Books

Books come in all shapes and sizes, and so do their purposes. Consequently it is difficult to offer specific advice in a text of this kind. We can, however, consider two general issues here:

- (i) the relative difficulty of writing one kind of text over another; and
- (ii) general procedures in publishing books.

DIFFERENT KINDS OF BOOKS

I list here some different kinds of book with my - probably biased - estimates of how time-consuming and difficult it is to write them.

The popular science book (e.g. texts such as those by Oliver Sacks, Carl Sagan, Stephen Jay Gould):

These books are extremely easy to read, but they are probably much more difficult to write than it might seem. There might be much more polishing of the text than meets the eye. However it is done, it is beyond most of us.

The edited collection of previously published papers by the *same* author:

These books can only be written by well-established authors who want to show their contribution to the field. These books may, or may not, be suitable for course texts.

3 The edited collection of previously published papers written by *different* authors:

These books require much less writing by the editors, and the task is perhaps made more enjoyable if there are two or more of them who can share the debate about what to include. There is an opportunity here to include famous papers, but part of the art lies in avoiding large payments for copyright fees. These books sometimes form the basis for a course textbook. They may, or may not, suit all students on other similarly named courses in other institutions.

4 The edited collection of original chapters written by several different authors:

These books take longer to produce – not all of the potential authors deliver their chapters on time. These books have the advantage, though, of being more up to date than books in 2 or 3 above, but their contents might not be so outstanding, or well-known.

5 The conference collection:

Here many authors are often involved and consequently there is more room for delay. However, the conference collection (if it is not delayed in publication) can present the state of the art, particularly in new and developing fields.

6 The handbook:

The handbook combines categories 4 and 5. Here, the book is usually larger and the multiple chapters are original ones (usually reviews), written by acknowledged experts in the field. The handbook usually has a long gestation period and wider coverage and is destined for the library shelves rather than the personal library.

7 The individually authored textbook:

This is perhaps the most satisfying kind of book for an individual to write but it can be a hard slog. It is easier if you have a number of previous contributions to draw on.

GENERAL PROCEDURES

In order to publish a book, it is useful to think first about an appropriate publisher. Some publishers will have books on similar topics in their 'list', and others won't. It might be best to look to the first kind, for they will know the market better. Then it is a good idea to check these publishers out on the Web. Each will have a homepage with details about submissions — and possibly the names of their commissioning editors for the different categories of texts that they publish. A letter to such a person, making general enquiries about the suitability of what you propose to do, is then in order.

Many publishers have actual proposal forms on the Web. It is interesting to compare them, but they are fairly similar. What the publishers require is a synopsis of the text, probably one or two sample chapters and, sometimes, some indication of the author's prowess in the field. What they also require is an estimate of the 'competition' and of the size of the market: in other words, how many books will sell? For a proposal to succeed, the book 'needs to be of high quality, original, with no or few competitors, have a clearly defined audience, and promise to be a product (the publisher) can market at a reasonable price' (Woods, 1998, p. 129). Figure 3.1.1 shows an extract from the Web-based proposal form for Routledge – the publishers of this

Submitting a proposal

Four main areas need to be addressed:

- I A statement of aims including 3–4 paragraphs outlining the rationale behind the book:
 - Quite simply, what is your book about?
 - What are its main themes and objectives?
 - What are you doing differently, or in a more innovative way, or better than existing books?
- 2 A detailed synopsis and chapter headings with an indication of length and schedule:
 - Please list working chapter headings and provide a paragraph of explanation on what you intend to cover in each chapter.
 - This may be all that the reviewer has to go on, so a list of chapter headings alone is not enough.
 - If sample chapters, or a draft manuscript are available, please send them or let us know when they will be available.
 - How many tables, diagrams or illustrations will there be (roughly)?
 - Roughly how many thousand words in length will your book be?
 - Does this include references and footnotes? Most of our books are 80,000–100,000 words long.
 - When will you be able to deliver the completed typescript?
 - Please be as realistic as possible.
- 3 A description of the target market:
 - Who is your book primarily aimed at? Who will buy it? Who will read it?
 - Is it aimed at an undergraduate or postgraduate student audience?
 - What courses would the book be used on?
 - Is it a research monograph that will sell primarily to academic libraries?
 - Is the subject area of the proposal widely taught, or researched?
 - Would this subject have international appeal outside your home country?
 If so, where?
- 4 A list of the main competing books:
 - We would like some indication that you are familiar with competition to your proposed book. What are their strengths & weaknesses? What makes your book better then the existing competition?

It will also be necessary to include:

- I one or two sample chapters, or a draft manuscript, if available;
- 2 a curriculum vitae of all authors, and notes on any other contributors.

Figure 3.1.1 Extracts from Routledge's book proposal form.

Available at www.routledge.com; reproduced with permission of the publishers.

text. Examples of authors' actual proposals can be found in Haynes (2001, pp. 8–10 and 164–70) and Woods (1998, pp. 135–41).

If the commissioning editor likes the proposal, (s)he will take it to the relevant committee and, if they like it, the proposal is then (usually) sent out to referees. Sometimes authors are asked to nominate two or three such persons themselves, but not always. If the referees are favourable and make helpful suggestions, then the book might be deemed acceptable for publication – subject to a forthcoming contract.

Haynes (2001) considers the pros and cons of submitting a book proposal to one or more publishers at the same time. He comes to the conclusion that it is better to submit proposals to one publisher at a time as:

- a) commissioning editors will be annoyed if they find out that you have sent the proposal to other publishers behind their backs; and
- b) feedback from rejected proposals will help to improve the next submission.

Once you have got as far as the contract, you need to study it carefully – and perhaps discuss it with other authors that you know. There are things to look out for and to see if you can change – such as a low royalty rate – and there are things you might delete (such as guaranteeing that your next book will be considered first by this particular publisher). Other questions to ask include:

- Are royalties paid as a percentage of the list price (e.g. ten per cent of the cost of the book in a shop) or as a percentage of the publisher's net receipts (e.g. ten per cent of what the retailer returns to the publisher)?
 The latter will be less.
- Is the royalty rate increased after a given number of the books have been sold?
- If there is an advance against royalties, is this paid when you sign the contract, when you submit the manuscript or when the book appears?
- · How many free copies of the book do you get?
- How long are you given to correct the proofs and to prepare the index?

Items such as these are negotiable.

Haynes (2006) contrasts 'authors from hell' with 'dream writers' in terms of their behaviours (see Table 3.1.1).

Finally, these days authors need to consider their electronic rights. Many publishers now publish electronic versions of their printed texts as they occur, and they want to control the electronic book rights. Such rights require careful consideration. Advice can be found in the Society of Authors' *Quick Guide 8: Publishing Contracts* (2003).

Table 3.1.1 Authors from hell versus dream writers

Αι	Authors from hell		ream writers
•	Behave as though their book is the only one the publisher is	•	Read their contracts
	considering	٠	Alert the publishers to any difficulties
•	Believe their reputation is greater		
	than it is	•	Are happy to negotiate their contracts
•	Believe their own marketing ideas are		
	incontrovertibly good ones – regardless of reality, cost or time	٠	Write on the right subject, at the right level to the right length
			by the specified date
•	Break their contracts serially		
•	Are far too busy to contemplate collecting permissions or to create an index		

Adapted from Haynes (2006) with permission of the author and the Society of Authors. © Anthony Haynes.

WRITING THE BOOK

In writing a book, an author obviously wants to keep to the contract as far as possible but, by the very nature of things, may want to change some aspects of it. A chapter might get expanded, or deleted, or the sequence of the contents might change, and so on, but authors need to stick as far as possible to the underlying idea of the basic proposal. Some publishers send the final manuscript out to reviewers for further comments and adjustments before setting it for publication.

REFERENCES

Haynes, A. (2001). Writing successful textbooks. London: A. & C. Black.

Haynes, A. (2006). Authors from hell. The Author, CXVII(3), 99-100.

Society of Authors. (2003). Quick Guide 8: Publishing contracts. London: Society of Authors.

Woods, P. (1998). Successful writing for qualitative researchers. London: Routledge.

FURTHER READING

Luey, B. (2002). *Handbook for academic authors* (4th edn). Cambridge: Cambridge University Press.

Theses

I have on my desk a Dutch Ph.D. thesis (Kools, 2005). It is published, at the author's expense, in a paperback format, with a colourful, glossy cover, and it can be bought like an academic textbook. The content, in English, contains eight chapters together with an introduction and a summary. Seven of these eight chapters are basically reprints of academic papers, one of which has appeared in print, two of which are 'in press', and four of which have been submitted for publication. Other Dutch theses contain, with linking commentaries, only chapters that have been previously published or are 'in press' (e.g. Geraerts, 2006).

