

“A Design for Qualitative Research”

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Abstract

Through a description of a specific research design, the author details various merits of qualitative research. Using concrete examples from an actual research project on the use of computers by individuals over the age of 70, she suggests a salutary approach to research among elderly populations. This narrative description of methodological tools used in a qualitative approach includes a consideration of: population and setting; frequency and intensity of contact; data collection (participant observation, interviewing); data analysis; the issues of authority, validity and responsibility; and the role of the researcher.

Keywords: Research methodology; Elderly; Information and Communication Technology; Social Computing.

Introduction

A research population comprised of elderly individuals presents unpredictable challenges. The researcher must be aware, for example, of the potential for weakened physical conditions of older people and of stamina that can quickly wane. Emotional resources may be more easily exhausted than among junior research participants. Elderly individuals may be situated in circumscribed living conditions that reduce their range of movement through the community. They may be, therefore, less accessible to non-community members such as researchers.

On the other hand, people who have enjoyed many years of living have much to offer the patient researcher, such as elaborated responses to research queries and a nuanced understanding of their role within the larger social order. They may have more time to deliberate and reflect on the subjects being explored in the research project. These positive aspects of the lives of the elderly can inspire researchers to cope with any of the drawbacks they may encounter in such research.

The following narrative essay (written in 2009) details a research rationale and design that took shape as I conducted research among the residents of a retirement community who were grappling with the new technology of personal computing. While the methods typically included in such “qualitative research” are well suited to the needs

of elderly research participants, some of the classic approaches require modification. Since this discussion includes concrete examples from the lives of actual research participants, I have appended descriptions of these participants at the end of this essay.

A. Research Population and Setting

I conducted this research in a large residential community (which I renamed “Flamingo Park”) designed exclusively for individuals aged 62 and over. Most of the individuals living in the “Park” had their own private homes or apartments and in that sense were, at the time of this research, representative of Americans over age 65, nine out of ten of whom lived independently. On the other hand, only one in ten of all Americans over the age of 65 lived in age-segregated communities; over age 80 this number was 20%. In that respect Flamingo Park residents were not representative of their age cohort, according to a Pew survey (Horrigan 2009).

Within this population of approximately 1000 people, I found a range of life styles and attributes along dimensions of educational and occupational backgrounds, interests, ages (62 – 100+), physical condition, abilities and marital/partnership status. Several residents estimated the average formal educational attainment of Park residents as one to two years of college. Among those individuals with no formal post-secondary education, I encountered some who had attained the equivalent of professional positions through on-the-job training. The members of this community were financially comfortable, so for most of them the issue of affordability with regard to technological devices was mitigated.

In summary, my research setting was:

- A self-contained retirement community with a large population.
- A comprehensive life-long care facility that had several stages of living support.
- A community in which various kinds of social support were provided.
- A setting that acknowledged interest in new communication technologies in the lives of its members as manifested by special (though limited) facilities for computing equipment; and/or living spaces designed for technology connectivity.
- A population that had the economic means to explore relatively expensive technological devices and practices.

Entrée into this setting was afforded through previously established relationships with members of the town of “Dry Springs” in which the Park was located. I had been visiting residents of that town since the 1970s and residents at the Park since the early 1990s. In 1995-96, a few Park residents formed a computer club for the express purpose of exploring this new technology. I met a club member in October, 1996, while visiting in the Park and was invited to a meeting. Thus began what became an ongoing interaction with some of the residents who were aspiring computer users. Thirty some individuals aged 70 (one was 69 at the time of our first interview) and above were willing over the course of twelve years to share their thoughts and feelings with me about the culture of Flamingo Park and the role of I-C technologies in their lives. Before my attendance at the Computer Club, I had never met any of these research participants. In myriad ways—observing, listening, talking, and working together on computers—these individuals and I tried to understand and describe how they used various resources to accomplish their goals, meet their needs, and enhance their lives. A critical part of my self-identity in this setting was that of a commiserating mature learner who first began to explore computing systems in her mid-fifties. I am an enthusiastic champion of life-long learning but also profoundly aware of the serious challenge posed by continuously evolving technologies. Initially, I brought to the research a good understanding of how to explain, teach and discuss information technologies as a result of my personal educational experiences. As time went on, however, I found the pace of technological developments threatening to undermine my own “tech expertise.”

B. Frequency and Intensity of Contact

A good way to explore research issues is to share the lived experiences of the individuals who are involved with them and living in their community is an ideal means of doing so; this process is referred to as “fieldwork.” Some researchers, on the other hand, elect not to live in the field, a fact that led one scholar to ask, “What happens to fieldworkers who now ask questions but no longer hang out” with the research participants? They were concerned with the differing end products: “field studies favor a social-organizational analysis, while interview studies favor a social-psychological analysis” (Kleinman, Stenross and McMahon 1994, 38, 47). As a researcher in the field

of anthropology, I have experienced and enthusiastically support the practice of immersive fieldwork, the “prolonged engagement” and “persistent observation” described by Lincoln and Guba (1985). Such fieldwork, according to another researcher, “allows us to describe a set of fundamental life experiences as they occur—it provides us with words to inscribe the arc of human experience . . . it allows us to see the embedded tensions that lie beneath the surface” (Bosk 1992, 18).

