

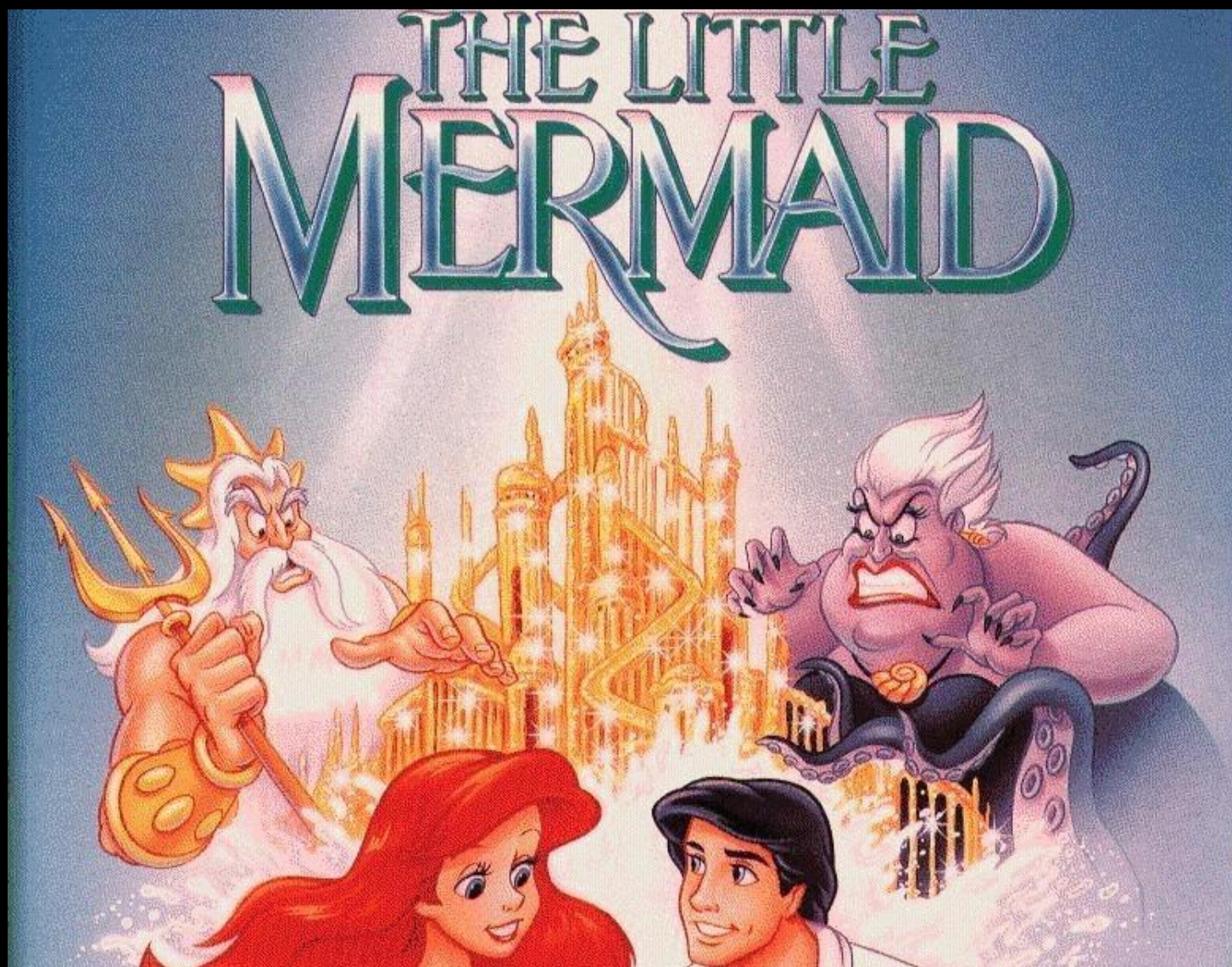
学而时习之: Being a Successful Graduate Student

