How to Diss?
Effectively and Efficiently
How to Diss
This is Not About

The place
https://www.google.com/maps/place/Dissen/@52.1122165,8.1720512,13z

The art of insulting
https://www.wikihow.com/Diss-Someone

Battle Rap
https://www.youtube.com/watch?v=NUC2EQvdzmY
• This thesis is computer-generated. No signature is required.

• This thesis uses results from tools that might be illegal in your jurisdiction.

• Some passages in this thesis might be computer-generated.
How to Diss

Reading

Writing

Organizing

Images from OpenClipart.org (Creative Commons by Steve Lambert)
Common Tasks

- Management of stored papers
  - Search text fragments in papers
  - Look up BibTex for stored papers

- Conducting a literature survey
  - Look up BibTex for specific publications from the web
  - Filtering large BibTex files
  - Downloading papers
  - Classifying found papers
Organizing
What I Needed?

- **getbibtex.rb**
  - Fetches bibtex entries for stored papers

- **gsresearch.rb**
  - Collects bibtex entries from Google Scholar

- **bibfilter.rb**
  - Filters large BibTex files by various criteria

- **gsdownload.rb**
  - Downloads all files referenced by a BibTex files

- **SLR-toolkit**
  - Supports classification of multiple BibTex items
Efficient Organizing
Structured Literature Survey

- Fetch all publications matching a query string
  
  **With:** software programming language
  **Without:** rbac policy sociology bio psycho
  **From:** 2000-2014 (first round),
  **Exact:** role based
  **Any:** modelling modeling

- Sort out irrelevant publications
- Download PDF files for all relevant publications
- Collect statistics about survey process

**Workflow**

- Fetch
  - gsresearch

- Filter
  - autofilter

- Download
  - gsdownload

- Classify
  - SLR-toolkit

**Workflow Diagram**

- Fetch
- Filter
- Download
- Classify

- autofilter

- raw/fil-
  - gsresearch
  - autofilter
  - gsdownload
  - SLR-toolkit

- downloads/

- classified/

- flow: Diss
  - stats/
How to Diss

Reading

Organizing

Writing

Images from OpenClipart.org (Creative Commons by Steve Lambert)
How to Diss

Writing

How it feels like

Knowledge in your Head

You

Your Writing Tool

Writing Result

How to Diss
Writing
Knowledge in your Head and Computer
You
Your Writing Tool
Writing Result
Your Writing Tool
Writing Result
Image from MaxPixel.net (Creative Commons by Markus Baumeler)
Multimarkdown

- Focus a simple syntax to both *read* and *write*
- Markdown extension by *Fletcher T. Penney* to support research activities
- Important features are: *Footnotes, Tables, Citations,* ...

**Pandoc**¹

- Command line tool written in Haskell
- Available for **all** platforms
- Direct transformation to
  - XHTML, HTML 5,
  - LaTeX,
  - EPUB (v2 or v3), ...
- Supports customized templates

---

¹ http://johnmacfarlane.net/pandoc/
Panruby

- Ruby-based command line tool
- Employing ERB as template engine
  - `<% ... %>`
    - Execute without return value
  - `<%= ... %>`
    - Execute and return value
- Include files into documents
- Conditional creation of content
- Embed source code in documents

**Thesis Template**

- Creation of a pandoc-Template for phd thesis based on tudscr
- Includes multiple options to customize fonts, pagestyle, and layouts
Simple Shell Script

- Periodically check git for updates
- In case of updates
  - Execute panruby
  - Execute latexmk
  - Commit and push changes
- Runs (almost) everywhere

```bash
#!/bin/bash

git remote update
TEMPLATE="tdissertation.tex" ;
DOCUMENT="thesis"
LOCAL=$(git rev-parse "@{0}")
REMOTE=$(git rev-parse "@{upstream}")
BASE=$(git merge-base "@{0}" "@{upstream}"
if [ $LOCAL = $REMOTE ]; then
  echo "Already up-to-date."
elif [ $LOCAL = $BASE ]; then
  git pull
  echo "Executing panruby..."
  ruby panruby.rb latex $DOCUMENT $TEMPLATE > $DOCUMENT.md.log;
  latexmk -halt-on-error -pdf $DOCUMENT;
  # commit changes
  git add $DOCUMENT.pdf $DOCUMENT.tex
  git commit -m "compiled"
  git push
else
  echo "You have local changes!"
else
  echo "Diverged"
fi
```
Family-of-rpls.md.erb
# Contemporary Role-based Programming Languages
{#cha:rpls}