However, there may be another way to observe this arc of experience and that is using the method of *intermittent immersion*. This is a form of contact that I was forced to devise to accommodate the personal circumstances of both the elderly users in my study and myself. This model involved repeated, short but intensive contact, over a period of years. There is no way to stipulate with what frequency such shorter contacts should ideally occur, given the multitude of factors such as location, population, purpose of study or research methods. Different frequencies would yield different but nonetheless interesting findings. One researcher who returned to her field site after a prolonged absence learned that the participants in her study did not have the happy endings that she had anticipated. Her understanding was “challenged by fundamental changes in the [participants’] circumstances” and she had to reconsider how to frame her initial description with “the possibility of challenging the expected ending” (Coffey 1996, 67-8).

If we are truly to see the arc of human experience, a longitudinal perspective is required and since most researchers cannot remain in the ‘field’ for a dozen years, intermittent visits have much to recommend them. My visits to Flamingo Park, averaged once a year and lasted from one to two weeks. Since, during these visits, I was invited to reside with various residents, I was always in the midst of ongoing Park activity and immersed in the life of the Park. Some advantages of repeated contacts of a shorter duration as compared with lengthy stays are:

- Refreshing one’s view of context (adaptation can dull the vision).
- Creating a finite time frame in which all parties are more alert to the need to schedule meetings, interviews, joint activities and to be more task oriented.
- Increasing intensity of thought and understanding through shorter, limited time periods (which can’t be sustained for long periods).

- Changes are set into relief; this is especially relevant in research which involves steep learning curves (= slow progress) for individuals.
- Providing interim periods in which to percolate ideas, hypotheses.
- Discovering missing data.
- Providing opportunity to observe how study participants deal with long-distance communication (such as e-mail, for instance) which is relevant in a study of novice computer users.

It is only with the passage of time that we can observe the trajectory of elders grappling with a challenge of the magnitude of I-C technologies. There are many fits and starts, success and failures that delay or hasten the course of learning, or that end in opting out of the attempt. It was with repeated interactions over time that I began to discern the reliance upon core survival strategies in the form, for example, of mantras to live by (happiness is gratitude; frustration begets aggression; illiterate 'til death), techniques to soothe (Solitaire and the female form; the memories stored in photographs), aids for sensory loss (the interplay between vision and memory and how photographs, however dimly perceived, can refresh the remembered experience). Longitudinal studies contain the tension, however, of not knowing their ending point.

It is generally axiomatic among social science researchers that you know that your study is completed when you do not learn anything new, when the same information is repeated. While I heard fewer new ideas and thoughts in 2005 and fewer still in 2008, it was the repetition of certain old ones that provided insight. I had to hear Laslo U. talk again and again about frustration and lost time before I understood the intensity of his feelings in this regard. It took the constant reiteration by Neva E. of her laziness and her husband's tech illiteracy for me to recognize it as a chant. It was only after I heard Al S. repeat his HAM experiences every time we talked that I understood they were the high point of his life and that they constituted the origin of his computing *and* his connecting. The former was in service of the latter but it was the successful connection between sweethearts that instilled in him an affectionate appreciation of the utility of the computer-agent. Thus the cogent fact of longitudinal study is that research is never done. The rejuvenation of Al Swenson's computer interest between 2005 and 2008 and his eventual arrival on Facebook a month after our last interview are examples of the fact that discovery is endless. People's lives continue, circumstances change, new ideas form,

and outside forces such as family, cultural trends and media push them into action. When the survey researchers telephone, a given individual's response on Day X may be completely different on Day Y.

C. Methods of Data Collection

1. Participant Observation

Participant observation is the *sine qua non* of many researchers' approach to qualitative research but as both theory and method it is a phrase in need of freshening up. Although participant observation involves the salutary aspect of being *with* people rather than standing on the sidelines looking *at* them, the phrase still has a unidirectional ring to it, as if the researcher were driving the action, participating and observing at her pleasure. In my experience in Flamingo Park, to the contrary, the process was a bi- or multi-dimensional one, in which I observed and participated at the pleasure of the residents. What's more, they observed me and participated in both my research and personal worlds. The first act of observation in this research was *of me* by Barbara Howard, Park resident. She had been watching me in a Park setting and evidently decided that I was of interest to her. She approached and interrogated me, asking my name, residence, purpose in the Park, occupation and interests. After realizing there was an institutional connection between me and her son—a fellow researcher at the University of Illinois—she decided that I was, as a scholar, a worthy person. She then invited me to join her in a Park activity. A few years later, when she invited me to stay with her in her cottage many more observational opportunities presented themselves (a process of which she was fully aware). My participation in the inner worlds of Park life was *created* by residents who invited me into their homes wherein they agreed to participate in my questioning. Each time I visited the Park, I was invited by Computer Club members to give a talk to the club so that they could pick my brain on tech issues. In subsequent visits, more people volunteered to participate—all with their own reasons. Later, Park residents continued to actively participate in *and shape* my study when they suggested people I should talk to. They solicited the help of their friends and acquaintances without my knowing it, as Barbara did with the Normans (the lonely Mac users). Al Swenson set up some dinner meals with people he thought I would find interesting. Barbara made suggestions as to

categories she thought were missing from my first (and only) questionnaire. During my last visit, Barbara set up a meeting with her personal computer tutor, Stugis Johnson, with no input from me. Thus, within the research context of Flamingo Park, the plane of interaction between the residents and me was predominantly horizontal.