John Blitzer

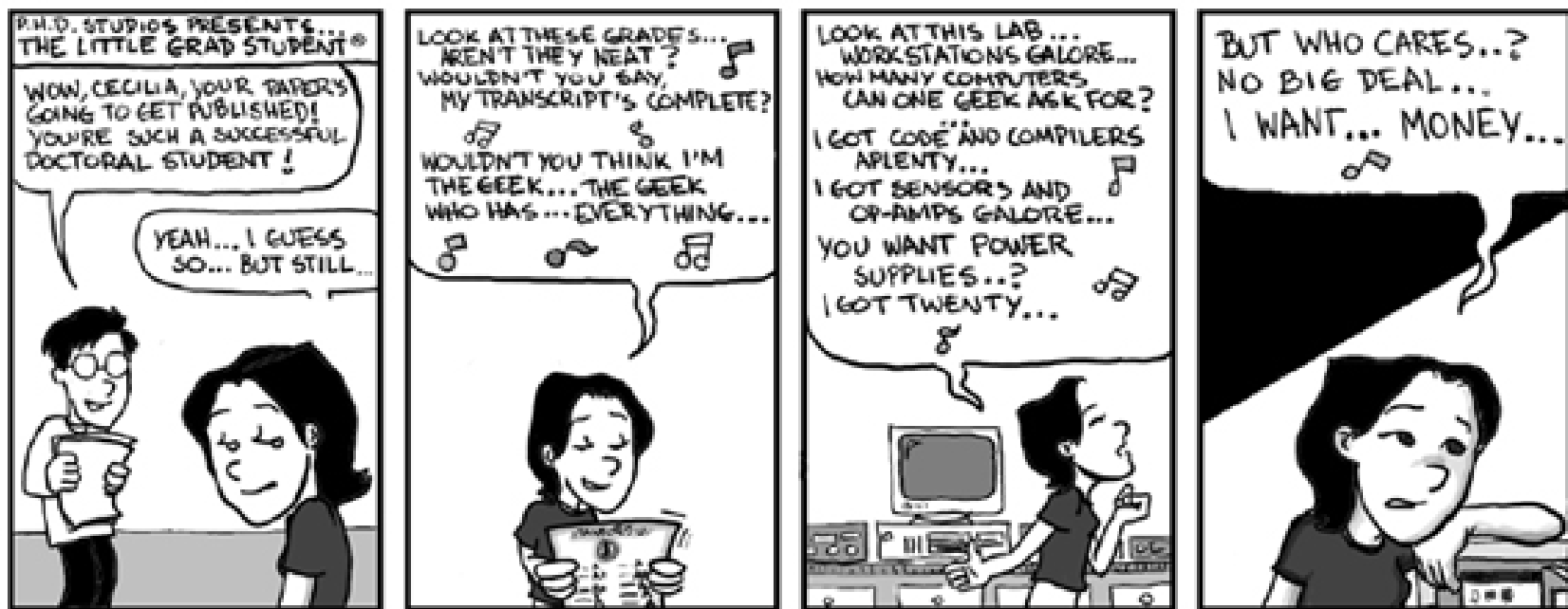
With materials lifted from:
Jorge Cham, 孔子

Outline

- Applying for graduate school
- Graduate school is about you!
-And your advisor
- The importance of presentation



Do I want to go to graduate school?



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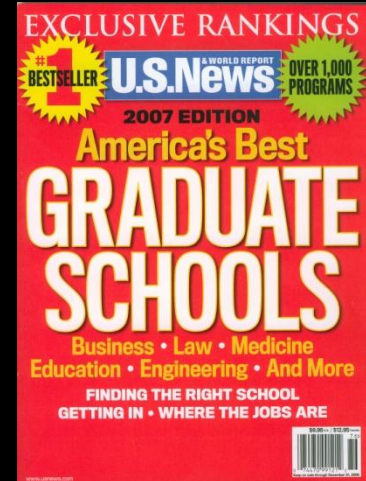
From Phil Agre

Graduate school is training in research. It is for people who love research, scholarship, and teaching for their own sake and for the difference they can sometimes make in the world. It is not for people who simply want more undergraduate courses. It is not for people who are in a hurry to get a real job.

子曰：学而时习之不亦说乎

Which graduate school should I go to?

