PART TWO

THE DISSERTATION

This is the nitty-gritty of the matter. If you are going to write a dissertation, you will have to write an introduction, a literature review, a method, a body and a conclusion. Your work will probably have appendices, and you will need to deal with all the formalities that dissertations are subject to, ranging from the writing of an abstract to making a bibliography. You will have to make sure that your institution's formatting guidelines are met, and you may have to make a presentation on your dissertation and face a question-and-answer session. All are covered below.

The purpose of each part of the dissertation and its constituent components, along with suggestions on how to structure and write each, are dealt with. This part of the book is divided into chapters and sections: The chapters are the main logical divisions, while sections contain supporting articles. These include pieces on academic reading, reviewing the works of other scholars, common research designs, interviewing and making questionnaires, analysis and evidence, engaging other scholars effectively in your work, and the basics of creating good charts and tables.

To get the most out of this part of the book, it is strongly recommended that you first read Part One, Foundations. When you understand the foundations on which a good dissertation project rests, not only will what follows below make more sense, but you will be able to do the work with confidence. You will have a context for what you are doing and know why it all is as it is. You also won't be nearly as likely to paint yourself into a corner at any given time.

Science starts only with problems.
– Karl Popper

CHAPTER 1
THE INTRODUCTION

Your introduction explains to your reader precisely what you are going to do and why it's worth doing. Here, in the beginning of the dissertation, is where you set up your reader's expectations and lay the groundwork for what is to follow. What you say here has consequences in just about everything you do later.

The elements that belong in an introduction are pretty standardised, which is useful because it provides you with the framework necessary to articulate your work. You'll be using that framework in both your proposal and the dissertation proper.

While the introduction is a work in progress from the very beginning, it should be *finalised* last. This is to make sure that everything that you have in your dissertation has been alluded to in your introduction if necessary, that your references are accurate, and that the introduction as a whole matches the logic and flow of the rest of the work. Careful editing of the introduction when you're done with the other chapters helps create a dissertation that comes across as an unbroken whole.

WHAT BELONGS IN AN INTRODUCTION

An introduction serves a particular purpose in an academic work. It makes it absolutely clear what your work investigates and the importance of that. You *don't* want any confusion about either. Absolute clarity is vital. The introduction must be completely unambiguous, so that the average reader in your field will understand you down to the finest detail. In order to achieve this, an introduction will typically contain all or most of the following:

- Background information/topic introduction
- A problem statement
- Research questions, if required
- Research objectives (or purpose) of the work
- A thesis statement (the position to be argued or the hypothesis to be investigated) plus explanation
- Delineation and limitations
- Definition of terms and concepts
- Underlying assumptions

- Significance of (or rationale for) the study
- Brief chapter overviews
- Any additional institutional requirements not covered here.

You will notice that all of these elements are different ways of either making it clear to the reader what you are going to do or why it's worth doing. The only exceptions are the background information (it provides a context for what you're going to do) and the chapter overviews (those give an indication of how you went about doing it).

It is crucial to say what you need to get across clearly, so that there is no possibility for misunderstanding. The introduction sets up the criteria by which the reader *will* judge your work, so losing them here is an absolute guarantee of trouble down the road.

The order in which the various elements are dealt with should be logical and easily make sense to your reader. The order above is not carved in stone, but it is fairly typical. Feel free to shuffle things around a bit, but be careful to guide your readers, giving them the information they need at any stage to be able to move forward comfortably. Let's take each of the elements one by one.

Background Information

Your readers (and examiners) may not be direct experts in whatever you are going to investigate, so you need to bring them up to speed. Once they have read your background information (or topic introduction), they should have a context for the problem that your work will focus on. From a good topic introduction, you should be able to progress neatly to the problem statement and the purpose of the work. When you go on to describe these, neither should come as a surprise to your readers.

When providing the necessary background information, try to open with something that will capture readers' attention and make them want to read on. Try to think of a hook to make your work relevant and interesting to your readers. The standard way of doing this is to open with an interesting quote, statistic, or anecdote related to your topic, but be creative. Once you have them hooked, relate the hook to your topic, and then move on to the meat of your discussion. The meat of the discussion is the background to the various facets of your work. It's the information that they need to know to make sense of your problem when you present it to them.

Your readers must be able to understand the problem that your dissertation is going to address in the context the background information you provide, but don't get carried away. It's easy to lose readers in a sea of background information, and it's also very possible to bore them to the point of tears with pages and pages of it. What you write here should be concise and to the point – a strong start draws the reader into your work.

You will almost certainly mention other scholars' work in your background information, but this section does not take the place of the literature review or

duplicate it. The literature review will be your next chapter, and will anchor your work solidly in previous, related work.

Problem Statement

Within the topic that you have introduced, there has to be a problem that you will be investigating. As Karl Popper points out, no new knowledge can be arrived at if there is no problem to be investigated. It's non-negotiable. No problem, no dissertation. Your thesis statement will later take a stand regarding your problem and tell your readers *exactly* what you will be investigating in order to come to a conclusion about the problem that you have identified.

In the problem statement you need to name and discuss the problem itself. What exactly is the problem? Why is it a problem? What facets are there to it? What has been done to address it before, if anything, and why is that not satisfactory? These are the types of issues that you will be addressing here.

> As an aid to thinking about your problem statement, it often helps to put the problem statement as a question, and then explore and explain it further. By the way: Putting the title of your dissertation as a question should come very close to naming the problem that your work will address.

Note that some institutions will accept a problem statement only as the basis for a dissertation. A clear problem statement is indispensable to a good dissertation, but even the best problem statements are unable to match the precision of a clearly formulated thesis. It is strongly recommended that once you have a clear problem, you develop a good thesis about it and express that as a thesis statement.

Research Questions

Research questions are sometimes used when not enough is known about the problem to allow a thesis to be formulated or convincingly argued. Then research questions are used to name as precisely as possible what the study will attempt to find out. However, from the perspective of this book, it's not a good idea – it is more difficult to work with research questions only, and you lose the precision and focus that a thesis statement provides. Besides, a bit of careful thought will generally allow you to develop a perfectly acceptable thesis statement, with all the attendant benefits.

If your institution requires you to include research questions, ask yourself what questions the testing or arguing of your thesis statement would answer, and write them down. Alternately, frame your problem statement as a question or set of questions, and see which the testing or arguing of your thesis statement would let you answer. Both will allow you to retain the advantages that a clear thesis offers, and your research questions will relate *precisely* to your investigation.

It is often possible to combine the problem statement and research question parts of your introduction. This makes sense: if you formulate your problem as questions to be answered, the answers must address your problem.

Research Objectives

You need to make it clear at the outset what you want to achieve with your work. You are undertaking this study for certain reasons (other than to meet the requirements for your degree, that is). You have an objective to achieve, and you need to name it. If there is more than one, as there usually will be, you need to name them all.

'Naming' the research objectives of your work simply means that you write every objective down one by one and then explain each so that your reader understands exactly what you mean. Name it, explain why it is worth achieving and then move on to the next one. You may or may not use the work of other scholars to help you justify any of them.

> When readers get to the conclusion, they will go back to this part to see whether your stated purpose or research objectives have been achieved, so make sure that what you write here relates directly to your study's outcomes. If you don't achieve all your research objectives, that's okay too, as long as you have good reasons that you couldn't have anticipated before you started.

You should be able to start the sentences that name an objective with 'To', followed by a verb. Your objectives will always be to do something. That may be to demonstrate, to evaluate, to determine, to establish, to argue, to prove or anything else.

Thesis Statement

This is critical! Re-read Thesis Statements until you're comfortable with the concept. Giving this and your method careful thought before you commit can easily make the difference between a high-quality dissertation that will be finished on time and a long, drawn-out process, culminating in a weak or – worse yet – never-completed dissertation.

This section lets your readers know *exactly* what it is that your work is going to investigate. The investigation of your thesis statement will address the problem that you have identified. Investigating your thesis statement should lead to achievement of your research objectives. The thesis statement lays down the criteria by which readers *will* judge your work and you *are* responsible for coming to a conclusion about what you posit here.

The best way to start writing this section is just to state your thesis in one sentence. There must be a clear link between your problem statement, research objectives and thesis statement. If you were to write something along the lines of "In

light of the above [your problem and research objectives], the thesis of this work is ..." it should make perfect sense to your reader.

After you have stated your thesis, you need to elaborate on it. Explain it, and explain why the investigation of it will lead to the achieving of your goals. Both will go a long way to convincing your reader that your thesis makes sense.

After you have proposed and explained your thesis, you need to delineate it.

Delineations and Limitations

Delineations cover your back. They explain to your reader exactly what you are responsible for by detailing what you are *not* responsible for and why. By stating very explicitly what falls inside your thesis statement and what outside of it, you avoid the possible criticism of "Why didn't you do x, y or z?", a perennial favourite among examiners. Re-read the piece on delineating in Thesis Statements and give it *careful* thought.

Limitations are the flip side of the same coin. Your delineations limit the scope of your work. Because you limit the scope of your work, the conclusions may not be applicable in certain circumstances or may not address certain relevant issues. Limitations will affect either how far you are able to generalise your conclusions (scope) or how confident you can be about your conclusions (reliability).

Limitations are inherent in academic work. You can't do it all and you can't do it perfectly. No one expects you to. You are expected to name the limitations of your work, and to do so explicitly. You don't want readers or examiners holding your work to standards that you never intended. Be sure to check this part of your dissertation after you have completed the work, but before you hand it in. Be straightforward when you name the limitations of your work: Sentences like "This work does not consider...." or "This study will not deal with ...." and the like leave little room for guesswork.

- Don't let readers guess your work's limitations. It is not a bad thing to have and to name limitations. All academic work has them, whether named or not. It is a bad thing not to name and explain those limitations.

Some limitations of your work will not be the result of deliberate delineation, but of how you were restricted in your ability to investigate your (delineated) thesis statement. Those are methodological issues. Some may result from the data or finances you are able to get hold of, others from the time you have available and various other practical constraints. When this is the case, give careful thought to whether you want to discuss them here or in your method chapter. As a general rule, you will probably want to mention the most important ones here, but reserve the in-depth discussions for the method chapter.

For example, if you designed a new psychological test to measure how honest people are and you only tested it among university students, an important limitation of your study is that you can only confidently state how well the test measures honesty among college students. You may suspect that the same results would apply to the elderly and blue collar workers, but you don't know. That's a limitation, and

you should mention it here. Similarly, if you don't have the time or finances to do a large-scale study into something or the other and settled for a more modest investigation, your conclusions might only be suggestive, not definitive. Again, that's a limitation you'd probably want to mention at the beginning of your work. In these cases, you would name the limitation here, explain the consequences and, if necessary, reserve the in-depth discussion for the method chapter.

If there are very specific or detailed methodological limitations, they should be dealt with in the appropriate places in the method chapter. Typically they will have to do with the data you were able to get hold of, the research instruments you used and so on.

Definition of Terms

This section makes it absolutely clear to your reader what you mean whenever there is any possibility of misunderstanding. You need to define your terminology and then stick to whatever definition you give throughout your dissertation. It doesn't matter how you get to the definition: It may be your own definition, or that of another scholar, or come directly from the dictionary (if it's not yours, you need to reference, of course). Precision is the point here.

It is also useful to provide your reader with a list of abbreviations used in your work. This should not take the place of writing out whatever you abbreviate in full at first use in every chapter. If you don't use many abbreviations, it's good to include them here. If you *must* use a lot, then rather include a list of abbreviations at the end of your dissertation. The idea is to give readers a central place where they can quickly look up the definition of any terms they may have forgotten the meaning of.

Assumptions

Assumptions are things that you take to be true without checking whether or not they are true. You also expect your reader to believe them without offering further evidence. You need to name all assumptions underlying your work; often they are not obvious but can affect your work enormously. When an otherwise sound dissertation fails (or a government or business initiative, for that matter), it is often because the writer did not sit back and think about what the underlying assumptions were. If you do not name your assumptions or you fail to take them into account when designing your work, you cannot accurately name the limitations of your work or even establish whether your work is going to have any value at all.

If you give careful thought to just about any thesis statement, you are likely to discover several underlying assumptions. For example: A dissertation offers as a thesis statement that management system ABC is a cost-effective tool to reduce absenteeism among blue-collar employees in the steel industry. The researcher decides to test this by comparing two similar companies, implementing the system in one but not the other, and measuring before and after results. The validity of results will depend on the following assumptions:

- That the company agreeing to allow the implementation will commit to it as they would have done without the researcher's input.

- That implementation in other companies in the steel industry, not part of the research project, will be done in the same manner.
- That there are no major differences between steel companies that would make the results found ungeneralisable.

Assumptions are things that you should minimise as much as possible in your work. If you can figure out a way of getting rid of an assumption by providing evidence, your dissertation will be the stronger for it. If you cannot get rid of an assumption, it must be named and explained.

- Do not be afraid to name the assumptions underlying your work. It is far better to name them than it is to have your examiners name them for you. If your work requires such big assumptions that even you no longer believe in it, you shouldn't be doing the study at all.