As described above, research participants were selected on the basis of what Patton described as “opportunistic” and “snowballing” sampling strategies (1990, 183). In addition, I also occasionally used a “criterion” strategy as when I intentionally sought out any Mac computer users, for example. Finding study participants among the residents of Flamingo Park was constrained by several factors, including ability, willingness and interest. Some individuals stated that they were busier in retirement than when employed. Some people left Dry Springs for the summer and returned to their northern residences. The major holiday season from November to December was not an ideal time to try to set up formal meetings because it was prime visiting time for distant family members. Some retirees had firmly fixed schedules for managing their daily lives and did not easily incorporate new things into them. In actuality, therefore, my participant population was mainly self-selecting. If I wanted to catch up with participants, and in order to experience all seasonal activities of Flamingo Park, I needed to be in Dry Springs during certain periods of the calendar year. As a researcher, I visited the Park in every month except April, June and December.

2. Observation

As the name implies, a major element of participant observation is observing which in a research context entails more than simply watching people. The complexities of the process were described by Wolcott who recommended strategies for observing: look at everything, look at nothing in particular, look for paradoxes and/or look for key problems. But how do we make sense of what we have observed?

When ethnographers talk about observing human social behavior they are talking about actions *and* their meaning. It is those meanings that confound our capacity to observe human behavior. The problem is rooted not in the fact that we do not know what other people mean but that as humans we are accustomed to supplying meanings of our own [emphasis in the original]. (Wolcott 1994,167)

According to my assumptions [detailed elsewhere], humans are curious and stimulation seeking, imitative learners and gregarious, social beings. These principles underlie my hypotheses that older citizens—like younger ones—seek ways to keep

themselves stimulated, are curious about new cultural trends and learn through observation of others in contexts of social support. To verify or test these assumptions, I needed to systematically observe the array of social contexts available to the individuals in my research population in order to learn where and how they obtained help and support. Also, I needed to observe individuals in their private residences since this was a primary locus of their efforts to use I-C technologies.

Another researcher identified differing approaches to the process of observation, such as, “descriptive,” “focused,” and “selective” (Angrosino and Mays de Perez 2000). In my research, observations were a combination of researcher-determined and resident-determined approaches and opportunities. Participants determined the time of day, the areas within their residences into which I was invited and the family members to whom I was introduced. I wished to observe Park residents in a variety of settings and obtain a representative sample of their daily activity but I was reliant upon them to identify the appropriate contexts for such observations. On the other hand, I could, on my own, enter any number of public events and spaces in the Park. My goal, in doing so, was to observe a wide variety and representational sample of Park activities and events in order to understand the life context of the individuals whom I was interviewing.

Within this study, there were thus two alternating foci for observations: individual and institutional (the residential community). These foci are mutually intertwined and interactive though they may be separated out for the purpose of analysis and description. The observation of individuals most often took place within various spaces of the Park context. The institutional focus, then, is a means for understanding and situating individual behavior. The length of observation time that was focused on institutional phenomena varied widely, from fifteen minutes (to assess the collection scope of the library in a residence building or to observe the menu of a closed circuit TV channel) to several hours (for a Park event or an external trip). The objective was to observe a representative sample of park settings, events and activities. Other informal sampling occurred as I moved about the Park, where I could notice how things worked, such as, security procedures, facilities, transport, car ownership and so on. A more focused approach occurred in targeting and attending the events and activities that might be taking place during my stay in the Park and Dry Springs. Observations focused on

individual phenomena varied in length, as well. Doing a “tech survey” might take only twenty minutes; observing computer use could take up to an hour or more. (Attending events with individuals overlapped the institutional focus, as described above.) I tried to observe the individual use of a computer at least two times, and the amount of lapsed time in between observations ranged from six months to two years, eight months. Follow-up observations were critical to understanding the ever-changing importance of technology in the life of each individual. It is with such spaced and selected observations that I was able to chronicle computer use as it unfolded.

Observation that took place during an instructional interaction, either in group settings or in individual residences, was noted openly and immediately with the understanding of the participants that I was describing their learning progress. I recorded these observations either as written notes or dictations into a tape recorder both in the presence of participants and later. Observations involving informal conversations that occurred in either public or personal settings were noted immediately following an interaction. Observations were also made of the use of (or reaction to) technological devices that existed in the surrounding environment. The positioning and repositioning of technological devices in personal settings were noted. In some instances, I photographed (with permission) computer locations and setups. I occasionally sketched room and furniture layouts in public places. Logs or reports with analytic and methodological memos were generated for each formal observation episode.

In my Flamingo Park research, observing became increasingly important as the years went by and the articulation prowess and actual speaking ability of the participants waned. It was only due to our long association that I was able, for example, to fill in the gaps in Barbara Howard’s utterances, which became more and more fragmented due to her partially paralyzed throat as well as her word recall difficulty. As words fall away, other means of communication become foregrounded, like body postures, facial expressions and hand gestures. Examples are Al Swenson’s finger snapping to signify speed, Laslo Unterweg’s finger drumming indicating restiveness and Barbara Howard’s moving fingers to indicate relationship closeness.

3. Interviewing

Initially, I asked for volunteers to talk with me about their information needs and their interest in new technologies of communication. That request was made at Computer Club meetings (by me and by club participants) and other social settings, and it was gradually disseminated by word of mouth. To those who identified themselves (by taking classes on or owning computers, for example) as interested in new information technologies, I offered individual tutoring and assistance in exchange for the opportunity to talk with them about their experiences. My promise for each session was to help individuals to accomplish at least one task on their list of computing interests or problems. Eventually, other opportunities for formal interviewing arose through casual conversations in social settings. Given time constraints, I mainly talked with those who were using or interested in new technologies although I recognized that talking with those who expressed distaste or disinterest in these phenomena would have provided valuable insights into perceived challenges and difficulties. Throughout twelve years I established ongoing relationships with several dozen individuals who shared with me their reflections on their evolving lives and the place of technology in them. About seventeen of those individuals were, at some point, active computer users. Interviews and conversations took place in individual residences, public meeting areas, and local community settings to which I accompanied individuals. Most interviews were tape-recorded. When a tape recorder was not used (due to machine malfunctioning or sensitive circumstances) interviews were recorded in written notes during or subsequent to the conversation. For each interview I generated a “log” or interview report which included methodological and analytical memos.

