Break this Bottle: Fieldnotes in Qualitative Research

Phillip Clark, Ed.D *

Abstract

Fieldnotes have long history in anthropological and social science research. They have been elevated, assailed, examined and re-examined, defined and re-defined, rarely with agreement. Novice researchers in current times with various convenient recording devices at their disposal may feel fieldnotes are a relic of a less technological age. In this brief paper, drawing on the research of others and my own experience as a qualitative researcher, I argue that fieldnotes remain one of our primary sources of reflexive data.

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"You'll need more tables than you think."
–Laura Bohannan (1954) in *Return to Laughter,* to qualitative field researchers on the sheer quantity of data they may encounter (quoted in Clifford, 1990).

In the late 1950s, decades before Global Positioning Systems could map the world, scientists at what was then called the U.S. Coast and Geodetic Survey (USCGS) performed an experiment: In an effort to measure ocean currents, they set small glass bottles adrift in the sea—inside each bottle, a note. The paper note was curled into the shape of a tube, with the outer, visible portion of the tube reading, in large English letters: *Break This Bottle*. Once the finder of the bottle (assuming anyone found it) broke the glass and retrieved the paper inside, they would find instructions to record the date, time, and location of the bottle's discovery. An address was provided, to which the paper could then be mailed. This use of so-called "drift bottles" was for centuries a workable method in oceanographic research, dating back to Aristotle (Ebbesmeyer & Scigliano, 2009). While the image of the "message in a bottle" is well-known by beachcombers worldwide, in this case the bottles of interest were not instruments of sentimentalism, but part of a calculated effort to gather hard data for a specific purpose.

As the drift bottle gave way to GPS mapping, so the accoutrements of qualitative research have also developed greatly since the days of the Ticonderoga pencil and spiral notebook. Analog tools have given way to digital tech. While in the last century, researchers were advised to be sure to always keep extra pencils handy, we now are told to keep extra batteries and portable chargers. One admonition of an old ethnographer's stated:

> Pencils are useful because you know how much is left (no hidden reservoir). Pencils can be sharpened with a knife or by rubbing them on a rock. Pencil graphite is waterproof, but will smudge. Use a hard lead 2½ - 3. The only disadvantage to pencil is that it can be erased. NEVER erase anything in

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> a field note--draw a single line through it if it may be incorrect. That observation may be the most important thing ever entered in your notebook. Erase it and it is gone.
>
> (https://www.naturespace.org.)

In the same way as the pencils themselves, the results of those pencil scribblings, *fieldnotes*, have in some ways been subsumed by tools of a more technological virtue. Audio recording, and to a lesser extent, film recording, has long been a tool of the qualitative researcher. Now that video recording technology does not require the use of heavy equipment and is relatively inexpensive, videotaping participant interactions, focus groups, interviews, and even field observations has become more common. IC recorders store gigabytes of sound and fit in a lapel pocket, portable video cameras can be carried in one hand, and smartphones have voice and video recording applications and can sit relatively unobtrusively on a table near the researcher and participant(s). With such resources available, a clipboard of ruled quarto may seem unwieldy, antiquated, even superfluous. Even so, I would like to make the case that the technology of easily portable, high storage-volume recording devices does not render fieldnotes obsolete.

The audio and video recorder in data gathering are vital in capturing as accurately as possible the words and physicality of both participants and researchers[1]. Fieldnotes, however, are a valuable supplement in data analysis, despite those who may state that the "integrity of fieldnotes is a revered illusion" (Ellingson and Sotirin, 2020, p. 18). In the sections below, drawing on my own experiences as a qualitative researcher and using examples taken from my own fieldnotes, I make the case that fieldnotes—actual written reflective fieldnotes—remain an irreplaceable form of data gathering, and are by no means peripheral or outdated.

Describe, transcribe, inscribe

I will not, here, attempt to give instructions on composing, managing, organizing, coding or analyzing fieldnotes, though advice on such matters can be found in abundance elsewhere (Burkholder & Thompson, 2020; Corbin & Strauss, 2007; Phillippi & Lauderdale, 2017; Saldaňa, 2013; Wolfinger, 2002) though even these will vary in their recommendations. Parsing out what fieldnotes are at all is sometimes difficult—as Clifford (1990) suggested, "there can be no rigorous definition of what exactly constitutes a fieldnote" (p. 52). Some ethnographers include items such as journals or letters in the category of fieldnotes, others do not. I will here classify fieldnotes at least within the larger category of *field data*, which consist of, essentially, anything and everything that one writes, sees, hears, reads, imagines, even doubts, regarding the research during the qualitative study. Memos, photographs, clippings, physical artifacts, shorthand notes on observations, research journals, video and audio, transcriptions, translations, and in the modern era, emails, SMS texts, selfies, self-recordings, social media posts, even Zoom conferencing (Archibald, Ambagtsheer, Casey & Lawless, 2019), all of these constitute data sources that might later prove meaningful, each potentially "the most important thing" in one's qualitative research data. This is not to say that every bit of minutiae gathered in the research process is of necessity used in analysis—it certainly is not. As Corbin and Strauss (2007) suggest, in analyzing data, qualitative researchers must