Assumptions are best just stated, along with a reason why you have chosen to leave them as assumptions (it's impossible to test for, it's too expensive, other work has investigated the matter and suggests that it is a safe assumption to make, etc.).

Significance (Rationale)

Here you need to explain why your work is worth doing. Your literature review will support what you write here, but this is the place to name the significance explicitly. Significance breaks down into two distinct parts: theoretical and practical significance. Often a dissertation will have both, but sometimes only one of the two will be present, which is perfectly acceptable. Your work must, however, have some significance, either practical or theoretical, otherwise it's not worth doing and not worth reading. For more on significance, see Thesis Statements.

When discussing the theoretical significance of your work, you will explain how your investigation either offers a new theoretical explanation for something (and why that's important), or how it validates, extends, refines or contradicts an existing theory. Theoretical significance always relies on what it explains.

The practical implications of your work are what your work does that matters in terms of 'the real world'. Practical significance always relies on the benefit that the work offers somebody or something.

- Be careful not to overstate the significance of your work. If you do, you will be setting the bar far too high for yourself, for no good reason. Your work will have to live up to what you say its significance is and, if it does not, you will disappoint your reader. It is far better to be a little modest and then to over-deliver, than it is to exaggerate the significance of your work, and then not deliver. Besides, in order to get your degree, your dissertation does not have to be hugely significant. Your examiners know that knowledge advances one step at a time.

The originality of your work should be clear after the stating of the significance of your work. Having said that, it's generally not a good idea to expect your reader to read between the lines, so it can be worth pinpointing where your work is original. In order to do this, ask yourself – what, exactly, distinguishes your work from similar works? It may be in your thesis statement or it may be in your method. Sometimes it is in the sources you use; for example, you may investigate someone else's idea (say, a new management strategy), in the same or nearly the same way as they did, but in a different industry (perhaps a petrochemical environment instead of finance). Stating whatever it is will support what you have written above concerning the significance of your work.

Chapter Overviews

Your chapter overviews give the reader an indication of how the dissertation will develop. Deal with the chapters in the order in which they will appear in your dissertation and give an overview of the main points they consider, except for the first, your introductory chapter. The assumption is that if your readers get to your chapter overviews, they will already have read the introduction.

Chapter overviews are not the place for proof or argument. Simply state what is covered in each chapter and in what order. Also don't feel that you have to give away the results at this stage. It's about allowing the reader to see, in words, how the dissertation is structured and the logic of that structure. By the time they get to the actual chapters, it should seem familiar, even necessary.

Be sure to tweak this part *last* to make sure that it all fits with what is actually in the chapters and sections.

CONCLUSION

The introduction will tell your reader from various angles what your work is going to do and why it is a good idea to do it. You will be held to the promises that you make here, to the definitions that you posit, and to the claims that you make for your work. You are responsible for doing what you state here. You are also *not* responsible for what you say you are not going to be doing.

This has at least three consequences: Firstly, you *must* be in complete agreement with your supervisor about this part of your work *before* you go out and do the actual study. That is why it forms a vital part of the dissertation proposal. You'll hear about it if it's not in order. Secondly, it means that you must be confident that your work will live up to what you say in your introduction. It means that it must all be doable by you, and that you will do it all as you say. No digressing or going off the rails! Thirdly, it means that there may be no misunderstandings. You want your reader to take from your introduction exactly what you meant to say and nothing else. Clarity, in thought and words, is what makes for a good introduction.

A man who reviews the old so as to find out the new is qualified to teach others.
– Confucius

CHAPTER 2
THE LITERATURE REVIEW

The literature review always comes after the introduction and before the method chapter. This makes sense: In the introduction, you've told your reader what you're going to do and you've intrigued them enough to read on. Now it's time to locate them solidly in the secondary literature. The 'secondary literature' is the body of works previously published by other scholars. You need to identify and review those relevant to your work.

A good literature review is comprehensive, critical and contextualised. That means that it will provide the reader with a theory base, a survey of published works that pertain to your investigation, and an analysis of that work. It is a critical, factual overview of what has gone before. The literature review is *not* the place to present research data of your own (unless it has been previously published, that is). It contains secondary sources only.

THE PURPOSE OF THE LITERATURE REVIEW

A literature review serves several purposes in your dissertation. A good literature review shows

- that you are aware of what is going on in the field, and thus your credentials
- that there is a theory base for the work you are proposing to do
- how your work fits in with what has already been done (it provides a detailed context for your work)
- that your work has significance
- that your work will lead to new knowledge.

Let's take them one by one.

Your Credentials

Readers will not take either you or your work terribly seriously unless you manage to convince them that you are well read in whatever it is that you are investigating. 'Well read', by the way, means that you have read broadly in your field *and* that you

understand the important works in depth. If your literature review is any good, there won't be much room left for doubt on either point. By your selection of works, organising them in a way that makes sense, discussing them objectively, and focussing on the important bits, you will have established your credentials.

Theory Base

This is a part of the literature review that poses a major problem for many students. In it, you need to show that you understand and can relate your work to the major theories that underpin what you are going to do.

> To understand what a theory base is, one needs to understand what the word 'theory' means in academic terms. In popular terms, the word implies fuzziness, guesswork and unreliability. In academic terms, a 'theory' is a logical explanation for why something is as it is or does as it does. Theories are not cast in stone – something may come along and disprove them tomorrow – but they are the best explanations we currently have. The more general a theory is – i.e. the more it explains without the facts contradicting it – the better a theory it is.
>
> In the exact sciences, theories are often testable and have predictive power. In the social sciences and humanities, this is not as often the case, but they are still logical interpretations and explanations that help us make sense of the world around us.

Look at it this way: If you were developing a new product, paint perhaps, you wouldn't just throw a lot of ingredients together. If you randomly combined sand, bolts, tonic water, flour and paper, you would make a mess, not paint. If, on the other hand, you understood the theory behind what makes paint, you would probably use the key ingredients that the theory predicts would make paint. You would know what they are and why they work. You might add some new ingredients or combine old ones in a new way, but your work would be based on theory. It would have a theory base. On the basis of theory you would be able to explain, before you even made your new paint, why it would be likely to work.

The same thing applies to all academic work. For example, it is one thing to devise a new system to teach children to read at an early age; it is another to prove that it works. Assuming that it does work, an explanation of why it works is the theory behind it. There will be certain principles that cause it to work. Naming those will be the basis of the theory. The theory might ultimately be wrong, right, or partially right, but until contradicted by facts it is a possible explanation.

If something has no theory base whatsoever – for example, using the density of traffic in the morning to predict the yield of next year's maize crop – it's unlikely to produce interesting or valid results. If no one has thought of any reasonable explanations for why something might work and you can't either, it probably won't work. A theory base is necessary for readers to take your work seriously.

It is possible, even likely, that there will be several conflicting theories about why something is the way it is. For example, there are several competing theories accounting for the different roles men and women have played in society, ranging from purely cultural theories to genetic ones, with many variations and spin-offs.

If you are required to include a theory base in your dissertation, you need to hunt down the major explanatory theories that pertain to what you are doing and comment on them as they relate to your work. *Do* consult with your supervisor when doing this part of the literature review – he or she will know the theories and the main players.

Context

What you need to do here is to locate your work in the work of others. It must be clear to the reader how what you are proposing to do fits in with what has gone before. By discussing the works related to what you're going to do and focussing on the ones most closely related, the context of your work will automatically be clear. This one is closely related to the next point, significance.

Significance

After reading your literature review, there should be little doubt in readers' minds that your work has some significance. You will have gone quite some way towards making the case in your introduction but, by grounding your proposed work in the previous literature, you will *show* the significance of your work.

If you structure your literature review according to the funnel method described below, the significance of your work will emerge automatically.

> If you want to emphasise the significance and originality of your work, when you review the work of other scholars, gently point out, where you can, omissions or inadequacies in their work as it relates to *what is original* in your work. Don't do this too often or too blatantly. If you do, it will become transparent and irritating. But you certainly can put in a few well-placed remarks to the effect that "while contributing in this and that regard, unfortunately So-and-so's work does not address [your originality]" or "So-and-so's major contribution was this, that and the other. However, he fails to consider his point in the South African environment" [while you do].

Originality

If you have reviewed the related work of other scholars and you have not found anything that precisely duplicates what you are going to do, then your work must be original – if your literature review has been at all comprehensive, that is. This, incidentally, is one of the reasons why it is so important that your literature review focuses on the most *closely related* and most *current* work. It's how you show that what you are planning to do hasn't already been overtaken by work already published.

There are exceptions to the originality requirement. For example, if you are precisely duplicating the work of someone else in order to check its validity, obviously there's not much room for originality. Your originality then lies in your thesis statement only: You will hypothesise that the work either can or cannot be replicated. Similarly, a meta-study also leaves little room for originality.

STRUCTURING THE LITERATURE REVIEW

Given the number of works that literature reviews can contain and the importance of balance, having a good structure for your literature review is vital. The funnel method will bring order to your literature review. It will also make it much easier to write because it provides you with a built-in structure.

> The 'funnel method' of structuring a literature review as shown in Figure 2-1 below is designed to make sure that all the objectives of the literature review are met automatically. Applied properly, your credentials and originality, as well as the theory base, context and significance of your work will all emerge without further effort on your part.

Categorising Works

The first rule of the funnel method is to group works by commonality. This applies regardless of topic or thesis statement. It does not matter if you include articles, books or any other type of secondary sources in a group: If they have something in common, they should be grouped together.

There is no formula for what commonalities you should choose, or into how many groups you separate the works. Whatever seems to you to link works together is what you should choose. They could be linked by the focus of works or by how they relate to major facets of your work. Whatever substantial similarities you find are potential groups. One of the groups should, however, should be 'Theory Base'.

> Be sure to use your index cards when grouping the works. If you have followed the advice in Index Cards, you should have at least one index card (and probably more) with comments written on it for every work that you are going to include in your literature review. These cards are invaluable when it comes to helping you group works and for structuring the actual discussion of each group.

To group the works to be reviewed, first read through all your index cards labelled Literature Review. As you read, keep an eye open for possible categories in which to group works. As you spot possible categories, think of a name for the category and write that on a separate index card (preferably a different colour). The closer the name you give to the category relates to whatever it is that links the works, the better.

By the time you've gone through all your literature review cards, you should have a fair number of possible categories. Go through them one more time, just to be sure that there are no duplications of categories (if so, combine them) and to be sure that you haven't missed a possible category. If new possible categories occur to you as you do this, give them a name and write that on a separate index card too. Then make a list of those possible categories.

Go over the list of possible categories, checking for logic and completeness, making the necessary changes as you do. Then go through all the literature review index cards again, this time sorting them into their categories. If there are some cards left over that don't seem to fit into any category, read them carefully. If you made a card for the work, and labelled it Literature Review, you must have thought that something about that work was worth including in your literature review. Name what that 'something' was and, if you have a category to which it relates, put it in that category. If you don't have a category where it fits, then make a new category.

- Sometimes you may find that a particular work belongs in more than one category. In that case, you need to find the dominant category and that's where you should place it. If you *really* can't choose one category over another, only then make a copy of the index card and put it in both category piles. Try to avoid this as much as possible, because it will lead to your discussing the same work (albeit different aspects of it) more than once in your literature review.

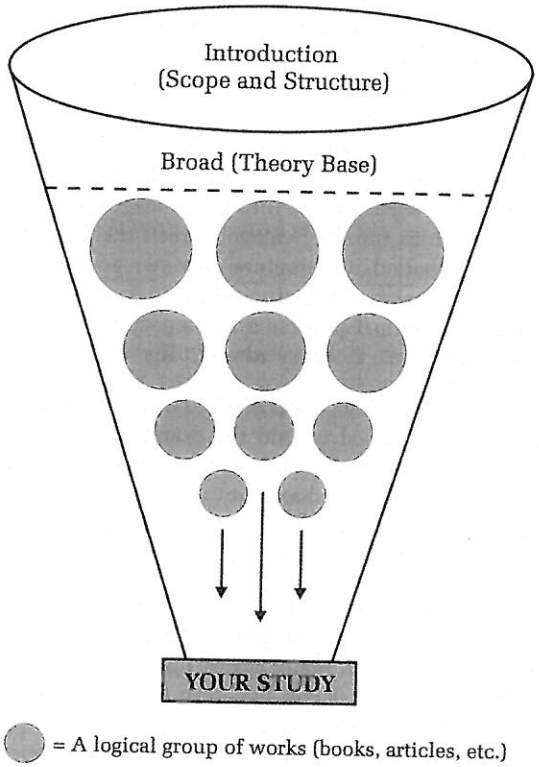
You should now have all the works that you want to include in your literature review in at least one category. You will have several distinct piles, all with several works in them. Some may contain many cards, others only a few. That's okay. The important thing at this stage is that you have brought some form of order to all the works you need to include in your review.

Once you've completed this part – and it may take several iterations till you are satisfied – you have the basis to structure your literature review. Your next step is to place the categories in a logical order. The order should be as shown in the drawing of the funnel below. The categories – your stacks of index cards – are the balls in the funnel.