There were constraints that occurred in the course of conducting these interviews. Conversing with those whose verbalization skills are apparently slowing entails careful consideration. Posing questions can be an unsatisfactory means of eliciting information because it puts the conversant on the spot. Rather, formulating inquiries as statements seems less demanding and allows the respondent to choose his preferred mode of speaking (commentary, seeking clarification, or even silence). One substitute for questioning is story swapping. For example, when I mentioned traveling to the Park by train, it prompted one participant to tell me that both he and his wife’s father had worked

for the railroad at some time in their lives. I discovered the drawbacks to conversing with or interviewing more than one person at a time. Attention is sometimes diffused so that meaning cannot be quickly grasped, reacted to or followed up on. The interactional dynamic is markedly different and the individuals typically speak less frankly and/or shape their responses for the other participant. With couples, it can be difficult to tease apart the minds, opinions and words that have fused during long years together. One person can dominate and disrupt the train of thought of a slower respondent. And this applied to other multiple participant conversations, too, as when Barbara Howard's tutor, Sturgis, spoke for her during our joint discussion.

In the initial stages of my study, I conducted semi-formal interviews, using topic guidelines. As the study progressed and I became well acquainted with the participants, the interviews became unstructured and eventually assumed the nature of conversations. There are many components to consider in the interview process in addition to the social or class identities of the participants, like rapport, reciprocity, equity, and the nature of the relationship. There are debates on how much rapport should be sought or established. Some interviewers advocate for an "I-Thou" relationship between interviewer/interviewee, which has the potential of turning into a "We" relationship. Others see the disadvantages: "In [a full 'We' relationship] the interviewer would become an equal participant, and the resulting discourse would become a conversation, not an interview." In such a relationship, the "question of whose experience is being related and whose meaning is being made is critically confounded" (Seidman 1991, 73). He advises, "If the interviewer has created a full 'We' relationship in the process of interviewing, then he or she must be prepared to deal with the consequences." And Seidman warns against the temptation to act as a therapist in such a close relationship, "The researcher is there to learn, not to treat the participant" (Seidman 1991, 76 and 81). Although Seidman expressed these sentiments nearly two decades ago, there are many researchers who would agree with him and who would criticize the nature of my relationship with some of the residents of Flamingo Park, which clearly became a We relationship through interactions over a dozen years. And, as he advised, I am prepared to take the consequences in terms of both research and ongoing relationships.

4. *Surveys*

The two ‘surveys’ I employed in the course of this study were actually an inventory and a question guide. Both of these research instruments served as starting points in an interview and provided structure for conversations that might have been flagging or lacking direction.

- The Tech Survey provided a context of technology and appliance use that reveals comfort levels with previous technologies and indicates possible previous training for newer technologies.
- The Information Resources Survey established a basic level of information needs and resources and familiarity with computing technologies, as well as possible support resources.

5. *Artifacts*

People *do* as well as say. By examining the material traces of behavior, we gain a different kind of understanding than that afforded through conversing. Thus, the products of technological use provided an important source of information in this research context. What do the Senior users of computing technologies do with their computers? Their individual and joint creations such as greeting cards, stories, reports, email and flyers, are rich data that their creators were willing to share with me. As a sometime participant in the Computer Club, I received e-mails from various members. One of the Club co-leaders, who served as a storyteller for the group, included my name on his lengthy mailing list so I received his many jokes, words of advice, and social commentary. Within these hundreds of messages there were many revealing narrative threads. According to Hodder (2000) these artifacts can be analyzed as representations of ideas and/or as evocations of sets of practices. Knowing what individuals do with various technologies provides insight into many aspects of their lives. The popularity of creating greeting cards with computer programs to send through the regular postal service is a good example of the melding of the new and the older familiar technologies in the lives of Seniors.

6. *Researcher Role*

Within the Flamingo Park research setting, I was, among other roles, an advocate and helping agent for residents. If I identified a need that I could meet or a problem I could resolve, I did so. I lent my services to the improvement of individuals’

circumstances in a variety of ways, ranging from addressing their bodily needs (bandaging a sprained ankle, helping to wipe the face and brow after an unexpected incident of vomiting, doing the laundry for an immobile individual, buying food treats for a house-bound individual and so on), to serving as their personal computer tutors who worked with them for hours on technological mishaps. These intimate interactions arose naturally out of my background experiences as practical nurse, care taker, counselor, teacher and sometime clinical psychologist. Such personal involvement has positive and negative consequences. Benefits for research participants (as well as my research) include the following:

- My interest in them has encouraged and supported their efforts to explore computing technologies.
- I have been able to pass along some useful information and techniques for computing.
- In addition to adding to their technological support system, I have in several cases added to their social support system and become a friend.
- For however brief a time, I was able to assuage the loneliness of some residents and to provide them with stimulating conversation.
- By embroiling myself in the affairs of Park residents, I learned (among other things) about their willingness to help their fellow residents and about available resources.

