

How To Not Give a Bad First Theory Seminar

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May 2009

These are in no particular order, some are more important than others, and some of them may seem contradictory. But here are some things to think about as you prepare for a theory presentation.

When writing your slides

- Assume we're smart, but haven't read your paper or the one you're extending
- Don't be limited by your paper

The goal of a presentation is to present the material as clearly as possible. The best way to do this might be different from the best way to write the paper – don't feel limited by the structure/order of your paper. Even if the paper's already written, start with a blank slate and think about what's the best way to present the material in a talk.

(I got complimented on my slides after a conference presentation where I gave a little motivation, then presented the model, then gave the rest of the motivation. That same paper has the lit review at the end, after the model and results. Think about the best way to present the material, not the outline that someone else used at the last seminar.)

(This is also true when you're presenting someone else's work. The key to presenting someone else's paper is to understand it well enough to make it your own; once you do that, the most natural way to present it may not be the way they do in the paper. In class, I teach a simplified version of the model if I think something adds complication without adding insight; I change the notation if I don't like it; I skip some results and re-order others; I motivate the paper in a different way than the author did.)

- Tell a story

Yes, we're theorists. Yes, we're generally very comfortable thinking about a model bearing only some very loose, tenuous connection to reality. It would still help if you can point to some real-world situation that motivates what you're working on.

Do *not* tell four stories that each fit your model a little bit. Try to find one real-world motivation that's as close as you can get.

- Give an example

Your model has n players and arbitrary discrete action spaces. A lot of the intuition can probably be seen in a 2×2 example. Give us that example up front, so we can keep it in mind as you present the more general stuff.

(If you don't give me an example, I'll make one up for myself; but then it might be the wrong example, giving me the wrong intuition. Then, since I'm pretty pushy in seminars, you'll get stuck pulling me back on track. So whatever example you want me to have in mind, show it to me!)

- Make your lit review quick

Talk about as few other papers as you feel you can get away with. If you feel guilty, show a slide citing related papers but only mention one or two of them out loud – “There are a bunch of related papers, let me highlight the two closest to mine.”

Don’t just recite the authors and year of each paper related – either let us scan the slide and move on, or tell us something about the paper. If you can, group them together – “There’s a significant literature, starting with XXX (1999), that models the problem this way; I extend it by adding a third player. YYY (2004) and ZZZ (2007) consider a similar problem, but without moral hazard.” Now you just covered five papers in two sentences, allowing you to...

- **GET TO YOUR MODEL FAST**

The sooner you get to the model itself, the better. The more you discuss your paper in the abstract before you present the model, the more you have to defend it (your setup, your assumptions, your results) in vague terms, which is confusing. As fast as you can, get to the model, so we know precisely what you’re talking about and you can defend it in those terms.

- **GET TO YOUR MODEL FAST**

I’m saying it again for emphasis. The sooner you present your model, the more time we have to engage the question on your terms. Please get to your model fast.

- Define things rigorously

If your paper is about “trust,” explain *exactly* what you mean by “trust.” Just because you’ve been thinking about something for 6 months and think you know exactly what it means, doesn’t mean we have. And just because something is a common English word, doesn’t mean we all agree on its exact definition.

(This may be the best reason to give a practice talk to friends – to learn which things you think are obvious, but aren’t obvious to everyone else!)

- Make the equations count

I found that I like presenting using PowerPoint rather than L^AT_EX, in part because it forces me to retype every equation I want in my presentation, which makes me think about whether I actually want it on my slides. Don’t assume that every equation in your paper belongs in your presentation – only present the ones that are useful. (It might help to move some proof steps to a supplemental slide that you can show if people ask for it, and hide otherwise.)

- Don’t defend your model or assumptions by saying someone else did it

You may think the author of some clever eight-year-old JET paper is a vastly better economist than you; this may even be true. But this is your talk; we don’t care if he thought Assumption 1 was reasonable. If you’re re-using his model, it’s your model now. Defend the assumptions you make, or at least explain why you make them – don’t just say, “I’m doing this because these other papers did it.”

(Your paper may contain some assumptions you don’t like, which you make for tractability. It’s OK to admit this – “I think this assumption is too strong, but it guarantees a unique equilibrium and leads to a lot of the results.” Also, know what each of your assumptions is accomplishing – why you make each one, and what goes wrong (if anything) if you take one away. This is exactly the type of question you’re likely to get in a good seminar – “what goes wrong if Assumption 1 is violated?”)

