The Publish or Perish Book

Your guide to effective and responsible citation analysis

Anne-Wil Harzing

Edition: September 2010

For inquiries about this book, refer to the book's web page:
http://www.harzing.com/popbook.htm

ISBN 978-0-9808485-0-2 (PDF)
ISBN 978-0-9808485-1-9 (paperback, colour)
ISBN 978-0-9808485-2-6 (paperback, black & white)

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Published by Tarma Software Research Pty Ltd, Melbourne, Australia.

National Library of Australia Cataloguing-in-Publication entry:

Author	Harzing, Anne-Wil.
Title	The publish or perish book [electronic resource]: Your guide to effective and responsible citation analysis / Anne-Wil Harzing.
Edition	1st ed.
ISBN	9780980848502 (pdf)
Notes	Includes bibliographical references.
Subjects	Publish or perish (Computer program), Authorship, Academic writing, Scholarly publishing.
Dewey Number	808.02

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PREFACE

Nearly four years after the launch of the software program Publish or Perish, I am delighted to introduce to you the Publish or Perish book, your guide to effective and responsible citation analysis. The Publish or Perish software was first introduced in October 2006, partly as a response to my unsuccessful application to full professor that same year. I reasoned that if I was going to be successful, I would need to present a case that simply couldn't be rejected. Publish or Perish allowed me to do exactly that (see page 84), and I was promoted to full professor in 2007.

Even before I put in my second application for promotion, however, I realized that Publish or Perish might not only be able to help *me*, but also many other academics in a similar situation. I therefore made Publish or Perish freely available on my website, www.harzing.com. Over the years, I have come to realize that PoP can be used for many more purposes than I initially envisaged. This book documents its many and variable uses and shows you how to get the best out of the software program.

Citations are not just a reflection of the impact that a particular piece of academic work has generated. Citations can be used to tell stories about academics, journals and fields of research, but they can also be used to distort stories. This book is meant to help you create effective stories, but also to teach you to be a responsible user of research metrics. I hope you enjoy reading it and applying its content to good use.

Stories gain color through examples and this book contains many of them. Giving meaningful examples requires a detailed knowledge of the person or field in question. Therefore, many of the examples involve my own work as well as the broader field of Business and Management. However, wherever possible I have drawn from a broader discipline base, and I would be delighted to hear about your own stories for future editions of the book.

ACKNOWLEDGEMENTS

As this book is self-published there were few people beyond myself involved in its realization. However, I would like to thank my colleagues Christina Cregan and Joeri Mol as well as my PhD student Shea Fan for reading the final manuscript and providing thoughtful comments.

Most of all, however, I would like to thank Ron van der Wal of Tarma Software Research for his initial implementation and continuous improvement of Publish or Perish. Without his patience, dedication, and expert programming skills, Google Scholar's potential for citation analysis would still be unrealized.

Anne-Wil Harzing
September 2010
Melbourne, Australia

CHAPTER 1:
INTRODUCTION TO CITATION ANALYSIS

1.1 INTRODUCTION

This book is a companion to the software program Publish or Perish (PoP). PoP was designed in the first instance to calculate citation metrics for a variety of purposes. As is discussed in detail in Part 2 of this book, it can be used in many different ways. In Section 1.1.1., I provide a very brief summary.

In this first chapter, I will provide a brief introduction to citation analysis as well as an overview of the most popular data sources and metrics in use. The chapter will conclude with an overview of the remainder of the book.

1.1.1 THE MANY AND VARIABLE USES OF PUBLISH OR PERISH

Academics that need to make their case for tenure or promotion will find PoP useful to create reference groups and show their citation record to its best advantage. When evaluating other academics, PoP can be used as a 5-minute preparation before meeting someone you don't know, to evaluate editorial board members or prospective PhD supervisors, to write up tributes (or laudations) and eulogies, to decide on publication awards and to prepare for a job interview. Deans and other academic administrators will find PoP useful to evaluate tenure or promotion cases in a fair and equitable way.

PoP can also be used to assist when you are uncertain which journal to submit it to. You can use it to get ideas of the types of journals that publish articles on the topic you are writing on and to compare a set of journals in terms of their citation impact. Once you have decided on the target journal, it can also help you to double-check that you haven't missed any prior work from the journal in question.

PoP can help you to do a quick literature review to identify the most cited articles and/or scholars in a particular field. It can be used to identify whether any research has been done in a particular area at all (useful for grant applications) or to evaluate the development of the literature in a particular topic over time. Finally, PoP is very well suited for doing bibliometric research on both authors and journals.

1.1.2 A CAUTIONARY NOTE

A word of caution before we start. This book provides lay users with an overview of how to use citation analysis in a more effective and responsible way. However, it is important to note that although high quality scholarship might be highly cited, citations are not in and of themselves a measure of quality. When assessing the quality of scholarship, there is no substitute for reading an academic's work.

Further, whether using metrics for counting publications or citations, another crucial question that should always be asked is: "Has the scholar asked an important question and investigated it in such a way that it has the potential to advance societal understanding and well-being?"

1.2 WHY CITATION ANALYSIS?

Governments worldwide, all of which have mandates to foster society's best interest, have introduced formal rankings-based research assessment processes. These national research evaluation systems reinforce universities' proclivity to systematically rank journals, scholars, and academic institutions.

In general we can distinguish two broad approaches to ranking: stated preference (or peer review) and revealed preference (Tahai & Meyer, 1999). Stated preference involves members of particular academic community ranking journals or universities (and less often academics) on the basis of their own expert judgments.

Revealed preference rankings are based on *actual* publication behavior and generally measure the citation rates of journals, academics or universities using Thomson ISI's Web of Knowledge. However, any source of citation data can be used. Publish or Perish is ideally suited to measure the impact of academics and journals with Google Scholar data.

If, after reading this book, you would like to learn even more about data sources, data metrics or any other aspect of citation analysis, you might be intrigued to know that there is a entire academic sub-discipline focusing on these topics: bibliometrics. Although bibliometrics is a multi-disciplinary field with relationships to the Sociology of Science and Science & Technology Studies, it is generally classified under Library and Information Sciences.

Journals most likely to publish articles relating to citation analysis are the longstanding *Scientometrics* (established in 1978) and *Journal of the American Society for Information Science and Technology* (established in 1950 as *American Documentation*), as well as the more recently established *Journal of Informetrics*.

1.2.1 FROM RANKING JOURNALS TO RANKING ARTICLES

Traditionally, journal rankings were used to evaluate the research impact of individual academics. Hence, rather than measuring the impact of an academic's individual articles, universities and governments would use the ranking of the journal (based on stated or revealed preference) as a proxy for the quality and impact of an academic's articles.

Although this practice is still common, the realization that this might lead to sub-optimal conclusion is gradually beginning to take hold. Although on average articles in top-ranked journals can expect more citations (this is the very essence of the Journal Impact Factor, discussed in Section 1.4.1), there is a wide variance. Several articles have shown unambiguously that highly-cited articles can be published in lower-ranked journals, whilst many articles published in top-ranked journals fail to gather a substantial number of citations. Based on their research, Singh, Haddad & Chow (2007: 319) warn that: