

Org-mode and Org-roam for Scholars and Researchers

EmacsConf 2020

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Introduction I

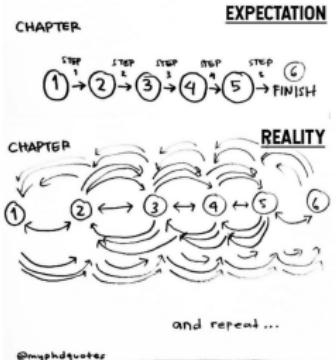
PROGRESS IS MESSY.



@myphdquotes

STEPS OF WORKING ON THE DISSERTATION CHAPTERS

@myphdquotes



and repeat ...

@myphdquotes

The research process: expectation versus reality ^{a,b}

^a My PhD Quotes. "Progress is too messy to notice. Don't imagine it like a staircase." *Instagram*, March 3, 2020. Accessed November 25, 2020. <https://bit.ly/39loTSf>

^b My PhD Quotes. "The most relatable post to describe my current situation." *Instagram*, February 28, 2020. Accessed November 25, 2020. <https://bit.ly/3mk2U1K>

Introduction II

- Motivation
 - Research is hard
 - Writing is even more difficult
- Goal is to add some *structure* to the **madness**. (Unfortunately, the madness never stops)
 - Org-mode: planning, time-management, document creation (manuscripts and presentations)
 - Org-super-agenda: customized way of viewing agenda
 - Org-sidebar: buffer-specific agenda/ TODO view.
 - Org-roam: note-taking and general writing, knowledge creation
 - Org-roam-bibtex: reference management, literature review
 - Org-roam-server: visualize your knowledge database
 - Org-transclusion: transclude text from 'branch' org files to 'main' org file.

Org-mode modules

Org-mode

Planning

- Org-agenda
- Org-habit
- Org-gcal
- **TODO**'s and tags
- Org-capture

Writing

- Org-roam
- Org-journal
- Org-noter
- PDF-tools

Reference Management

- Org-ref
- Helm-bibtex
- Bibtex-completion
- Org-roam-bibtex

Planning

- Activities

- Task management (pomodoro method; time-blocking)
- Time management (appointments; time-blocking)

TODO's and tags I

- These are identifiers in an org-file as tasks or reminders.
- The types of TODO's can either be set **globally** in your init file, or they can be **file/buffer** specific.
- They are created as a subtree (think 'heading'), or in-line ('org-inlinetask).
- You can assign deadlines, scheduled date and time, active timestamps, and inactive timestamps.

TODO's and tags II

```
#+TITLE: Webscraping IEA Policy Database
#+BABEL: :session *R* :cache yes :results output graphics
:exports both :tangle yes :dir ~/Dropbox/Dissertation/Data
#+TODO: TODO ANALYZE GRAPH TABLE CODE DOCUMENT | DONE
TRYING CANN'T
```

- IEA Policies Database :notes:
[\[2020-04-02 Thu 16:47\]](#)

IEA manages a collection of energy and climate related policies from many countries. I have also compiled policies from [NewClimate Institute](#), which consists of 3,867 policies and covers 193 countries. I plan on consolidating these two policy databases and explore any patterns.

- **ANALYZE** number of countries in the dataset :noexport:
- **Download IEA's sitemap.xml and export policy links to a new text file**
First, we download IEA's sitemap, which is in .xml format. We are lucky that we still have access to their sitemap which has all the links within their website. This, however, might change later. This file is as of [\[2020-04-03 Fri\]](#).

Org-capture

These are customizable org-headings that you can create on-the-go.
They can be regular TODO's or just notes.

Select a capture template
=====

[t] TODO
[a] Appointment
[n] Note
[r] Research Tasks
[m] Meeting

[q] Abort

Template key:

```
• Org-capture settings|  
  
#+BEGIN_SRC emacs-lisp  
(setq org-capture-templates  
      '(("t" "TODO" entry (file+headline "~/Dropbox/orgfiles/inbox.org"  
                                         "General Tasks")  
         "* TODO %? \\nSCHEDULED:%^T")  
        ("a" "Appointment" entry (file "~/Dropbox/orgfiles/gcal.org")  
         "* %? \\n:PROPERTIES:\\n:calendar-id:  
           alhasan.noorah@gmail.com\\n:LOCATION:\\n:END:\\n\\n:org-gcal:\\n%^T\\n:END:  
           \\nLink: %a")  
        ("n" "Note" entry (file+headline "~/Dropbox/orgfiles/inbox.org"  
                                         "Notes")  
         "* %? \\n%U\\n%a\\n")  
        ("r" "Research Tasks" entry (file+headline  
                                     "~/Dropbox/orgfiles/inbox.org" "Research")  
         "* TODO %? \\nLink: %a")  
        ("m" "Meeting" entry (file+headline "~/Dropbox/orgfiles/inbox.org"  
                                         "Meetings")  
         "* Meeting with %? \\n%U")))  
#+END_SRC
```

