# Writing a master thesis – some advice

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## Beginning of paper

- Describe what does your paper (master thesis) contribute with?
- Why this is interesting and important
- Clarify how your paper takes the literature or our knowledge forward.
- What is novel in the paper

## On "novel" in research papers

#### For example, it can be considered novel if

- Well-known application in new area
- A new insight
- Existing theory is generalised
- Various existing papers, methods, theories are brought together for the first time
- An overview, meta-analysis or other type of analysis that has been done or written before

#### **Focus**

- Declare your focus, in the beginning of your paper
- "We focus on design-based estimation. An alternative is model-based estimation (Valliant et al. 2002)." + some argument + brief discussion of differences between these approaches
- Covering too much will only result in a mess.

#### Title

- What to emphasise?
- Compare:
  - "Variance estimation for functionals"
  - "Handling survey weights in jackknife variance estimation"

#### The Introduction

- Broad background
- Specific background
- What is unknown > research question
- Contents of paper
  - > A "funnel"

#### The Discussion

- Interpretation/analysis of findings (first)
- Some repetition, but not the same wording (summary, key findings, why it is important)
- Put findings into context
- Ideas for further work

### Assumptions

- State why your assumptions are reasonable
- and/or that the assumption is common (with a reference)
- and/or if it helps exposition or the arguments
- If it is an assumption you are forced to make, admit it and discuss it.
- Some focus here as well, not any trivial assumption

## Efficient style

- 1. Bethel proposed an algorithm (Bethel (1985)) useful to determine total sample size...
- 2. Bethel (1985) proposed an algorithm for finding the minimum sample size..
- 3. The Bethel (1985) algorithm finds the minimum sample size
- Are words like "certainly", "of course", "in fact" necessary?

- Clarity usually preferred to cleverness and elegance
- Rather few research papers are really clever.
   You see more useful and sound papers than clever papers.
- Wit and elegance in style is nice but very hard to achieve without losing clarity – best avoided

## Style

- Not too informal. No "isn't" or words like "wiggly (curve)". "Flipside" is debatable.
- No storytelling: "After having looked at the data, I turned my attention to the design"
- Not too formal, may look turgid or bombastic
- "Kill your darlings"