- Don't be too critical of your own results

Especially in your first presentation, it's hard to find the right balance between selling your work and acknowledging its limitations. Most people err on the side of underselling their work. Don't – if your paper's that bad, why are we wasting our time listening to it?

(I made this mistake in my first practice job talk. After discussing the talk with his colleagues, my advisor emailed me: "...You went overboard in describing what is not in your model. We joked: You don't include the model in general equilibrium; you don't treat (or endogenize!) the role of military spending; you don't describe how R&D is affected by world hunger.")

- Use colors, pictures, animations, ...

My presentations got a little better when I started putting theorems and lemmas in blue text, so they stood out more from the rest of the presentation. Two years ago, one of my grad students presented the Gale-Shapley deferred-acceptance algorithm with an animated slide, showing how tentative matches get made and broken as you step through the algorithm; this made it incredibly clear. (I'm not talking about flashy moving parts and sounds – just having elements appear and disappear from slides is usually enough.)

- *Ricardo adds:* The slides should contain a fair amount of empty space: avoid extra dense slides. The audience will either give up on reading them or give up on listening. I would stress even more to be economical with equations. Our students tend to write too many and then not even explain them. Avoid long paragraphs, use them as bullet points.

Before your talk

- **PRACTICE**

If someone asks you a question you hadn't thought of and you stumble a bit in answering it, that's fine. But there's no reason you should be lost for words on your second slide – whatever you're trying to say, you knew ahead of time you were going to have to say it! Practice alone. (I go over certain things in my head countless times before a seminar, and sometimes even before a class lecture) And practice to friends. (After my first practice job talk, I changed my paper significantly, and didn't have another seminar presentation scheduled; I reserved a room, ordered a couple pizzas, and told every student I could find they'd get free pizza if they came to a practice talk.)

- Ask someone to take notes for you

During your presentation, you won't have time to write down every good question someone asks. After the talk, you'll forget some of them. Ask another student who's coming to your seminar to write down every question and comment you get (and if possible who said it). Also, you'll get better notes from this person if you number your slides.

During your talk

- Face your audience, not the screen

This one's a little tricky. What I like to do: make sure the laptop is between myself and the audience, and look at my slides on the laptop, not the projector screen. This way, even when I'm looking at my slides, I'm still facing the audience. You don't want to turn your back on

everyone every time you look at your slides on the screen. Also, it's fine to occasionally point to stuff on your slides (especially if you're explaining a picture or chart), but don't do it on every slide.

- Let people finish their questions

Few things irk me more than speakers who cut someone off mid-question because they think they know what the person is asking, and then go on to answer the wrong question. Let the person finish their question, make sure you know exactly what they're asking, and then answer. If you're not sure what they mean, ask them to clarify. When they're done asking, take a breath before you start talking.

Also, don't take strongly-worded questions personally – if someone asks you a harsh question, it's usually a sign they take you seriously as an academic and are thinking critically about your work. Don't get defensive, just give an honest answer as to why you made the choices you made.

- Don't defer questions more than necessary

Be flexible. Yes, it's easy to just say, "I'll get to that in three slides," and there are times it's appropriate. But if there's a one-sentence answer, give it now. Or say, "I'll explain that in more detail in a few slides, but the short answer is, ..." And if you cover something fully before you planned to, you can skip over that slide when you get there.

- Don't be limited by your slides

Related to the last one. Your slides are a tool – use them in whatever way they are beneficial. You don't have to say everything that's on your slides. You don't have to put everything on your slides that you plan to say. I tend to like minimalist slides that serve like a detailed outline, so I'll always say lots of things that aren't on the slides (which helps keep the slides themselves from being too crowded).

- *Ricardo adds:* About pace: go slow... This is especially true with equations and intuition. Take your time. It is better to leave some details out rather than racing over the important results. With equations, explain clearly the notation and the important elements.
- *Ricardo adds:* Presentation: Do not read the slides all the time (for that you can just send them by email and not bother presenting them). Presentation is about communicating and explaining and slides are the auxiliary material to make these tasks easier for the audience.
- *Ricardo adds:* Modularity: To better control the tempo of the presentation it is always a good idea to have a modular presentation: the important stuff first and then some additional slides you show if there is enough time. That way, if there are many questions you do not risk leaving the punchline and the important results out.

See Also...

<http://faculty.chicagobooth.edu/john.cochrane/research/Papers/phd%5Fpaper%5Fwriting.pdf>