

# Academic writing skills

## *How to write an academic project report or thesis*

### High Integrity Systems (M.Sc.)

**Dr. Verena Demiröz**  
ReActing  
reacting@fra-uas.de

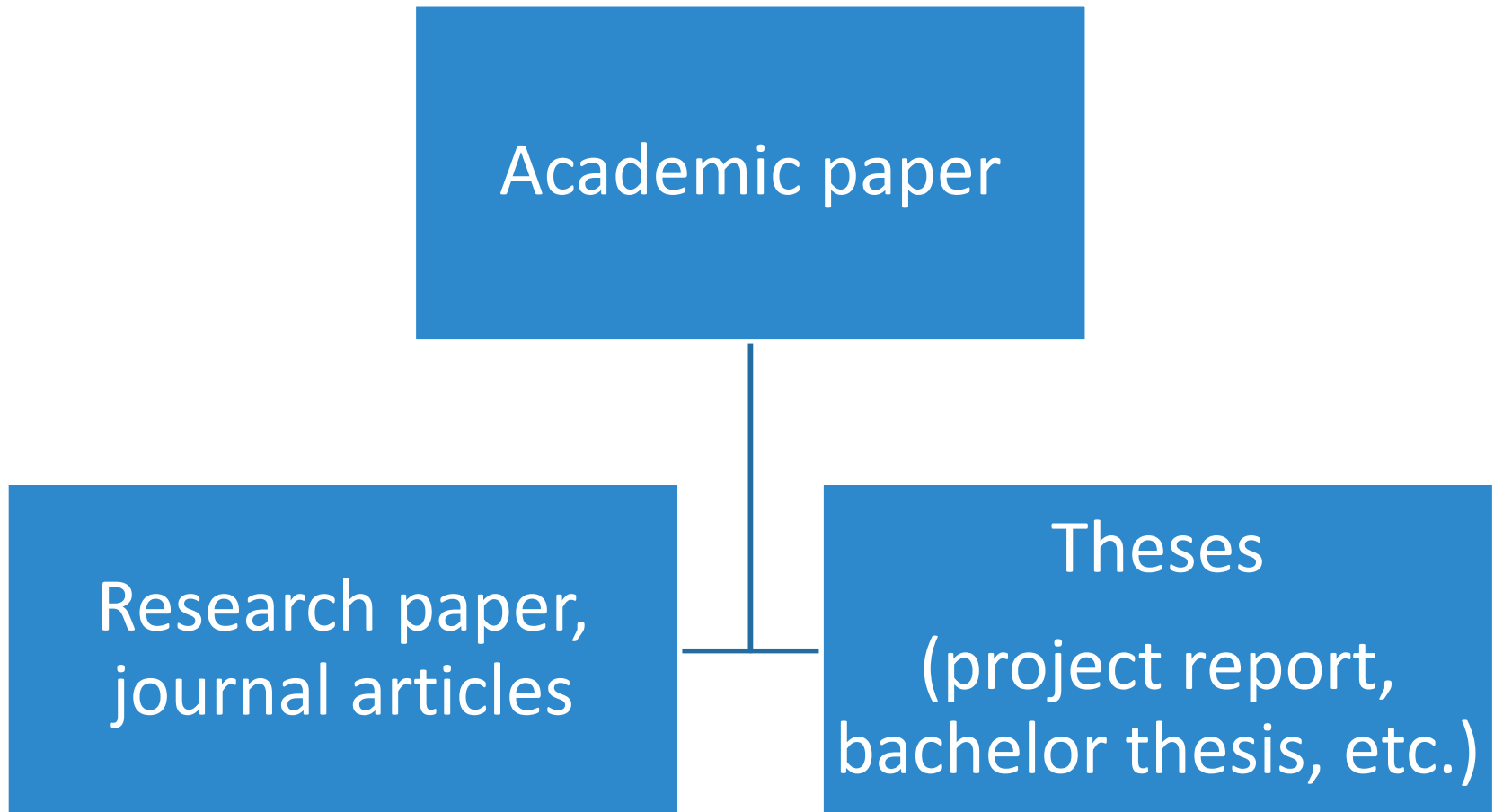
# Content

- Parts and structure of academic papers
- Text production phases in an academic writing project
- Academic writing style

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## Difference between academic paper



# Structure of research papers

- **IMRaD** – Typical writing structure of academic and research papers
- The acronym stands for:

**I**ntroduction

What question was asked? /  
What is the aim of the  
research?

