

Notes on the structure of a dissertation.

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*Version note; 13 August 2010: 2.30pm—Minor clarifications throughout, additional material in Introduction
More comments incorporated. References added.*

Note that these are general remarks, and that they are trumped by any specific rubrics from the awarding institution. As discussed here, they apply most clearly to dissertations within broadly social studies and to a lesser extent humanities, where, however, there may be more scope for variation.

University and/or faculty (in the sense of organisational unit, rather than academic staff) libraries will contain dissertations from previous years; even if the rules are quite explicit, it makes sense to go and have a look at half-a-dozen or so, to see what has been deemed acceptable in practice. (I was amazed, when doing this prior to submitting my M.Ed dissertation many years ago, to find a completely hand-written piece—beautifully done—but then it *was* about the teaching of hand-writing.)

Preliminaries

(Note, this heading is my own portmanteau term—you will not find it anywhere in an actual dissertation.)

Regulations may specify what is to appear in the header and footer of each page, and other details of layout. Pagination, for example, may need to be in a standard form; roman numerals up to (and sometimes including) the Introduction, and standard (arabic) thereafter; or standard and continuous throughout.

This is the part of the dissertation which is probably most precisely prescribed by the university, which may, for example, have a set layout for the title page. There are several short components to these preliminaries, probably including;

Title page, including

- **Title of dissertation**
- “A dissertation presented to *Name of University* in (partial) fulfilment of requirements for the degree of *Master of Arts* in the *Faculty of Social Sciences*, *month and year*
- By ***Name of author***

Table of Contents (Some universities require this after the Abstract; check the rules)

Formal **notices**, including

- **Declaration of Originality**; formal confirmation that the work is solely that of the author (given a free hand, I would put this after the acknowledgements; it makes more sense there). In the event that the dissertation refers to your own previously published or

submitted work, here is where to draw attention to how you will refer to it—generally in the same way as you would to anyone else’s.

- **Confirmation of ethics clearance:** again, requirements vary across universities, but make sure that they are addressed, whatever form they take.
- **Acknowledgements;** may include the tutor/supervisor, anyone from whom specialist advice was sought, perhaps someone who prepared diagrams, or offered special IT support, or librarians and archivists who dug out obscure material for you... may also include mention of those who responded to a survey or consented to be interviewed. Best to mention others in the research group or team (as a rough rule of thumb, if you were to publish any of the dissertation as an article, who would you list as additional authors?); and people who acted as critical friends.
- **Technical stuff;** such as a list of abbreviations and initials used within the text, or conventions used to refer to archive material.

Abstract

The Abstract is a very short summary or digest of an article or dissertation whose basic task is to tell a potential reader, searching for scholarly or research-based material by topic or title, whether or not this is what she is looking for. Writing a good one is quite a craft and there is no substitute for reading lots of abstracts to develop the knack of summarising and selecting the key points.

Indeed, drafting and re-drafting the abstract is a very useful exercise for an author, as one has to be rigorous about priorities when there may be a word-limit as short as 200 words.

Do check the regulations; some universities which specify a word-limit for the abstract may refuse to accept the dissertation if the abstract is one word over. It makes sense to give a word count at the end of the abstract. Check too just where it needs to be located.

Generally the abstract can be single spaced in order to get it comfortably on a single page, so that when read with the page header, that one page is a self-contained summary of the content.

Introduction

Generally speaking, the Introduction will set out;

1. The **aims and objectives** of the research; how tightly these can be specified will vary from discipline to discipline but they should have been defined and articulated at the very beginning of work on the dissertation. I won't say more on this because this paper is not about how to *do* your dissertation but about how to *write it up*, but suffice it to say that aims and subsidiary aims or objectives are critical.
2. The **context** of the work; the reader needs to get a handle on what this is about as soon as possible and the author’s reasons for engaging with the topic. There is no premium on a marker asking herself, “What *is* this person on about?” twenty pages in.

- The context may be academic; “Building on Aardvark and Molestrangler’s seminal 2002 work on...” –in which case resist the temptation to go into detail because the place for that is in the Literature Review.
- It may be historic; “The specification of underwater knitting as a core competence by the Institute of ... has led to...”
- It may be narrative; “Based on the author’s experience of teaching English as an additional language in Korea, this study uses a grounded-theory approach to generate alternative ethnographic accounts of ...”

