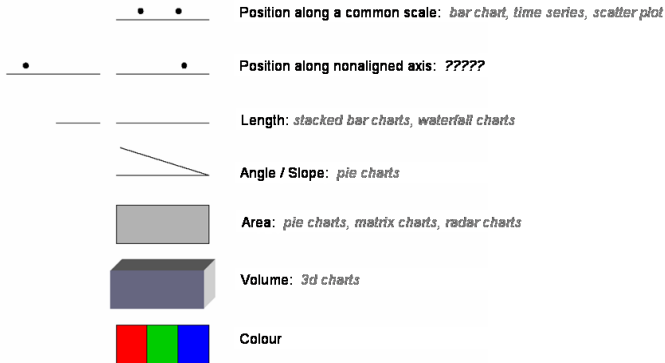


Cleveland's hierarchy

Cleveland's Graphical Features Hierarchy

Best information transfer



Worst information transfer

Source: Presentation Graphics, Leland Wilkinson, SPSS Inc & Northwestern University
Revised 16Feb2010 tdwld

<http://sfew.websitetoolbox.com/post/clevelands-graphical-features-hierarchy-4598555>

Scales

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Scales

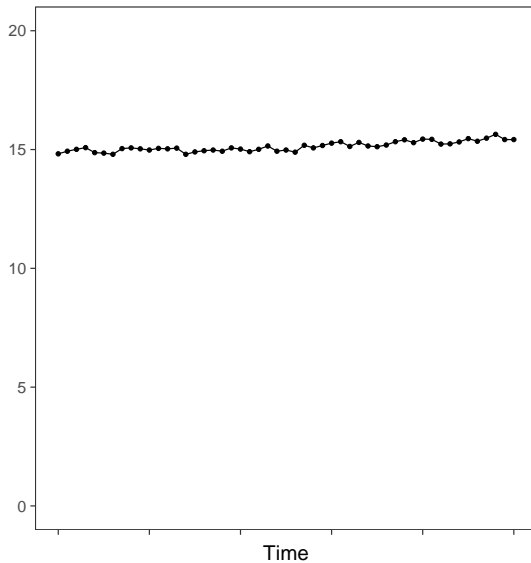
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Outline

