

23

Writing your Data Chapters

CHAPTER OBJECTIVES

By the end of this chapter, you will be able to:

- Plan the overall structure of your thesis.
- Recognize and choose between different stories you can tell about your research.
- Work out how to present data effectively.
- Appreciate the importance of writing in a clear and persuasive manner.

23.1 INTRODUCTION

As we have already seen, many supervisors and funding bodies suggest that doing a research study falls into three equal phases. These phases are commonly defined as:

- reviewing the literature
- gathering your data
- analysing your data.

Faced with this convention, it may be necessary to restate the obvious. Assuming that you are writing an empirically based study, your data-analysis chapters are (or should be) the key basis on which your dissertation will be judged. Unlike coursework essays, where knowledge of the literature and an ability to analyse it critically will stand you in good stead, dissertations that involve research count as nothing without good data analysis. Moreover, as I have said several times already, there are usually no brownie points awarded for successfully gathering your data. Whether or not such data gathering involves discomfort, danger or the need to learn another language is, ultimately, neither here nor there. In the final assessment, everything comes down to what you *do* with your data.

This situation implies two clear messages. First, as I have stressed throughout this book, you cannot begin too early in your data analysis. Second, when you

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write up data, you need to develop the skills to present your analysis clearly and cogently to your readers.

This is why, as Jay Gubrium (personal correspondence) has commented, students need advice on the actual writing up of their data analysis. They need to understand ‘what to say first, next, where to place things, how to introduce extracts and what to say in relation to them, how to draw conclusions’. In this chapter, I offer advice addressed to the issues that Gubrium raises.

It will be useful at once to make a distinction between how you write up your analysis of particular sets of data and how you craft your overall argument. Alasuutari (1995) calls the former area the ‘microstructure’ of a thesis and the latter its ‘macrostructure’. This is how he explains the difference between the two levels:

The difference between the two could be compared to different dimensions of the architecture of a house. At the macrolevel one thinks how the rooms and different activities are placed in relation to each other, whereas at the microlevel one considers the furnishing and interior decoration of different rooms. (Alasuutari, 1995: 179)

This is a helpful distinction because, as Alasuutari suggests, different issues arise in relation to the organization of individual chapters (the ‘microstructure’) and the overall organization of your thesis (‘the macrostructure’). In the rest of this chapter, I will consider each structure separately and then go on to explain how to make a final check that everything is in place before you tighten up the structure (Wolcott, 1990: 47).

23.2 THE MACROSTRUCTURE

The macrostructure is how the investigation proceeds from one chapter to another so that it forms a logical and sound whole. (Alasuutari, 1995: 179)

How do you ensure that your data-analysis chapters form ‘a logical and sound whole’? I discuss below two answers to this question:

- Plan your table of contents at an early stage and continually revise it.
- In the final write-up, decide the form of the ‘story’ you want to tell about your research.

23.2.1 *Early planning of table of contents*

Plan what you may put into your data chapters as early as you can and then keep revising your list. As Wolcott suggests, projecting a table of contents provides for:

an orderly progression, a clear identification of major points and subordinate ones, and an overview ... to assess whether the structure I have designed accommodates

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the data to be presented and provides an appropriate sequence for the presentation. (1990: 18)

By such early planning of the structure of your thesis you can help to clarify your research design and identify upcoming problems:

Insurmountable problems in finding a sound macrostructure may be a sign of weaknesses in the research design: problems which have to be sorted out first. (Alasuutari, 1995: 179)

Alasuutari gives the example of a set of chapters which veer unpredictably between different themes – a good indication of an unclear research design. This means that, if you have difficulty in working out your table of contents, then you are exhibiting symptoms of a confused research design.

To show you how tables of contents can be projected, I set out below examples from two of my research students: Sally Hunt and Kay Fensom. In each case, these research students started to project a table of contents at an early stage.

Sally gathered audio recordings of case conferences of a community health team seeking to house mentally ill, homeless people. Her work, which was discussed in Chapter 2, is ethnographic in focus. Example 23.1 shows her draft table of contents prepared while she was still writing her data chapters.