**M**ethod

How was it studied?

**R**esults

What was found?

**a**nd

**D**iscussion

What do the findings mean?

(Source: Hall, 2003, p. 1)

# Structure of a thesis compared to a paper

(1) Introduction

(2) Theory → In contrast to a scientific paper every thesis (Bachelor, Master or Doctoral Dissertation) features a theory chapter (extensive literature review).

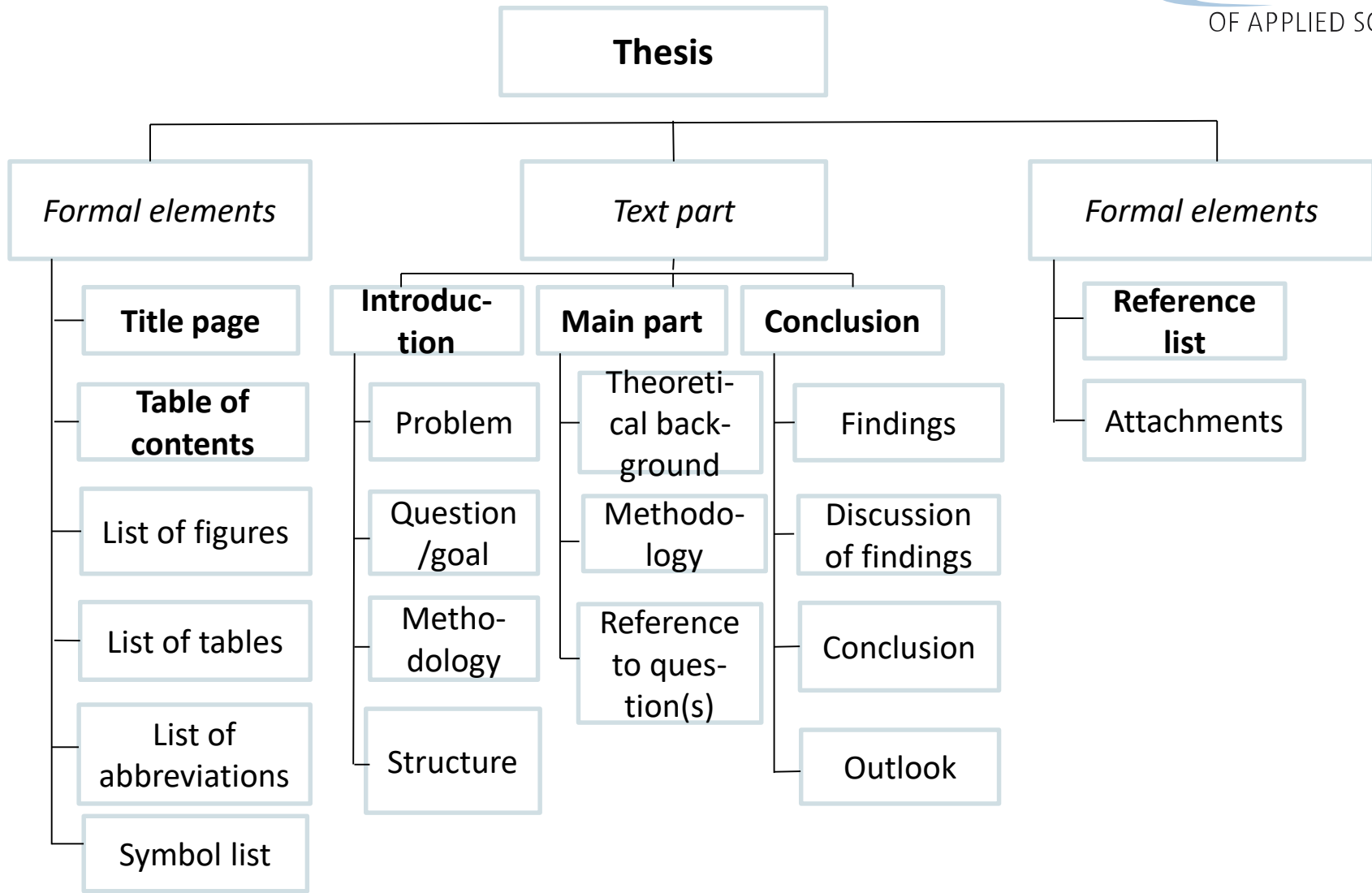
(3) Method

(4) Results

(5) Discussion

(6) Conclusion

# Structure of a thesis



(Source: Adapted from Theuerkauf, 2012, p. 14)

# Constituents of an academic thesis

- **Title page\***
- Confidential clause (Sperrvermerk)
- **Statutory declaration** (Eidesstattliche Erklärung)
- Abstract/Summary
- **Table of contents**
- **Further directories like a list of figures, list of tables, list of abbreviations, or a symbol list**
- **Text part – Introduction, main part, conclusion**
- **Reference list**
- Attachments

\* The parts marked in bold are mandatory!



## Parts of the title page

- Name/Logo of the Frankfurt UAS
- Study course and module
- Kind of academic paper (bachelor thesis, project thesis, etc.)
- Title (and subtitle)
- Name and matriculation number
- Title and name of the reviewer/referee and co-referee
- Processing period (Bearbeitungszeitraum)
- Date of submission

## Formal elements preceeding the text part

- Confidential clause
  - Is necessary if the thesis is based on confidential data and information from a company/institution
- Statutory declaration
  - You confirm that you have composed the thesis by yourself without the use of any other than the cited sources and aids and that your thesis has not yet been submitted to any examination body and not been published before

## Formal elements preceding the text part

- Abstract/Summary
  - Is a short summary of the topic, research question(s), methodology and findings
- Table of contents
