The (thesis) writing process:
strategies for inventing and building academic text

11 April 2019
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Academic Support Centre
What is a thesis?
The eternal struggle.

getting stuff from here

To here.
3 minutes to describe your writing process

1. What do you need—mentally and physically—to start writing?

2. When (mornings/evenings?) and where do you work most effectively?

3. What is the hardest part?

4. The easiest part?
Writing Processes

A. Brainstorm. Read. Write. Edit. Turn in.
B. Read. Read. Read. Read. Read. Write at the last minute. Turn in.
D. Usually starts with brainstorming → reading and note-taking → drafting, → back to research which generates new ideas → more drafting → revision that leads to new ideas → more focused reading → more revising, which eventually leads to editing and proofreading. Turn in.
Writing Processes

what people think it looks like

what it really looks like
”I write because I don’t know what I think until I read what I say.”

- Flannery O’Connor
Benefits of writing regularly

- 6 year study of 32 people
- 16 regular writers (30 minutes/day, consistently)
- 16 binge writers

"To be creative, one must be disciplined."

-- Fredrik Ullén (prof. in cognitive neuroscience & concert pianist)
Different texts at different times

- Process writing (focus on thinking & content)
- Product writing (focus on its form)

Different types of writing generate different types of text:
- raw text (for your eyes only)
- draft text (for feedback during the process)
- reader text (the end product)

All are necessary and have their place in the writing process
Topic: noun

Can’t research a noun productively.
“...beginner’s mistakes: start plowing through all the sources they can find on a topic, taking notes on everything they read.”

“...the best way to begin working on your specific topic is not to find all the data you can on your general topic, but to formulate questions that point you just those data that you need to answer them.”
Temperate deciduous forest →
tree diseases

(Subjects)

• Dutch Elm Disease
treatment and prevention
  in Dalby Söderskog
Types of questions to ask:

**Ask about the history:**
- How does (topic) fit into a larger developmental context?
- What is (topic’s) internal history?

**Ask about its structure and composition:**
- How does (topic) fit into the context of a larger structure or function as part of a larger system?
- How do (topic’s) parts fit together as a system?
Topic to RQ

Types of questions to ask:

Ask how your topic is categorized?
   How can (topic) be grouped into kinds?
   How does (topic) compare to and contrast with others like it?

Turn positive questions into negative ones.
   What has not contributed to...?
   How does (topic) not differ from...?

Ask “what if?” and other speculative questions.
   How would things be different if (topic) didn’t happen/never existed?
Subject to topic to RQ

Tree diseases

• Dutch Elm Disease treatment and prevention in Dalby Söderskog

Question(s)

• How is Dutch Elm Disease currently treated in Dalby Söderskog?
• What does the current condition of the elms in Dalby Söderskog suggest about their future?
Free write

• To warm up your writing muscles
• To turn off your inner critic or editor
• To quickly generate raw text
• To break through writer’s block

1. Choose a starting sentence/theme and time frame
2. Write without stopping! (No backspace, no eraser)
3. Continue to write without thinking about what you’re writing, even if you don’t have anything to write about

If you free write on the computer, turn off the monitor!
How to free write: sentences

It’s a problem that... *(starting point)*

It’s a problem especially for....This could be used by....to.... *(whom does it concern?)*

The problem is caused by.... *(causes)*

I want to.... *(your aim)*

To study the problem, I will.... *(method)*

To understand the problem, you have to understand how X works.... *(theory)*

Some keywords and concepts are...

I will only deal with...because... *(delimitations)*

For now, I’ll work as if this section will have the following structure... *(content & organization)*
What can you do with a “free write” text?

• Find a starting point for a new free write
  – underline good ideas and formulations
  – write the best bits on a new page and free write from there
  – repeat until you have developed a working draft

• Find keywords and make a preliminary structure
  – note keywords and write them on a separate page
  – structure the keywords in a logical order ➔ paper structure?
  – write additional comments on each point

• Find gaps in what you know to guide further reading
  – note questions or uncertainties in your text
  – formulate as questions to ask to other literature
  – group and prioritize the questions according to kind
Exercise: Using your “free write” text

• Underline 3-5 good ideas and formulations, (or keywords).

