# ACADEMIC WRITING: SELECTED ASPECTS



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# OUTLINE

- What is scientific writing and a scientific work?
- How do I find a research question?
- Referencing/citing
- Structuring the thesis
- Common mistakes

## SCIENCE ....

Science is nothing but a way to understand what the world is like. Goldratt, Eliyahu M., 2002

Science should contribute to a better understanding of cause-andeffect relationships (knowledge acquisition) and also to a better problem-solving behavior.

Considering the above: What is a scientific work?





### What is a "scientific work"?



... what is not a "scientific work"?



# HOW A SCIENTIFIC WORK SHOULD BE

- Approach to objectivity
- Documented work
- Systematic work
- No textbook and no "sampler" in terms of a thematic literature compilation
- Explains real phenomena

. . .

# WHAT IS A MASTER THESIS?

- The master's thesis is a scientific work
- The master's thesis follow all aspects which are related to a scientific work
- The master's thesis serves as a proof that the graduate is able to perform scientific work systematically and independently.

## How do I find a research question?





## **GENERATING A RESEARCH QUESTION I**

■ How to look for the research question (RQ):

It's best not to look for them, but to find them!

- Confrontation with problem-focused texts and statements:
  - □ Contributions to scientific journals
  - □ Conference papers (Proceedings)
  - $\Box$  conference visits
  - $\Box$  scientific discussions
  - Choose the topic based on your own strengths and interests



## **GENERATING A RESEARCH QUESTION II**

## **General recommendations:**

- Take your time to determine and formulate the RQ
- Structure, literature, methodology depends on RQ
- The work is measured by answering the RQ
- Formulate a precise question
- Sub-questions are possible, but questions should be related
- First, choose several alternatives that you can think of to choose from



## **GENERATING A RESEARCH QUESTION III**

### Examination of the research question:

- Whether the RQ is suitable you only recognize when you try to create a concept
- When resources and know-how are not enough (e.g. basic knowledge from other disciplines)
- RQ should be based on your own strengths and interests
- "Depth comes before width!"
- Do not pretend too much: task must be manageable.
- Do not edit several questions, which are not related.
- Avoid questions where you find too much literature or too little literature
- Favorable if there are 10-20 recent contributions in scientific journals, which belong to the core of the RQ



## LITERATURE SEARCH I

Search the online journals (access to databases available !?)

- Creation of keyword lists (subscripts, generic terms, synonyms, english)
  - □ Search with multi-panel search options
  - □ Link terms by using Boolean operators

### Possibly restrictions:

- □ Restriction to certain journals ...
- □ Limit the search possibly to the last 5 to 10 years
- Check the **bibliographies** of relevant articles for more interesting / relevant literature
- Search for articles by **authors** who connect you to the topic



## LITERATURE SEARCH II

### **Important Questions:**

- What insights are already available on this topic or problem?
- What are appropriate approaches solving the research question?
- Which approaches are suitable for answering the research question?
- Are the research gaps or future research interests formulated in literature?



# **RATING OF LITERATURE I**

### Rate literature through:

- Publication type
  - Papers in (peer reviewed or renowned) scientific journals
  - Papers on (reviewed or renowned) scientific conferences
  - Research magazine
  - Collected Works (Conference Proceedings)
  - Textbooks
  - Contributions in practice and industry magazines
  - Popular science books
- Publication properties
  - Bibliography
  - Table of contents
  - · Objective, research question
  - Referenced statements
  - Precision of terms

Rößl 2008, p. 180ff



# **RATING OF LITERATURE II**

Rating of journals through journal rating lists, e.g.

