

The Literature Review

A literature review is:

- 1) A list of books and journal articles,
- 2) on a specific topic,
- 3) grouped by theme,
- 4) and evaluated with regard to your research. This evaluation would identify connections, contradictions and gaps in the literature you have found.

The purpose of a literature review, therefore, is:

- 1) To get a feel for the agreed academic opinion on the subject (the connections).
- 2) To discover the disagreements on the subject (the contradictions).
- 3) To find opportunities, (the gaps), for developing and expressing your own opinions.

The classic pattern of academic arguments is

THESIS, ANTITHESIS, SYNTHESIS

An Idea (Thesis) is proposed, an opposing Idea (Antithesis) is proposed, and a revised Idea incorporating (Synthesis) the opposing Idea is arrived at. This revised idea sometimes sparks another opposing idea, another synthesis, and so on...

If you can show this pattern at work in your literature review, and, above all, if you can suggest a new synthesis of two opposing views, or demolish one of the opposing views, then you are almost certainly on the right track.

Steps in compiling a literature review are:

- 1) Select a specific topic (the more focussed, the better, or you'll go on for ever).
- 2) Collect the most relevant (usually "peer reviewed") books and articles.
- 3) Read/skim them, using the abstract (a short summary attached to the article).
- 4) Group the articles into the sub-themes of your topic.
- 5) Identify within each sub-theme those points on which the articles agree, those points on which they disagree, and those points which they don't cover at all.

1) Choosing your topic

Seek advice from a lecturer or tutor on this, if a topic is not already assigned. It is very common for students to bite off more than they can chew, simply because they have not realised the full breadth and complexity of an apparently simple topic. It is better to cover a tiny topic perfectly, than a huge topic superficially.

Look for a topic on which there is polarised opinion. It often helps to pick one in which a question is being asked, for example: Is a particular taxation policy beneficial or disadvantageous to a developing country?

When authors disagree, this provides an opportunity for you to enter the debate and argue for one side or another in your essay. Taking a hatchet to someone's opinions (a) gives you something to write about, (b) is fun, (c) is the foundation of much modern scholarly writing.

2) Collect the most relevant (usually "peer reviewed") articles and books

The three tools for finding these books and articles are, in this order:

(a) the relevant section of a good subject encyclopedia, which usually describes the development of the discourse on that subject, gives you an overview of the territory, and ends with a bibliography of the key works on that field.

(b) the library catalogue and

(c) the library databases of electronic journal articles.

Before you search them, spend a minute thinking about the best terms to use. Make a list of alternative words that describe your subject, and also think about general terms and more specific terms. This is important because the journal databases are good for finding very specific terms in articles, but the library catalogue tends to use more general terms.

To access the library catalogue (Primo) go to www.lib.uct.ac.za and use the Primo search interface.

If you find a good book reference, scroll down to the bottom of the reference and you will find the subject terms the library cataloguers have assigned to it. Click on that term to call up more books just like the one you have found.

A quick way to check the relevance of any books you find is to glance at the table of contents, the introduction and any descriptive blurbs on the back cover. The index at the back of the book not only helps you dive to very narrow topics in the book, but also gives you an indication of how much attention (i.e. how many pages) the book spends on that specific topic.

If you are satisfied with the book, look at the bibliography in the back – this can help identify other relevant sources. Following a chain of references in a bibliography like this, whether in a book or a journal article, is one of the most basic techniques of scholarship – find something that is relevant and look at the sources it used.

The library's journal databases are particularly helpful for literature reviews. Journal articles are short and cover very specific topics, so they are more digestible than books and more likely to deal exactly with your topic. They are also quicker to publish than books and so are more likely to be up to date.

To find journal articles by subject go to the library home page at www.lib.uct.ac.za , mouse over **Search & Find**, and select **Databases A-Z**.

Many of these databases allow you to restrict your search to "Peer Reviewed" journals only – these are the most scholarly journals, for which each article has to be vetted by other academics before it is accepted.

Many of our databases are Full Text – so you can usually get the whole article on your desktop for downloading, e-mailing or printing – you don't have to find it in print on the shelves.

While you can search Primo, or individual journal databases, as simply as you search Google, you can also type in very precise searches by using And, Or, Not operators, Wildcards and Logical Brackets.

An example of such a search would be:

Information Technology AND Brain Drain AND (Employ* OR Jobs OR Labo?r) NOT United States

The AND operator narrows a search – all listed elements must be mentioned in each article: in this example we want articles that cover both Information Technology AND the Brain Drain.

The OR operator expands a search – any of the listed elements must be mentioned in each article: in this example we wanted Information Technology Brain Drain articles that discussed either Employment or Jobs or Labour. The OR operator is useful for dealing with alternative terms which different authors might use when writing on a similar topic.

