Guide to "literature-reviewing"

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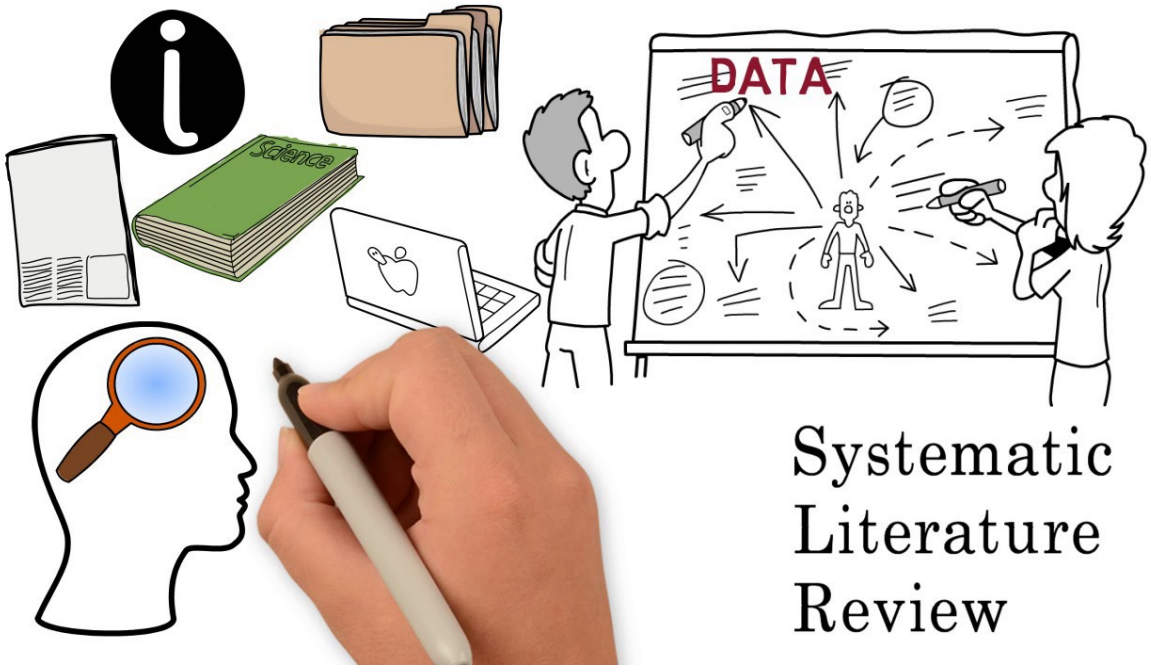

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Words of encouragement

There is probably three stages where encouragement is needed, especially when you are a post-graduate student.

The first stage: This is a daunting task and I have no idea how to start…

The second stage: Why do I keep getting more and more references, when will this stop, never?

The third stage: I survived till now…but brain is fried…

This is where you stop working on the review for say a week. Then you should be able to tackle the issues again.

The final stage: Frantically trying to finish either because time is up, you are exceedingly fed up, or you think otherwise you will never have a normal life again.

Bottom line, this takes a while and a lot of work, so do not underestimate it. That is without having to edit the style of the text (all the et als, making sure all your references are cited, fonts etc) and making sure there are no grammar and spelling mistakes.

But, practise makes perfect, if you get into the habit to work neatly and methodically, it actually becomes easier after each experience.

Good luck.

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1. How to get started

1.1 My working title

My research project/topic theme

_____

_____

My eventual and final research project/topic theme

_____

_____

My first title:

_____

_____

My "later-on" title:

_____

_____

My final title

_____

_____

Random notes:

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2 What is needed

For a project/proposal:

My research project is:

_____

_____

_____

What will the impact of my research project be?

_____

_____

What must I know to do a good research project? These becomes your main headings (may have other titles).

