



# UNIT ELEVEN

## Data Analysis 1

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# **SECTION ONE**

# 1. Introduction

The first step in the process of analysis, then, is a careful reading of the data collected up to that point, in order to gain a thorough familiarity with it. At this stage the aim is *to use the data to think with*. (our italics) One looks to see if any interesting patterns can be identified; whether anything stands out as surprising or puzzling, how the data relates to what one might have expected on the basis of common-sense knowledge, official accounts or previous theory; and whether there are any apparent inconsistencies or contradictions among the views of different groups or individuals, or between people's expressed beliefs and attitudes and what they do. Some such features and patterns may already have been noted in previous fieldnotes and analytic memos, perhaps even along with some ideas about how they might be explained.

(Hammersley and Atkinson 1983:178)

Some of the passages on the subject of independence contain direct contradictions. Irv thinks of mechanical work in bad weather as something to forget, Cal thinks of it as requiring the stamina that is cause for pride. Jack thinks being away from home is a negative part of trucking, Dan thinks a man has to get away once in a while, Irv talks about how the value of travel is zero; Will evaluates it highly. But in other contradictory statements the variation forms a pattern.

(Agar, 1986: 163)

This unit focuses students on the process of data analysis. Previous units, particularly Unit 10, have already introduced students to some analysis because data collection and analysis always go hand in hand in ethnography. But this is the first unit to take students step by step through the stages of data analysis.

Some students may feel that these method-units are too technical for them, that someone is trying to turn them into social scientists, and it may be worth reiterating that the whole purpose of learning this method and specific techniques is to make them into more effective cultural learners and inter-cultural speakers. This unit helps students to look at small sections of data and to analyse them at the levels of content and concept. The next unit, which is also on data analysis, gives students some further practice in this and introduces them to the processes of coding and indexing all their different kinds of data. These two units are often taught around the time the students have a break and are collecting data for their home ethnography. If possible, the methodological points made in these units should be related to the data they have collected. If these units are covered before such a break, students can use the data they have already collected in the PO and interview units (8-10) or they can use the data they have collected for any of the other assignments.



## 2. Links with other units

This unit looks back to Units 9 and 10 on *Ethnographic Conversations* and looks forward to Unit 12 and to Unit 18 on *Writing Ethnographic Projects* since there is a close relationship between writing and analysing. The data and exercises aimed at developing conceptual awareness relate back and forwards to all units where specific conceptual frameworks on gender, local politics, identity etc. are developed.

## 3. Background notes

### Raising questions about data analysis

One of the most daunting problems for a beginner ethnographer concerns the analysis of data. The following are typical questions:

- ◆ What counts as data?
- ◆ How much data is 'enough' data?
- ◆ How can I begin to find any shape or direction or patterns in my mass of data?
- ◆ How do I relate my different sources of data to each other and to my overall topic?
- ◆ How can I be sure that what I learn from the data 'really reflects' the data?

This unit (and Unit 12) aims to help students answer some of these questions (or at least appreciate that some questions cannot be easily answered) and to start the process of moving from a stack of field-notes and transcriptions to a written ethnography. But no amount of help with data analysis will produce a good ethnographic project if there is not enough data so it is worth spending a few minutes with the students reinforcing the importance of collecting lots of data. Ellen suggests there are two fundamental processes for transferring data into text: one is to develop an argument and the other is to devise a system for storing and retrieving information. This unit looks at the first of these two. Before giving general advice on data analysis, an example is given of an urban ethnography by Michael Agar. His account of American self-employed long-distance truck drivers *Independents Declared* (Agar 1986) illustrates a number of the issues in data collection. The compulsory reading for this unit is an excerpt from his study.

### *Independents Declared*

This study carried out over nine months, 1981-2, was based in Maryland but took Agar to many states in the USA. He was interested in finding out what being an independent trucker was actually like and the extent to which truckers lived up to the image of the free-wheeling, independent cow-boy type mythologised in American narratives. In writing about his methods, he discusses his concerns about how much data to use, what to count as data and how to meet possible criticisms that the researcher may, in some way, falsify the data. He meets some of these problems by being very explicit about what data he collected. He decided to use a 'corpus' of interview data –

seventeen extended 'career-history' interviews with informants, whom he calls 'teachers' whom he gradually got to know during his time as a participant observer. He saw these informants, in the true spirit of ethnography, not as objects to be studied but as people to learn from. The corpus of data was enriched and expanded by 'hundreds of conversations', forty days on the road doing PO, attending regular meetings of the Maryland Independent Truckers and using the archive and survey reports of the Interstate Commerce Commission. All of these were significant in contributing to the insights and conclusions of the study, but it was to the corpus of interviews that he felt accountable. In other words, he tried to ensure that any analytic conclusions he arrived at were to be found in the data.

Agar tells us that 66% of the corpus was accounted for in his book, i.e. was either directly quoted or referred to in the text. The percentage figure is not, of course, significant in itself, but is a salutary reminder of how important it is to 'ground' concepts in data. (See below). Agar's determination not to allow the data to let go of him is a challenge to those critics of ethnography who dismiss it as anecdotal. Agar's book has extensive quotes from the independent truckers on nearly every page. He gives the truckers 'a voice' or rather several voices. But he does not simply present their voices as, say, Studs Terkel does in his books on working people. Long verbatim quotes are not ethnography. Agar combines voices with his analysis.

