

Teaching R graphics & visual rhetoric

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www.graphdoctor.com
github.com/graphdr

UseR! Conference, Aalborg, 2015–07–01.

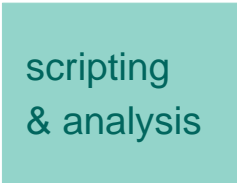
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Creating a data visual is an exercise in rhetorical judgement.



- ▶ meanings
- ▶ comparisons
- ▶ contexts

Different communities focus on different aspects of communication.



scripting
& analysis

- technique
- patterns
- inference

Different communities focus on different aspects of communication.



- technique
- patterns
- inference
- tips
- clarity
- convention

Different communities focus on different aspects of communication.

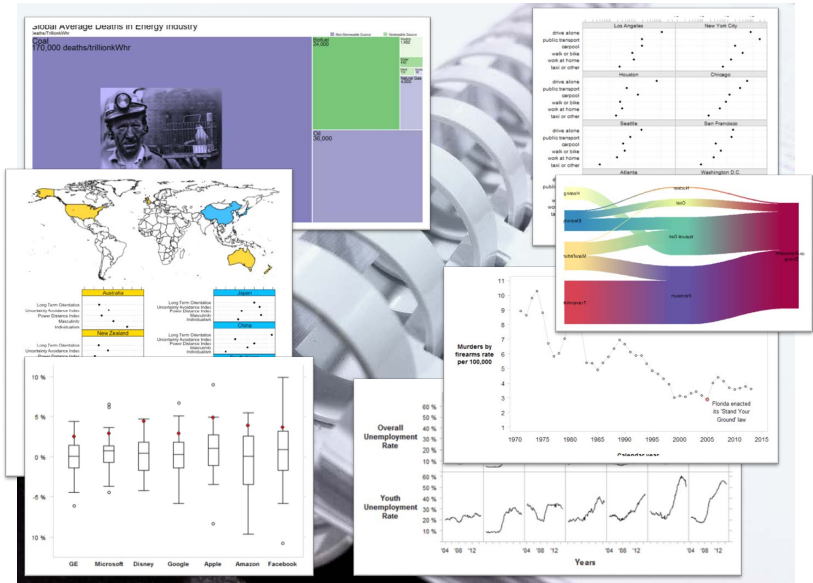


- technique
- patterns
- inference

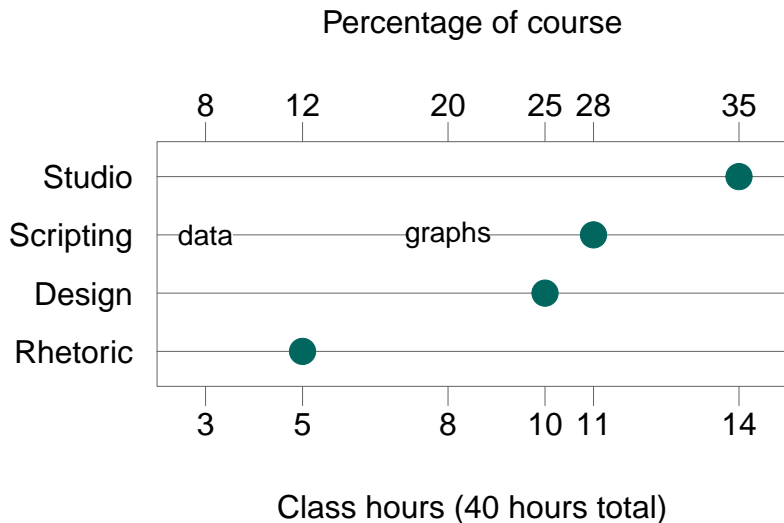
- tips
- clarity
- convention

- meaning
- context
- response

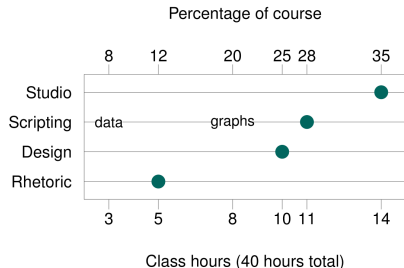
A student creates a portfolio of displays and critiques.