  - It shows the structure and hierarchy of the paper/thesis
  - It has no chapter number

## Formal elements preceding the text part

- Table of contents
  - Every subsection has to have at least two equal headings!

<b>CORRECT</b>	<b>WRONG</b>
<b>1</b>	<b>1</b>
<b>1.1</b>	<b>1.1</b>
<b>1.2</b>	<b>2</b>
<b>2</b>	<b>2.1</b>

## Formal elements preceding the text part

- Table of contents
  - Headings should be formulated in a comprehensible and precise way
  - Creating a formal structure is a dynamic process. Start with a basic structure and change/amend it during the working process
  - It is advisable to use the style templates in Word for headings and to create an automated table of contents

## Formal structure of a thesis

Chapter number	Part	Page number
No chapter number	Title page	No page number
	Confidential clause	
	Statutory declaration	
	Abstract/summary	
	Table of contents	II
	List of figures/tables	III
	List of abbreviations	IV
1	Introduction	1
2	Chapter 2	etc.
3	Chapter 3	
4	Conclusion	
No chapter number	Reference list	
	Attachments	

# Introduction

- Its function is to introduce the reader to the topic
  - What is the topic and the problem?
  - What makes the topic relevant and interesting?
- Description of the research question(s) and target
- Description of the methodology and structure of the paper/thesis
  - Which methodology do you apply?
  - In which sequence do you proceed (short description of the content of the following chapters)?

## Main part

- Its structure depends on the specific topic, the research question and the methodology applied. It typically includes the following parts:
  - Description of the state of the art, state of research, specific theories (if applicable) and central terms
  - Elaboration of solutions and alternative solutions
  - Description and assessment of findings and results
- The single chapters and passages should be connected!

