Sliding into Home Plate: How to Use Slideware to Improve Your Presentation (While Dodging the Bullets)

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Introduction

Recently, Microsoft's PowerPoint has come under a series of brutal attacks. Critics have accused the software of promoting simplistic thinking, dumbing down presentations, and constricting interactions between presenter and audience (Schwartz 2003; Parker 2001; Thompson 2003). One detractor went so far as to label PowerPoint "technological cocaine" and another demanded a ban on the software, urging that "Friends Don't Let Friends Use PowerPoint" (Keller 2003; Stewart 2001). The most coherent exposition of PowerPoint's weaknesses has come from Edward Tufte, Yale Professor and visual presentation guru. Tufte (2003) argues that PowerPoint is format—rather than content—or audience-oriented, and thus "turn[s] everything into a sales pitch." His list of grievances against the software is long. PowerPoint replaces serious analysis with chartjunk, logotypes, and corny clip art. It breaks information into small arbitrary fragments and stacks it chronologically in a manner that inhibits analysis through comparison. It "messes up data with systematic intensity" through bad resolution, thin graphics, and low-information charts. PowerPoint's "inherent defects," so says Tufte, are "making us stupid, degrading the quality and credibility of our communication, turning us into bores, wasting our colleagues' time."

In the following pages, I argue that the very same limitations for which slideshow programs have been castigated entail potentially beneficial side effects for political science speakers and their audiences. The design of slideware media, such as PowerPoint, Keynote, and Impress, forces speakers to address weaknesses common to political science presentations, such as the tendency to present overly intricate arguments that are either overwhelming in detail or excessively abstract. Contrary to conventional wisdom, I recommend that presenters use programs such as PowerPoint to forge their papers into slideshow presentations before writing the text of their presentation. I conclude by discussing some common transgressions committed by slideshow users and suggest strategies for avoiding these pitfalls. The recommendations included in this paper should prove useful to political science speakers and lecturers from all backgrounds and levels, particularly those advanced graduate students who face the arduous task of translating their research into a successful job talk.

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Talks and Their Pitfalls

Our discipline has developed a wide array of tools for training scholars to write strong papers suited for publication. It has yet to develop such tools to teach the skills necessary for giving a good talk. Most talks delivered by political scientists, whether in the form of lectures, presentations at conferences, or job talks, are based on previously prepared papers. The differences between these two forms of communication are, however, significant. Because written arguments permit readers to set their own pace, add their own commentary into the body of the text, or re-read difficult sections, they can communicate ideas at a higher density and complexity than during talks. Members of the audience in a talk depend entirely on the speaker's voice for information and are at the mercy of the speaker's information delivery pace.

This disparity is exacerbated by differences in length between the standard 30-page paper and the average 30-minute talk, the former often exceeding 8,000 words while the latter permits 4,500 words at most. Faced with this discrepancy, authors confront the twin temptations of condensing as much information as possible from the paper into the talk or inadvertently offsetting the balance of the original argument by removing crucial theoretical or empirical segments.

The difficulties of translating papers into talks without resorting to an intervening medium give rise to several pathologies, well-familiar to audiences of political science talks. Many of these talks are too dense, containing information that is too complicated for the audience to absorb given the format and time allotted for presentation. Often these talks contain reasoning that branches out, like nested clauses in a sentence, diverting the listener away from the core line of argumentation time and again. Intricate orations have been known to shift the audience two or three levels of reasoning away from the central thesis before returning abruptly to the matter at hand. Speakers who forget how badly written arguments translate into spoken arguments pepper their talks with anecdotes, apropos, and non-sequiturs which, while hard to bear in writing, make coherent listening near-impossible.

When authors decide to sacrifice large blocks of their argument in preparing a talk, the result often lacks the balance between theory and evidence that characterized the original work. This results in talks that are either too concrete or too abstract. Talks in the first category are mired in detail, overwhelming the listener with data, case studies, and empirics as the speaker rambles on with one illustrative narrative after another. Talks in the latter category sacrifice evidence for theory, offering insufficient data to substantiate far too abstract argumentation.

