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https://jarisaramaki.fi/2018/08/07/ten-tips-for-revising-your-first-draft-paper-writing-for-phd-students-pt-15/amp/?__twitter_impression=true

Check that your paper is focused. Choose the point of the paper and its key conclusion before you begin writing, stick to your choices, and write the paper so that the reader gets the point already in the abstract and in the introduction. Leave out results that are not required for supporting the key conclusion, or safely tuck them away in the supplementary information document. When editing, if you feel that your paper loses its focus at some point, take a step back and do a major rewrite.

Check that the figures tell your story. If you just glance through the figures and skim their captions, do you get the point of the paper and its take-home message? If not, go back and reviseafter all, skimming is what most of your readers do.

Make sure that you take the readers hand and lead her through the text with sign-posts. Or, in other words, check that your writing is not confusing. Writing is, in part, psychology, and it aims to modify your readers state of mind and to influence what your reader thinks. Feel empathy for your readers and try to get inside their heads, assuming that they know nothing or very little. Your empathy should be reflected at the level of sentences and paragraphs: present familiar things first before moving to new concepts, use leading sentences, glue your sentences together with expressions that guide the reader. Use subheadings. Gently lead the reader from result to result, from paragraph to paragraph, and from sentence to sentence. Never leave it to the reader to connect the dots always connect them for her. Err on the side of caution: papers where things have been over-explained are rare (if they exist at all), but papers that are all too difficult to follow are frustratingly common.

Chapter 1

Introduction

Introduction and Conclusion shouldn't include anything that it's not in the other parts.

Only talk about the project itself at the introduction and NEVER AGAIN.

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Check that there is a clear question and a clear answerit is all too common to focus on your results and what you have done, instead of stating and then solving a problem. Your results are meaningful only if they solve a meaningful problem. Remember that your paper is neither an account of your work nor a lab diary; it should be a story of an important problem and its solution. Emphasise the problem, both in the Introduction where it should really stand out, and in the Results section and the Discussion. Make it clear to the reader how each result contributes to solving the problem, and what the implications of solving the problem are.

1. What am I going to prove?
2. Why does this matter?

Table 1.1 illustrates the results of my work.

Training Error	**Testing Error**
0	∞

TABLE 1.1: The Results

Figure 1.1 shows why this is the case.

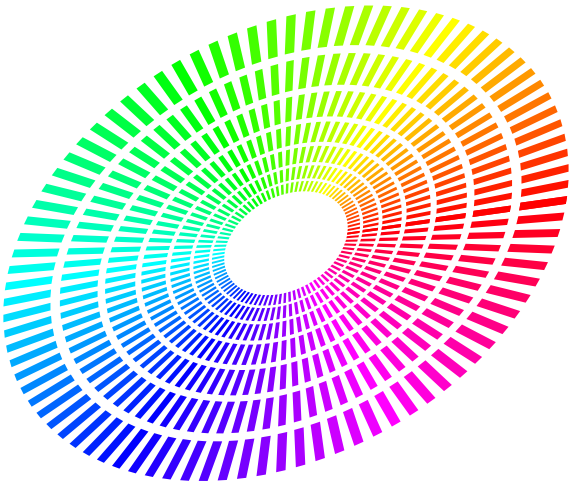

FIGURE 1.1: A colourful picture (reproduced from / adapted from).

This page shows you a subfigure example in Figure 1.2.

(a) The left caption (b) The right caption

FIGURE 1.2: A doubly colourful picture.

Chapter 2

Theory

Check that you provide enough background information: your reader does not know what you know. Assuming that your reader knows much more than you and therefore omitting background information is a very common problem with students.

Many students seem to think that they know little while everyone else knows a lotthere-fore they shouldnt explain things that everyone probably already knows. It is only later in their careers when they realise that no-one really knows that much! Besides, there will be readers from adjacent (sub)fields and readers who are just learning the tricks of the trade. Use a colleague who works on something slightly different than you as a test readerask her which parts of the text are hard to follow, and revise accordingly.

1. Setting the scene
2. Underlying information

Chapter 3

Methods

Parameters are defined in Results (not in Methods)

It doesn't matter if you don't include all the methods, only the ones for the final results.

Check that you provide enough background information: your reader does not know what you know. Assuming that your reader knows much more than you and therefore omitting background information is a very common problem with students. A typical example would be a Methods section that directly launches into what you have done without first telling why. Although it is evident to you that to get from A to B you need to do X, this is probably far less obvious to the reader. If you only tell the reader that you did X, she is confused. Why did you do X? Never assume that the reader knows your motivation, or the details of every method you used, or why your research question is important. Tell her.

Plagiarism: use of code (this includes open source code!) that was not written by you, without acknowledgement of the source

Check that the reader can replicate your results. Verify that your Methods section (and the supplementary sections if any) contains everything that the reader needs to know. Also check that you provide links to your code and your data if it can be released without violating anyones privacy.

1. How am I going to measure it?
2. How am I going to prove it?

Chapter 4

Results

Parameters are defined in Results (not in Methods)

Report is a presentation of the final results, not the whole process.

Check that your paper is focused. Choose the point of the paper and its key conclusion before you begin writing, stick to your choices, and write the paper so that the reader gets the point already in the abstract and in the introduction. Leave out results that are not required for supporting the key conclusion, or safely tuck them away in the supplementary information document. When editing, if you feel that your paper loses its focus at some point, take a step back and do a major rewrite.

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1. What did I find?
2. Let me describe the best bits

Chapter 5

Discussion

Draw inferences from proofs

Check that there is a clear question and a clear answerit is all too common to focus on your results and what you have done, instead of stating and then solving a problem. Your results are meaningful only if they solve a meaningful problem. Remember that your paper is neither an account of your work nor a lab diary; it should be a story of an important problem and its solution. Emphasise the problem, both in the Introduction where it should really stand out, and in the Results section and the Discussion. Make it clear to the reader how each result contributes to solving the problem, and what the implications of solving the problem are.

1. Here is my analysis and proof of it
2. Here's my conclusion(s) about it

Chapter 6

Conclusions

Introduction and Conclusion shouldn't include anything that it's not in the other parts. Objectives should match with conclusions.

Conclusions mirrors the content of introduction and repeats/summarises the conclusion of the discussions. Nothing new here.

Future work.

Check that you end the paper with something worth remembering. This means something concrete. More research is needed is a platitude and a vague one at that; better, go for something like because of the results of this paper, we are now in a position to tackle problem X with method Y, bringing us closer to the ultimate goal of Z. This is far more concrete and memorable. Endings have power; do not waste this power.

1. Let me summarise my conclusions about it
2. And let me state the value of them

Appendix A

Stuff

The following gets in the way of the text....