His conclusions centre around the tension that the truckers live with between the imagined freedom and independence, which is the romanticised version of their lives, and the very real dependency and even control which is their 'lived experience'. They are dependent on the carriers who give them their work, the mechanics who keep them on the road and the regulatory officials who turn their free wheeling, entrepreneurial world into a bureaucratic treadmill. To Agar, their world is not a free and independent one, but it is a very distinctive one.

Given this distinctiveness, Agar reflects on why their accounts of trucking life are, in the main, so negative. He concludes that they are true accounts but that they represent worst-case scenarios. In other words, these events happen but the frequency of the negative outcomes described may be overstated. Agar sees this as a rhetorical device in which 'the teacher' over-dramatises the consequences of the situation in order to make a good story and so a good 'lesson' for Agar to learn from. This is an interesting example of reflexivity. The richness and depth of Agar's data meant that he found himself posing the question of why the truckers constructed such a negative picture. He was then able to explain it by being self-conscious about the effect of his presence as a 'learner' on the narrative of his 'teachers'. If Agar had simply represented the culture of the truck drivers as a largely negative one, he would have been painting a picture which was only a part of their experience.

So, there is a lesson here for starter ethnographers not to rely only on what you are told but seek other data to triangulate with the interview data and also be ready not only to ask questions about what the data means but why informants (or teachers) are giving you this data and not, for example, other stories, examples and so on. Students will need to think about their own ethnicity and nationality, and social identity more broadly, when studying a group abroad. Perhaps their informants are talking to the students as British people, as members of a linguistic minority within Britain, as one woman to

another and so on. This does not mean that the data is not in some ways 'true' – far from it. But it means it is a particular representation of the truth.

Another point that Agar makes in trying to work out how 'independent' the truckers are centres on what 'independence' means to truckers. His analysis suggests that independence does not necessarily mean lack of control but that, to the truckers, the opposite of 'independence' may be 'indistinguishable' or the opposite of 'independent' may be 'alienated'. So, his original notion of what independence means had to be rethought.

Agar's ethnography exemplifies a number of the issues raised about data analysis:

- ◆ triangulating (see Unit 8) – using a variety of data sources in the analysis.
- ◆ being clear about what data you are using and being accountable to it. In other words, not just picking out the bits that are dramatic or illustrate the point that you have decided is important but working through all your core data and using most of it in your final analysis.
- ◆ reflexivity – thinking about how the data came to be produced and your role as a researcher in their production.
- ◆ questioning the usual or dictionary meaning of words as they take on particular significance for groups or individuals.

Agar's study is also a good example of an urban ethnography, which although done by a professional ethnographer, in scope, presentation and methods, is not so very far removed from what students could aim at. Of course, Agar worked full time on it for nine months and had plenty of time for writing up. Also, he was working in his dominant language, English. Language learners as ethnographers have less time and are working in a foreign language, so a smaller and more focused project would be appropriate. But the kinds of urban myths and personal tensions that Agar explores are typical of what students may come across, especially if they choose a topic around a workplace or a career. Chris's home ethnography on despatch-riders explored very similar tensions between freedom and control to the ones described by Agar (see Unit 12). And more loosely associated to this theme, Sophie's study of the *camavaliens* in Nice examined the tension between controlling traditions perpetuated by the older men and the pioneering involvement of the women.

### From description to concepts

The field notes and transcriptions (and perhaps documents of different kinds such as leaflets, catalogues, photos, etc., etc.) make up the ethnographic description. The next stage is to move to the formulation of concepts. Burgess (1984) calls this the difference between substantive and analytic field notes. *Substantive* fieldnotes are a continuous record, largely descriptive, consisting of notes, diagrams etc. Brian Street's excerpts from his notebook, written while doing fieldwork in Iran, (see Handout 3, Unit 12), are a good example of the raw data that an ethnographer might collect over time. Students may also have roughly transcribed interview data of the kind illustrated in Units 9 and 10. *Analytic* field notes draw out concepts based on the interpretation of the data. So the focus here is on interpretation and not just selection and illustration.

There are a bewildering number of research methods, drawn from anthropology and sociology which outline procedures for analysing data in a qualitative way. They have much in common but all tend to use rather different terminology. The methods work in two complementary ways. One is to look for general themes and then become increasingly analytic and detailed. The other is to work from the data line by line and build up concepts and categories. Roughly speaking, the former is used with field notes and very large data sets from interviews. The other is more likely to be used with transcribed interview data. Students will need to use both approaches at different times and in different ways.

In the ethnography course we draw, rather generally, on only three of these methods:

- ◆ semantic and ethnosemantic analysis – from cognitive anthropology
- ◆ analytic induction – from sociology and anthropology
- ◆ grounded theory – from sociology

Some semantic and ethnosemantic methods have been described in Unit 10 and they are not covered again here.