Org-agenda I

- Populates all your TODO's and appointments into a singular view.
 - Default is week-view.
- Using `org-super-agenda`, I set up my agenda as a daily view with appointments, deadlines, and a habit tracker.
- **NOTE:** I am STILL struggling with it, so it's a **PrOcEsS**.

Org-agenda II

Wednesday 25 November 2020

Today

GMAIL: 8:00..... -----
GMAIL: 10:00-12:00 Quiet Writing
10:00..... -----
10:43..... now -----
GMAIL: 12:00-12:30
12:00..... -----
GMAIL: 14:00-16:00 Writing Group
14:00..... -----
16:00..... -----
18:00..... -----
20:00..... -----
WRITING: Free-writing



Due today

HOME: DUE TODAY: TODO

Overdue

HOME: 2 d. ago: TODO [#C]

Due soon

HEALTH: In 3 d.: TODO [#C]

Org-agenda III

Wednesday 25 November 2020

Today

	8:00.....	-----
GMAIL:	10:00-12:00	Quiet Writing
	10:00.....	-----
GMAIL:	12:00-12:30	
	12:00.....	-----
GMAIL:	14:00-16:00	Writing Group
OTHER:	14:00-15:00	Emacs slides
	14:00.....	-----
OTHER:	15:00-16:00	TODO Framework diagram
	16:00.....	-----
	16:32.....	now
	18:00.....	-----
	20:00.....	-----
WRITING:	Free-writing	
Due today		
HOME:	DUE TODAY: TODO	
Overdue		
HOME:	2 d. ago: TODO [#C]	
Due soon		
HEALTH:	In	3 d.: TODO [#C]

● General Tasks

:PROPERTIES:

:CATEGORY: OTHER

:END:

● TODO Framework diagram

<2020-11-25 Wed 15:00-16:00>

Link: [Emacs slides](#)

● TODO Emacs slides

<2020-11-25 Wed 14:00-15:00>

Link: [Emacs slides](#)

Org-sidebar

Another way of accessing your TODO's that are outside of your agenda. I am using it to keep my project-specific TODO's in the main project org file.

```
#+TITLE: Dissertation Proposal
#+roam_alias: "Dissertation" "Proposal"
#+STARTUP: CUSTOMTIME OVERVIEW
#+SETUPFILE: template.org
#+export_file_name: Alhasan_Dissertation_Proposal
#+exclude_tags: notes noexport
#+TODO: TODO WRITE DEFINE EXPLAIN EXAMPLE DISCUSS
FIGURE TABLE SCREAM | DONE TRYING CANN'T
```

- **SCREAM** into a pillow
SCHEDULED: <Friday, November 27, 2020 +1w>

:PROPERTIES:
:STYLE: habit
:END:

- **Introduction**

```
#+transclude: t
Problem statement
```

- Tasks :noexport:
 - **WRITE** 250 words on research motivation...

- **Literature Review**

DEADLINE: <Thursday, December 17, 2020>

- **Theoretical Model**

- Tasks :noexport:
 - **FIGURE** theoretical framework

View: Upcoming items in: 2020-03

- 27 November 2020
SCREAM into a pillow today
- 17 December 2020
Literature Review in 20d

View: To-do items in: 2020-03-23

- To-do: **FIGURE**
FIGURE theoretical framework
- To-do: **WRITE**
WRITE 250 words on research motivation

