

thesis \Rightarrow dissertation \Rightarrow defence \Rightarrow
degree

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sources

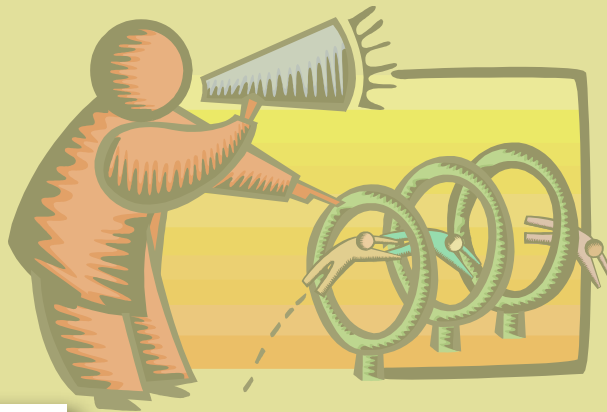
- Saul Greenberg - Chapter 1 club notes
 - Chris Riesbeck, What is a thesis defense?
 - <http://www.cc.gatech.edu/faculty/ashwin/wisdom/what-is-a-thesis-defense.html>
 - Cohen, Empirical Methods in AI



milestones

- MSc

- course work
- write thesis
- defend thesis
- 2 year typical
- 4 year maximum



- PhD

- breadth requirements
- course work
- select supervisory committee
- candidacy exam
- 2 written exams
- oral exam
- background and proposal
- write thesis
- defend thesis
- 3 year typical
- 6 year maximum ?

on to the defence

- complete research
- complete dissertation
- select examination committee
 - MSc
 - supervisor(s)
 - 1 departmental
 - 1 extra-departmental
 - PhD
 - supervisory committee
 - extra-departmentals
 - extra-university



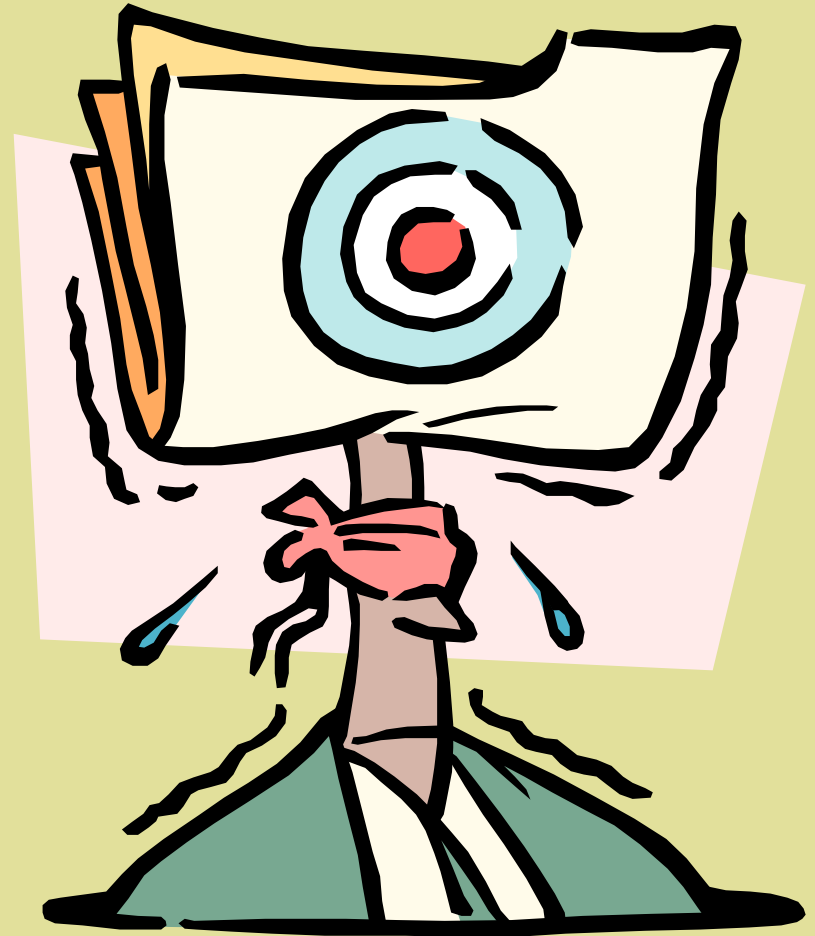
scheduling the defence

- 4-5 weeks before
 - to Faculty of Graduate Studies deliver
 - names of examination committee
 - scheduled time
 - copy of dissertation
- 3 weeks before
 - dissertation in hands of examiners
- allow 8 weeks from completion of dissertation to defence



defense format

- 20 minute presentation
- rounds of questions
 - start with most external
 - finish with supervisor
 - repeat until out of time (2hrs)
- committee deliberations (in camera)
- result
 - 1, 2, 3, 4a, 4b



what is a thesis

- a claim that you support with evidence and argument
- dissertation
 - a document
 - states thesis
 - presents supporting evidence and arguments