I mention this to make two points:

- that the ways of writing theses differ in different countries; and
- 2 that it might be useful to think about subsequent publication when writing a thesis . . .

WRITING A THESIS

Writing a thesis is like writing an academic article, only worse. The thesis is much longer. Unfortunately, students normally write their thesis before they start on articles, and they only write one. Thus, thesis writers typically have less practice and are less skilled at academic writing than are the more experienced authors of papers. Furthermore, many Ph.D. students writing their theses in English are non-native speakers of the language.

A thesis is much like a graduate student: It has a limited purpose and a small audience; it is often insecure and defensive, justifying itself with excessive documentation; it is too narrowly focussed; and it has not yet developed a style of its own.

(Luey, 2002, p. 34)

Disciplinary differences

There are disciplinary differences in theses, as there are in articles, in how they are written. Parry (1998) examined twenty-four Australian theses, eight in the arts, eight in the social sciences, and eight in the sciences. She showed that the language of theses (like that of articles) varied subtly within different disciplines. Parry argued that students had to learn to master these subject variations without being taught them explicitly. She found that, in the arts theses, there was a strong emphasis on argument in the writing, with writers arguing for new perspectives on the phenomena they were discussing. Arts theses were thus highly personalised and subjective. In the social science theses, Parry also found a strong emphasis on argument, but the arguments here were more likely to be based upon using and creating evidence, often in order to change the status quo. Parry found less argument in the science theses. Here, a series of studies was often reported, leading to statements and conclusions based upon the findings.

Different kinds of thesis

Paltridge (2002) described, with examples, four types of thesis, based upon an analysis of fifteen master's and fifteen Australian Ph.D. theses. These types were:

- *Traditional (simple)*: Here, typically, there were six sections: introduction, literature review, materials and methods, results, discussion and conclusions - the IMRAD structure writ large.
- Traditional (complex): Here there were more sections, for example introduction; background to the study and literature review; background theory and methods (optional); study 1 – IMRAD; study 2 – IMRAD, study 3 etc.; general discussion and conclusions.
- Topic-based: This type of thesis typically began with an introductory chapter followed by a series of chapters that had titles based on the subtopics of the main topic under investigation, for example introduction; topic 1; topic 2; topic 3, etc.; conclusions.
- Compilation theses: These theses comprised a compilation of research articles (as in Kools and Geraerts), for example introduction; background; research article 1; research article 2; research article 3, etc.; discussion and conclusions.

To this list we can add a fifth type:

The professional or practitioner doctorate: Here, the chapters might be formed of pre-prints of articles targeted at practitioner journals, or a mixture of both theoretical and practitioner chapters. These theses are likely to be shorter and more practical than traditional theses.

Some people have discussed other, non-traditional forms of theses. Duke and Beck (1999), for instance, discuss the novel as a form of thesis, and presentations in CD-ROM format.

These different formats for different types of thesis affect the students' writing requirements. Thus, for example, the initial literature review is probably more detailed and complex in the traditional thesis than it is in the compilation one. Furthermore, the audiences are different. The chapters in compilation theses are reprints of material written for a more specific. targeted audience (the readership of the journal in which they were first published), whereas the traditional thesis is targeted at a wider audience and is, therefore, perhaps more difficult to write. Similarly, the conclusion sections of topic-based theses will be different from those of compilation or traditional theses.

ELECTRONIC THESES

It is now conventional for Ph.D. writers to use word processing facilities to write their texts. In addition, it is getting more common to produce an electronic version of the thesis. Apparently, more than 50,000 doctoral theses and 100,000 master's theses are produced annually in this way in the USA (Moxley, 2003). Some universities are progressing in this direction in the UK, although there is much debate over the necessary regulations. Currently, there is discussion about providing an electronic theses online service (EThOS) to replace (or add to) the present-day inter-library loan service (see www.ethos.ac.uk).

Most of the electronic theses that can be downloaded from the Web follow the conventional format of traditionally printed ones, but there are variations. Thus, some use colour, animation, sound and hypertext (which allows the readers to read them in any sequence they wish). Dorwick (2003) presents a case-history of the difficulties of creating a web-based hypertext as a Ph.D. thesis: his paper suggests that people have to be very determined to write a thesis in this manner.

There are clear benefits to writing an electronic thesis. Single copies of traditionally printed theses sit on the library shelves in single institutions and are rarely read. Electronic theses are more easily available, making the contents accessible to a wider range of readers.

STRATEGIES FOR THE BEGINNING THESIS WRITER

The following tips (updated from Hartley, 1997) may be helpful when starting to write a thesis:

- Try to be well organised. Plan well ahead. Try to keep to the plan.
- Examine two or three theses in your discipline/area. This will show you
 what is required and how best to present it. Consider how appendices
 can be used to include material that gets in the way of the flow of the
 argument.
- Write from the beginning. Do not leave 'writing up' until the end you will forget what you did, and why you did it. So keep a written record. With word-processors you can easily add, change, move around or delete words, sentences, paragraphs and chapters. If the thesis is experimental, then early experiments and pilot studies should be written up in full at the time of doing them, even if this detail is not needed in the end.
- Make and keep clearly labelled back-up disks. Losing your work is shattering.
- Discuss what you are doing and why you are doing it with fellow students all the time. Report back to them on progress. Share methods, results and conclusions. Explaining things to others helps with the writing process.
- Think of how you might publish each chapter or parts of the thesis separately after the thesis is completed. Write them in such a way that it will be relatively easy to do this. Do not get distracted by this, however: the thesis comes first.
- Master at the outset the appropriate procedures for presenting text in your discipline, particularly the presentation of footnotes and references. References should be stored – preferably on a database – from the outset, in full detail. There is nothing worse than trying to find again something that you read several months ago, just to record the part number or the page numbers.
- Read the requirements of your institution for the presentation of the thesis. Most institutions, for instance, require the text to be double-spaced, and they specify the width of the margins necessary for binding the thesis. If you prepare your drafts to this specification, you will find that you will not make mistakes such as producing tabular arrays that do not fit in. Also, remember that a larger type-size (say 12-point) with 1.5 line spacing is necessary on an A4 page to make the text more readable.
- Submit regular drafts of subsections of your thesis to your supervisor, and ask for guidance on your writing – particularly if you are an overseas student.
- Make sure your supervisor eventually sees the thesis as a whole. It is not possible to judge the thesis as a whole by reading subsections on their own.

DISSEMINATING THE RESULTS OF DOCTORAL RESEARCH

New technology encourages the dissemination of doctoral research. However, theses are not normally written in a style that is appropriate for dissemination in conferences, journals or textbooks. As Luey (1990) points out, 'Textbooks differ in the level of difficulty, in format, and in the degree of illustrations . . .' (p. 121) as well as in their audiences. The same is true of articles. Many of the chapters in this text-book are based upon previously published articles. Some of these were written for postgraduates, some for academics in general and some for specialists. But, in writing this text, I have had to rewrite them all to make them more suitable for a mixed audience.

Dinham and Scott (2001) reported on the percentages of graduate students carrying out certain activities to disseminate the findings of their theses. In their first study, there were 139 respondents. Sixty of these (forty-three per cent) had disseminated their findings in one or more ways: fifty-one had made conference presentations, fifty had published a journal article, nine had written book chapters, seven had written books, five had written 'dissertation abstracts', and two had published in newsletters and electronically.

In their second study, there were fifty-three respondents. Here thirty-three (sixty-two per cent) had published the results of their research in some form before graduation, and forty-one (seventy-seven per cent) since graduation. Students who were supported by their supervisors and/or institutional policies had a significantly higher rate of publication that did those who were not.

REFERENCES

Dinham, S. & Scott, C. (2001). The experience of disseminating the results of doctoral research. *Journal of Further and Higher Education*, 25(1), 45–55.

Dorwick, K. (2003). Weeping stones, living trees: Creating and archiving electronic texts in student and scholarly writing. In J. R. Walker & O. O. Oviedo (Eds). *TnT: Texts and technology* (pp. 113–35). Cresskill, NJ: Hampton Press.

Duke, N. K. & Beck, S. W. (1999). Education should consider alternative formats for the dissertation. *Educational Researcher*, 28(3), 31–6.

Geraerts, E. (2006). Remembrance of things past: The cognitive psychology of remembering and forgetting trauma. Maastricht, NL: Maastricht University Press.

Hartley, J. (1997). Writing the thesis. In N. Graves & V. Varma (Eds.), Working for a doctorate: A guide for the humanities and social sciences (pp. 96-112). London: Routledge.

