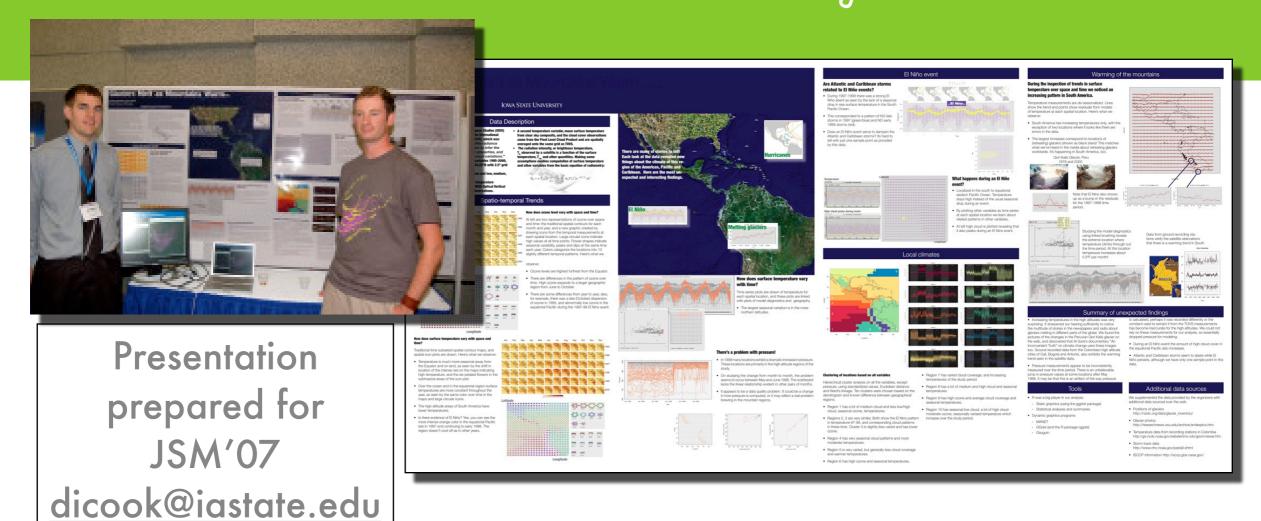
Improving Statistical Posters

Di Cook Iowa State University



OUTLINE



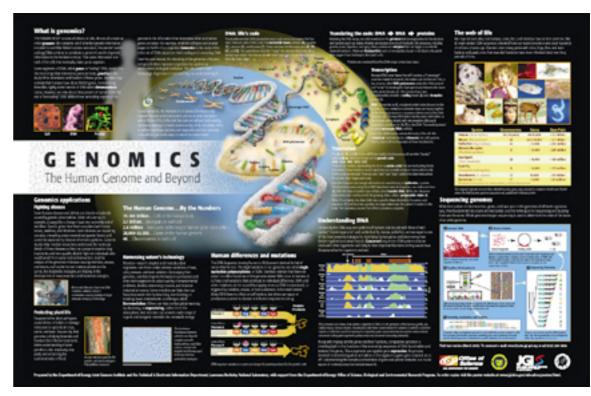
Layout
Color

Text and font

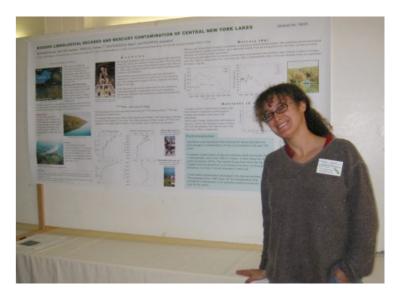
Visuals

Electronic media

Resources



http://www.lbl.gov/Publications/Currents/Archive/images/Apr-04-2003/genomics_poster.tiff.jpg

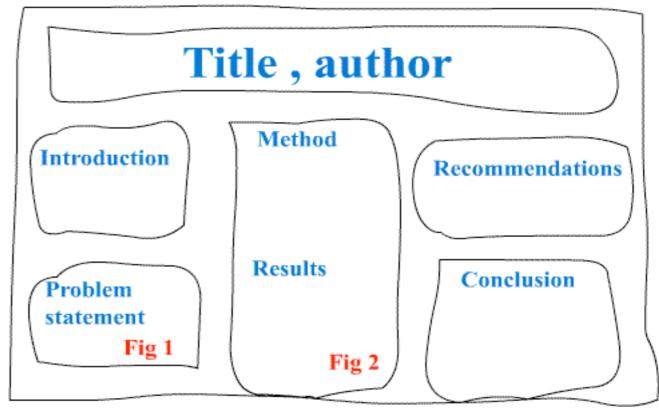


PLANNING

Write down everything: Title, Introduction, Problem Statement, Method, Results, Recommendation/Conclusion

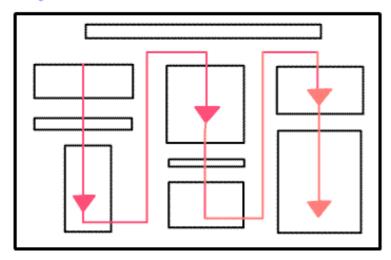
Plan attention grabbers - you have less than 3 seconds to grab people's attention.

