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# Balancing Yin and Yang

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# BALANCING YIN AND YANG: TEACHING AND LEARNING QUALITATIVE DATA ANALYSIS WITHIN AN UNDERGRADUATE QUANTITATIVE DATA ANALYSIS COURSE\*

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*THE FIRST THREE-QUARTERS of the semester flew by. We learned about quantitative data analysis and I loved it. I really enjoyed the numerical manipulations and seeing how it all related to people. Everything was there in front of me. Not too much imagination on my part was really needed. Then it all ended. Professor Clark introduced qualitative methods and the anxiety began. I soon realized I had to reinvent my creative side, which is something that as an undergraduate I am not required to do very often. I was nervous that I would discover that I was not creative at all. I also soon realized while doing my qualitative data analysis that the possibilities were endless, that there really were no limits on the directions I could take the project. This too filled me with apprehension. I felt like a small child letting go of his parents' hands and taking the first step toward a more independent future. I was not quite sure how to approach the new freedom over my work.*

Ours is a story of an undergraduate who learned something about doing qualitative data analysis and a professor who learned something about teaching it. It is a story of anxiety and inspiration, frustration and satisfaction. In her comment above, Angela, the undergraduate, has already cited some of the peculiar sources of anxiety for a student (and, I think, anyone) doing qualitative data analysis for the first time. I would like to tell you about some of the sources of my

anxiety about teaching it, and not for the first time or even the third. I had taught qualitative data analysis several times and had even written a chapter about it in a textbook (Adler and Clark 1999). But I felt I had never taught it all that well, and this fact added to my anxiety.

I belong to a generation-based segment of sociologists who were not formally trained in qualitative research, much less qualitative data analysis. My graduate education had given me a solid background in quantitative statistical analysis, and this served me well as teacher and researcher for nearly twenty years. I had helped design my department's research methods curriculum, one that in theory would introduce students to the logic of social research and various data collection techniques in one semester and to quantitative analysis in the second. I had happily and successfully taught that data analysis course for many years.

Over the years, however, my own research and teaching convinced me of the importance not only of qualitative research generally, but of qualitative data analysis in particular. I have said elsewhere (Adler and Clark 1999:394-95): "The distinction [between quantitative and qualitative data analyses]...is not one of mutually exclusive kinds of analysis but of kinds that, in the real world, stand side by side, and, in an ideal one, would always be used to complement one another." Newman (1999) and Schutt (1996) have made much the same point. Moreover, an increasing number of undergraduate research methods textbooks note the significance of qualitative as well as quantitative data analysis (e.g., Adler and Clark 1999; Babbie 1998; Frankfort-Nachmias and Nachmias 1992; Newman

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Editor's note: The reviewers were, in alphabetical order, Mike F. Keen and Gregg Weiss.

1999; Rubin and Babbie 2000; Schutt 1996; Singleton et al. 1988). But where in the curriculum, if at all, do we introduce qualitative data analysis? How do we introduce students to it?

The pedagogical literature does not hold many answers. *Teaching Sociology* published only six articles in the 1990s that addressed teaching qualitative research methods, and all assumed a whole course devoted to the subject (Charmaz 1991; Keen 1996; Nyden 1991; Ostrower 1998; Schmid 1992; Snyder 1995) as well as a graduate-school curriculum, although Charmaz (1991) wrote of teaching graduate students with an eye toward their teaching undergraduates. Only one researcher (Keen 1996) dealt specifically with qualitative data analysis, and this in the context of projects that unfolded throughout a whole semester devoted to qualitative methods. Moreover, none of the writers assumed a two-semester sequence of research methods courses, one a data-collection course taught by one faculty member [and] the other a data-analysis course taught by a second instructor. None assumed, as was my dilemma, a course that generally comes late in a student's undergraduate career (in the second semester of the junior year, or sometimes the first semester of the senior year) and thus follows by some time a student's initial exposure to sociology, including that first research methods course devoted to various techniques of data collection. None assumed, as was my problem, a data analysis course in which students are expected to have been exposed "to computer programs such as SPSS" and to have learned conventional descriptive statistics (like measures of central tendency and spread), bivariate statistical analyses (like contingency table analysis, chi-square, correlation and regression), and multivariate analyses (mainly multiple regression). Was it reasonable for me to anticipate squeezing an adequate introduction to qualitative data analysis into three or four weeks after spending the bare minimum of nine or ten weeks on qualitative analysis? Was it reasonable for me and my