A. **WHAT** has already been done, and/or not done (can become topic 1)

_____

_____

B. **WHY** did they do it or could not do it (can become topic 2)

_____

_____

C. **HOW** did they do it (can become topic 3)

_____

_____

CONCLUSION: What is state of affairs, where should focus be……..This will motivate your study

_____

_____

Random notes:

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For a review-of-the-literature publication or thesis:

My research theme is:

_____

_____

What will the impact of my review be (why am I doing this)?

_____

_____

What must I know to do a good review:

Choose THREE topics to start with that are the most relevant/poorly summarised/topical etc. to what you want to do. From these THREE topics you can build out more later on (but not too many). Use these topics to sort everything that you are reading under the appropriate topic and to plan where to put your ideas/facts. The topics will form the bulk of your review, and your main headings (may have other titles).

A. **Topic 1**

_____

_____

A. **Topic 2**

_____

_____

B. **Topic 3**

_____

_____

CONCLUSION: What will impact of review be/summarise state of knowledge/motivate your project

_____

_____

Additional topics:

_____

_____

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For a critical review publication:

My research theme is:

_____

_____

What will the impact of my review be?

_____

_____

What must I know to do a good review? These becomes your main headings (may have other titles).

B. **WHAT** has already been done/is known, and what did it mean? (Can be topic 1)

_____

_____

C. **WHAT** has NOT been done/is not known, and what are the implications? (Can be topic 2) Why?

_____

_____

D. **WHAT** is the best way forward? (Can be topic 3) Why?

_____

_____

CONCLUSION: What will the impact be……..

_____

_____

Random notes:

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3. Pages to organise ideas and facts

- It will help tremendously if you already put in your citations below (you will forget where you read things at some point) and to also add the useful publications to a program used to store references to your publications (e.g. Mendeley, Refworks, Endnote).
- I always develop the body of my review first. Only after that do I tackle the introduction and conclusions, and at a later stage.

TOPIC 1:_____

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TOPIC 2:

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TOPIC 3:

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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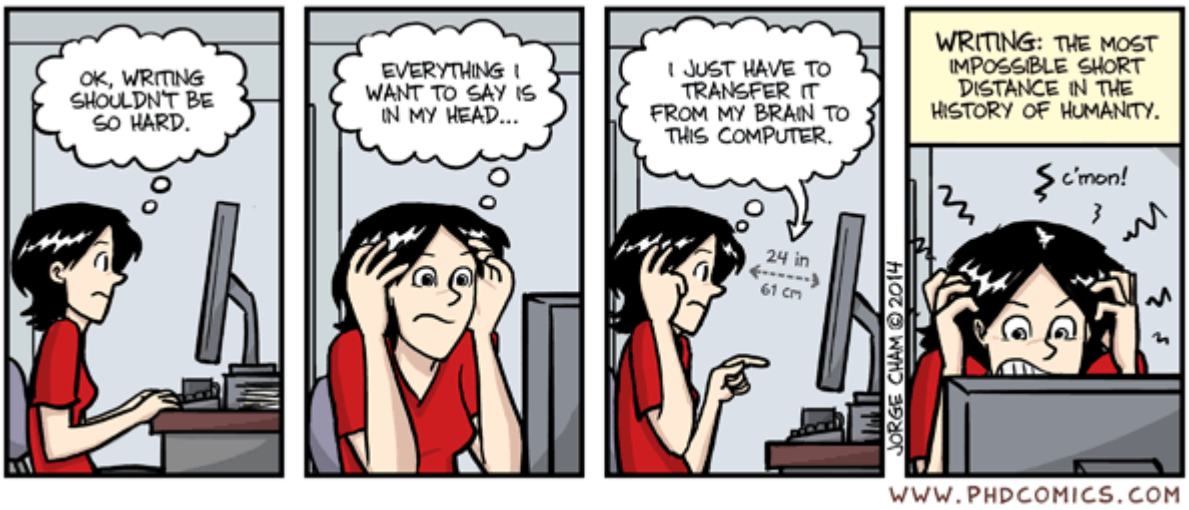
RANDOM NOTES:



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4. Organizing the content

1. Now you need to organise the facts/ideas into groups that have the same theme (remember to keep your references). These becomes your subheadings or paragraphs. (Colour code them, e.g. link to coloured topics with coloured markers on your papers)
2. After you organized them in groups, come up with a strong sentence that reads more like a statement that defines the topic for that group. **Highlight it**. Do this for both your subheadings AND each paragraph.

