

HOW TO PREPARE A SCIENTIFIC DOCTORAL DISSERTATION BASED ON RESEARCH ARTICLES

The article-based thesis is becoming increasingly common, especially in the “hard” sciences such as biology, medicine, and technology, and is beginning to replace the traditional monograph. Format guidelines vary among universities. This is the first book to summarize the main features, showing the PhD student how to prepare a thesis in such a format.

The suggestions are highly practical; both the good and bad examples from published theses support the author’s wise advice on all aspects of such theses. Poor figures are not only scrutinized in detail, but are also redrawn for comparison. Guidance also covers the issues of reprint permissions and copyright.

This informative and accessible book, by the author of *How to Write and Illustrate a Scientific Paper*, has developed through the author’s extensive teaching experience in scientific writing and also through his experience as a journal editor. It is an indispensable guide to article-based thesis success.

BJÖRN GUSTAVII has been teaching courses in scientific writing for doctoral students for over 30 years. He brings his personal experience to this book, both from his work as a journal editor and from producing more than 100 of his own research papers. He is the author of the highly successful *How to Write and Illustrate a Scientific Paper* (2nd edition, Cambridge, 2008).

How to
Prepare a
Scientific Doctoral
Dissertation Based on
Research Articles

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Preface

Before writing this book, I looked into a couple of thousand theses¹ based on published (and ready-for-publication) papers. Most of them I viewed on the Internet, but several I surveyed while on location in various university libraries. Merely seeing an image of a thesis on the Internet is not the same as having a paper version in your hands; to smell and feel the paper – I love it!

Although the examples shown are real (if not otherwise stated), bad ones are given without revealing the source. When I wanted to include a figure, I sought permission from the author. If the example was bad, the author was informed of the changes suggested and of the form the credit line would take, for example: *Reproduced from a thesis published in 2008, with permission*. All the authors asked gave me permission. I am grateful for your generosity, which has provided the readers with authentic examples from which to learn. Thank you!

This book is about the overall summary of a thesis (also called the *overview*²). It is thus *not* about the research papers which were

¹ The terms *thesis* and *dissertation* are used differently in different parts of the world. For example, in the USA, master's students write *theses* whereas in Britain, they write *dissertations*. At the PhD level, however, these terms are reversed. In this book the terms *thesis* and *dissertation* are used interchangeably.

² *Overview*: To mention a few variants, this is also called *contextual statement*, *explanatory essay*, *linking narrative*, *summarizing report*, *integrating paper*, *cover story*, *frame* and *synthesis*.

dealt with in my book *How to Write and Illustrate a Scientific Paper* (2nd edition, Cambridge University Press, 2008). Such research papers authored by the degree candidate have passed editorial scrutiny; the overview has not. As a former editor of a scientific journal, I had the experience of giving this overview a closer look.

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