Writing process and completing the thesis

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Friday 17.4.2020 at 8.30–9.00
via Zoom

Towards Doctoral Degree
UniOGS
First version of the dissertation

- Use Acta template
- Start from the list of content of this lecture
- Sketch the content for each sub-chapter
- Maximise the use of existing materials
  - Articles, research reports, etc.
- Copy substance from your materials (rephrase)
- Write missing bits from scratch
Compilation dissertation

- 3-5 articles + compilation
  - Requirements for the number of articles varies by discipline
  - Journal articles vs. conference articles vs. manuscripts

- Compilation must be readable independently

- Best and most fitting bits from the articles
  - Contemplating the **whole** created by the articles
Alternative structures

Title
Abstract
Acknowledgements
Abbreviations and definitions
(List of original publications)
Table of contents

1 Introduction
   1.2 Objectives and scope
   1.3 Research process

2 Theoretical foundation

3 Results

4 Discussion

Title
Abstract
Acknowledgements
Abbreviations and definition
(List of original publications)
Table of contents

1 Introduction

2 Literature review

3 Aims of the study

4 Materials and methods

5 Results

6 Discussion
Compilation dissertation structure

1 Introduction
1.1 Background and research environment
1.2 Objectives and scope
   (1.3 Philosophy of science (ontology, epistemology))
1.4 Research method
1.5 Dissertation structure

2 Theoretical foundation
   (2.1 Background )
2.2 Theoretical sub-area 1
2.3 Theoretical sub-area 2
2.4 Theoretical sub-area 3
2.5 Theoretical sub-area n
   (2.6 Theory synthesis )

3 Results
3.1 Research question 1 results
3.2 RQ 2 results
3.3 RQ 3 results
3.4 RQ 4 results
   (3.5 Results summary)

4 Discussion
4.1 Theoretical implications
4.2 Practical implications
4.3 Reliability and validity
4.4 Recommendations for further research

References
Original publications
Monograph structure

1 Introduction
   1.1 Background and research environment
   1.2 Objectives and scope
   (1.3 Philosophy of science (ontology, epistemology))
   1.4 Research method
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2 Theoretical foundation
   (2.1 Background)
   2.2 Theoretical sub-area 1
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   2.4 Theoretical sub-area 3
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   (2.6 Theory synthesis)

3 Results
   3.1 Results of sub-area 1
   3.2 Results of sub-area 2
   3.3 Results of sub-area 3
   ...
   3.N Answering research questions

4 Discussion
   4.1 Theoretical implications
   4.2 Practical implications
   4.3 Reliability and validity
   4.4 Recommendations for further research

References
Abstract

- Short paragraph for each of the following
  - total length 1 page

- What is the bigger picture (introduction)?
- Dissertation purpose
- Research method
- Key results
- Practical implications
1.1 Background and research environment

- Research background and **research gap**
- Identifying a gap in research using literature

- What have others studied relating to the topic?
- what is known & what is not known about the topic and closely related issues

- Write using the "funnel principle"
1.2 Objectives and scope

- Divide the research problem into research questions / hypotheses
- Describe the logic how the research questions are interconnected.
  - use an illustration
- Aims of the dissertation and exclusions
  - must be in-line with the results – allow the results to guide the final version
- Compilation dissertation
  - Simplest solution if each research question is answered by one article
## Complicated structure

<table>
<thead>
<tr>
<th>Research question</th>
<th>Article I</th>
<th>Article II</th>
<th>Article III</th>
<th>Article IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>RQ2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>RQ3</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>RQ4</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
3 Results

Present core results
- Compilation: RQ-by-RQ
- Monograph: in stages

Monograph:

3 Results
3.1 Results of sub-area 1
3.2 Results of sub-area 2
3.3 Results of sub-area 3
...
3.N Answering research questions

Compilation:

3 Results
3.1 Research question 1 results
3.2 Research question 2 results
3.3 Research question 3 results
3.4 Research question 4 results
(3.5 Results summary )
4.1 Scientific implications

- how do you advance the existing scientific knowledge
- reflect against literature presented in your theoretical part
- supports/contradicts previous research results, or creates something completely new?
- Structural recommendation: one key conclusion/topic at a time
4 Discussion

4.2 Practical implications
- Who benefits from your results and how
- Implications to society, companies, organisations, etc.
- Structural recommendation: beneficiary group by beneficiary group

4.3 Reliability and validity
- Discuss reliability and validity of your research
- Take a position on
  - limitations of your research
  - generaliseability of results
Writing order

- PowerPoint presentation
- Research questions and related answers
- What is the bigger whole created by your articles

- Writing of results
  - Result analyses and conclusions
- Research methods
- Theory (Literature review)
- Introduction
- Discussion
- Abstract
- Title

- Finalising
- Iterations when necessary
Other tips for writing

- Write and **finalise** one sub-chapter at a time → ready to publish text
- Co-operate with your colleagues
  - to give & get feedback
  - to realise the purpose of each sub-chapter
- Once the Results chapter is written, ask supervisor for feedback before proceeding further
Introductory sentences

- Pay special attention to the beginnings of chapters and paragraphs
- Write introductory sentences
  - Enables reader to understand what is being discussed
- Present figures, tables, etc. in the text
  - *Figure 1 illustrates, Table 2 summarises*
  - More detailed text after the illustration
Finalisation

• Check that results and research questions match
  – fine-tune research questions if necessary

• Check that Theory, Introduction, and Materials & methods are in line with the results

• Check and follow format requirements
Other points

- Language check either before pre-examination, simultaneously, or after

- Article publishers
  - ask permissions to use in your dissertation early
  - ask permission to use your figures
4 hour lectures on Scientific Communication

- Thu 17.9.2020 at 12.15 - 16.00 Writing a doctoral dissertation
- Thu 1.10.2020 at 12.15 - 16.00 Writing scientific journal articles
- Tue 1.12.2020 at 8.15-12.00 Writing the compiling part of a compilation dissertation