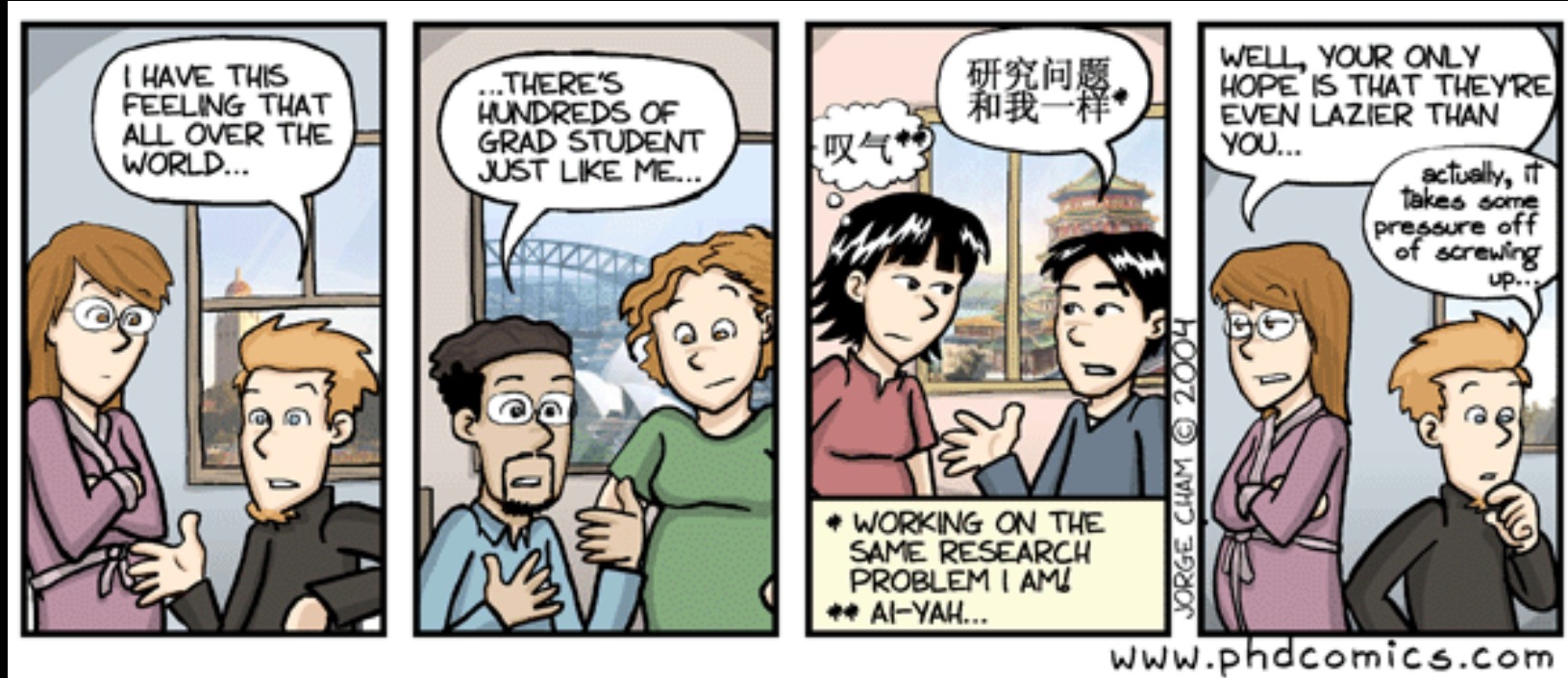
- Typical answer. The top of the U.S. News rankings!
- Problem: Reporters don't know anything about graduate school!!
- Better answer. For every school you consider,
 - Choose at least one professor.
 - Read at least 3 of her papers.



Your application packet

- 关系
- All Chinese applicants have great GRE scores and great grades
- For foreign applicants to American schools, everything is 关系
- Talk to your undergraduate advisor in person!

All graduate students are the same



Actually, graduate school is your time to shine!

- As an undergraduate, you solved problems
- As a graduate student, your main job is to think of your own problem
- The best undergraduates are the best problem solvers
- The best graduate students think of really interesting new problems to solve

Use your strengths

- I am good at learning new languages
- I like historical linguistics and ancient history
- My research area is natural language processing



Take the time to think about a problem



- 周明曰 : “Doing the right thing is more important than doing things right”
- Before you start coding / deriving

- 1) Ask “Is this problem worth solving?”
- 2) Explain your idea to at least 1 other person.
- 3) Write your idea down before coding it up!

Example of a bad research

- Language modeling

I worked on language modeling for 3 years!

Is this problem worth solving?