Such well-intended involvement, however, can have negative consequences, as well:

- Fostering a dependency on me which, given my physical distance from the Park, is difficult to address or ameliorate.
- Becoming a part of their lives in such major ways can heavily influence and alter 'data.'
- Becoming attached to Park residents results in profound sadness for me when they suffer health crises and, eventually, die. It has been heartbreaking to witness the sorry state of affairs that some of my acquaintances have experienced once they moved into the Nursing Care Center. This, in turn, has resulted in feelings of guilt for not doing more to improve their circumstances.

Thus, these are the circumstances I will be addressing for the foreseeable future as a result of the We relationship I have with the residents of Flamingo Park.

D. Informed Consent

It seemed to be well known by any Park residents with whom I interacted that I was studying the use of computers and working towards a degree in a computer-related field of study at a major university. Several people in the Park had relatives who have attended my university and/or were then affiliated with it and they were always eager to mention this. When I was being introduced by my Park acquaintances to other residents, these were the facts that were often stated about me in the introduction.

Before any formal interview, I gave interviewees a consent form to read and asked them to sign it. I provided them with a copy that I either gave to them at that time or sent to them along with a thank you note a week or two after leaving the Park. A few interviewees evidenced an initial wariness when handed a form to sign but no one refused to sign or questioned the function of signed consent after my explanation of its purpose. Three individuals had difficulty reading (due to failing eyesight) the print on the forms so I read the words to them. Over the years, I modified the consent forms slightly. The Institutional Review Board of the University of Illinois placed this research project in an “exempt” status at its inception through a subsequent review in 2008. Consonant with the provisions of the consent forms, I assigned pseudonyms for all personal, place, and local institutional names that might reveal the identity or location of participants.

E. Analysis of Research Data

1. Classic and Alternate Methods

Being guided by content rather than method is at the heart of qualitative inquiry. I did not restrict myself to any particular analytical methods. One method that I initially tried in a very limited manner was “grounded theory” which entails a set of procedures that typically take place throughout the data collection period. One of its techniques is the extraction, from data such as interview transcriptions, of concepts through the application of coding words that are then chunked into categories, taxonomies, and eventually themes. Category examples might be “the use of computers in daily life” or the “physical placement of computers” or “meanings of ‘old.’” In this method, repeated data collecting involves repeated “sampling to refine the researcher’s emerging theoretical ideas” (Charmaz 2000, 510-11). This was an approach that I found too constricting of focus. My

revised version (not actually a grounded theory technique) of the idea of purposeful sampling was to do a kind of *topic* sampling. Thus, in each return to the research site I tried to gather information on current cultural events (like Y2K or social networking) that might be impacting the participants' computer use. Eventually, I came to agree with the critics of grounded theory/analysis that the "fracturing" of data (into codes and chunks) fostered a preoccupation with analysis at the cost of "the portrayal of subjects' experience in its fullness." Small wonder that this might occur given the fact that this method was originally created "to help the researcher avoid . . . unconsciously adopting subjects' perspective" (Charmaz 2000, 521). Nor was I tempted to use computer programs designed to carry out such coding and categorization. To the extent that they rely on word frequency as a measure of relevance, such programs could indeed find salient categories which in my data were "time," "change," and "frustration," for example. But how would a computer program recognize the significance of a single utterance (such as "apple") for Laslo Unterweg, the Park resident who spoke it?

Rather than dividing the data into convenient parts, I found that I had to treat it holistically. The analysis or understanding of data as voluminous as mine became a multi-stage, multi-sensory process in which I lived and then relived the field experience through all the senses. Some of the oft-repeated steps of doing this are:

- Read transcripts, field notes and other textual artifacts.
- Listen to the spoken words on the tapes to glean meanings through intonations, misstatements, pauses, hesitations, laughter and other nonverbal utterances.
- See in the mind's eye the gestures and body language surrounding the words and thoughts.
- Reflect on these sensations with cognitive apprehension and begin to recognize the emergence of meaning (participants' concerns, insights, successes) and to extract understanding through artful absorption of data.
- Write from this comprehensive, informed understanding.

2. Writing as Analysis and Knowing

"Writing is . . . a way of 'knowing'—a method of discovery and analysis. By writing in different ways, we discover new aspects of our topic and our relationship to it" (Richardson 2000a, 923). "Metaphor," she insists, "is the backbone of social science writing."

Metaphors organize social scientific work and affect the interpretations of the ‘facts;’ indeed, facts are interpretable (‘make sense’) only in terms of their place within a metaphoric structure. The ‘sense making’ is always value constituting—making sense in a particular way, privileging one ordering of the ‘facts’ over others. (Richardson 2000a, 926-27)

Richardson describes classic sets of metaphors regarding theory building as in the use, for example, of the concepts of: foundation, support, constructing, buttressing, shoring up, framework, and scaffolding; other popular metaphor types involve combat and sports. Those introduced by some feminist researchers describe “theory as story” in which the boundary between narrative and analysis dissolves. Richardson advises writers to examine their own metaphors and to reflect on the ways in which they may have shaped the research process. Only by re-reading transcripts of the interviews with Park residents did I realize that the source and meaning of my metaphors are situated in my life-long preoccupation with travel (journey, path, route, road, movement) and restoration (dig, unearth, reveal, explore, peel away, uncover excavate, mine, plumb depths). These metaphors, used both to elicit and comment on the utterances of Park interviewees, shaped our mutual perceptions of meaning and understanding. My aim is not to build towards truth but to unearth it.

Writing serves many functions—rumination, exploration, analysis, and creation—but it is not without peril, as one ethnographer long ago reminded us.

Writing is both empowering (a necessary, effective way of storing and manipulating knowledge) and corrupting (a loss of immediacy, of the face-to-face communication . . . of the presence and intimacy of speech). (Clifford 1986, 118)

Knowing this, we can strive to keep manipulation and corruption to a minimum.

