

What Should a PhD Thesis Look Like*

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Introduction

This article is in three parts. The first offers some advice on setting out to do a PhD. The second examines the structure of a PhD. The third and final part summarises some useful things to keep in mind, considered from the perspective of the reader of your work.

The purpose is to give a good impression of the layout, structure and form of a thesis. At the same time some advice is proffered on the do-don'ts of style, content, and purpose. The aim is to give you a preliminary idea of what is expected of a finished thesis by its readers and examiners.

Preliminary desk and library research

Find out all you can about the work that has been done before and see what the accepted style of research is for your area. When thinking of starting a PhD the first step is to look at existing theses in your proposed subject-area; look at ones that have used theory and methods that are similar to those you are proposing to use. PhDs dominate a student's life for some years - make sure that you really want to do it!

Develop a detailed research proposal to focus your ideas

One of the reasons why so many PhDs fail to finish on time is that students do not focus their ideas early enough. You should arrange with a prospective supervisor a time-table for the first six months (or a similar time which suits you both) to put together a detailed research proposal. Ideally you should then present its ideas to others who know something about the topic and the proposed research methods. Proposals have the following:

- Rationale

Why the proposed research is important.

- Objective and results

A clear statement of what it is hoped to achieve through the research and what the results will be in terms of practical benefit and/or addition to knowledge.

- The research idea you will use to guide the research

A concise statement of what the research will investigate and why. The major insights expected, and if it is expected that the research will prove, disprove or discover any hypotheses, then these should be stated.

- Previous work

A very brief indication of other work that has been done before on the topic, demonstrating the gaps that the proposed research will fill. This should refer to well-known pieces of research and not to information from textbooks.

- Methodology

A brief account of how the proposed work might be carried out, with some indication of the proposed sources of information and research approach and methods.

- Proposed timetable

A provisional outline of how the research will be completed in a proposed period of time, suggesting how many months will be spent on each of the various stages involved.

- Qualifications

A note as to why you believe you are particularly qualified and suited to undertake this research.

- Likely research success and extension of results

A note about the chances of success: what are likely to be the main problems, how when and where will the results of the research be publicised and written-up.

What a finished PhD thesis should look like

The following is a list of the main considerations usually found in presented PhD theses. The numbers shown do not necessarily coincide with chapter numbers, but the thesis structure is likely to be based closely on this ordering of text materials.

1. An introduction.
2. Necessary subject-area background information.
3. Necessary theoretical background.
4. A critical review of other researchers' work and conclusions.
5. The thesis research approach and methods.
6. Presentations of evidence/findings.
7. Analysis of (6) in terms of (5).
8. Discussion of (7) in the framework provided by (3) and (4).
9. Conclusions and recommendations.
10. A reflexive account of how the research process qualifies conclusions in (9) given (5).

How many chapters and pages your work will involve, and the exact shape and order of the thesis, will depend upon the subject and the success of the research. There are few rules!

Structure is very important

Structure is important as it plays a central role in making a thesis understandable to a reader. Structure should lead the reader easily to the places in the text where these questions can be clearly answered:

- What is the purpose of the thesis?
- What is known already about the subject and its associated issues?
- How does the research investigation compare to other work in the subject-area?
- What are the original findings?
- What is their wider significance?
- What has been achieved in terms of the thesis objectives?
- Are there any recommendations?

This is all easier said than done! Writing up a thesis often takes much longer than the research process. Indeed, writing-up is part of the intellectual discipline of a thesis, and is an integral part not separate. It is often only when you start expressing your ideas in writing that complex ideas suddenly click into place and their true meaning and the contribution of your own research, become fully apparent.

The use of very brief introductions between chapters, to link, relate, and explain each stage of the thesis argument in terms of its purpose and structure, will greatly help

reading. The reader may not be very informed about the study area, and he or she will then depend upon the thesis presentation to guide them through the pages. Make it easy for the reader. Think about the eventual structure of the finished product from the very beginning of your research. Also be careful about presentation: never be gimmicky or too stuffy. Look carefully at other theses and assess for yourself what the genre looks like.

The Introduction

Ideally, the introduction should be kept very brief. You are introducing the research idea and the purpose of the thesis to the reader. That is all. Explain why your subject was chosen for a PhD. Give a precise summary of the thesis structure and purpose to make the reader's job easier.

Background information

It may be necessary at an early stage in the thesis to acquaint the reader with some background information that is relevant to a full understanding of the thesis argument. This may include some complex issues. If such information is halting to a fluent reading of the text, then relegate it to an appendix.

Appendices

Appendices are used for information which is useful to a full understanding of the research and thesis, but would be too distracting and disrupting to the main thesis argument to retain at length in the main body of the text. Though note that information put into an appendix should not be there just for padding. It must be relevant to the main point of the thesis, which is to present the thesis argument and research results.