department to change, as we had done, the description of the "primary objective" of this data analysis course from "an introduction to the purposes, techniques, and uses of quantitative data analysis" to its current version, altered to read "quantitative and qualitative data analysis"? My earlier attempts had indicated that it was not.

*In the end I was very happy with my qualitative analysis paper and was even a little embarrassed with myself for feeling so nervous at the beginning. I had gained a tremendous amount of confidence in myself as well as a great amount of respect for the sociologists that do this sort of research all the time. If I were to do a qualitative project again, I would probably try to organize my work much as we did in this class. I would probably plan to create fieldnotes, code data, do data displays, review literature, and write drafts of the final paper much as I did for this project, and hope that the ideas and research questions began to float into my head, as they did this time.*

Angela is an exceptional student and might have produced a genuinely fine paper no matter what I had done. But the number and diversity of delightful papers I received at the end of this four-week unit on qualitative analysis left me thinking I might have stumbled onto something useful. While I had asked students to do comparable papers in earlier versions of the class, again based on four- to five-week units, the grades on these papers were higher (a median grade of B+, compared to a B)—an indication that I was more satisfied. The students seemed happier too. After the two previous semesters, a typical student comment was: "I would try to explain the second half of the course a little more; was unclear."<sup>1</sup> Now my students made comments such as, "The first half of the semester seemed to drag a little, but the second half was much better."

<sup>1</sup>Even though I have never devoted more than 5 of 14 weeks to qualitative data analysis, students often refer to this part of the course, in course evaluations, as the "second half."

Moreover, I had found in earlier avatars of this unit that trying to do analysis around the diverse efforts of students collecting data outside of class even on very delimited subjects (as students had done while watching children on playgrounds, [observing] other students in the college's dining room, or by interviewing two or three people who had interesting jobs) could be highly unsatisfying. This was mainly because the time requirements of data collection were too great and the possibilities for focused in-class discussion too limited. A happy choice this semester had been to collect much of the data in the first class devoted to qualitative analysis by having all students respond to an image of Sojourner Truth (see Figure 1 for a reproduction of the questionnaire

**Figure 1. Data Collection Instrument and Angela's Response to It**

Name: Angela Lang Major: Sociology  
Age: 21 Year in College: 3d year (junior)



Respond to this picture of Sojourner Truth:

*Sojourner Truth does not appear to be very happy in this picture. Her clothes are plain. It is an old photograph so she may be a slave or a poor woman. She is old and weathered. Her face is tired and aged. She is alone in the picture, suggesting that she has no family or husband. I think this picture is from the late 1800's to early 1900's.*

and one student's response to it). Seventeen students responded to this image at 8 o'clock one morning. These responses resulted four weeks later in Angela's excellent essay about the relationship between students' self-definitions as "night" or "morning" persons and their likelihood of giving elaborate responses to a simple stimulus early in the morning. But they also resulted in a fascinating range of foci in other papers, from the relationship between age and concern with social status to the relationship between gender and any number of other characteristics (such as concern for systems of oppression, willingness to admit a lack of knowledge [no one in the class actually knew who Sojourner Truth was], concern with the emotional state of a subject, length of a person's response to an arbitrary stimulus, or concern with the physical characteristics of a subject). If the proof is in the pudding, and these essays were my pudding, I felt as if I had finally found a recipe worth sharing.