Kools, M. (2005). Get the picture? A cognitive-psychological approach to systematic health education materials design. Maastricht, NL: Maastricht University Press.

Luey, B. (2002). Handbook for academic authors (4th edn). Cambridge: Cambridge University Press.

86 Other genres

Moxley, J. M. (2003). The role of compositionists in creating the networked digital library of theses and dissertations. In J. R. Walker & O. O. Oviedo (Eds.), *TnT: Texts and technology* (pp. 137–47). Cresskill, NJ: Hampton Press.

Paltridge, B. (2002). Thesis and dissertation writing: An examination of published advice and actual practice. *English for Specific Purposes*, 21(2), 125–43.

Parry, S. (1998). Disciplinary differences in doctoral theses. Higher Education, 36, 273–99.

FURTHER READING

Kamler, B. & Thomson, P. (2006). Helping doctoral students write: Pedagogies for supervision. Abingdon: Routledge.

Murray, R. (2006). *How to write a thesis* (2nd edn). Maidenhead: Open University Press. Pollard, R. Q. (2005). From dissertation to journal article: A useful method for planning and writing any manuscript. *The Internet Journal of Mental Health*, 2(2) (pages unspecified) (www.ispub.com/ostia/index.php).

Chapter 3.3

Literature reviews

Whether it be a thesis or a paper, it is normal practice to begin with a literature review. The aims of these reviews can vary, however, and how they are tackled depends upon their purpose. Literature reviews can:

- show the history of a field;
- review the work done in a specific time period for example 'The annual review of . . . ';
- plot the development of a line of reasoning;
- integrate and synthesise work from different research areas;
- evaluate the current state of evidence for a particular viewpoint;
- reveal inadequacies in the literature and point to where further research needs to be done.

These different purposes define and control how and where writers search for the relevant information to review. Typically, researchers start by following up the references provided in several key papers and then proceed to the Internet (see Fink, 2005). The accumulating information (it never ceases) can be filed – electronically or in paper-based folders (see Chapter 4.1). If it is appropriate, it is also helpful at this stage to email or write to the authors of original papers to obtain copies of the materials used in experimental studies for, in my experience, the brief descriptions of such materials in journal articles do not do them justice.

STRATEGIES FOR PRESENTING RESULTS IN REVIEWS

There are at least six ways of presenting summaries of the results of research reviews, which can be placed along a continuum of statistical precision.

1 The narrative review: This is the kind of review that is typically used in this book. Writers research around a particular topic and then write a

review of the field, giving their own 'take' on it, selecting evidence from whatever seems appropriate to them. This type of review is most common in text-books and popular journals. I once provided a case-history account of how to write such a review that was motivated by the need to rebut a claim by the UK government that primary school children benefited from doing homework (Hartley, 2000). The government had used spurious claims in order to specify how many hours each week children in primary school should spend on homework.

- The narrative review with scoreboard: Here, writers strengthen the arguments of their reviews by supporting the claims made with tabular 'scoreboards'. Table 3.3.1 shows an example (with fictitious data).
- A scoreboard plus details: Table 3.3.2 shows an example (with limited data) of how more detail can be provided in a scoreboard. The advantages of listing individual studies in different categories are that it enables the reader to trace the studies should they wish and, if they are familiar with the field, to see if any have been omitted.

Table 3.3.1 A 'scoreboard' giving the number of studies that show homework has an effect at different ages*

	No. of studies showing that homework has or does not have an effect		
	Yes	No	(1)
Primary school studies	1	6	
Secondary school studies	10	3	

^{*} Fictitious data.

Table 3.3.2 An extract from a more detailed (unpublished) 'scoreboard'*

	Studies showing that homework has an effect		
	Yes	No	
Primary school	Alton-Lee and Nuthall (1990)	Cooper et al. (1998) Levin (1997) Miller et al. (1993)	
Secondary school	Cooper et al. (1998) Holmes and Croll (1989) Keith and Benson (1992) Rutter et al. (1979) Tymms and FitzGibbon (1992) Zellman and Waterman (1999)	Faulkner and Blyth (1998) Mau (1997) Wharton (1997)	

^{*} With many references left out to save space.

- A 'scoreboard' showing critical features: A common method of summarising results, particularly used in theses and dissertations, is to provide a table listing the key features of the studies being discussed. Table 3.3.3 provides a simplified and fictitious example. Such tables take a good deal of time to construct, but they can be enormously helpful for readers. The information provided in such tables also means that key information (e.g. the numbers and the ages of the participants, and the place of study) is not omitted, as often occurs in narrative reviews. Indeed, a series of such tables can be presented, each dealing with one particular feature in turn.
- Meta-analytic 'scoreboards': Meta-analysis involves pooling the results that can be found from all the known studies on a given topic. Sometimes this number of studies is very high (e.g. studies of the effects of television). and sometimes it is quite small (e.g. studies of the effects of homework). The aim, however, is to arrive at an overall summary of the results for the topic in question.

To conduct a meta-analysis, all of the studies known to the researcher (or team of researchers) are accumulated, and the results are averaged according to certain rules. This usually involves, first of all, discarding a number of studies that do not include sufficient data, or the right kind of data (see below). Then, for each one of the remaining studies. the mean score of the control group is subtracted from the mean score of the experimental group, and the result is divided by the standard deviation of the control group (or both groups combined). Finally, the results obtained in step two are averaged over all the studies. The ensuing result is expressed in terms of an 'effect size' that indicates the importance of a particular variable. Table 3.3.4 provides an example from the field of homework. Effect sizes are typically interpreted as follows: 0.0 = no effect; 0.2 = small effect; 0.5 = medium effect; 0.8 = large effect. Thus, in Table 3.3.4, the effects of homework get larger as the children get older.

Table 3.3.3 A 'scoreboard' with critical features'

Study	Age group	Number of pupils	Subject matter	Length of study
Abba (1988)	5–7 yrs	20 per year	Arithmetic	l week
Becca (1997)	7-8 yrs	2,0000	Varied	3 months
Cedda (2001)	6 yrs	10	Reading	7 weeks
Deffa (1999)	II-I2 yrs	25 per year	English Maths	8 weeks
Egga (1996)	12-14 yrs	13 per year	Science	I week
Fehha (2005)	15-16 yrs	21 per year	English	8 weeks
		150 15	Maths	
			Science	

^{*} Fictitious data

Table 3.3.4 Effect sizes for studies of the effectiveness of homework

	Homework versus no homework	Homework versus supervised study	Time spent on homework
Primary school	0.15	0.8	0.04
II-I4 years	0.31	0.24	0.14
15-17 years	0.64	0.33	0.53

Adapted with permission from Cooper and Valentine (2001). © Taylor & Francis, www.informaworld.

Some people think that such meta-analytic reviews are superior to narrative reviews, but others provide criticisms (see Fink, 2005). To carry out a meta-analysis you need to know the sample sizes and the means and standard deviations of the experimental and control groups in every study included. This stricture, of course, excludes qualitative studies, and these studies can make important contributions. Student performance in homework is undoubtedly related to what they and their parents think about it. There is also some debate over whether or not some studies should be excluded from the averaging procedure - say on the grounds of limited sample sizes - but with meta-analytic studies it is usual to include all of the studies that one can. Some studies, however, do compare the results obtained with different procedures. Anderson's (2004) meta-analytic review of the effects of violent video games, for example, contrasted the results obtained when all of the studies known to the author were included with those obtained from a smaller sample of better studies. In this case the better studies yielded higher effect sizes.

Evidence-based 'scoreboards': With the 'evidence-based' approach, more studies are excluded on particular methodological grounds when making the overall summary of the results. In medical research, for example, it is usual to exclude comparison studies where the participants have not been allocated at random into experimental and control conditions. However, it is difficult to do this in all areas of study, and randomised controlled trials (RCTs) are rare in social science research. Torgerson et al. (2003), for example, were only able to find twelve RCTs in 4,555 reported investigations into improving adult literacy and/or numeracy, and, I know of no RCTs on the topic of homework.

The criteria for including studies in evidence-based studies have thus got wider for disciplines in the social sciences compared with medicine, but there are still many strictures concerning what should and should not be included in reviews of this kind (see Andrews, 2005). The importance of the evidence-based approach becomes more obvious when the overall picture obtained from RCTs is different from that obtained

from studies using other, less stringent methods. Guyatt et al. (2000), for example, found that the pooled results from ten studies using RCTs in the field of sex education for adolescents showed no significant effects for the treatments overall, whereas the pooled results from seventeen non-RCT studies showed the treatments to be effective

SOME PROBLEMS

There are a number of problems in reviewing the literature that apply to all of the above strategies. First of all, there is what is sometimes called the 'file-drawer' problem. This relates to the fact that it is easier to publish studies that have statistically significant findings than it is to publish ones that do not, and so the latter get filed away. Torgerson (2006) calls this 'the Achilles heel' of systematic reviews, but it applies to all attempts to review the literature in any field.