Literature review (writing + reference management) I

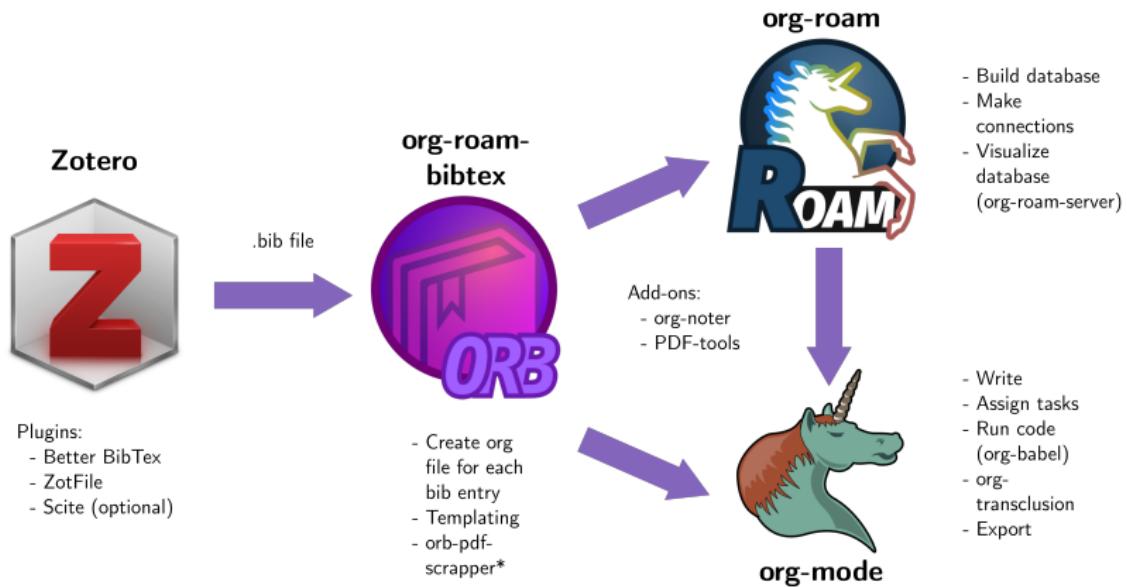
"I love writing lit reviews!"

said no one, ever.



som eecards
user card

Literature review (writing + reference management) II



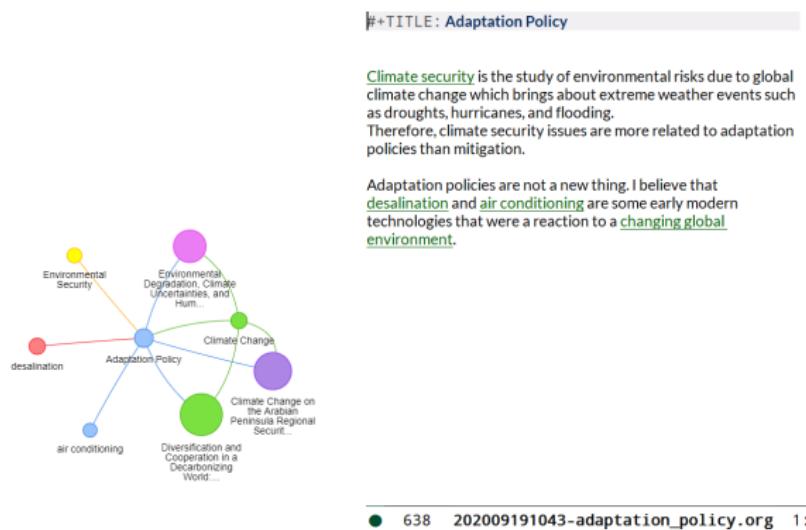
Zotero: open-source reference management software

- **BetterBibTex**: automatically creates well-formatted bib files and manages reference keys in a systematic way.
- **ZotFile**: Efficient plug-in to organize PDFs.

Org-roam I

A note-taking package that replicates Roam Research which is based on the Zettelkasten method. I use it to build my literature review and I use `org-roam-server` to visualize my notes into a network.

- It builds on the strength of `org-mode`'s hyperlinking properties.



Adaptation Policy

- 3 Backlinks
 - [Climate Change on the Arabian Peninsula, Regional Security, Sustainability Strategies, and Research Needs](#)
 - 19.6 A Sustainable Future for the Gulf? > Highlight on page 8 > Contents
 - While strategic overseas [agro-investments](#) can be regarded as a form of [adaptation](#) 30, these steps cannot replace much-needed [mitigation measures](#) that must also occur in the [Gulf region](#).
 - [Environmental Degradation, Climate Uncertainties, and Human Vulnerabilities: Realm of Possible Actions toward a Shifting Security Paradigm in the Arab Gulf Monarchies](#)
 - 20.1 Introduction
 - Author attempts to take a holistic and critical view of the multiplicative effects of further [environmental degradation](#), resource depletion, and [climate uncertainties](#) on future [human security](#) in the region. They also outline the limited [adaptation capacities](#) in the absence of an informed and enabled society.

Org-roam-bibtex I

Utilizes a combination of `org-ref`, `helm-bibtex`, and `bibtex-completion` to streamline note-taking workflow with references within the `org-roam` ecosystem.