*The class was asked to respond to a picture of Sojourner Truth. At this stage no one really knew what was going on. It was such a new experience. I did not know what to do. Without any instruction, members of the class could put down absolutely anything about this picture, which I realize now was the point, but there was still the feeling that there must be a right or wrong answer. At this point I was a participant in a study and felt the apprehension that subjects must feel, whether it is filling out a questionnaire or being interviewed for a research project. But after I was given copies of everyone's responses I could not wait to see what each person had put down. During the class we were instructed to transcribe the data at home onto half a page. (See Figure 2 for a sample transcription.) Examples were given from our text to give us an idea of what it might look like, but we were told that there was no right or wrong way. That night, as I transcribed my data into fieldnotes, I learned a great deal about the other students in my class. I tried to imagine why*

*they gave the responses they did and wondered if they were doing the same thing. Rewriting everyone's responses onto one set of fieldnotes was tedious, but it made me feel more professional, so I did not mind it.*

The image of Sojourner Truth turned out to have been a good choice for an unlikely and unexpected reason: none of the students who were asked to respond to it recognized her name. This had not been true when I had tried a similar exercise with an image of Mahatma Gandhi the previous semester. In this instance, students did not have to worry about why some students might know Sojourner and some might not and were therefore able to work towards more theoretically interesting empirical generalizations. On the first day, after I had made copies of all the response sheets for everyone in the class, I asked students to transcribe the responses into word-processed "fieldnotes," leaving generous margins for coding and other acts of data reduction. I then suggested that they begin to focus their attention on behavioral regularities that might emerge from their data. We discussed the distinction between what Walter Wallace (1971) called the "inductive" moment of social science—the movement from observation to empirical generalization to theory (what Glaser and Strauss 1967, called "grounded theory")—and the "deductive" moment, a movement from theory to hypothesis to observation. We observed that a couple of examples of qualitative research we had read (Adler and Adler 1999; Enos 1999) seemed to work in this "inductive" mode, and students seemed to think they should try it on these projects. My guess is that this assumption is what made Angela anxious, as she mentioned earlier, about her ability to tap her "creative" side.

One significant pedagogical advantage of having all students respond to an image like the one of Sojourner Truth is that it keeps the time spent on data collection to a minimum. Another advantage, however, is that it facilitates "introspection," the examination of one's own thoughts and feelings with

### Figure 2. A Page from Angela's Transcribed Fieldnotes\*

Jason Cook is a Justice Studies major in his junior year. He is 20 years old:

I have no idea who this guy is, or even if it is a guy. The person looks male, but the scarf makes me wonder. The name sounds familiar, but I can't remember where I heard it before. He kind of looks like my friend Aubrey, unless this person is female then I take it back because I don't want to say Aubrey looks like a girl.

Charlotte Dupre is a sociology major in her 4<sup>th</sup> year. She is 32 years old:

The man appears to be stern by his facial features and the way he carries himself. In considering the name of the picture he depicts honesty.

Doug George is a sociology major in his 4<sup>th</sup> year. He is 22 years old:

Ol' Sojourner does not look too happy to be sitting for this daguerreotype. To those without prior knowledge, from looking at this photograph it is difficult to determine the gender of the subject. The subject also appears to be very stiff or uncomfortable judging by facial expression and body language. The picture gives no indication of what setting the photo was taken in, nor does the photocopy do the original photo much justice as most likely some details are lost. If I had to guess, I would say Sojourner appeared to be at least 50, possibly 60 years old in the picture. The clothing appears to be a mix of American Indian and Old West Sheriff.

Angela Lang is a sociology major in her junior year. She is 21 years old:

Sojourner Truth does not appear very happy in this picture. Her clothes are plain. It is an old photograph so she may be a slave or a poor woman. She is old and weathered. Her face is tired and aged. She is alone in the picture suggesting that she has no family or husband. I think this picture is from the late 1800's to early 1900's.