Next, there is the problem of interpreting the findings of the published studies and seeing if these findings are relevant to your review. Research papers summarise a great deal of time and effort in a few pages. Reviewers summarise these papers in a few lines. Different reviewers emphasise different aspects of the same studies, and thus their accounts vary. Hartley (2000, pp. 166-7), for example, cites four different accounts of one particular study on homework. Readers reading only one of these may be mislead.

Relatedly, it may be more difficult to summarise adequately the results of qualitative studies. Dixon-Woods et al. (2006) discuss this at length in the context of summarising evidence-based studies and come to the conclusion that this really is a tricky problem.

Finally, there are some other assumptions made in literature reviews that do not withstand close scrutiny. These are:

- that different dependent variables (manipulated by different investigators in different studies but designed to test the same hypotheses) are of equal validity or importance;
- that the results obtained in one culture (e.g. American) are directly relevant to another one (e.g. British) and can thus be pooled together;
- that the results obtained in one period (e.g. the 1960s) are the same as those that would be obtained today;
- that the results obtained from limited samples (e.g. schoolchildren) apply to wider populations (e.g. adults); and
- that the results obtained in simplified experiments apply to the much more complex 'real world'.

When writing a literature review, one solution to some of these problems is to examine in more detail the original papers and, in particular, the original materials used in the papers being reviewed. There are few examples of reviewers using such strategies - although it is clearly advisable to do so when writing the literature review in theses. Hartley et al. (1980) provided three such illustrations. One, by Macdonald-Ross (1977), concluded that Vernon's (1946) results on the effectiveness of diagrams arose largely as a consequence of her using poorly designed diagrams. Similarly, Elashoff and Snow (1971) were able to write a devastating critique of Pygmalion in the Classroom after examining the tests and procedures used by Rosenthal and Jacobson (1968). And finally, Klare (1976) read thirty-six studies on the effects of readability upon the comprehension of text. Nine of these were published papers, and twenty-seven were unpublished theses. Klare found that 100 per cent of the published studies contained statistically significant findings, compared with sixty per cent of the dissertations. This, of course, altered the nature of his review, and his conclusions.

REFERENCES

- Anderson, C. A. (2004). An update on the effects of playing violent video games. Journal of Adolescence, 27(1), 113-22.
- Andrews, R. (2005). The place of systematic reviews in educational research. British Journal of Educational Studies, 53(4), 399-416.
- Cooper, H. & Valentine, J. C. (2001). Using research to answer practical questions about homework. Educational Psychologist, 36(3), 143-54.
- Dixon-Woods, M., Bonas, S., Booth, A., Jones, D. R., Miller, T., Sutton, A. J., Shaw, R. L., Smith, J. A. & Young, B. (2006). How can systematic reviews incorporate qualitative research? A critical perspective. Qualitative Research, 6(1), 27-44.
- Elashoff, J. D. & Snow, R. E. (1971). Pygmalion reconsidered. Worthington, OH: Charles A. Jones.
- Fink, A. (2005). Conducting research literature reviews: From Internet to paper. Thousand Oaks, CA: Sage.
- Guyatt, G., DiCenso, A., Farewell, V., Willan, A. & Griffith, L. (2000). Randomized trials versus observational studies in adolescent pregnancy prevention. Journal of Clinical Epidemiology, 53(2), 167-74.
- Hartley, J. (2000). Investigating homework: An outsider's view. In J. Hartley & A. Branthwaite (Eds.), The Applied Psychologist (2nd edn, pp. 163-78). Buckingham: Open University Press.
- Hartley, J., Branthwaite, A. & Cook, A. (1980). Writing reviews: Some problems of reviewing research in the social sciences. In J. Hartley (Ed.), The psychology of written communication (pp. 252-62). London: Kogan Page.
- Klare, G. R. (1976). A second look at the validity of readability formulas. Journal of Reading Behavior, VIII(2), 129-52.
- Macdonald-Ross, M. (1977). How numbers are shown: A review of the research on the presentation of quantitative information. Audio-Visual Communication Review, (25)4, 359-409.
- Rosenthal, R. & Jacobson, L. (1968). Pygmalion in the classroom. New York: Holt, Rinehart & Winston.

- Torgerson C. J. (2006). Publication bias: The Achilles heel of systematic reviews? British Journal of Educational Studies, 54(1), 89-102.
- Torgerson, C. J., Porthouse, J. & Brooks, G. (2003). A systematic review and metaanalysis of randomised controlled trials evaluating interventions in adult literacy and numeracy. Journal of Research in Reading, 26(2), 234-55.
- Vernon, M. D. (1946). Learning from graphical material. British Journal of Psychology, 36, 145-59.

FURTHER READING

- Fink, A. (2005). Conducting research literature reviews: From Internet to paper. Thousand Oaks, CA: Sage.
- Hart, C. (1998). Doing a literature review. Buckingham: Open University Press.
- Kamler, B. & Thompson, P. (2006). Helping doctoral students write: Pedagogies for supervision. Abingdon: Routledge.
- Petticrew, M. & Roberts, H. (2006). Systematic reviews in the social sciences: A practical guide. Oxford: Blackwell.

Chapter 3.4

Conference papers

The conference paper has been described as 'the essential launching pad for nearly all scholarly careers' (Gould, 1995, p. 37). According to Drott (1995), nearly half of the conference papers published in the sciences and the social sciences in the 1960s went on to become published papers — usually within two years or so. Similar results were reported in the field of medicine (see Weller, 2002). However, others have reported smaller proportions than this. Drott (1995), for example, found that only thirteen per cent of conference papers in information science were developed into publications, and Stolk et al. (2002) report that only thirty per cent of conference papers in medical contexts found themselves in print. More recently, conference papers can be found as preprints in some databases, and Schwartz and Kennicutt (2004) report that such papers were cited twice as frequently as those not posted.

There is also some evidence, but not a lot, that presenting papers in seminars and conferences can lead to shorter refereeing times and greater success in the refereeing process. Hartley (2005), for instance, found shorter refereeing times for papers previously given as conference papers in the American Journal of Psychology and in the Journal of Educational Psychology, but not in the Journal of the Experimental Analysis of Behavior. Brown (2005) found that two-thirds of the papers published in three major accountancy journals had been previously delivered in conferences or workshops. He concluded that:

- delivering workshop presentations and conference papers increased the probability of getting an initial favourable review ('revise and resubmit' rather than 'reject'); and
- 2 once such papers were published, they were more influential than were papers that had not been previously presented at conferences.

READING VERSUS SPEAKING

It is important to note that the conference paper is designed to be spoken and listened to; it is not a written paper. There may be a written version for

the conference delegates who want one, and for other enquirers, but in the conference itself the focus is on speaking and displaying information. In this connection, Gould (1995, p. 39) remarks that humanists inevitably read their papers from a manuscript, whereas scientists speak extemporaneously from written notes. He also says that scientists nearly always show slides, whereas humanists rely on text alone. These views may be exaggerations, and possibly now out of date, but they are important. Direct speech is clearer than spoken written prose. Thus, it is better to give a conference talk from a set of notes. perhaps prompted by visual aids, than literally to read the paper.

POWERPOINT

Most conference papers these days are accompanied by computer-based slides, and the most common of these use PowerPoint software. Such displays have met with considerable criticism (see Adams, 2006), but it is not all gloom and doom. There is some evidence from students that they like lectures accompanied by PowerPoint presentations (Susskind, 2005) and that slides presented by PowerPoint are preferred to the same materials presented on flip charts and overhead projectors in certain circumstances (e.g. see Austin-Wells et al., 2003). One feature that appeals to an audience is the ability to build up more complex pictures - by adding in more detail on each slide in a series. Students also appreciate the clarity and legibility of PowerPoint presentations, but they dislike poor typographic layouts and odd colour combinations.

Students are not happy either if the lecturer simply reads out the Power-Point slides. One rule of thumb that forces speakers to talk about their slides and not simply to regurgitate them is called the 7 x 7 rule: that is, use no more than seven words per line, and seven lines per slide: (some say 5 x 5). Another way of putting this is to say, 'Write no more on a slide than you would on a postcard'! But suggestions like these bring us back to the criticisms.

The most common criticism of PowerPoint presentations is that the presenters preparing such displays get preoccupied with their format and that, by necessity, they present simplistic arguments. Myers (2000), in an insightful chapter, contrasts giving a conventional lecture (without visual aids) with learning to give the same one with PowerPoint slides. Myers points to a dozen changes overall, leading him to conclude:

The overall effect is that what was before a carefully connected sequence, with some digressions for stories, and references to texts on a handout, was now a series of spaces, marked by rather flashy transitions.

