# Notes on Presenting a Paper

Social Sciences 212a, Fall 1998, Matthew O. Jackson

This provides an outline of things you should be thinking about in organizing your presentations for class. As your presentations will provide practice for your second year presentations, job market papers, and future seminars, I have directed the outline towards seminar presentations, and at points mention you might adjust presentations for changes in circumstance and audience. What appears below represents my own tastes and experience, and is meant only as a guide to preparing a seminar-style presentation.

# An Outline for Presenting a Research Paper

#### 1. The Problem to be Studied.

There are several questions that you should be thinking about answering at the start of a presentation. What is the problem to be analyzed? Why should we care about resolving the issues that are studied here? What should we expect to learn?

In answering these questions, it helps to think of providing such answers to a very general audience, including people outside of the field of economics. If you cannot provide good answers to these questions, you may want to think again about the importance of the study at hand.

## 2. The Contributions of this Paper.

Having described the basic problem at hand, you can now start describing the specific study and approach of the paper that you are presenting. If it is a theoretical (or econometrics) paper, offer an overview of the techniques, setting, and model; and then the main results. If it is an empirical paper or experimental, describe the model or hypotheses to be tested, the data set or experimental design, and methodology used to analyze the data.

In describing the specific study of the paper at hand, you should keep in mind questions that helps put this in perspective. Are the main contributions normative, positive, or methodological? How much of what is learned here can be extended or applied beyond the specific setting analyzed? What insight is offered into specific phenomena or other areas of research? This part of the presentation is somewhat delicate, and my taste is to keep this part of the presentation reasonably short. Explain why the study is interesting, what is to be learned, and outline how you will go about it and then move on. Avoid falling into the trap of presenting so much detail that you end up presenting the model twice. While I am arguing for clarity and brevity, it is still important to provide the audience with a good sense of where the presentation is going, as that makes it much easier for them to process the information that is coming. Sometimes a presenter thinks that by giving away the main conclusions too early, that he or she will lose the suspense of the presentation. However, unless you are a master of clarity it is very difficult for your audience to follow a technical presentation of over an hour in length without some idea of where you are headed.

### 3. Relation to the Literature.

Next, you can put the contribution of the paper in perspective by describing how the results of the paper fit with what is already known. This is a chance to refine what was discussed under heading 2, above.

Let me make a few remarks on this part of the presentation.

You should avoid turning your talk into a survey (unless, of course, it is one). Concentrate on discussing the most closely related work, and offer a clear and concise comparison. You can feel free to field questions on relationships to other work as the questions arise naturally when you present the model or results. Also, it is often quite useful to postpone much of this discussion, especially fine details, until the end of the presentation. At the end of the presentation, the contribution of the current paper is clearer and some of this discussion can be better directed.

In the particular situation where the current paper is very closely related to a specific piece of existing research (e.g., the paper is a direct extension of previous research), it may be best to reverse the order of 2 and 3. In that case it may make sense to start by briefly describing the previous research, and then discussing the contribution of the current paper with respect to that research.

A common mistake in discussing the relationship to previous work, is to refer to a paper such as "Laurel and Hardy (1934)" and to assume that your audience can recall exactly what was shown there or even that most of the people in the audience have read (or seen) it. This is especially true in situations like second-year paper presentations and job-talks, where the audience tends to be very diverse. In almost all situations it is easy to overestimate the familiarity of your audience with the specifics of the subject at hand; and once you lose the audience it is very hard to regain their attention.

# 4. Definitions, Descriptions of Data, Etc.

You can now begin to describe the framework, model, or study in some detail.

The main caution with regards to this part of the presentation is to keep things simple. Try hard to keep notation as simple as possible, using obvious symbols where possible. Once you have more than a few symbols that the audience needs to instantly recognize, it becomes difficult for them to follow. Feel free to present special cases, rather than the paper in full generality (to the extent that the special cases provide insight to the general case). It is often better to be able to convey the basic insights and intuition of the paper, than to impress the audience with its generality. Even in situations where you plan to present general results, it is helpful to use examples as they can be a great device to familiarize the audience with the problem, notation, and approach of the paper. Carefully chosen examples can convey much of the insight as well.

Depending on where the main contribution of the research lies, you may want to spend more or less time on this part of the presentation as compared to time spend discussing the results. In some cases the main contribution may be the way in which the model or experiment is designed, the data is gathered or used, or ideas are put together, and so it then makes sense to highlight that contribution and spend more time on it. In other cases, the model, data set, and/or techniques may be quite standard and instead it is the conclusions that are more interesting, in which case it makes more sense to spend more time discussing the results of the research.

## 5. Main Results

You are now ready to present the main results and conclusions of the research. It is very important in this part of the presentation to provide insight into the main theorems or results of the paper. Why do you think things turned out as they did? You should be able to provide some insight that the audience can take away from the study and discuss some new questions that the research raises.