- **No:** There is so much data (the entire web), that the best language models are consistently the simplest

Example of a great research topic

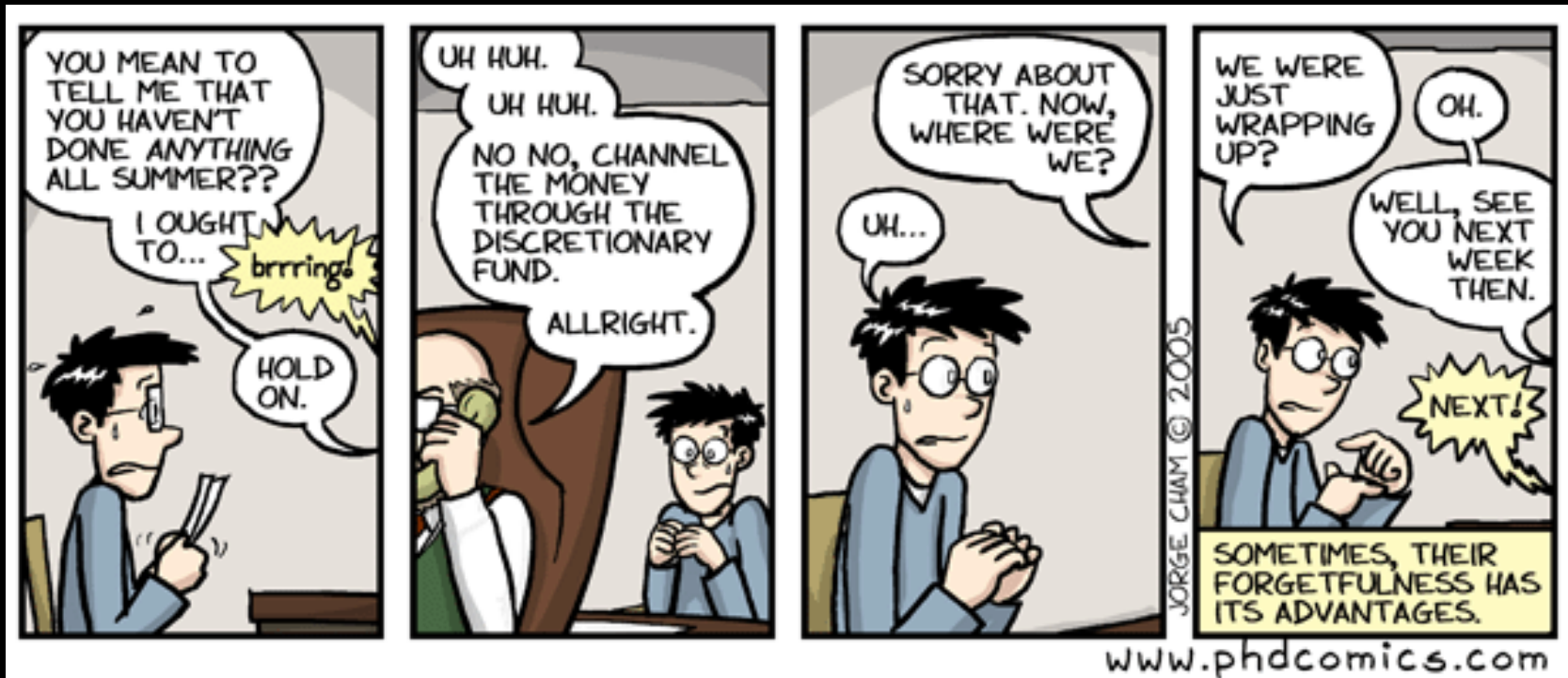
- If I had one, I would be working on it!
- A great research topic is something people need
- A great research topic is easy to explain
- A great research topic doesn't always involve a fancy model

Your colleagues

- 子曰：不患人之不己知，患不知人也
- Example: Your officemate Nikhil wants to go to lunch with you
- Go to lunch with him!
- Ask him about his research!



Your advisor



Your advisor: The real story



John Blitzer:
“学而不厌”

Fernando Pereira:
“诲人不倦”



- Next to you, your advisor is the most important person in graduate school
- Your advisor wants you to be successful!!!

3 rules for meeting with your advisor

1) Be aggressive. Knock on your advisors door.

2) Prepare for meetings

- Write down an agenda a meeting with your advisor.
- Before the meeting, read your agenda

3) Listen to your advisor

- He has much more experience than you
- Fernando: “John. Nobody cares about language modeling. Stop working on it.”