### **Analytic induction**

This method was originally developed by Znaniecki (1934) as an alternative to analysis based on quantification. It has been widely used by ethnographers working out of the tradition of sociology. For example, Mehan's classroom study (see Unit 7 on Education and Socialisation) was based on analytic induction. The method, as with all qualitative research, assumes that the researcher is steeped in data. As themes are gradually identified, a hypothesis is formed. For example, Mehan began to see in his classroom data that there were clear patterns emerging in which the teacher asked a question to elicit a display of knowledge from the child and then evaluated the response in some way. This pattern formed the basis of a hypothesis which he then used on other data. He did not just scan the data to find confirming evidence. Instead he looked at *all* the data to see whether the particular pattern he had provisionally identified was instanced in the data. If it was, he used the data to support the hypothesis. If it was not, then he had either to rethink the hypothesis, or use what amounted to *disconfirming evidence* to suggest another hypothesis or a modified version of the first one. He found much of the data which apparently did not fit a tentative hypothesis could, on close inspection, be accounted for within the overall pattern of teacher-pupil questions and answers.

Perhaps the most helpful points from analytic induction for beginner ethnographers are, firstly, the idea that *all* the data needs to be looked at and accounted for (and see the comments on Agar earlier on. Not all the data will be used in the same way or examined in as much detail.) Secondly, the notion of *disconfirming evidence* is useful. An analysis of data is bound to draw the ethnographer into negative cases and apparent or real contradictions. This contradictory evidence may be just as important to work at as the examples that confirm the pattern. It may be part of a modified version of the original pattern or a patterned contradiction to the original pattern. At any event, it will need to be discussed in the ethnography.



It is one of the strengths of an ethnography that it can contain complex and even contradictory patterns and yet still hold together as a study. And certainly, a student's understanding of a particular cultural group is likely to be complex and contradictory and from this study they will be able to draw out some general principles which help them resist the temptation to jump to quick, simple and stereotyping conclusions about a national or ethnic group. For example, Toni, who was studying some of the relationships between eating habits and religion in Seville, found that there were apparent contradictions between some of her informants who denied any close relationship and her own observations of the five year old boy, Quino, who she was looking after. So, she had to go back to her data again and see if there was an underlying pattern which accounted for these apparent contradictions.

### **Grounded theory**

The notion of *grounded theory* was developed by two sociologists, Glaser and Strauss (1967). The term 'grounded theory' is based on the idea that any theory, or conceptual generalisation, must be grounded in the data. In other words, as Agar suggests, the data has to be accounted for in the analysis. As with other procedures, grounded theory method moves from description to discovering concepts and then groups of concepts, called categories. The first stage consists of questioning and then comparing, e.g. What is this? What does it represent? This incident is then compared with other incidents. Glaser and Strauss call this the 'constant comparative method'. Gradually a series of categories can be developed. For example, in the trucking study already mentioned, Agar has a chapter called 'Getting Underway' which consists of 'Load and Unload', 'Lumping', 'Manoeuvring' and 'The Driver's Log'. (Agar does not use grounded theory as such but his headings seem to be good examples of what Glaser and Strauss call categories.)

As concepts are drawn out of the data and the relationships between concepts explored, the ethnographer is encouraged to keep analytic memos: questions, possible interpretations, problems to come back to, etc. The final stage is to bring the categories together in an overall theory. Strauss and Corbin (1990) suggest that researchers commit themselves to an overall story-line, giving the central phenomenon a name then working back through all the categories, uncovering the patterns.

As with the other methods described, it is unlikely that students will wish to be driven by the procedures laid down in grounded theory. But it may be useful to draw on the approach in helping students to interrogate their data and see beyond the immediate content to concepts that can be traced throughout the data. A particularly interesting idea that Glaser and Strauss suggest is that ethnographers should deliberately enhance what they call their 'theoretical sensitivity'. In other words, they can develop a questioning, sensitive and creative way of thinking about their data to avoid purely descriptive or banal reactions or jumping to conclusions about the data.

One of the exercises in this unit aims to develop this sensitivity using a short excerpt from one of Agar's trucking interviews. So, from 'grounded theory', it is useful for students to be alerted to: the idea of grounding patterns, structures and clusters of concepts in the data; the constant comparative technique and the usefulness of writing analytic memos.

Analytic induction and grounded theory are just two approaches to qualitative analysis of data. They both stress the need to analyse data rather than just study a piece of literature, studying the words but also bringing a kind of imagination to the task – what has been called an ethnographic imagination – so that you do not stay at the literal level all the time. The data has to be constantly questioned and ethnographers are always relating, comparing and making inferences. They ask questions such as: What could these words/actions mean to the people using/doing them? Do they have a particular significance? Do they relate to other words/actions? Is there a pattern here? In one sense, we use our imagination to make meanings all the time, as Camus said in his *Reflections on Hanging*: 'Where the imagination sleeps, words are empty of their meaning.'