Org-roam-bibtex II

<pre>#+TITLE: Reframing adaptation: The political nature of climate change adaptation #+ROAM_KEY: cite:Eriksen2015 - tags :: - keywords :: Authority,Climate change adaptation,Knowledges,Politics,Power,Subjectivity • TODO Eriksen2015 :PROPERTIES: :Custom_ID: Eriksen2015 :INTERLEAVE_PDF: C:\Users\Noorah\Dropbox\Zotero\storage\Eriksen2015.pdf :AUTHOR: Eriksen, S. H. et al. :JOURNAL: Global Environmental Change :DATE: 2015-11-01 :YEAR: 2015 :DOI: http://dx.doi.org/10.1016/j.gloenvcha.2015.09.014 :END:</pre>		<p>Reframing adaptation: The political nature of climate change adaptation</p> <ul style="list-style-type: none">• No backlinks!• No ref backlinks!
<pre>● 503 Eriksen2015.org 1:0 All CRLF UTF-8 Org ↵ main (setq orb-templates '("("r" "ref" plain (function org-roam-capture--get-point) :file-name "\${key}" :head "#+TITLE: \${title}\n" #+ROAM_KEY: \${ref} - tags :: - keywords :: \${keywords}\n • Meta information\n :PROPERTIES:\n :Custom_ID: \${key}\n :URL: \${url}\n :AUTHOR: \${author-or-editor}\n :INTERLEAVE_PDF: (%(orb-process-file-field \"\${key}\")\n :INTERLEAVE_PAGE_NOTE: \n :END:\n\n"</pre>		

Org-roam-bibtex III

```
#+TITLE : |The Origins of the Syrian Conflict: Climate Change and Human  
Security  
#+ROAM_KEY: cite:Daoudy2020
```

- tags::
- keywords::

- **Meta information**

```
:PROPERTIES:  
:Custom_ID: Daoudy2020  
:AUTHOR: Daoudy, M.  
:DATE: 2020-03-26  
:YEAR: 2020  
:DOI: http://dx.doi.org/10.1017/9781108567053  
:URL:  
:END:
```

- **Shifting the Paradigm: Human-Environmental-Climate Security (Framework)**

```
:PROPERTIES:  
:PAGE: 15--21  
:END:
```

- Positions vulnerability and sustainability at the center of environmental and climate insecurity and risk.
- Combining security and development concerns, human security is a concept used to analyze people's economic, food, health, environmental, personal, community, and political security.

The Origins of the Syrian Conflict:
Climate Change and Human
Security

- No backlinks!

- No ref backlinks!

Org-noter

- I use it to annotate PDFs and take notes within the same buffer.
 - Works extremely well with PDF-tools.
 - org-noter-create-skeleton



0 notes

2.9M



Meta Information

P1/153



547



Notes of Meta Information

1:0

Meta Information

:PROPERTIES:...

This extensive report explores risks faced by FFDCs (fossil fuel-dependent countries) and provides strategies that help these nations navigate the low-carbon transition.

Org-transclusion I

- An effective way of “copy/pasting” text from one org file (let’s say an org-roam note or a section of your thesis/dissertation) into your main org file.
- It will export all the transcluded text.
- Sort of equivalent to “#+INCLUDE:”

- Peer Feedback :noexport:

```
#+INCLUDE: "Alhasan_Feedback.org" :lines "2-"
```

Org-transclusion II

- Introduction

- **Problem statement** :noexport:

The purpose of this paper is to test the resource curse hypothesis (RCH) by looking at the level of environmental degradation as another developmental consequence of the curse.

These consequences have far-reaching implications on the human health of nations and the long-term viability of local communities.

Moreover, it allows for a more granular exploration of the resource curse's ills, going beyond the effects on economic performance and institutional quality.

I will specifically focus on both 'resource-dependent' and 'resource-abundant' economies, following the definitions proposed by [citet:Brunschweiler2008](#), in which resource abundance is the value of resource assets either per land or per capita, and in contrast, resource dependence is the share of resource exports to gross domestic product (GDP).

These definitions are essential because they distinguish types of resource-rich economies by their relationship with the extractive sector.

For example, a resource-abundant, but not a resource-dependent economy, such as Norway or Canada, in theory, is more likely to pursue social and environmentally-friendly policies because of its ability to redistribute the benefits of resource rents.

Therefore, we are less likely to find negative impacts of resource rents on the environment and human health in these economies.

Thank you!

Special thanks

- @jethrokuan (org-roam)
- @zaeph (org-roam-bibtex; org-roam)
- @myshevchuk (org-roam-bibtex)
- @goktug97 (org-roam-server)
- @nobiot (org-transclusion)
- @alphapapa (org-super-agenda; org-sidebar)