EXAMPLE 23.1 Sally's draft table of contents

'Producing single homelessness: descriptive practice in community mental casework'

- 1 Introduction: aims of the study
- 2 Natural history of the research
- 3 Literature used in the analysis
- 4–6 The ethnographic context
- 7 Constructing the case
- 8 Constructing the client
- 9 Gender as an interpretive framework
- 10 Constructing the mental health team
- 11 Conclusion: limitations and implications

In the final version of her thesis, Sally reorganized most of her thesis into two parts: an introduction (which included Chapters 1–3 above) and data analysis (Chapters 7–10). Sally recognized that her projected chapters on the ethnographic context were peripheral to her main argument. So her draft Chapters 4–6 were vastly shortened and incorporated in her introduction.

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Kay analysed crime stories in local newspapers in London and Northern Ireland. To do this, she used Harvey Sacks's **membership categorization device** analysis (see Chapter 11, in relation to the story about the navy pilot). Example 23.2 shows her early ideas about the organization of her thesis.

EXAMPLE 23.2 Kay's draft table of contents

'Locating newsworthiness in newspaper headlines: reading inference and "motive"'

- 1 Natural history: stages, directions and influences
- 2 Theoretical framework
- 3 The media, 'newsworthiness' and the activity of reading
- 4–7 Data chapters (each on a separate crime headline)
- 8 Dealing with critiques of MCD analysis
- 9 Conclusions: what has the analysis achieved?

By the time Kay submitted her PhD, she had one extra data chapter. She now felt that two of her draft chapters were based on literature reviews which were not distinctively original. So Chapters 3 and 8 disappeared from the final version of her thesis although parts of each were used elsewhere. Kay's title also changed to: 'Crime, locality and morality: membership categorization and "newsworthiness" in local newspapers'. This improved title nicely reflected (what had turned out to be) Kay's key concepts and database.

Sally and Kay's redrafting carries three important implications about how you should think about the structure of your thesis:

- Work out what main message and findings you want your data chapters to contain.
- Ensure that the structure of your thesis underlines that message.
- Strip out or minimize draft chapters that are peripheral to your argument.

Deleting or shortening chapters over which you have toiled requires a degree of ruthlessness on your part. Seek the guidance of your supervisor about whether such chapters might find a better home in, say, a conference paper or journal article (see Chapter 27).

More than a year before Sally and Kay finished their dissertations, they were already planning a draft table of contents. Planning is important because your research dissertation will probably be the longest piece of writing you have ever done. BA or MA research essays are commonly 10,000 words and PhDs are usually between 70,000 and 100,000 words long. However, it is important not to

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focus upon your own difficulties at writing at this length for I guarantee that, in nearly every case, you will find you have too *little* space.

Instead, think of how the reader needs a guide to follow a long story. Provide that guide at the start and repeat it, as appropriate, in every chapter (see Alasuutari, 1995: 180). This will mean giving regular ‘signposts’ to help the reader understand what you are going to do (or have done) and how these relate to your overall theme. It also means planning the form of the ‘story’ you wish to tell.

23.2.2 Planning your story

There are at least three models to choose from in working out the macrostructure of your thesis:

- the hypothesis story
- the analytic story
- the mystery story.

Each is discussed briefly below.¹

The hypothesis story

This is how many journals require you to organize your paper. It follows a standard three-part way of writing up research reports derived from quantitative studies:

- 1 State your **hypotheses**.
- 2 Test them.
- 3 Discuss the implications.

As Alasuutari (1995: 181) points out, there are two reasons why you are unlikely to want to use this model for writing up your qualitative dissertation. First, you may well be proceeding inductively, developing and testing hypotheses in the course of your data analysis. If so, then clearly you cannot state a prior hypothesis. Second, however, there are reasons to be suspicious of the hypothesis story because, even in quantitative studies, it often represents not the ‘actual’ logic of the research but a reconstructed logic fitted to how your cross-tabulations of variables actually worked out (see Alasuutari, 1995: 181–3).

The analytic story

The hypothesis story usually demands a passive voice format (e.g. ‘it was hypothesized that ...’ or ‘the findings were ...’) which can be difficult to write and still more painful to read! Telling an analytic story is a more conversational way of writing. It involves deciding ‘the main analytic story line that you wish to tell’ (Strauss and Corbin, 1990: 230). As they put it:

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think intently about the *analytic logic* that informs the story. Every research monograph, indeed every research paper, will have such a logic In a sense the entire thesis or monograph will represent a spelling out of this analytic story. (ibid.)

To write this story, you need to ask yourself questions like:

- What are the key concepts that I have used in this study?
- How do my 'findings' shed light on these concepts and, through them, on the substantive topics I studied?
- What, therefore, has become of my original research problem and the literature regarding it?

