How to meander your way to grad school, and enjoy life once you get there

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B.A. EPS 2007
B.S. Environmental Sciences 2007
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Amazon Basin
(Google Earth)
Outline

1. About me: my meandering path
2. How to prepare for grad school (while at Cal)
3. Take some time to meander
   - How to make the most of your gap year(s)
4. Is grad school right for me?
5. Tips for applying to grad school
6. What school is right for me?
   - Pros and cons of a top-tier school
About me: my meandering path

2003-2007: Cal
Meandered from astrophysics to environmental to sciences to (almost) environmental engineering to EPS

BA in Geology (EPS)
BS in Environmental Sciences (CNR)
About me: my meandering path

**Fall 2007:** Study abroad in Costa Rica
(officially graduated)

**Dec 2007 – April 2008:** Took time off to travel (Central America, India, Nepal, Egypt, Israel)
About me: my meandering path

April 2008 – June 2009: “Junior Specialist” working for Bill Dietrich
About me: my meandering path

Summer 2009: Traveled in South America
About me: my meandering path

Fall 2009 – Present: Graduate student in geology at Caltech (studying geomorphology with Mike Lamb)
About me: my research
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So you’re maybe, kinda, sorta thinking about doing a PhD?
What grad school is like in the abstract
What grad school is like on the day to day

**Marriage vs. The Ph.D.**

**Marriage**
- Typical Length: 7.5 years
- Begins with: A proposal
- Culminates in a ceremony where you walk down an aisle dressed in a gown
- Usually entered into by: Foolish young people in love
- 50% end in: Bitter divorce
- Involves exchange of: Vows
- Until death do you part? If you're lucky

**Ph.D.**
- Typical Length: 7 years
- Begins with: A thesis proposal
- Usually entered into by: Foolish young people without a job
- 50% end in: Bitter remorse
- Involves exchange of: Know-how
- Until death do you part? If you're lazy

And:
- In a relationship with my Thesis
- It's complicated
A typical grad program

- 4 to 8 years total
- Year 1 (and sometimes 2): Lots of classes, some research, TA
- Sometime in the first 3 years: candidacy exam
- After candidacy: research and TA
Reasons to not go to grad school

It’s really easy to get caught up in your work and lose perspective.
A typical day for me

7:15 AM: Wake up
7:30 – 9:00: Exercise
10:00: Get in the office
Somewhere between 6:00 and 9:00 PM: Leave the office
Evening: Eat/read/relax/sleep
My life as a grad student

- Work ~50 hours/week (rarely more than 60 / less than 40)
- Work ~half the weekends
- Vacation: ~2-3 weeks/year (including holidays)

On the day to day:
- Most time in front of a computer
- Lab/flume work
- Goofing off
- Seminars/reading groups/etc
- TA
- Field work
About me: How I stay sane

- Do research that you find interesting and exciting!

- Set boundaries (e.g. no work at home)

- Make time for things that are important outside of school (e.g. hobbies, family, relationships, whatever)
  - Schedule activities in advance
  - Take vacation (even if you feel too busy)

- Prioritize your work and life
Good prep for grad school
How to prepare for grad school while at Cal

If you want to get into a top rank geosciences program:
How to prepare for grad school while at Cal

If you want to get into a top rank geosciences program:
- Get involved in undergraduate research
  - URAP, NSF REU, SURF, talk to faculty and graduate students
- Present your work at meetings/conferences
  - *This is really important to see if you actually enjoy research!*
How to prepare for grad school while at Cal

If you want to get into a top rank geosciences program:
- Take quantitative classes
  - The more math, physics, chemistry, the better off you’ll be. You want to be solid in the fundamentals.
- Programming skills are a plus too!

How to prepare for grad school while at Cal

If you want to get into a top rank geosciences program:
- Attend seminars, get to know faculty and graduate students.
How to prepare for grad school while at Cal

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And don’t forget Beer on the Balcony!
Take some time to meander: Why?
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- Down time to avoid “burning out” when starting grad school
- Figure out if you even want to go to grad school
- Easy to travel, take breaks, enjoy a period in your life with few responsibilities
Take some time to meander: How?

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- Work for industry/consulting in a related field
- Scholarships
  - Fulbright (study anywhere in the world, 1 year)
  - Marshall (study anywhere in the UK, 2 years)
  - Rhodes (study at Oxford, 2 years)
  - Hertz (5 years at $31-36k/year)
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- The above all pay the bills and give you experience that will help get you into grad school, but make sure to take some time for yourself too!
Applying to schools
Tips for applying grad school

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- Do some reading to be up to speed on the research your perspective adviser does
How to decide
What school is right for me?

- Depends what you want to get out of grad school

  - Do you want to become a professor at a top-tier research institution?
  - A professor at a small liberal arts school?
  - Industry?
  - Consulting?

  - Where does grad school/academia rank in your life priorities?
What school is right for me?

- Visit!
  - Talk to other students
  - Talk to perspective advisers
What school is right for me?

- Potential adviser
  - Cool research?
  - Nice person? (Ask other students!)
What school is right for me?

- Quality of the department overall
  - Opportunity for collaboration
  - Experts outside of your immediate field
What school is right for me?

- Location
  - Close to family/friends/significant others?
  - Fun place to live?
  - Climate?
What school is right for me?

- Salary/funding
  - Will you need to TA every term?
  - Health insurance?

The Law of Free Food:

\[
\text{Food Taste} = \frac{\text{Food Quality} \times \text{Hunger}}{\$\$ \text{ Cost}}
\]
Caltech Division of Geological and Planetary Science

- Located in Pasadena, CA
- ~40 faculty members
- 100+ graduate students
- Lots of post-docs, visitors, etc
- Seminars every day (sometimes twice a day!)
- ~$30k salary, must TA 1 quarter/year
Caltech Division of Geological and Planetary Science

Pros:
- Intellectually stimulating
- Large, diverse faculty
- Lots of funding
- Not tied to a single adviser
- Your only limit to success is yourself
- Travel opportunities
- Good location

Cons:
- Demanding work schedule (self-imposed?)
- High pressure (self-imposed?)
- It’s not Berkeley!
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Questions?

Feel free to get in touch if you have any questions about meandering to grad school, Caltech, geomorphology, or anything else.

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