THE NEW ENGLAND INSTITUTE OF ART

SUMMER 2008

GD220 PACKAGE DESIGN

HINTS:

• use *sidenotes*, not footnotes!

•There is a 6,000-year history of information design!

• design can harm content, or it can let it through gracefully, but it *can't* rescue bad content!

• be aware of the viewer's need to understand your design!

• *don't* dumb-down the information…*do* assume that the viewer is intelligent! Strunk and White: "no one can write decently if you assume your readers are dumb"

• adjacent information is better than information that is stacked in time (i.e. facing pages work better than 'turn the page, turn the page,' etc…; when information is stacked in time, the viewer asks, "where *am* I?" (*Visual Explanations*, pp 80, 81)

• bad information design makes stupidity come alive

•'chartjunk' is statistical stupidity (*Envisioning Information*, p34; *The Visual Display of Quantitative Information*, ch 5)

• use visual effects to reinforce your message

• you want the viewer to understand your message—don't make *dis*information design

• ts eliott said, "talent imitates, genius steals"; borrow strength — don't get it original, get it right.

• look at these websites:
• www.microscopy.fsu.edu/primer/java/scienceopticsu/powersof10/index.html
• www.washington.edu/computing/training/560/zz-tufte.html

INFORMATION VISUALIZATION

(from notes taken at an Edward Tufte seminar 9 March '00, Boston, MA; * are my additions)

WHEN DESIGN VISUAL INFORMATION, THERE ARE TWO PROBLEMS…

1 Nearly everything that is interesting has multiple variables and requires 3D, but has to be displayed in 2D
2 The need to accurately and concisely present a dense amount of information data

FIVE GRAND PRINCIPLES OF INFORMATION

Minard's map of Napoleon's army's fate in Russia (Slides #1 and #2 and *The Visual Display of Quantitative Information*, pp176, 40, 41, 51):

1 *compared with what?*—find a good answer to display this… and *enforce visual comparisons*
2 *show causality*—mechanism, process, dynamics… to produce a desired effect, know the cause
3 the display should *reflect the multivariate data*…these variables may necessary in your design:
   - size
   - location in 2D space (latitude and longitude)
   - direction
   - temperature (Minard's depiction is an *anti-war poster*, yet the *temperature* scale that he includes is the key to understanding the problem!)
   - dates
4 completely *integrate your information*—words, numbers, images
5 your presentation will stand or fall on the *relevance, quality, integrity of the content*!

PRINCIPLES OF INFORMATION DESIGN

- use *analytical thinking*; an information display is *visual thinking*!
- *design*, *thinking* and *reasoning* are alike!
- ask yourself, "what is the thinking task that this display is supposed to support?"
- good information design is *clear thinking made visible*
- think in terms of small multiples, the detail helps your credibility (*Envisioning Information* p 19—*time* is a crucial variable)
- magnitude, scale and quantity are *powerful* when depicted visually!
- cause and effect (*Visual Explanations*, pp30, 31 [Slide #3: Snow's map of cholera outbreak helped to end the epidemic];
- aim for the smallest effective distinctions: make your diagram as small, un-contrasty, and minimal as possible—but make it *clear*.
- use direct labeling (*Visual Explanations*, p74; *also pp98, 99: Slides #5 and #6: 'R' before and after, and…
- **Visual Explanations*, p75 and 20–23: animated thunderstorm (Slides #7, #8, #9, before, and with revisions
- work *with*, not against, conventions (*Visual Explanations*, pp76 [with], 77 [against]: Slides #10 and #11
- integrate text, word, number, image (*Visual Explanations*, p85): Slide 4
- work with intensity of knowledge and a caring spirit infused with passion and knowledge for your subject matter ((*Visual Explanations*, p144, 145 especially note sidebar, p145)
- Slide #12, 'Chartjunk': do not overwhelm your viewer with unnecessary visual information

THE VISUAL DISPLAY OF QUANTITATIVE INFORMATION

1 detail helps credibility
2 you need to adjust, standardize, the information *before* you design the chart
3 when you show $$$ over time you *must* adjust for inflation!!! if you don't you're *lying*
4 look closely at the information chart/graph: know when it's important to adjust line weight, work meticulously with typography, show extreme clarity or diagramming
5 the best information design is just as beautiful, as historically important, and has the emotional worth of any oil painting (the central argument of James Elkins' *The Domain of Images*) "

FOR SERIOUS INFORMATION DESIGN DECISION-MAKING:

1 place the full amount of necessary information into the chart/graph
2 show causality
3 show effects/results