Theory and other work

Theoretical background is an examination of what researchers and others think they already conceptually know about a subject-area, and its related problems, in general terms. It should outline and discuss the relevancy (for your research) of the generally accepted models on which general understanding is based. This is in part a question of sufficiency of theory: in other words, it is about how much is known and what entitles researchers to investigate the subject-areas and research sites in the ways, and with the methods, they do.

A critical review of other researchers' published work can be included as a part of a discussion of the general theoretical background. But in many theses it will be necessary to make comparisons with similar studies of similar problems in some detail. It is

necessary to identify and discuss the classic studies in your area, so you can discuss the implications for your own choice of research approach and method, and compare your results and conclusions in a meaningful way to the most important, and most cited work in your subject-area. This should also help you publish your results later.

A careful understanding of theory and related research is an essential part of a good PhD. There are generally accepted methods for choosing research sites, making data observations, collection, and analysis. Usually they depend upon on some common consensus held by a research community, and the academic discipline more generally, about what they think they know, and what constitutes a subject-area and appropriate research styles and approaches.

Sometimes, however, it happens that there are competing schools of thought, or different research and theoretical traditions, so carefully establish what the state of knowledge is and the different views which prevail in the literature. State what your perspective is, then explain how your research fits into the general picture, then design your general approach to research and pick your research methods to match.

Be **CONSISTENT** at all times. You will need to state the reasons for your choice of approach, and later, perhaps in your thesis discussion, state something about the validity of your approach and methods. You might want to add if you think your methods were right for the kind of problem you investigated; would you recommend any changes for future similar work?

Findings, analysis, and discussion

It must be clear which is your own work, and which is the work and findings of others. Make it crystal clear. Other people's work is still evidence, but make it plain what your contribution is. It is better to present your findings first, and then bring in other evidence in a separate analysis of your findings, and discussion of them.

It is difficult in practice, but try not to confuse analysis and discussion. Analysis is about the significance of your findings in terms of your thesis argument, research approach and methods. It involves evaluation in terms of your model of how things actually are, as you have understood it from the theoretical literature and other published work, and how you have presented it in the early chapters of your thesis. Discussion is wider than this and is more speculative, as you generalise outwards the wider meaning of your findings for different ways of understanding, and the different but related fields of work. That is, discussion is about the implications of your research for existing knowledge and research questions generally.

Conclusions and recommendations

Conclusions should consist of a concise summary of the thesis argument and main results. If recommendations are included, then these should not be confused with conclusions. It helps to include these separately and clearly elsewhere. They are usually presented as simple statements of follow-up actions.

It is a good idea to follow your conclusions with a reflexive account of their quality given the nature of the research, and the problems encountered in developing the thesis. This is most appropriate for qualitative research, where conceptual clarifications are often complex and difficult, and where much depends upon the style of the research (and even the personality and actions of the researcher!). An assessment of how the research itself had influenced the results is often helpful to a reader's interpretation of the thesis findings and conclusions. The reflexive account should show your awareness of the limitations of the study, and indicate what you have personally learnt from your investigation.

Hypotheses

Research hypotheses are usually necessary to guide the direction of the research process. Often, however, they do much more than this; they dictate quite precisely the nature of the research process itself. Many accounts of how to do research outline a process, which proceeds through stages similar to this below:

1. Read other people's work.
2. Construct a general model.
3. Then propose a hypothesis(es) based on this.
4. Design a survey and questionnaire to operationalise the hypothesis.
5. Process the results to see if the hypothesis is confirmed or not
6. Assess its implications for the usefulness of the model

The role and purposes of different research styles, and the methodologies they suggest, constitute a major subject-area in itself, and would take too long to outline here. But you should note that while in principle this general approach is correct, in practice it can often prove too simple. Research is often very messy and plans continually have to change, often because of unforeseen changes in the organisation being studied. Perfection and planning are difficult to achieve in practice, and you should be aware that while taking a systemic approach is important, analytical quality in a PhD is just as important.

This is particularly so where theoretical background is weak, as is often the case for interdisciplinary projects where several disciplines may be screened for hypotheses. This might suit a particular conceptual prejudice, but it also sometimes means that researchers take these ideas out of their theoretical context, and do not make a full allowance for the underlying assumptions on which they are based. It easily leads to a mixed bag of competing and contradicting hypotheses.

It is particularly difficult in organisational studies and social science generally to prove or disprove hypotheses. The level of required theoretical abstract is often too high, and the results are too specific to be meaningful for statements of theory that have a general application. Research in organisations is typically exploratory as well as investigative in its nature. Often, it is based around solving a practical and clearly defined problem for a particular context. Solving a problem or issue in one particular case means that the emphasis is on achieving insights rather than about formulating general theoretical statements.