1) In certain types of research, such as participant observation or conversation analysis, video recording that includes both researcher and participant can enrich the data, though having one camera set-up is ideal to prevent data overload (See Yang, K., 2012).

"follow their instincts" (p. 71) in deciding how and what to examine. Researchers do seem to agree that fieldnotes are best written as soon after the relevant experience as possible. Boellstorf, Nardi, Pearce, and Taylor (2012) suggest that "expanding and refining fieldnotes…is best done within twenty-four hours. The short-term memory is fresh; details can be recovered. After a day or so memory fades" (p. 83). Ellingson and Sotirin (2020) state (somewhat doubtfully) that "what conventional fieldnotes do is ground claims both to the fieldworker's authority and to the veracity of the fieldwork account" (p. 18). Fieldnotes, then, are often a repository of information of a type not found in other kinds of recorded artifact. In the following sections I will briefly outline Clifford's (1990) concepts in defining the three kinds of qualitative writing: *description, transcription,* and *inscription*, and I will continue the case for how fieldnotes provide a conduit for all three.

One basic task of qualitative data is to *describe*. Audio and video recording can be used in an effort to provide authentic accounts of an event such as an interview, focus group, or other such research context, though even with video, issues of validation must be considered (Penn-Edwards, 2004). Often video or photographic artifacts can provide detail that a researcher has either not noticed or not remembered days, weeks, or even months or sometimes years after the fact, depending on the length of the research project. Certain aspects of experience, however, remain out of the reach of audio or video recording, notably ambient factors such as temperature, smell, air pressure, balance, the disposition of the researcher at the time, or the perceived tone or attitude of the participant(s). While audio and video reveal sounds and images, these are, counterintuitively, often not the whole picture. Scrupulously written fieldnotes can fill this gap, and in so doing flesh out what might otherwise be a one-dimensional representation of an interview, focus group, or observation.

As an example, and at the risk of exposing my readers to the "discursive mess" (Clifford, 1990, p. 59) of my unedited (though typed from handwritten) notations, I will turn to my own observational fieldnotes at a secondary school in western Japan, where I was ostensibly hired to replace a teacher who left unexpectedly at the end of the school term. I ultimately only served as observer for a few classes, as the teacher returned to his post as unexpectedly as he had left. During my 19-day period on campus, however, I spent several class periods each day in the small un-windowed room reserved for the non-Japanese teachers of the high school's English department. These four men (one of whom was absent and I was to have replaced) carried out their jobs between classes in this space huddled over their cluttered desks, speaking in a casual, sometimes tense banter, seemingly, after years of inhabiting the office, completely oblivious to the appearance of their surroundings. In such a work context, my carrying a video camera or even audio-recorder was not possible or permissible, though in my fieldnotes I wrote (perhaps unflatteringly) the following, describing the office in which these men toiled daily:

> Used coffee cups with coal-like stained interiors. Open a desk and it's the same inside as out—except with smaller plastic and metal pieces, such as liberated paper clips, individual staples, pens without caps, half-spent erasers, rulers, and more papers. The same copy of a small English language newspaper I've never heard of sat at the same edge of one of the desks the whole of the 2 ½ weeks I visited the office—or perhaps it's still there, and indeed perhaps it had been there long before I ever turned up. Across the back

> wall is a bookcase with glass doors—inside this are trapped more forgotten textbooks and papers in a suffocating state of disorder. Chaos.
>
> --Author's fieldnotes, June 2012.

In this case the description becomes evocative, not simply a still photo or video of a place, but a kind of exploration of the environment—one that I had quite forgotten years later when I decided to write about it. The resulting fieldnotes are indicative of both my attitude toward the room (and the job itself) as much as an image of certain parts of it. Description always belies the biases of the describer, from the selectivity of what is described (and not described), to the word choices made. This, however, does not result in corrupt or hopelessly subjective data, but quite the opposite: it makes plain the positionality of the researcher to the researcher in ways that ostensibly objective audio or video recordings cannot.

