CHAPTER THREE

Qualitative Research and Analysis

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In this chapter, I will first set out some of the basic premises of qualitative research as a mainstream research approach which is used by applied linguists as they develop their interests in wider social and political issues connected with language and language education. It is important to begin in this way because analysing qualitative data is very much integrated with other stages of the research approach. The central section on techniques and instruments of analysis will demonstrate this, and the extended example in the final section will show how the basic issues connected with the approach come back again and again during analysis.

Underlying assumptions and methodology

There are a wide range of approaches to qualitative data analysis. The field is however moving increasingly towards a postmodern acknowledgement of the inevitability of qualitative research being subjective (Walford 1991, p. 1). While in quantitative research the emphasis is on controlling variables to the extent that the influence of the researcher is minimized, the aim of qualitative research is to search for the richest possible data. It is recognized that the ideas and presence of the researcher will be influential in what the data looks like and the way in which it is interpreted. Postmodernism acknowledges that 'truth' is mediated by ideology. Therefore, the outcomes of the research will always be influenced by the researcher's beliefs. There are also strong indications that quantitative

research is itself increasingly recognizing these influences and becoming less naïve in its attitudes towards data.

The basic aim of qualitative research is to get to the bottom of what is going on in all aspects of social behaviour. It tends to do this within specific social settings such as schools, factories, hospital wards and so on, which are treated as cultures of activity, and pose basic ethnographic questions to do with power structures, tacit behavioural rules and modes of organization. Its roots are therefore closely associated with social and cultural anthropology and with the sister discipline of ethnography (see Starfield this volume), which is more precisely concerned with describing human communities, but from which it borrows much of its method. Within applied linguistics, qualitative research has been more traditionally applied to the linguistic aspects of communication and as such has been quite limited; but it is now being applied to a wide range of scenarios from the politics of language teaching to the non-linguistic environment of language behaviour (e.g. Holliday 2005, 2006).

The types of data that can be collected are very varied, and it could be said that the data comprises whatever can be seen or heard which helps the researcher to get to the bottom of the issues implicit in the research questions. Such types of data are listed in Table 3.1. It needs to be noted here that interviews, observations, diaries and so on, as listed in the third column, are not really types of data, but means of collecting it.

Table 3.1 Types of data

Type	Characteristics	How collected
Description of behaviour	What people are seen or heard doing or saying	Observation notes, research diary etc.
Description of event	Piece of behaviour, defined either by the people in the setting (e.g. wedding, meeting) or by the researcher (e.g. bus journey, argument)	Observation notes, research diary etc.
Description of institution	The way the setting operates in terms of regulations, tacit rules, rituals	Observation notes, research diary etc.
Description of appearance	What the setting or people in it look like (e.g. space, buildings, clothing, arrangement of people or objects, artefacts)	Observation notes, research diary, drawings, diagrams

(*continued*)

Type	Characteristics	How collected
Description of research event	What people say or do in interview, focus group etc.	Observation notes, research diary etc.
Personal narrative	Reconstruction of experience that aids understanding	Narrative, research diary etc.
Account	What people say or write to the researcher – actual words	Interview, audio recording, questionnaire, participant's diary, transcription, verbatim notes
Talk	What people are heard saying – actual words	Audio recording, transcription, verbatim notes
Visual record	What is actually seen	Film, video recording
Document	Piece of writing belonging or pertaining to the setting	Photocopy, scan

As the data is collected, it begins to indicate a picture of what is going on. Each piece of data, in itself a single instance of behaviour, contributes to this emerging picture. The outcome needs to be a *thick description*, which is a narrative of what has been found that shows the full complexity and depth of what is going on. For example, a thick description of the roles and aspirations of a school head teacher was created by juxtaposing a description of her dealing with a pupil, a description of what happens when she enters a class, a description of her role in the school, a description of her office and its artefacts, her own account of her mission in the school, a pupil's account of her effect on timekeeping and a clause on the role of headmistresses in a ministry document (Holliday 2007, p. 74, citing Herrera).