But just as the data should not be read too literally, so the ethnographer should not make too many inferences from it or what are called high inferences, i.e. it is important to avoid claims about the data which you cannot support. In *Speaking of ethnography*, Agar talks about schemata – structured sets of assumptions – which we carry around in our heads and which in turn are discovered through inferences. The classic example is the 'restaurant schema' which means that we know what to do when we go into a restaurant. We check to see if we are to be seated or whether we can choose a table ourselves, etc. If we see other diners waiting near the entrance, we infer that someone, probably a waiter, will come along and direct us to a table.

When we are in a relatively unknown place where cultural practices are different, we have to infer from what we see around us what the schema is. When the behaviour is totally unfamiliar or bizarre, we make what inferences we can but they are likely to be based on our existing schemata and may be quite wrong. We need evidence, probably quite a lot of evidence before we can make the appropriate inference. So making inferences without enough data to support them is called 'high inferencing' and should be avoided, although of course when you first go into the field you cannot help making these high inferences all the time. The trick is to accumulate data against which to test them.

The key points in this unit are:

- ◆ collect lots of data.
- ◆ become steeped in the data, reading and re-reading it for further illumination and triangulating one piece or set of data with another.
- ◆ keep on questioning, comparing and relating so that you move from description to conceptualisation. There is a continual process of seeking connections within the data and then shifting up to a level of abstraction which labels or categorises the data in a way that accounts for several instances of it, e.g. Agar writes about 'truck stops' as one aspect of 'road life'.
- ◆ look for patterns in the data but also take account of data which seems to cut across or contradict those patterns, e.g. interview data may contradict observation, one informant may contradict another, data may contradict the 'fore-shadowed' problem you went in with, etc.

- ◆ be reflexive about the data and think about how it came to be produced as you analyse it. Remember 'data must never be taken at face value' (Hammersley and Atkinson 1983:200).

These key points are summed up in Handout 2 which is based on a general introduction to analysing qualitative data by the American educational anthropologist, Frederick Erickson. Working with both audio and video recorded data and PO field notes, Erickson has looked at schools, hospitals, families and selection interviews and those who want to develop their data analysis skills further are recommended to read his 1986 account of qualitative methods in research on teaching.

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## **SECTION TWO**

# 1. Outline of a session

1. Introduction
2. *Independents Declared*: Assignment Reading
3. Developing Theoretical Sensitivity
4. Basic Procedures in Qualitative Data Analysis
5. Analysing Interview Data, Drawing out Key Themes: The BTEC Student
6. Inferences and High Inferences

# 2. Description of a session

## 2.1 Introduction

- ◆ Spend a few minutes emphasising the importance of collecting lots of data and discussing the possible feelings of insecurity about doing a home ethnography. Points worth making:
- ◆ assignments should have given you some confidence but you may still feel insecure
- ◆ you probably want to know 'the answer' before you have even started
- ◆ but do not let any panic lead you to pre-conceptions and a blinkered approach
- ◆ ethnography is a risky business but this is the price of freedom!
- ◆ remember anxiety is an insight into a situation not an inadequacy
- ◆ you are studying something that no-one has ever studied in quite the same way before but you don't have to be a special kind of person, you just need some sound methods and concepts and some determination
- ◆ you will be learning as you go along, producing your own very individual piece of work
- ◆ your data may look boring, banal, scrappy, etc. but remember that everything is significant, everything is worthwhile and worth studying. Bring to each scrap of data a heightened perception so that even the smallest and most trivial situation is worth recording and describing and analysing.
- ◆ your data are the vital evidence and everything else emerges from them

## 2.2 Independent Trucker reading

Use to bring out some of the general issues discussed in the introduction. Students can work in small groups, sharing their answers to the three questions set with this reading assignment or the questions can be used to raise more general issues, e.g. the importance of using informants' voices in an ethnographic study.

## 2.3 Developing theoretical sensitivity

Use Handout 1 and in groups ask students to interrogate the data. Explain that students need to develop an ethnographic imagination in which they use the data to *think*. They should aim to think of as many questions as they can about the data: anything that makes them think about the topic, what more they could find out about it, what certain terms might mean in this context, and so on. Then, they can be given the list of possible questions on the handout and asked to offer any other questions that are not already listed. The idea is to encourage them to see that anything, any bit of data, is interesting and might lead them down a new path of discovery.

## **2.4 Basic procedures in qualitative data analysis (for interviews).**

Before working through Handout 2, ask students to share in groups the work they have done for this unit's assignment. They should use their own data to answer the three questions posed:

- ◆ What are the themes?
- ◆ Are there connections between different parts of the data?
- ◆ What further data would you want to collect?

Then, drawing on some of the ideas from analytic induction and grounded theory, talk students through the basic procedures using Handout 2. Highlight the more systematic and in-depth approach to analysis than has been offered so far.