The Advantages of Slideware

Because slideware programs contain limitations that force the user to adapt

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his or her ideas to a particular format, slideware can provide a valuable means for creating talks that are neither too complex, too concrete, nor too abstract. Three qualities that distinguish slideware parallel the common pitfalls of presentations mentioned above.

First, by virtue of presenting single slides in strict consecutive order, programs like PowerPoint suggest a linear logic. The first and most difficult stage an author faces when creating a slideshow presentation for a talk is to untangle the logic of her or his argument so that it can be divided into the concise and coherent blocks of data that fit on each slide. Writers who try to use slideware to present a jumble of parallel, interspersed, and overlapping fragments of riddles, conclusions, evidence, and hypotheses soon run into trouble. The sequential format in which slides are projected makes it exceedingly difficult to present branching or nested arguments.[1] More often than not this results in a well-tried presentation formula, such as riddle-hypotheses-evidence-conclusion. Although this process tends to promote some degree of uniformity across presentations, the outcome can be a useful first step in a junior scholar's progress towards delivering coherent verbal arguments.

There is a second obvious implication to using a slideshow program to present an argument. Slideware permits and even encourages the user to breathe life into her or his argument through photo, film, chart, graph, color, and sound. Educators across disciplines have noted the power of slideware in helping students cut through complex clusters of information by providing representations of abstract or complex ideas (Musselwhite 1999; Schultz 1996–1997; Alster 2002). Teachers in our discipline have lauded the software's ability to provide physical representations of abstract or complex ideas, thus improving students' attentiveness, information absorption, and even information retention (Harknett and Cobane 1997; Bradley 1997; Yanarella 1998). Over 93% of political science students surveyed by Kenneth R. Mayer and John J. Coleman (2000) found lectures accompanied by multimedia more effective and reported a marked improvement in the ease of taking notes.

The geopolitical situation of a state as evidenced by its location on a regional map; a leader's policy as documented in a voice recording; or the terrible landscape of destruction in the aftermath of a devastating war; these are some examples in which the proverbial picture is worth the proverbial thousand words. In other cases the visual imagery seeks merely to illustrate, emphasize, or contextualize an element in a talk. Slideshow software gives the speaker an opportunity to display complex data in graphs, diagrams, or charts; visually highlight the most relevant section of a document on display; or exhibit a headshot of the political actor whose statements are now invoked. Moreover, visual effects supplement the speaker's voice, and engage and lure the audience into the talk. The broader the array of information sources on which the listener can draw, beyond the inevitable monotony of the speaker's voice, the greater his and her level of alertness, interest, and receptivity.

A third, and perhaps most important, advantage of slideshow programs lies in the limit they place on the amount of information displayed on each slide. The resolution of slideware projectors and the font sizes visible to audiences, as well as obvious aesthetic restrictions, limit the number of words, images, or data components per slide. Tufte's overly strict calculation of 40 words per slide provides the lowest boundary of this range with, say, 80 words per slide setting a reasonable upper limit. Even speakers who intend to click their way through a slideshow at a breakneck speed of one slide per minute will discover that the software limits their total projected word count to 2,400 words.

This word limit places slideshow software in an excellent position to mediate between the 8,000 written words of a paper and the 4,000 spoken words of a talk. Speakers who choose to translate the former into the latter through the medium of slideware will find the task of carefully selecting and phrasing their statements surprisingly painful (cf. Mayer and Coleman 2000, 598–9). PowerPoint slides simply cannot accommodate verbose causal statements, large block quotations, overly intricate graphs, or charts with more than 40 (or by Tufte's count, 12) components. Users must think hard and long about how to best express complex ideas in simple and direct language.

The key to resolving this dilemma involves a decision over what information to present visually and what information to relay verbally. Speakers who use slides as prompts or in order to mirror information that is already being presented verbally, forget the sole purpose behind slide shows: to add value to the presentation by enhancing audience comprehension. The only types of information that fulfill this requirement are visual evidence and condensed summaries of complex arguments. The first category involves information that cannot be conveyed verbally with ease, such as elaborate data display, complicated text or detailed figures, copies of original documents, informative images, or sound recordings. The second category involves occasional synopses designed to bring core arguments to the audiences' attention.