\*All names, except Angela's, have been changed in this figure, Figure 3, and Figure 5.

respect to the task in question. Babbie (1998:297) is not alone when he argues that

students should practice putting themselves in the place of those they are studying when doing qualitative data analysis and ask themselves how they "would have felt and behaved." Early on I pointed students to the possibility of using this resource as all students attempted the hard, creative work involved in analyzing their data.

In the next class we discussed Miles and Huberman's (1994:12) model of qualitative data analysis, a model in which qualitative data analysis is a series of "concurrent flows of activity" rather than of steps. They call these flows "data reduction," "data display," and "conclusion drawing/verification." But we practiced the "flows" as relatively concrete steps for a project leading to a short paper three weeks later. As a first step I asked students to do some coding in class and at home as their introduction to "data reduction." While I had given this assignment before, the really lucky decision I made this time was one that I would repeat: to have students share their decisions, this time about coding, with me and the rest of the class. Students responded positively to the resulting lesson that their decisions represented only a few out of an infinite variety that could have been made.

The discussion regarding how students coded various responses was typical of subsequent discussions. My simple question, "What kinds of things did you code?" elicited first simple lists, then speculation about what could be done with the codes, and then a flurry of ideas about what other codes might be fruitful. The fact that we all were dealing with the same essential problem (what to make of responses to the image of Sojourner Truth) rather than disparate ones (such as what to make of one person's interviews with teachers and another's observation of kids on a playground) meant that we could avail ourselves of the pedagogical advantages normally associated with "brainstorming." Such advantages, Adams (1979:139) has argued, include a relatively diminished sense of "inhibition and defeatism," the "contagion of enthusiasm," and the "development of a competitive spirit."

Whatever the reasons, we moved more quickly than I had with other classes from what Lofland and Lofland (1995:189-90) call "housekeeping" codes that merely help keep matters straight to "analytic" codes that somehow substantially advance analysis. For instance, it became clear that the gender of the respondent was considered important by many students. Once this became evident, students naturally began to address the question of the kinds of responses that might be associated with gender. In turn, this began to clarify some of the other kinds of "housekeeping" codes they had created and inspired them to consider other things to code. Could it be, they asked, that students' genders were associated with things they noticed about Sojourner Truth (e.g., her emotional state, her apparent or potential experience of oppression) or with the general nature of their responses (e.g., their complexity, their emotional distance from the subject, etc.)? I was impressed by how much more focused and fruitful this discussion was than comparable discussions had been in earlier versions of the course when students reflected on independently collected data sets.

*Having an open discussion in class about the different ideas each student came up with regarding their codes was helpful. (See Figure 3 for an example of a coded page.) I realize now that I was able to focus more on where I wanted to take the project: perhaps in the direction of explaining why some student responses were more complex than others. After the coding assignment, I still had little idea how to turn my codes into something usable, but the class discussion confirmed my belief that there really was something in my sense that some students had been able to come up with more ideas in response to the image of Sojourner Truth than others. Other students had noticed this too, though they did not necessarily say so in so many words. The discussion was similar to having someone proofread a paper for you. Sometimes outsiders help you find better ways to phrase sentences, etc. In this*

Figure 3. A Coded Page from Angela’s Field-notes

Jason Cook is a Justice Studies major in his junior year. He is 20 years old:

I have no idea who this guy is, or even if it is a guy. The person looks male, but the scarf makes me wonder. The name sounds familiar, but I can’t remember where I heard it before. He kind of looks like my friend Aubrey, unless this person is female then I take it back because I don’t want to say Aubrey looks like a girl.

no gender \*elaborate  
 hint of humor  
Personal Statement - friend

Charlotte Dupre is a sociology major in her 4th year. She is 32 years old:

The man appears to be stern by his facial features and the way he carries himself. In considering the name of the picture he depicts honesty.