## **2.5 Analysing interview data, drawing out key themes: the BTEC student.**

Use the steps in Handout 2 to analyse a piece of data. Agar's study was of a group that is relatively culturally distant. This piece of interview data is from a young British student and is likely to be much more familiar to language students. (See Handout 3). She has just started a business course in a further education college and the ethnographic study was looking at how students in multilingual, multicultural classes came to be successful in terms of the BTEC course they were following (Roberts, Garnett, Kapoor and Sarangi 1994). BTEC stood for Business and Technology Education Certificate and the CPVE course which she attended the year before was a Certificate in Pre-vocational Education. Students should use Handout 2 to analyse the interview in groups. Some of the following should come up in their analysis:

### **Step One**

- ◆ college as 'primitive', i.e. no teacher and no work to do: suggests she expected more structure/organisation/guidance/help? Where to go? (contrast with school).
- ◆ assignments all together – shows lack of organisation
- ◆ boring: not enough work/should push you a bit/needs to be pushed. (too much (?) free time)
- ◆ assignments: confusing: different from school: task one, two, etc.
- ◆ can discuss problems with teachers but need an appointment

- ◆ better than school: no uniform, more communication here, talk to everyone and not just the gang
- ◆ no notes, need to go over notes/be given a lecture
- ◆ BTEC because of dad's business/wants her own business
- ◆ what do next: BTEC National/job depends on qualifications/potential to do business
- ◆ doesn't know much about the specifics of the course
- ◆ couldn't do BTEC National
- ◆ Dad made her retake GCSEs: heart wasn't in it: lack of motivation was a reason for not doing well
- ◆ BTEC was *her* decision/can only blame any failure on herself/opposition to her father/doesn't like to be forced

## Step Two

Key themes:

- ◆ Contrasts between school and college: type of assignments/communication/amount of work/confusion
- ◆ Desire for more structure/input/organisation: primitive/don't know where to go/all assignments together/need lecture and notes
- ◆ What happens next: qualifications/potential for business/dad's business
- ◆ Tension between being told what to do and being independent: dad said have to retake, dad forced, heart wasn't in it, it's my own decision, don't like to be forced.

## Step Three

Take the last issue: the tension between being told what to do and being independent: Manjula seems to be tackling explicitly the concepts of independence and dependence. There is a history here in which she contrasts her submission to her dad last year and her own decision this year. She evaluates her lack of motivation when doing her GCSE re-takes with this course which she says she likes (but see some of the negative comments made about the course – so there is a tension here.) The independence is not only in the decision to defy her dad (may be too strong a description of what happened between her and her dad) but in her willingness to take any blame if she fails.

## Step Four

She does not mention how she would feel if she did well on the course nor how she went about getting her dad to accept her decision.

Her feelings and evaluations seem very strong when she talks about her decision to do the course but less so in her description of her experience of the course where she is more factual or only evaluative in a more external way (except when she says she had to be pushed).

### **Step Five**

Summary of the patterns around this issue. (These patterns emerge from the clustering of concepts such as dependence, structuring, etc. into categories.) :

failure or potential success are linked to the amount of control she has over her college career. Where she can be the decision-maker, she is helped to be motivated and even failure can be rationalised as an act of independence.

### **Step Six**

#### **Discrepant cases**

She talks about needing to have a heart in something in order to do it which suggests she can be self-motivated but earlier she has said she needs to be pushed. The independence which is so important to her in choosing the course seems less evident in her statements about what is disappointing about the course so far.

So some of the relationships between categories are to do with causes or consequences, other categories may conflict with each other such as the conflict here between being organised and being independent.

### **Step Seven**

We need more evidence of her feelings of independence or not in relation to the course itself. Also, more evidence is needed in quite why she did not pass her GCSEs second time around. Was it only because her father had forced her to do it?

At this stage, the analyst needs to go back and tackle another of the issues identified and so on.

Students may feel that a lot of time has been spent getting to a point which they could have reached after one quick read. In some ways this may be the case, but the idea is to build some discipline into the analytic method so that all data is examined in this way and students can begin to read into the data patterns, interesting contradictions, etc. which may not be clear at first glance. Also, if they have followed the steps laid out in the basic procedures, they should feel much closer to the data and to Manjula. Perhaps she seems more interesting now and her story more worthwhile pursuing. If this is the case, then it is an example of the old cliché that the more you put into something the more you get out of it.

## **2.6 Inferences and High Inferences**

Use Handout 4 on Inferences to talk about the relationship between evidence and claim and relate these issues to the Manjula transcript. For example, would the following be high inference?

- ◆ Students on BTEC courses are confused about the value of the course
- ◆ There is a tension between being self-motivated about your career and being self-motivated enough to work hard
- ◆ Students struggle to create new identities for themselves at college

### 3. Advice and comments

For students studying literature or with any background in the social sciences, the interpretive approach to data may seem quite familiar. Our experience is that most students have not worked with texts in this way and certainly not with texts made in the field or transcribed from interviews. If this approach is quite new to students, then, ideally, several sessions and assignments are needed. When students undertake their ethnographic projects, they tend to spend too much time collecting data and not enough on analysing it. Indeed, some seem to feel they have done the work once the data is collected.

The other issue here is the amount and kind of data students have already collected. They need to try out some of the approaches using data in English (or their dominant language) but they also need to work more with foreign language data. If they have collected data from the assignment in Unit 10, this can be used either in class or for this assignment.