Ordering Categories

The first category you need to deal with contains the works that provide a theory base for your work. They come first in the literature review because they give the reader the big picture. The internal order of the theory base category should reflect the major theories that pertain to your work. You should group the cards in this pile according to which theory the works are the closest to. Start the discussion of each theory with the classic works about that theory. Then comment on later works that either extended or argued against that theory, before moving on to the next theory.

Figure 2-1. The funnel method of structuring a literature review



The balls in the top of the funnel are categories of works that are relevant to your investigation, but do not specifically address what you are doing. They will have more to do with your topic than with your thesis statement. They will tend to contain a lot of works per category, which makes sense because there will be more works that are generally relevant than there will be works that are specifically related to what you are doing. You should discuss generally relevant works briefly, concentrating on the aspects most relevant to your work. The better or more helpful to you any of these works are, the more you should comment on them. But don't go into too much detail. Keep it short.

The next layer of works will be works that are closer to what you are doing, but still do not match directly. There will be fewer works per category, but you should deal with them in a bit more detail, as they relate more closely to (an aspect of) your work.

As you move down in your literature review funnel, the categories should get closer and closer to the research that you are going to undertake. Eventually you may find that a category contains only two or three, or possibly even one work. And that's okay, because it is directly relevant to what you are investigating. You may spend several paragraphs reviewing just one article when you get to the bottom of your literature review: It is important to what you are going to do, so it makes sense to discuss it in detail.

If you pay attention to your paragraph introductions and conclusions, you will guide the reader seamlessly from one group of works to the next. The whole will read as a unit, conceptualised as such from the outset.

The Internal Order of Categories

Internally, your categories should also have an order. The fact that the works are in the same category is your point of departure. They must have something that links them or else they wouldn't be in the same pile, so that's the first point of discussion: the thread that runs through that category. After that, you can discuss the works chronologically, or play them off against each other, commenting on their strengths and weaknesses as they pertain to each other, or you can subdivide them into groups. You have a lot of choices here, and it is a good idea to vary the internal structure of each of the categories a little. Doing so makes the review more pleasant to read. It also shows that you have actively thought about the works and that you understand them.

> However you choose to order the works within any category, it is a good idea to organise your index cards in that order before you start writing. It is also a good idea to write a linking sentence or two on each card. That way, when you get to the actual writing, it becomes a matter of flipping index cards. When you have worked your way from the top of the pile to the bottom, you're done with that category, and ready for the next.

When you are faced with actually writing about the works, however you organise the internal order of the categories, you will include quotes from some of the works. The same rule that applies to all direct quotations applies here too: Use them sparingly. Make sure direct quotations capture a key point that the author makes, otherwise rather paraphrase. Needless to say, all the works that you discuss must be fully referenced, regardless of whether you quote them directly or not.

The last thing you should do for your literature review is write its introduction. You should do it last because, in it, you comment on the scope of your literature review, and on how you structured the review. Both are a *lot* easier to do once you have actually written it, and you'll be sure that what you say in the introduction actually matches what comes below it. And that's important because, as with all introductions, this is where you make promises and create expectations.

When you introduce the scope of your review, you need to comment on what you have included and why, as well as on why you decided to draw the line there. In other words, you name the categories that you included, and then you point out the sense in limiting your review to those categories. When discussing how you structured the review, you should briefly discuss the order of the categories, and the sense of putting them in that order. That way your readers will already have an idea of what they're going into so, when they get to the actual review, the order and the logic of the whole will make sense to them.

Concluding the Literature Review

When you reach the bottom of the funnel all that remains is to conclude your literature review with a succinct summary of the state of the scholarship as it pertains to your thesis, and a comment about the usefulness of your work in that context. You explain that, in the light of the above, your study will do – whatever it is that is original in your work. That may be the problem that it tackles (your thesis statement), how you go about it (your method), or the sources that you use. If it is more than one of them, point that out.

You will have – automatically – done what every good literature review should do: You will have established your credentials by identifying, grouping and commenting on the works as you did. You will have demonstrated your understanding of what's going on in your field the same way. You will have provided a theory base for your study before discussing the works that pertain more closely to your topic and thesis statement. You will also have demonstrated the originality and significance of your work, and where it fits in with what has gone before. If your work were not original in some way, it would have shown up in your literature review, probably somewhere towards the bottom. If it were not significant to some degree, you would not have found any works that relate to what you're going to do. And by structuring the literature review in the way you did, saving the works that relate most closely till last, you have shown the reader exactly where your work fits in with what has been done before.

When you structure your literature review this way, you may notice that a rough chronological order emerges by itself. Academic work builds on what has gone before – what you're doing is the latest in a long trail of work by other scholars. In the funnel structure, that shows up automatically.

BALANCE

The works you include, how you group them, and how you relate them to each other will say a lot about your understanding of your field and topic. It is up to you to balance works, determined always by the need to contextualise your work and to demonstrate your ability to evaluate the works you include. 'To balance' means to select the appropriate quantity and quality of works on every relevant facet of your topic, and that the amount of space you devote to discussing each facet and work is appropriate.

- Stay away from too many general works, especially textbooks. General works usually won't contain the level of detail that you need. Don't underestimate the amount of specifically relevant works likely to be available. Be especially careful of tertiary sources: Rather identify the relevant bits and go to the secondary sources on which they are based.

You do not need to review all works in equal detail. Some may warrant only a single sentence; others, several paragraphs. When works are only loosely related to your study, but are relevant to your topic, you may deal with a whole class of works in a short paragraph. The more important a work is to your work, the more space you should devote to it. As a rough rule of thumb, length = importance.

You should also spend less time on works that comment on essentially the same subject. An overview of the current state of the subject and a few lines per work detailing what is original in each is sufficient to let the reader know both the ideas in that particular area and your mastery of them.

Works that relate closely to your investigation will require a more in-depth discussion. If only a part of a work is relevant to your dissertation, then that is what your review should focus on. If the entire work is relevant, then of course you need to discuss it in its entirety.

SELECTING WORKS TO INCLUDE

A frequently asked question is how many works should be included in a literature review. There is no absolute answer to that one. A doctoral dissertation nearly always has more works in the literature review than a master's in the same field does, but PhD projects nearly always tackle broader questions. Use your institutional guidelines as just that – a guideline. Your literature review must be comprehensive, but what has been previously published is not up to you. Your literature review must reflect the reality of what is available and relevant. In other words, it must provide an accurate reflection of the current state of the scholarship in the area that you are writing about.

Don't pad your literature review if there simply is not a lot available, but search carefully. Most often you will find that if you do your secondary research properly you will soon have too much rather than too little. And then you will have the luxury of choosing the best and most relevant to review.

> You do *not* need to get hold of and review every book or article that could possibly pertain to what you are investigating, which is an impossibility anyway. You *do* need to identify the seminal theoretical works and those works that are directly related to your work. Quality is *far* more important than quantity.

If you're wondering whether or not to include any given work, look at your thesis statement again. Ask yourself how the work relates to it. What's the contribution? How important is that contribution? Based on the answer, make a decision. If you

include a work, it should contribute something important to either the theory base underpinning your work or to (a facet of) your thesis.

Adding Works

If you organise your literature review according to the structure explained above, you will always be able to add new works as and when you find them, and you will be able to slot them in without upsetting the organisation of your literature review. Either you will be able to put them in one of the categories or, in the unlikely event that they do not fit any category, you will know where to slot in a new category.

- If you come across a work that you feel needs to be included, by all means do so, but don't add so many that you drown. You are done when you have reviewed the major theoretical works and both the well- and lesser-known works that pertain *directly* to what you are doing. There will always be more peripherally relevant works. Unless you draw the line somewhere, your literature review is going to become a never-ending story. Only include new works after the proposal stage if they really are important and you missed them in the secondary research that you did for the proposal.

If there really is too much work that is directly relevant, you probably have a problem with your thesis statement. Either it is too broad or general, or you don't have an original angle. That means it needs work – but that you should have found out while doing your preliminary research. If you didn't, well, it needs fixing now. It is much better to deal with it now, while working on your literature review, than when doing your primary research, or worse yet, when writing the dissertation.

CONCLUSION

A literature review is an important part of a dissertation. It takes a lot of work to write a good one. It is often the most time-consuming piece of a dissertation to research and write. But it is worth doing well. You'll learn a lot and you'll get many ideas that will be useful elsewhere in your dissertation.

There is a strong correlation between the quality of a literature review and the quality of the dissertation that it finds itself in. Good examiners, by the way, know that. It makes sense: If you have done good secondary research, you will have all the building blocks at your disposal that other scholars can provide. If you are able to provide a sensible, balanced discussion of that literature, then you must, per definition, understand that work. That means you understand your field. It is highly unlikely, if you both understand your field and have the relevant and latest thinking at your disposal, that your work is going to be of substandard quality. Hence the correlation.

Academic Reading

Secondary literature, regardless of topic, tends to be extensive and time is not on your side when it comes to reading it. Unless you plan and focus, secondary research can easily expand to fill all the time you allocated to your dissertation. You have to be able to get through large amounts of potentially useful material quickly in order to get what you need for your project.

A fair amount of theory has been written about reading effectively for research purposes, but what the best of it boils down to is this:

- Academic reading is done for a purpose. You need to name that purpose before you start.
- Skim each work to find out whether it is worth reading, or contains bits that are worth reading, according to your purpose. Once you find what you need,
  - ☐ make sure you understand the information, and then
  - ☐ extract what you need (make notes).

HAVING A PURPOSE

Academic reading is not done to pleasantly pass the hours on a Sunday afternoon. It's goal-orientated, done to satisfy a predefined need. You want something from the secondary literature and you should name what that is *before* you start reading.

You will probably want several things at various stages in your secondary research. Initially you may want to get a general impression of what is currently being published in a certain field or specialisation. Later you may want theoretical perspectives on a certain subject, a guide to a certain research design, or studies that are closely related to what you're considering doing.

Whatever the case, always spend some time figuring out why you need to go to the library before you go. If you can name what you need, you can formulate a plan of action to get it. What you want must, of course, always be defined in terms of your dissertation project's needs.

> If whatever you're researching is new to you, ask your librarian or supervisor for a text that synthesises the literature in that area. Articles and books that explore the current state of a field or topic, review articles, and introductions to conference proceedings can be very helpful. A good synthesis will give an overview of the currents and debates in a field or topic area and discuss the major works and players. Using that as a guideline is quick, creates understanding and leads you to where *you* need to go. To put it differently, first read *about* the works that you are considering reading.

Once the preliminary reading is done, look for details on the items that you have defined as relevant and for new perspectives on what you already know. That's the

most efficient way to get an in-depth understanding of your topic. Start with the latest works – they'll help you get an overview of what has come before. They'll also often contain more relevant information than older works, their bibliographies are more useful, and you will be relying on them more in your dissertation.

Often you won't be able to get hold of everything that you want. Libraries have limited budgets and they invariably fall short of pleasing everyone. Weigh the effort involved in getting something against its importance to your project. Here, as elsewhere, it's a balancing act. If you *must* have it, get it; if it would be nice, think how nice and whether there are alternatives.

When considering alternatives, think out of the box. If a work really is important to you, you can probably devise a number of strategies to get it. The interlibrary loan system works well. Your supervisor has a personal library, and so does virtually every other academic/expert interested in your topic. Amazon.com has or can get hold of virtually any book under the sun. All it takes is a credit card and the finances to cover it. Nearly all major journals have an online presence. If they don't have the article you're looking for online, they probably do have the editor's email address. The author of the article also has an email address. Try both. But think also how you could get the core of what you need in a different form. Frequently, later works by authors rely to some degree on what they wrote before, and what is in a book has often been tested in stages in articles. Ask around and see what you can find.

SKIMMING

Efficiency is important. There are a lot of works out there. Some will be relevant in full, but most will have only bits and pieces relevant to your purpose. Resist the temptation to read everything in equal detail. Only if an entire work is important should you give all of it your full attention. Mine a work for the information you need and then move to the next richest vein. If you feel tempted to become perfectionistic (and many postgraduate students do), this can be difficult but you just don't have the time to read it all in detail. Vet:

- **books** by the table of contents, bibliography, introduction and the first and last few paragraphs in chapters,
- **articles and dissertations** by the abstract, the introduction, conclusion and bibliography,
- **online sources** by the organisation or individual responsible for publishing the material, by the abstract if present and, for the rest, by skimming, concentrating on keywords and concepts.

Skimming according to keywords is a powerful technique. Make a list of keywords relating to what you're interested in, and first look them up in the index of the work you're considering reading. Then go to those pages and see whether there is anything worth your time. If the work doesn't have an index, keep your keywords in mind while you page through it. You'll miss a lot but, if there is something that is relevant, you should be able to pick it up. When you find something interesting, slow down

and read in more detail. If it doesn't make sense because you've missed the context, page back and read that.

An alternate way of skimming is to concentrate on the first sentence in paragraphs. Good writing has topic sentences that tell the reader what the paragraph is going to be about, and they belong at the beginning of every paragraph.

Another effective technique is to first look for the main point or argument of a work and only then concentrate on the details. Use the table of contents, the introduction, and the last few paragraphs per chapter for this one. Once you can name the main argument of a work – the thesis underlying it – you will be in a much better position to gauge its relevance, as well as to understand and evaluate it.