**Note:** You try to solve a problem with scientific methods, not to simply retell information!



## Conclusion

- Description of findings with regard to your topic and research question
- Findings from the single chapters should be shortly summed up (without giving new information!)
- Reflection and conclusion of results and recommendation for action (if applicable)
- Outlook on future developments

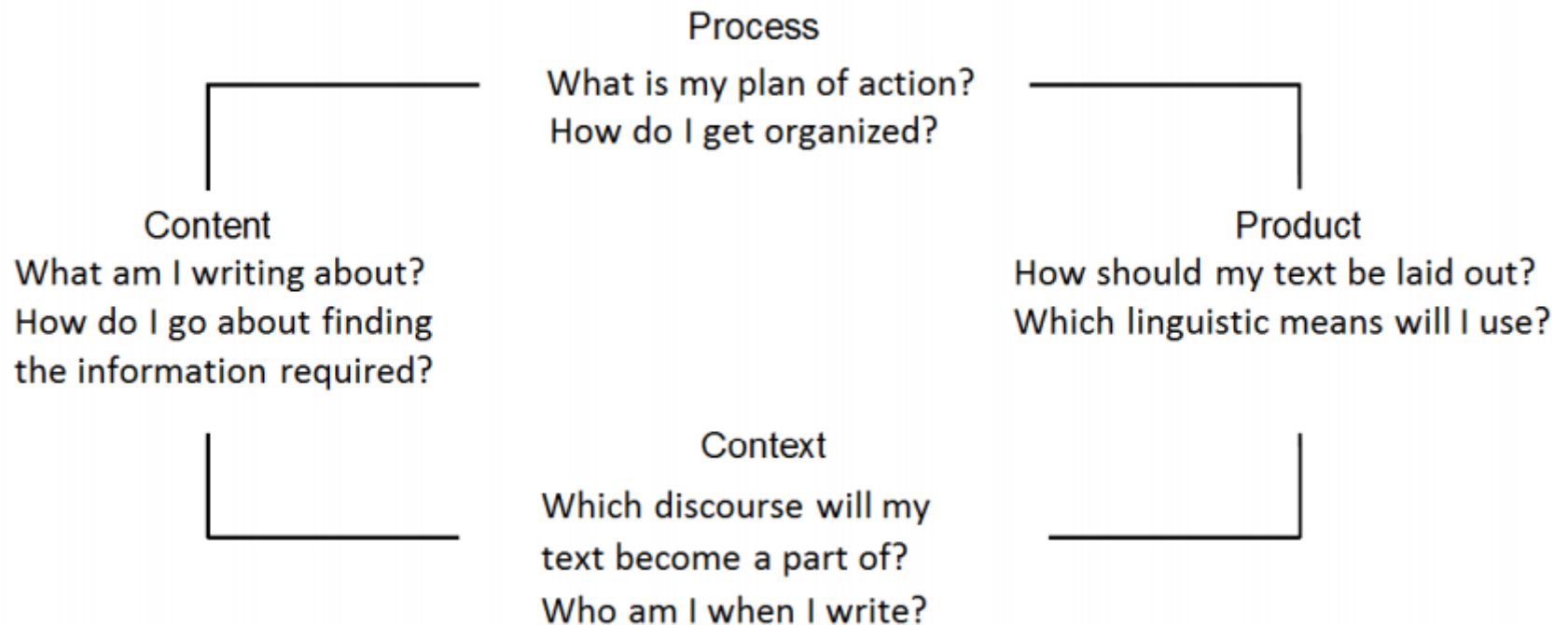
## Formal elements following the text part

- Reference list
  - You include the complete reference of all sources quoted directly or indirectly in the text.
  - The format of the reference list depends on the referencing style used.
- Attachments
  - It is used e.g. for diagrams, data sheets, technical drawings, etc. which are not described in the main part
  - Documents in the attachment chapter should be numbered and described with a headline