Regardless, it should be as simple and clear and practical as possible. This may well lead into...

3. A more detailed **exegesis** (OK! unpacking) of the title; which may include reasons for the choice of certain words, the reason for the part after the colon (which is generally to qualify and restrict the aspirations of the main title);
 - “Generating a theory of everything: necessity and sufficiency in explanatory accounts of the physical world by seven and eight year old children in an inner-city school.” Why that grandiose first part? What it meant by “necessity and sufficiency” in this context? In turn this may lead into...
4. The more specific research **hypotheses** to be tested or **questions** to be answered. Each can be spelt out and then commented on for a paragraph or so. Do this with a view to re-visiting them in the conclusion. (In practice you may well be writing this *after* writing the conclusion, of course.) Tie these in to the aims and objectives—it may of course make more sense to re-arrange these items in order to make the links clearer. There is nothing sacrosanct about the order in which they are presented here.
5. **Exclusions**: you have to get these in somewhere, and up-front is the best place;
 - “The scope of the study does not extend to a consideration of... because of lack of time/resources/space...”
 - “As discussed in the literature review below, most previous work in this area has concentrated on... On this occasion, however, attention is directed at...”
6. The **shape** of the dissertation; outline, chapter by chapter, how the argument fits together, and mention the material which has been relegated to the appendices.
7. **Conventions** adopted;
 - “Because of the nature of the action-research process, the convention of the author referring to herself in the third person makes for convoluted expression and hard reading. After consultation, I have decided to adopt a first-person narrative voice...” (“After consultation” is important—you are less likely to get hammered if your supervisor agreed to it.)

- “For simplicity, and where it does not affect the sense, reported interviews refer to the interviewer and interviewee as of opposite sexes...”
- “All transcripts of interviews have been translated into English; original language versions are available if required, but will be destroyed (as *per* the ethics policy) as soon as assessment formalities have been completed...”

Literature Review

This is where you outline previous work on the topic, and organise it so as to inform the empirical work which will come later, and its discussion.

Planning the literature (or research) review calls for careful thought. It needs to be comprehensive, but obviously in areas which have already been well-researched, it is not going to be possible to include everything ever written about the topic. Indeed, as a marker I am inclined to distrust too many brief allusions to (sometimes obscure) studies; they may well suggest an over-reliance on secondary sources, and it is difficult to do justice to research and scholarship at Master’s level and beyond on that basis.

As (of course) Mark Twain is reputed to have said, “The researches of many commentators have already thrown much darkness on this subject, and it is probable that if they continue we shall soon know nothing at all about it.”

The obvious temptation is to set out the review in the order in which you came across the material; you have put a lot of work into reading a lot of stuff and so you are going to show how much work you have done by referring to all that stuff. That is not a good basis, unsurprisingly. It may make sense to you, but not to anyone coming across it afresh.

Find a structure in the literature you have read, and follow that. Some of the most obvious are;

- An appropriate **historical discussion**. Start with the first major work in the field (or from a date of your choosing if the history is long), and show how subsequent research and commentary has built on, modified, or rubbished it, leading into where your contribution fits. (This pattern also focuses the mind effectively on priorities in the literature; generally you will try to be as up-to-date as possible, but you have to show that you are also familiar with the foundations of the discipline and the field within it;

You can of course make use of the exclusion strategy mentioned in relation to the introduction:

- “Clearly, one of the most influential works in the field continues to be Scroggins and Lumpit (1990). Their work will however be addressed only indirectly. It is now twenty years old, and so it is discussed in terms of its effects on later research rather than in its own right. Similarly...”
- “**Schools of thought**”; Take several studies which exemplify research influenced by underlying principles, and discuss how they have approached the topic. Many social phenomena, for example, have been viewed through positivist, marxist, interactionist, constructivist and post-modern lenses. Generally speaking you simply need enough typical examples to illustrate the point, and to show where your contribution lies on the map.