The Brackets tie the options to the required material. In this example they make sure that any articles we get on labour or employment are concerned with Information Technology and the Brain Drain. If we didn't have brackets here the search would just bring up every reference to labour in the database, whether relevant to Information Technology or not.

The Wildcards, * and ?, expand a search: The * deals with related words. In this example Employ* means that we get all words starting with "Employ..." – such as Employment, Employee, Employees, Employers...

The ? fills in a missing letter, and is used for covering alternative spellings in British and American English, both Labour and Labor in this example.

NOT weeds out anything you've got too much of. Many of our databases are American products, for example, and you can often be flooded with reports on the American situation unless you weed it out.

3) Read/Skim the articles, using their abstracts

Most of the articles will have an abstract. This is a short paragraph at the head of the article that lists the main facts and arguments in each article. By reading these you will quickly get the gist of what each article is about and where it fits into the pattern you are building up in your literature survey.

How many books and articles should you have? It's wise to check this with your lecturer or tutor. In general, though, your aim is not to cover every single book or article, but every major opinion or theme on the topic. Many of the books or articles will add very little that is new.

Therefore a short list of really scholarly, relevant, comprehensive articles is often more effective than a list of hundreds of superficial or tangential articles.

What you are ideally looking for are the "seminal" articles (seed articles) on which most of the other authors are basing their work.

4) Group the Articles into the themes and sub-themes of your topic

Obviously, it helps to have a structure in mind already, but the articles you find will often help to suggest a structure or cause you to redesign your existing one.

Herewith a hard-learned tip:

There are tides and seasons in academic publishing – a topic is often hot for a few months, then dies, then is revived to be attacked from a different angle, then dies, then is revived again to be discussed from a third angle... remember, Thesis, Antithesis and Synthesis?

This has two implications for studying the results on a database search:

Just because there is nothing much in the recent articles does not mean that it was not hot a few months or years ago, so scroll back in time down the list, or jump right to the earliest reference and scroll up through time to look for a hot spot.

The tides of article titles often tell a story that can help you shape your literature review.

For example, in a list of journal articles on Information Technology and Employment you might find that:

The earliest articles are all about how hard it is to find skilled IT workers.

Later you get articles about UK and US firms desperately recruiting school-leavers and training them in IT skills on the job.

A year later you get articles about how countries like India and South Africa are doing the same thing.

And not long after that you get articles about India and South Africa having a huge, skilled IT workforce, working far more cheaply than the US and UK workforce, and lots of UK and US projects being outsourced to them.

Then you get complaints about unemployment in the IT sector in the UK and USA.

Then you get stories about how employers in the UK and USA have become very choosy about whom they employ, insisting on really good academic training, loads of experience and very-specialised skills.

Then you get the latest stories which are all about how new IT entrants, without that experience, start packing their bags to gain experience elsewhere...

See? Story!

Many database lists of academic articles tell this sort of story when they are looked at in date order. Either they reflect swings in world events or they are reflecting swings in academic debate and opinion. Seeing such a story in the literature is a great help in structuring any literature review.

In particular, look out for the major triggers of such changes: When did the first swing to a new track happen, and what event or article provoked it?

When you find an article that has provoked a major swing, or started a whole new debate, then you are looking at the "Seminal" (Seed) article that I mentioned earlier. This sort of article is often the best sort of article to identify in a literature review – many of the other articles will just build on, comment on, or attack its basic arguments.

Using a Citation Database

If you find a seed article, or any other really good article, we have a magic database, called the ISI Citation Database, which can find all the other articles which have cited that article, either because they support it or because they disagree with it.

The ISI Citation Database is on our database list under ISI WEB OF SCIENCE. There are three versions of it, covering the Sciences, Social Sciences, and Arts and Humanities. You can search all three at once.

Go to "Cited Ref Search" and type in the author's last name, the journal in which his article appeared and the year it appeared in the appropriate boxes. This will bring up the authors and articles that have followed or disagreed with that author.

Unfortunately this database is not full text, but you can often get the full text of the articles off one or other of our alternative databases.

Another way of doing a citation search is to download Harzing's *Publish or Perish* software from <http://www.harzing.com/pop.htm>. This does a lovely job of tracing citations on Google Scholar.

6) Identify within each sub-theme those points on which the articles agree, those points on which they disagree, and those points which they don't cover at all.

The abstracts can help with this, of course. The main trick is coming up with, or spotting, the sub themes and that is simply a matter of brain work. But if it is done well, and you have taken the trouble to find good sources, then you will find, quite magically, that you have constructed the skeleton and a good bit of the flesh and blood of your essay or research project.

In fact, a good literature review can result in an essay that virtually writes itself.