Writing a Master's Thesis In Four Not-So-Easy Steps

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LIKE PASSING DRIVER'S ED OR PLANNING A WEDDING, writing a Master's thesis is one of those skills most people only really need once. As a Master's thesis supervisor, much like a driving instructor or a wedding planner, I do my best to help my students get the job done to their satisfaction, ideally without trauma, and move on with their lives.

Over the years, as I've supervised a number of Master's theses, I've amassed a set of writing advice which thesis writers typically find helpful. Since there's no syllabus for the thesis writing process, I've resorted to passing this advice on verbally, outlining lists and concepts with gestures and whiteboard scribbles. It's time to make it formal. This note collects all of my thesis writing advice in one place. I think of it as a living document, expanding and evolving as I gather more experience advising theses.

Roughly speaking, we can think of writing a Master's thesis as a four-step process:

1. Picking a topic
2. Working out a structure
3. Filling out the structure with paragraphs
4. Actually doing the work

In this guide, I cover each of these four steps in turn. As the title of this document suggests, none of these steps are particularly easy, but I am able to offer some guidance on each of them. After discussing the four steps, I cover 'the fine print', a set of procedural rules for my thesis supervision.

1: Picking A Topic

MY MAIN PIECE of advice for picking a topic is simply:

Pick a topic that gets you up in the morning.

I mean this in a motivational sense: you should pick a topic that's interesting enough that when you wake up, you want to get up and push on with your thesis rather than stay in bed. This has the intrinsic benefit of being personally meaningful to you, but that's not the point here. The point here is that a topic that is interesting to you has the *functional* benefit of making it easier for you to get started working each day.

To be sure, your topic probably does not meet this very high standard. That's okay. There's nothing wrong with finding your topic only mildly interesting. But your choice of topic should maximize subjective interestingness. You may feel tempted too choose topics according to other criteria, like what a potential employer may look for or what's fashionable.[1] The problem with this approach is that eventually you'll run out of steam. That may happen in any case, but nothing will bring you farther than your own motivation.

[1] I work partially in political methodology, an extremely faddish field, so I appreciate that 'intrinsically interesting' and 'fashionable' are not always easy to tell apart.

2: Structuring the Thesis

PERHAPS THE MOST common question I get from thesis writers is "which sections do I need to have in the thesis?". Unfortunately, there's no one answer for this. For example, a highly empirical thesis is bound to have a 'Data' section, whereas a political theory thesis almost certainly won't. Conversely, a methodology thesis will not have a 'Theory' section, at least not one easily recognizable as such.

This lack of one universal thesis structure doesn't mean there's no way to get guidance on this. A useful starting point is the following, which I'll call the Standard Structure:

1. Introduction
2. Literature review
3. Theory
4. Methods & data
5. Analysis
6. Conclusion
7. Discussion

As you write your thesis, you may at some point decide to deviate from the Standard Structure. But it's useful as a starting point and as a framework for understanding the necessary elements of a thesis, even if eventually you end up placing them in a different order.

For the sake of the argument, let's assume you're happy to stick to the Standard Structure. Having a structure in place is great, but you're still left with the question: what should go in each section? To answer this question, it's helpful to distinguish between what I call a *thematic* understanding of thesis sections and a *functional* one.

A thematic understanding of thesis sections sees each section heading as describing what that section is about. The section labeled 'Theory' contains a bunch of theory, the 'Methods & data' section is about data, and so on. This is true as far as it goes. The problem with the thematic understanding, however, is that it's ultimately not very helpful to the writer. For a thesis writer setting out to write the 'Theory' section, the thematic understanding outlines

the type of material that goes in that section, but not specifically what theoretical work to cover. Equally importantly, it does not offer guidance on when you're done writing the theory.

Because of these shortcomings, a functional understanding of thesis sections is in many ways more helpful. The functional understanding sees each section as fulfilling a particular purpose within the overall structure of the thesis. Crucially, the function of each section is tied to a particular need of the following section. In other words, *the purpose of each section is to answer a question the following section need to get started*. A key advantage of the functional understanding is that it makes it clear when a section is done. *When a section has answered that question, the section is over*.

Table 1 presents one way to think of the focal questions associated with each section in the Standard Structure. These are by no means the only way to think of what a given section needs to do, but they offer guidance on the types of question each section needs to answer. Note that each question feeds into the following section: the introduction lines up the research question for the literature review, which introduces relevant concepts for the theory section, and so on.

Table 1: Thesis sections and their focal questions.

Section	Question
Introduction	What is the RQ and why should we care?
Literature Review	What has earlier work said about the RQ?
Theory	How does this lead you to your hypotheses?
Methods & data	How are you testing your hypotheses?
Analysis	What do the tests show?
Conclusion	What do you conclude based on your findings?
Discussion	What are the broader implications of your work?