Another requirement of qualitative data is to *transcribe* what is said or done. Here, too, audio/video has a great advantage over interview notetaking, or simply relying on one's memory. Recording electronically creates discrete audio/video files that can be listened to/viewed repeatedly, thus allowing the transcriber, whatever methods he or she might use, to more accurately transcribe but also to member check (Lincoln & Guba, 1985) by providing the participant with copies of the same files. The audio/video recorder also allows the researcher to more actively listen and participate during the interview (or other such interaction), putting away his or her notebook and letting the electronics do the documenting. The process of actually transcribing the audio data—in effect creating a second layer of data—is another matter and has been discussed extensively elsewhere, including issues of power, gender, and representation (Coates & Thornborrow, 1999; Kvale & Brinkman, 2009; Mishler, 1991; Serovich & Mason, 2005, among others). Here in transcription as well, however, fieldnotes can have a place, particularly if they are conscientiously written immediately after (and/or before) the interaction.

Over the course of three years I conducted a study with returnee students at university, where the main data were interviews. In one such case my final interview with one girl (who I will refer to as A___) was held in a public café, and part of the account of this in my fieldnotes is as follows constituting both description and, to some degree, transcription, though in this case not what was said, but what I chose not to say:

> She looks different than our last meeting, when her hair was long and dark. Now her hair is dyed blonde, and shortish, sort of in a bob parted on the side. Not quite a bob, but bob-like. I'll have to look it up. She's wearing a light gray pants suit, but the pant legs are short and she has on red socks. Her shirt is like a checkered tablecloth of the sort I imagine in Italian restaurants in Little Italy in New York, but the checks are extremely small. In her top button—her shirt is buttoned all the way to the top, is a white round button of the sort you might find on a backpack, and the button says: [redacted for privacy]. Where she works. She has a pen stuck in her lapel, not her pocket. Like the clip of the pen is in her lapel balancing it. On the back of her chair is a wool coat, multicolored, wouldn't be out of place in the old testament or a Broadway play. Technicolor. I imagine this is a look she has purposefully cultivated. She goes to get a drink, and comes back with a coffee and a chocolate tart. I wonder if this is dinner, but avoid asking the question as it might seem rude.

--Author's fieldnotes, January 16, 2014

Elsewhere in these same fieldnotes I reveal how I purposefully found myself avoiding questions about her divorced parents and the sudden lack of funding this produced, preventing her from pursuing a study abroad course which had originally been her stated reason for attending the university. Without the fieldnotes and the explanation (to myself) of my feelings and the mood of the encounter at the time, I might look at transcripts and wonder "Why on earth am I taking this train of thought? Why am I not asking the obvious questions here?" Keeping scrupulous fieldnotes then has the potential to inform later choices in follow-up, or, equally plausible, give the data analysis and write-up a new direction.

From the same interview, I found myself writing in my notebook my impressions of her comments at the sentence level, making sense of them even before I had listened to the recordings:

> A____ has not quit university. She stopped going, though. She didn't get any credits in the last year. She still needs 30 something. But each class is 8 credits she says. This sounds unbelievable but I don't press her on it. She seems to indicate she will stay at school and finish; she says she *has to finish.* This means something I know not what, but I suspect it has to do with just getting university out of the way. I think A___ wants to seem as if she knows what she is doing. And maybe she does in her own way. She has her eyes on some distant prize, which for her I think means getting out of Japan. *I have to finish. I have to take some classes. Do you have any professor you can recommend?* I do. I write three of them down for her, one Japanese woman, and two Americans, a woman and a man. I say they're good. I say students have told me they enjoy these classes. She doesn't seem to doubt me but doesn't jump on the names either. She will take what she has to take.
>
> She got tired of the school. Professor M's class was okay. Yeah, okay. Professor F's class was okay. Just okay. Nothing special. Nothing was special about the school. It wasn't what she wanted. It isn't what she wants. Something isn't. The classes aren't what she wants.

--Author's fieldnotes, January 16, 2014

Fieldnotes also allow the researcher to *inscribe,* meaning, in simple terms, to act as a mirror of how one, as a writer and co-participant, may feel. Inscribing brings to the fore the reflexivity of the researcher, and provides as much or more insight into his or her self in the thick of research as it does insight into the research participant(s) (Steier, 1995). As Geertz (1973) wrote: "The ethnographer 'inscribes' social discourse; he writes it down. In so doing, he turns it from a passing event, which exists only in its own moment of occurrence, into an account, which exists in its inscriptions and can be reconsulted" (p. 19). Even with recording devices present, the researcher's own reflections are an essential, possibly one of the most essential, parts of qualitative research. The interpretive lens of the researcher's perspective is what gives essence to the data, not solely the images or sounds captured by recording devices. To give a modern example, the smartphone footage of a moment of intimacy or violence may be interpreted solely on the criteria of what is seen, but what is seen is often not the entire story, and may even be deceptive if presented without context. Likewise, video of an interaction, regardless of the quality of its resolution, does not reveal the experience of the researcher partici-

pating in the moment the video is captured. The often-invoked "thick descriptions" of Geertz (1973) are not produced by pressing *record* and are not re-produced by pressing *play*. Where recordings capture a moment in time, whether it be an observation, an interview, or a focus group discussion, fieldnotes are written after- or before-the-fact and represent the insights, concerns, or reflections of the researcher.