3. Narratives

“Personal experience narratives,” including reminiscences, are of special interest in the lives of older adults (see Mullen 1992), and the residents in Flamingo Park were eager to tell them. By ‘narrative’ I refer to the stories not only of the Park residents, but also to the personal narrative of the researcher which has to be accounted for in the interactive process of qualitative research (see Pratt, 1983). There are many kinds of narrative forms used to describe the reminiscences of the elderly and many different ways of representing experience and individual reality. Through careful attention to these forms one can discern the distillation of significant life events. In lieu of formal terminology, I have begun to use the phrases “emblematic tales” and “totems of

technology” to describe little nuggets of revelation that I have encountered while sharing time and thought with Flamingo Park residents. They weave in and out of this research and could benefit from more systematic exploration in the future. Following are examples of this narrative form that emerged in my conversations with the residents of the Park.

Neva Evans repeated the sentence about her husband’s utterance (“‘I plan to leave this world computer illiterate.’ and he did!”) so often in front of so many that it assumed significance beyond that of an anecdote. It seemed like an encapsulation of a deep truth about their relationship that expressed her disappointment over his failure to keep up with the changing times and with her. In a similar vein, Al Swenson used the word, “patches,” to encapsulate a deeply felt experience he had had of connecting military personnel to members of the civilian population from whom they were separated (he often mentioned “sweethearts”). He used “patches” not only to reminisce but also to explain the start of his technological journey in communications—a journey that culminated in Skype-ing. Nelson Jones expressed the turning point in his understanding and interest in computers with the gesture of shaping his hands into a six-inch rectangle to represent the hard drive that Don McDonald brought to the first gathering about computing. Seeing a hard drive was his “ah ha!” moment when he realized that he could relate to computers via their guts. He was fond of reliving that moment, and he always illustrated it with his hands in the air. The symbolic gesture told the tale. The möbius band that Laslo Unterweg referred to repeatedly and made for me time after time likewise held some deep meaning for him. In the absence of other clues to its meaning, I accepted his explanation that it represented life in Flamingo Park, which he found to be one-sided and lacking in diversity. The scrabble board that Barbara Howard’s daughter made for her was a totemic object depicting a family history. She permanently affixed the Scrabble tile-letters to spell out her mother’s and family’s traits, names and jokes. This is an example of an object that symbolized and encapsulated Barbara’s love of words and ideas that were manifested in her love of a board game.

4. Poetry: Reading It, Hearing It

All poetry offers insights into the mind of its author, and autobiographical poems offer a particularly fine-grained way of discovering meaning. This poem by Barbara Howard was written when she was approximately age 90; it is a profound reflection of

the life outlook that underlay all that she did, including her exploration of I-C technology. It is titled, “An Elderly Lady Looks Ahead.”

Driving, I look ahead to sudden stops.
Red lights, changes and new directions.
Not my choice.
I want to be ready.

In life, I look ahead to sudden stops,
Temporary switches and changes—
Not my choice.
I want to be ready.

People also speak the poetry of their lives. Sometimes if we are careful listeners we can hear it immediately. But more often it does not emerge from the ‘background chatter’ until it is spoken/told time after time. Examples from the Park research participants were:

- Al S. patching together people across the seas with HAM Radio and, later, Skype.
- Neva E. taking deep breaths and lazing her way through the years.
- Laslo U. eating life with big bites; seeing his old age in a tiny corner of his mind.
- Samuel D. harmonizing and seeking good fellowship.
- Barbara H. Scrabble-ing her life together.

F. Authority, Responsibility, Evaluation & Knowing

1. Evaluating Authority and Validity

Although questions of validity and reliability are of lesser concern in the world of qualitative research where studies are unique and not designed for replication, a few scholars have tried their hands at operationalizing these concepts. In his essay on how to attain validity in qualitative research, Wolcott listed nine points including good listening, accurate recording, and full reporting; another one of his points resonated with me and my research approach. He called it, “Let readers ‘see’ for themselves.”

I make a conscious effort to include primary data in my final accounts, not only to give readers an idea of what my data are like but to give access to the data themselves. In striking the delicate balance between providing too much detail and too little, I would rather err on the side of too much; conversely between overanalyzing and underanalyzing data, I would rather say too little. Accordingly, my accounts are often lengthy; informants are given a forum for presenting their own case to whatever extent possible and reasonable . . . [M]y growing bias toward letting informants speak for themselves is exactly that—a bias in favor of trying to capture the express thoughts of others rather than relying too singularly on what I have observed and interpreted. (Wolcott 1990, 130)

As researchers, we must bear responsibility for our actions, be they the manner in which we use our participants' words or be they the manner in which we use our observations.

If part of the ethnographic enterprise is to take people's own words away from them . . . then another part of the same enterprise must surely be to remain responsible for how those words may be interpreted by those who read them. . . .