Rather than hope that the reader will eventually find out these matters, telling an analytic story lays everything out on a plate at the outset.

There is much to be said for this model for it helps the readers to settle back knowing what they will find in the rest of your thesis. Some readers, however, may actually want to be surprised. Such surprises can be planned rather than the mere outcome of sloppy design. This is where the mystery story comes in.

The mystery story

Alasuutari refers to an approach to writing that 'proceeds by pointing out mysteries and by gradually developing questions and answers'. In this approach, one:

starts directly from **empirical** examples, develops the questions by discussing them, and gradually leads the reader to interpretations of the material and to more general implications of the results. (Alasuutari, 1995: 183, bold added)

Beginning one's data analysis in the form of a mystery story has at least two advantages. First, it may well capture your readers' attention as, like the readers of detective stories, they want to stay with you in order to find 'whodunnit'. Second, it more accurately mirrors the inductive form of much qualitative research where findings (and even topics) are only gradually revealed.

Set against this, you must remember that writing a mystery story requires many craft skills. Should you fail, you will certainly lose your readers' interest. So, in practice, many writers of good qualitative dissertations follow Strauss and Corbin's idea of telling an analytic story to lead their readers through the data-analysis chapters.

In a sense, whichever story form you choose can be safely left to personal choice. More important is whether you are telling *some* coherent story. For, despite their differences, all three models share one important feature in common: they give the study focus and point. This means that the structure of your thesis should only rarely flow from the chronological order in which you happened to find out things. As Cryer puts it: 'the final version of the thesis should be written, with hindsight, knowing where one has been' (1996: 178).

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So, if you just remember one lesson from this chapter it is this: *avoid telling your story in the order which you found things out or wrote them up*. Such a story is only appropriate for a natural history chapter (see Chapter 22). If the overall structure of your thesis just reflects the order in which you discovered things, then your examiners are unlikely to praise you for your verisimilitude. They are much more likely to criticize you for being too lazy to work out a coherent structure for your argument.

As Alasuutari puts it, returning to the motif of a ‘mystery story’:

A good investigation is indeed like a murder mystery in that it does not contain much irrelevant text: themes or details that have nothing to do with the solution revealed in the end One could talk about the *economy principle* of a study: everything included must be related and tied in with the argumentation developed and presented in the investigation. (1995: 186, my emphasis)

Now attempt Exercise 23.1.

23.3 THE MICROSTRUCTURE

With a clear ‘macrostructure’, you are well set up to write well-organized and well-argued data chapters. Whether it is a matter of setting out an overall argument (the macrostructure) or developing an analysis of a particular topic (the microstructure), you should always write in a way that helps the reader. As Jay Gubrium (personal communication) notes, this is not always something that comes easily to inexperienced researchers:

many students ‘don’t take their readers into account; they don’t know how to “teach” their readers what they should be reading into the empirical material present. Many just throw stuff into the text and expect the reader to get the point.’

Thinking about your reader(s) turns out to be an excellent way of answering perennial problems that arise when you first write up a qualitative study. For instance, you may ask yourself: how much depth is needed in my data analysis? How much is enough?

Strauss and Corbin suggest a good way of answering such questions:

The answer is first that you must know what your main analytic message will be. Then you must give enough conceptual detail to convey this to readers. The actual form of your central chapters should be consonant with the analytic message and its components. (1990: 232–3)

So the answer to these questions is found in how you have depicted the main message of your thesis (the macrostructure). The point here is: know your message and stick to it!

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Normally, each data-analysis chapter will have three sections:

- an introduction, in which you explain what you are going to do in advance
- the main section, in which you work through your data in terms of what you have already said
- a conclusion, in which you summarize what you have shown and connect to the next chapter.

I set out below some suggestions for writing each of these sections with an audience in mind.

23.3.1 Introduction

Never spring anything on your readers. Even if you have decided to tell a mystery story (see above), your audience should always know what the mystery is about and what kind of ‘clues’ they should be looking for. As Becker has cautioned:

Many social scientists ... think they are actually doing a good thing by beginning evasively. They reveal items of evidence one at a time, like clues in a detective story, expecting readers to keep everything straight until they produce the dramatic concluding paragraph ...

I often suggest to these would-be Conan Doyles that they simply put their last triumphant paragraph first, telling readers where the argument is going and what all this material will finally demonstrate. (1986: 51–2)

So at the outset, preface each data-analysis chapter with an explanation of how its topic relates to your thesis as a whole and how the chapter will be organized. As a broad rule, no sub-heading should ever appear in a chapter without it having received a prior explanation of its nature and logical place in your argument.