Let me mention some things to keep in mind.

If you describe the proof of a proposition or theorem, it is often best to just provide a sketch of the proof, and only to the extent that this is informative. The more diverse the audience, the shorter this part of the presentation should be. You should go deeper into the proof, to the extent that one of the main contributions is a new method of proof which may be useful much beyond the question at hand, or if the insight is clearly seen through the proof. It is helpful to ask yourself at each point of the preparation: "How clearly will the audience understand this and what do I expect the audience to learn from this?"

Things that are generally useless to spend time on (and yet often appear in seminars) are series of simple algebraic manipulations in solving simultaneous equations or inequalities, or long series of logical deductions in solving for an equilibrium. Such derivations are often routine, and at most one or two steps are novel and insightful. In the case where there is insight in these details, you should be clever in highlighting that insight while avoiding losing the audience's attention through a long series of steps. Often, this part of the discussion can be greatly aided by examples, figures, or tables.<sup>2</sup>

Similar comments apply to presentations of empirical and experimental research. Present only the outcomes that you expect the audience to digest. Presenting a table of ten regressions with twenty variables each

<sup>&</sup>lt;sup>1</sup>These recommendations apply for general presentations, but may not apply in specific cases. If you are presenting a paper in a class that is focusing on a specific literature and methodology, it may be appropriate to go through a proof in detail. Another case where a full proof is appropriate is in a class where the emphasis is on developing careful analytic techniques, understanding proofs, and learning to produce proofs.

<sup>&</sup>lt;sup>2</sup>When presenting figures or tables, make sure that you label the axes and clearly define each variable. It takes time for an audience to feel comfortable with relationships that you can eyeball quite quickly.

only offers the opportunity for an audience to get lost. Finally, if you describe the conclusions of some statistical tests that may not be known to all of the audience, briefly describe the ideas and assumptions behind the test.

#### 6. Conclusions

It helps to summarize what you have shown and what the audience should have learned from the paper, especially if you have presented more than one result. Then you can focus in on implications this might have for applications or further research, as well as what the limitations of the results were and what new questions have been opened.

#### Some Final Remarks:

The keys to a good presentation are organization and clarity. You can worry about style and flair after you are comfortable with your foundation.

The standard time for a seminar presentation of an hour to an hour and a half is too short for you to communicate everything you know about a subject, no matter how tempted you are. So in preparing a presentation, think carefully about what you would like, and can reasonably expect, the audience to learn in the time allotted.<sup>3</sup>

You may be tempted to structure the presentation to follow the way in which you originally thought about the problem and discovered the answer. Although you should know what you learned from that process, this is often a dangerous way to structure a seminar. Explaining dead-ends and blind alleys is more confusing than illuminating. In retrospect, you should be able to think about how to best organize the questions and results to most clearly provide the intuition.

You will often be faced with the difficulty of talking to an audience that includes a world expert on the subject, as well as people who know nothing about the subject (especially when you are giving job-talks). A seminar

<sup>&</sup>lt;sup>3</sup>The challenge is even greater if you are presenting at a conference where you only have 15 to 30 minutes for a presentation. In such situations, significant trimming relative to this outline is necessary. Essentially, you will only have time to describe the problem, briefly outline the model, and highlight the main results. You will see how important this is, when you see someone trying to shorten their usual 1.5 hour talk by simply flashing slides more quickly!

presentation is not the time to have a one-on-one dialogue with the world expert. You are best off keeping things at a level that is accessible to a diverse, intelligent, but possibly ignorant, audience. The expert will hopefully have plenty to think about concerning the problem at hand and can spend time guessing ahead, and should not mind revisiting some well-known definitions.

In some cases, questions that go beyond asking for a clarification will arise. These may concern basic assumptions behind the model, the experimental design, or methods of gathering data. The most useful time for such discussion is towards the end of the seminar, when the implications and results of the assumptions, design, or techniques are clearest. In cases where you can answer these questions well at the time, go ahead and do so. However, avoid letting the discussion deteriorate into an extended second-guessing exercise, for instance a lengthy discussion of "Why didn't you run this experiment instead?" at the expense of not having time to tell the audience what you learned from the experiments that you did run. Feel free to postpone answering such questions until the end of the seminar when such discussion can be most constructive. You should plan time for such discussion in any seminar, so that you do not end up so pressed that you either fail to eventually answer such questions or fail to finish presenting your material.

Finally, William Thomson has written a very useful guide to preparing a research paper in economics. (Thomson, W. (1996) "Writing Papers," Rochester Center for Economic Research, Working paper No. 417, revised 1998.) Much of the advice he gives there concerning writing a paper carries over to presenting a paper, and you are well advised to take a look.

<sup>&</sup>lt;sup>4</sup>Of course, anticipating such questions can also be helpful in structuring your presentation as well as in guiding your research.