- Tie the review more tightly to your **specific research questions or hypotheses** or methodologies. This is of course what you need to do if you are seeking to replicate or test the validity of earlier findings, perhaps with a different population, or in a different cultural context, or after a lapse of time.

The last of the above reminds us that this chapter is the *literature or research review*. It is a preliminary to the main empirical show. Generally speaking, apart from the “where your contribution fits” points, and possibly “this particular finding is explicitly tested in the current research reported here...” this chapter is not about *your* work.

It needs to be structured so that when you do get to your own findings, you can readily refer back to the review;

- “This is consistent with the findings of Fink-Nottle and Psmith (1924), as reported in the literature review, that...” or
- “There is a marked discrepancy here with the work of Jekyll and Hyde (2006), as outlined earlier...”

If the marker is not intimately acquainted with what is by now after all, *your* specialist area, such signposting is invaluable.

Of course, not all the literature reviewed will be substantive research on the content of the topic. Some of it may involve outlining philosophical or even methodological principles which underpin what you are doing. It is a slightly moot point as to where that discussion should sit; my preference is generally to find it in this chapter (clearly demarcated, of course, and possibly preceding the accounts of substantive research so that you can refer back to the implications of the principles and methods in your evaluation of that research). Sometimes, however, where the points are quite specific and technical and not really up for debate, they can be dealt with comfortably within the Methodology chapter.

If you ever find yourself writing “Another writer says...”, you have lost the plot and descended into an amorphous list.

Methodology

It is now standard practice on the *Research Methods* module of many Master’s programmes to have two assignments, of which the second is the research proposal for the dissertation. This has the advantage of allowing the student to concentrate on the methods she is actually planning to use, and usually to get formative feedback before working on the dissertation itself.

It also has an unintended consequence; very often those second assignments re-appear in minimally-edited form as the Methodology chapter of that dissertation. I can usually tell when the chapter starts with “Research methods fall into two main groups, quantitative and qualitative. Quantitative methods are defined by Cohen, Manion and Morrison (2007) as...” followed by a gratuitous quotation. Strangely enough, I do know that! And I already know a lot of other stuff people trot out which is not worthy of getting within a mile of a dissertation.

It is *not* the task of the Methodology chapter to revisit social science methodology overall—it is its task to explain and justify the specific choices made for the methods used in this particular study. The principal—and all too frequent—failing of this chapter is that it is insufficiently specific, and not tied in to the Findings which follow.

The chapter has to explain how you **got** the findings, why they can be **trusted**, and how they **answer** the research questions/**test** the hypotheses.

One experienced supervisor and assessor commented in response to an earlier draft of this paper ; “A rule of thumb for me here is ‘Could someone else replicate this study based on the information here and in the appendices?’”

The shape of the chapter is—in almost all cases—a zoom-in;

1. The chosen research **paradigm**. I’m not going to go into that—this is a tactical rather than strategic guide—but it may be (there is no consistency in the labels) about:
 - Uncovering the “facts”
 - Making sense of them
 - Understanding what they mean to different actors
 - Locating them in a political or other context... etc...

Which leads to...

2. A consideration of the **context** and indeed constraints of the research. That may mean;
 - Its academic or professional nature (is it about creating knowledge for its own sake, or about suggesting how a problem might be tackled, or evaluating an initiative, for example?)
 - Its organisational context and how that might influence the methods available. Is it undertaken on behalf of management or a sponsor, and what say do they have in it? Is it subject to any additional ethics approval beyond the university’s internal procedures?
 - And the practicalities of access to people and resources.

In the light of which you can get down to...

3. The selection of a research **strategy**, such as (*inter al*) all the usual suspects;
 - Use of published statistics
 - Documentary / primary sources
 - Commentary (docs + journalism etc.)
 - Experiment
 - Survey

- Structured interviews
- Unstructured interviews
- Records of participant observation

...and any combination of the above.