Understanding What You Read

When you read, you will be trying to increase your understanding of your subject through the use of the work of others. Unfortunately though, not everything that has been written is of equal quality. When it comes to detailed reading, you need to become a critical consumer.

You can only be a critical consumer if you truly understand the point that the authors are trying to make and then look at the quality of their evidence and arguments. You don't want to risk misrepresenting the works or authors in your dissertation. You must evaluate the quality of what you read, as well as its applicability to your work.

When you read a work (or points in a work) that you need to understand in detail, try to be as objective as possible: Approach the piece with a neutral mind, read, and try hard to understand it from the author's perspective. Only once you have done that, can you formulate a judgement on what you have read. It is especially important to do this whenever you have preconceived ideas (positive or negative) about a work or an author. To put it differently, be aware of your biases!

If something is very important to your work, discuss it with others. You'll learn a lot if you can find some other people, maybe your supervisor or colleagues, to discuss key works with. Using an online study group can be useful. Academics (and dissertation writers) specialise, so you may find it difficult to find people who share your exact interests in your immediate surroundings – but they're out there.

Recording What You Find

The book or article you found today will be lost tomorrow unless you record (at least) its author and title. What you learned and understood today will be forgotten tomorrow unless you write it down. When you come across information that is (potentially) useful to your dissertation, you *must* make a note of it. If you don't, expect to spend a lot of time bouncing up and down to the library. Expect also to end up with a much weaker dissertation. The system described in Index Cards works very well. Learn it, apply it consistently, and your life will get much easier.

Taking notes is one thing. Taking them efficiently is another. The fewer times you need to return to any given work, the more efficiently you have gone about your research. Make copies, and apply the 'use to lose' principle from Research Basics.

WHAT YOU SHOULD BE READING

What you should be reading obviously depends on your topic and thesis statement, but the bulk of it should be scholarly books, articles, dissertations and conference proceedings. Popular sources (magazines, newspapers and the like) are written for mass-consumption. The mass market wants and usually gets a considerably lower standard of thought, argument and evidence than the academic market does.

Use popular sources *only* when you are able to establish the reliability of the piece you're interested in. Even then you should be very careful, as they often simplify beyond the level of detail you need in your dissertation. If they reference secondary academic sources, rather get those. If they don't, chances are you won't be able to tell the quality of what you're reading, with the possible exception of original research. Even then, unless the methods are described, you still won't be able to judge the quality of the work. Chances are, the methods won't be described in any detail. The masses do not like methodology.

As far as Internet sources are concerned: The Internet in general and the World Wide Web in particular contain vast quantities of information easily accessible to anyone with a computer and a modem. For academic researchers, the web is potentially both a goldmine and a minefield. It comes down to two problems.

First is locating the useful stuff. Unless you have the web address, it can be a daunting, time-consuming task. It is easy to spend hours upon hours browsing and to end up with very little that is usable. There are various techniques and advanced searching aids designed to help, but even at the best of times search engines cover only a fraction of the web. You'll probably still get far too much information, too loosely focused.

The second problem is establishing the quality of what you find. The information you find is only as strong as the author or the institution behind it. Anybody with an opinion or a product to sell can, and does, put up web pages. It can be almost impossible to establish the credentials of information obtained from the web. The basic academic rule is: *If you are not certain of the quality, don't use it.* If you use the web, use information only from respected organisations: Statistics SA, the UN, known research institutes, peer-reviewed academic journals, and the like. Ignore this advice at your peril. Many academics are automatically suspicious of internet sources, and often with good reason. That probably includes your examiners.

Reviewing Books and Articles

A literature review should be a *critical* evaluation of the previous writing that is relevant to what you are doing. 'Critical' in a literature review means 'characterised by careful evaluation and judgment' not 'marked by a tendency to call attention to errors and flaws'. If you're not sure of the difference between the two, study a number of book reviews. Get about ten or twenty, as not all book reviews are equally good. Good book reviews sum up the important parts of a work, and then evaluate the work, its methods, research and conclusions against what is known. You do the same from the perspective of your dissertation, focusing on anything that is relevant to your work.

- If a particular work is badly flawed in some way, by all means point it out, but reserve some room for appreciative comments too. If you focus exclusively on the negative and insist on finding fault in everything that you read without acknowledging the positive, you imply that your work is going to be far superior to all the work you've trashed. And then you're going to have to live up to that. You want to achieve, as far as possible, a dispassionate, balanced overview of previous work. Being consistently negative won't achieve that – unless the entire field is rubbish of course, but that's not terribly likely.

The only way you are going to have something sensible to say about the works is to have an in-depth understanding of them, and an understanding of how they pertain to your work. A good way to go about getting that is to pose yourself explicit questions about the works and then to answer them. The questions should fall into two categories – general questions about the work, and questions that are specific to the field/your dissertation.

SOME GENERIC QUESTIONS

These are questions that apply to all academic works, be they books, articles or dissertations.

- Who is the author? Does that tell you anything about the work?

  Look particularly at the author's background. This can reveal a purpose and a perspective that influenced the work. It can also establish the person's credentials quite quickly. Easy places to look include the back cover, the preface/foreword and a list of other works the person has published. The acknowledgements can also be useful. Sometimes even a very quick search on the Internet will tell you what you want to know. Often amazon.com and other major online booksellers have a short biographical piece on authors.
- Who is the publisher? Some presses are more prestigious than others, and academic presses attract more scholarly works than commercial presses do. In the case of journals – is it peer reviewed? How well respected is it in the field?

- When was the work published? What new knowledge has been added to the field since the work's publication? Which points still stand?
- If there is a thesis or a theme running through the work, what is it? Is it important? Does it have implications for previous work? If it doesn't have a main argument, what is new in the work? What is its contribution?
- Does the author adequately cover his or her topic? In other words, was what was promised in the beginning done? Are there any major gaps? If so, where? Why do you think the author left those gaps?

  Promises about a work are not always explicitly stated, but can often be found in the title, preface and/or introduction. With those in mind, establish where (or on what) the author spends the most time and whether that is appropriate. Always weigh the answers to this question against what the author intended to do, *not* against what you would have liked them to do.

  A closely related question is whether or not the work is appropriately focused. Does it go off on tangents? Is everything clearly relevant? Is everything in balance with the rest? Remember, length = importance.
- What basic assumptions or 'givens' can you spot? What does that tell you?

  Look for what is *not* said as much as for what is said. As for several of the other questions, a close reading of the table of contents (or examination of an article's structure) can be of great help in answering this question.
- Are the method used and evidence provided appropriate? Does the author make a strong case? Are there any places where the author offers unsubstantiated conclusions, draws more from the evidence than it will bear, or is illogical? Does the author make unwarranted inferences or inappropriate comparisons? If so, what does that tell you?
- Does the piece work as a whole or are some parts stronger than others? Why? Conversely, are some parts weak? Which parts and why?
- Is the author being controversial, or engaging other writers in the field on any particular points? If so, are you convinced? If not, why not?
- Ask some aesthetic questions too – is the work logically structured? Does it provide the necessary background information? Does it read well or is it confusing? Is the writing good, average or awful?

The list above is by no means exhaustive. Practice inevitably leads to a set of personal favourite questions. Make and keep a list for yourself, including field- and dissertation-specific questions.

By asking the right questions, you will be able to answer the following – in terms of your field of study and especially, in terms of your dissertation, what has the work under consideration contributed? That's a critical analysis.

If the map shows a different structure from the territory represented... then the map is worse than useless, as it misinforms and leads astray.
– Alfred Korzybski

CHAPTER 3
THE METHOD

For many writers of dissertations, the method poses a major problem. But when you sit back and think about it logically, this is a very strange state of affairs: If you are going to pose yourself a problem and then come to a conclusion about it, you have to do *something* to come to that conclusion. That 'something' is your method. Needless to say, your dissertation – or any other academic work – will be much stronger if you give careful thought to your method before you start your research and your writing.

THE ROLE OF THE METHOD

Your method, along with your thesis statement, is vital to the success of your dissertation. It must be, because *a result can only be accepted, rejected, checked, replicated or even understood in the context of how you got there.* Readers will look to your method chapter to tell them all they need to know about how you got to your conclusions. It is the map they will be relying on when they get to the body of your dissertation. If the information regarding your method is incomplete, they will have nothing on which to base an opinion of your work. It might be good or bad, reliable or unreliable, sense or nonsense – they will have no way of telling.

When you consider a potential thesis statement, you will probably find that there are many possible ways of investigating it to come to a conclusion. You are not required to consider your thesis statement in every possible way. You *are* required to find a good way, and to convince the reader that it *is* a good way. You're the salesperson here; if there is any doubt in your readers' minds about the reliability of either your method or your data, your conclusions are going to be called into question. If your method is good, your battle is more than half won.

You should choose or design a method that *you* consider most appropriate to your work. It's part of your originality. What your choices are will depend on your thesis statement and the data you can get hold of. You can choose, design and combine, as long as it will lead to reliable results.

There is a lot of confusion between 'research design' and 'method', and the two are often used interchangeably. The word 'method' is commonly used to refer to:

1. *your* way of considering your thesis statement, or
2. the general technique/s that you employ to examine your thesis statement, for example, interviews, a case-study, content analysis or an experiment, etc.

The phrase 'research design' can also have two meanings:

1. the way you choose to design *your* study, i.e. how you went about coming to a conclusion about your thesis, or
2. the general technique/s themselves, again for example, interviews, a case study, content analysis or an experiment, etc. The research technique is not focused on any specific problem; it can be applied to many different problems.

By and large, in the academic world, you need to figure out which meaning is intended by the context. In this book, the word 'method' is used to mean your specific way of testing/probing your thesis statement (in other words, your methodology – how *you* apply one or more research designs to your problem). The phrase 'research design' is used in both senses given above. When it is used in the first sense, it always reads 'your research design'. In other words, *your* research design section will tell readers how you designed your study. Your method (sense 1 above) is the nitty-gritty of how you apply one or more research designs (sense 2 above) to your specific purposes.

In your proposal, you should explain in detail what your research design is and how you will apply it in your dissertation. You need to discuss the data you will use, how you propose to collect it, why it's appropriate and how you will analyse it. This must be in the proposal and pre-approved, otherwise your supervisor will have no way of deciding whether your work is likely to end up being of passable quality or not. Your proposal will also show that you have considered possible ethical problems carefully and that you have the necessary approvals to go ahead.

In your dissertation you will do the same, but you will tweak it so that it reflects what you actually did (i.e. you change it to the past tense) and you will change the anticipated strengths and weaknesses of the data to the actual strengths and weaknesses. Unlike when you wrote the proposal, you now have the data, so you can discuss it. Once you have settled on a method and had it formally approved in your proposal, you *must* stick to it.

Consistency between the method and the body – what you say you will do and the doing of it – is vital. A dissertation is not the place for suspense or creative presentation: Your readers may be surprised by your findings and conclusions, but never by how you got to them. If you change your method along the way, you're very likely to end up confused and stuck in the writing of the piece. Your readers, for their part, won't have a clue about what's going on in your dissertation.

STRENGTHS AND WEAKNESSES

All research designs have their strengths and weaknesses. Know the strengths and weaknesses of all the research designs that you are considering using in your dissertation in detail. Do some homework to find out.

All research designs contain assumptions at their core, and all have certain requirements in order to work well. Because of this, all research designs have their limitations and are better suited to some types of problems than others. For example, one of the requirements of an experimental design is that, in order to get to a reliable result, you must strictly isolate the phenomenon that you are studying.

If you are doing a dissertation to establish whether or not drinking soft drinks shortens the lifespan of those who drink them, you will find it well-nigh impossible to use an experimental research design: There are more variables – such as eating and drinking habits, exercise, incidence of smoking, and so on – than you could possibly control. Besides, time and ethical constraints would also forbid the use of an experimental research design. You could probably still get to an answer. There are plenty of alternate routes to try, but however you ultimately go about it, the experimental route probably won't feature.

However, if your thesis statement is that playing baroque music to cows during milking raises the yield of milk (apparently it does) then an experiment with a control group may well be the way to go. Randomly select a certain number of cows from a particular herd, make sure that they all get the same food and drink and share the same environment and so on, but play baroque music during milking to one group and not the other. If it works, you'll know. To be even more certain of your results, switch the groups.

Researchers, like research designs, also have different strengths and weaknesses and different areas to which they are best suited. It's a good idea to choose a problem that can be tested with a research design that plays to your strengths, and to avoid those that you are not comfortable with, for whatever reasons. Do so, and life gets easier, and results become more reliable.

If qualitative analysis is not your strength, make your method largely quantitative. If you will have a difficult time finding relevant people to interview for your topic, choose a method that does not rely on interviews. If the costs associated with setting up an experiment are too high or time consuming, don't go the experimental route. It's also a good idea not to design something radically different, but rather to stick with research designs that are often used in your field for your type of problem. If you do, there will be many examples for you to learn from and your supervisor will be familiar with them.