Textual representations transform social actions and events into narrative, which in turn shape and give consequence to the details of observed life . . . By placing the observable into recognizable textual formats, the ethnographer can make the social world readable . . . [This] is part of a complex discourse of authorship, authority and responsibility. (Coffey 1996, 71, 72)

To serve as witness (rather than "voyeurs") we have "to provide an empirically thick description of what happened: who did what, to whom, in what circumstances, with what responses from others, to what end, and with what consequences." (Bosk 1992, 4)

By what criteria do we wish our studies to be evaluated? Three that I would choose are among those listed by Richardson: (1) *Contribution*. Does the work "contribute to our understanding of social-life? Does the writer demonstrate a deeply grounded (if embedded) human-world understanding and perspective?" (2) *Reflexivity*. "How did the author come to write this text? . . . How has the author's subjectivity been both a producer and a product of this text? Is there adequate self-awareness and self-exposure for the reader to make judgments about the point of view? Do authors hold themselves accountable to the standards of knowing and telling of the people they have studied?" and (3) *Expresses a reality*. "Does this text embody a fleshed out, embodied sense of lived-experience? Does it seem 'true'—a credible account of a cultural, social, individual, or communal sense of the 'real'?" (Richardson 2000b, 254).

2. *The Elusiveness of Knowing*

The purpose of research is to contribute to human knowledge and understanding. In the context of social science study, many scholars believe that a preliminary step for this contribution is self-knowledge and awareness, as well as an accounting of one's subjectivity. Seventeen years ago a scholar conceptualized "a participatory mode of consciousness" in her attempt to expand the understanding of the idea of subjectivity and knowing in qualitative research. She observed that the "anxiety about how to be as objective as possible has been translated into anxiety about how to manage subjectivity as rigorously as possible" (Heshusius 1994, 15). She posited,

two kinds of subjectivity; the accounted for and the not accounted for; the tamed and the untamed. . . . How would we know if the unaccounted-for subjectivity is not far more important in determining one's influence on the research process than the accounted for? . . . The preoccupation

for how to account for one's subjectivity can be seen as a subtle version of empiricist thought, in that it portrays the belief that one knows 'how to handle things,' that one knows what is 'behind' things and 'behind' oneself and how to keep it under control. (p. 16)

Heshusius recommended a re-viewing of the ancient idea of participation as knowing in the deeply somatic sense of our forebears. This kind of knowing involves a "deep passion and identification . . . that *does not want* anything," and a compassionate consciousness (Heshusius 1994, 17; italics in the original). She continued,

[T]he essence and starting point of the act of coming to know is not a subjectivity that one can explicitly account for, but is of a direct participatory nature one cannot account for . . . [There is a] . . . pervasive affirmative quality, which can exist only when there is a recognition of the deeper kinship between ourselves and other, [which] is the ground from which participatory knowing emerges. A participatory mode of consciousness. . . results from the ability to temporarily let go of all preoccupation with self and move into a state of complete attention. . . . Concerns about truth and degrees of interpretation are replaced by positing a transformative process of merging, and then differentiation, which results in rethinking the boundaries of self and other in the knowledge of their permeability. (Heshusius 1994, 17-18)

The solution for not becoming "'lost' in some symbiotic participation" which would obviate "reasoning conceptualization, [and] categorization," is to develop "the ability to self forget and fully attend" simultaneously (Heshusius 1994, 20).

During the time I spent in Flamingo Park I entered this mode of "participatory consciousness" and hope to give evidence of it in any account of this research.

Appendix 1

Descriptions of Computer Club Members

Encapsulated in these brief descriptions are revealing aspects of the lives and levels of interest in I-C technologies of selected members of the Computer Club (C.C.) in Flamingo Park between 1996 and 2008. Their ages, (in parentheses) indicate their life span during our interaction.

Earliest computer club members and mid-1990s interviewees.

- Barbara Howard (age 82 to 94): former teacher; fervently dedicated to maintaining her computer skills well into her mid-90s; finally turned use over to proxy-friend; her husband did not compute due to ill health but while still alive supported her interest with patience and humor.
- Samuel Dunlop (76 to 89): former pastor; received frequent tech help from son; enjoyed searching the Web; became a devotee of genealogy research; avid user of assistive devices for the visually impaired; his wife did not compute due to eye problems but remained supportive until her death.

- Albert Swenson (83 to 91): former engineer and high school teacher; most exploratory user; eventual C.C. co-director; dedicated to teaching computing to fellow residents which he continued until a week before he died; wild for Skype; wife (stroke victim) vicariously enjoyed family communication through Al's use.
- Helmut Rossler (88 to 93): former videographer who thought this experience would translate to computing and became depressed when it didn't; stated that computing was his first/only tech failure; wife commiserated with his efforts to learn about computers but did not attempt use due to failing health.
- Marion Probst (82 to 91): former secretary; only (and therefore frustrated) Mac user in the C.C.; wanted to do pragmatic things like organize files; despite modest efforts, did not become accomplished Internet user; husband not interested in computing and ignored her interest due, possibly, to failing health.
- Don McDonald (70 to 82) still working as salesman; founded the C.C. in order to share his enthusiasm for spreadsheets and to create a personal social outlet; believed that computing was a one-person endeavor; claimed that Internet was evil influence; wife did not use due to ill health.

Interviewees between 1999 and 2008.

- Neva Evans (75 to 85): former teacher/practitioner of holistic therapies; curiosity prompted computing exploration; her physician husband threatened by this technology, didn't want to hear about/see it; her computer use increased under influence of Park companion, Tally, whom she 'dated' after her husband's death.
- Laslo Unterweg (79 to 88): former high-powered scientist who became increasingly enraged by his unanticipated failure to master computing (except for Solitaire which proved therapeutic); finally turned tech duties over to visiting secretarial assistant/proxy; lived alone.
- Will Mahler (77 to 86): former research laboratory technician; initially comfortable with his computer with which he authored articles for Park Flyer; eventually seemed to lose interest but despite a year of non-use declared he wasn't done; his wife—an avid reader— was dedicated to not using a computer.
- Myrtle Likert (90 to 97): former utility company employee; was inspired to try (in her late 80s) to learn computing because she saw little children doing it; she grew quickly frustrated by her inability to screen out irrelevant stimuli; eventually closed the door to her computer room but did not unplug the machine.
- Nelson and Sue Jones (89 to 96; 81 to 82): former pilot, former stewardess; he loved all gadgets; enjoyed playing games like Flight Simulator; kept trying to find ways to compute despite losing vision and hearing; Sue used the computer to communicate with family members and make greeting cards.

