### **HNRS 2000**

# RESEARCH & EXHIBITION Creating Effective Presentations

The last major artifact of this course moves toward closing the loop of research: information dissemination. Note how we started the semester by looking at what others have said, shared, or discovered about your area of interest. The sources that you reviewed were presented in written form—the form of your proposal. In scholarly discourse, the second major form of information dissemination is the presentation.

## The Content's the Thing

Have you ever engaged in a conversation that has lasted all night? No slides to be seen; no bullets to read; no screen to behold. And yet you remain engaged for hours. What keeps things going? It's the conversation itself: what you're talking about. The best conversations exchange information of mutual interest, with sufficient depth. This is the heart of a successful presentation.

So before we even consider visuals, consider what you want to say. For this course in particular, you want to share a research inquiry, justify why it is interesting or worthwhile, then describe how you will go about that inquiry. If this through-line is weak or insubstantial, then no amount of fancy visuals will make your presentation successful. This is what ties your presentation to your written proposal: if the proposal lacks substance, then your presentation will also, no matter how much time you spend with slides, visual aids, or spoken delivery. So first and foremost, make sure that your proposal covers effectively all of the points given in the previous writeup.

Having shored up your message and your material, we can now consider how best to deliver it. In theory, a presentation can be just like a conversation: you, your audience, and your voice. If your research idea is solid, the spoken word can prove sufficient to convey your message. But in practice, your message does have more impact with the right visuals. The key is to show something that has more information than your spoken word can deliver in the same amount of time. Let's say it again: the best presentations strive to provide visual aids that deliver more information than can be stated verbally.

Note that this principle flies in the face of a typical conventional slide show: packets of bullets, smashed into a small screen (not in terms of dimensions but in terms of information density), each bullet redacted to the point of generality or oversimplification. These do not necessarily ruin a presentation—as mentioned, good content will survive bad visuals. But bad content cannot be saved by good visuals, because in a sense, there can be no good (informative) visuals on bad content.

Information visualization expert Edward Tufte, in fact, goes as far as recommending against slides of any kind for presentations (2003), opting instead for a paper handout with material written in paragraph form and accompanying figures. We won't go quite that far here, but we will hew to Tufte's core principle that the quality of a presentation is ultimately determined not by its format, but by its information content. So before we move on, learn your literature, clarify your question, and flesh out your methods. This section's title paraphrases the Bard not only for pithiness but also because he is a model for presentations—his plays are rich in substance, and can thus be staged in all kinds of ways. The best proposals, and eventually their research results, share the same versatility of dissemination.

# Eye—and Mind—of the Beholder

If you read Tufte's book, you'll note that he is actually not anti-visual at all, but anti-empty visual. Canned slide templates, with their swaths of empty space and meaningless visual elements (what Tufte calls "Pfluff") can be seen as wasting the "bandwidth" of a projected slide. The key to a successful presentation, then, is to reclaim that bandwidth.

If your presentation is meant to deliver an overall message, then the slides in a presentation must deliver *coherent parts* of that message. Instead of tapping out bullets, consider instead what you want to convey at a given point in a presentation, then determine the visual that best delivers that message. Approaches include but are not limited to: an "elevator story"-type sentence, an information-rich image, compelling data from the literature, or an embedded video clip. Edward Tufte observes that

bullets are less an aid to the audience as they are an aid to the presenter—and so, in that case, leave the bullets with the presenter, in the form of handheld notes or, if the technology allows, on the second screen that only you can see.

This does not mean that bullets are completely anathema; it means that you let your content *determine* the visual, and not *fit* it into something predetermined. The bullet format is essentially an outline—thus, when you need to supply an outline, then by all means use bullets. Just don't force everything you want to say into a bulleted list, because most of the time, there will be a better way to say it.

The second major element to consider in preparing your visuals is *readability*. You don't want your audience to devote their cognitive energy toward understanding what they're seeing; you want them to focus on what you're *communicating*, in totality. Thus, you want to (and here I go with the bullets):

- Avoid superfluous visual elements. If you must use a slide template, stay away from templates with meaningless glyphs and shapes. These most likely do nothing toward delivering what you want to say.
- Select color schemes that are easy on the eyes—typically high-contrast where text stands out and the background stays in the background.
- Similarly, select fonts that are easy on the eyes too. Typically this means a *sans-serif* font like Helvetica or Arial. Font size should be large enough to read but not too large as to overly limit the text that you want to display.
- For showing images or data, use as much of the screen as possible without clutter. Remember that these visuals are all meant to convey a specific message, so save some room at the top for a one-sentence description of what the audience is seeing. Alternatively, you can place this message on a preceding slide so that your visual can have the screen all to itself.
- Don't hesitate to leave your slides if your visual is something separate, like a website you'd like to show or some software that you would like to demonstrate. Your material does not even meed to be digital: if a paper handout delivers the information better, then use that.

## Murphy: It's the Law!

And finally, on a practical note, *practice practice* your presentation, with a friendly but constructively critical audience. Practice lets you assimilate your content better and ultimately improves its delivery as well as your confidence.

Don't assume that everything will go right and "just work" on the day of the presentation. If you can do a dry run on-site, do it. Have backup material in case some visuals don't work (e.g., screenshots of a website in case it is down). Measures like these not only ensure that you're ready for Murphy's law; they also increase your own confidence that things will go well no matter what.

#### The Presentation for this Class

Given the number of students presenting at the end of the semester and the amount of time available for those presentations (including possible Q&A), target a maximum of 3 minutes for your presentation. You will want at least: a title slide with your name, your mentor's name, and the title of your project; a "question" slide which states your research question; and a References slide at the end listing your most significant sources. Visuals after that will vary individually and so cannot be given a blanket specification.

In terms of the content you want to cover, we want the same major elements as your written proposal: introduction/background/related work, the question you are asking (which gets at least one slide of its own, and possibly more), how you plan to seek the answer to that question, and finally, if applicable, your expected results or product.

The proposal budget and timetable may remain in your proposal only. Longer forms of proposal presentations do include these, but for this class we will not have time for them.

As always, when applicable, we will defer to the conventions or standards of your discipline for making oral presentations. If differences are particularly radical, ask me about them.

#### References

Tufte E (2003). The Cognitive Style of PowerPoint: Pitching Out Corrupts Within. Self-published at http://www.edwardtufte.com (last accessed on March 23, 2014).