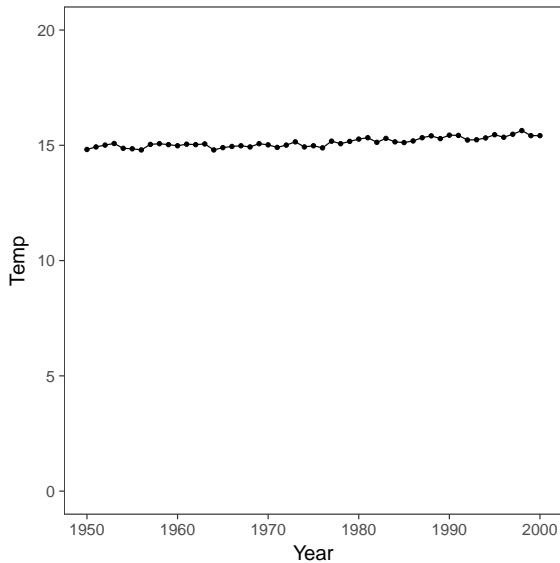
Anchors

Transformations

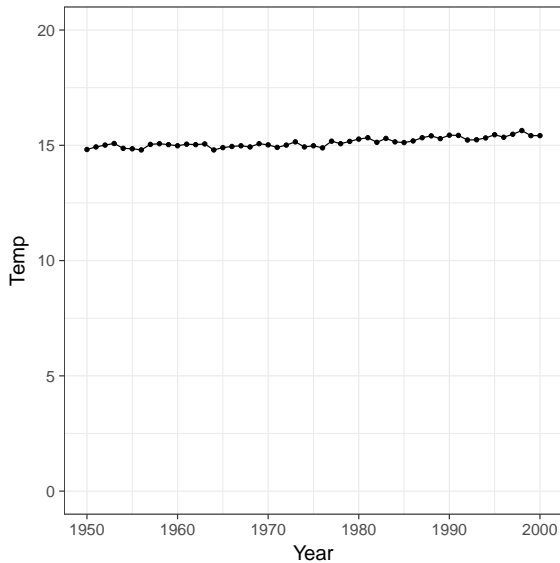
Golem bait call



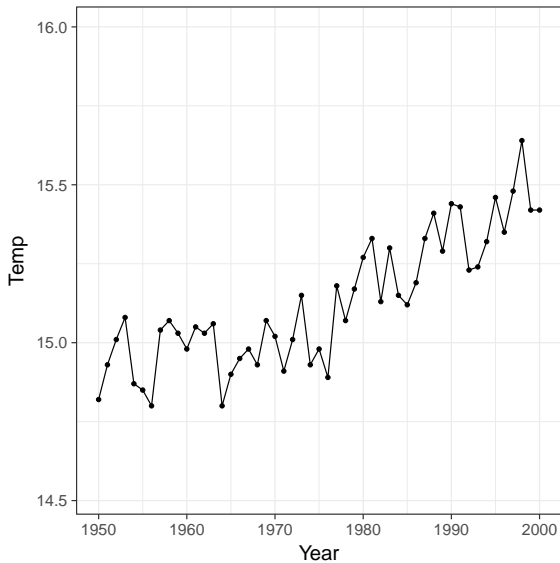
Global climate



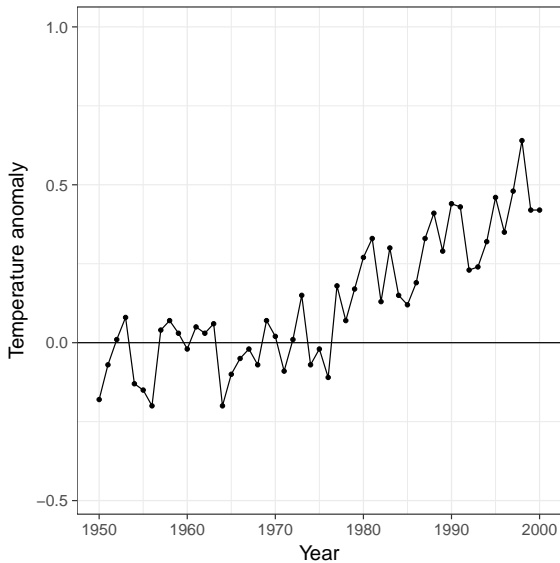
Global climate



Global climate



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Climate lessons

- ▶ Choosing an anchor is a scientific decision

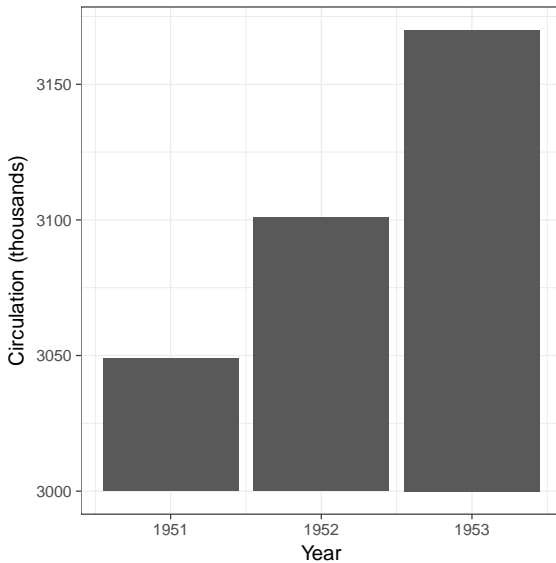
Climate lessons

- ▶ Choosing an anchor is a scientific decision
- ▶ Remember: graphic design is communication