Another example from my own store of fieldnotes is from a series of interviews I conducted with another returnee student in the same study I have previously mentioned, who was in his junior year of university and whom I had been interviewing since his first semester of his freshman year. He had decided to quit school and had moved to another city to enroll in another university quite similar to the one he had just left, though I was unaware why he had absconded in the first place. I recorded and transcribed all of our interviews, but my accompanying fieldnotes often revealed that the interviews did not always transpire as I had hoped. Prior to our next-to-last interview in a busy coffee shop I wrote the following:

> I finish my coffee before he arrives and leave the cup sitting there in front of me. Then he is here. I have his money in a beige letter envelope with his name written on it in regular handwritten black ink. Payment this time: 3000 yen. Triple what he used to get when he came to the office. But then these interviews are more valuable now, and threaten to end. I need to keep him interested and willing to meet again if necessary. At least he isn't playing me for more.
>
> --Author's fieldnotes, January 11, 2014

In reading over this far after I conducted the interview, I am faced with my own doubts about the interview process and my practical fears that my participant would simply leave the project. This undoubtedly affected not only my decision to up the remuneration to him as a participant, but possibly my behavior before, during, and after the interviews, including the degree to which I might have risked making him uncomfortable and jeopardizing his cooperation. After I had completed this particular interview and the participant and I went our separate ways, I wrote my reflections, and included the following:

> I had a few questions ready:
> *Are you in school?*
> *How have the last 2 years been?*
> *Do you feel Japanese?*
> *Are you still working at the bar?*
> *Are you still living at home?*
> *How was the TOEIC?*
> *Was it you who decided to quit school? Why?*
> *Have there been any changes to how you feel about yourself or your goals?*
> *Are you interested still in going abroad?*
> *Do you have any criticisms of your university?*
> *What are your goals for the future?*
> *Why do you use the term "Parents"?*
> *Would you fit in if you went back to New York just as you are now?*
> *Where do you see yourself in 10-20 years?*
> *What is important to you?*
>
> These I initially felt would suit me for a good hour. They didn't. We were done with them in 25 minutes. He has never been a big talker. I got the impression always with him—and have it again—that he is withholding somehow. Even here in Starbucks, around the milieu he might be used to, he isn't being completely honest with me. Always the student trying to put on a good face, an

> academic face, make a good impression. He wants so badly to seem serious and dedicated. And maybe he is.
>
> --Authorvs fieldnotes, January 11, 2014

These reflections would assist me later in making sense of how this participant seemed to approach all of the interviews, and how, by the time of our final interview, he seemed to change the goals he had stated in his earlier interviews nearly completely. In such a longitudinal study (three years, in this case) had I not taken fieldnotes I would have been left relying on my memory, or whether I felt some spark of recollection by watching his videos or listening to our voices from years earlier.

From Fieldnotes to write-up

Untangling the extensive data of fieldnotes and finding where to put it in one's write-up is a part of the intuitive process of picking and choosing what seems relevant to the researcher's purposes. Sanjek (1993) borrowing a term from Ottenberg (1993) proposes categorizations of *scratch notes* that are written hastily, and even clandestinely, in the field; *fieldnotes* which are fleshed out versions of scratch notes; and *headnotes* which organize the fieldnotes. There is even a long tradition in ethnography in using another's fieldnotes in one's own research (see Lutkehaus, 1993; Smith, 1993), although at times making sense of another's fieldnotes is a challenge in itself (Sanjek, 1993), for as the author of a fieldnote your target reader is always your future self. Nevertheless, some fieldnotes (perhaps cleaned up from their original "mess") are lifted from the journal to pass directly into publication, as in Geertz (1960). In my own experience my fieldnotes served as reminders, post-transcription, of the contexts of interviews or interactions in the settings I was studying. They enabled me (and continue to enable me) to reflect on both my own actions and lack of actions as interviewer and observer, and the contexts in which my interviews and observations occurred.