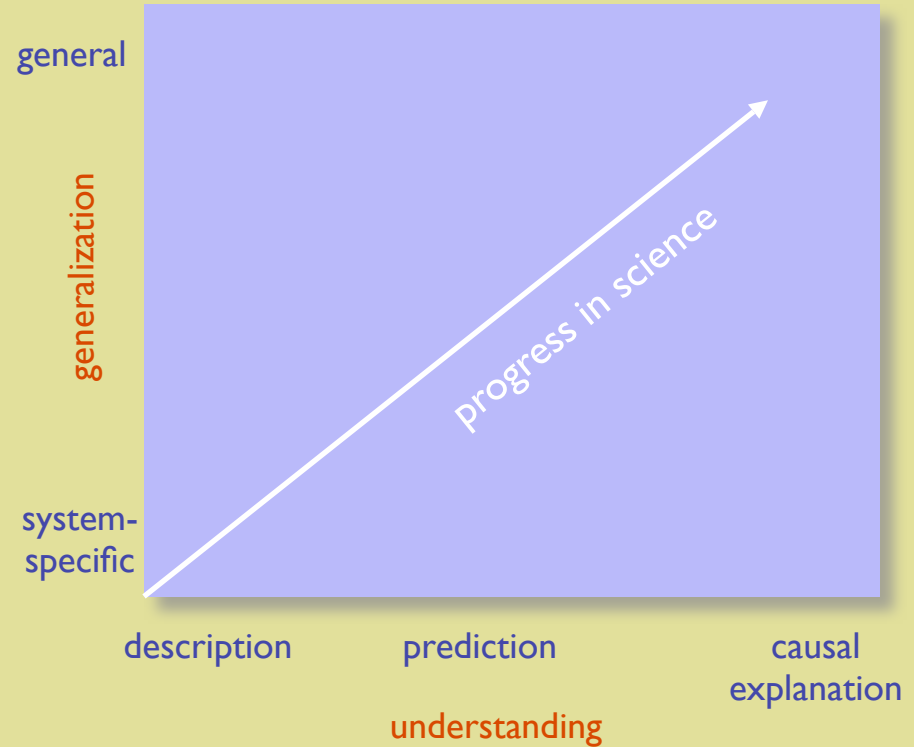
ideas - top down (Saul)

- internal
 - talk to other grads
 - get demos
 - experiment with software
- external
 - **READ** conference proceedings, journals, ...
 - attend a conference
 - try software from other labs
- how to decide
- supervisor
 - may have project
 - may be more flexible
 - must interest you
 - must be rich in scope
 - topical
 - relate to supervisor's experience



ideas - bottom up

- attack small, technical problem
- problem raises questions
 - start investigating questions
 - generalize
 - like Cohen's progression of research questions



ideas

- collect materials
 - binder, folder, ...
 - start building bibliography
 - annotate bibliography
 - keep a *notebook*
 - maintain links to interesting web sites



thesis proposal

- requirement for PhD
- optional for MSc
- early draft of dissertation
 - state thesis
 - do not have to support, but
 - indicate how you will collect evidence



elements (1)

- thesis - your hypothesis or claims
 - Riesbeck suggest 6 categories
 - process X is a feasible way to do task Y
 - process X is a better way to do task Y than any previously known method
 - task Y requires process X
 - people use process X to do task Y
 - process X is a terrible way to do Y
 - people don't use process
 - must be a novel contribution for PhD



elements (2)

- motivation
 - why is it interesting to others
- related work
 - literature survey
 - summarize the work of others
 - organize
 - does not have to be exhaustive
 - should be representative
- focus on ideas, not technical detail
- add value with your organization
- a bad literature survey
 - a disconnected collection of paraphrased papers
 - no big-picture view of how they fit together



elements (3)

- approach
 - how will you gather evidence?
 - how will you test hypotheses?
- evaluation
 - what will your evidence look like?
 - how will you know if it is valid?



elements (4)

- work done
 - what have you accomplished so far?
 - good to have started work on collecting evidence
 - do not go too far
 - on PhD the proposal is your supervisory committee's first chance to give you feedback
 - helps convince
 - supervisor
 - committee
 - you



elements (5)

- plan
 - time line
 - allow time for
 - writing thesis
 - organizing defence



suggestions

- find good drawing software
 - Corel Draw
 - Adobe Illustrator
- type-setting software
 - Latex
 - M\$ Word
 - make sure you can get math/diagrams into document