(Myers, 2000, p. 184)

He continues: 'But these lists of formal changes don't quite get at the shift in effect'. He notes that students now focus on the screen rather than on him, and that:

I am seen as the animator rather than the source of the utterance. Instead of my speaking with the aid of some visual device, the text is speaking with my aid.

(Myers, 2000, p. 184)

Adams (2006) makes similar criticisms. PowerPoint, it is argued, controls the sequence of presentation (so that it is not easy to respond to an unexpected question), and it makes all the content appear equally significant. PowerPoint it is argued, does not help members of the audience to engage in higherorder thinking and deep understanding. Such arguments, of course, confound the method with the content. Vallance and Towndrow (2007) respond to these criticisms by indicating how one can use PowerPoint alone, and in conjunction with other methods, to achieve more desirable objectives.

THE WRITTEN TEXT

Although the conference paper is delivered orally, it is useful to have a summary version available as a hand-out during the talk. Handouts help listeners follow the presentation and grasp its overall structure. It may be helpful to reproduce copies of any of the key PowerPoint slides, but it is unwise just to present them all in reduced size. The handout needs to be readable, and much is lost if the spoken accompaniment to the slides is omitted. The hand-out should also contain the title of the talk, the speaker's name and institutional address, and the date and place of delivery. These are all useful features for listeners who might want to refer to it at a later date, or to write to the author to ask for an update or further information.

It is also helpful to have a full version of the paper available for distribution at the end of the talk and for later enquirers. Some authors these days do not provide actual copies of their papers at the conferences themselves, but let people know where they can be obtained. As one group of authors put it: 'The first author used to copy and pass out manuscripts at conferences, now she simply passes out a card indicating a www address where interested individuals can access the manuscripts via the Internet' (Murphy et al., 2003, p. 5).

No matter what the format, the conference paper should contain the same features described above for the hand-out. It is indeed remarkable that much of this information is often missing. Table 3.4.1 shows that, in one particular study of conference papers, only half of the papers stated where and when the paper had been delivered, and only half gave a sufficiently detailed contact

Table 3.4.1 Information provided (%) in a sample of 50 conference papers given at the American Educational Research Association's Annual Conference. 2004

	Yes	No
Information on where the paper was delivered	48	52
Contact address in sufficient detail to send for a copy	48	52
Abstract	52	48
References	94	6
Tables and/or figures	78	22
Acknowledgements	6	94

address. Furthermore, when these two features were combined, only twentyfive per cent of the papers had both of these pieces of information.

If you send for a conference paper today, you will find that what you receive may not be an actual copy of what was said at the conference, but rather a more detailed paper upon which the conference presentation was based (Hartley, 2004). What you receive may be a prepublication version of a journal submission or, indeed, a prepublication copy of a future book chapter. This reflects the fact that it is now normal practice for researchers to provide their latest findings on request.

REFERENCES

- Adams, C. (2006). PowerPoint, habits of mind, and classroom culture. Journal of Curriculum Studies, 38(4), 398-411.
- Austin-Wells, V., Zimmerman, T. & McDougall, G. J. (2003). Determining an optimal delivery format for lectures targeting mature adults. Educational Gerontology, 29(6), 493-501.
- Brown, L. D. (2005). The importance of circulating and presenting manuscripts: Evidence from the accounting literature. The Accounting Review, 80(1), 55-83.
- Drott, N. C. (1995). Re-examining the role of conference papers. Journal of the American Society for Information Science, 46(4), 299-305.
- Gould, S. J. (1995). Ladders and cones: Constraining evolution by canonical icons. In Silvers, R. B. (Ed.), Hidden histories of science (pp. 37-67). New York: The New York Review of Books.
- Hartley, J. (2004). On requesting conference papers electronically. Journal of Information Science, 30(5), 475-9.
- Hartley, J. (2005). Refereeing and the single author. Journal of Information Science, 31(3), 251-6.
- Murphy, P. K., Long, J. F., Holleran, T. A. & Esterly, E. (2003). Persuasion online or on paper: A new take on an old issue. Learning and Instruction, 13(5), 511-32.
- Myers, G. (2000). Powerpoints: Technology, lectures and changing genres. In A. Trosborg (Ed.), Analysing professional genres (pp. 177-91). Amsterdam: John Benjamins.

- Schwartz, G. J. & Kennicutt, R. C. (2004). Demographics and citation trends in astrophysical journal papers and pre-prints. 10 November. Retrieved 3 September 2006 from http://arxiv.org/PS-cache/astro-ph/pdf/0411/0411275v1.pdf.
- Stolk, P., Egberts, A. C. G. & Leufkens, H. G. M. (2002). Fate of abstracts presented at five international conferences on pharmacoepidemiology (ICPE): 1995-1999. Pharmacoepidemiology and Drug Safety, 11(2), 105-11.
- Susskind, J. E. (2005). PowerPoint's power in the classroom: Enhancing students' selfefficacy and attitudes. Computers & Education, 45(2), 203-15.
- Vallance, M. & Towndrow, P. A. (2007). Towards the informed use of information and communication technology in education: A response to Adams' 'PowerPoint, habits of mind, and classroom culture.' Journal of Curriculum Studies, 39(2), 219-27.
- Weller, A. C. (2002). Editorial peer review: Its strengths and weaknesses. Medford, NI: Information Today.

FURTHER READING

- Edirisooriya, G. (1996). Research presentation in a democratic society: A voice from the audience. Educational Researcher, 25(6) 25-30.
- Farkas, D. (2006). Toward a better understanding of PowerPoint deck design. Information Design Journal, 14(2), 162-71.
- Fischer, B. A. & Zigmond, M. J. (2006). Attending professional meetings successfully. Retrieved 1 September 2006 from www.survival.pitt.edu/library/documents/Attending professionalmeetings-general-2006.pdf.
- Hall, G. M. (Ed.) (2007). How to present at meetings (2nd edn). BMJ Books, Oxford: Blackwell Publishing.
- Kinchin, I. M. (2006). Concept mapping, PowerPoint, and a pedagogy of access. Journal of Biological Education, 40(2), 1-5.

Tables and graphs

Tables and graphs are important features in academic articles and conference papers – and indeed elsewhere. Table 3.5.1 shows the percentage of articles containing tables and graphs in a variety of journals in 2005. Generally speaking there are fewer of these features in journals in the arts and more in journals in the sciences, with the social sciences in between. These data suggest that there is not much to choose between the proportions of authors using *tables* in the sciences and in the social sciences, but that there are differences in how they use *graphs* in this respect. The 'harder', or more scientific the discipline, the greater the use of graphs (Smith *et al.*, 2002).

IMPROVING THE CLARITY OF TABLES

Authors can do a number of things to improve the clarity of tables. These relate to:

- 1 how they are constructed
- 2 how they are presented.

Constructing tables

The clarity of tables can be improved by paying attention to their size, complexity and organisation, as well as to the captions and the prose descriptions of the tables that appear in the appropriate parts of the text.

Table 3.5.1 The percentage of articles containing tables and graphs in four different journals in 2005

Journal (2005)	No. of articles	% containing tables	% containing figures	% containing both
J. Educational Psychology	56	96	70	61
American Psychologist	43	47	47	35
Studies in Higher Education	40	55	23	8
J. Scholarly Communication	20	10	0	0

Large tables and figures are comparatively rare in most research articles. Nonetheless, in the 2005 volume of the Journal of Educational Psychology, some twenty per cent of the tables occupy whole pages (approximately A4 size). This might be acceptable in an Appendix, but it makes life difficult for readers when such large tables are presented in the body of the text. Furthermore, another ten per cent or so of the tables in this same journal were printed sideways in either the right- or the left-hand column of the two-column page. Readers thus have to reorient the page in order to follow these whilst trying to read the text. As most research articles are available on-screen these days, it is worth thinking more about how to present information in screen-size tables that do not require head/page turning.

The complexity of tables can be reduced by paying attention to some simple rules. Such rules are:

- split large tables into smaller ones;
- produce one overall summary table rather than several small tables; for example, Table 2.1.1 (p. 26) summarises the data shown in four tables in the original article;
- provide clear captions that say what the table is about, or tell the reader what the table shows (some people look at the tables first before reading the text);
- round off the numbers so that readers can make meaningful comparisons more easily (giving data to four or five decimal points gives a misleading measure of accuracy);
- consider including averages (averages not only summarise the data but they also allow the reader to grasp better the spread of the scores presented); and
- 6 use the same layout for a series of tables to avoid subsequent confusion for the reader.

