

The PP Paradigm

The Cognitive Style of PowerPoint. By Edward Tufte, Graphics Press LLC, Cheshire, Connecticut, 2003, 24 pages, \$7.00.

PowerPoint—following Tufte, I abbreviate it here as PP—the speakers’ friend, appears to be a grand success. A Web search for “PowerPoint” will give you almost 40 million sites—if that’s any measure of success. Lecturers cry out for PP. Audiences are enchanted. PP is more than a slide projector. It offers word processing, outlining, drawing, graphing, presentation management, prompts, and much more. PP is a form of rhetoric, a form of dramatic theatre, of art and poetry; it’s a universe of potentiality. And it is hard to think of another piece of equipment whose name, in such a short time, has become a metaphor.*

BOOK REVIEW

By Philip J. Davis

We are not here, PP marketers imply, to sell a mere accumulation of plugs, chips, and buttons, but a mode of communication, which is to older modes (and here I quote Descartes) “as the orations of Cicero were to the babbling of an infant.”

Enter at random the function room of the weentsiest motel. The regional association of burlap bag salesmen may be meeting. Or a fraternal organization is having its annual fried chicken and potato salad lunch for the induction of new members. Or maybe the high school teachers association is discussing how to use new equipment for math classes (perhaps even PP). Where once there were blackboards and chalk, easels with large sheets of paper and multicolored magic markers, overheads and transparencies, flipboards, slide projectors (and 125 years ago, magic lanterns), PP now reigns supreme, trumping all these paleolithic informational devices.

Enter a university lecture room, where not so long ago, the professor of humanities droned and droned from a dense, handwritten manuscript, or where the professor of mathematics, back to the students, produced yards upon yards of formulas on the blackboard, (seemingly) eliciting the stuff on the spot from her logical brain.

No longer. PP displays ready-made formulas hot off the rack of Math-ematica’s formal math manipulator. It produces on-line computations, 16 bullets on why the Roman Empire fell, a picture of Edna St. Vincent Millay at the age of 12, a splattering of chartjunk that summarizes the wool and cloth trade in 14th-century Brabant. You want Basic Hegel? It’s probably been powerpointed in five animations.

There are at least 28 how-to-do-it books on PP. There are courses, instructors, teachers’ guides, ombudsmen, and maestros of PP who create bravura stuff. One can swear by PP (even as I swear by MATLAB).

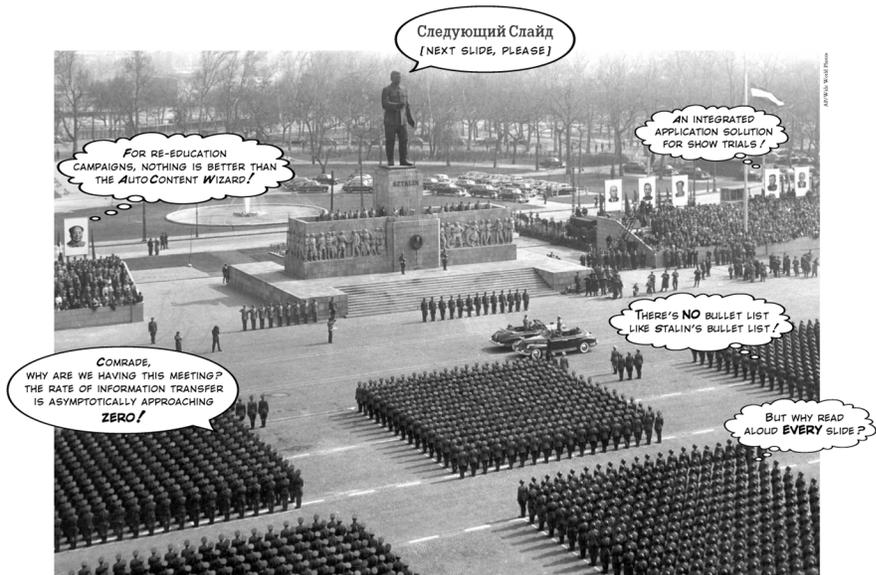
Into this rosy picture, Edward R. Tufte, guru of good graphics, the author of very well-received books on the subject, now enters with a devastating evaluation of PP presentations. He asks: “What is the problem with PP and how can we improve our presentations?”

