On Thesis Writing

Philipp Rümmer (Programme coordinator ES)
IT Department, Uppsala University
Some thoughts on writing

• Writing a thesis is (more or less) like writing a research paper
• Thesis contains same sections/chapters as a research paper, but is longer/more detailed

• Have a look at conference + journal articles!
Thesis should be ...

- **formal**
- **objective**
- **precise**
- **concise**

- Avoid slang
- No short forms
  (isn't, won't, ... are not appropriate)
- No direct speech
  (“And then the Moose said: '...'”)
- “I”/“we” are used only rarely; much passive voice
  (“The measurements were repeated three times”)


What is wrong?

- “The Moose is the largest land animal in Sweden.”

- Claims have to be supported by references/citations, experimental evidence, or proofs

- “The Moose is the largest land animal in Sweden [42].”

What is wrong? (2)

• “The Moose is the largest land animal in Sweden.”

• If there is no good reference/evidence (or you are not entirely sure):
  • Weaken the statement!
  • There are numerous ways to do that ...

• E.g.,
  “The Moose is one of the largest land animals in Sweden.”
  “The Moose is considered one of the largest land animals in Sweden.”
Structuring texts

Avoid overly long

- **sentences** (at most 3 lines)
- **paragraphs** (at most 10-20 lines)
- **sections** (at most 1-2 pages)

- Every paragraph should have **one clear** message
- Section titles should be descriptive

**Too short:** “Moose”

**Better:** “An Overview of Moose in Scandinavia”

- Use clear, consistent numbering
Proofreading

- Strictly necessary

- Typical procedure:
  - Write some text
  - Proofread a day later, correct
  - Proofread more carefully a week later

- Eventually:
  Give the text to a friend of yours for checking!

- Your supervisor/reviewer will be grateful if they do not have to read un-proofread texts!
Word vs. LaTeX

Experience shows:

• Learning LaTeX takes a while in the beginning
• But the results are much more convincing than anything written in Word (or similar)

• Good introduction:
• Helmut Kopka et al, “Guide to LaTeX”
• (check the library)
CVS, SVN, Git, etc.

- **Use it!** Versioning is always a good idea
- Much more powerful than Dropbox

Free (restricted) services are available on the web
- E.g., [http://beanstalkapp.com/](http://beanstalkapp.com/)
- Including automated backups

Or: install on your own machine (**easy**)
Start writing in time

- Writing always takes longer than expected
- Do writing continuously while working on thesis
Related work

- (Overview of relevant research and development)

- **First section in report to write!**
  - Should list all major lines of related work
  - Give proper references (to articles, books, etc)
  - Short descriptions
  - Compare with what you are doing (discussion)
How to write an introduction

Go from large to small:
• What is the context? (general introduction)
• What is the specific area you are working in?
• What is the problem you are trying to solve?
• What is the solution? (outline)
• What are the results?

• What are the contributions?
• Sometimes: already give examples in introduction
Plagiarism

• Not tolerated, do not go there

• When you are copying text, you have to
  • Use proper quotation
  • Give a reference

"Unlike most other deer species, moose are solitary animals and do not form herds. Although generally slow-moving and sedentary, moose can become aggressive and move surprisingly fast if angered or startled."

Questions?