If the unit is taught before the break, students should be asked to sort out some interview data either in English or the target foreign language which they can use in this unit. This might be another segment from the data from their Unit 10 interview or from a tape-recorded interview in English in class or even an example from a transcribed interview by someone else. The important thing is that they bring along data to the session which they have collected earlier and are ready to draw on it to illustrate issues and problems in data analysis.

#### Student comments

By analysing the interviews I began to understand what ethnographic studies aim for: not a reflected opinion, generalising ideas and analytic observations but actual evidence, personal experiences and examples that make the informant come to that conclusion...By looking at the received data I began to realise the importance of referring the informants' statements back to their cultural background and also to consider my subjective interpretation of the data given.

# **SECTION THREE**



# 1. Assignment

## DATA ANALYSIS

This session may be taught immediately after a vacation, during which time you will have been expected to make a start on your home ethnography. If this is the case, then no other assignment is set for this session but you should bring along some of the data you have gathered recently. Your data probably consists of at least one of the following three types:

1. Field-notes collected from participant observation and from informal interviews and chats
2. Tape-recorded ethnographic interviews
3. Tape-recordings of naturally occurring conversations and other interactions.

1. You are probably wondering what on earth to do with your data now! You may feel you have masses of data but do not know where to begin to deal with it. Or you may feel that your data does not add up to a great deal and wonder how you can write an ethnographic project on it. Unit 11 will help you to work on small pieces of data systematically so that you can get a lot out of them. Unit 12 will help with organising data so that it is manageable.

2. Ask the same questions of your data that you used in the interview assignment feedback in Unit 10 but try and take these questions a bit further:

- ◆ What is the content of this piece of data, i.e. what are the themes?
- ◆ Are there any connections between different parts of the data or patterns, taking the piece as a whole?
- ◆ What further data would you want to collect? e.g. are there things which are not clear or seem contradictory? Are there things which were not said that you might have expected to be said?

3. Come to the session ready to talk about your preliminary analysis.

## UNIT 11 – Data Analysis 1

### HANDOUT 1 – developing theoretical sensitivity

The following is a quote from one of the ethnographic interviews of independent truckers that Michael Agar studied:

Well, actually the truck stops were – hah, three quarters of them were pit stops, you know. Oh God, terrible. You never could find a decent place. If you found a place that had a shower, Christ, you'd have to steam-clean a shower before you could go in. So I used to just stop and rent a motel room and shower and shave. What the hell. A motel room cost about four bucks in them days, I guess, or two and a half. I forget any more. Truck stops were horrible.

Now once in a while you'd – there was a lot of good eating places, you know. They were truck stops but they didn't sell fuel or anything, just strictly restaurants. They were nice. But then again in them days you could stop at a barber shop and almost all barber shops had showers, especially in the South. (Agar 1986: 40)

Read through this short quote and think of as many questions as possible that you could ask the trucker about it so that you could begin to understand the experience of being a trucker from the inside. When you have thought of as many questions as you can, turn over the page and compare your list with the one on the back. Of course, there are no right or wrong answers. The idea is to engage with the data as strongly as you can.

Possible questions that could be asked about the data:

- ◆ What's the difference between a truck stop and a pit stop?
- ◆ What is a decent place?
- ◆ What state would the showers be in that meant that you had to steam-clean them?
- ◆ Why were the truck stops horrible?
- ◆ What would four bucks buy you?
- ◆ What is a truck stop like now?
- ◆ What would you get in a restaurant?
- ◆ What made a restaurant nice?
- ◆ What did you get in a barber shop?
- ◆ Why did barber shops have showers?
- ◆ Which states had barber shops with showers?

Some of these questions are trying to get at the cultural knowledge of truckers through comparison and eliciting detailed descriptions. Others are more factual questions but even these are representations of reality as presented by the truckers themselves. Answers to these questions would help the ethnographer understand what a truck stop meant to a trucker, how important getting clean or eating certain kinds of food were and so on. They would also help to understand the language of truckers – for example, what 'nice' and 'horrible' meant to them as opposed to or in addition to their meanings in the dictionary.

## UNIT 11 – Data Analysis 1

### HANDOUT 2 – basic procedures in qualitative data analysis for interviews

...It is well to be self-conscious about how you decide whether some data is significant or not, rather than to rely on intuition. This is not a recommendation to become a statistician, to replace the richness of your understanding with a thin gruel of meaning-free figures; it is a suggestion that your arguments should be constructed with some regard to the amount of evidence which supports them.