To sum it up: Careful thought with regard to your method can easily end up saving you an enormous amount of time, effort and frustration. Think about your method early in your dissertation process, and think about it carefully. If you can't

come up with an appropriate method that you are comfortable with, revise or change your proposed thesis statement.

DESIGNING A METHOD

The first thing to do when you need to figure out how you are going to come to a reliable conclusion about your thesis statement is to brainstorm. Make a list of all the possible ways that you can think of to test, argue or probe your thesis. How could you establish the truth or validity of your thesis statement? It helps to get ideas from others. The more ideas you have, the more choices you will have, and the higher the chance that you will arrive at a good method that you can implement without too much difficulty.

Once you have your list of possible ways, you should give some thought to the ten points listed below. They will determine whether or not you will be able to complete your work, how long it will take, and how good the results will be. You don't want to run into problems with any of them.

- **How completely does your method cover your thesis statement (completeness)?**
  You posited a thesis statement and delineated it, and now you need to get to a conclusion about it – all of it. If you don't, expect some serious criticism from your examiners. Know exactly what your thesis statement says and implies, and be sure that your method covers it all. This does not mean that you need to get primary data for every aspect of your thesis statement: If part of the thesis statement is covered adequately in the secondary literature, that's okay. But you must know where you need primary data, and that the entirety of your thesis statement will be adequately considered by the time you get to your conclusions.
- **How well does your method test your thesis statement (applicability and reliability)?**
  If your method of testing your thesis statement is not appropriate, your conclusions will be easy to shoot down. They shouldn't be. The test here is: Would you believe that the method under consideration would lead to strong conclusions if someone else presented the method and conclusions to you? If you can find holes in it easily, so will your readers.
- **How familiar are you with the research design?**
  Life gets easier and results get more reliable if you are comfortable using the research design/s under consideration. See Overview of Common Research Designs for more on this.
- **How reliable will your data be?**
  If your readers aren't convinced of the quality of your data, they won't be convinced of whatever you use it for. This is important: The first place to look for weaknesses in a work is in the method chapter, and the data is a big part of it.
- **How difficult will it be for you to analyse that data?**
  Data in and of itself means nothing; it's neutral. Only when you analyse it do you give meaning to it. Your method chapter will explain to readers how you analyse it, but you need to be sure that how you analyse it is appropriate and that you have the skills to do it properly. This applies regardless of whether the data is qualitative or quantitative.
- **How difficult will it be for you to obtain your data if you go about it using the method you're considering?**
  Collecting reliable primary data is one of the most challenging aspects of writing a dissertation. If you can do so easily, good. If not, analysing data that others have collected (for whatever reasons) can lead to good dissertations *if* the data is reliable and appropriate to the thesis statement. If you are going to collect your own data, try to focus your data collection to where you know you can get it quickly, for example by analysing data you have at work or interviewing people you have easy access to.
- **How much effort will it take to comply with ethical guidelines?**
  If you can't comply with your institution's ethical guidelines, you can't do the dissertation. If you can comply but it would require an unreasonable amount of effort, think twice before you finalise your method.
- **Can you afford to do it this way (expense)?**
  Virtually anything can be done, but not by everybody. If you need a particle accelerator, a huge double-blind study or anything else financially demanding, you need to be *sure* that you have the finances in place. You don't want to have to compromise later.
- **Will the method allow you to keep to your time frame?**
  Some things just take longer to do than others. This one is closely related to how much time it will take you to get your primary data, but keep an eye open for other possible time-consuming elements, such as getting necessary permissions, developing research instruments (tools to get the data you need) and developing analysis tools.
- **How easily will you be able to structure the body of your dissertation?**
  This one is not mission critical but, seeing that you have to do in the body of the dissertation what you said you would do in your method chapter, it helps if you have a logical way of writing up the body before you commit to your method.

When it comes to developing methods, if you can figure out a simple, *reliable* way of coming to your conclusions, that's easier and more elegant than a complex way. It's often also quicker and there's less room for error. Both will help you reach your primary goal of completing a *good* dissertation in a reasonable amount of time. Complexity, on the other hand, complicates matters.

THE METHOD CHAPTER

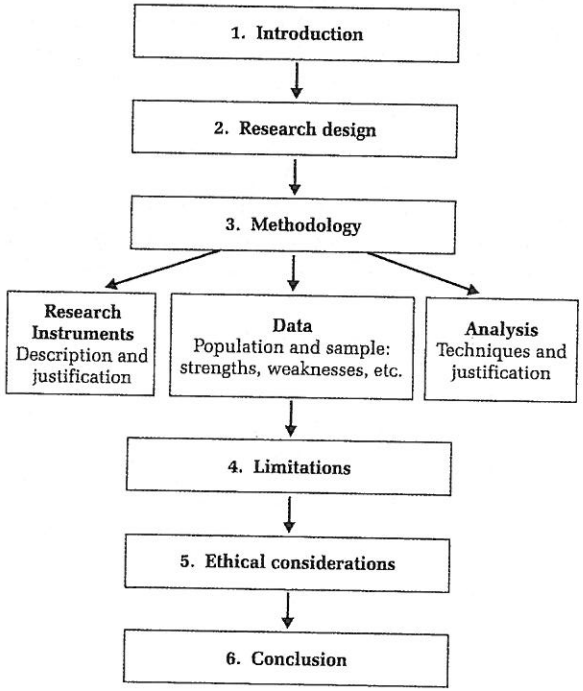
Above, the importance of a good method is discussed. This section explains how to translate your choice of method into a strong chapter in your dissertation.

Typical Structure

The method chapter is one of the most stylised chapters in dissertations. This is because all dissertation writers need data, most collect data, and all analyse data in some way or the other. The method chapter exists to make it clear to your reader how *you* go about it. Once you know how you're going to get to a conclusion about your thesis statement, this part of your dissertation should become almost a fill-in-the-blanks process, and will probably look similar to the diagram below.

Depending on your thesis statement and how you have chosen to test it, you may need to include all the elements depicted or only some. If your method is unusual, you may need to add some components. Your guiding principle is: If it would help readers to either understand how you get to your conclusions or to reproduce your work, or if it would help convince them of the reliability of your method, put it in. The purpose of each element will be discussed in detail below; use that description and common sense to adapt the diagram to your needs.

Figure 2-2. Generic method chapter layout



1. Introduction

All method chapters, regardless of the type of study being done, need a decent introduction. A decent introduction is one that

- briefly reiterates the purpose of the study
- details the results that the method was designed to provide
- provides an overview of what will be discussed below it.

Your introduction to the method chapter points out what you hope to achieve by your method. Make it clear, but don't make a meal of it; it's only an opener. Be sure that what you say here matches what you said in the introduction to your dissertation. If you describe something in your method chapter that cannot be easily related to what you're doing or why you're doing it, your readers will be hopelessly confused. They will have no idea why you're going to be doing whatever it is that you discuss. Then they will conclude that you have written either a weak method chapter or worse yet, a weak dissertation.

Make sure the link is there, but don't repeat yourself verbatim from the first chapter of your dissertation. That's boring. Focus on the outcome, what your method is designed to do for you, and why that will help you come to a solid conclusion about your thesis statement.

Also keep the description of the structure of the method chapter brief. If the logic and the contents of the chapter are truly obvious from the Table of Contents that you will provide at the beginning of your dissertation, it is sometimes even permissible to skip it entirely. However, if there is anything vaguely non-standard about your method chapter, give the reader an overview here and briefly indicate what the various pieces in your method chapter will contain. Clarity for your reader is what it is all about.

2. Your Research Design

The research design section is where you name and discuss the overall approach you will use to test your thesis statement. The way you design your research will usually be a variation of one or more research designs discussed in Overview of Common Research Designs. Exactly how you adapt and apply the standard research designs to your work should be discussed in detail in the methodology section of your method chapter. In the research design section, you discuss the technique/s you will use, and the strengths and weaknesses of those techniques as they apply to your problem.

- You do *not* explain the details of how you are going to implement the techniques/research designs here. That comes in the methodology section. It's a bad idea to confuse the two because this section, the research design, will become too long and too dense. Your readers will have a hard time separating what you are saying about how you designed your study, what standard research designs you used, and why you chose them, from how you implement it. Running the two together also makes both pieces difficult to structure logically.

The best way to write the research design section is to first name the techniques (research designs) that you use – for example, surveys, process simulation, a case study, a field experiment, content analysis, etc. – and then discuss what you want to use them for. It often works well to do this in a couple of paragraphs as the introduction to your research design section, so that readers will have a context for what they will be reading later.

Once you have named the technique/research design and what you want to use it for, you should discuss its strengths and weaknesses as it relates to your study. You should use the work of other scholars to back up what you say here. You can use works that focus on the research design itself and works that have actually used the research design to make your points. If, for example, you are going to be using questionnaires, you need to discuss the uses, strengths and limitations of questionnaires in the type of research you're using it for. An overview of the theory behind the research design, applications, variants and controversies surrounding the survey method *as they apply to your work* are possible subjects.

- It is nearly always possible to write an entire book in this section, but keep it short. Focus on the most important points and avoid getting involved in theoretical debates. You're doing this to convince your reader that you're aware of the research design's uses, strengths and weaknesses as they apply to your work and that it is appropriate to your purposes.

To stay with the example of questionnaires: You might discuss the pros and cons of open versus closed questions, techniques to obtain sensitive information, and of emailing them rather than relying on traditional mail, if those issues apply to your research. Again if they apply, you might want to discuss issues around the comprehension level of respondents, the dangers of comparing answers from a diverse group of respondents, and so on. These are the general methodological issues associated with any research design, focused on what's important to your work.

If you are going to use more than one research design, discuss each one in terms of how it relates to your dissertation in this section. It's nearly always possible to do this research design by research design. If you run them together, it can easily become difficult for your reader to keep in mind what research design is being used for which purpose, and they will lose the big picture of how you intend to tackle your problem as a whole.

It is easier if you use only one research design, but if using more than one would improve results, or is necessary to get to a reliable conclusion about the entirety of your thesis statement, then use more than one.

While it is important not to compromise the quality of the conclusions you will be able to draw on the basis of your method, it is also important not to go overboard by using too many research designs. Going back to our example of using questionnaires above; let's assume that you're going to use them to find out about a brand's image. You could probably also do some in-person interviews and run some focus groups to check your findings; depending on the information you were looking for, you could perhaps also have chosen to study sales data, or to analyse customer

complaints, among other things. But you can't possibly do it *all*; you need to come to reliable results, not perfect ones. If you're going to chase perfection, you'll never finish your dissertation.

By the time your readers have completed the research design section of your dissertation, they should be convinced that you understand the research design/s that you applied, and that they are appropriate to the problems that you address. If there is any doubt about the appropriateness, you may want to consider including a subsection called 'Overview of Possible Methods'.

Such a subsection can be included either in the research design section of the method chapter or in the introduction to the chapter. If you do include it, name the possible other research designs you could have used, *briefly* discuss their strengths and weaknesses, and finish with your reasons for not choosing them for your study. Make sure that every alternate research design gets either its own subsection or a set of paragraphs.

> The reasons why you chose not to use an alternate research design can be pretty much anything: Doubts about the reliability of data that would be obtained, time, expense, ethical issues and so on, but they must be *legitimate* reasons. Remember, you're trying to convince your reader that you have chosen a good way to come to a conclusion about your thesis statement within the constraints that you face as a master's or doctoral candidate. Don't be afraid to name those constraints; all researchers face constraints and dissertation writers face more than most.

It is quite possible that there are better and more reliable ways of getting to a conclusion than how you go about it but, as long as the reasons you give for not doing it the better way are legitimate, you will convince the reader that your research design is the best under the circumstances.

3. Your Methodology

This is the nitty-gritty of the matter. Here you explain, in detail, your particular use of the research design/s you discussed in your research design section. You should describe exactly how you apply it, and justify that to your reader. At the end of this section, your reader should be convinced that both the data collected and the form of analysis used are appropriate to your thesis statement, and they should be able to go out and do a similar study.

This section can usually be broken down into three major subsections: research instruments, data, and analysis.

Research Instruments

If you used research instruments – and most dissertation writers do – they need to be detailed here. A research instrument is pretty much anything that you use to get the data that you're going to analyse. That can range from questionnaires to laboratory

equipment to psychological tests or any other tool that provides you with data to analyse.

You need to describe the instrument/s, what you expect them to deliver, and why you believe they will get you reliable data. In other words, you must discuss:

- The *design* of the research instrument/s. Do this all the more carefully if your research instruments were non-standard or if you designed them yourself! If you used existing research instruments, explain them, their history, maybe a bit about past uses, and their sensitivity.
- The *purpose* of the research instrument/s. What exactly were they created to do?
- The *reliability* and *validity* of the research instrument/s. How do you know, when you apply each research instrument, that you will get the data you want? How do you know that it measures what you say it does? Also discuss the limitations of the instruments, and give the reader reason to believe that the data generated was sufficient for your purposes.

If your readers don't believe that your research instruments are reliable, they are going to question the data they produced. If they question your data, they will automatically question your conclusions. Bear in mind – it is one thing to collect data; it is quite another to know exactly *what* you collected. Make the case that the data you collected is what you say it is, and that it is good enough for your purposes.