What is Tufte crabbing about? Listen:

“PP is entirely presenter-oriented, and not content-oriented, not audience-oriented.”

(The speaker orientation can be seen in the marketing pitches: “A cure for presentation jitters. . . . Get yourself organized. . . . Use the AutoContent Wizard to figure out what you want to say.”)

But back to Tufte’s gripes:



From *The Cognitive Style of PowerPoint*.

* “Vartan Gregorian, head of the Carnegie Foundation, produces a Power-Point executive summary of what Islam is about for his board of trustees.” From *The New York Review of Books*, June 12, 2003, page 27.

“The popular PP templates [i.e., ready-made designs] usually weaken verbal and spatial reasoning and almost always corrupt statistical analysis.”

[Lack of space on slides] “leads to over-generalizations, imprecise statements, slogans, lightweight evidence, abrupt and thinly-argued claims.”

“With so little information per slide, many slides are needed. Audiences consequently endure a relentless sequentiality, one damn slide after another. When information is stacked in time, it is difficult to understand context and evaluate relationships.”

“Bullet outlines dilute thought . . . and can make us stupid,” Tufte writes, quoting a *Harvard Business Review*[†] study. Exposed to PP, the audience pphloats in “PPPhluff.”

And these complaints are just for starters. If my clips have not yet convinced you of the downside of PP, your light bulbs may go on when you plug into Tufte’s reproduction of Peter Norwig’s PP Lincoln’s Gettysburg Address (made with an assist from the AutoContent Wizard).

What, asks Tufte, should be demanded of a presentation?

“Explanation, reasoning, finding things out, questioning, content, evidence, credible authority [and] not patronizing author-itarianism—[all these] are contrary to the hierarchical market-pitch approach.”

Sure, but aren’t mathematical presentations authoritarian? Unless we are aficionados of the R.L. Moore method of Socratic teaching, we don’t want to use our 50-minute lecture time having students figure out from scratch what the axioms for a group ought to be. Perhaps that’s why it was the algorithmic mind that invented and loves PP. But did I say lectures? I read that information technology has made traditional lectures passé, as dead as celluloid collars for men.

Every new medium changes the nature of communication, creates a new mental world. This was the message of Marshall McLuhan in the ’50s. Did you know that in ancient India, mathematical treatises had to be written in poetry? Did this affect in some shape the practice of mathematics? You betcha. If contemporary mathematics had a poetry requirement, mathematicians would be eligible—in addition to all the prizes now open to them—for the Pulitzer. Well, it turns out there are prizes for PP formats and presentations. Soon they’ll be entering them in the annual Cannes Film Festival.

In addition to coining the phrase “the medium is the message,” Marshall McLuhan asked four questions: “What does the new medium or technology extend? What does it make obsolete? What is retrieved? What does the technology reverse into if it is over-extended?”

In short, insofar as each medium has its pluses and its pitfalls, consider what PP is doing for us and what it is doing to us. Allow me to speak from ignorance at the 50% level—that is, I’ve been to many lectures that have used PP, but I have never myself given one. I think that Tufte’s criticism is right on the button and that we are in a reasonable position to answer what PP does for us.

As to what it is doing to us, the question is wide open. What concerns me most is that originality is threatened when ready-made templates and formats reduce the necessity for thought. Go to the drugstore and buy a greeting card specially designed for the marriage of a second cousin once removed. I’m sure you can find one.

There’s no longer any point in thinking through your own.

[†] Vol. 76, May–June 1998.

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