Central to the process of data collection and analysis is gradual focusing. Ideally, decisions about what sort of data should be collected will not be made until the researcher has entered the field, the place where the research will be carried out. An initial broad observation of what is going on will enable the researcher to establish what sorts of data will be relevant. More focused data collection then begins, but there should still be room for further refinement of focus and data collection choices.

Validity and trustworthiness

Because of the inevitability of subjectivity, the validity and trustworthiness of the research will depend on how this subjectivity is managed. Good research therefore depends on three principles. The first principle is *transparency* of

method, which requires a description of how the research was carried out, from decisions regarding data collection and analysis to how the beliefs and influence of the researcher were excavated and addressed.

The second principle is *submission*, which requires that while being aware that she or he is the designer of the process, the researcher must submit to the data in such a way that the unexpected is allowed to emerge and perhaps change the direction of the research. A good piece of research will have built into the research design something which will enable the research to take on a life of its own. There is therefore an inherent weakness in qualitative research which tries to imitate quantitative research by starting with research questions, asking these questions in interviews and then reporting the answers. In such a design, the researcher will only be able to get answers to questions she has thought of, and which have led the interviewees' responses. An important discipline is for the researcher to put aside professional preoccupations. For example, while carrying out classroom research, the researcher must try as hard as possible to stop thinking like a teacher or a teacher trainer and try and see the classroom from a stranger's point of view. Another connected discipline is that of *making the familiar strange* in which the researcher tries as hard as possible to take on the role of a stranger in order to experience what it is like to approach a situation for the first time and to be acutely aware of how it operates as a culture.

Two ways of allowing the research to take on a life of its own are through a holistic thematic analysis (see below) and attending to detail. This can best be illustrated in descriptive data. The following description of classroom behaviour, while clearly being subjective in what the researcher has chosen to describe, contains detail which travels beyond his initial questions and leads him to look further:

> The teacher walks around at the back monitoring while the students work. Those writing seek comment from their peers.... A student near the camera leans back to speak to friend. One girl student is arranging her hair. Several students talk to peers while the teacher explains. This does not seem to be a problem. The student who has been 'talking' is also clearly getting on with her work (Holliday 2005, p. 90).

The research question which drove this description was 'what are the students' role and behaviour in the classroom?' By noticing certain types of informal behaviour and being prepared to think laterally about it, the researcher was driven to consider that communicative activity took place outside and sometimes in conflict with the teacher's plan. I shall return to the issue of detail in methods of analysis below.

The third principle is that of *making appropriate claims*. Qualitative research looks at instances of behaviour rather than broad tendencies in that it cannot prove, for example, that certain percentages of people believe certain things. An appropriate claim would therefore be that in a particular

location at a particular time, certain things *seem* to be the case. This shows that the purpose of qualitative research is not to prove anything, but to generate ideas which are sufficient to make us think again about what is going on in the world. It is not therefore possible to use qualitative studies to prove or disprove other studies by means of replication. Three different researchers looking at the same set of qualitative data may easily arrive at three very different interpretations, and it may well be the case that the data can only be made sense of by a researcher who has taken part in the total experience of collecting it.

Techniques and instruments

The process of analysing qualitative data is not always separate from collecting data. Indeed, an ongoing dialogue between collecting data, writing and analysis should be encouraged. A research diary should be kept throughout the whole process, in which comments made at the time of data collection are kept. An example of these is in the right hand column of Table 3.2. Even though it must be acknowledged that the data is already itself a product of the researcher's interpretation, it is important that the researcher should learn to separate this from what can be said about it.

