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Before writing up a paper, and as soon as you have a clear idea/concept for the paper, it is important to plan as much as possible. One important step that I have learned is critical is to prepare the first sketch of the paper. This sketch should have already the flow of the paper, the key figures, and the key messages to be conveyed. This brief note aims at helping everyone get started on preparing the sketch. Of course, this is just an example – please adapt according to your own style, but do have a plan (even if you change the plan as you move along the paper-writing process).

§{1} Why a sketch of the paper Writing a paper is pretty complex (and there are many excellent books and papers on how to write papers), but I have found, over the years, that the most important step is planning ahead and have a clear view of where the write-up and the paper are going to take you. This means preparing a detailed sketch of the paper, with the key ideas/messages, structure, figures, sections, and paragraphs. Note that the sketch will evolve but to get started always prepare a sketch (and discuss it with your supervisor in detail).

§{2} Structure of the sketch The preparation of the sketch should be made as simple as possible - it is not necessary to have fancy material, a nice layout, templates, or nice figures. Focus on the ideas. Here are some critical points to pay attention to and steps to follow:

¶ Look carefully at excellent or classic papers that you might have recently come across - study the style, the organization, and the flow of the paper.

¶ The sketch can/should be totally handwritten as the draft of a script or a storyboard - look for famous movie storyboards – google "storyboard Alfred Hitchcock" to check how one can prepare a full movie from drawings on a canvas;

¶ 1. Write down the story you aim to tell and the one single most important message that a reader of your paper will take out from reading your manuscript - this should be a single full English sentence (focus on the message/finding/discovery that this single sentence will convey, don't worry about the context, and definitions – this will be added afterward in the paper);

¶ 2. Define the big sections[1] e.g.

- Introduction

- Theoretical Model

- ...

- Summary

¶ 3. Within each one of these sections define the flow of the paper in terms of sub-sections. Note that these sections or sub-sections do not need to be actual sections or sub-sections of the manuscript (e.g. defined as such in the LaTeXtemplate) - these are just points to guide you through the preparation of the big conceptual blocks of the paper;

¶ 4. Within each subsection, identify the figures you plan to include. At this point the "figure", is just a box, with axes well identified and some hand-drawn sketch of the trend or data you will show; not necessary to have a computer-generated figure;

¶ 5. For each figure identify the key messages you want to convey as one-liners/bullets, as a single full sentence;

¶ 6. For the full paper, define the take-home messages (as one-liners/bullets) and place them in the abstract, at the end of the introduction, and in the summary; these should be full English sentences, that will stress the message in the three key points of the paper;

¶ 7. Now go back to the sections and sub-sections identified before and write down (as bullets or one-liners) the key ideas for each one of these sections and sub-sections (each one of these one-liners will be a single paragraph in your final paper);

¶ 8. Review now all the one-liners/bullets for the paper to make sure that you are telling the story, adding one-liners/bullets to make sure the flow is comprehensive and the transitions are clear;

¶ 9. Sit down with a few of your colleagues and explain your sketch of the paper: by the end of the storytelling (following your sketch) ask your colleague what is the key message of your paper to make sure this was properly

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[1]These are just examples! each section and sub-section must represent a conceptual block of the paper

conveyed, and, of course, ask for feedback on the clarity and excitement of the sketch of the paper;

¶ Review (from 2. to 8.) to incorporate the findings/feedback from 9. in order to make sure the key messages are clear and the flow is smooth;

¶ After convergence, discuss with your supervisor, fine-tune the sketch and start writing the manuscript. If you need pointers on writing the paper, ask LOS for a few references.

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