Conference Talks

Mark D. Hill

Computer Sciences Department
University of Wisconsin-Madison

April 1992

Below are points to consider and an outline for a conference talk. The outline is a starting point, not as a rigid template. Most good speakers average two minutes per slide (not counting title and outline slides), and thus use about a dozen slides for a twenty minute presentation.

1. Points to Consider

(1) Oral communication is different from written communication.

Listeners have one chance to hear your talk and can't "re-read" when they are confused. Often they have or will hear many talks on the same day. There are two well-know ways to communicate your point effectively. The first is to K.I.S.S. (keep it simple stupid). Second, repeat key insights: tell them what you're going to tell them (Forecast), tell them, and tell them what you told them (Summary).

(2) Think about your audience.

Most audiences should be addressed in layers: some are experts in your sub-area, some are experts in the general area, and others know little or nothing. Who is most important to you? Can you still leave others with something? For example, pitch the body to experts, but make the forecast and summary accessible to all.

(3) Think about your rhetorical goals.

I recommend two goals for conference talks: leave your audience with a clear picture of the gist of your contribution, and make them want to read your paper. Your presentation should not replace your paper, but rather whet the audience appetite for it. Thus, it is commonly useful to allude to information in the paper that can't be covered adequately in the presentation. (The goals for an interview talk, for example, are radically different.)

(4) Practice in public.

It is hard distilling work down to 20 minutes.

(5) Prepare.

See David Patterson's "How to Give a Bad Talk" (attached).

2. A Generic Outline

Title/author/affiliation (1 slide)

Forecast (1 slide)

Give gist of problem attacked and insight found (What is the one idea you want people to leave with? This is the "abstract" of an oral presentation.)

Outline (1 slide)

Give talk structure. Some speakers prefer to put this at the bottom of their title slide. (Audiences like predictability.)

Background

Motivation and Problem Statement (1-2 slides)

(Why should anyone care? Most researchers overestimate how much the audience knows about the problem they are attacking.)

Related Work (0-1 slides) Cover superficially or omit; refer people to your paper.

Methods (1 slide)

Cover quickly in short talks; refer people to your paper.

Results (4-6 slides)

Present key results and key insights. This is main body of the talk. Its internal structure varies greatly as a function of the researcher’s contribution. (Do not superficially cover all results; cover key result well. Do not just present numbers; interpret them to give insights. Do not put up large tables of numbers.)

Summary (1 slide)

Future Work (0-1 slides)

Optionally give problems this research opens up.

Backup Slides (0-3 slides)

Optionally have a few slides ready (not counted in your talk total) to answer expected questions. (Likely question areas: ideas glossed over, shortcomings of methods or results, and future work.)

3. P.S. for Class Project Talks

The audience and rhetorical goals of a talk on a class research project are somewhat difference than a conference talk. The audience includes the professor who will be evaluating your work. A rhetorical goal you should consider it convincing him/her that your work is solid, perhaps by placing less emphasis on technical background and more on methods.

4. Acknowledgements

Thanks to Jim Goodman Jim Larus, and David Patterson for their useful comments.

How to Give a Bad Talk

David A. Patterson

Computer Science Division
University of California-Berkeley

Ten commandments (with annotations gleaned from Patterson's talk by Mark D. Hill):

I. Thou shalt not be neat.

Why waste research time preparing slides? Ignore spelling, grammar and legibility. Who cares what 50 people think?

II. Thou shalt not waste space.

Transparencies are expensive. If you can save five slides in each of four talks per year, you save $7.00/year!

III. Thou shalt not covet brevity.

Do you want to continue the stereotype that engineers can't write? Always use complete sentences, never just key words. If possible, use whole paragraphs and read every word.

IV. Thou shalt cover thy naked slides.

You need the suspense! Overlays are too flashy.

V. Thou shalt not write large.

Be humble -- use a small font. Important people sit in front. Who cares about the riff-raff?

VI. Thou shalt not use color.

Flagrant use of color indicates uncareful research. It's also unfair to emphasize some words over others.

VII. Thou shalt not illustrate.

Confucius says ''A picture = 10K words,'' but Dijkstra says ''Pictures are for weak minds.'' Who are you going to believe? Wisdom from the ages or the person who first counted goto's?

VIII. Thou shalt not make eye contact.

You should avert eyes to show respect. Blocking screen can also add mystery.

IX. Thou shalt not skip slides in a long talk.

You prepared the slides; people came for your whole talk; so just talk faster. Skip your summary and conclusions if necessary.

X. Thou shalt not practice.

Why waste research time practicing a talk? It could take several hours out of your two years of research. How can you appear spontaneous if you practice? If you do practice, argue with any suggestions you get and make sure your talk is longer than the time you have to present it.

Commandment X is most important. *Even if you break the other nine, this one can save you.*