Where hypothesis directed research is going to be used in its narrow and strict sense, such as to prove or disprove ideas, then you should be very cautious, and carefully discuss your ideas with your supervisor, particularly about how you propose to operationalise your research hypothesis(es) in terms of data collection and quantitative analysis.

Collaborations and research partners

Access to field-settings, the formation of practical research ideas, often depends on working very closely with prospective respondents and practitioners. It is often useful to involve these in the management of your research. This very often brings an immediate relevance to your work and your findings can be disseminated quickly across user networks. However, a thesis must be theoretically grounded in a way that makes its contribution to knowledge obvious. So understanding must not be traded off against notions of 'practical utility'. Understanding comes first and the integrity of the researchers must never be compromised by expediency, or a desire on the part of the researcher to be useful. Most of all a researcher should never bow to experience - but find out for yourself! Try to provide checks in the design of your research so that other (wider, alternative, and critical) perspectives can be considered.

If you are working with an employing organisation, make sure that what they want you to do is also suitable as a thesis; otherwise you may end up doing two different projects. Give special thought to how you and your supervisor(s) are going to manage and involve any prospective sponsors. Be careful about confidentiality: if it is going to get in the way of the research making a contribution to knowledge - then forget it.

Think about your readers in terms of what they expect and want

A PhD is first and foremost an academic examination. Carry in your mind from the beginning what the examiners are likely to look for. In all the things listed below think about what your audience wants and expects:

- Be original and show initiative and imagination in your work. And do not hide your argument in clouds of qualifications and ifs and buts.

- But be careful about your creative conceit. Original or radical ideas about theory are dangerous. They are dangerous for *you*. Existing ideas are usually somebody else's property, so be careful how you treat them. Examiners have established their careers and reputations on the existing order, not on unconventional ideas. So always be careful to understand existing ideas and present any new ones in ways that make them understandable in terms of the old! Be humble and do not get carried away.
- The choice and definition of an appropriate area of study is important. What are you going to find out, is it realistic to investigate, and will it add usefully to the existing store of knowledge? Will the subject you choose to investigate be manageable and not be too open-ended? Make sure the mission, or general purpose of your work is clear.
- Take care over the sources and methods of data collection. Be sure you know the studies that are most like your own. Your work should relate to these, if it does not, you must be sure how your work is different, and what it means in terms of your (original) contribution in extending the findings of past studies.
- Be clear in analysis and argument. Be clear about what your academic discipline's perspective is, do not mix together evidence, findings, analysis, discussion, conclusions and recommendations, in the same place; but try to be ANALYTICAL and deal with these things separately, so that they lead naturally into each other to develop an argument.
- Consider and judge objectively the validity of your conclusions and recommendations that you propose on the basis of your analysis and how you feel your research progressed.
- Keep a good record of references from the very beginning of your work. When you come to write the thesis make it clear which references you quote, and try not to give the impression you are only listing references. It is better to concentrate on a few other studies in depth rather than be seen to cover a lot of ground superficially.
- And do not be precious. Do not attempt to read everything before you start work on the research and writing. It is bad scholarship to think you can read everything. Focus your efforts early on. Get on and do not use reading as an excuse to delay getting your hands dirty! You can modify your text as you proceed (you will be learning things as the research develops).
- Think about the quality of final presentation. An abstract is a summary of the whole thesis, which is physically separate from the text, but it typically inserted into it; as such it can be very helpful to a prospective reader. But remember to summarise well, as an abstract is a form of advertisement for your work. Sections and paragraphs should have common content and not contain any unrelated points

of information. Read booklets about how to write theses - these can usually be obtained at your university library.

And be happy

Choose a subject, a research approach, and a supervisor, you will be happy with. The road ahead is long with many twists and turns. Be prepared for this; do not let yourself be blocked. Try to keep a balance in all things. Keep a sense of proportion. Do not let a PhD take over your life. PhDs do this and you find your life being measured in chapters. But everywhere life goes on regardless, so watch out.....

Useful reading

- Bryman A. (ed.) (1988) *Doing Research in Organisations*, London: Routledge.
- Carter S. (1999) Anatomy of a qualitative management PhD. Part two – getting started, *Management Research News*, 22 (11), 9-22.
- Carter S. (1999) Anatomy of a qualitative management PhD. Part two – getting finished, *Management Research News*, 22 (12), 1-18.
- Howard K. and Sharp J. A. (1983) *The Management of a Student Research Project*, Aldershot: Gower Publishing.
- Perry C. (2000) *A Structured Approach to Presenting a Thesis: Notes for students and their supervisors*, <<http://www.emeraldinsight.com/literariclub/authors/articles8.htm>>
- Phillips E. M. and Pugh D. S. (1987) *How to Get a PhD*, Milton Keynes: Open University Press.