# Content

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# Questions to ask before starting a writing project

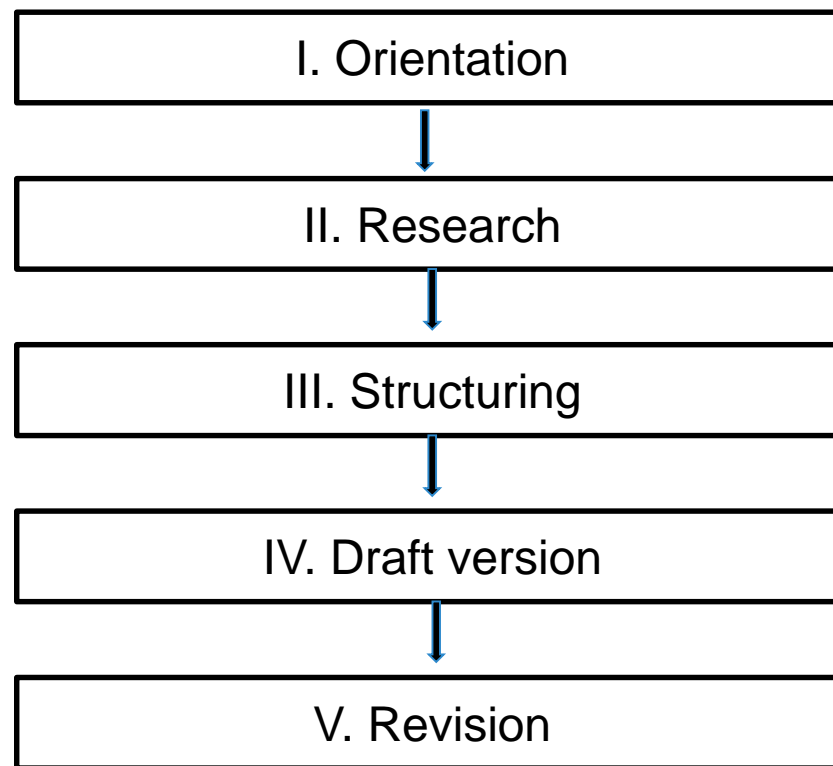


(Source: Adapted from Kruse, 2007, p. 130)

## How to start...

- For an overview and to plan your project, it is advisable to **break down the writing process into manageable steps**
- This is the basis for your project and time schedule
- Sometimes, the steps and phases run parallel or are recursive

# Phases in the text production process



(Source: Adapted from Esselborn-Krumbiegel, 2014, p. 18)

## Phases in the text production process

- For each step of the writing process, there are specific and very helpful writing tools. These can e.g. be found at the *Writing Center of the TU Dresden*.

German version: *Starthilfe Schreiben*.

[https://tu-dresden.de/karriere/weiterbildung/ressourcen/dateien/schreibzentrum/infothek/181121\\_SZD\\_Starthilfe\\_dt\\_pdf\\_web.pdf?lang=de](https://tu-dresden.de/karriere/weiterbildung/ressourcen/dateien/schreibzentrum/infothek/181121_SZD_Starthilfe_dt_pdf_web.pdf?lang=de)

English version: *Jumpstart your writing*.

[https://tu-dresden.de/karriere/weiterbildung/ressourcen/dateien/schreibzentrum/handouts/181121\\_SZD\\_Starthilfe\\_en\\_pdf\\_web.pdf?lang=de](https://tu-dresden.de/karriere/weiterbildung/ressourcen/dateien/schreibzentrum/handouts/181121_SZD_Starthilfe_en_pdf_web.pdf?lang=de)

# Text production phases

- **Step 1: Orientation**

- Clarify your writing job
- Do a first literature research and collect ideas
- Find your topic
- Formulate your research question(s) and define your goal
- Choose your methodology
- Draft a time schedule
- Write an exposé (if applicable)