Allotting the in-class hours to the major topics.



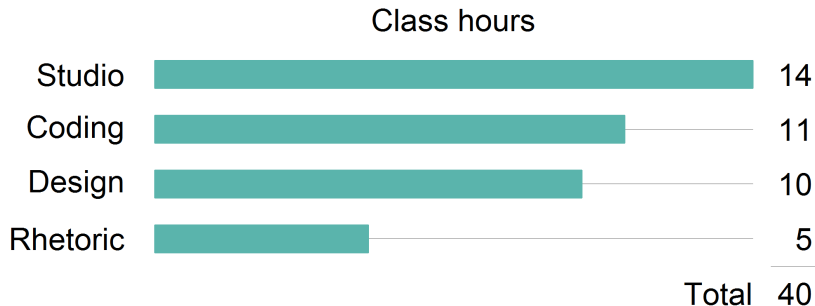
Consider the rhetorical attributes of the dot plot.



- ▶ empirical-study based
- ▶ optimal data transmission
- ▶ philosophical positivism

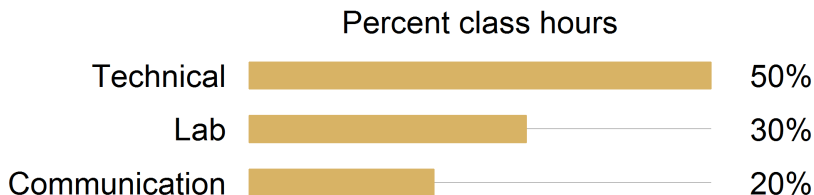
Rhetoric of adaptation: tailoring the communication to a specific situation.

The “Curriculum Committee” version:

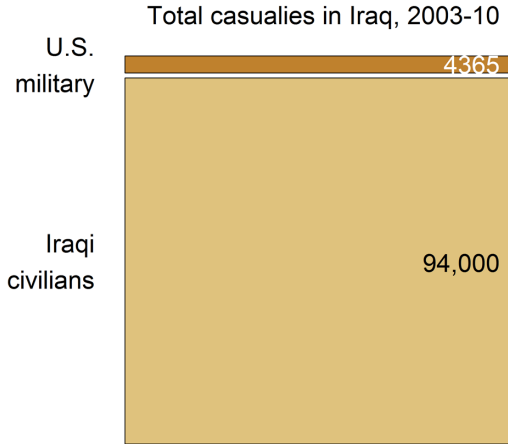


Social rhetoric: readers interpret displays through their collective learning, experience, and values.

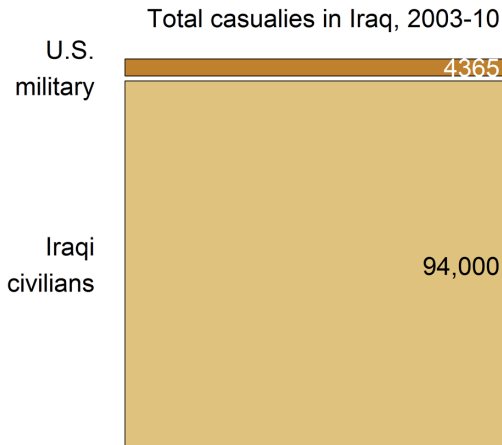
The “Board of Trustees” version:



Indifference to the human condition: a cruel graphic.



A humanizing image can convey a humanistic ethic.



Implications for teaching R graphics.

- ▶ Carefully select your technical computing objectives.
- ▶ Continue to design for clarity and truthfulness.
- ▶ Pay attention to the needs of the audience.
- ▶ Convey a humanistic ethic.