1. BACKGROUNDS, STRENGTHS, AND LIMITS

Videotape recording is increasingly included in qualitative studies. As I reviewed a large number of qualitative studies for my dissertation, I was impressed with how many of the qualitative research studies from the last few years, include video recording at some point. Collier and Collier (1986, p. 139) comment, "Film and video have become essential for the study of human behavior."

Yet as I contemplated my own research, I looked in vain for a book completed devoted to qualitative methods of making and using videos, although a number of books had chapters or sections that touched on the subject. Rare, though, were books that gave specific guidelines for planning, videotaping, and doing analysis of videotape. The need for such a book is perhaps most acute for beginning researchers, who want specific help entering the unfamiliar world of qualitative research. Yet, with so little on the subject, there are undoubtedly some who have conducted research previously and now for the first time want to add a videotape component. This book may also serve as a contribution to further discussion about the planning, execution, and analysis of videotape data among those with previous experience in this area as well.

My background includes a number of richly varied experiences that have helped me in understanding the visual and audio aspects of videotaping. As a child and later as a teenager I experimented with tape recorders and an eight millimeter movie camera, purchased with income from a paper route. Early guidance was provided by the book *How to make good home movies* (Eastman Kodak, 1966). For many hours I experimented with different lenses, positions, and special effects as I filmed family vacations, the effects of a tornado, and many other visual interests. Throughout high school and college I worked at several radio stations, learning the intricacies of good sound recording and playback. I also took the time for some course work in television production. After college I spent six weeks teaching at a tiny school hidden in the rain forest of a tiny Caribbean island, taking some time to document broom-making, children's play, religious activities, and other interesting aspects of local life using my old eight millimeter camera. Years later I purchased my first camcorder (combination videocamera and video tape recorder), experimenting for many hours with how to make good home videos. Midway through my doctoral program I made a short video to teach playground behavior coding to undergraduates for a quantitative research study we did at an elementary school. For my dissertation, I conducted a four month ethnographic study of an elementary school, which involved a wide variety of videotaping methods for many different purposes. My varied background in learning video and audio skills has helped prepare me to accomplish the goal of this book, which is sharing something of what I have learned, particularly as it relates to qualitative research. I share, not as an accomplished expert, but as one who is continuing to experiment and learn.

My experience in researching children in elementary schools, particularly during the dissertation, is especially influential to what is found in this book. While the substantive findings of that work have been reported in detail elsewhere (Ratcliff, 1995), in the present work I will include numerous examples of how I used videotape during that study, and what I learned *about videotaping* in the process. I will try to emphasize insights about video tape recording and analysis that can possibly generalize to many different contexts and topics, but time and again I will illustrate my ideas from my firsthand experience. I will also make use of the few sources I have found that speak to videotaping, including some that discuss guidelines for other forms of photography that apply or can be readily adapted to videotaping in qualitative research.

Videotaping for qualitative research can be considered a subsection of two broader fields known as Visual Anthropology and Visual Sociology. These disciplines describe and make use of many kinds of visual media, including still photography, anthropological movies, and even topics such as analysis of commercial cinema and advertising (Ball & Smith, 1992; Hockings, 1975). While reading these more general texts in these areas can be rewarding--I especially recommend John and Malcolm Collier's *Visual Anthropology* (1986)--there is often little that is specifically directed to videotape methods of research. While some of the principles of research using other visual media can be applied to videotape, and I will include many of these, often there must be some or adapting of those suggestions.

Two other sources of information outside my own study have been helpful to a lesser degree. Several books from psychology and ethology describe aspects of videotaping for quantification of data (such as Kendon, 1979; Dowrick & Biggs, 1983; Dowrick, 1991). Sometimes there is an unbreachable chasm between the numbers oriented approaches to videotaping and those appropriate to qualitative research, but not always. Of course quantification of data can be part of a qualitative design. Finally, there are a large number of books on television broadcasting and commercial cinema that can provide insights on technicalities of camera angles, lighting, and other issues that sometimes have a bearing on qualitative camera work as well. Of this genre, one of the most practical guidebooks, loaded with suggestions for making good camera shots, is Daniel Arijon's *Grammar of the Film Language* (1976). Arijon's work could make for valuable study if the reader constantly remembers that videotaping for research purposes has different goals than making movies and television, and thus suggestions appropriate for commercial media may be irrelevant or even counterproductive in a research context. Research data can be entertaining and an entertainment medium like television can make use of videotape research data, but the two diverge as much as they converge.