An important advantage of the functional perspective is that it keeps you focused on the essential parts of a section. The 'Literature Review' section illustrates this nicely. Lit reviews are hard to write, in part because they presume extensive knowledge of the literature, which you almost certainly don't have. But lit reviews are also hard to write because covering the literature can feel like an aimless task. What is 'relevant literature' anyway? From a functional perspective, the answer is relatively straightforward: the lit review introduces the concepts needed in the theory section. If a concept is not necessary for the theory section to work, it shouldn't be in the lit review - even though it may in a broader sense be 'relevant'.

Dramatic theory offers an elegant illustration of this principle. The principle of *Chekhov's gun* states that every element in a story must be essential, and that non-essential elements should be removed. The principle is named after the playwright Anton Chekhov, who expressed the idea as: "If in the

first act you have hung a pistol on the wall, then in the following one it should be fired".[2]

To be sure, unlike Chekhov's imagined playwright, you are not likely to be adding one superfluous paragraph after another only to cut them afterwards. You are more likely to find yourself struggling to write anything. This section has offered some guidance on how to approach this challenge. Knowing the function of each individual section leaves you with the task of writing individual paragraphs, which is the topic of the next section.

3: Writing Paragraphs

PARAGRAPHS ARE THE FUNDAMENTAL logical units of a text. They are not the fundamental linguistic elements, of course - any paragraph consists of a number of sentences, in turn consisting of words, letters, and phonemes. But paragraphs are the fundamental logical units in the sense that each paragraph conveys a point. In this sense, a non-fiction text is a series of points, weaved together in order, each conveyed in a single paragraph.

This section leans heavily on Patrick Dunleavy's *Authoring a PhD*, an excellent textbook on writing for research.[3] The key idea here is that a paragraph should follow the **Topic-Body-Token-Wrap** (TBTW) principle. The TBTW principle states that a paragraph should have a topic sentence, one or more body sentences, one or more token sentences, and a wrap sentence. Let's cover each of these in turn.

The opening *Topic* sentence is a 'signpost' sentence previewing the paragraph's topic to the reader. The sentence does not fully develop the paragraph's argument, but previews the point being made. Note that since a topic sentence is forward-looking, a topic sentence should never consist of 'meta language' connecting to earlier points. Linkage between points is taken care of by the wrap sentence, see below.

The *Body* sentences consist of one or more sentences laying out the core of the argument. Here the writer lays out her reasoning to the reader, showing her reasoning, describing findings, or drawing implications. The body sentences should persuade the reader of the claim made in the topic sentence.

Body sentences are followed by *Token* sentences providing examples, relevant quotations, or supporting facts pertinent to the body sentences. Token sentences are especially important in academic writing, which puts a high premium on backing up claims. (Conversely, token sentences are less important in genres such as the personal essay). At the same time, since token sentences lead the author away from the key point being made in the paragraph, they should be used sparingly.

Lastly, the *Wrap* sentence pulls the argument together, highlighting to the reader what to take away from the paragraph. In Chekhovian terms, the wrap sentence 'hangs the pistol on the wall'. Any meta-language linking to later

[2] From `https://w.wiki/We7`, Chekhov's original formulation: "Remove everything that has no relevance to the story. If you say in the first chapter that there is a rifle hanging on the wall, in the second or third chapter it absolutely must go off. If it's not going to be fired, it shouldn't be hanging there."

[3] Patrick Dunleavy (2003): *Authoring a PhD: How to Plan, Draft, Write and Finish a Doctoral Thesis or Dissertation*. Red Globe Press. See also this Medium post speficially on paragraphs.

parts of the texts should also come in the wrap sentence.

To be sure, not every conceivable well-written paragraph fits this scheme. For example, most paragraphs in this document do not adhere to the TBTW structure, and I don't think all of those are *ipso facto* bad. But for any given point you're looking to make in your thesis, the TBTW structure offers a useful set of guidelines for conveying that points thoroughly and effectively.

4: Doing the Work

WRITING A MASTER'S THESIS is a daunting task. It is the longest single written assignment of your academic career, and quite likely the longest single text you will ever write. You are working mostly alone, with none of the day-to-day interaction and sparring typical of your future jobs. And you're doing all of this while wrapping up your life as a student, perhaps the only lifestyle you've ever known, to enter the full-time graduate labor market.

For all of these reasons, getting any writing done at all is a small miracle. Anyone tasked with writing for a sustained period of time is painfully aware of the struggles of committing words to paper. The German novelist Thomas Mann famously quipped that "a writer is one to whom writing comes harder than to anybody else".[4]

Luckily, you're not alone. Struggling to get writing done is as old and as common as the craft of writing itself, so you have an abundance of shared experiences and lessons to draw on. Here I'll introduce two pieces of advice which I've found very useful.

Writing

The first pertains to the act of writing itself, and can be summarized as follows:

The reading is in the writing. The writing is in the editing.

A catchier expression of this idea, often misattributed to Ernest Hemingway, is "Write drunk, edit sober" – good advice, if not taken too literally. The key insight in the saying above is to dispense with the idea that reading and writing are separate processes. You should not expect to be able to consume all the information you need and then bang out a finished thesis. Instead, think of writing as a tool for reading, and your text as raw material to be continually edited.