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TOPIC 2:

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TOPIC 3:

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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5. Obtain logical flow

1. Now take your highlighted topic sentences for each group and decide on the most logical flow for them. Reorganize them accordingly (e.g. number them in the order you think works). They will become your paragraphs. (Imagine each paragraph is one presentation slide). Number them or use small pieces of paper.

2. Now do the same for the various facts and ideas within each group, organize them in a logical flow (same way as 1.). No need to write out the sentences fully, can write as if it is a presentation as long as you understand yourself and keep the citations.

TOPIC 1:_____

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TOPIC 2:

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TOPIC 3:

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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6. Take a break

Now take a bit of a break from your review so that your brain can rest a bit (remove yourself from everything).

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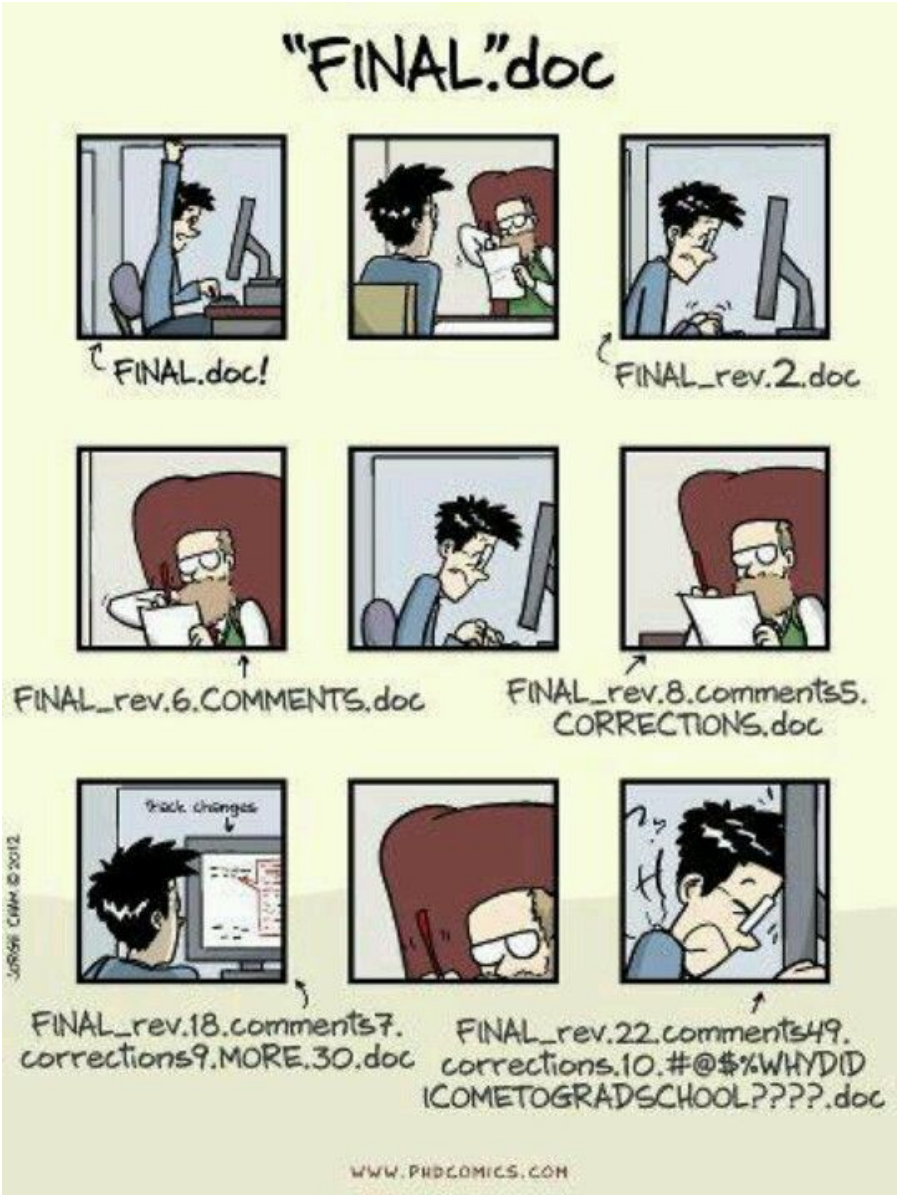
7. Revise, revise, revise….