A few examples: If you used a questionnaire, explain what information it was designed to elicit, how it was put together and the reasoning behind that, and what testing you did to make sure that you actually got that information, and not something else. If you did an experiment, what instruments did you use? How do you know they were accurate? If you used a psychological test designed elsewhere, how did you ensure its validity in the environment where you used it? How did you control for possible cultural differences?

If you did not use research instruments, you still need to explain and discuss the sources of your data. If this is the case, this section will often be shorter than if you generated your own data, but your readers must still not be under any misapprehensions about where your data came from or how it was originally collected.

For example, if you got your data from a data warehouse, explain where the warehouse got it; who collected it, why, and how they did so. If you used data from the Department of Labour or Statistics SA, the same applies. If you looked into a company's books, explain their bookkeeping procedures. If you did some form of observational research, what precisely were you looking for? Where? How? How did you record that information? What protocols ensured accuracy and consistency? In this case, *you* are the research instrument. Explain yourself.

If you relied purely on textual data – parliamentary documents, archival sources or letters and diaries, for example – you simply need to explain how you got them and their reliability.

Data

After you've discussed how you obtained your data, you need to discuss that data. It is nearly always desirable to have more data, or to have more accurate data. Nobody expects the data that you used to be perfect, but they do expect that you discuss the strengths and weaknesses of it, and that you convince them that it is of sufficient quantity and quality to allow you to draw reasonably reliable conclusions after you have analysed it.

If you're doing a qualitative study, tell your reader about the data you have. Are the records incomplete? Flawed in any way? Biased? Whatever is necessary for your reader to form a clear picture of the data you will be analysing in your body chapter needs to be discussed here.

In the case of quantitative studies, if you're sampling a larger population, you need to describe the characteristics of the entire population (that is, the pool from which you collected your data). Then discuss your sample: How representative of the entire population is it? How did you arrive at your sample? Why did you choose that way? Then you should discuss the data itself – strengths and weaknesses. In short, make the case that the data you worked with is good enough for your purposes.

Analysis

Once you have your data, of whatever nature, you have to do something with it in order to turn it into evidence. Data in and of itself just is. To turn it into information you have to analyse it. You may apply statistical analysis techniques or do some form of textual analysis, or a combination of the two. Whatever you do, you must explain it to your readers so that they understand how you will arrive at your (sub)conclusions.

If you do a quantitative analysis, you need to describe the (statistical) technique/s that you use. The description doesn't have to be complicated, but it does need to be clear. If you came up with a simple form of analysis, so much the better. If it is complicated, you need to do a bit more describing here. Either way, you *must* make the case that whatever you do will lead you to the knowledge you're after.

If you did a qualitative analysis, you also need to tell your reader what you did with your sources. What did you look for? How? Often qualitative methods require a bit more thought and explanation but, unless you indicate to your readers how you analyse your data before they read the body of your dissertation, they will be playing catch-up with you.

4. Limitations

To put it plainly: Your method's limitations are what separate doing your study according to your method from perfection. All methods have limitations. Perfection is seldom, if ever, attainable. To establish what the limitations of your method are, brainstorm how else you might have tackled your problem. That can range from a much-expanded version of your method to completely different ways. Dream as much as you want – practical constraints don't exist in this exercise. If you could

have done it better in space or by interviewing people who are dead, write that down. If you could have done it better with a ten-year longitudinal study spread over five different countries, write that down.

Once you have exhausted all the possible ways that you can think of for coming to a reliable conclusion about your thesis statement, write down the advantages of each. Then check to see which you can't match doing it your way. Those are the limitations of your method as it pertains to your problem.

Don't take this as an opportunity to shoot holes in what you have spent so much effort building up above. Simply name the most important limitations that will affect either the reliability of your findings or the extent to which you can generalise from them, name the consequences, and tell the reader why your findings are still worthwhile. Limitations are inherent in academic work.

You may also face specific challenges that will limit your work. Perhaps only 15% percent of respondents answered question 2 in your survey form, for example. Or maybe you were unable to get the detailed financial statements of two of the four companies that you studied. In these cases, discuss the issues where they best belong, whether here under limitations, or under research instruments or under data. If you know about the issues beforehand, it is sometimes best to discuss them in the introduction to your dissertation, under the limitations of the study.

5. Ethical Procedures

This section is intended to detail to readers what you have done to make sure that your work adheres to your university's ethical guidelines. If there are ethical implications to your work, you should have addressed them in your proposal and obtained approval to go ahead. What the issues are and what you did to address them belongs here. If you're wondering whether to take research ethics seriously, read Four Certain Ways to Fail in What Not To Do (Part Three).

> The ethical procedures section is not made redundant by a formal approval of your research. You should include it even if you have (written!) approval from your department or university's ethics committee. Do consider attaching a copy of the approval as an appendix to your dissertation though.

A good way to write this section is to first name the potential ethical problems in your study as a whole and then state that you have formal approval from your university to do the study. Then name each ethical concern, as well as the specific procedures that you implemented to counter the problem. If there were many, group them logically and follow the formula 'concern: specific procedures'.

For example: If identification of research participants would be a problem, explain what you did to ensure their anonymity: Did you not collect their identities? Did you fictionalise names or store identities in encrypted files? If your work had the potential to affect the environment negatively, how did you prevent that, or how did you reduce the risk to acceptable levels (as defined by your university!)?

- If you are ever tempted to deviate from the procedures that were approved in your proposal, be very, very sure to have your new ethical procedures approved by your university *before* you do anything. Any change renders your prior approval worthless.

This section can usually be neatly rounded off by concluding that, while there was the potential for harm in your work, all reasonable attempts have been made to counteract it.

6. CONCLUSION

The conclusion to the method chapter can sometimes be a bit of a nuisance to write because you don't really have anything new to say, and there usually isn't much use for a synthesis. Often the best thing to do is to give the readers a brief indication (in terms of your method) of how you structured the body. Keep it short – all you need is a paragraph or two to round off the chapter nicely.

CONCLUSION

By now you should have a good idea of what you need to include in your particular method chapter. Use Figure 2-2 above as a rough guide, and choose which sections (1–6) you need for your study and what you need in them. Write those down on blue index cards. Then, for each section, establish what you need to do to meet its purpose.

Brainstorm, but from the reader's perspective, not the perspective of somebody who already knows what they're going to do and how (that's you). Write that down on green index cards. Then simply write all the points you need to address under each green index card on white index cards. File any other (white) index cards pertaining to your method chapter that you have made during the course of your research under the appropriate green cards.

Once you've done that, go critically through each stack of index cards. Are you sure that all the points that you need to make are covered? Do you have enough information to make those points in a convincing way? Do you need more from other scholars? Ultimately, you're asking yourself whether there is anything that a sceptical reader might need to know to understand how you went about your study. If there is, put it on an index card and file it in the appropriate pile.

Once you are convinced that you have covered all the angles, simply order the blue index cards according to Figure 1-11 (p. 48), and order the green ones logically under the appropriate blue cards. Then put the white cards under each green card in logical order. When done, you will have all the points that you need to cover in your method chapter in the order in which they will appear in your dissertation.

Overview of Common Research Designs

As noted above, there are potentially many ways to design a study in order to arrive at reliable, well-argued conclusions. Being able to put a (recognised) name to the techniques you use gives readers a chance from the outset to think about whether yours is a good or bad way to go about considering your thesis. By explaining your research design, you provide them with a theoretical background to your method.

The list of research designs below is not by any means complete, but it covers those most commonly used in dissertations. Others do exist, as do fairly substantial variations on the ones listed here. Use the overview to help you generate ideas for your dissertation, and to alert you to what you need to be careful of. It is highly recommended that you get more detailed information on any given research design and its applicability to your research before you commit. The first thing to do is to go to the library; the second is to get feedback from your supervisor.

When you head off to the library, look at articles and books that discuss the research technique that you are interested in, and read a number of studies that have utilised it. When looking for a book about a particular research design, it's a good idea to start with the thinnest one that has good reviews. In the beginning, too much detail is likely to hinder more than help. Once you have a thorough overview of the technique/s that you're interested in, you can always get additional information if you have specific questions that need answering.

> After you have some idea of the research design/s you want to apply, speak to your supervisor. When you do, have some good reasons why you think a particular research design is appropriate to your problem and also some ideas for alternatives. The bottom line is that you *must* agree on your thesis statement, your research design and your methodology before you start your work, otherwise you could end up having to redo a *lot* of work.

For the sake of brevity and clarity, some liberties have been taken in the grouping of the various research techniques given here. Nonetheless, whatever your methodology, it will most likely be traceable back to one or more of the research designs listed.

We shall be looking at:

- Extended literature reviews/synthesis of scholarship
- Survey-based research
- Case studies
- Correlation-based research
- Comparative analysis
- Content analysis

- Critical theories
- Historical studies
- Evaluative research/Appraisals
- Ethnographic research/Participant observation
- Action research
- Experiments (laboratory and field)
- Secondary data analysis
- Simulations/statistical modelling
- Interdisciplinary research
- Theory development

1. EXTENDED LITERATURE REVIEWS

Extended literature reviews are undertaken to provide an overview of the scholarship in a particular aspect of a field, or of a field in its entirety. Unless you are thoroughly at home in the secondary literature or need to be for future purposes, this can be a difficult route to choose. It takes a *lot* of reading.

Extended literature reviews are not common dissertation research designs, as they cannot produce anything substantially new – all they can produce is a new perspective on what has gone before. Consequently, when they are undertaken for dissertations, it is usually at the master's level.

An integral part of an extended literature review is to show the various specialities that a field or subfield has fragmented into, and the links between them. Writers classify and relate various subspecialities, schools of thought, and debates; often they comment on over- or under-studied areas and highlight areas of promise. A study of this nature nearly always relies exclusively on the secondary literature, although it is perfectly possible to integrate the comments of experts or specialists through the use of interviews and questionnaires. It can be combined with a thesis statement, though the wide-ranging nature of a comprehensive synthesis of the literature can make this too restricting.

Be careful of

- sources used. It will not be possible to cover everything; it is the researcher's responsibility to choose what to include
- availability of sources
- accurately representing and classifying the work, conclusions and contributions of other scholars
- researcher bias (of the writer of the literature review, that is)
- how you structure the work
- time factors.

Areas of Applicability

It can be very useful within a field or an aspect of a field to periodically evaluate where it stands. It helps a lot to be able to step back to look at the forest instead of only the trees. Extended literature reviews help other researchers to take stock of the current state of affairs and they can help to generate new ideas. By imposing order on the sometimes bewildering array of work in a given field or speciality, good syntheses also make the lives of new researchers or of scholars who do not specialise in the particular area considerably easier.

Even if you are not considering writing an extended literature review as your dissertation, it is *highly* recommended that you find some that relate to your topic. If you don't know where to find them, your librarian and your supervisor both will.

2. SURVEY-BASED RESEARCH

If you use a survey-based research design, you are essentially trying to elicit information from a limited number of individuals who are presumed to have the information you are seeking, who are able and willing to communicate, and who are (nearly always) intended to be representative of a larger group. Surveys can range from highly structured questionnaires to unstructured in-depth interviews.

Be careful of

- the type of questions you ask
- how you ask the questions
- the sample size
- how representative your sample is
- time and cost factors
- ethical questions.

Areas of Applicability

Surveys can be an excellent way of finding out people's opinions, desires and attitudes. After all, if you want to know, ask. This makes them a powerful tool when such information is required; for example, in market research, political opinion and the like. They can also be used to elicit purely factual information; for example, the number of children in families with one or more parents with a postgraduate degree.

Surveys, of whatever nature, are also a potential minefield. Probably more questionable research has been done utilising this technique than any other. If you are going to use surveys, see Questionnaires and Interviews for the basics. If you need more than the basics (and you may well), do go to the library and study the subject a bit further.

3. CASE STUDIES

If you use a case study, you will be examining a single case (this may be something that happened, an organisation or any other 'case') in a tightly structured way. You will probably do this to test a hypothesis you have about the case itself, and probably also in the hope that you will find principles that can be extrapolated to similar cases.

Be careful of

- the risk of losing focus
- generalisability of results
- subjectivity.

Areas of Applicability

The case study method is useful when detailed knowledge is required of any particular case for whatever reasons. Having said that, because of the difficulty of keeping it focused and of obtaining unbiased results that can be generalised confidently, this can be a difficult approach to use successfully on its own. As such, it is often combined with other techniques. If you do a case study-based work, it is highly recommended that you read a number of *good* articles that have used case studies. Look at how they did it and then read a book or two on the research design in general to help you avoid common errors.

4. CORRELATION-BASED RESEARCH

The researcher using correlational statistics compares two or more variables in order to establish whether there is a relationship between them. Examples are establishing the relationship between owning pets and longevity, smoking and heart attacks, and the like. A relationship does not have to be a positive one to be important. Negative correlations can also suggest a relationship between variables, and as such can be equally interesting.

Be careful of

- outside variables that are responsible for (part of) the correlation
- the difficulty of obtaining reliable data. This includes sample size, sample representativeness, and the accuracy of data
- over-simplifying complex relationships.