• Write additional comments on each point:
  - I want to talk about / explain / analyze / .......... because ........
  - The relation between ................ and ................. is ................
  - First I’ll write about ................ because ................ and then I’ll write about ................ because ................

• Spend a few minutes preparing to tell a classmate about these ideas.
Research problem
Good academic writing...

...poses a problem (sometimes in the form of a question) and aims to solve that problem/answer that question.
Problem

Theoretical or Practical or Both

Cost?
**Practical problems** lead to practical solutions – tell us what to do

*Condition:* something that doesn’t work in the world

*Cost:* inefficacy, inefficiency, loss of money, climate change, loss of biodiversity, death, etc.

**Theoretical problems** lead to conceptual solutions – tell us what to think or understand

*Condition:* not knowing or understanding something

*Cost:* something more important that we don’t know or understand

**Examples:** Is prediction X made by theory Y accurate?
What theory explains observations Z?

*From The Craft of Research by Joseph Williams*
Your readers will ask:

SO WHAT?
If we understand [paper’s topic], then we will understand the more important thing people in this field are interested in, ______________.

If we understand [paper’s topic], then we can suggest what [a certain actor] should do to ____________.
Aim
Formulate aim & objectives

Aim: what
Objectives: how

i.e. This study aims to... by...
Formulate aim & objectives

STRONG VERB
To map
To identify
To design
To build
To develop
To determine
To evaluate

new diagnostic targets for emphysema.
the life cycle of...

In order to accomplish this, we will (1) generate..., (2) characterize..., and (3) determine...
Reading
Reading & Note-taking to…

Find out:

What do we know?
What don’t we know?
Active Reading

Get an overview:

What type of text is this?
• Title, author information, synopsis on the back, table of contents, forward, abstract
• Headings, bold/italicized words, text boxes, figures, graphs...

*What do I want out of this reading? or
*How does the text contribute to or inform my topic?
Active Reading

SKIM: overview of content and main points. To find parts you want to read more carefully.

NORMAL: the overall message, thinking, argumentation, problem formulation, and results.

INTENSIVE: detailed knowledge, precise information, to learn the material deeply and be able to reproduce and analyze the nuances of the text.

SELECTIVE: the texts relevance from a specific point of view. To use the text in a specific context.
Notes that rework the source and include your own reflections lead to better texts.
Reading & Note-taking

(1) What type of text?
(2) How does the text contribute to or inform your topic?
(3) Note the problem-solution and argument for the solution (reasons & evidence)
(4) What definitions does the text use?
(5) Any helpful concepts or language?
(6) What connections does this text make?

Handout: specific questions for articles
Evaluating a scientific article

TITLE
• What is the main idea/are the main concepts?
• Who does it concern?
• What type of study?

ABSTRACT
• What variables were examined?
• How?
• Main results and conclusions?

INTRODUCTION
• What is the purpose of the article? (present new data, validate a method, review literature...?)
• What is the problem/question being solved or answered?
• Why should we care about this problem?
• What is the solution/hypothesis?
• What can I expect in the rest of the article?
Evaluating a scientific article

METHOD
• What data collection method(s) is (are) used?
• Is this method a valid choice? What other ways could the study have been conducted?
• Do similar studies use similar methods?
• Any potential bias? Is it accounted for?

RESULTS
• How do the results relate to the hypothesis/solution in the intro? (Does the evidence fit?)
• Are the results reported clearly and objectively?

DISCUSSION
• Why were the results achieved?
• What previous studies help to explain the results?
• What potential counter evidence is accounted for?
• What do the findings help us understand better?
Evaluating a scientific article

DISCUSSION cont.
• What can we do to change/improve the relevant situation with these findings?
• What limitations do the authors provide?