# Text production phases

- **Step 2: Research**

- Intensive and systematic literature research for primary and secondary sources
- Reading and analysis of literature and data

# Text production phases

- **Step 3: Structuring**
  - Bring your information in a logical order
  - Create a first draft for your structure/table of contents
  - Develop your argumentative structure

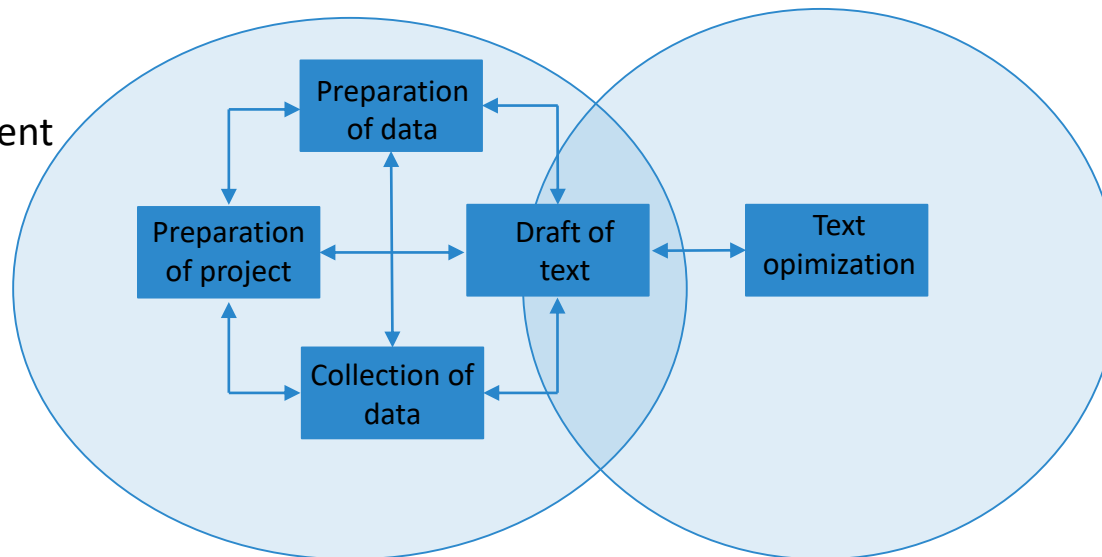
## Text production phases

- **Step 4: Draft version**

- Texts that reach their communicative goal with regard to the reader are a result of your own clear understanding of your text
- Writing as self-understanding: swiftly write down your text
- Writing for your target group/reader: Revise your draft in order to make it comprehensible for a reader who is not an expert in your field

# Text production phases

**Cycle 1:**  
To clarify content  
for yourself



**Cycle 2:**  
To clarify content for  
your readership

(Source: Theuerkauf, 2012, p. 11)

# Text production phases

- **Step 5: Revision**

- Revise your text with regard to content, baring in mind the reader of your text
- Remember to present your ideas and information in a comprehensible and logical way
- Proofread your text with regard to spelling, grammar and punctuation as well as format (**NOTE**: Do several proofreading rounds and just focus on one area, e.g. spelling, at the time)
- Ask at least one person to proofread your text!

# Content

- Parts and structure of academic papers
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- **Academic writing style**

## Academic writing style

- Academic texts have a formal tone and style, but they are not complex and do not require the use of long sentences and complicated vocabulary.
- Each subject discipline has its certain writing conventions, vocabulary and types of discourse to become familiar with.
- However, there are general characteristics of academic writing that are relevant across all disciplines.