- VH ٠
- Im ٠
- Qu ٠

Firefox 🔻

VHB

Startseite

Sie sind hier: Service /

Teilranking Technologie- u Innovationsmanagement

<ul> <li>VHB-Jourqual: http://vhbonline.org/</li> </ul>				GR	Journal/Zeitschrift			Rating	JQ Inc
Impact-Factor (e.g. SSCI, SCimago)     Innovation				32	Resea	rch Policy	′	А	8,4
Quality Criteria:					Journal of Business Venturing			А	8,3
<ul><li>Peer review process</li><li>Citation rate</li></ul>				46		oreneursh y and Pra		А	8,1
<ul><li>Literature included, cited in papers</li><li>Structure and writing style of papers</li></ul>				53	Journal of Product Innovation Management			А	8,1
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			Journal/Zeitschrift			Rating	g JQ2 Indexwert		
/HB Entrepreneurship			Research Policy			А	8,41		7,3
artseite Verein Einrichtungen Preise - Förderung Veranstaltungen	2	34	Journal of Business Venturing Entrepreneurship: Theory and Practice Journal of Small Business Management (JSBM) Strategic			А	8,38		$\square$
e sind hier: <u>Service</u> / VHB-JOURQUAL	з	46				А	8,18		7,1
Stellenbörse VHB BuR - Business Research VHB-JOURQUAL Leitung und Beirat	4	167				в	7,30		7,0
VHB-JOURQUAL 1 (2003)         VHB-JOURQUAL 2 (2008)         VHB-JOURQUAL 2 (2008) Details         VHB-JOURQUAL 2.1 (2011)								_	6,9

## **REFERENCING/ CITATION**

Which rules do you have to follow?



# **PLAGIARISM I**

## What is plagiarism?

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

In other words, plagiarism is an act of fraud. It involves both stealing someone else's work and lying about it afterward.

https://www.plagiarism.org/article/what-is-plagiarism

#### Definition of plagiarism at JKU:

https://www.jku.at/en/degree-programs/students/theses-and-dissertations/#c142142



# **PLAGIARISM II**

## All of the following are considered plagiarism:

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not (see our section on "fair use" rules)

https://www.plagiarism.org/article/what-is-plagiarism



# **Avoid that THIS happens to you!**

#### Plagiatsvorwürfe Die "wissenschaftliche Katastrophe" um Ministeri Aschbacher weitet sich aus

Nicht nur in der Diplomarbeit der türkisen Politikerin fand Plagiatsjäger Stefan Weber etliche abgeschriebene Passagen – sondern auch in Aschbachers Doktorarbeit

#### Guttenberg bittet Uni um Rücknahme des Doktortitels

21. Februar 2011, 23:04

(DiePresse.com)



Verteidigungsminister räumt "gravierende handwerkliche Fehler" in Dissertation ein - Rückendeckung durch Kanzlerin Merkel und eigene Partei

Kelkheim/Berlin - Angesichts immer neuer Plagiatsvorwürfe gegen seine Dissertation gibt der deutsche Verteidigungsminister Karl Theodor zu Guttenberg seinen Doktortitel endgültig auf. Er bat der Universität Bayreuth am Montagabend schriftlich, den Dr. zurückzunehmen. Zur Begründung habe er auf "gravierende handwerkliche Fehler" in seiner Arbeit hingewiesen, teilte die Hochschule am späten Abend mit.



DER STANDARD, 6.2.2013:



#### Trotz Plagiats: Schavan will Bildungsministerin bleiben

6. Februar 2013, 09:54

Entscheid der Uni Düsseldorf: CDU-Politikerin hat in Dissertation systematisch kopiert - SPD erzürnt

## Die Presse: 15. Februar 2010

Richter verweigern Studentin das Doktorat: Plagiat

**ERSCHLICHEN.** Schummelstudentin ging durch alle Instanzen und verlor doch ihren Titel.

#### DER STANDARD, 29.3.2012:



PLAGIAT Präsident Schmitt verliert seinen Doktortitel

#### GREGOR MAYER AUS BUDAPEST, 29. März 2012, 20:54

Ruf nach Rücktritt wird lauter - Kommission der Budapester Semmelweis-Universität entscheiget für Aberkennung

# **CITATION STYLE: HARVARD**

Harvard Syle: All references are given directly in the text (not in footnotes!). The author team, the year of publication (and the page number) are to be indicated in parentheses.

"In entrepreneurship research, spatial aspects can play an important role in many analyses, such as the diffusion of innovations (Rogers, 1983. p. 34), market entry of firms (Debarsy & Dejardin, 2008, p. 8), and the role of regional characteristics in shaping entrepreneurial activity (Karlsson & Dahlberg, 2003, p.144)."



# **DIRECT CITATIONS**

- Direct citation: literally represent true-to-the-text passages of a source. They are placed in execution strokes. Direct quotations are often used in the definition of terms.
- > Example:

According to *Culture's consequences,* values are "a broad tendency to prefer certain states of affairs over others" (Hofstede, 1980, S. 19).