CONCLUSION
• What is the overall summary of this text?
• Were my expectations met?
• Is the significance the same as in the introduction or expanded?
• Any future research recommended?
• What experiments/research should be done next?

NOT: Is this right or wrong?
Reading & Note-taking

Visualize the structure to help you connect to big picture

Mind maps

Central idea, theme, or question

Main idea

Detail

Sub idea

Detail

Detail

Detail
Reading & Note-taking

Start a synthesis matrix
### Synthesis matrix for an overview of the literature

**Topic:** 

<table>
<thead>
<tr>
<th>Source #1</th>
<th>Source #2</th>
<th>Source #3</th>
<th>Source #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Idea A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea B</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Idea and example from: https://writingcenter.fiu.edu/resources/synthesis-matrix-2.pdf
### Topic: Women in WWII

<table>
<thead>
<tr>
<th>Alteration of women’s roles because of WWII</th>
<th>Cornelsen</th>
<th>Stewart</th>
<th>Bruley</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Women accredited the WASP program for opening new doors, challenging stereotypes, and proving that women were as capable as men (p. 113)</td>
<td>- WAAC (Women’s Army Auxiliary Corp) was 1st chance for women to serve in army, given full army status in 1943 as WAC (p. 28)</td>
<td>- Women given equal opportunities (p. 223)</td>
<td>- Women born in the 1920’s found new doors open to them where they once would have encountered brick walls (p. 526)</td>
<td></td>
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<tr>
<td>- Women could compete with men as equals in the sky because of their exemplary performance (p. 116)</td>
<td>- Needs of the war were so great that women’s traditional social roles were ignored (p. 30)</td>
<td>- Women joined workforce as a break from the ordinary to help the war (p. 220)</td>
<td>- Even women not directly involved in the war were changing mentally by being challenged to expand their horizons because of the changing world around them (p. 562)</td>
<td></td>
</tr>
<tr>
<td>- WASP created opportunities for women that had never previously existed (p. 112)</td>
<td>- Military women paid well for the time period and given benefits if they became pregnant (p. 32)</td>
<td>- Unconscious decision to cross into male-dominated roles (p. 221)</td>
<td>- War also brought intellectual expansion to many people (p. 557)</td>
<td></td>
</tr>
<tr>
<td>- Women’s success at flying aircrafts “marked a pivotal step towards breaking the existing gender barrier” (p. 112)</td>
<td>- The 1940’s brought more opportunities to women than ever before (p. 26)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hardships and oppositions women faced</th>
<th>Cornelsen</th>
<th>Stewart</th>
<th>Bruley</th>
<th>Scott</th>
</tr>
</thead>
<tbody>
<tr>
<td>- “From the outset male pilots resented women’s presence in a traditionally male military setting” (p. 1113-4)</td>
<td>- Women in the military given extensive physical and mental tests, but still discriminated against, ridiculed, and considered inferior to men (p. 29)</td>
<td>- Women given unskilled labor positions by government because only seen as temporary workers, therefore no reason to train them (p. 221-2)</td>
<td></td>
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</tr>
<tr>
<td>- “The WASP were routinely assigned inferior planes that were later found to have been improperly maintained” (p. 114)</td>
<td>- Women given less significant work and viewed as less intelligent and physically able (p. 224)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Discrimination against WASP at every level of military service, women were only paid 2/3 of what men were for doing identical tasks (p. 114)</td>
<td>- The Church-Blass diary reveals how dilution arrangements… ensured that women working in male preserves were prevented</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Ask:

- Are there differences in the scope of these texts’ main ideas?
- Any degree of disagreements between them?
- Do they engage with each other? How?
- Do they cover different aspects of my subject? How many different aspects? Any left out?
- Do they tackle similar problems with similar methods? Or similar problems with a variety of methods?
- How detailed/deep is each analysis?
- Any ideas in one text that you could reasonably expect to see in another, but don’t?
If writing for an extending amount of time is painful...
Pomodoro Technique

1. Choose a (concrete, realistic) task
2. Eliminate as many external distractions as possible
3. Work with intense focus for 25 minutes
4. Quickly note distractions on scratch paper
5. After 25 minutes, note what you have done
6. You’ve earned a 5-minute break 😊
7. Work for another 25 minutes
8. After 4 pomodori, take a longer break
Keep a thesis writing journal

1. Before: What will I do today? Set up sub-goals. A good sub goal is:
   a.) Concrete 
   b.) Realistic 
   c.) Relevant 
   d.) Possible to tick off.

