Introduction to Scientific Working

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Course Analysis

`https://lv-analyse.uibk.ac.at/evasys/online.php?p=7CU6U`

Summary of last lecture

- Kinds of publications
- Publication process
- Peer review

Checklist for reviews

1 Short summary of the core of the paper

2 Is it well written? Is it clear?

3 Is the topic well covered, are ideas or quotes missing?

4 Who is the paper aimed at? (right audience?)

5 Does the abstract/intro/end correspond to the article?

6 What is the level of the article?

7 Is it too short or long?

8 Are there grammar or syntax issues? Typos?

9 How could the article be improved?

10 Are relevant parts available online?

11 Is it correctly cited?

Lecture Content

Research and Understanding

Understanding and summarizing of scientific text, Literature research,
Internet search, Citing, Practical scientific work

Structuring Scientific Works

Kinds: Seminar, Bachelor and Master theses,
Topic analysis and paper structuring

LaTeX

Interaction, Typesetting of text, Images, Diagrams, Lists, Tables,
Mathematics, Fonts, Special cases

Evaluation, Checking and Presentation

Publish or Perish, Evaluation of work of others,
Review system in computer science, Introduction to presentation

Introduction to Presentation

Example

> *Ein Student spricht. Siebzehn Studentinnen und Studenten langweilen sich. Die Professorin langweilt sich. Niemand fühlt sich wohl.*[1]

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[1]Norbert Franck, Lust statt Last(2): Referat, Vortrag, Seite 223.

Introduction to Presentation

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<div align="center">

Both in academia and industry you will need to present,
for many of you often, and important

</div>

---

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Preparing a talk

Structure

- Introduction
- Overview
- Main Part
- Closing

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Before I start, let me shortly ...

Introduction and Outline

Goals of the Introduction

- Get the audience interested
  Why should they listen?

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  Is it interesting?

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  What was said already, what will be there?

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Goals of the Outline

- Start or end of the introduction

- Presents the structure of the talk

- Allows to establish the length of parts

Suggestions for less confident speakers

Fange nie mit dem Anfang an, sondern immer drei Meilen vor dem Anfang! [. . .] So gewinnst Du im Nu die Herzen und die Ohren der Zuhörer.[2]

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  Occam's Razor

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- Test presentation
  Fictitious or real

- Occam's Razor (again)

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   Simple main points
2. Illustrative
   Examples, Examples, Examples, . . .

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Summary

1 Formulate clearly
Simple main points

2 Illustrative
Examples, Examples, Examples, . . .

3 Show importance
Talk of "Problems", "Questions"
rather than "Things" which "were said", . . .

Closing

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The closing is the end of the talk
It has the longest effect. Last slide visible during questions.

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Questions?

- Good, if no moderator
- Bad, with a moderator

Examples
(Not all good!)

- UIBK PhD seminar:
  `http://cl-informatik.uibk.ac.at/teaching/ss17/mip?semester=ss17`

- UIBK Group seminars:
  `http://cl-informatik.uibk.ac.at/teaching/ss17/ms2/schedule.php`

- Conferences:
  `http://easychair.org/smart-program/LPAR-21/LPAR-accepted.html`
  `http://aitp-conference.org/2023/`

- Non-scientific advice (not all relevant):
  TED, Company product lauch presentations, Media
  `http://www.youtube.com/watch?v=Q5WT2vweFRY`

Handout

Enables having the most important definitions in writing. It could

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Note

a handout is only sometimes a service or it is appropriate

Presentation in LaTeX

```
\documentclass[
%draft,
%handout,
]{beamer}

\usetheme[shadow]{ComputationalLogic}

\usepackage{pgfpages}
\pgfpagesuselayout{4 on 1}[a4paper,
landscape,border shrink=5mm]

[...]

\begin{document}
[...]
\end{document}
```

Homework

1. Read "5 Presentation Metrics"
   https://business.lehigh.edu/sites/default/files/2019-08/Five%
   20Presentation%20Metrics.pdf
2. Search for other suggestions on how to present scientific work
3. Send a preliminary version of the slides by email
4. Start to look at the reports to review (but reviews are due in 2 weeks)
   http://cl-informatik.uibk.ac.at/teaching/ws23/ewa/reports.php
   Yours to review are the three following the one you did. So if you did n you will
   need to review $n + 1..n + 3$ modulo number of reports.