(Davis in Ellen 1984:302)

1. Go through your transcripts carefully, turn by turn or line by line and section by section. Of each turn or line, ask yourself: What is going on here? What does the speaker seem to mean here? (When you do this, try to avoid making claims that you can't support from the data). What are the key words/phrases in each line or group of lines? Are they compared with or contrasted with other words and phrases? What questions can you ask about these key words, e.g. What kind of a stop is a truck stop? (see Unit 10 where Spradley's work was used to ask questions of this kind).
2. Identify the issues/themes/concerns that seem to be particularly important in the informant's talk. (Stick closely to her/his wording).
3. Take one issue at a time. What concepts, feelings and evaluations are connected with this issue? Exactly how are they related to it and to each other? (Again avoid big interpretive leaps, and keep close to the evidence of what your informant says).
4. What concepts, feelings and evaluations that you might have expected *aren't* present in your informant's account of the issue? This question is important in helping you get a sense of the scope of the issues, as well as opening new lines of thought for yourself.
5. Try clustering the issues/themes and their associated concepts into categories so that you begin to see patterns emerging, i.e. ways in which the categories relate together, e.g. are they all different examples of an overarching experience as in Agar's trucker study where the truckers' experiences of good and bad facilities on their truck stops make up part of a pattern of 'road life'. Write down a summary of the patterns you have identified so far. Review the data that supports this. How well do the summary and the data seem to fit together? Do you need to refine the summary? If so, do so.
6. The summary of your patterns should account for most of the evidence that you have looked at so far. But there may be some bits that do not seem to fit in. These are called 'discrepant cases'. They are important and you need to look at them carefully. They may make you rethink your summary. But if you cannot see how, put these discrepant cases on side for a while *but don't forget them!* You will have to return to them before your analysis is finished.

At the end of the day, you may not be able to see how they fit but you will still have to account for them in your final write-up.

7. Look again closely at your summary. What kind of evidence do you need to elaborate it further? What kind of further evidence might contradict it? At this point you may want to collect more data. (Remember the process of data collection and data analysis go hand in hand. Once you've collected more data, you may have to reformulate your summary or decide that it is not relevant).
8. When you've completed your analysis of this particular issue (even though there may be one or two unresolved discrepant cases still pending), move to another issue and repeat steps 3 - 7.
9. When you've done that, look at both of the issues that you've analysed. Are there connections between them? e.g. in the study of 16-year-old Further Education students (see Handout 3) the category of 'shaky student' linked to the category of 'framing their learning'. Where students had difficulties framing their learning, they were labelled as shaky. So one was a consequence of the other. Are you now also in a better position to deal with discrepant cases? e.g. in Chris's study of despatch riders, they talk of their leather gear as part of their macho image but this talk seems to conflict with the ways in which they are regulated by bosses, customers, etc. Write a summary about the relationship between these two issues and then go over steps 5 - 7 again. For example, in the case of Chris's study, he needed to think about why there was such discrepancy between macho free-wheeling images and regulation and control.
10. After a while, you should feel reasonably confident that you have produced a fair account of your data. If you haven't already, you should now relate some of this data analysis to the concepts you have been learning about on the ethnography course or indeed other courses that have introduced you to concepts in social and cultural studies, e.g. Agar asked questions about how trucksters manage their *identity* to sustain some of the cultural image of the American cowboy hero or the FE classroom and interview data (see Handout 3) could be used to ask the question: how is FE classroom life a form of *cultural reproduction* ?

As you can see, there is nothing mysterious or inaccessible about qualitative data analysis. It has been called 'common sense' of a very 'meticulous and clerical' kind. But step by step you can gradually move to more and more abstract and general statements about your data. To try and ensure that your statements are trustworthy/valid, it is important to go through the processes outlined above: very careful and attentive analysis of pieces of talk or interaction; 'constant comparison' between different pieces of data and between data and your summaries; searching for disconfirming evidence; and attending carefully to discrepant cases.

Based on a handout devised by Ben Rampton from Erickson (1986).

## UNIT 11 – Data analysis 1

### HANDOUT 3 – interview data from a project on vocational courses in further education.

#### Extracts from an interview with Manjula (16 years old)

I think the college is okay, but I think you know – primitive. Well, like today we don't have a teacher and we're just sitting here, you know. I didn't have a teacher, we don't really know where to go or who to ask where to go. We can go to the library, but what work can we do in the library – we have to have some work. Its only to-day, of course.

.....

It's quite boring actually. I expected more work, because I'm used to doing more work. Probably because it's the beginning of term. Also, they give all the assignments together, you know, don't give us one by one, so we haven't finished one and they have just given us another one. We don't really understand and they just tell us this, you know, deadline of the assignment.

They do want us to do well and pass the course. The assignments are okay, we have to give them on time, but sometimes we get confused what really you have to do. These assignments are different from the school ones, we didn't have things like task one and task two. There we just had to do an experiment and write the assignment or the essays, we didn't have assignments like these. So, it's quite difficult to follow you know.

.....

We can go to XXX or the teacher to discuss problems, but you have to get an appointment.

Its better than school – no uniform but also you have much more free time. They don't really push you too much. They should, you know, push you a little bit. They don't do anything, you know. Its a bit worrying because if someone does not tell me to do that work, I will never do it. So, I need some push to do the work.

We don't have any notes. We don't really make too much notes, only assignment lessons. I think we should have some notes, so, you know, we can go over them, just you know giving us some lecture.

.....

The school and college atmosphere are more or less like the same but there is more communication around here – talk to everybody else, say hello – there wasn't that atmosphere in the school – if you are in one gang, you just stay in that gang.

.....



I want to do BTEC first because my dad has got a business and I'll pursue my career with him. Also, some day I want to have my own business. After BTEC first, I might look for a job or I might do BTEC National. The kind of job depends on what qualifications I get – what I get out of the course. I really don't know what the course is going to give me. If it gives me some kind of potential then you know I can go over that area of business.