Gender - male \*vague  
qualities - stern  
 name shows honesty

Doug George is a sociology major in his 4th year. He is 22 years old:

Ol’ Sojourner does not look too happy to be sitting for this daguerreotype. To those without prior knowledge, from looking at this photograph it is difficult to determine the gender of the subject. The subject also appears to be very stiff or uncomfortable judging by facial expression and body language. The picture gives no indication of what setting the photo was taken in, nor does the photocopy do the original photo much justice as most likely some details are lost. If I had to guess, I would say Sojourner appeared to be at least 50, possibly 60 years old in the picture. The clothing appears to be a mix of American Indian and Old West Sheriff.

no gender \*elaborate  
emotion - not happy; uncomfortable  
age - 50 to 60 yrs  
 Remark of photo  
 appearance of clothing

Angela Lang is a sociology major in her junior year. She is 21 years old:

Sojourner Truth does not appear very happy in this picture. Her clothes are plain. It is an old photograph so she may be a slave or a poor woman. She is old and weathered. Her face is tired and aged. She is alone in the picture suggesting that she has no family or husband. I think this picture is from the late 1800’s to early 1900’s.

remark of photo \*elaborate  
emotion - not happy  
appearance - old and weathered  
 social life

*case, they helped me articulate, to myself, what I was most interested in. The class felt like one big peer review session.*

*After this class discussion, we were asked to write memos related to our codes. With the class discussion in mind, I proceeded slowly. The first idea I had, which was to*

*look up biographies of Sojourner Truth to see what type of person she was and compare that to the impression students had of her, took the longest to come up with. After this initial idea, which, in the end, led me nowhere, other ideas began to flow more easily. I examined the different student re-*



*sponses and began to let my imagination work. I recalled observations that had been made during the day's class discussion, observations that included reference to something I myself remembered: on the day student responses were collected, one girl was late to class and was asked to respond to the photo in the last minute. She jotted something down in about five seconds and handed it in. That got me to thinking about the effort that students put into their work, something I assumed would be related to the complexity of their responses (this girl's had been a one-sentence response). Then I thought about the timing of the class itself. Because the class was held at 8:00 a.m., I figured there would be some students who were just too tired to care about an assignment that, at the time, seemed pointless. The topic I finally proceeded with was actually the last one I thought of. The memoing stage was probably what made my topic seem tangible. It helped me organize my coded data, what students in the class had said, and my own thoughts. Before I knew it, I came up with an idea that I liked pretty well.*

As Angela's narrative indicates, I asked students to write a number of memos for their next homework assignment. I suggested these memos could be of various sorts but gave them examples of what Enos (in Adler and Clark 1999:442-43) had called "theoretical" and "methodological" notes. Angela's ruminations on what made some students think Sojourner Truth was male and whether students were "night" or "morning" people (see Figure 4) are really examples of both kinds of notes, since they not only point to ways she might have organized some of her coded fieldnotes (as good theoretical notes should do), but they also specify possible directions for additional research (as good methodological notes should do).

The discussion about the memos was, again, pretty fruitful, especially in terms of solidifying ideas about potential research questions. By now, Angela had pretty much

**Figure 4. Examples of Angela's Memos**

**Memo**

Many responded that Sojourner appeared worried. Look into her life and the worries she may be expressing.

Should also find out the exact date the picture was taken and incorporate that into the responses from those that commented on the picture itself.

Why did the students that felt Sojourner was a male feel that way? Find out what it was: clothing, hair, facial expression, etc. that made them identify her as a male.

The students that thought Sojourner Truth's name sounded familiar did not explain. Find out why they mentioned it. Did it bother them that they did not know who she was?

What physical characteristics do the students see as strong, independent ones and compare to those who felt Sojourner displayed these characteristics?

