

How to Organize your Thesis

John W. Chinneck

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Declaration

I declare that this dissertation is my own, unaided work, except where otherwise acknowledged. It is being submitted for the degree of Master of Science in Engineering in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

Signed this ____ day of _____ 20__

John W. Chinneck

Abstract

This document provides a dissertation/thesis skeleton. The actual content is sampled from “How to Organize your Thesis” by J.W. Chinneck. See <http://www.sce.carleton.ca/faculty/chinneck/thesis.html> for the entire note.

To ...

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Contents

Declaration	i
Abstract	ii
Dedication	iii
Acknowledgements	iv
Contents	v
List of Figures	vii
List of Tables	viii
List of Algorithms	ix
List of Symbols	x
Nomenclature	xi
1 Introduction	1
2 Background to Graduate Research	2
2.1 What Graduate Research is All About	2

2.2	What the Graduate Thesis is All About	2
3	A Generic Thesis Skeleton	4
3.1	Introduction	4

List of Figures

List of Tables

List of Algorithms

List of Symbols

The principal symbols used in this thesis are summarised below, and the first equation in which each symbol appears is given.

Nomenclature

2D Two-dimensional

3D Three-dimensional

Chapter 1

Introduction

This note describes how to organize the written thesis which is the central element of your graduate degree. To know how to organize the thesis document, you first have to understand what graduate-level research is all about, so that is covered too. In other words, this note should be helpful when you are just getting started in your graduate program, as well as later when you start to write your thesis.

Chapter 2

Background to Graduate Research

Give chapter summary

2.1 What Graduate Research is All About

The distinguishing mark of graduate research is an original contribution to knowledge. The thesis is a formal document whose sole purpose is to prove that you have made an original contribution to knowledge. Failure to prove that you have made such a contribution generally leads to failure.

To this end, your thesis must show two important things:

- you have identified a worthwhile problem or question which has not been previously answered,
- you have solved the problem or answered the question.

Your contribution to knowledge generally lies in your solution or answer.

2.2 What the Graduate Thesis is All About

Because the purpose of the graduate thesis is to prove that you have made an original and useful contribution to knowledge, the examiners read your thesis to find the answers to the following questions:

- what is this student's research question?

- is it a good question? (has it been answered before? is it a useful question to work on?)
- did the student convince me that the question was adequately answered?
- has the student made an adequate contribution to knowledge?

A very *clear* statement of the question is essential to proving that you have made an original and worthwhile contribution to knowledge. To prove the originality and value of your contribution, you must present a thorough review of the existing literature on the subject, and on closely related subjects. Then, by making direct reference to your literature review, you must demonstrate that your question (a) has not been previously answered, and (b) is worth answering. Describing how you answered the question is usually easier to write about, since you have been intimately involved in the details over the course of your graduate work.

If your thesis does not provide adequate answers to the few questions listed above, you will likely be faced with a requirement for major revisions or you may fail your thesis defence outright. For this reason, the generic thesis skeleton given below is designed to highlight the answers to those questions with appropriate thesis organization and section titles. The generic thesis skeleton can be used for any thesis. While some professors may prefer a different organization, the essential elements in any thesis will be the same. Some further notes follow the skeleton.

Always remember that a thesis is a *formal* document: every item must be in the appropriate place, and repetition of material in different places should be eliminated.

Chapter 3

A Generic Thesis Skeleton

Give chapter summary

3.1 Introduction

This is a *general* introduction to what the thesis is all about – it is *not* just a description of the contents of each section. Briefly *summarize* the question (you will be stating the question in detail later), some of the reasons why it is a worthwhile question, and perhaps give an overview of your main results. This is a birds-eye view of the answers to the main questions answered in the thesis (see above).

All the above content is from <http://www.sce.carleton.ca/faculty/chinneck/thesis.html>. It's worth reading the rest — check it out!