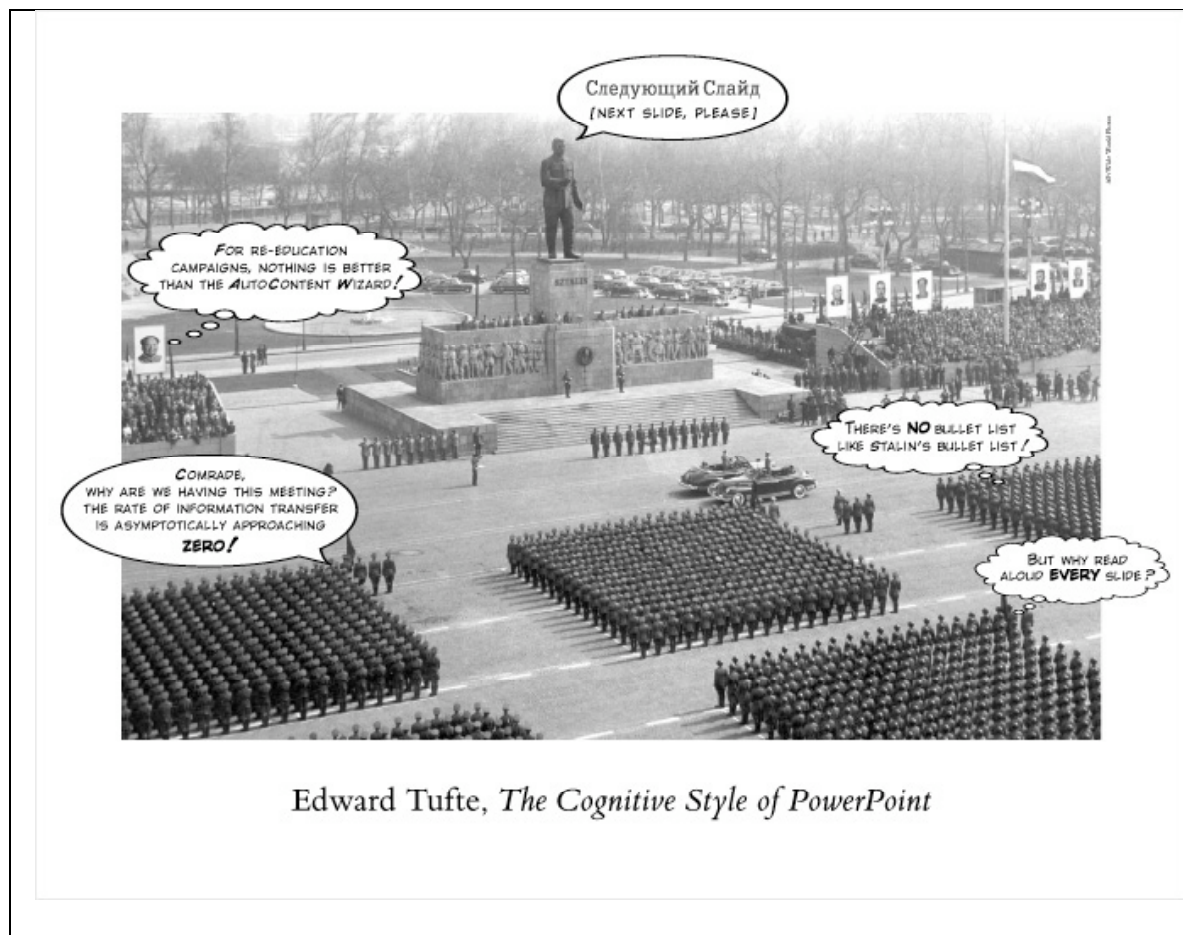


Good PowerPoint-an Oxymoron?

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PowerPoint has become one of the most well known computer programs of all time. There are literally hundreds of millions of users. The program permeates business and academic life. Meetings are built around such presentations. It has become a national obsession and, at the same time, a national debate. There is now the contention, championed by Edward Tufte, an expert in graphic design, that not only is PowerPoint awful, but it can be dangerous. And we all know that many PowerPoint presentations are dull, have little information content, and indeed have become a substitute for thoughtful analyses (or even thinking at all). See below



How do we reconcile the fact that PowerPoint is ubiquitous but often terrible? Can we come up with a synthesis that makes sense and reconciles these two opposing point of views? How can we improve presentations?

It is important to remember what a presentation can and cannot do and how it differs from a written presentation of your work. You must realize that in a presentation your audience's attention will wander and lag – this has nothing to do

with you or the presentation but rather the reality of the human attention span. Therefore, you cannot expect your audience to assimilate more than a few major points. Also know that these points must be made more than once to assure that the whole audience will understand your message. It can be argued that making these points from different (emphasis on different) perspectives will also ensure greater understanding by your audience.