Bibliography:

Hofstede G. (1980): Culture's consequences. International differences in work-related values. Baverly Hills (CA): Sage.

- As far as possible, reference is made to the original text (primary source). Only if the primary source is not accessible the secondary source may be cited. The primary source has to be specified always first:
- > Beispiel:

"...sind nämlich in der Lage, die Einseitigkeit der formalen Organisation zu kompensieren..." (Luhmann, 1965, S. 284, zitiert nach Schreyögg, 1999, S. 15)

Bibliography:

Schreyögg G. (1999): Organisation. Grundlagen moderner Organisationsgestaltung, 3. Auflage, Wiesbaden: Gabler.



# **INDIRECT CITATIONS**

- Indirect Citations: when a strange thought is reproduced in its own words. Indirect and non-direct citations should be prevalent in a scientific work.
- The corresponding text passages are not indented, not written in single lines and not quoted!
- > **Multiple citations:** If several references are cited for a statement. Using multiple quotes, for example, can underpin an argument or point out conflicting opinions.

#### Example:

z.B. Soziale Netzwerke, über die eine Gründerperson verfügt und die sie aktivieren kann, um diverse Unternehmensressourcen zu beschaffen, werden in der Literatur oft im Kontext des Sozialkapitals diskutiert (Aldrich & Zimmer, 1986, S. 2; Coleman, 1990, S, 154).

Multiple citations should not be used to artificially extend the bibliography. Often it is better to refer to the original author of a thought than to insert multiple multiple quotes (for example, when discussing a theory)!



## **Structure of the Master Thesis**

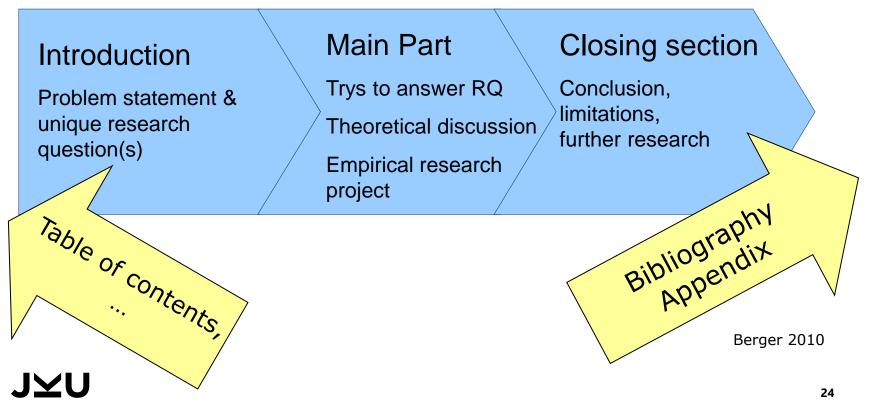




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## LOGICAL STRUCTURE OF MASTER THESIS

- Scientific work has three parts
- Pay attention to the flow and logical structure of the work (red line, structuring of the table of contents)



# **STRUCTURE OF MASTER THESIS**

- Introduction:
  - Presentation of the problem or the motivation, the objective and the structure (methodology)
- Main Part:
  - □ General theoretical discussion of the problem (incl. definition of relevant terms)
  - □ Transfer to the specific theoretical discussion, the specific context, and/or the specific application
  - □ Presentation and discussion of own empirical work
    - Method
    - Results
    - Discussion of theoretical and empirical findings
- Concluding part:
  - Conclusion, implications, limitations, research outlook



## **INTRODUCTION – LOGICAL STRUCTURE I**

### 1.1 Problem statement (WHY?):

- $\Box$  Gives the reader a first orientation about the subject matter of the work.
- □ Describes the problem or problem landscape
- □ Why is the topic interesting / important / relevant?

### **Examples:**

- □ Introduces the topic and context by showing that the research field is important ("Recently, there has been growing interest in ...")
- Developing the topic and context based on the results of existing research ("Author X found that ...")
- □ Research on previous research to identify a research gap ("However, the issue X remains under-researched ...")



## **INTRODUCTION – LOGICAL STRUCTURE II**

### ■ 1.2 Research Aim/Objective (WHAT?):

- $\hfill\square$  Clear and concise formulation of the goal of the work.
- $\Box$  What awaits the reader?
- $\Box$  What is trying to show with the following chapters?
- $\hfill\square$  Location of the question in the problem landscape
- □ Connection of possibly partial questions

### Examples:

□ Secure the focus of the work by setting the goals (formulate a RQ: "The research question of the thesis is ...")