- Richard Querengasser (“Dr. Q;” 80 to 89): former psychiatrist; first Internet use in 1999 was to order his wife a book on Amazon; even after he could no longer use his computer due to failing health, refused to give up his computing equipment which occupied a large space in his nursing care room.
- Mary and Marvin Cooper (79 to 86; 81 to 83): former homemaker (& current volunteer secretary at local church), former field engineer for utility co.; equal interest at start of use; his interest faded while hers grew; after his death, she became accomplished in page layout; occasional help from children.
- Carmen Nouvel (78): former government employee who learned computing on the job; started exploring the Internet in late 1990s; was disheartened by the computing systems she encountered in libraries and was unable to use; stopped attending C.C. due to a disfiguring cancer in last years of life.
- Sturgis Johnson (85): former business executive; newer Park resident; experienced computer user; became tech tutor and remote-system proxy user for some Park residents, most especially Barbara Howard when her ability to compute faded; his teaching maxim: “the Sturgis way is the only way.”
- George Brinkley (69 to 72): former computer scientist; newer resident and second-generation co-director of C.C.; introduced more contemporary topics into Club meetings; readily acknowledged contributions of original Club founders; he and partner fond of cruises, creating lacunae in C.C. schedules.

Acknowledgement: Professor Jennifer Greene (College of Education, University of Illinois) contributed significantly to my revitalized understanding of qualitative research methodology. I am grateful for her guidance during the initial iterations (between 2002-04) of the methodological design that I used for my long-term research project among the residents of a retirement community.

Citations

- Angrosino, Michael V. and Kimberly A. Mays de Perez. 2000. Rethinking Observation. In *Handbook of Qualitative Research*, 2nd ed., ed. Norman K. Denzin and Yvonna S. Lincoln, 673-702. Thousand Oaks, CA: Sage Publications.
- Bosk, Charles. 1992. *All God's mistakes: Genetic counseling in a pediatric hospital*. Chicago: University of Chicago Press.
- Charmaz, Kathy. 2000. Grounded theory: Objectivist and constructivist methods. In *Handbook of Qualitative Research*, 2nd ed., ed. Norman K. Denzin and Yvonna S. Lincoln, 509-535. Thousand Oaks, CA: Sage Publications.

- Clifford, James. 1986. On ethnographic allegory. In *Writing culture: The poetics and politics of ethnography*, ed. James Clifford and George E. Marcus, 98-121. Berkeley, CA: University of California Press.
- Coffey, Amanda. 1996. The power of accounts: Authority and authorship in ethnography. *Qualitative Studies in Education* 9, no. 1: 61-74.
- Heshusius, Lous. 1994. Freeing ourselves from objectivity: Managing subjectivity or turning toward a participatory mode of consciousness? *Educational Researcher*, 23, no. 3: 15-22.
- Hodder, Ian. 2000. The interpretation of documents and material culture. In *Handbook of qualitative research*, 2nd ed., ed. Norman K. Denzin and Yvonna S. Lincoln, 703-716. Thousand Oaks, CA: Sage.
- Horrigan, John B. 2009. Home broadband adoption 2009. Pew Research Center Publications (accessed June 17), <http://pewresearch.org/pubs/1254/home-broadband-adoption-2009>.
- Kleinman, Sherryl, Barbara Stenross, and Martha McMahon. 1994. Privileging fieldwork over interviews: Consequences for identity and practice. *Symbolic Interaction* 17, no.1: 37-50.
- Lincoln, Yvonna S. and Egon G. Guba. 1985. Establishing Trustworthiness. In *Naturalistic Inquiry*, 289-331. Newbury Park, CA: Sage Publications.
- Mullen, Patrick B. 1992. *Listening to old voices*. Urbana, IL: University of Illinois Press.
- Patton, Michael Quinn. 1990. *Qualitative Evaluation and Research Methods*, 2nd ed.,. Thousand Oaks, CA: Sage Publications,.
- Pratt, Mary Louise. 1986. Fieldwork in common places. In *Writing culture: The poetics and politics of ethnography*, ed. James Clifford and George E. Marcus, 27-50. Berkeley, CA: University of California Press.
- Richardson, Laurel. 2000a. Writing: A method of inquiry. In *Handbook of Qualitative Research*, 2nd ed., ed. Norman K. Denzin and Yvonna S. Lincoln, 923-48. Thousand Oaks, CA: Sage Publications.
- Richardson, Laurel. 2000b. Special focus: Introduction—Assessing alternative modes of qualitative and ethnographic research: How do we judge? Who judges? *Qualitative Inquiry* 6, no. 2: 251-291.
- Seidman, Irving E. 1991. *Interviewing as qualitative research*. New York: Teachers College Press.

Wolcott, Harry F. 1990. On seeking—and rejecting—validity in qualitative research. In *Qualitative Inquiry in education: The continuing debate*, ed. Elliot W. Eisner and Alan Peshkin, 121-152. New York: Teachers College Press.

[For a more comprehensive overview of the literature that informed this research, link to “Citations for a Qualitative Research Project” at] <http://hdl.handle.net/2142/26527>