Why Use Videotape?

Why has video become more popular in research studies? Any video medium produces data that can uniquely add to research design. The tangible, concrete nature of pictures derives from the production of images made directly by light, and this produces a more holistic view of events and situations (Collier & Collier, 1986, pp. 7-10). Of course this does not imply greater objectivity (Prost, 1975). Video provides a unique memory enhancement for past experiences, since the content approximates their original form (Mehan, 1979, p. 16). Consequently analysis can be more complete than what is possible with standard observations (Erickson, 1992, p. 209). Scenes can be replayed numerous times as the researcher reflects on what occurs, thus reducing the possibility of premature inferences and conclusions. Erickson also notes that normal field observation tends to emphasize events that occur frequently, since there is more data on them to be compared, while a videotape of a rare event can be repeatedly observed and explored (p. 210).

Videotape records thirty frames each second, allowing microanalysis of behavior not observable any other way by comparing individual frames of the event. Details can be more quickly and easily sorted into meaningful categories. In my research I originally planned to defer videotaping until several weeks into the study, after I had adequately surveyed the context. However, because the amount of information was overwhelming, I added the videotape on the third day of observing--I simply could not take it all in sufficiently, and videotape helped me sort out the multitude of details by repeated viewings. Many other things can be done with video that are impossible with standard observation. Complex edits, with the assistance of computers and videodisks, allow incredibly intricate analyses that cannot be accomplished otherwise. Many angles can be observed that would be extremely difficult otherwise, such as the camera being suspended from a ceiling. The videocamera records subtle details not observed by the human eye, including latent aggressive and affectionate gestures (Beresin, 1993, p. 161).

As a result of these many possible variations and unique views, video tends to change the way people watch events. One begins to define future research plans in terms of video technology once skills in this area are acquired (Jackson, 1987, p. 110). New angles of observation come to mind that can be attempted and tested for data value. Sequences, including antecedents and consequences, become more salient, although qualitative researchers have often been less concerned about sequence and prediction than quantitative researchers (Agar, 1986, p. 16). Thinking of yourself and others as the future audience can influence how videotaping is done and what is videotaped. Attention can be given to details that, in normal fieldwork, might be mistakenly taken for granted as irrelevant. These changes have parallels in the history of cinema--at first stationary cameras recorded events much like a member of an audience watched a play, but later cameras experimented with new angles, special effects such as fades and multiple simultaneous views, that were not possible apart from the camera (Brigard, 1975).

Videotape adds distinctive advantages to other video media. Movie equipment is balky, and older ethnographic movies often required a camera/audio team to produce (Rouch, 1975). Early video equipment was also unwieldy, but today's camcorder equipment is amazingly small and versatile (Jackson, 1987, p. 228).

Cost and availability was once prohibitive in videotaping, but that has changed dramatically even as equipment has improved in quality (Collier & Collier, 1986, p. 221). While writing this book, a name brand camcorder with zoom lens and many other features was locally advertised for under $400, while extra high quality videotapes can be purchased for less than $3.00 each! The purchase of a good camcorder is within the price range of most researchers, and readily rented or borrowed at most universities for the few that cannot purchase a personal unit. The camcorder has become a commonplace piece of equipment in middle and upper middle class life, which contributes to availability (LeCompte & Preissle, 1993, p. 231).

Videotape, like the movie, is able to capture the movements involved in activities, the *how* not just the *what*. Basic aspects of human interaction can be recorded and studied in detail, including body space, continuity and change across time, and kinesic variables such as gestures and posture (Collier & Collier, 1986, p. 77). Videos can also reveal new variables and thus provide questions to be raised during later interviews (p. 79).

Another reason to use videotape is the concern that a record of research be available to observe whether the research was actually conducted in the manner described by the researcher, a concern propelled by reports of fabrication and misrepresentation of research. It is difficult, though not impossible, to falsify a video record. *Limitations of Videotape*

While videotaping offers many advantages, there are also several limitations and weakness that deserve consideration. LeCompte and Preissle (1993, p. 232) mention, for example, the difficulty of accumulating too much data that can be overwhelming for later analysis. Of course, one need not use all the data acquired; sampling from the video record is also possible.