It needs to be justified as fit for purpose, and also in ethical terms. And so to;

4. The research **design**. This is getting rather technical for a guide like this, so what follows is indicative for a survey-based project, because the protocol for that is the most formal:
 - Sample construction
 - Survey method; on-line, phone, personal contact... etc.
 - Consent and ethical considerations
 - Addressing sampling/ non-response bias
 - Instrument construction
 - i. Addressing independent variables; questions on age and sex (and occupation, ethnicity) and how (and when) they are posed ...
 - ii. Addressing dependent variables. Choice of method
 - **What questions did you ask and why and how would the answers, particularly cross-tabulated and significance tested, contribute to addressing the research questions/hypotheses?** This is the crucial design question: it closes the loop, and you need to lay it out clearly. You do not need to go into detail for every question, but the questions on the dependent variables need to show a clear line of accountability from the original research questions or hypotheses. How people can leave this out beats me, but many do, and inevitably suffer for it.
 - Arrangements for piloting, and any changes made as a result of it.
5. Of course in the real world the actual survey or round of interviews or video samples would have taken place weeks or months ago, and so you will probably be evaluating with hindsight rather than designing for the future. But it **is** best if you can start the writing and re-writing of this chapter while you **are** actually designing (no, what you did for *Research Methods* is not a substitute) as well as reviewing after the event; that way the chapter becomes a device for checking progress and structured evaluation.
6. Finally, outline the methods used for **processing** the data. The actual results belong in the next chapter, but the choice of processing methods belongs here. Include *inter al.*;
 - Statistical techniques adopted, including significance testing—of course the instruments will have been designed with these in mind (won't it?) so this might fit in earlier.

- Processing methods for qualitative data such as interviews, use of particular packages for tagging and identifying themes. There are conventions and procedures; show how they have been adopted.
- Ditto for audio- or video-recordings
- Concessions to practicality, such as selective transcription
- Use or non-use of independent judges for qualitative data. (People very rarely have the resources to use judges at this level, but better to admit that you didn't, much as you would have liked to, rather than ignore the possibility. Markers do understand such things.)

The structure will of course vary from discipline to discipline; one correspondent from medical science, for example, differentiates more than I have done between the methodological considerations—as theoretical issues to be taken into account in the research design—and the actual practical methods and materials used, as she says, "the recipe of the research", so that it can be replicated easily elsewhere. These need to be set out in a clear and distinct section at the end of the chapter.

Findings and Discussion

Whether you deal with these separately or together will depend very much on the kind of research you have undertaken, and so it is harder to be prescriptive about the structure of these chapter(s); what follow are mostly simply suggestions.

What is more than just a suggestion, however, is that you signpost clearly in an introductory paragraph just how you are going to present the material. Raw findings easily become fragmented and hard to follow, which is why you may need to discuss and evaluate them as you are going along rather than delay the findings until you have set out all your wares.

Findings themselves

On the whole, deal with the boring stuff first—but do deal with it. Did you include questions about independent variables such as age and sex *etc.*, so that you could determine the fit between your sample and the overall population? It's important but not exactly exciting; get it out of the way.

We shouldn't have to say this, but even in otherwise good dissertations the use and presentation of statistics is often abysmal. It is way beyond the brief of this paper to go into reasons and solutions, but frankly many non-scientists appear too frightened of maths to engage properly with statistics and failure to make appropriate use of quantitative techniques accounts for the poor quality even of some published research in the social "sciences".

Whether or not charts and tables (or interview transcripts) are presented “in-line” as part of the narrative of the chapter, or separated into appendices is an important choice, but it does not have to be all-or-nothing; just make it clear at the start of the chapter what rule you are going to apply. The referencing of material in appendices is critical, and it is worth getting to grips with automatic cross-referencing in your word-processor, so that when you edit you do not lose track and point the reader to the wrong table or chart. And for the marker’s sake remember that continually flipping from main text to appendix and back can detract from concentration on the argument.

There are many ways of picking a route through the data;

- Unless explicitly forbidden to do so by the rubrics, use well-structured sub-headings to help the reader keep track. This chapter is probably the easiest in the entire dissertation for the reader to misunderstand, often by confusing just which part of the evidence a point belongs to.
- Sometimes you may want to follow the order of the questions you asked of your respondents. On the whole that works better for interview-based data than for questionnaires, because in the case of the latter the interesting material comes largely from the cross-tabulation of answers to two or more questions, so it is not always clear in what order to take them.
- Sometimes you may use the actual research questions posed in the Introduction (remember that?) but the information in your findings may be too “fine-grained” for that to work directly. And of course by this stage in the game you may have realised that the original research questions were misconceived (see below under Discussion).
- Alternatively, you may simply work on a set of emergent issues which have become apparent as you scrutinised the data. That is fine, as long as you signpost the strategy.