Find out who in the class considers themselves a "morning person" and who considers themselves a "night person." Meaning who does their best work in the morning and which ones feel they are clear headed at night. Compare these responses to the answers they gave to the picture. Are the more elaborate and detailed ones from people who are more "alive" in the morning?

zeroed in on a plan to examine the relationship between a student's self-assessment as a night or morning person and the complexity of his/her early-morning response to the image of Sojourner Truth. Her last memo reflects this. She represented a minority of students who had done a good deal of focusing by the last class at the end of the second week. Most of the other students either had not figured out exactly how they might use the "variables" that were of greatest interest to them or had not yet figured out what those variables were. The actual memos that students discussed did, as Glaser's classic description (1978:83-84) suggests, vary in length from a sentence to a page or so, but more importantly they also varied in the degree to which they indicated that students were homing in on clear and feasible topics. I remember feeling anxiety that some stu-

dents might not be able to achieve our goal of a five-page paper in the two weeks that remained of the term. I also remember, however, students playing off each other again during this class. Angela's mention of her concern about the complexity of student responses (as measured by the number of different ideas a student spelled out) led two students to a primary concern with the length of those responses. (Both of them ended up looking at the question of whether the gender of the respondent was associated with the length of the response.) Was this another "brainstorming" effect?

*The class on data displays was particularly helpful for organizing my data. Professor Clark showed us examples of several types of data displays. Some of the examples were complex and did not seem relevant to me. I ended up concentrating on one type of data display that Professor Clark refers to as a "Monster Dog." (See Figure 5.) I looked at several Monster Dogs, each displaying a different set of variables. I was soon able to see helpful patterns. For instance, self-described morning people looked as though they gave more elaborate responses to the photograph of Sojourner Truth than night people did. When I crosstabulated these two variables, there was in fact clearly a relationship.*

*The next step was to seek out possible references for our final paper. I decided that I wanted to see whether anything might be available about the behavioral differences of self-declared night and morning people. I discovered that not too much had been done on this topic. I realized that I was being too specific and that I needed to broaden my literature search. Once I did find some materials on sleep patterns and sleep studies, I decided to locate my study within the literature on the effects of sleep deprivation.*

Another happy pedagogical breakthrough came during my preparation for the class on data displays. In the earlier version of the course that had been organized around stu-

dent responses to an image, I had introduced students to only a tiny fraction of the possible types of diagrams they might use; for example, typologies and flow charts (see, e.g., Adler and Clark 1999:442-46) and event-listing and check-list matrices (Miles and Huberman 1994:105-15). By this time, I was impressed with how little such displays helped students actually organize information from a number of essentially comparable cases, such as the student responses to the image of Sojourner Truth. I returned to what I consider to be the bible on data displays, Miles and Huberman's (1994) *Qualitative Data Analysis: An Expanded Sourcebook*, and rediscovered their chapters on "Cross-Case Displays." Angela's displays in Figure 5 are essentially examples of what Miles and Huberman call "meta-matrices" or, more affectionately, "monster-dogs" (178). A monster dog allows students to juxtapose all of their single-case displays on one page (or a few pages), including all relevant data collected on the basis of earlier coding. Angela's first monster dog in Figure 5, for instance, permits her to see how many traits (e.g., race, gender, age, etc.), commonly mentioned by students in their responses, were actually mentioned by [individual] students. Through cross-tabulation or other kinds of analyses, "monster dogs" rapidly lead to a genuine sense of empirical relationship among the variables that students use to organize their analyses. For instance, Angela uses her first monster dog to determine how many of each commonly-mentioned trait each student actually mentions, thereby enabling her to assess whether the response is "elaborate" or "vague." Monster dogs seem to be an especially quick and dirty way of doing what Glaser and Strauss (1967) call *constant comparison* and what Billson (1991) calls *progressive verification*. A number of students were able to articulate the relationship between key variables by the end of this class, but even those who could not seemed to have a good sense of how they might tease out such a relationship when the time came. In addition to offering

Figure 5. Two Examples of Angela’s “Monster Dog” Data Displays

Data Display: Response Specifics to Determine Elaborate or Vague

Name	Race	Gender	Age	Emotion	Qualities	Personal	Appear	Job	Photo	Name Sig
Terri		x	x		x					
Jennifer						x				
Alan	x	x	x	x	x					
Richard	x	x			x					
Jason	x					x				
Charlotte		x			x					x
Doug		x	x	x					x	
Angela		x		x			x		x	
Delia	x			x				x		
Katie		x	x		x	x		x		
Janice	x	x							x	
Rita	x	x	x							
Joe		x	x		x			x	x	
Julie	x	x			x	x				x
Ann		x	x							
Casey				x	x				x	