Mehan (1979, p. 16) notes that sometimes researchers will fall short in rigor by analyzing a few video segments in considerable detail. Not only does this have the potential for misrepresenting the whole in terms of typicality or frequency, but also the relationship of the behavior to the context is not determined. There is the tendency to select evidence supporting prior assumptions or initial hypotheses (p. 20). These weaknesses are not unique to videotaping, but perhaps researchers are more prone to them with this medium. Erickson (1992, p. 210) notes that if analysis is conducted after videotaping is completely finished, there is no opportunity for testing emerging hypotheses with participants. The key to addressing this difficulty is to do much of the analysis before leaving the field. Erickson also emphasizes that important contextual details may be missing in the video record, an issue that needs to be addressed by a survey of contextual details early in the study.

Jackson (1987, p. 109-112) notes the loss of mobility and limited as to options when using videotape equipment. No machine is without its limitations; a decision to include any kind of equipment automatically excludes other kinds of data that might be available. Equipment takes attention in the field, which means less attention given to the data while recording. Equipment also costs time in maintenance and repair. Additional equipment increases the possibility of data loss and error. Videotaping researchers sometimes allow attention to drift, as they assume the tape will record all that is needed, and thus they may ignore details and nuances needed for good follow up. Therefore Jackson recommends that the researcher should use as little equipment as is needed, and gradually develop expertise in using equipment step by step. Capturing video data should not take the place of seeing; one must not examine a situation only in terms of what will produce a good picture or, as Jackson puts it, "think through the machine," but rather concentrate on the information the site and participants offer (pp. 116-117). The case can be made that an observer with a camcorder is more intrusive than an observer alone (Collier & Collier, 1986, p. 133), particularly if operated by an unskilled operator (LeCompte & Preissle, 1993, p. 232). Hostility can result if the camera is perceived as a threat, which is inadvertently encouraged by researchers who are secretive or hurried, the Colliers assert (p. 135). Some degree of intrusiveness is to be expected, at least temporarily until people become accustomed to the camera, but the greater intrusiveness of the camera can be considered a tradeoff for more and better data. There is also the advantage that with a videocamera the researcher can affirm a more precise role--that of a cameraperson (Collier & Collier, 1986, p. 22). The role of researcher is often vague and even hidden, which invites negative attributions, while the operator of a camera is a known role. When I stood alone in the school hall making notations on yellow pads of paper,

others may have been suspicious about why I watched the children so carefully, but people with cameras are expected to look carefully.

Conclusion

This books is an introductory work that hopefully can help the reader create and analyze videotapes in a productive manner. It is only introductory, and far from being the last word on the subject. Some of the topics are considered in greater detail by some of the books cited, while other issues I raise have received little or no comment in the past. There is some ongoing discussion of visual research more generally on an internet email listserv system which can be joined without cost. Sometimes some of the topics considered in this book are discussed on this interactive system. The system is abbreviated VISCOM for "Visual Communications Discussion" and you can read and participate in the dialogue by sending the message SUBSCRIBE VISCOM followed by your name to the following email address: LISTSERV@VM.TEMPLE.EDU. After you subscribe, you will receive instruction on how you can enter into the dialogue so that your comments are passed on to the 400+ current subscribers. You can also access archives of past conversations if you wish. For other advanced discussions on some of these topics, consult *Visual Anthropology*, a journal associated with the Visual Ethnography section of the American Anthropological Association, or *Visual Sociology*, which is associated with the Visual Sociology Association.

Ultimately what is written here is the product of my own experience and what I have chosen to include from the experiences of other researchers and writers. I do not pretend to offer an objective, value-free presentation of facts, but rather I have attempted to discuss to some extent most of the major issues that tend to emerge while doing research with a videocamera. I hope my ideas and those I have borrowed from others will help you in doing high quality video research, but I also realize that each person's research experience is unique and that some of these ideas will be less helpful than others.

Use back button on browser to take you to previous menu, and from there go to next section of book