.....

I still don't know much about the course. I know banking – things like that. I don't specifically know what is in banking – what are the issues involved in it. I wanted to do BTEC National. I didn't get my grades. Last year I did part of CPVE – that was really interesting but my dad said you have to retake GCSE. So I didn't get them because my dad forced me to do the course. It wasn't really – my heart wasn't in it. I didn't really get all the grades I wanted.

.....

Doing BTEC is my decision, because my dad wanted me to do something else. I said I want to do this. This helps. It's my own decision and if I fail, it's my own fault. No-one else is to be blamed. And I like the course as well. It's okay but I don't like to be forced into something.



## UNIT 11 – Data Analysis 1

### HANDOUT 4 – inferences and high inferences

#### **Making Inferences**

(Roughly based on Agar's *Speaking of Ethnography* 1986 )

The ethnographer is looking for patterns and connections. The process of discovering patterns is through *inferences*. These are based on what we observe, hear, read, etc. and the sets of structured assumptions, i.e. schemata that we work with, e.g. we may say that we have never had a car accident and then either touch wood or say 'touch wood'. This is based on a schema which goes like this: Saying something bad has never happened to you is risky because it may cause that thing to happen. In order to ward off the possible effects of saying it, you touch wood which is invested with good luck properties. This schema assumes that bad things can happen just because you have courted fate. It also assumes that wood has some sort of magical property if you touch it. So the 'touch wood' schema, like all other schemata, is made up of bunches of inferences, of ways of making connections and relationships between things. And this schema is used, in turn, to make inferences about similar situations. Schemata like these are handed down historically (though it is possible that young people are not using this expression nearly as much as older people did) and they become not so much a way of warding off bad luck as a ritual phrase which has a meaning something like: 'I know it is rather foolish to make such a statement because you never know what may happen in the future'.

What does the ethnographer from Mars make of this? They may have a schema about touching wood (if only they had some to touch!) which is either quite different or, what is even more confusing, just a little different. For example, 'touching wood' might have a much more specific meaning such as bringing good luck to your father-in-law or preventing a terrible outbreak of spots. When they see you touch wood, they use their schema to make inferences about what they have observed. For example, they might mention, if they had got to know you well, that your face was fine and there was no need to touch wood! How would they find out what meanings 'touching wood' had for people in Britain? They will have made an initial inference at the level of observation but if they wanted to test this inference they might need explanations which they would look for in an ethnographic conversation. But further conversations with other informants might deny the earlier explanations and so on. So inferences are at different levels:

1. Observation: doing
2. Explanation through ethnographic conversations: talking about doing
3. Further, confirming or counter explanations: talking about talk.

#### **High Inferences**

This is a term used by ethnographers to criticise an analysis of data where there is not enough evidence to substantiate a claim. For example, our ethnographer from Mars, seeing or hearing people say 'touch wood', might infer that there was widespread concern among the group studied about their complexion. This would be a wrong

inference. But if they had learnt what 'touching wood' meant to a group of English-speaking people and they inferred from this that English people are deeply superstitious, then this would be a high inference. They simply do not have enough evidence to support this claim.

Hammersley (1992) gives the following example from a study of the lives of women factory workers by Pollert:

'Cutting off' or separating the 'inner self' from what is objectively happening on the 'outside' is one of the 'sorry' skills we are forced into, in an existence dominated by alienated relations of production. It is otherwise known as 'wishing one's life away'. Some girls actually prided themselves in the art of switching off, pitying those who were bad at it, and thinking themselves lucky to be working at all.

**Raquel:** Yes, you get bored sitting up here, very bored ... You gets used to it, though. I think it's imagination a lot of the time. I get fed up sometimes, but I don't really get that fed up, because I haven't really got anything to be fed up about.

**Anna:** (the researcher) Nothing really. I can sit up here a whole day without really speaking.

Hammersley then goes on to say there are serious questions about the multiple claims the author makes. These claims are:

1. that the workers cut themselves off or switch off from their work
2. that they refer to this as 'wishing one's life away'; and that it is a 'sorry' skill produced by alienated relations of production
3. that some of the women provided themselves on their ability to switch off and pitied those who were bad at it, judging themselves lucky to be working.

Hammersley argues that the quotation supports the first claim but provides no evidence of the other two claims.

### **Being systematic and reflexive**

Making inferences and guarding against high inferences is also related to thinking about the data and how it came to be produced. Having evidence to support your claims means not only having enough evidence but thinking about what the data means, given how it was collected.

Becker and Geer suggest that the data has to be treated differently depending on how it was collected. Observed data is different from elicited data. What people do and what people say they do is often not the same thing. Similarly, what people say to the ethnographer on their own may be different from what they say if they are talking as part of a group or if they know someone is overhearing what they are saying. And

there is a difference between directed questions – asking explicit questions to check understanding – and asking more open and general questions to elicit descriptions.(see Units 9 and 10 as well on this). Becker and Geer suggest that ethnographers should always make a note of HOW the data was elicited and under what circumstances.