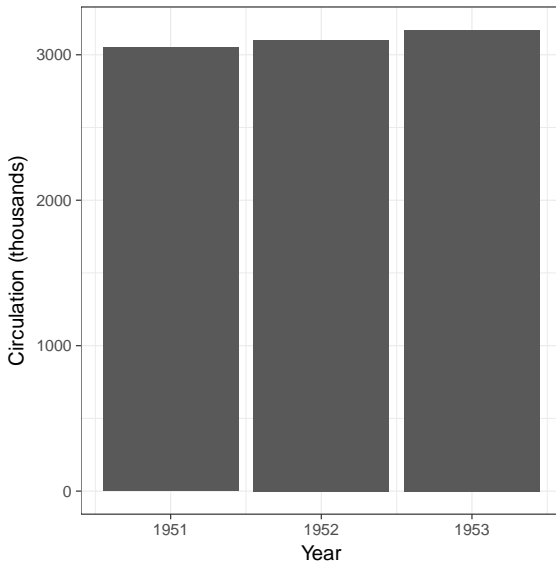
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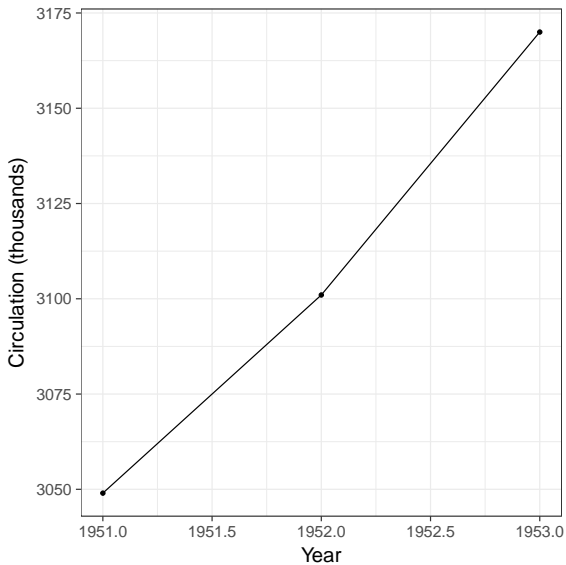
Magazine circulation (advertisement)



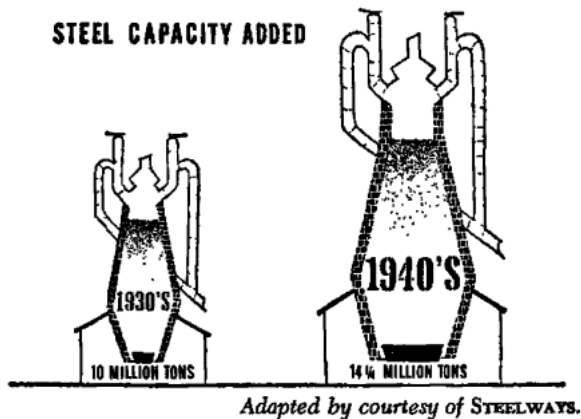
Magazine circulation (absolute amount)



Magazine circulation (trend)



Area and volume



How to Lie with Statistics

Advertisement lessons

- ▶ Use area to indicate fair comparisons

Advertisement lessons

- ▶ Use area to indicate fair comparisons
 - ▶ On a physical scale

Advertisement lessons

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Physical quantities

- ▶ 1 is to 10 as 10 is to what?

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- ▶ The log scale is often good for physical quantities:

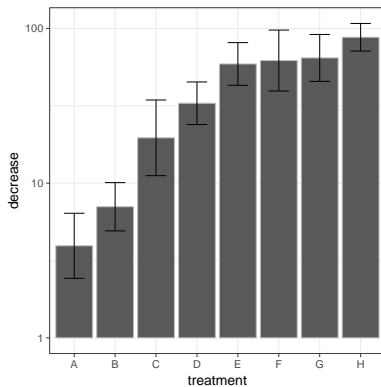
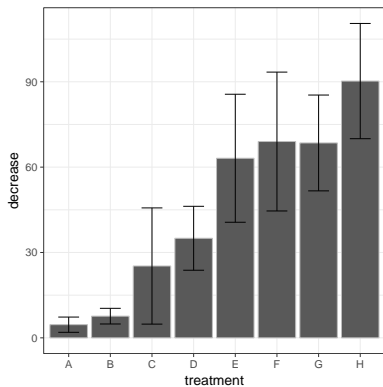
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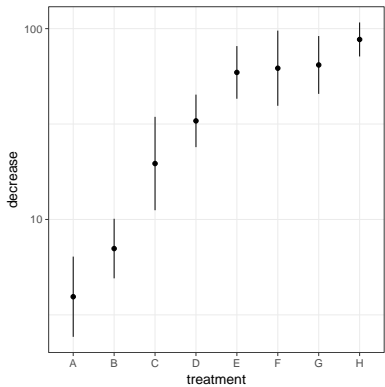
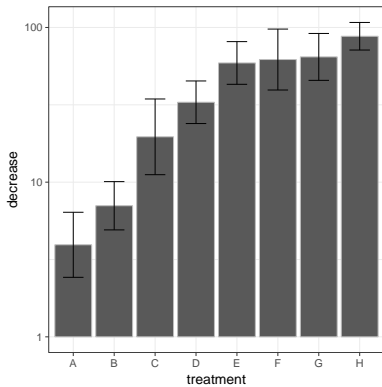
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Log vs. linear