Areas of Applicability

Correlation-based research is often done when experiments cannot be undertaken for ethical or practical reasons, or for laying the groundwork for future work, experimental or otherwise. Bear in mind that the best that correlation-based research will arrive at is a correlation and that correlation is not necessarily causation. In other words, know your confidence levels and be careful with generalisations.

5. COMPARATIVE ANALYSIS

When doing comparative analysis, the researcher investigates, in a focused and systematic manner, two items (sometimes three, but any more than that can easily become confusing) in depth and compares them to each other to find the reasons for difference or similarity. Comparative analysis can compare small individual cases, or range across national borders and time. As a rule of thumb, the broader the comparison, the more difficult the study is to undertake.

Be careful of

- choices of cases: The case for comparability needs to be made by the researcher
- complexity: Differing backgrounds lead to different cases. As many variables generally intrude, this can make drawing conclusions difficult. Also be aware that, as more items are compared, the difficulty increases exponentially
- focus.

Areas of Applicability

Comparative analysis has many potential uses, though it is definitely better suited to some types of problems than others. For example, in an experimental setting where (most) variables are under the control of the researcher, a control group for comparative purposes can be very useful. In the social sciences and humanities, where variables are much more difficult to control, making the case for comparability can become difficult. A tightly focused topic and thesis statement, as well as methodological rigour, are essential if the results are to be convincing.

6. CONTENT ANALYSIS

As the name suggests, content analysis studies closely examine the content of preserved records. The records are nearly always written documents, although some researchers feel that other records (such as films or videos) can also be used. There are various techniques associated with content analysis research, but the end goal is the same: To discover the non-obvious meaning contained in the record. The methods used are usually quantitative, although qualitative judgements often need to be made. Some forms of content analysis use a combination of the two (for example, causal analysis, used to establish the optimism level of authors). Thesis statements can be used to provide focus in this type of work, although they tend to limit the range of meaning that may be derived from the source being studied.

Be careful of

- sufficiency (quality and quantity) of sources
- analytical methods used (they can have a large influence on findings)
- researcher bias
- reliability of results.

Areas of Applicability

These types of studies are invaluable when an in-depth understanding of a text or collection of texts is required. The range of potential applicability is vast, ranging from establishing authorship or authenticity of documents to uncovering obscure cultural or ideological messages in texts and everything in between.

7. CRITICAL THEORIES

Critical theory studies take, as the name indicates, a profoundly critical perspective on society, and seek to move past superficial descriptions of 'consensual reality' to the structures underlying it. Critical theory is explicitly political. It questions the assumptions that form the basis of our understanding of reality. Power, whose interests are served, and hidden assumptions are central to critical theory studies.

Be careful of

- difficulty
- subjectivity
- polemics.

Areas of Applicability

Applying critical theories to observed phenomena can be a powerful tool, especially in the humanities and social sciences, but it is fraught with danger. A good study utilising a particular critical theory can provide truly valuable insights by highlighting ideological and societal assumptions that would otherwise go unquestioned or even unrecognised. If enough people adopt the view of a particular theory it can also, to a greater or lesser extent, change how we view and react to the world. We would, for example look at the world very differently if it were not for the work of feminist scholars. However, a theoretical perspective is often just that, a perspective: It tends to emphasise one way of looking at reality at the expense of the whole. This poses the danger of creating a polemic – a reactive argument that relies on some pre-held belief, where only one side of the story is presented rather than a balanced evaluation of possibilities and perspectives.

8. HISTORICAL STUDIES

Essentially, doing an historical study means that the researcher looks into an event in the past, utilising whatever sources may be available, either to shed light on that particular event, or to shed light on a contemporary issue (for example: "Catholicism and the French Revolution" or "The Influence of the French Revolution on Contemporary French Painters"). Sources tend to be written documents, though there is a vast array of potential sources. Historical studies may focus on a single event, or cover huge numbers of people over long periods. They are not necessarily limited to people. Ideas have a history, as does science, the environment, and pretty

much everything else. Historical studies may be quantitative, though they are usually qualitative or a combination of both.

Be careful of

- methodological difficulties
- focus (what is it, exactly, that you are hoping to determine?)
- bias
- sufficiency and reliability of sources.

Areas of Applicability

Unless you are an historian, historical studies are likely to be a tool to strengthen other parts of your work. You may use historical work to get background information to (partly) explain a current phenomenon, or as evidence for a part of your work. Bear in mind that it can be very difficult to draw concrete connections between the past and the present. Whatever you utilise historical research for, be aware that for it to be any use at all, interpretation is required. A recounting of the facts from the past, no matter how obscure the source in which you found them, will not do. The facts you find must always serve a larger point that you are making – and that larger point should be related to your thesis.

9. EVALUATIVE RESEARCH/APPRAISALS

The researcher who does evaluative research seeks to come to a conclusion about the effect or success level of some happening or intervention. That may be a project, a procedure, an event, or anything else that requires a structured evaluation or appraisal. There are numerous ways of setting up an appraisal, ranging from quantitative to qualitative, and many different aspects one could choose to concentrate on. These range from implementation procedures to cost/benefit analyses, to purely outcome-based studies. Appraisals are often combined with a theoretical explanation detailing why the matter being evaluated turned out as it did.

Be careful to

- carefully define whatever is to be appraised
- establish appropriate measurement criteria
- measure accurately
- avoid researcher bias (i.e. be careful of prejudging).

Areas of Applicability

If the above 'Be carefuls' are taken into account, evaluative studies can be very useful. They tend to move on shaky ground when the researcher presents his or her evaluation of *why* whatever was investigated was a success or failure. If included, this part must be carefully argued, with sufficient evidence. The researcher – while putting forward his or her case – should also honestly acknowledge the limitations

of the interpretation. Needless to say, it must be made clear in the beginning of the dissertation that the work extends beyond merely investigating the degree of success or failure of whatever it is that is being appraised.

10. ETHNOGRAPHIC RESEARCH/PARTICIPANT OBSERVATION

Researchers doing ethnographic research closely observe a group in order to understand that group (if it involves a single person, it is generally called a 'Life History' study). Personal experience and the observation of groups in their natural setting are key to ethnographers. Researchers may, to a greater or lesser degree, participate in the groups they observe, though this is not a requirement. Ethnographers use their observations as well as interviews and documentary records in their work.

Be careful of

- subjectivity
- ethical problems
- focus
- time factors.

Areas of Applicability

Ethnography is as much an art as it is a craft, making it difficult to learn and apply. There is a considerable danger of subjectivity, of incurring time and financial problems, as well as difficulty in writing up results (focus). Having said that, some very good ethnographical studies have been done and they make for informative reading. But think carefully before approaching your supervisor with this type of research and, if you do, make sure that your supervisor understands it in depth and is willing and able to guide you through.

11. ACTION RESEARCH

Action research, also known as participatory research, is a form of research whereby the researcher actively involves the participants in order to solve a problem or achieve a learning objective. The collaborative approach effectively turns participants into co-researchers. The emphasis is on planning, implementation, learning, evaluation of the learning process and the empowering of participants.

Be careful of

- subjectivity
- generalisability of results
- replicability.

Areas of Applicability

When there is a small group of participants in a working environment (including classroom settings), who need to achieve certain goals, action research may be able to assist in finding the most effective way to achieve those goals.

12. EXPERIMENTS

Experiments can be conducted either in the laboratory or in the field. They are done to test an hypothesis or theory, or to observe the effect of a given intervention. Laboratory experiments usually allow significant control of the environment in order to isolate the phenomenon to be studied, while field experiments tend to offer a lower level of control. Consequently, an experiment in a laboratory can often be more easily replicated than a field experiment.

After conducting the experiment, researchers record and, as best they can, explain the outcome. In effect they say, "See – if you do this, that will happen" and "it proves (or suggests) this, that or the other." They will also be saying, or implying, "If you do exactly the same, in exactly the same environment, you will obtain the same results."

Be careful of

- identifying and controlling for outside variables that may influence results
- accuracy of measurements
- possible difficulty of coming up with a theoretical explanation of results
- cost
- ethics, if involving people, animals or the environment.

Areas of Applicability

While most closely associated with the physical sciences and psychology, many other disciplines have conducted highly useful experiments. This research technique, properly used, is generally taken to be the classic research design because of its high replicability. However, it is often difficult or impossible to set up reliable experiments for many of the problems that confront academics in the 'real world'. Also, it is one thing to have an expectation and to prove or disprove it via an experiment; it is quite another to explain convincingly *why* the outcome of an experiment was as it was.

13. SECONDARY DATA ANALYSIS

Researchers doing secondary data analysis study data collected by previous researchers either to check (an aspect of) their work or to answer other questions. For writers of dissertations, secondary data analysis can be a very good way to go *if* they have an academically legitimate reason. In other words, your analysis of the data collected by another must have some significance. Data collected by others can be

quantitative or qualitative, and have a broad range of uses or a very limited range. Whether the data collected by others is useful to you depends entirely on whether the quality and quantity of the data is appropriate to your envisioned use.

There is a huge amount of data available, scattered all over the world: data collected by government agencies or research institutes, financial data, weather data, data collected by websites – the list goes on and on. As long as it is reliable, it has potential. The range of potential applications of secondary data analysis is also vast, ranging from the building of computer simulation models to using existing interview transcriptions for content analysis purposes, and everything in between. But it is of paramount importance to know the reliability and limitations of the data: If you did not collect it yourself, you need to be convinced that it will do for your purposes, and make the case that it will to your reader.

Be careful of

- quality (reliability) and quantity of the data
- the match between the data being used and your use of it
- the development of an appropriate analysis method
- cost (some data can be had for the asking, other data is expensive).

Areas of Applicability

The areas of applicability are virtually boundless. It all depends on what you want to do and the data available.

14. SIMULATIONS/STATISTICAL MODELLING

Simulations and statistical models attempt to capture the essence of a process by identifying key variables and then creating a representation of it. A statistical model captures and describes the process, while a simulation runs similar scenarios. Simulations are nearly always computer models. Both simulations and statistical models can be fascinating studies, with potentially large practical and theoretical implications, but they are also both limited. No model is reality; it will always be a simplification of reality.

If you have the skills and the data, this can be a good way to go. If you do it and get it right, it can lead to very interesting results, often with spin-off effects. However, you would be wise to think about the time it will take and your chances of getting it right before you start. If the model or simulation you are considering is very complex or unlikely to succeed, ask yourself what your primary goal is, and then choose.

Be careful of

- difficulty (reality nearly always gets complicated on close observation)
- obtaining sufficient and sufficiently complete data to build and test the model
- unexpected variables

- the impact of assumptions made to simplify reality enough to contain it in a model
- errors in constructing the model.

Areas of Applicability

Insofar as reality is not random, the areas where studies of this nature can potentially be applied are many. They include logistics, social systems, networks, disease transmission and many, many more. As noted above, they have potentially large theoretical significance, because a successful model can explain a lot about a particular phenomenon. The practical significance can also be large because, nearly always, the more accurately one can model something, the better chance one has of manipulating what has been modelled.

15. INTERDISCIPLINARY RESEARCH

Interdisciplinary research takes methods, concepts, or ideas from one discipline and applies them to a problem in another discipline.

Be careful of

- difficulty. Mastery of two disciplines rather than just one is required.
- inappropriate borrowing. There is a possibility of seriously flawed research because of non-applicability of what was borrowed.

Areas of Applicability

Aspects of many different disciplines have been combined, sometimes successfully, sometimes not. For example, psychology has been combined with such diverse fields as linguistics, economics, literary studies, medical science and law, to name but a few. Some combinations have been useful, others less so. There have been serious disasters utilising this method (for example, social Darwinism), promising areas of research (for example, evolutionary psychology) and striking successes (for example, genetic/historical studies). Creativity and commonsense are key here. This type of research, if successful, can have considerable theoretical and practical significance.

From the perspective of the dissertation writer, creating something truly new in interdisciplinary research is often a task that is far too difficult and large to consider doing simply to fulfil the conditions for getting a degree. If you are considering an interdisciplinary approach (difficult enough in and of itself), you would be well advised to limit yourself to where previous work has laid a foundation and to strictly limit the scope of your investigation (in your thesis statement and delineations).

16. THEORY DEVELOPMENT

Theoretical studies lie at the heart of academic work. They create new ways of understanding (aspects of) the world that surrounds us, they bring order out of chaos and give meaning to observations. The more a theory explains accurately, the more

powerful it is. Usually studies of this nature are restricted to testing an aspect of an existing theory, refining it, or expanding its applicability, although of course totally new theories do emerge.

Theoretical studies use various methods and data to achieve their aims, ranging from mathematical modelling to philosophical reasoning. The key test of theoretical models is, of course, whether they have predictive power.

Be careful of

- difficulty
- internal consistency of the theory
- the 'ivory tower'; that is to say, the danger of developing theories that are internally consistent, but bear little relation to reality
- assumptions
- time constraints.

Areas of Applicability

There are very few higher callings in the academic world than the development of new theories. It's what moves forward human understanding. The rewards are also great, in terms of both personal satisfaction and public recognition. The development of new theories secures the fame of academics, which is why the names of some academics are known across disciplines and around the world, while others are not: Einstein, Freud, Marx, Darwin, Chomsky, Plato .... They all developed theories – not perfect theories, but influential ones.