## **INTRODUCTION – LOGICAL STRUCTURE III**

### ■ 1.3 Structure of the thesis (HOW?):

- $\Box$  How should the question be treated or answered?
- □ How are the individual chapters related?

#### **Examples:**

- □ Defining the structure of the work ("The remainder of the thesis is structured as follows ...").
- □ Explains how to reach the goal or answer the research question
- □ Explains why you include certain chapter



# LOGICAL STRUCTURE OF MAIN PART

- Which chapters are necessary to answer the research question?
- Main part should be aligned exclusively to the problem & research question!
- Subject-specific focus
- Do not include general knowledge
- Argumentation chain must be complete
- No repetitions Repetitions are a sign of a "poor" structure

Berger 2010

# **DEFINITIONS/ TERMINOLOGIES**

## **Conceptual Definitions / Definitions**

- Used for the introduction and / or demarcation of terminology
- Necessary if
  - □ terms are used differently in the literature
  - $\Box$  certain definitions have to be introduced.
- What is not discussed?
- How are terms understood / used in the work?
- Include definitions in theoretical review



# **CONCLUDING PART**

### Conclusion

- Summary of main findings
- Which RQs could be answered in the thesis and what could not be answered?

### Implications

- Recommendations for action
- What do the results mean for further research, business and / or politics?

### Limitations

- Why some (sub-)questions could not be answered?
- Shortcomings of the research design, method, sample, etc.

### **Outlook/Future Research**

- What is missing or which questions are still open?
- What could be the next steps?

# FORMAL LAYOUT

- Use JKUs standard layout for Master thesis
- Use standard citation style (Harvard style) throughout the whole thesis
- Overview of the reasoning facilitated by
  - $\hfill\square$  structure leveling
  - □ paragraph Styles
- Improve readability
  - □ Red thread (central theme)
  - $\Box$  fluid style
  - $\hfill\square$  concise and precise formulations
  - □ appropriate use of graphical representations



## Common mistakes!!!

A summary ...





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# **COMMON MISTAKES I**

- Problem is not clear or not shown at all
- Problem is missing, work starts with goal
- Problem not associated with literature
- Topic often too broad (lack of focus, superficial work)
- Objectives not clear or not defined
- Poor structure of work (logical structure is missing)
- No scientific writing style
- Scope of work (often too short / too long)
- No red thread



# **COMMON MISTAKES II**

- Research question is not answered
- Title of the work promises more (or something else) than the work involves
- Work too little theoretically founded (no link with literature, too little or wrong literature)
- Literary basis: too many books, too few current journal articles
- Connection with theories is missing
- No or insufficient reflection



# COMMON MISTAKES III

## **Citation:**

- Taking over secondary quotes of other works
- Too close to the original
- Statements not proven
- Sources not in the bibliography
- Sources from Lit Directory not in the text
- No page information (for example in pictures)
- Inconsistent citation
- Wrong citation in secondary quotes



# **COMMON MISTAKES IV**

Spelling, grammar, expression and sentence errors

Use a proofreading service to check your thesis !!!

■ Incomplete, double and "bumpy" sentences can be avoided.





## LITERATURE

- Rössl D. (Hrsg., 2008): Die Diplomarbeit in der Betriebswirtschaftslehre.
   4., neu bearbeitete Auflage, Facultas.WUV: Wien.
- Berger D. (2010) Wissenschaftliches Arbeiten in den Wirtschafts- und Sozialwissenschaften: Hilfreiche Tipps und praktische Beispiele, 1. Auflage, Gabler: Wiesbaden.



# **GRADING CRITERIA (WEIGHTING)**

- Problem statement, research question & structure (clarity and feasibility of objectives, logical structure) max 15 points
- Quality of theoretical backgrounds (literature review, theoretical concepts and instruments, interdisciplinarity) - max 25 points
- Quality of empirical analysis (appropriate choice and application of method) - max 25 points
- Transfer and conclusion (validity of proposed findings, logical deduction, originality of contribution) max 10 points
- Academic working style, academic writing style (correct terminology, references, layout, use of language) max 15 points
- Independent way of working in the research and writing process max 10 points

IFI - Evaluation-Sheet