When you are fresh again, REVISE everything you have done.

Repeat this till you (and your supervisor later on) are happy that you hit the spot. (Extra pages that you can use at the end. Copy as many as you need)

Note: You will notice you have not really been writing yet, but a good organization or layout is critical for any written piece, and will fly even if you feel you write terrible. It will also ensure that you do not repeat things randomly throughout the manuscript, write extra or irrelevant things, and will make your review complete before you actually start to write it. And you will be much less drained.



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EXTRA PAGES

TOPIC 1:

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TOPIC 2:

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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ADDITIONAL TOPIC:_____

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8. Introduction and Conclusions

You are now ready to compile your introduction and conclusions. With the bulk of the facts part of the topics of your review, the Introduction and Conclusions related to your MAIN project/theme (i.e. your research project). The Introduction is more an introduction and motivation for your review and the Conclusions a summary of everything (or highlights, problem areas, lack or study…). You may still need references here. Use the same process as before to develop them.

INTRODUCTION.:

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CONCLUSIONS:

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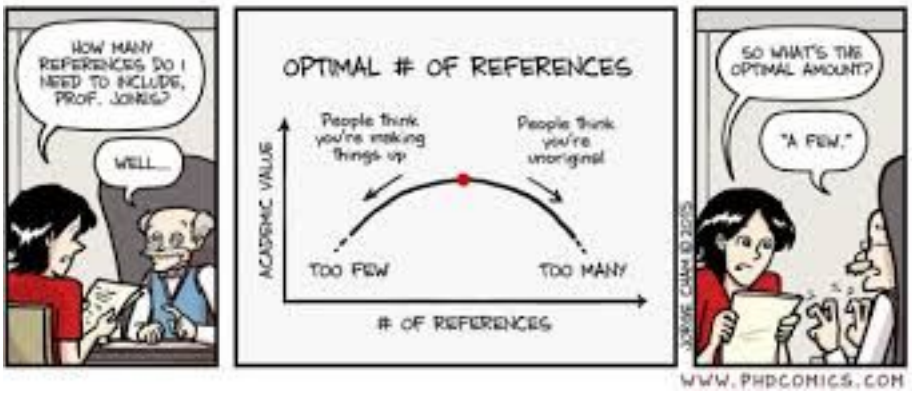
9. References

If you have already added the papers you used to a referencing program, all you need to do is to follow your text to see which references you used and that need to be inserted as the full citations under the References section (using your referencing program).

Ask your supervisor for a journal style, and follow it rigorously (this is the first place where examiners and reviewers can see how carefully and neatly you worked). Personally I like Fungal Biology)

Lastly, cross check carefully that all the references are cited in the text, and that the citations in the text all have full references. Some examiners/reviewers actually do check….