<!-- … -->

### JavaStage {#sec:javastage}

```java
<% if @variant==:latex %>
```{#lst:wtf .java float=t}

```java
\setcounter{lstlisting}{3}
<% end %>
```

```java
<%=
load("src/javastage.java") %>
```

```java
<% if @variant==:latex %>
\setcounter{lstlisting}{4}
<% end %>
```

- No support for *custom languages* in listings
- Markdown tables too inflexible
- No direct support for references to
  - Figures,
  - Tables and
  - Acronyms
- **Bugs** sometimes hard to debug
"All of a sudden he seemed to lose confidence in himself, his topic and the quality of the work he had done."
– Inger Mewburn

• Typical phase in any thesis process
• Caused by
  • working without immediate reward
  • Focusing on full task
  • Loosing track of your progress
• Can cause depression

3) https://thesiswhisperer.com/2012/05/08/the-valley-of-shit/
Interlude

Motivate Yourself

- Find reward strategy
- Trick your brain
- Keep your dopamine level up

SLE`14

SLE`15

SPLC`15

SPLC`16

SLE`17
Interlude

Motivate the Shit out of Yourself

Grand Price

LEGO, the LEGO logo and the Minifigure are trademarks and/or copyrights of the LEGO Group.
Interlude

Avoid Bad Habits

Mate Consumption

- Mate consumption
- Submission
- Defence
- Doktor

How to Diss
The Beardening

"Piled Higher and Deeper" by Jorge Cham (www.phdcomics.com) used with permission
# Text templates

```erb
genevaluation.erb

# Text templates
additions=["Furthermore", "Indeed", "In addition", "Moreover", "Besides", "In fact"]

# ...
Textperclass=[ # ...
lambda {ext,add,name,complete,partial|
  r="#{add}, *#{name}* incorporates the contextual"
  r<<" Features #{complete} fully" unless complete.empty?
  r<<" and" unless partial.empty? or complete.empty?
  r<<" Features #{partial} partially" unless partial.empty?
  r<<" ."
}
]
```

```md
# JavaStage

In general, *JavaStage* supports the behavioral nature of roles [@barbosa2012]. In other words for the behavioral nature, it supports Features 1, 3, 6--8, 10--13, and 15 completely as well as Features 4 partially. Specifically, roles have properties and behaviors, objects may play different roles simultaneously, the sequence of role acquisition and removal may be restricted, unrelated objects can play the same role, roles can play roles, the state of an object can be role-specific, features of an object can be role-specific, roles restrict access, roles can inherit features, and an object and its roles have different identities. Although, JavaStage only partially provides that objects may play the same role (type) several times.
```

- Generate LaTeX *tables*
- Generate *PDFs* from SVG
- Generate *Plots* with *tikz*
- Generate *Text* from *classification*
**Favorite Editor**
- Syntax Highlighting
- Auto Completion
- Templates

**Continuous Integration**
- GitLab
- Build Script
- Error Log

**Panruby**
- Multimarkdown + Ruby
- Configurable Templates

**Automatic Generation**
- Tables
- Plots
- Text

Future Work

- Generate different version
  - Text for visually challenged
  - HTML for online reading
  - EPUB for offline reading
- Include Language Tools into continuous integration
- Add acronym and reference support
On Github

- Bibfilter
  https://github.com/Eden-06/bibfilter

- gsresearch
  https://github.com/Eden-06/gsresearch

- panruby
  https://github.com/Eden-06/panruby