## Academic writing style

- Academic writing is:
  - **Planned and focused:** answers the questions and demonstrates an understanding of the subject
  - **Structured:** is coherent, written in a logical order, and brings together related points and material
  - **Evidenced:** demonstrates knowledge of the subject area, supports opinions and arguments with evidence, and is referenced accurately
  - **Formal in tone and style:** uses appropriate language and tenses, and is clear, concise and balanced



## Basic academic writing rules

- Be concise:
  - Only include one main idea per sentence
  - Keep your sentences at a reasonable length
  - Avoid repetition
  - Be objective
- Avoid using redundant words (e.g. *fundamentals* instead of *basic fundamentals*)
- Avoid colloquial language
- Omit contractions (do not vs. don't)
- Use the passive voice judiciously

## Basic academic writing rules

- One idea = one paragraph
- Look carefully at the first sentence of each paragraph (= topic sentence)
- Use signposts to structure the text (e.g. headings, sub-headings and summary sentences) (Macgilchrist, 2014, pp. 13)
- Be careful in the use of the first personal pronoun (I, we, my, our, us)
- Bare in mind your reader (what does he/she already know?)
- Carefully proofread your paper (in case of uncertainty, consult e.g. <https://www.merriam-webster.com/>)

# Tenses in academic writing

Tense	Where to use	Example
<b>Present</b>	<ul style="list-style-type: none"> <li>• General truths or states</li> <li>• Habitual actions</li> <li>• To cite an author</li> <li>• To present your interpretations</li> <li>• To describe diagrams and figures</li> </ul>	<ul style="list-style-type: none"> <li>• Two artefacts provide insights into ....</li> <li>• The standards are regularly reviewed.</li> <li>• Pauli's exclusion principle states ...</li> <li>• Table 1 demonstrates that...</li> </ul>
<b>Past</b>	<ul style="list-style-type: none"> <li>• An action started and finished in the past</li> <li>• Results of an investigation/experiment</li> </ul>	<ul style="list-style-type: none"> <li>• Duly and Burt conducted their studies in the early seventies.</li> <li>• Two subjects showed an increase in ...</li> </ul>
<b>Future</b>	<ul style="list-style-type: none"> <li>• Inform about a future event</li> </ul>	<ul style="list-style-type: none"> <li>• This paper will focus on...</li> </ul>
<b>Present perfect</b>	<ul style="list-style-type: none"> <li>• An action started in the past and has not finished</li> </ul>	<ul style="list-style-type: none"> <li>• A great deal of research has been conducted on ....., but few experiments have been carried out to discover...</li> </ul>
<b>Passive voice</b>	<ul style="list-style-type: none"> <li>• To put the focus on new or important information</li> </ul>	<ul style="list-style-type: none"> <li>• Results were analyzed ...</li> </ul>

# Difference between German and English papers and theses

## **Nominal vs. verbal style:**

Zur **Zielerreichung** ist eine andere **Herangehensweise an das Problem** notwendig.

To **attain a goal**, we need to **approach the problem** differently.

## **Active vs. passive voice:**

**In dieser Studie werden** die Auswirkungen von Sprache auf die Qualität der Bachelorarbeit **untersucht**.

**This study explores** the effects of language on the bachelor thesis.

# Difference between German and English papers and theses

## **Complex vs. simple sentences:**

Im Allgemeinen kann man davon ausgehen, dass beiden Sätzen im Kern ihrer Aussage die gleiche Bedeutung zu Grunde liegt.

Generally, the meaning of both sentences is the same.

## **Gender-neutral language:**

Für die Forschung wurden **Tänzer und Tänzerinnen** befragt.

For the research, **dancers** have been interviewed.

## Helpful resources on academic writing

- Writing Center University of North Carolina (<https://writingcenter.unc.edu/tips-and-tools/>)
- Purdue Online Writing Lab (<https://owl.purdue.edu/>)
- University of Manchester: Academic Phrasebank (<https://www.phrasebank.manchester.ac.uk/>)
- University of Toronto (<https://advice.writing.utoronto.ca/>)
- Queen Mary University of London (online course) (<https://www.qmul.ac.uk/library/academic-skills/resources/#>)

Thank you very much for your attention!

## Reference list

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