A productive writing workflow requires ridding yourself of a certain type of vanity keeping you from writing imperfect sentences. If you've ever needed a few drinks to work up the courage to join the dancefloor at a party, you know this process. It's not that the alcohol makes you a better dancer.

[4] The original quote, from Thomas Mann's *Tristan* (2003): "ein Schriftsteller ein Mann ist, dem das Schreiben schwerer fällt, als allen anderen Leuten."

It's that it makes you less concerned with dancing badly. You should come to writing with the same attitude.

The writing technique of the Argentinian author Jorge Luis Borges offers a useful contrast. Borges, who was partially blind and therefore unable to write on his own, would dictate sentences verbally to a secretary. The secretary would then read the sentence back to him, and he would edit each sentence until it was perfect, only then moving on to the next one. Your method of writing should be the exact opposite of this. Commit yourself to writing lots of flawed text and editing it many times over.

Avoiding procrastination

The canonical image of writer's block is one of a writer seated with their typewriter, staring intently at a blank piece of paper, unable to jot down a single letter. But truthfully, you're unlikely to find yourself in that situation. Instead, you're likely to be on your phone looking at your favorite time-wasting app, cleaning your apartment, or clicking aimlessly through Wikipedia links. In other words, you're not really writer's blocked. You're procrastinating.

Procrastination is often joked about, but it's the main thing standing between you and a finished thesis, and you should take it very seriously.[5] You should not expect to be able to avoid procrastination entirely. But if you're not able to control it, you may end up with a very frustrating thesis writing experience.

Procrastination happens because of the lure of an instantly gratifying activity in the face of a vague, daunting task. Crucially, the allure of procrastination comes from the instantness of the procrastination task, not from the procrastination task being particularly enjoyable. In fact, people often procrastinate doing otherwise not very enjoyable things, like cleaning. And even notionally enjoyable distractions, like watching YouTube videos, are ruined by an unshakable sense of guilt when done for procrastination.

Writers struggling with procrastination often think of the problem as one of weakness of will. That's a mistake. To be sure, anyone with an enormous amount of willpower could force themselves not to procrastinate, but most people can't simply will themselves out of procrastinating (that certainly includes myself). Instead, I've found that the best way to avoid procrastinating is to change the choice set. In other words, you need to make it easier for your inner procrastinator to opt for the work you're trying to get done.

The key to making work more tractable is *planning*. Here, planning means breaking down an abstract, higher-order task into a series of smaller tasks, each as concrete and approachable as possible. As Tim Urban states it in *Why Procrastinators Procrastinate*:

Effective planning turns a daunting item into a series of small, clear, manageable tasks

I personally use a task management app for planning my work, but an ana-

[5] This section builds in part on *Why Procrastinators Procrastinate*, an excellent post on procrastination posted on the blog Wait But Why. See also this TED Talk based on the post: `https://youtu.be/arj7oStGLkU`

logue approach should work just as well.[6] The key is that your task management system should make it easy for you to dump tasks into a list and store them there until you can tick them off. You should also make sure that your task management system has a 'Pavlovian' aspect to it. That is to say, whenever you complete a task, your brain should release a tiny bit of dopamine. If you did a task but forgot to add it to the list, go ahead and add it and tick it off! You earned it.

This advice may be helpful to you in combatting procrastination. But even if it isn't, you should always feel free to come to me if you find yourself struggling with procrastination. I want for you to not only end up with a thesis you're proud of, but also to have a joyful writing process. As your advisor, I will be happy to assist you in any way I can in accomplishing that goal.

The Fine Print

Meetings

Each time we meet we will be discuss a written submission from you - this submission can be an excerpt from the thesis itself, or a standalone document summarizing your current progress. I must have the submission in hand no later than 24 hours before we are scheduled to meet. If the submission is late, or not received at all, the meeting is cancelled.

At the end of each meeting we schedule the next meeting, typically about 3 weeks later, with slightly higher frequency early in the supervision process. You cannot reschedule meetings.

After a meeting, you should send email me a brief summary of key conclusions and to-do's - ideally immediately after the meeting, and no later than 24 hours after.

Feedback

Most meetings focus on feedback on excerpts from your draft version of the thesis. In each meeting, I will provide feedback on up to 15 pages, double-spaced. You may send a longer excerpt and specify which pages therein you'd like to discuss. I will read each part of the thesis no more than once. This rule is to safeguard your independence as a thesis writer. For the same reason, I will not give feedback a complete draft of the thesis.

Correspondence

You are always welcome to get in touch via my email, `fh@ifs.ku.dk`, with any urgent questions you may have. When in the office I aim to reply to any request within 24 hours.

[6] For software, I recommend TickTick, which works across platforms and has a full-featured free tier. Microsoft Todo, based on the now-defunct Wunderlist, is also very good.