

The tyranny of the majority - design edition.

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The Net seems to be full of amateur (and occasionally professional) designers who've all got advice for ya.

I've complained before about how usability to many people means 'how well could a lobotomized person operate this device?' And hey, the lobotomized are legion. If I want my toy to be the next iPod, then I can't have more than five buttons on the thing—wait, wait, iPod digression! How is it intuitive that you turn on an iPod by holding down the menu button? If I recall right, holding down play/pause turns it off. Why do people praise this as so perfect and intuitive when there is no way to know how to turn the darn thing on without having to RTFM?]

These posts by designers, and the sporadic email sent to me, often begin sentences with "People want . . .". Does this mean that if I don't what the current design community consensus then I'm not a person?

This came to mind from a post about the interface for a wget GUI¹. It's a hideous mess of buttons and checkboxes and, well, seems pretty useful to me. I've actually been paid for a couple of wget scripts, which I guess makes me a professional wgetter. I have the manual for wget open on another screen every single time I use that program, because there is so much to tweak. As a substitute for the man page, this application works great. Good job guys. As a substitute for, uh, Internet Explorer, it's goin' nowhere, but nobody intended it to be an IE replacement. [A colleague embarrassed me the other day by downloading a set of sets using DownThemAll while I was still trying to get wget to accept cookies. DTA wouldn't have worked in the cases I was paid for above, but in this case wget's endless command line switches totally lost out to a system with virtually no switches at all.]

All of this advice about reaching the largest audience by choosing the lowest common denominator doesn't appear in other fields besides graphic design/usability. Imagine somebody writing advice for musicians that they should make sure that they not write anything more challenging than Coldplay, or a writer who advises other writers that they must only write about sex, puppies, and shiny objects.

Andrew Gelman² is a statistician who is big on this sort of thing as well. The linked article, like just about all of his article reviews, opens: "First, I'd replace the tables by graphs." Have you ever tried citing a plot? 'Quantmael [1814] found that the regressor for wheat consumption was significant with, oh, uh, maybe 98% confidence, I think. Give or take.' The entire concept of the metastudy is based on the fact that journals publish tables. Does this mean plots are evil and all have to go? No, but they provide

¹<http://www.codinghorror.com/blog/archives/000734.html>

²http://www.stat.columbia.edu/~cook/movabletype/archives/2007/05/measuring_media.html



Figure 1: If you write about anything but shiny puppies, you run risk of losing your audience.

and hide different information from the tables. It's fine to use plots as well as tables, but to propose plots instead of tables is to propose hiding information.

[From Gelman and Hill [2007, p 254]: "As we move on to more complicated models, we present estimates graphically but do not continue with formulas..." This guy is sooo not invited to my parties.]

Also, graphics can be fun. Have a look at the splash on this page of visualizations³. But then, text is fun, too.

If everybody absorbed information and learned in the same way, life would be pretty easy for the world's teachers, but instead we've got all kinds. Visual learners are the majority, but many people are not. Auditory learners—I think of myself as one—want text, because it turns into a mental dialogue with the page, while a diagram does not. At the extreme, blind computer users are as common as blind people, and whether they are visual or aural learners, they still rely on screen readers that pass over graphics as blank space.

Now, if you are a design professional, then the odds are pretty darn good that you're a visual learner. Further, the majority of humans are primarily visual learners, so the design professionals who pound the pulpit and insist that you must design for visual consumption are right that you must if you want to reach the majority and be the next Coldplay. But this is the classic case of the tyranny of the majority, because these pulpit-pounders are saying that you should design for the majority at the expense of the minority who want other forms of information and feedback. Some people want text, but the design world says that text like the wget GUI is clutter. Some people want kinetic action to the extent possible with a screen and keyboard, which means turning pages and tabs, but the design world says that as much as possible should be visible

³<http://www.smashingmagazine.com/2007/08/02/data-visualization-modern-approaches/>

from one static view.

The correct solution is a balanced presentation of all types of learning technique, including visual, textual, spatial, haptic, and I don't know what else. Which is not to imply that striking that balance is in any way easy—people devote their lives to that balance. And yeah, I probably post too few graphics.

But the need for a balance isn't coming through in the infovis world, which is still in love with being able to produce graphs that were impossible a decade ago. So let me offer some balance: people (by which I mean me) want text. People acquire language skills early in life—as I understand consensus, the ability to learn and use language is innately wired into the brain—and use language to communicate with alarming regularity. Use that in presenting information. Text, people. It's great. Yay, text.

References

Andrew Gelman and Jennifer Hill. *Data Analysis Using Regression and Multi-level/Hierarchical Models*. Cambridge University Press, 2007.