As a rule of thumb, confine the information to what *you yourself* have found out, and leave the link with the Literature Review for the Discussion section.

Discussion itself

This is IT! This is the heart of the dissertation. This is where you tie together the research questions or hypotheses, the data you have unearthed, and the previous research and models and arguments. In a sense, anything goes in this chapter, except that if it is separate from the Findings, there should be no new information or data. It is all about the potential meaning(s) of data you have already reported, whether yours or that of previous researchers.

What must run through the chapter, though, is this continual knitting of the present material and the previous research. Moving away from the mundane aspects, this is a conversation between the present and the past, to adopt Oakeshott’s metaphor (1989) and both sides need to be heard.

You can now speak in your own voice, as it were (although don’t switch from third-person to first-person if you are using that convention). You have led the reader systematically through the research process, and this is where you can point out what it all adds up to: if you have done it properly, you are now expert and you have earned the right to be heard.

This is also where you should evaluate your efforts and their limitations. If the research design did not prove up to the task, say why and how that qualifies the results; if the survey suffered from a poor response rate, don't try to cover it up, but discuss how this might have upset the sampling. The marker will already have noticed these limitations anyway, so there is no point in trying to conceal them, but you show your professionalism by the way you address them.

The most critical evaluation issue is the "If I were trying to get to there, I shouldn't start from here" problem; you find you have been asking the wrong questions (or you have proved the null hypothesis). That is not necessarily a Bad Thing; you will not be randomly wrong, and the questions will have been formulated in relation to the previous research and scholarship, so the results can still be interesting and useful—just not quite in the way you first thought. But once again, do not try to fudge the issue: tackle it head on.

And of course this may be where the unexpected result may show up. That's great! That is the climax!

Conclusion

Unless the requirements call for *Recommendations* as they may in the case of professionally-based programmes, the conclusion should be relatively brief and to the point, usually based on a re-visitation of the research questions (not in enormous detail) and a summary statement of what we can now say about the **title**. The loop is closed.

But the story does not end there. Where to from here? What questions are posed which are worthy of further study? For most people, questions need answers; for academics, questions pose more questions. The traditional conclusion for a dissertation is as ever, "More research is needed."

References

...or separate References and Bibliography, if called for by the regulations.

I'm not going to go into formatting! It should be second nature by the time you get this far.

Appendices

There are policy matters to resolve about how much evidence to include in appendices, and guidance from your supervisor is important here (as of course it is throughout). In general, however, be guided by the common-sense questions;

- what have you already promised will be available in the appendices? And
- what material is a marker likely to want to see, which is not important enough to go in the main text?

In all probability this will mean that you do not have to include original questionnaires or complete transcripts of interviews or focus groups, but should include all original statistical calculations in tabular format.

Video or audio material may be included; make sure that it is presented appropriately so that specific sections can easily be accessed.

You may need to include details of particularly arcane technical procedures with which a generic reader might not be familiar.

You may also need to include some primary source material not readily available to a marker; if so, it will need to be redacted and anonymised. (If you need to anonymise, the most reliable procedure is to write the whole thing using real names and then Find and Replace throughout.)

And a quick housekeeping job before you put it away; read the appendices in conjunction with the main text and make sure that they really do what you claim for them, and their rationale is apparent.

References

No authors were harmed in the preparation of this paper; apart from these all references are fictional;

Oakeshott M (1989) *The Voice of Liberal Learning* New Haven, Conn; Yale University Press

Cohen L, Manion L and Morrison K (2007) *Research Methods in Education* (6th edn.) London; Routledge

And no, I can't source the claimed Mark Twain quotation—and boy, have I tried!

Many thanks to all the people who have suggested revisions, some of which have been incorporated, although not necessarily in an immediately recognisable form.

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