Along these lines, Pat Cryer suggests four components of a good introduction to a chapter. These are set out in Table 23.1.

23.3.2 Main section

Now that your readers know the areas that this chapter will discuss, it is important that you initially pull apart these areas and discuss each one separately. The golden rule for writing data analysis is:

- Make one point at a time.

So, if you find yourself veering off in another direction, cut out the offending material and put it in another section. Sometimes this will mean returning to the same data but from a different perspective. Sometimes it will mean getting rid of some data altogether.

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TABLE 23.1 COMPONENTS OF A DATA CHAPTER INTRODUCTION

-
- 1 Scene-setting for the chapter, i.e. explaining the general area(s) that the chapter considers
 - 2 Locating the gap in knowledge which the chapter addresses
 - 3 Explaining how the chapter fills that gap
 - 4 Providing a brief overview of what is in the chapter
-

Source: adapted from Cryer (1996: 182)

Your readers will find their lives much easier if they are not distracted by too many different arguments. And it is also much more likely that you will be able to recognize holes in your argument if it is stripped to the bone.

If you are making just one point at a time, it is, of course, crucial that your readers should immediately grasp what that point is. Therefore, a second rule is:

- ‘Top and tail’ each data extract.

This means writing a sentence or two before every extract to context it in your argument. This way your readers will know what to look for while they read it.

Follow that up with a more detailed analysis of the extract in terms of the single point you are using it to make. If the extract is inconclusive, then admit to it. So, a third rule is:

- Always show that you understand the limitations of both your data and your analysis of it.

For your readers to be able to follow your analysis, they will need to be able to locate the extract(s) to which you are referring and where to find the relevant part of that extract. So a fourth rule is:

- Always number your extracts.

One effective way to do this is to give each extract two identifying numbers: the first will be the chapter number in which it appears and the second the order in which it is placed in the chapter. So the first data extract in Chapter 3 of your thesis should be numbered Extract 3.1.

Line numbers should also be used for any extracts over two lines in length. In this way, for instance, you can refer to Extract 3.1, lines 5–7, without having to reprint the passage.

A fifth rule is:

- Convince the reader.

TABLE 23.2 COMPONENTS OF A DATA CHAPTER
CONCLUSION

- | | |
|---|--|
| 1 | Explain what the chapter has done |
| 2 | Describe the new questions the chapter has identified |
| 3 | Explain where these questions will be addressed (e.g. in the next chapter or in the overall conclusions) |

Source: adapted from Cryer (1996: 183)

Not only must your readers be able to see why you interpreted your data in the way you did, but also they must be convinced by your interpretation. As Murcott suggests: 'the basis for saying that the data say "x" rather than "y" has to be made apparent' (1997: 2).

Murcott also suggests that the way to display that your analysis has this kind of critical component is to: 'discuss candidate interpretations and make the case for judging, and so discarding, alternatives as inferior or inadequate' (1997: 2).²

23.3.3 Conclusion

When you reach the end of a tight piece of data analysis, you may feel that nothing further needs to be done. Not so! You owe it to your readers to tie the whole chapter together again. Not only will this remind them of what you (and they) have learnt in the preceding pages, but it will also prepare them for the chapter(s) to follow.

Table 23.2 sets out what the conclusion of a data chapter might contain.

It is worth remembering that it is unlikely that you will achieve a well-argued, reader-friendly thesis at one go. I conclude this chapter, therefore, with some suggestions about moving to a final draft or what Wolcott calls 'tightening up' (1990: 47).

23.4 TIGHTENING UP

Make sure all parts are properly in place before tightening. (directions for assembling a new wheelbarrow, reported by Wolcott, 1990: 47)

Wolcott's analogy of assembling a wheelbarrow reminds us that no subtle change of detail will work if the macrostructure of your thesis is not properly in place. As he puts it:

Before you start tightening, take a look at how the whole thing is coming together. Do you have everything you need? (And do you need everything you have? Remember, you're only supposed to be tightening up that wheelbarrow, not filling it!). (1990: 48)

You are likely to be too close to your work to tell easily whether everything is properly in place. As Cryer suggests, the author of a thesis:

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will know it inside and out and back to front. So the link between its components may be clear to you, while not being as clear to those who have met your work only recently. (1996: 186)

There are two ways of giving yourself the critical distance necessary to see whether all the parts of your thesis are in place. First, if time allows, put it to one side for a while. After a time on the back burner, Wolcott notes:

I do a better job of strengthening the interpretation, spotting discrepancies and repetitions, locating irregularities in sequence or logic, and discovering overworked words, phrases, and patterns after periods of benign neglect. (1990: 52)

Locating what Wolcott calls ‘irregularities’ can mean deleting particular points to which you may have become attached but which detract from your overall argument (Clive Seale, personal correspondence).