Table 3.2 Data and comment

Data: what can be seen or heard	Comment: what this seems to mean at the time of data collection
The women tended to sit down the right of the room while the men tended to sit down the left of the room. Down the centre of the room there were many instances where the division was not precise, as men and women sit shoulder to shoulder and talk to each other.	This might connect with gender segregation seen in other parts of the society – e.g. on buses. But, the men and women sitting together in the centre seem comfortable. Other factors might therefore easily override the segregation principle. This connects with observation of men and women working together in small groups.

The classic method for analysing qualitative data is to begin by taking the following steps:

1 Coding: convert the comments on each piece of data to key words or phrases – for example, 'informal behaviour', 'gender division' and 'teacher control'. There may be more than one such code for each

piece of data, but basically this is a method for seeing how each code is distributed throughout the data.

2. Determining themes: The codes which occur with significant frequency are then grouped within themes.
3. Constructing an argument: The themes are then used as the headings and subheadings for constructing an argument about what can be learnt from the data. Under each thematic heading, extracts from the data which exemplify the theme are collected and used as evidence for the points made in the argument.
4. Going back to the data: Collecting extracts to support the argument will involve going back to the data, reassessing the codes and refining or possibly changing the themes. The process of drafting and redrafting the argument will also add to this process of refinement.

There is a parallel here with writing a literature review, where the literature as a whole is like the data, and where extracts from the data are used in the same way as quotations from the literature, to provide evidence for what is being said about it. Note that I refer to data throughout as an uncountable noun – 'data is' rather than 'data are' – because in qualitative research, it is not a sequence of items, but collectively a single body of experience. For this reason, for the purpose of analysis, it is better not to divide the data into parts (e.g. according to stages or types), but to deal with it holistically.

There is a range of computer software for analysing qualitative data. This can be very helpful in and collating codes and determining themes. However, I would not personally recommend using software as it cannot replace the intuition of the researcher who was there when the data was collected. The entire meaning may not be confined to the data, as the research diary is also an important source of interpretation. Also some data is so complex that it defies coding, and the narrative needs to be written in a more creative manner directly from the data and the research diary.

The following extract from a dissertation (Duan 2007, pp. 156–157) shows the resulting interaction between (a) extracts of data (double indented), (b) comment made specifically about the extract (indented) and (c) the broader argument about what the data means (italicized). *Teachers* is the thematic heading for this part of the analysis. The three dots indicate that material is missing.

Teachers

> …The reasons for Teacher Liang passing the letter to us were, I thought, to teach us something from the letter, to offer us encouragement, and hard-working spirit. I felt that Teacher Liang was a good teacher. The reasons for her to hit us or scold us were to

> nurture and educate us – to enable us to become useful, successful people. She did everything for our own good! (Diary, Wang Yang, 7 March 2002)

This Teacher Liang is the same one that scolded Wang Yang in the first extract. It seemed that he had already changed his view regarding this teacher. In the incident above, Wang Yang seemed to dislike the teacher. But in this extract, it seems that he tries to find some justification for his teacher's ill treatment of him, even defending his teacher for what she had done to him, showing his understanding for her scolding him. This does not necessarily mean that he has changed his view. It may indicate consistently ambivalent feelings towards her. On the one hand, he hated his teacher for scolding him in public. On the other hand, he showed consent in witnessing his teacher's recital of the discourse. *This may suggest that there is evidence of the dominant discourse within the students' discourse.* The following extract shows just such a feeling:

> I know that Teacher Liang is a good teacher, that she always wants the best for us and that she has been doing all these things for our own good. But I could still not forget that she had scolded me in front of the other students, that she scolded me for 'grinning cheekily', saying that I did not study hard. Thinking of these events, I felt heavy and painful. It was difficult for me to forget these things. When she did these things, I really hated her because I thought she should not have scolded me in public, she could do it privately in her office instead of in public. That really hurt my self-esteem. It made me lose face.