Tables 3.5.2 and 3.5.3 show the effects of rounding. The underlying organisation of a table needs careful thought. The reader needs to be able to grasp this intuitively, or at least quickly, so that data can be retrieved and inferences can be made correctly. Table 3.5.4 shows an original layout that is clarified in Table 3.5.5.

Table 3.5.5 is more successful, because its organisation matches how reading across the table fits in with the language one would use to describe the contents in the text. It is easier to read the productivity scores from left to right in Table 3.5.5, following the labels 'enthusiastic doers' and 'enthusiastic thinkers', than it is following the labels 'thinkers enthusiastic' and 'thinkers anxious' in Table 3.5.4. In addition, higher numbers are placed at the top of Table 3.5.5 rather than at the bottom.

Table 3.5.2 An original table that contravenes rule 2 by giving data too accurately*

	Number of applicants (thousands)					
	1997	2000	2003	2006		
Men	159.61	350.73	395.35	399.41		
Women	100.31	152.46	220.27	310.64		
Total	259.92	503.19	615.62	710.05		

^{*} Fictitious data.

Table 3.5.3 The data in Table 3.5.2, rounded up*

	Number of a	Number of applicants (thousands)					
Ţi.	1997	2000	2003	2006			
Men	160	351	395	399			
Women	100	152	220	311			
Total	260	503	615	710			

^{*} Fictitious data.

Table 3.5.4 The average productivity scores of different kinds of writers*

201	Enthusiastic	Anxious	
Thinkers	20.9	18.1	
(N)	(15)	(12)	
Doers	32.6	19.8	
(N)	(19)	(4)	

^{*} Fictitious data.

Table 3.5.5 The data in Table 3.5.4, reorganised to make it easier to read*

T .	Doers	Thinkers	
Enthusiastic (N)	32.6 (19)	20.9	
Anxious	19.8	18.1	
(N)	(4)	(12)	

^{*} Fictitious data.

Presenting tables

Some ways of printing tables in the text can cause difficulties for readers. One common problem relates to the positioning of the tables on the page. Tables are frequently placed mechanically by typesetters at the top or the bottom of a page (or column), irrespective of where they are mentioned in the text. This can cause difficulties for readers of an article when, say, the last table of the 'results' section appears in the middle of the 'discussion'.

Another related problem is how tables are fitted into the space allocated to them. Tables are typically set to fit the column- or page-width regardless of the effects that this might have upon their clarity. This can cause reading difficulties when a wide table cuts across the middle of a double-column spread. A more serious problem arises when the space between the columns is manipulated to make the table fit the space available, without taking into account whether or not that space is used to group the data appropriately. If, for example, there is more space between the data in the columns headed 'pre-' and 'post-test' for a series of columns, then the reader will group together unrelated data (see Table 3.5.6). Such problems of typesetting can be changed at proof stage - if you ask. There is no need to take them for granted.

Textbooks are available to help authors produce effective tables, ranging from the 'copy this' approach (e.g. Nicol and Pexman, 1999) to more detailed accounts of effective design (e.g. Tufte, 1983).

Prose descriptions of tables

Tables, and their contents, have to be explained to readers in the text. This can partly be done in the caption, but there is usually more to it than this. Salovey (2000) presents contrasting examples (see Table 3.5.7). He argues that the first one is 'statistics-based' and the second one 'reader-based'. In the first passage, we have no idea what was found until the end. In the second one, the findings come first.

Table 3.5.6 The effects of inappropriate internal spacing in a table: readers group together the wrong sets of data*

Condition	School A		School B		School C	
	Pre- test	Post- test	Pre- test	Post- test	Pre- test	Post- test
1	20	25	36	40	51	60
2	21	26	38	42	52	62
3	24	30	42	46	56	63
4	29	32	47	47	59	67
5	28	32	48	58	56	69

^{*} Fictitious data.

Table 3.5.7 Two contrasting descriptions of the contents of a table*

Description 1:

A two-way, 2 x 2 between-subjects ANOVA was performed on ratings of the vividness of childhood memories in which the independent variables were participant sex (male or female) and induced mood (happy or sad). There was no main effect for sex (F(1.99) =0.20. n.s.), but there was a main effect for mood (F(1,99) = 7.89, p < .01) and a sex by mood interaction (F(1,99) = 12.30, p < .01). Happy people had more vivid memories than sad people, overall. The effect was stronger for women than it was for men. As can be seen in the results from Tukey's studentized range test, reported in Table I, the vividness of happy and sad female participants' memories differed significantly, but the vividness of happy and sad male participants' memories did not.

Description 2:

Table I provides the vividness ratings for men and women who experienced happy or sad moods. The childhood memories of men and women did not differ in vividness, (F (1, 99) = 0.20), n.s. The most striking finding, however, was that the usual tendency for happy people to report more vivid memories than people in sad moods, (F (1, 99) = 7.89, p < .01) was stronger for women than for men, as indicated by a significant sex by mood interaction, (F(1, 99) = 12.30, p < .01). This finding is consistent with the hypothesis that mood has a more pronounced effect upon the quality of childhood memories among women than men and was confirmed with the Tukey's studentized range test reported in Table 1.

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IMPROVING THE CLARITY OF GRAPHS

Problems of typesetting can also affect the appearance of graphs - they too can be squeezed or enlarged to make them fit the space available, and this can affect the perceived importance of the results. And, like tables, graphs too can be separated from where they are first mentioned in the text.

Graphs can also be distorted by their authors – by expanding or contracting the spaces between the measures on the ordinate or the abscissa, or by only focusing on a range of results. Figure 3.5.1 shows the effects of such a strategy.

Pie charts, bar charts and line-graphs

It is usual in discussions such as this to distinguish between pie charts, bar charts and line graphs. Pie charts are much rarer in academic articles than are bar charts and line graphs, and probably should be avoided in this context. Pie charts are difficult to label and to read if they contain several segments (see Figure 3.5.2). Further, multicoloured segments do not copy well in black and white.

^{*} From Salovey (2000), pp. 125-6.

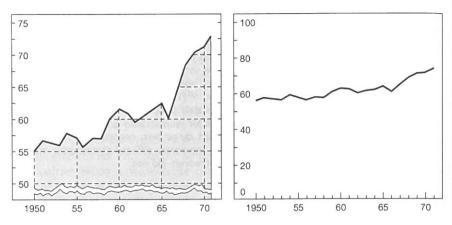


Figure 3.5.1 Plotting the same data with different vertical axes can affect the appearance of a graph and the inferences that are drawn from it (fictitious data).

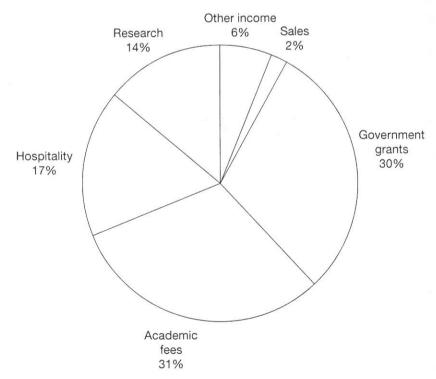


Figure 3.5.2 Pie charts are difficult to label and read when there are segments of different sizes (fictitious data).

Bar charts

Bar charts are easy to construct and are usually clear, but, again, difficulties arise with the labelling if several different components on each measure are presented (in different colours) for separate comparisons. Some authors also seem to forget that what looks clear with separate colours on a computer screen will not look clear in black and white. These difficulties are compounded when authors use computer-based packages to produce three-dimensional (3D) presentations. A sizeable literature now shows that 3D presentations are more confusing than 2D ones (Hartley and Yates, 2001; Mackiewicz, 2007). Figure 3.5.3 shows the differences that ensue, even on a simple chart.

Line graphs

Line graphs are good for showing, say, the performance of two or more groups in different conditions, especially when the data from the different groups vary according to the condition they are in - technically, when there is an 'interaction' between them. Figure 3.5.4 shows such an interaction that it is hard to describe in words and that is also sometimes difficult to detect in a table of numbers. However, line graphs can provide difficulties for readers when there are multiple groups (say, more than three) in multiple conditions (say, more than three).

Tables and graphs thus provide different ways of presenting data, each with their advantages and disadvantages. Writers need to think carefully about which method will be easiest for their readers to understand. Tables are probably best for displaying exact numbers; graphs for displaying trends in the data. As with tables, there are a number of useful texts on graphing techniques (e.g. see Nicol and Pexman, 2003; Tufte, 1983). A key concept introduced by Tufte (1983) is that writers should avoid the use of 'chartjunk' - all those embellishments that add clutter to a display.