Does this mean that you should offer no details? No. Rather that the details should be sufficient to advance your story and to convince your audience that you are knowledgeable and have thought in depth about the subject. Thus you are persuading your audience of a point of view. A presentation such as PowerPoint can be effectively used to convey emotion or a way of thinking. It is relatively poor at conveying detailed information. However, it can be used in much the same way as a speech in earlier times-to convey enthusiasm, excitement, or to persuade.

Here is a concrete example about the differences between a talk and a paper. Authors can use tables and figures to show their results that are stated and discussed in detail. Tables (or figures for that material) presented in a paper can have a level of detail that does not work for a presentation. A reader can refer to the text, make notes on the figure and spend as much time as necessary to understand and be persuaded of your conclusions. In a presentation you must make your slides digestible in the brief time – maybe only 30 seconds to a minute that your slide will be before the audience. It may be considered impressive to use the tables or figures that have been published in your papers but it is not the most effective way to present the information. The precise reason that Tufte likes Tables, namely that they have a tremendous amount of information in them, makes them relatively poor for presentations. Any tables and figures should be simplified and presented in a clear and concise manner with all aspects clearly labeled and a title that states the conclusion drawn from the results.

A major goal for the speaker is to find a way to clearly state and present the major points they wish to make. The careful use of artfully crafted slides can do much to make your points persuasive. You need to consciously consider a number of issues carefully. These include why you are making the presentation, to whom you are making the presentation, what points you want to make, and even where you are making the presentation.

Why are you making this presentation? Make sure you have a clear idea of what you are trying to accomplish with your presentation. Is it to get a job, to get people excited about your work, to get students enthused?

Who is your audience - medical students-local physicians-fellow scientists – fellow immunologists -- fellow T cell immunologists? The amount of background you will need to present will be guided by the knowledge you can be sure your audience will

have. But it is better to err on the side of more background. A good general rule is to “assume infinite intelligence and zero knowledge” (attributed to famous physicist Wolfgang Pauli, talking about physics lectures)

What are you going to present? What are the major points you wish to make? What is the best way to get these points across? One good plan is to consider each major point as a unit of several slides. You can then create units or cassettes that can stand alone, but that you can modify for a particular audience, and you can continue to use them as your story grows.

Another consideration is where you will give the presentation. This includes the audiovisual equipment you will have at your disposal. The size of the room and the screen will impact the way your slides will have to be. A large room that will require a high level of magnification may take that wonderful figure and wash it out. Make sure you have checked your slides in the exact room if possible. Always have a backup –CD, jump drive, your own computer. Technology is great but it also provides many points for failure of equipment and incompatibility – make every effort to check this out before you reach the time of the presentation. This is absolutely critical if you are going to use any animation or video.

Some specific guidelines

What works in one setting does not work in another- The difference can be immense-seeing a play in the Old globe theater vs. reading a play by Shakespeare.

Make sure the type is readable-it has to be large enough to SEE. Many people recommend sans serif type so the words do not blur together (although this is not a problem if the font is large enough). For the same reason avoid underlining. Use upper and lower case.

Colors that look good on your computer screen will frequently look washed out or unbelievably bad in an auditorium or a classroom. You will not usually go wrong with black on white or white or yellow on blue. White or yellow on black can also work well but can become tiring on the audience. Be especially careful of using multiple colors on a dark background.

The 1-6-6 Rule. Generalization- No more than one point per slide. No more than 6 lines per slide. No more than 6 words per line. They are to help you not provide the exact lines as in a teleprompter. You do not need to slavishly follow this rule, but is meant to keep text to a minimum. If you violate it do it with forethought and with concrete reasons.

Do not make all your slides identical looking-avoid slide after slide of text or by using the same type of graph again and again. It will probably get confusing and almost certainly will be boring.

If you are thinking about using animation- Consider this VERY carefully. Animation or video has a high failure rate. Make sure you really need it and that it enhances the story. If so test it thoroughly and make sure it is of very high quality. You are now competing against Pixar/Disney and not fellow scientists and physicians. Consider possibly using two projectors and a DVD player rather than incorporating it into your PowerPoint presentation

Plan on remaking your slide 3 times in order to get a good one.

For data slides make the Title of the slide the conclusion. The audience should be able to get your point even if they do not see the graph-in fact that is a good test to see if it is a good title.

Get some honest feedback (not as easy as one might think!) Instead of asking was it a good talk, ask someone one thing they liked about the talk and one thing they think you might change or clarify. Ask several people independently and see if there is a consensus.

Special thanks to Dr. Courtney for her help and many of the specific suggestions listed here. All errors of course are mine alone.

Some useful sites and books

<http://www.presentationzen.com/presentationzen/2007/03/index.html>

<http://www.edwardtufte.com/tufte/>

"Death by PowerPoint"

<http://www.slideshare.net/thecroaker/death-by-powerpoint>

http://sethgodin.typepad.com/seths_blog/2007/01/really_bad_powe.html

References

The Visual Display of Quantitative Information by Edward Tufte

Tools for Teaching by Barbara Davis