It also seemed that teachers have contradictory feelings towards students. As Teacher Xiao comments:

> Student life is really hard. They have too much homework to do every day. All their subject teachers compete with each other regarding the amount of the homework they assign to the students. They want the students to spend most of their time after school on the subject *they* teach. As a result, the students have to suffer from over-assigned homework. Take my daughter, for instance. She is only in Year One in N1MS. But she has to work until the middle of each night to try to finish her homework, sometimes even until 1.00 o'clock in the following morning. I feel sorry for them, these poor students. (Individual Interview, Teacher Xiao, 1 August 2004)

Teacher Xiao seems here to show her empathy for the students in their suffering. This may be because she has an interested daughter. But it

seemed that she even complained on the students' behalf about this homework issue. *And this may suggest that there is indeed a student's discourse within the teachers' dominant discourse.*

It is important to note how the data extracts are carefully referenced, so that they can be traced back to the larger corpus of data. Also, the extracts are cross-referred to other extracts to show how meaning is built through their interconnection within the thick description, and the researcher goes into considerable detail in explaining what each extract means, while showing due caution through the use of phrases like 'not necessarily' and 'seem'. It may well be the case that there are other interpretations. In this discussion, Duan first of all exercises restraint from jumping too quickly into an interpretation. He sets the extract from the diary against another 'incident above' and uses this juxtaposition to move gradually from one possible interpretation to another.

Qualitative researchers need to be excellent writers. It may be the case that small extracts of data are not sufficiently effective in expressing the richness and complexity of what the researcher experienced. Researchers may decide to present longer extracts of data, or reconstructions, or even fictionalized representations. There is no restriction on what can be done as long as it is explained and justified in the text, and as long as it is made clear in what way faithfulness to the data is maintained, and what sense is being made of the data. Many novice qualitative researchers make the mistake of thinking that presenting raw data will speak for itself. What is important to understand is that because the reader was not there, the data left alone will never be sufficient to communicate what was going on.

Ethical considerations

There are clearly considerable ethical issues in qualitative research. At the most basic level, the integrity and privacy of the people taking part in the research must be preserved at all costs. It is not however always a matter of getting permission. The following points need to be considered: (a) People will very likely have far more important things to do and think about than taking part in your research project. Involving them in extended procedures for getting permission, collaborating or checking interpretations may in itself be an unfair imposition. (b) It may be unfair to expect that the people in the research setting should understand or be interested in the research project. (c) Different cultural settings will require different forms of consent, with different degrees of formality, informality and understanding. (d) What people are prepared to say, or how they are prepared to appear in front of a researcher may have as much to do with their perceptions of the researcher as with the questions the researcher is asking. They may

be researching you as much as you are researching them – if they care to take the time. Researchers are usually far more unusual than the people they are researching. (e) It may be unfair to develop relationships within a research setting which cannot be sustained in their own terms. (f) Whatever claims you may have to being an insider, these will always be contaminated by the fact that you are a researcher.

A sample study

The study I have chosen for this section is reported in Holliday (2010, 2011) and involved my investigation into the politics of established descriptions of national cultures.

My driving suspicion was that these descriptions are not as neutral as they purport to be, and I was led into this by previous work on the way dominant English teaching methodology employs negative stereotypes of 'other cultures'. The purpose of the research was thus to question an established belief. My data comprised (a) email interviews with thirty informants from a range of countries, (b) reconstructions of intercultural events from a range of ethnographic sources and (c) research and training literature on intercultural communication as examples of academic or professional ideology. Here, I will focus on my initial analysis of the interview data, while being aware that eventually it was looked at holistically along with the rest of the data. I am happy with email as a means for interviewing because it allows my informants the space to take their time, solves the issue of distance, has the (so far unused) potential for group discussion and produces written responses which do not need to be transcribed. It also means that the social setting does not have to be a physical one but could be a community of people. I am open about the fact that my informants are friends, colleagues and students who are hand-picked for having encountered cultural difference, and I kept this in mind when I began to make claims at the end of my research.