For example, in my lecture on territorial disputes, I discuss three processes that characterize dispute entrenchment, each driven by a handful of mechanisms. I detail these mechanisms verbally and offer empirical evidence to substantiate the dynamic relationships between the 20-odd components of my argument, but most of this information does not make it onto the slideshow. Indeed, this part of the talk, which lasts nearly 10 minutes, occupies only three sparsely filled slides, one for each process described. I use the slides to complement my verbal explanation, first, by displaying a concise summary of the relevant process, and second, in the bottom half of the slide, by offering a visualization of this process. The slide entitled "II.3: Increased Cohesion over Time," for example, starts with a précis: "The extension of homeland infrastructure into the disputed territory enhances perceptions of territorial cohesion by linking various parts of the disputed territory with one another and by integrating the disputed territory with the homeland." These 34 words are the only text in the body of the slide. The bottom half of the slide shows a map of the Golan Heights on which I have superimposed time-lapse animation of the creeping extension of road, electricity, and communication networks and the gradual expansion of settlements over the course of 30 years, based on previously collected data. The slide does not detail the long list of intricate mechanisms, already mentioned verbally, that my students cannot (and need not) remember. Instead, it displays a summary of what I am saying and a piece of evidence that doubles as a stimulating visualization of my argument.

The Dangers of Slideware

Slideware places constraints on, and provides opportunities for, improved order, content, and style. This is not to say that the critique leveled at the software is entirely unwarranted. It is merely misdirected. Blame for the inferior quality of PowerPoint presentations should be placed on the shoulders of those users who try to ignore or circumvent the limitations of slideware. Three specific offenses deserve close scrutiny, matching the three qualities of slideshow software examined above. Users can easily avoid

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Six Do's and Don'ts of Slideware Use

Do	Don't
1. Write your slideshow presentation before you write your talk.	1. Don't crowd too much information on slides. Never place more than 80 words on a slide. Never use font size smaller than 20 point. Do not overcrowd charts and graphs.
2. Start your presentation with a single-sentence summary of your argument or findings.	2. Don't wait beyond the third slide to present your thesis statement.
3. Display a table of contents for your talk. Keep slide titles consistent with the section headings in this table of contents.	3. Avoid non-linear presentation structure or tangential information.
4. Use black font against plain white background.	4. Eschew background templates or font colors.
5. Use simple visual aides as evidence, illustration, and to keep your audience engaged.	5. Avoid gratuitous visual effects that might distract your audience.
6. Use complete sentences to describe and qualify your causal argument.	6. Avoid bullets and sentence fragments.

these faults by observing a handful of basic guidelines.[2]

First, many users seek to maintain the complexity or length of their original argument by forcing it onto a slideshow, in spite of the natural restrictions posed by the software's design. These are speakers who cram endless block-quotations onto single slides or display lists running into the dozens of lines, bullets, or chart items. Others seek to convey non-linear arguments via slideware by convincing their audiences to read slides in non-sequential order: Slide number 16 in their talk may follow on slide 15 but is logically or causally related to slides 4 and 18. Both cases exemplify speakers that have transposed rather than translated their talk from paper to PowerPoint.

Given the difficulty of distilling a written article into a slideshow, these tendencies are not all too surprising. There are four ways to counter them. Speakers must avoid stretching the intrinsic limits of slideware as regards font size and word count. Moreover, every strong presentation should begin with a slide displaying the thesis of the talk in the most concise form possible. Phrasing this thesis statement poses a significant challenge, especially for junior speakers, but it bears invaluable benefits for the audience. By placing the thesis at the beginning rather than in the body or at the end of the talk, the speaker "reveals his hand": The audience is no longer expected to evaluate fragments of evidence bearing on an unfamiliar goal but can weigh each and every element of the talk in relation to a now familiar core argument.

The thesis statement should be followed by a table of contents that outlines the structure of the talk, again for the benefit of the audience. In presenting this outline to the audience, the speaker would be well advised to explain how the structure she or he has chosen for the talk undergirds the argument: Why has she chosen to present this evidence before examining existing arguments in the literature? Why has he chosen to begin his talk with a case study, followed by a series of competing hypotheses?