Data Display: Elaborate Response versus When Feel Most Awake

Name	Elaborate	morning	afternoon	night
Terri				
Jennifer		x		
Alan	x		x	
Richard			x	
Jason	x	x		
Charlotte		x		
Doug	x			
Angela	x	x		
Delia				x
Katie	x			x
Janice				x
Rita		x		
Joe	x	x		
Julie	x	x		
Ann				x
Casey	x		x	

students a way of doing a kind of constant comparison or progressive verification, the monster-dog had the additional advantage of showing students how qualitative and quantitative data analyses can complement each other. Once they had created a monster-dog showing how several variables varied for specific students, it was simple for students already trained in quantitative analysis to work out associations between different variables using crosstabulation.

*I finally sat down and began writing the paper. It was now that the project actually began to make sense and fit together. One of my biggest concerns going into this step was how I would incorporate the literature reviewed with the rest of my findings. I had found literature, I knew, that was somewhat relevant, but nothing that spoke directly to my findings that morning people would write more elaborately in the morning. As I wrote, I discovered that my worries were misplaced. Things did flow. The fact that the literature I reviewed did not speak directly to what I had found became a virtue; I could simply say that I was addressing a hole in what the literature already said about sleep patterns. Once I began to put it all into words, the paper "practically wrote itself." That was neat.*

We spent the last three classes of the semester composing, reading, and revising drafts of the final essay. We talked about how important report writing was for any kind of social science analysis, and I emphasized its importance to qualitative data analysis (see Adler and Clark 1999:447-52; see also Hammersley and Atkinson 1983:208; Lofland and Lofland 1995:203). I also stressed that I wanted each essay to contain seven parts: a title, an abstract, a literature review, a methods section, a findings section, a summary and conclusion section and a reference section. (A number of my students told me afterwards that they had never actually written a report involving all these parts before, and that this process itself made them feel as though they had

matured as researchers.) The first class was devoted to drafts of literature reviews in order to familiarize students with the genre's justificatory function. We looked closely at two published reports (Enos 1999; Adler and Adler 1999) to see how other authors used their literature reviews to justify their analyses. I asked students to find only two or three references to justify their own research. Students were impressed that little things, like selecting the right key words for finding relevant references, could significantly advance their analysis by helping them focus on precisely what it was that distinguished their work. We devoted a second day to a reprise of the literature review and the findings section, an examination of whatever other portions of the papers students had gotten to, and the effort to make various parts of their papers cohere. At this point, I gave students peer critique forms (see Figure 6) to focus their

**Figure 6. A Peer Critique Form**

**Peer Critique Form**

Your Name: \_\_\_\_\_ Writer's Name: \_\_\_\_\_

1. What parts of the final paper did you read (e.g., literature review, methods section, findings, conclusion):
  2. What seems to be the main point of this paper?
  3. What worked in this paper for you? Please be specific. (e.g., large issues: the writer convinced you of his/her point, the structure of each part was effective; smaller issues: a particular piece of evidence seemed especially apt, an image or idea or paragraph or sentence was particularly striking.)
  4. What did not work well for you as a reader? Please be specific. (Begin with the larger issues of organization, major point, use of evidence; conclude with the smaller issues of style, paragraph or sentence structure.)
  5. What advice can you offer to help the writer improve her/his paper? Please be specific.
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conversations. Cooper and Odell (1977:150-52) have argued that peer evaluation not only "offer[s] each student an opportunity to observe how his or her writing affects others" but also helps students "to check their perceptions of reality and to correct distortions," an effect that may be especially likely when the peers actually know something about which they are writing.