So if you have a really good idea, well, yes it is risky. There are definitely easier ways to earn a degree. But you do get to be a little experimental in your dissertation so, if you have the ambition and are willing to go out on a limb, go for it. It will be difficult, frustrating, time-consuming and fun.

Questionnaires and In-person Interviews

Questionnaires and in-person interviews have a lot in common. Both are a manner of eliciting information directly from the person/people who are presumed to have the required information. Both can be an excellent way to collect data for a dissertation. But both can also return results that are biased or difficult to analyse.

Since the purpose of all academic interviews is to gather reliable information relating to the problem being investigated, always ask yourself before you embark on any form of interviewing: What information am I trying to find? In other words, know your goals. Remember – you have a thesis to get to the bottom of. That should always be your guiding light.

Based on your goals, determine what type of interview technique is most appropriate; in-person or questionnaire. Then establish whether your interview is going to be structured, unstructured, or semi-structured. Structured interviews ask all respondents the same questions and give them the same options in answering. Unstructured interviews ask different questions of different interviewees and allow the respondents to answer as they see fit. Semi-structured interviews allow for digression from a set format, either in the questions or the answers, depending on circumstances.

Whichever type of interview technique you use, in your dissertation you must be able to justify the reason for choosing to interview, the technique/s used, the questions asked and the form of analysis applied to the information gathered. You must also always be able to make the case that your sample (i.e. the people who are interviewed, *and* the subset of those who respond) is representative and appropriate to the topic being investigated. This often requires *very* careful thought. You must also make the case that the answers that are returned to you are reliable, or at least honestly point out where the weaknesses and possible biases lie. Your examiners will be looking for all this in your method chapter.

As with much in academics, experience has led to a number of general rules and caveats that, if heeded, can minimise the chances of errors when conducting interviews. Below are the basics in this regard. Depending on the nature of your research, they may not be sufficiently detailed for the type of work you are undertaking. If you are planning to make interviewing a central part of your data gathering, it is highly recommended that you consult a handbook or two to familiarise yourself with proper interviewing techniques. Having said that, the tips below should help you avoid elementary errors.

Questionnaires

Questionnaires are a form of structured interviewing, where all respondents are asked the same questions and are often offered the same options in answering them (yes/no, ranked on a scale, etc.). Questionnaires may include open questions, which respondents answer in their own words, but it's usually better to avoid this as much as possible. People differ in their ability and willingness to write answers, and

answers to open-ended questions can be difficult to interpret/analyse. Some researchers, however, recommend always asking a few open-ended questions, as this can put respondents at ease, and being able to express themselves in their own words can give them a sense of control. It also allows for more in-depth answers when required. Consider your needs and sample group to make a decision in this regard.

Questionnaires have the disadvantage of not allowing the researcher to interact, or often even to observe, respondents. They are also limited in the depth to which the researcher is able to probe any particular respondent and do not allow for digression from the set format. Nevertheless, depending on the situation, they have several advantages over verbal interviews: They can offer confidentiality to respondents, and are generally easier to analyse and turn into quantitative results. They also allow for more volume (i.e. they can be sent to more people) to raise confidence levels in your sample. The more structured the questionnaire, the more easily results can be compared later.

Questionnaires should include information about why the respondent should answer (you're asking for the favour of the person's time!), the purpose of the questionnaire, name and contact details of the researcher, and information on how it is to be returned when filled in. If you're offering anonymity, explain how you'll live up to that promise too. Questionnaires should also be attractively designed. Avoid clutter and anything that may reduce legibility. Badly designed questionnaires create an unprofessional impression and will affect both the number and the quality of answers you get. If you can get a university stamp on them, or send them on letterhead stationery, so much the better; you'll probably get more responses.

Be aware that, unless you have a captive audience (at work perhaps, or students in a class), it can be *very* difficult to get sufficient respondents to answer your questionnaires to allow you come to reliable conclusions. Take this seriously – many a dissertation has been handed in much weaker than anticipated because the researcher could not, in spite of his or her best efforts, get enough people to respond.

Questionnaire Content

Try to keep your questionnaire as consistent as possible; you don't want confused respondents, or respondents who have to read instructions/examples any more often than strictly necessary. It is also important to keep questionnaires as short as possible. Figure out what you need to know, formulate the questions, and then go back and try to cut any unnecessary questions. That way you will minimise respondent boredom, get more carefully considered answers and, in all probability, a higher response rate. The less inconvenient you make it for your respondents, the more likely it is that they will help you get the information you need. If the questionnaire *has* to be long, let your respondents know how far they have to go – perhaps when they have completed 25, 50 and 75% of the questionnaire.

Directness and clarity in the formulation of questions are vital. All respondents should be able to understand your questions easily. Aim for the lowest common denominator. If all respondents don't understand exactly what you mean to ask, you

will be comparing apples and eggs when you analyse the answers and your results will be questionable, to say the least. Abbreviations and technical jargon are, almost per definition, a bad idea.

Questions must be neutral and not push respondents in any particular direction. Without very careful formulation of questions, it is very easy to weight them to favour a particular answer. Even the order in which questions are asked can have an effect on the type of answers you get. Your goal is to take subjectivity out of the matter as much as possible – both yours and that of respondents. A small test run of your questionnaire to check whether you are actually getting the information you think that you're getting, and not something else, is highly recommended.

Try to group your questions into categories. It's easier for the respondent and can make analysis easier. When grouping into categories, the general rule is to go from easy to difficult and from general to specific. With regard to easy and difficult, remember that abstract questions are more difficult to answer than factual ones, and that open-ended questions are more difficult than closed.

Sometimes putting questions in a random order can be a good idea: It has the effect of making respondents think more carefully before answering – they will have to 'change gears' mentally. Use this technique only if you fear your respondents may fall into a rut when filling in your questionnaire.

It is a good idea to keep personal, controversial or otherwise discomfiting questions at the end of the questionnaire: If you create comfort in the beginning, you'll be more likely to get what you want in the end. Besides, the respondent has already committed to answering your questions to a degree.

If the answers to your questions are ranked, go from low to high, and try to keep the number of answer categories to a minimum: Choosing between 1, 2 and 3 is easier and quicker than choosing between 1 and 12; 'seldom or never' is often better than both 'never' and 'seldom'. Depending on the information that you need, it may not always be possible to do this, but try. Again, the cardinal rule: Keep it all as simple as possible.

Try to avoid letting respondents off the hook too easily by offering easy neutral options (usually placed in the middle of a ranking) unless it is an appropriate response. This is especially important with difficult or discomforting questions. If it is possible that respondents can't, or won't want to answer a particular question, include an option where they can express an inability to answer (e.g., 'No opinion', 'Don't know' or 'Prefer not to answer', etc.). Place these at the end of the answer option – you want them to consider the other options first.

Finally, do try to get feedback before you send out all your questionnaires. Run your questions by somebody with expertise in designing questionnaires and, if at all possible, try a small sub-sample before sending to all your respondents. Mistakes are easier to fix early rather than late. If you *insist* on not getting feedback and not doing a small pilot run, at the very least make sure that you get the questionnaire approved by your supervisor before you send it out.

In-person Interviews

As with questionnaires, there are various ways of conducting in-person interviews. They can be structured, with all interviewees being asked the same questions. These can range from open-ended questions to only a few 'yes/no' questions, asked of a large group of people. They can take the form of focus groups, where a small number of participants are asked in-depth about a particular topic in a semi-structured manner or they can be entirely open-ended, one-on-one interviews. The points made below are, for the most part, aimed at the one-on-one type interviews, though a number can be extrapolated to other interview types too.

To start with the obvious: When making first contact, remember, the people you interview are doing you a favour. So be polite and considerate, and try to make the interview in their interests too, perhaps by offering to share the results of your work (it doesn't have to be the whole dissertation; a synopsis or the conclusions are usually sufficient). Also let them know beforehand what you want to interview them about (topic and scope) and how much of their time you need. If you are going to keep identities confidential or going to limit where the information will be used, discuss with your interviewee beforehand how you will do so. Consult with your supervisor on the limits of this one – sometimes you can keep your source/s secret and use them as evidence, and sometimes you can't.

For in-depth, one-on-one interviews, before you meet the person you are going to interview, get a little background information about the person. It's polite, will make you both more at ease and will allow you to conduct the interview more professionally. When you meet the interviewee, dress appropriately – i.e. dress to make him or her feel comfortable. Once you're done, thank the person and don't forget to follow up later. 'Follow up' means thanking them by email, phone or a note *and* keeping any promises regarding the sharing of results, etc. Make a note to do this or else you will forget (a few at least).

On the subject of notes: Do take notes in the interview – even if you're recording the conversation. There are a lot of things that go on in an interview that a tape recorder can't pick up. Take notes on your observations, ideas, and questions that you think of to ask later in the interview.

If you're recording the interview, you need to ask for permission.

Interview Questions

It's all about getting the information you need, so always have your questions ready (on paper) before you meet the person. When you formulate your questions, explicitly ask yourself what you want to know from the interviewee. Write your questions out in several different drafts, making sure that the way you phrase them is neutral and does not intimidate or offend your subjects. If you make the experience unpleasant for them in any way, including how you phrase your questions, they will shut down, get defensive or otherwise make sure that you don't get what you came for.

A relaxed atmosphere in which everyone feels at ease is best. Some initial easy, background-type questions often work well in this regard. It is also important to be

aware of the image you project. It is best to come across as calm, friendly, and professional. People tend to respond in kind, and coming across as nervous, tense or demanding won't set the other person at ease.

Body language is an important form of communication, and effective use of body language can not only help create the right atmosphere, but can also help you get better answers to your questions. Nodding, looking puzzled, smiling, and so on are all forms of communication, and can sometimes be more effective than verbal communication. Sometimes the most effective way of asking for more information is to remain silent.

As you ask your questions, it's up to you to keep the interviewee to the topic being discussed, but it can also pay not to be too rigid: Sometimes drifting off the point a little can reveal useful information. Also, don't be afraid to ask for more details based on what has been said, even if it's not part of your question list. But don't back your subject into a corner. If you make it feel like a grilling, they're not going to help you get the information you want.

If you don't understand something, or want more elaboration or an example, ask for it specifically. Directness and openness in communication often begets the same.

While it's often better not to make questions too narrow, if you want facts, figures, or a specific Yes or No, ask for them directly. It's usually better to save these types of questions until later in the interview, when a rapport has already been established.

Keep your questions in a logical order, but write a number next to the questions to prioritise them – you may run out of time and not get to all of them. Having said that, make more questions than you expect to have time for. Some people are quick and to the point, others are not.

As with questionnaires, 'leading' the subject to particular answers is not academically acceptable. This is not to say that you can't ask for elaboration, examples or an explanation, if you require one, but ask for them in a neutral manner.

When you're done, thank your subjects, and give them the opportunity to ask you any questions that they may have. Also give them the opportunity to make any final comments. Something along the lines of "Is there anything else that you would like to cover before we conclude the interview?" can sometimes reveal very useful information that you might not have thought of asking for.

The best time to write up your interview and the thoughts and ideas you had, is *straight after* the interview. If you don't, you're more than likely to lose some good information. Besides, you need to keep accurate records of interviews anyway, so it makes sense to note your observations when you record the basics such as time and place of the interview, who was present, and so on.

A beginning, a muddle, and an end.
– Philip Larkin

CHAPTER 4
THE BODY

This is the fun part. You have your data, you know how you're going to analyse it; here you put it all together. The body chapter/s lie at the heart of your dissertation: You described what you were going to do in the introduction to your dissertation; you explained how you were going to do it in your method chapter. The body is where you get to actually do it. But there are dangers.

As the quote of Larkin's above expresses (even though he was commenting on the 'classic' formula for a novel) this is the part of the dissertation where you are more likely to lose your reader than any other. This is where the meat of the matter is, but the structure of the body is where dissertations differ the most. In order to avoid proving Larkin right, know what belongs in the body section of your dissertation and structure it *carefully* before you sit down to write.

WHAT BELONGS IN THE BODY

The body of a dissertation contains essentially three things: your research findings, your analysis of them, and your subconclusions about them. Your findings will let you test or probe your thesis statement. Your readers will expect you to present and analyse findings that correspond directly with the data that you told them you would use in your method chapter. Don't disappoint them!

Your findings can be virtually anything – data from archives, results from an experiment, or answers to questionnaires. Sometimes you may not have any original findings. If, for example, you are doing a dissertation on the interpretation of an ancient religious text, it is entirely possible that your sources might be limited to that particular text, other known related primary sources, and the secondary literature by other thinkers in that area. If that's the way it has to be, that's okay too.

The second thing that belongs in the body of your dissertation is your analysis of those findings. You have a thesis statement to come to a conclusion about, you have the data with which to do it (your findings); now you need to interpret the data to let your reader know what it means. Findings in and of themselves are not interesting. Only when they are analysed do they have meaning, and only when that analysis is used for a particular purpose – the testing of your thesis statement in the case of your dissertation – do they become interesting.