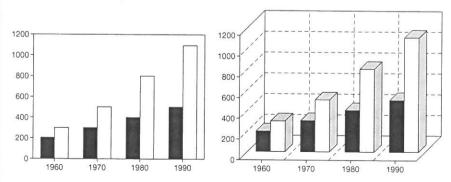


Figure 3.5.3 Two-dimensional displays are easier to read than are three-dimensional displays of the same data (fictitious data)

TABLES AND GRAPHS IN CONFERENCE **PRESENTATIONS**

Many of the features of tables and graphs discussed above are also relevant to their presentation in conferences. However, in conference presentations, it is best to present data drastically simplified - complexities can be covered in the talk. For conference presentations, tables and figures need to be an adequate size and to use few, possibly only two, contrasting colours (e.g. dark text on a pale background, or the reverse of this for darkened rooms). Full explanatory captions or titles on each slide also help (Alley et al., 2006).

REFERENCES

- Alley, M., Schreiber, M., Ramsdell, K. & Muffo, J. (2006). How the design of headlines in presentation slides affects audience retention. Technical Communication, 53(2), 1-10.
- Hartley, J. & Yates, P. (2001). Referees are not always right! The case of the 3-D graph. British Journal of Educational Technology, 32(5), 623-6.
- Mackiewicz, J. (2007). Perceptions of clarity and attractiveness in PowerPoint graph slides. Technical Communication, 54(2), 145-56.
- Nicol, A. A. M. & Pexman, P. M. (1999). Presenting your findings: A practical guide for creating tables. Washington, DC: American Psychological Association.
- Nicol, A. A. M. & Pexman, P. M. (2003). Displaying your findings: A practical guide for creating figures, posters and presentations. Washington, DC: American Psychological
- Salovey, P. (2000). Results that get results: Telling a good story. In R. J. Sternberg (Ed.), Guide to publishing in psychology journals (pp. 121-32). Cambridge: Cambridge
- Smith, L. D., Best, L. A., Stubbs, D. A., Archibald, A. B. & Robertson-Nay, A. (2002). Constructing knowledge: The role of graphs and tables in hard and soft psychology. American Psychologist, 57(10), 749-61.
- Tufte, E. R. (1983). The visual display of quantitative data. Cheshire, CT 06410: Graphics Press.

FURTHER READING

Few, S. (2006). Information dashboard design: The effective visual communication of data. Sebastopol, CA: O'Reilly.

Hartley, J. (2007). Guiding the copy editor: Positioning tables and figures in the text. PsyPag Quarterly Newsletter, Issue 63, June, pp. 54-9.

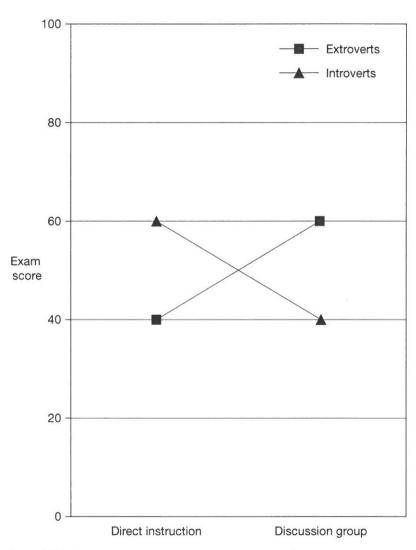


Figure 3.5.4 An interaction between the results obtained from two conditions (methods of instruction) and two groups (introverts and extroverts).*

^{*} Fictitious data.

Cha	pter	3.	6

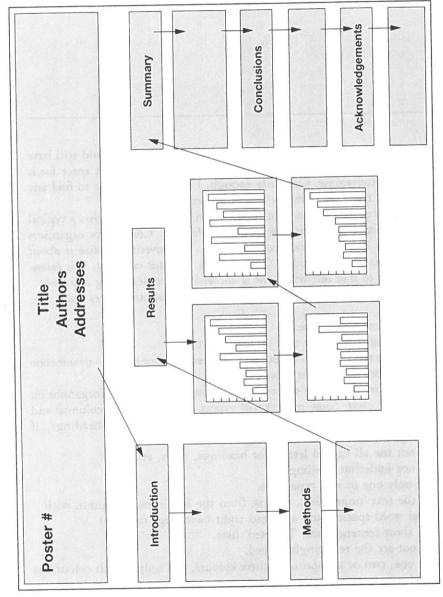
Posters

Poster papers were initially introduced to ensure that people could still have their work presented at conferences when there was insufficient space for it on the main programme. Curiously enough, I have been unable to find any assessments of their effectiveness in this respect.

Most papers on posters concern their design. Figure 3.6.1 shows a typical arrangement for a poster at a scientific conference. Conference organisers usually specify how large such posters can be. A conventional size is about 4 feet (120 cm) wide by 2.5 feet (75 cm) deep, but this can vary. It is essential, therefore, to find out what size is allowed before designing a poster.

Some suggestions for presentation, culled from various papers are:

- Have a clear, short title.
- Avoid acronyms in the title (and the text).
- Use a large type size (24–30 point). (Try reading your poster or someone else's from 3 to 6 feet away.)
- Use no more than three columns of text and make the flow/organisation
 of the text clear. Some readers will expect to go across the columns and
 some down. Using the IMRAD structure for the sub-headings, if
 appropriate, is helpful in this regard.
- · Do not use all capital letters for headings, titles, etc.
- Do not underline headings.
- Use only one or two type-faces.
- Set the text 'unjustified', that is, from the left in each column, with equal word spacing and a ragged right-hand edge (as here).
- Use short sentences and 'bulleted' lists.
- Do not set the text single-spaced.
- Use one, two or at most only three colours, and only if each colour has a didactic purpose.
- Do not use 3D graphics (see p. 107).
- Supplement your poster with a summary handout and/or a full paper that includes your name and address and the date and place of the presentation. This can be given to enquirers and people who pass by.



Reproduced with permission of Betch Fischer and Zigmond (2006), available at www.survival.pitt.edu. Figure 3.6.1 A typical format for a scientific poster.

Most poster presenters offend at least one or more of these rules. In particular, people seem reluctant to cut their material down to make it accessible on a poster, or to remember that text is hard to read from a distance. Even award-winning posters can be improved in this respect.

REFERENCE

Fischer, B. A. & Zigmond, M. J. (2006). Attending professional meetings successfully. Retrieved 11 July 2007 from www.survival.pitt.edu.

FURTHER READING

Nicol, A. A. M. & Pexman, P. M. (2003). Displaying your findings: A practical guide for creating figures, posters and presentations. Washington, DC: American Psychological Association.

Matthews, D. L. (1990). The scientific poster: Guidelines for effective visual communication. *Technical Communication*, 37(3rd Quarter), 225–32.

Chapter 3.7

Book reviews

Book reviews play an important part in academic communication. Most academic journals publish book reviews in addition to their articles and, indeed, some journals publish nothing but book reviews.

Book reviews are a special form of academic writing. They have well-known structures with familiar components. When writing book reviews, colleagues use a variety of phrases that carry hidden meanings (see Table 3.7.1).

Book reviews differ from academic articles submitted for publication because, in the main, they are solicited by an editor and are not subject to the normal refereeing process. Editors normally accept for publication the reviews that are submitted (although they may sometimes shorten them).

CHOOSING THE REVIEWERS

Different editors have different procedures for choosing book reviewers. Some, for example, maintain panels of authors deemed appropriate for the task, whereas others work more with their personal knowledge of authors in their field, perhaps guided by recommendations from colleagues.

Today, there are several journals where the editors do not personally select individual authors to review a particular book. Here, lists of books received for review are distributed by email attachments to a panel of reviewers and/or readers, who can then select any that interest them (e.g. PsycCRITIQUES, British Journal of Educational Technology). Completed book reviews are submitted by email or downloaded directly using electronic editing software. One or two journals provide electronic templates for their reviewers to follow when writing their reviews (e.g. International Journal of Commerce and Management).

WRITING BOOK REVIEWS: EDITORIAL INSTRUCTIONS

Because book reviews are not normally refereed, editors need to make clear what they require. Thus, there are usually instructions on these matters for

Table 3.7.1 The hidden meanings of phrases in book reviews

'This is a surprising book' This is better than expected

'A mixed bag'

Not much in this but one or two chapters worth thinking about

'A useful book for the library' Not very exciting

'The discussion is somewhat abstruse' I could not understand much of this

'For the most part this is a thorough, lucid and well-argued book but a few weaknesses can be noted. First . . .'