Finally, no matter how simple the structure of the talk may seem to speakers, they would do well to use consistent and numbered headers for all their slides. These should correspond in phrasing and numbering to the titles employed in the table of contents at the outset of the talk. In transitions between segments of the talk, presenters can and should provide their listeners with information they would otherwise glean from the sub-header of a written text, namely the subject of the upcoming part of the talk, its relation to the preceding section, and its function in the talk as a whole.

A second mistake often made by slideware users involves the overutilization of the visual effects toolkit.[3] Instead of drawing the audience closer to the speaker, the misuse of color, sound, and movement risks distracting listeners from the most important element of the talk, namely the argument. Two particularly noxious habits stand out among visual effects abusers. The first is the use of background templates that PowerPoint provides for the benefit of speakers in business or marketing circles (although their advantage in those settings remains as much of a mystery as the intentions of political science speakers who employ these templates). These backgrounds often involve some combination of mesmerizing shapes slashing across the screen, flamboyant decoration, and camouflage-like font colors. Because these templates do nothing to promote an argument and everything to obscure it, the rule on this front is simple: don't. Speakers should stick to black font against a white background.

Presenters who overindulge in PowerPoint's visual prowess often abuse the ability to animate text and image. PowerPoint provides users with the ability to fly, drop, fade in, or twirl information onto the screen, rather than simply making it appear sequentially. But should they? Animation is a tool and should be used as such. Its only effective use is for revealing information gradually, a valuable capability in one of three scenarios: When displaying text all at once might distract or confuse the viewer (a multi-part argument, for example, in which a stage needs to be understood before the next stage is shown); when the audience might profits from having layers of information introduced gradually in a dense graph or chart; or when information benefits from contextualization (when, for example, the speaker zooms in on a document or map to focus on a relevant segment.) In other words, where slideware poses too strict a limit on the amount of information the speaker can relay on a single slide, animation can be used to cautiously stretch the boundaries of the software's range. All other uses of animation are redundant, at best, or just plain silly, at worst.

A third and final offense committed by many slideshow users is the misuse of bulleted lists. This habit arises because slideware demands parsimonious phrasing and because the precise yet simple rendition of a complex argument can prove a daunting task. Yet bulleted lists are just that: lists. Bullets are useful for presenting inventories or catalogues of items (such as lists of places or dates, authors and texts in a bibliography, or the names of participants in a committee). Because bullets cannot convey priority or relationship, they should not be used if the items listed bear a causal link toward one another (such as interrelated events, elements in an argument, or a list of necessary or sufficient conditions). Such ideas are best presented in full sentences, replete with active verbs and qualifications. If a slide provides insufficient space for such statements, authors would do well to follow the implicit advice of the software designers, rephrase

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their thoughts in a more parsimonious manner, or eliminate redundant elements. Ask yourself: Does my audience need to see this information in order to better understand my argument, or am I already conveying this information verbally? As a last resort, numbered lists are always preferable to bulleted lists because they encourage the author to consider priority or logical sequence in presenting the items.

Peter Norvig's notorious PowerPoint presentation of the Gettysburg Address provides an opportunity for examining the differences between a condensed summary and a bulleted abstract. The penultimate slide of this parody, entitled "Not on Agenda!" consists of five bullet points: "Dedicate," "Consecrate," "Hallow (in a narrow sense)," "Add or detract," "Note or remember what we say." Norvig's presentation is silly because it is gratuitous. It adds nothing to the verbal delivery beyond displaying every other word the speaker is uttering, offering neither substantiation nor summation. A more useful slide, at this point in the address, could have displayed a summary of the argument, such as: "Lincoln noted the tension between the contrived consecration of the site by the ceremony of November 1863 and its innate consecration by the events of July 1863." Alternatively, the speaker could have substantiated the argument by displaying two contrasting images: A photo of the dignitaries, seated in formal attire, attentively listening to Lincoln's address, and one of the same site five months earlier, a battlefield strewn with the heroic dead. Finally, the speaker could have reversed the order of evidence and summary by displaying a copy of the speech (preferably in Lincoln's original handwriting), permitting the audience to read it for themselves, and then commenting verbally on the meaning of each passage. All three options share a characteristic that sets them apart from the bulleted list in the original parody: They require the speaker to invest time and effort in helping the audience better grasp the arguments presented.