While getting (and giving) feedback from (and to) their peers seemed useful to students in class, I also found I had time (at least in a class of 16 students) to read and comment myself on what students brought to class. Students appreciated this attention, and it was relatively easy to give since their papers at this stage were only a couple of pages long.

### *Summary and Conclusion*

*I began this endeavor with much anxiety and a silent yearning for the class to return to quantitative data analysis. But, as I look back, it is amazing how much I learned during the short period the class spent on qualitative analysis. Not only did I gain confidence in my ability to be creative, but I now feel oddly more able and eager to contribute to sociological studies. This was really the first piece of original research I had done in my undergraduate career.*

The idea of giving our students a balance of quantitative and qualitative approaches to research is gaining increased currency in sociology (e.g., Adler and Clark 1999; Babbie 1998; Frankfort-Nachmias and Nachmias 1992; Reinhartz 1992). Undergraduate research methods texts have long instructed students in data collection procedures appropriate to both approaches, but there has been little discussion of how to integrate qualitative data analysis into our undergraduate curriculums. In fact, I suspect that most of us, if asked where we teach data analysis in our undergraduate curriculums, would point to a statistics or quantitative data analysis course.

This paper presents a strategy for teaching qualitative data analysis to undergradu-

ates within the context of a traditional quantitative course. It suggests that such teaching may be done in a reasonably short period (approximately four weeks) at the end of such a course. The limitations of the approach outlined here are noteworthy. Miles and Huberman (1994:8ff) distinguish between two general approaches taken by qualitative data analysts: a social anthropological approach, aimed at uncovering and explaining regularities in everyday life; and an interpretivist approach, aimed at providing "accounts" of, among other things, unpredictable aspects of everyday life. The approach taken in this essay is more compatible with the former approach than the latter, although it could be adapted. Moreover, nothing in this essay has indicated how one might use the approach described to glean the kind of "in-depth" understandings frequently associated with qualitative research, although appropriate adaptations may be possible. Furthermore, while the current approach can be offered with appropriate equivocations about how most qualitative analysis typically involves recursive activities among data collection, coding, memoing, data displaying, literature reviewing and report writing, it may leave certain students believing they have found a foolproof recipe for qualitative data analysis. This limitation reflects our department's methods curriculum, in which the introduction to data collection techniques falls into one course and the introduction to data analysis techniques is assigned to a second. Finally, the current approach presumes that students already possess some skills at quantitative data analyses (e.g., in constructing crosstabs) that may or may not be justified in particular curricular contexts. Moreover, while this approach may actually help students see how quantitative and qualitative methods can be complementary (one of the goals of our approach), it may not place enough emphasis on the student's developing capacity for interpretive fundamentals. In short, there may not yet be enough qualitative yin to balance our quantitative yang.

However, the advantages of the approach outlined here are worth reiterating. First, it provides undergraduate students early exposure to ways they might analyze data if they employed some of the methods of data collection they are likely to be exposed to in typical undergraduate research courses (e.g., observations and open-ended interviews). Since our typical statistics (or quantitative data analysis) courses already provide a first exposure to analyzing data from other methods of data collections (e.g., the questionnaire survey and available statistical data), the current approach promises a certain balance that is currently absent from the typical undergraduate curriculum. Second, the current approach provides this first exposure to qualitative data analysis in a relatively short period of time, so that it can serve as a potential add-on to a conventional, extant quantitative data analysis (or statistics) course. The economy of the approach results in part from its avoidance of lengthy qualitative data collection procedures via the quickly-collected, in-class responses of students to an image and partly from its admittedly stylized (though hopefully suggestive) presentation of various "processes" typically involved in qualitative data analysis, including the unleashed power of the monster dog. The approach also provides students with an idea of how quantitative and qualitative data analytic techniques may occasionally complement one another in a single research project. Finally, it provides students with an opportunity to compose a short research paper in a professional format, an opportunity that for many students may be fairly uncommon in their undergraduate years but may prove to be a reasonably compelling addition to our invitation to sociology.

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