I asked each person the same three questions: (1) 'What are the major features of your cultural identity?' (2) 'What role does nation play in this?' (3) 'Are you comfortable with how others define your cultural identity?' These are purposefully very broad to allow maximum richness, and I invited each person to use them simply as starting points, with the possibility that I would get back to them later with further questions which may grow out of their responses. My aim as a qualitative researcher is not to attempt to control variability, but to invite complexity.

The data I received, about 22,000 words, defied classic thematic analysis. I began by following the procedure described above, by first marking the interview text directly with a number of codes, as exemplified in Table 3.3.

Table 3.3 Example of coding

Sample of data from question 1	Codes
First of all, what is my cultural identity? … I suppose it is defined according to a set of identifiable features that I share with others who belong to the world I most frequently inhabit. These features can only be described in terms that I am familiar with and that I consider important because of where I come from culturally. This sounds a rather circular approach: I define my cultural identity according to factors which are recognized as important for the group I see myself as part of.	Relative to group
Defining factors seem to be language, education, ancestry, religion and profession (I left language till last, but it seems to have emerged as number one, and although there is more to be said about everything else, I will leave it for now!)	Small culture Religion Ancestry
Most people can claim a first language, and it helps us to establish ourselves within a particular discourse community, but I am not sure how to explain the role of an English native speaker as part of my cultural identity. If I think about cultural identity as a set of features I share with others, language is too broad, or maybe it is that English is too widely spoken to indicate a particular culture.	Language

It needs to be noted here that this was not a linguistic analysis of the interview responses, but an analysis of opinion. The total list of twenty-five codes which emerged from this initial exercise were as follows, some of which I have glossed in brackets: (1) Ancestry, (2) Gender/sexuality, (3) Geography (other than nation), (4) Language, (5) Layered (different realities at the same time), (6) Moral (judgements about the world), (7) Multicultured, (8) Multi-loyal (to more than one 'culture'), (9) Nation first (the most important category), (10) Nation complex (too complex to be an easy category), (11) Nation insufficient (too simple to be an easy category), (12) Nation limiting (too stereotypical to be realistic), (13) National imagery, (14) Nation repressive (repressive ideologies), (15) Nation critical (critical of what it means), (16) Non-exclusive (others can join and can join others), (17) Othered (negatively stereotyped), (18) Reflexive (defined in response to others), (19) Relative to audience, (20) Religion, (21) Politics, (22) Small cultures (family, work, class, group, etc.), (23) Shifting, (24) History (personal) and (25) Uncertain. The large number concerning nation (9–15) resulted from their being a specific question about it – for the reason that I was concerned with how far national culture is problematic.

I, then, began to rationalize these codes into a smaller and more manageable group of subthemes, each of which could be grouped under a

smaller number of themes, as shown in Table 3.4. At this point, it became very clear that this approach to coding and deriving themes was *very unsatisfactory*. The problem was that: (a) every time I looked back at the data, I found something different, *because* what people were saying was so complex; (b) this totally invalidated my attempt, in the final column of Table 3.4, to try and validate themes on the basis of the percentage of times they were indicated; (c) and as a result, trying to be too systematic in the analysis was actually taking me progressively further away from what the informants were actually saying, which in itself was far from clear.

Table 3.4 Deriving themes

Themes	Subthemes	Codes subsumed	Percentage of informants mentioned
The significance and ambivalence of nation	Nation as the most important category	(9)	50
	Nation as complex, insufficient and only a part of one's identity	(10–11)	50
	Nation as limiting, confining, repressive or morally distasteful	(12–15)	50
Other locational categories	Language as a means of distinguishing group boundaries	(4)	50
	Ancestry and personal and family history	(1, 24)	30
	Small or large entities other than nation	(3, 22)	25
	Religion	(20)	25
Complexity	The shifting and multiple nature of cultural identity and its ability to be different things at the same time	(5, 8, 23, 25)	75
	Reflexivity and relativity to changing circumstances and other groups	(18, 19)	50
	Loyalties and memberships transcending group boundaries	(7, 8)	25
Struggling with otherness	Being reduced by majority and inaccurate imaginations of who one really is	(17)	50