That's done the praise bit, now let's get down to the criticisms

'In my view more scholarly references would be better for the readers of this text than the par-boiled information referred to on web sites

This is a light weight text and/or My scholarship is superior to that of the authors

'The author has presented opposing views fairly, although instances of bias are detectable by the omission of some critical references'

He has left out my key paper on ...

'This is a useful account of unastonishing work' Oh dear . . .

(Last sentence) 'The authors' position leads them to omit key research and to propose work that is complex and interesting but which will not improve the education of children'

Ouch!

Bressler (1999) comments: 'The reviewer is able to compress complex ideas into a snappy 600 words and to substitute veiled allusion for systematic argument because he can trust his readers to decipher the message'. (p. 709)

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potential book reviewers. Such instructions typically cover technical matters, and content.

Guidance on technical matters

These instructions often start with an indication of the required length: Individual book reviews should be between 800 and 1,200 words in length, depending upon the amount of attention which you feel the book merits'. Indeed, advice about length is sometimes the only advice given.

There may, however, be further advice on layout: 'Reviews should be set justified and double-spaced'. In some journals a good deal of attention is given to how to head the review in the appropriate format for that particular journal (e.g. author - surname first - date of publication, title - in bold, place of publication, publisher, number of pages, ISBN number, price). Similarly, there are sometimes instructions on how to end the review, with the reviewer's name and institutional affiliation, and perhaps a request for some biographical notes.

Much space is devoted in some editorial instructions on to how cire quotations from the book being reviewed, and on how to provide references and/or footnotes. However, some journals explicitly forbid such details: 'Please use references only sparingly, if at all' (The Psychologist). Finally, there are instructions for submitting the finished review: for example 'Please send your review by 6th August to meet the November deadline."

Guidance on content

Some journals provide more advice. The Journal of the Medical Library Association, for example, provides potential book reviewers with lengthy notes on the aims and scope of the journal, together with a paragraph on what the content of the review might contain:

Reviews should contain a brief overview of the scope and content [of the book being reviewed] so that readers can determine the book's interest to them. Reviewing each chapter of a book is not necessary. For a research or historical work, please comment on its significance in relation to the focus area as well as to the field as a whole. For an applied or descriptive work, be sure to comment on its usefulness. In both cases compare the book with similar publications in its area and indicate its potential audiences, where relevant.

Other journals go further, for example:

The editor encourages reviewers to devote special attention to the political assumptions and discussions in the book under review.

(Law and Politics Book Review)

There are also – sometimes – suggestions about style:

We are seeking reviews that are incisive . . . integrative . . . balanced ... and provocative.

(PsycCRITIQUES)

It is not required that every review contain at least one negative remark. Selective detail is refreshing. Encyclopaedic detail – as in a chapter by chapter outline - is rarely called for.

(American Journal of Physics)

Book reviews 119

One or two journals remark on the possibility that a reviewer, having examined a book, may not wish to review it. Such books should be returned for re-assignment. Others comment on ethical matters:

Professional ethics require that you do not review a book when an overriding sense of personal obligation, competition or enmity exists.

(Law and Politics Book Review)

Nature requires its book reviewers to sign certain disclaimers (e.g. that they have not been in dispute with the book's author) before their review can be published.

Unsolicited book reviews

Some editors accept unsolicited reviews, provided that they meet the required standards. As one editor put it:

I strongly encourage unsolicited reviews.

(Journal of Technical Writing and Communication)

Others are more cautious, for example:

This journal does not publish unsolicited reviews. However, if you would like to be added to our database of potential reviewers, please fill in our potential reviewers data-sheet.

(The Hispanic American Historical Review)

Some editors are more blunt:

Unsolicited book reviews are not accepted.

(American Historical Review)

READING AND WRITING BOOK REVIEWS

In a recent study, I reported on my findings when I sent out an electronic questionnaire on reading and writing book reviews to groups of academics in the arts, sciences and social sciences (Hartley, 2006).

Approximately fifty people in each of these groups replied. Almost twothirds of them recalled reading a dreadful book review. Some of the things they said about such reviews were that they were:

- pointless, uninformative, indecisive and boring
- a mere listing of the contents

- pretentious, unkind and careless
- personally abusive about the author's credentials
- written to cherish the reviewer's ego.

Generally speaking, book reviews were not highly regarded if they simply outlined the content of a book using a chapter by chapter format.

On the other hand, approximately half of the respondents recalled reading an outstanding book review. Here they thought that such reviews:

- gave a balanced, critical evaluation of the text
- made seemingly dull topics interesting
- were well written, succinct and informative
- made theoretical contributions in their own right
- made people want to buy the book.

In a wide-ranging and informative paper, Miranda (1996) suggests that the key features of successful reviews are that the reviewer:

- evaluates the contribution of the text
- sets the work in a larger, broader context
- identifies the strengths and weaknesses of the arguments
- involves the reader in the discussion.

Miranda also notes that some book review formats are not used as extensively as they might be. She distinguishes between integrated formats, where there are several reviews on books on the same subject matter; multidisciplinary format, where one book is reviewed by people from different disciplines: special issue formats, where the reviews supplement and complement the theme of selected papers in that issue of the journal; review essay sections, where two or three books on the same or contrasting themes are reviewed by the same reviewer; and rejoinders, where a review is followed by the author's reply. All of these formats seem worth exploring more.

How then do authors write book reviews? Respondents to my questionnaire were reluctant to commit themselves. Most argued that it depended on the book in question. One, however, wrote: 'I use a basic sort of "recipe" that touches on all the information that I think readers of book reviews need'.

Two stages appear to be required. First of all, there is the preliminary reading and thinking about the book. Sometimes this is done before starting on the review, but some reviewers start making notes from the outset. At this stage, reviewers are concerned with selecting and thinking about information that will be relevant to the task. This might involve a trip to the library or to particular web sites to check up on required information.

Next comes the actual writing of the review. Here, different writers have different preferences. The quotations given in Figure 3.7.1 provide but two examples.

'I usually read completely the books I am reviewing (so as to be sure that I do not misunderstand them), marking parts that I think are particularly meaningful. Then I start by saying what the book is about and the intended audience (since having this information first may allow readers who are not interested to skip the rest of the review, and readers who are interested to raise their attention). Next I outline how the topic is developed, as concerns facets of content and depth of treatment. Then I point out what are in my opinion the points of strengths and weaknesses of the book. Finally, I try to give a global evaluation of my appreciation and possible usefulness of the book. Finally I polish the form and try to bring it to the required length. This writing phase lasts usually around two hours'.

'I read the book through, marking on it possible points for inclusion on (i) what the author says the book is about, (ii) possible key findings, and (iii) controversial statements. I then decide on which of these to include and which bits of the book to write about and what to leave out (because of space limitations). I word-process the first draft, which is usually too long, and then I cut it and continually refine it through numerous editings - with periods for incubation between each one - until it emerges, in my view, as a highly polished piece of prose!'

Figure 3.7.1 Examples of how academics write book reviews.

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Whatever the procedure, it is important that a book review contains a number of key features. Figure 3.7.2 provides a checklist that might prove useful in this respect.

Make sure that your review contains:				
	An early paragraph saying what the book is about, and putting it in			
	context			
	Information about the intended audience			
	A critique of the argument/content of the book			
	Any supporting academic references			
	Remarks on the strengths and limitations of the book			
	A note on the format, length and price (or value for money)			
	A note (if appropriate) on how well the text is supported by			
	tables/diagrams/illustrations			
If the following details are not supplied for you, please make sure that your				
review contains:				
	☐ Accurate details of the authors'/editors' names and initials			
	Title of the publication			
	Edition			
	Date of publication			
	Publisher and place of publication			
	ISBN number			
	Format (hardback, paperback or soft cover)			
	Number of pages			
	Price			

Figure 3.7.2 A checklist for book reviewers.

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REFERENCES

Bressler, M. (1999). Contemporary Sociology: A quarter century of book reviews. Sociological Forum, 14(4), 707-20.

Hartley, J. (2006). Reading and writing book reviews across the disciplines. Journal of the American Society for Information Science and Technology, 57(9), 1194-207.

Miranda, E. O. (1996). On book reviewing. Journal of Educational Thought, 30(2), 191-202.

FURTHER READING

Lindholm-Romantschuk, Y. (1998). Scholarly book reviewing in the Social Sciences and Humanities: The flow of ideas within and amongst disciplines. Westport, CT: Greenwood Press.

Hyland, K. (2004). Disciplinary discourses: Social interactions in academic writing. Ann Arbor, MI: University of Michigan Press.

Nicolaisen, J. (2002). The scholarliness of published peer reviews: A bibliometric study of book reviews in selected social science fields. *Research Evaluation*, 11(3), 129–40.