A second strategy to obtain distance is to give a talk on your research during the writing-up stage or to find:

someone new to your work who will listen to you explaining it or will read the draft thesis and tell you where they have trouble following. (Cryer, 1996: 186)

Once the macrostructure is in place, it is time to tighten up the microstructure. Among the things to look at here are:

- unclear or infelicitous language
- over-large claims about your data or analysis
- needless repetition
- insufficient detail (see Wolcott, 1990: 49–50).

When you have done all of these things, you must recognize that the tightening-up period is nearly over. Certainly, you can ask yourself: ‘Have I really got the last details in? Got them right?’ (Strauss and Corbin, 1990: 235).

To check this out, you can ask your supervisor and/or fellow students to have one final read and then respond to their comments. But remember: the revision process is potentially endless! The real cop-out is not submitting a less than perfect thesis but being stuck in a process of endless revisions:

Part of an increasing maturity as a research-writer is to understand that no manuscript is ever finished. (Strauss and Corbin, 1990: 235)

Just as parents eventually realize that their children have become adults and will leave home, now is the time to make the break with your manuscript. Like ‘empty nest’ parents, you should be ready to strike out in new directions. But first you must ‘let go’.

23.5 CONCLUDING REMARKS

Your data-analysis chapters are (or should be) the key basis on which your dissertation will be judged. However, different issues arise in relation to the organization of individual chapters ('the microstructure') and the overall organization of your thesis ('the macrostructure').

Good overall organization is based upon planning your table of contents at an early stage and continually revising it. You also need to decide the form of the 'story' you want to tell about your research and structure your data chapters accordingly. Each data chapter should have a microstructure based on three sections: an introduction in which you explain what you are going to do in advance; the main section in which you work through your data in terms of what you have already said; and, finally, a conclusion in which you summarize what you have shown and connect to the next chapter.

KEY POINTS

In planning the overall (macro)structure of your thesis:

- Work out what main message and findings you want your data chapters to contain.
- Ensure that the structure of your thesis underlines that message.
- Strip out or minimize draft chapters that are peripheral to your argument.

When writing data chapters, it is wise to consider the following instructions:

- Make one point at a time.
- Context each data extract in your argument.
- Show that you understand the limitations of your analysis.
- Always number your data extracts.
- Realize that the reader will need to be convinced and that what is obvious to you will not always be so clear to others.

NOTES

- 1 As we shall see, the idea of the hypothesis story and the mystery story derives from Alasuutari (1995).
- 2 See Chapter 14 for a discussion of these issues in terms of 'validity' and 'reliability' and Chapter 12 for an explanation of how diagrams and charts may illustrate your rigorous thinking. On this latter point, see also Mason (1996: 131–3) and Strauss and Corbin (1990: 131–7).

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Further reading

Harry Wolcott's *Writing Up Qualitative Research* (Sage, 1990) is a marvellous account of how to write up data. Useful, shorter treatments are: Pat Cryer's *The Research Student's Guide to Success* (Open University Press, 1996), Chapter 18; Pertti Alasuutari's *Researching Culture: Qualitative Method and Cultural Studies* (Sage, 1995), Chapter 14; and Anselm Strauss and Juliet Corbin's *Basics of Qualitative Research* (Sage, 1990), Chapter 13.

Exercise 23.1

Try organizing your data analysis into two chapters. Don't do this arbitrarily but find a logical way to do it. Now try reordering this material into five shorter chapters with a different logic. Consider which format works best and why.

Exercise 23.2

Select a coherent piece of your data analysis which might become a chapter. Give the chapter a title that fits what you are trying to do there. Using Tables 23.1 and 23.2, now:

- 1 Write an introduction for this chapter.
- 2 Write a conclusion.
- 3 Add in your data analysis and show the whole chapter to a colleague. Ask them to what extent your introduction and conclusion helped them to see what you were getting at. If so, why? If not, why not?
- 4 Now revise and repeat the process.