2. During: What problems do I face? How can I solve them? Do I need to ask for help?

3. After: What have I done? How will I work further?
1. Introduction
2. Methods
3. Results
4. Discussion
5. Conclusion
I. Introduction
   A. Context
   B. Problem
   C. What others have said about the problem
   D. Aim
   E. Significance

II. Methods
   A. Design
   B. Data collection

III. Results

IV. Discussion

V. Conclusion
I. Introduction
   A. Skylights can improve quality and amount of daylight in a space. They increase heat loss but also solar heat gains.....

   B. Successful integration of skylights depends on a number of factors; if not done properly, they create many problems....

   C. Others have examined....but not....

   D. This study aims to analyze the impacts of integrating skylight models on energy consumption, thermal comfort, and daylight conditions in a typical classroom in Denmark.

   E. This is important for understanding....and to be able to assist designers with skylight positioning for new buildings and renovations.
Use signposting & templates

• To invent text &
• To relieve the cognitive burden of considering content & form

Examples:
• Focus statement
• Signpost = directions, first for you then for your readers
Focus Statement Template

I am working on/studying [TOPIC] ________________ because I want to find out who/what/when/where/whether/why/how [QUESTION] ________________ in order to help ________________ [AUDIENCE] understand better ______________________ and to make suggestions for ________________ [AUDIENCE] in order to change/fix/improve ________________ [SIGNIFICANCE].

[METHODS] To do this, I will conduct a case study/an observational study/historical research/field-experiment/______________. I will collect/construct/gather qualitative/quantitative data/empirical material through interviews/observation/content analysis/questionnaires/______________.

I will analyze the data from ________________ (this theoretical perspective)/with ________________ (this framework).

[RESULTS SPECULATION] The results of this research will show/explain/develop/have implications for ________________ and lead to further research on ________________.
In this chapter, I will begin by discussing the background to my topic. With that background in place, I will turn to an evaluation of the relevant literature on this topic. The next step will be a re-interpretation of my problem in light of this literature. I will conclude by considering the implication of my topic for the broader field.
In this chapter, I will begin by discussing the background to [my topic]. With that background in place, I will turn to an evaluation of the relevant literature on [my topic]. The next step will be a re-interpretation of [my topic] in light of this literature. I will conclude by considering the implications of [my topic] for [my field].
Signposting

Version 3 (for the reader)
The first step in discussing [something] must be a consideration of [some sort of background issue]. To get a better feel for [this issue], we will need to look at [a particular aspect of the literature]. The synthesis of results from [literature in field X] and [literature in field Y] will provide a new way to understand the [current topic]. It is only when we see [this topic] in this new way that we can grasp its implications for the broader project of understanding [some issue facing the field as a whole].

Example from Explorations of Style
Tell a friend

...and get feedback

1. What stuck out to me the most was...
2. I’d like to know more about...
3. I didn’t quite understand...
Reflect on your writing process
description from earlier

What will change, delete, or add?
WRITE NIGHT

Wish writing weren’t such a lonely process? Bring your computer and something you’re writing (or should be writing) to the ASC to find a community of other writers working on similar projects.

We’ll provide a spot to work, fika breaks, and writing consultants in case you’d like feedback along the way.

Spring term 2019:

4 March
21 March
11 April
6 May
20 May

17:00-20:00

in Genetikhuset

Visit our website and fill out our form to reserve a spot: www.lunduniversity.lu.se/academic-support
Seating is limited.

The Academic Support Centre