Making room



Data shape

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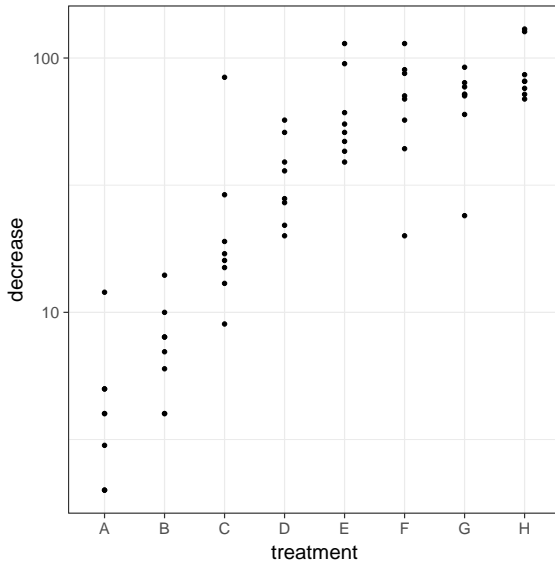
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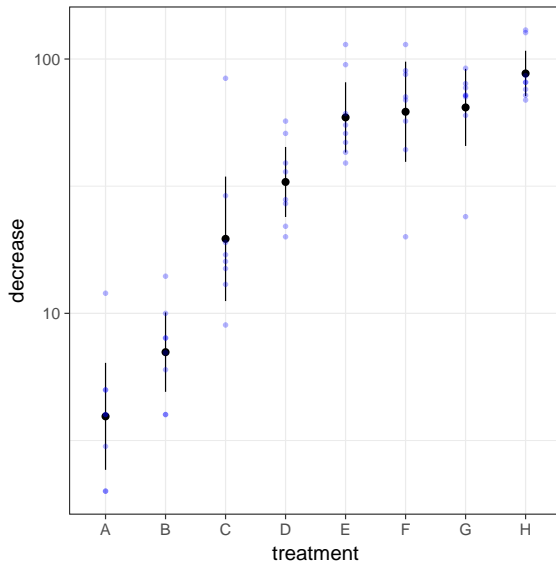
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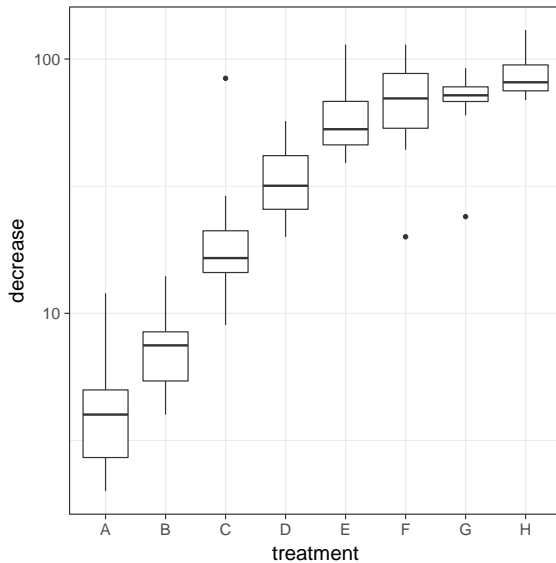
Showing points



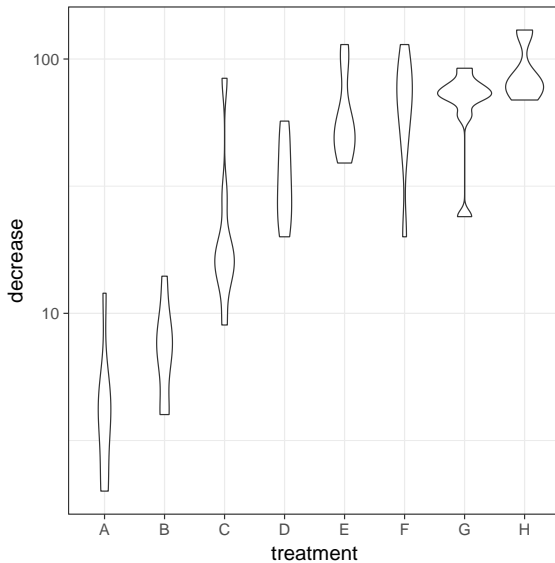
Combination



Boxplot



Violin plot



Orchard lessons

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