There was something else, which initially seemed problematic but then took me in a direction I had not expected – which was the truly validating element of the research, as I have referred to above. I had chosen informants partly because of their range of nationalities, which was in turn led by my interest in the way in which the West negatively stereotypes the rest of the world. However, ethically, I could not declare their nationality unless they gave me permission. I, therefore, had to ask them in my next question –

> To help me to preserve privacy, would you like to be referred to either as yourself or with a pseudonym? Can you then provide a phrase about who you are – something like 'Adrian – a British academic living in Britain'.

This prompt was purposefully tentative because I was aware of my agenda and of the dangers of pushing it. The responses I got back gave names or pseudonyms, followed by phrases, several of which avoided clear reference nationality:

> '… a young academic from Oaxaca, Mexico' ' … an English teacher living in France'
> '… an Iranian-Australian Academic'
> '… who currently lives and teaches in the UAE'
> '… an ESL academic working in Saudi Arabia'

There was also one response which explicitly raised the question of how far it was important to refer to 'profession, nationality, residence, etc'.

Other questions which arose as a result of this initial analysis were to do with the type of informants who had been approached. Were they too special *because* of being at 'cultural interfaces', of having travelled, of being good at expressing their complex ideas in writing, of being middle class, academics or students – or were they just particular examples of what many of us, everywhere, are like? This in turn led to thoughts about whether or not to interview other types of people. I also decided to leave behind the coding approach to analysis and derive themes directly from reading the interview text. However, the most significant outcome was a stronger appreciation of the moral imperative embedded in how we should deal with data – taking disciplined care to refrain from imposing meaning, not only on data, but also on the people who it represents.

The purpose of this example has been to illustrate that qualitative data analysis is far from a straightforward process. Rather than bringing the research to neat closure, it can raise as many questions as it seeks to answer and is always unfinished. On the one hand, there is comfort in its extreme open-endedness, and other the other hand, immense caution has to be applied.

Resources for further reading

All the texts listed below deal with mainstream qualitative research methodology and provide a holistic picture within which data analysis is part. None of them are specific to applied linguistics because I feel the mainstream is where the best roots for the research approach can be obtained.

Denzin, NK & Lincoln, YS (eds), 2005, *Handbook of Qualitative Research*, 3rd edn, Sage, Thousand Oaks, CA.

Though expensive, this is an essential body of work for any serious qualitative researcher. Fairly short chapters between them cover the whole range of qualitative research activity, from an overview of approaches through such methods as action research, grounded theory, narrative inquiry and so on.

Geertz, C 1993, *The Interpretation of Cultures: Selected Essays*, Fontana, London.

This is a classic text for those who wish to get into the intricacies of thick description.

Hammersley, M & Atkinson, P 1995, *Ethnography: Principles in Practice*, Routledge, London.

This is an excellent description of the scope and use of qualitative research methodology. While the title refers to ethnography, this is treated liberally, and it becomes clear that ethnography, grounded theory, phenomenology and so on are different sides of a common approach.

Holliday, AR 2007, *Doing and Writing Qualitative Research*, 2nd edn, Sage, London.

This is the text from which most of this chapter is taken. It is a practical introduction while also dealing with theoretical issues, and based on an analysis, with interviews and examples of how a number of researchers, from undergraduate to doctoral students, have carried out their studies. Though these studies are taken from a range of disciplines, a significant number are within applied linguistics.

Spradley, JP 1980, *Participant Observation*, Holt, Rinehart and Winston, New York, NY.

Though now old, this is an excellent manual for classic qualitative research methodology. It works gradually through the basic steps from broad to gradual narrowing of focus.

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