The three faults mentioned above—the overcrowding of data on slides, the excessive use of animation effects, and the abuse of the bulleted list—emerge whenever presenters design slideshow presentations with themselves rather than their audiences in mind. When a slideshow is created as a hasty afterthought to an existing talk the roles of speaker and visual aid are reversed: Instead of accompanying the talk by providing illuminating background information, the software comes to dominate the talk by directing the speaker when to say what. It is here that speakers commit the cardinal sin of PowerPoint use: reading out the text on their slides to their audiences word by word. Participants in these talks have repeatedly expressed their revulsion with this practice not only because it insinuates that they are illiterate but because it sends the clearest possible signal about who is in charge during the talk. If the slideshow runs the talk, their attendance is a waste of time. They would be better off watching the presentation from the comfort of their own desktop computer.

Conclusions: Is Slideware Right for Me?

Slideshow software cannot be expected to replace speakers and should not be employed to guide speakers. Its purpose is to add value to a presentation before and during the talk by streamlining complex arguments and by providing valuable visual information for audiences. Designed to be as user-friendly as the simplest word processing software, programs such as PowerPoint should appeal to academic speakers from all backgrounds.

Yet many political scientists resist the proliferation of this technology either out of principled technophobia or out of fear that the software will abandon them at their greatest moment of need. Such fears are by and large exaggerated. Conference venues are increasingly providing the hardware necessary not only for displaying but also for electronically transmitting and backing up slideshow presentations. Backup versions of presentations are easy to print on overhead transparencies. Speakers who use slideware to enrich rather than dominate their presentations are certain to survive even the worst case scenario of total systems collapse.

Even those who insist on eschewing this technology entirely have no excuse for depriving their audience of three helpful pieces of visual information, printed on overhead transparencies or handed out in paper format. Speakers should always provide an opening slide with the title of their talk and their personal information, a second slide that states their argument, and a third slide, visible throughout the remainder of the talk, that presents a detailed outline of the presentation. PowerPoint software can also be used prior to a talk to create detailed handouts displaying sophisticated graphs, charts, models, and other illustrations of complex data. Lecturers can place their PowerPoint presentations online or hand out copies of slides in class for their students' benefit.

Speakers should also realize the advantages of slideshow technology compared to overhead transparencies. Overheads eliminate animation as an option and create costly disincentives against using color. The awkwardness involved in finding, placing, and replacing overheads on the projector reduces the slide replacement rate significantly compared to slideware's single-click speed. With no more than 10 slides, at most, per talk compared to a maximum of 20 or 30 slides in digital format, overheads create an obvious incentive for illustrating talk segments selectively and incompletely. In other words, transparencies fail in emulating the one slideware quality that this paper has prized above all others: the comprehensive distilling, streamlining, and balancing of complex arguments as they transition from paper to talk format.

At one of many high points in his attack against PowerPoint, Edward Tufte (2003, 24) compared the PowerPoint to a school play: "very loud, very slow and very simple." This is bad news for slideware users who, like Tufte, prefer their visual information served like thick slices of richly layered Viennese coffee cake with a double shot of espresso on the side. I have argued that the limitations of PowerPoint and programs like it are good news for political scientists whose talks are muffled, too fast, and too complicated. Speakers who use this software to translate their papers into concise verbal presentations while taking care to avoid the dangers that arise from misuse will find the results rewarding.

Notes

1. For classroom technology that permits the display of nonlinear arguments, such as multimedia or Internet software, see the Special Issue on Web-Based Teaching in *PS: Political Science and Politics*, Vol. 31, No. 3 (Sep. 1998), pp. 568–590 and the Special Issue on "Teaching and Technology" in *PS: Political Science and Politics*, Vol. 33, No. 4 (Dec. 2000), pp. 826–852.

2. Searls (1998) and Godin (2001) provide additional guidelines on designing effective PowerPoint presentations. Resources for designing effective public presentations short of PowerPoint are available at www.edwardtufte.com and in Tufte (1997).

3. The negative impact of irrelevant imagery on the effectiveness of PowerPoint presentations is documented in Bartsch and Cobern (2003).

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