Presentations

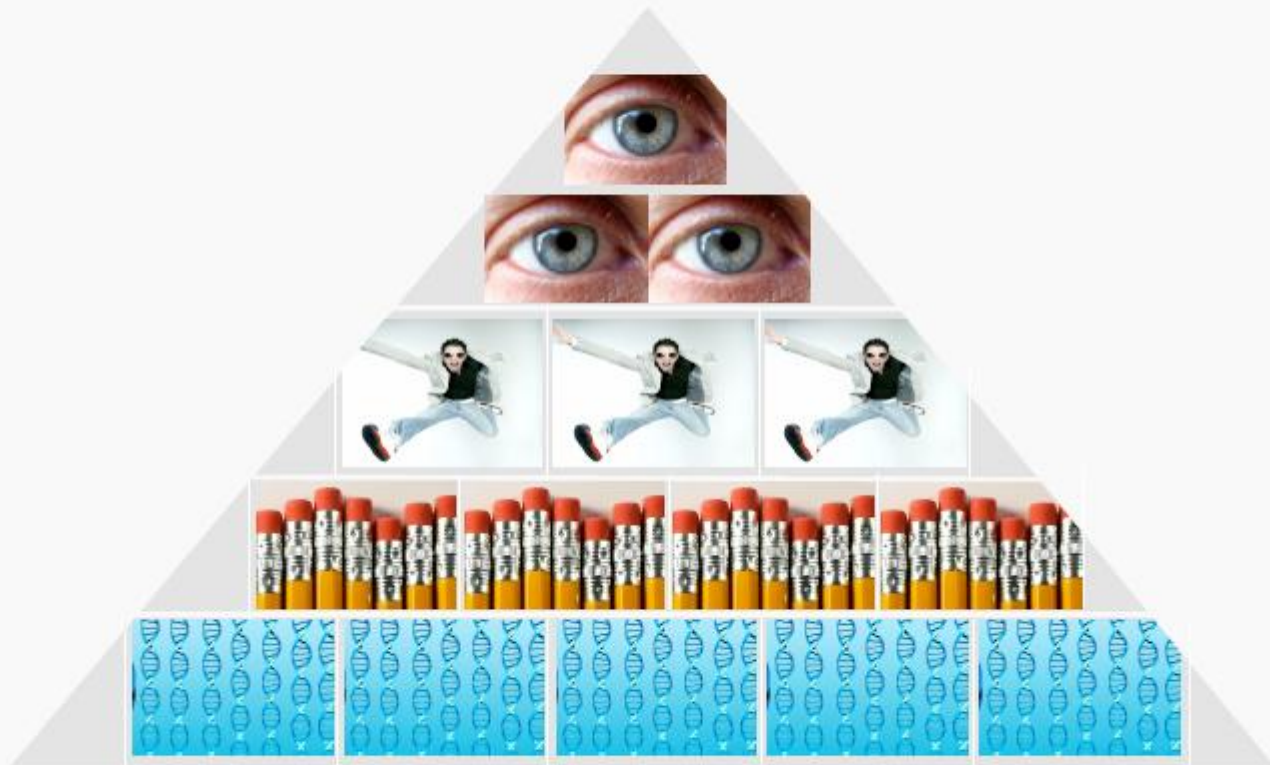


Why are you including presentations?

- “I’m here to do research, not write PowerPoint slides!”
- Wrong. You are here to contribute to the scientific community
- You do that by doing good work **AND** by presenting it in a clear and interesting way
- Spend time on your presentations!

The Presentation Pyramid for Science™

Promotes effective communication



Good science is the foundation



Organization for *understanding*



Dynamic delivery for *impact*



Efficient focused visuals for *analysis*



Want more?

This is from Lisa B. Marshall

<http://www.lisabmarshall.com>

Meeting people in the hallway

- First impressions are important
- Some simple steps for the “elevator pitch”
- Also from Lisa B. Marshall
<http://www.lisabmarshall.com>

- 1) I work in the area of “A”
- 2) Specifically in the field of “B”
- 3) This field is important because of “C”
- 4) My specific work is “D”
- 5) So far the results have shown “E”

- 1) I work in natural language processing.
- 2) Specifically, I work on domain adaptation.
- 3) Much of the data we have for building models comes from specific domains (like financial news). NLP researchers increasingly need to apply models to different domains (like blogs or biomedical text).
- 4) My specific work uses unlabeled data to learn a new representation for adapting models to new domains. We don't need any labeled out-of-domain data.
- 5) So far, we have applied our technique to sentiment analysis and part of speech tagging in NLP.

Conclusions

- **Applying to graduate school.** Remember to really get to know your prospective schools
- **In graduate school.** Find your own problem, and remember to think carefully about it
- **Advisors** are there to help you. Spend as much time with yours as possible
- **Presentation** is an important part of a researcher's job. Learn to do it well!

Thanks to the following

1) PhD comics <http://www.phdcomics.com>

2) 孔夫子. Read 论语 . . . Again!!

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