

## Info 424

Tufte continued: Micro/macro & Small Multiples  
*Envisioning Information* (ch 2 & 4)

## Today's lecture

Assignments/Wiki problems  
 Micro/Macro Readings (Tufte)

- Discussion from the book
- Digital examples from the laptop
- Class examples

Small Multiples

- Discussion from the book
- Digital examples from the laptop
- Class examples
- Compared to animation

Lab this week

## *Envisioning Information*

Micro/Macro Readings

## Online examples

[Google maps](#)

[PhotoMesa](#) Image browser

Maya Lin [Systematic Landscapes](#)

Piccolo **examples:** Fisheye Calendar, Graph Editor, Presentation Tool

InXight [StarTree](#)

TextArc [Hamlet](#)

10x10 [news summary](#)

## Micro/Macro summary

*...detail cumulates into a larger whole*

Maps (flat and perspective)

Data dot patterns

Patterns in words and numbers

- Stem and leaf plots
- Vietnam memorial

Pictures from pictures

- Scattered (Where's Waldo, Cuba)
- Coherent (Marley)
- Objects (Lin's Landscapes)

What about real pictures?

## *Envisioning Information*

Small Multiples

## Small Multiples Summary

*...visually enforcing comparisons of changes, of the differences among objects, the scope of alternatives*

Similar repeated instances

- To show cases (train signals)
- To show variation (fishing flies)
- To show process (calligraphy, origami cranes)

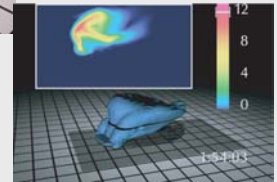
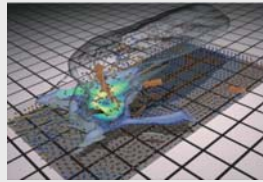
Frozen animation

- To show positions (planets, chess, Muybridge)
- To show process (instructions)

Abstract data to detailed graphic

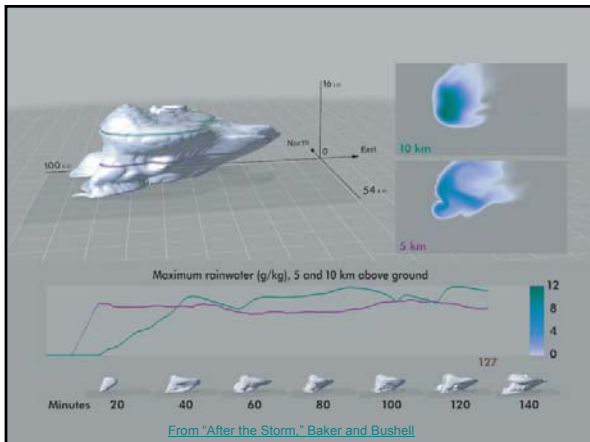
What about real animation?

## After the Storm



Video available at [Mediaport](#)

From "After the Storm," Baker and Bushell



From "After the Storm," Baker and Bushell

## Animation vs. Small Multiples

Small-multiples often better

- Easier to see all steps (Muybridge)
- Doesn't rely on memory for comparisons
- User is in control of pace

Animation problems

- Too fast ([visible human](#))
- Too complicated
- Interactive much better

Animation pluses

- More detail, if less precision
- Better overall sense of motion

Animation: [Can It Facilitate?](#) Barbara Tversky, Julie Morrison, Mireille Bejrancourt

## Friday's lab

Design exercise: redesign a bad example  
Stephen Few [examples](#)

Bring your own example  
Work in teams of 2  
Do two redesigns/team