Conclusion

Fieldnotes are both the floating bottle and the message within. If properly recorded, they will reveal, months or even years after the fact, bits of exacting detail such as the date, time, location, even temperature, smell, color, mood. They report back to us—we as researchers report back to ourselves—the who, what, when, where. Beyond that, they remind us of what—without intending to and without being aware of it—we have forgotten. They remind us of tone, spirit, and ambience. They tell us the currents of our thoughts on that day or night, the tides of feeling and sensory detail that were a part of the experience, the essence in addition to the shape. To dismiss or abandon fieldnotes—or, just as unfortunately—to treat them lightly, to treat them as tedious scribbles without purpose—is to forfeit one of the qualitative researcher's best and most rich sources of data.

References

Archibald, M., Ambagtsheer, R., Casey, M., & Lawless, M. (2019). Using Zoom videoconferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods* **18**(1-8). doi: 10.1177/1609406919874596.

Boellestorf, T., Nardi, B., Pearce, C., & Taylor, T. (2012). *Ethnography and virtual worlds: A handbook of method.* Princeton, NJ: Princeton University Press.

Burkholder, C. & Thompson, J. (Eds). (2020). *Fieldnotes in qualitative education and social science research: Approaches, practices, and ethical considerations. London, UK:* Routledge.

Clifford, J. (1993). Notes on (Field)Notes. In R. Sanjek (Ed.), *Fieldnotes: The making of anthropology* (pp. 47-70). Ithaca: Cornell Univ. Press.

Corbin, J., & Strauss, A. (2007) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* (3rd ed.) Los Angeles, CA: Sage.

Devers, K.J. (1999) How will we know "good" qualitative research when we see it? Beginning the dialogue in health services research. *Health Services Research*, **34**(5): 1153-1188.

Ebbesmeyer, C. & Scigliano, E. (2009). *Flotsametrics and the Floating World: How One Man's Obsession with Runaway Sneakers and Rubber Ducks Revolutionized Ocean Science*. New York, NY: Harper Collins.

Ellingson, L. & Sotirin, P. (2020). *Making Data in Qualitative Research: Engagements, Ethics, and Entanglements* London, UK: Routledge.

Emerson, R., Fretz, R. & Shaw, L. (1995) *Writing Ethnographic Fieldnotes*. Chicago, IL: University of Chicago Press.

Geertz, C. (1960). *The religion of Java.* Chicago, IL: University of Chicago Press.

Geertz, C. (1973). *The interpretation of cultures*. New York, NY: Basic Books.

Lincoln, Y. S., & Guba, E.G. (1985). *Naturalistic inquiry.* Newbury Park, CA: Sage.

Lutkehaus, N. (1993). Refractions on reality: On the use of other ethnographers' fieldnotes. In R. Sanjek (Ed.), *Fieldnotes: The making of anthropology* (pp. 303-323). Ithaca: Cornell Univ. Press.

Ottenberg, S. (1993). Thirty years of fieldnotes: Changing relationships to the text. In R. Sanjek (Ed.), *Fieldnotes: The making of anthropology* (pp. 139-160). Ithaca: Cornell Univ. Press.

Penn-Edwards, S. (2004). Visual evidence in qualitative research: The role of videorecording. *The Qualitative Report*, **9**(2), pp. 266-277. Retrieved from https://nsuworks.nova.edu/tqr/vol9/iss2/5

Phillippi, J. & Lauderdale, J. (2017). A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research* **28**(3) pp. 381-388. doi: 10.1177/1049732317697102

Saldaňa, J. (2013). *The coding manual for qualitative researchers.* (2nd ed.). Los Angeles, CA: Sage.

Sanjek, R.(1993). *A vocabulary for fieldnotes*. In R. Sanjek (Ed.), *Fieldnotes: The making of anthropology* (pp. 92-138). Ithaca: Cornell Univ. Press.

Smith, R. (1993). Hearing voices, joining the chorus: Appropriating someone else's fieldnotes. In R. Sanjek (Ed.), *Fieldnotes: The making of anthropology* (pp. 356-370). Ithaca: Cornell Univ. Press.

Steier, F. (1995). *Research and reflexivity*. London, UK: Sage.

Sunstein, B. & Chiseri-Strater, E. (1997). *Fieldworking: Reading and writing*. Boston, MA: Bedford/St. Martins.

Wolfinger, N. (2002). On writing fieldnotes: Collection strategies and background expectancies. *Qualitative Research.* **2**(1). 85-95. doi: 10.1177/1468794102002001640

Yang, K. (2012). Reflexivity, participation, and video. In E. Milne, C. Mitchell, & N. De Lange (Eds.), *Handbook of Participatory Video* (pp. 100-114). Lanham, MD: AltaMira.