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10. Tables and figures

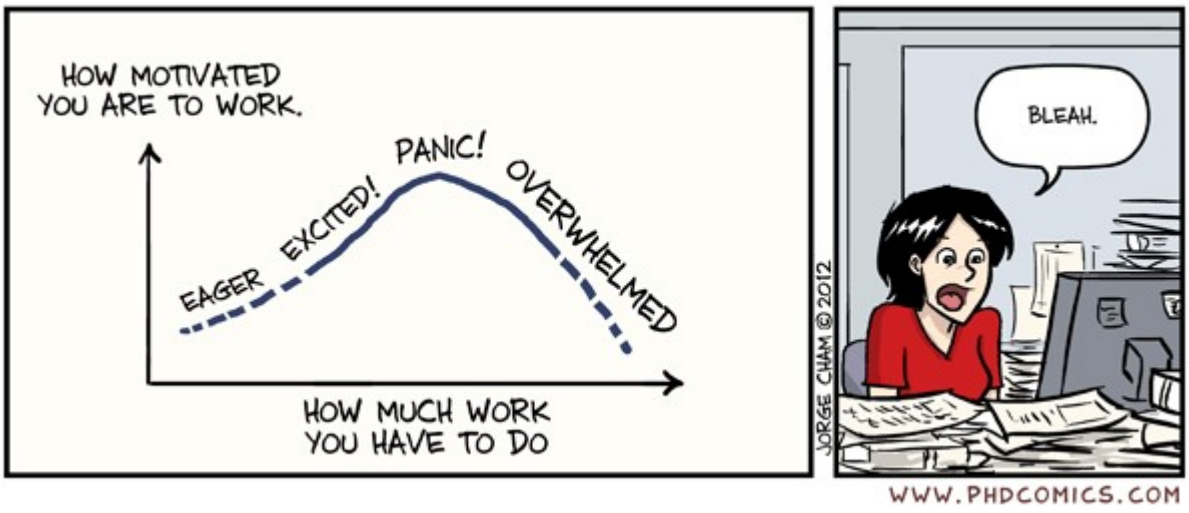
It is very useful to summarise facts in table format. Then you do not need to laboriously write many things down so that it make sense, and your supervisor/reader does not have to laboriously read through them. Often you need to support the facts in the tables with references too. You can either link them with subscripts (for example [a]) at end of table, or include a column for the references.

Keep your tables simple and readable. You can change the orientation of the page to landscape if you struggle to fit in the columns (enter section breaks before and after table, then only select the part between breaks for landscape). Your table may also flow over to the next page but then just put the column titles in for each new page.

Some reviews may lend themselves to make your own diagram or figure by using published information or figures (must be cited) or by making your own. It surely makes the review much more interesting.

All tables and figures must be cited in the text in chronological order as they appear in the text.

Legends for tables are given above the table, and legends for figures below the figure.



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11. Style of the review

Consult with your supervisor which journal style you need to follow (e.g. Fungal Biology). Then get the **Instructions to Authors** for that journal online, and follow it carefully. This will tell you how to cite your references in the text and under References, how the headings must look like, font, line spacing, etc. Usually these Instructions are quite comprehensive and instructive.

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12. Last thoughts

Always insert page numbers.

It is useful to include line numbers (continuous) for your reviewer/examiner.

Use fontsize 12 and only Ariel or Times New Roman, and line spacing 1.5 or 2. These just read more comfortably.

Some journals/supervisors like tables and figures in the text while others prefer them to all be at the end. The last option has the advantage that you do not have to continuously fix the positions of your tables and figures, and then everything is together.

Be careful of grammar (is/are, have/has, etc….. Use the grammar check of word to spot them.

Your own additional things to remember:

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13. Tips, last but not least

1. **Make a habit of always working as precise and meticulous as possible (no half measures).** With experience you will see how can basically write without making any mistakes (or at least very few).
    a. Try not to make spelling, style or writing mistakes, or fix right away.
    b. Use complete phrases or sentences so that you know what you meant later on.
    c. Cite your references correctly in the text from the beginning.

It will save you a LOT of trouble later on because you will not have to fix everything. And your supervisor will definitely be grateful.

2. It is good to **ask someone else** to read through, or what their opinion is of your topics, ideas and the order they are in.
    a. Fresh eyes and brains spot problems and errors more easily and will give you good ideas as well.
    b. Do this for others too, because by critically reading the work of others, it will teach you to become better too.

3. My supervisor taught me an interesting trick to spot those little mistakes no-one sees anymore at the end. Start reading your pieces backwords, literally. Your brain still understands it but suddenly the mistakes stand out.

Your own tips:

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In the end, aim for a review that is **short** (conscise) and **sweet** (reads well, relevant, interesting) and **complete** (it should cover the needed things, not necessarily the nice-to-knows).

The End

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