- Sketch out your poster
- What's the message? Who's the target audience?

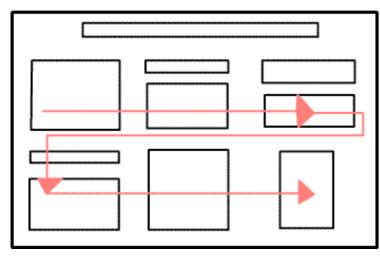


LAYOUT

By column



By row



A numbering system will help your audience follow the flow of information.

Print the pieces at actual size and place them on a table.

COLOR

Color is a very important part of your poster.

Choose a color theme.

Too much color makes it too busy.

 \odot

This combination is easy on the eyes.

 \odot

This combination is also easy on the eyes.

This combination is NOT easy on the eyes.

This combination is NOT easy on the eyes.

TEXT & FONTS

Text size and font are very important.



ALL CAPITALS

CAN BE

DIFFICULT TOO.

- Ariel bold is easy to read.
- Courier regular is NOT easy to read, and is boring.
- E Italics and script is NOT easy to read.

Title	100pts	>1.5in
Headings	~50pts	0.6-0.8in
Body	>25pts	0.2-0.4in

VISUALS

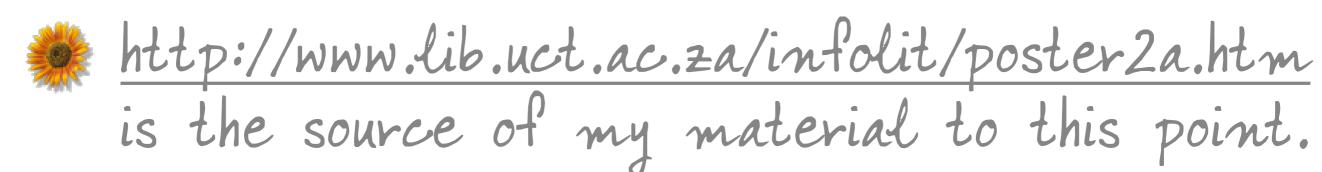
Graphics, photographs and diagrams are a vital part of a poster. They add interest and help communicate your message.

Use digital photos rather than scanned.

Create graphics using good plotting software such as R, and edit/annotate using a drawing program such as Photoshop, Canvas, CorelDraw.

Use sparingly to avoid a busy appearance.

CREDIT



Reably excellent, straight forward advice with pictures and diagrams on poster construction.

EXAMPLE

Catchy

Navy and white color scheme

Glaciers Melt as Mountains Warm

Hadley Wickham, Jon Hobbs, Heike Hofmann, Di Cook

IOWA STATE UNIVERSITY

Data Description

- Source: BASA besides Invited by Tapes: Decides (BES) satisfied if the smoothly of the late in the satisfied basal basaline for all Controlling Project (BCD), which were decomped the control ones that associates surfaces excessive events and its analysis black to late the global distribution of change, their properties, and
- Morality clear reduces of admospheric scriptions (MR-SMS), but owns 112.75°C-04.35°E, 21.35°C-04.35°E with 23° grid specials.
- Türkibina premen, temperaten, esese mel lem, medien, high-sheet arree.
- high should write.

 The present is, speak and sear-surface beings refuse

 observations are committed from the TROM Surface before
- A moved temperature scription, mean method temperature.
 Texts above ally composite, and the clean derive electrostate event from the Part Land Clean Product and are spatially.
- The sublation inducedly, or brightness beings unless, I, elemented by a matellite in a franchise of the methods takepointee, I and other question. Earthus being made occumy there again to competitive of carriers beings related and other contributions.

20 = 0 24 , 0 - 000 + f 45 (4) 0 - 060 A

Spatio-temporal Trend



At left are two representations of capite over space and time: the traditional spatio continues for each smooth analysis, and a revergingable content of the desired by drawing born. If an the temperature executions are each aparticle content, a Large character before the earlier to the tradition of the content of the co

observe

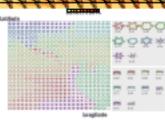
- Coone levels are highest furthest him the Equation
 There are offerences in the pattern of occurs over
- time. High ocone expands to a larger people(in region from June to October.
- for example, there was nisted (Catobe) dependent of spine in 1986, and abnormally live spone in the equational Pacific during the 1997-199 (France even)

for the order beyorks my will you and

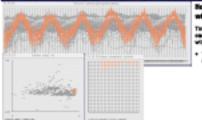
special templots are disarra. Here's what we obser

- Temperature is much more essented every from the biguidar and on land, as seen by the shift in bootion of the manner radion the major industry; high temperature, and the pic pedicial forwars in the
- Over the ocean and in the equations region such temperatures are more constant throughout the year, as seen by the same color over time in the maps entitled a circular foom.
- The high attracts areas of South-Armeica have least terrogenitaries.
- Is there existence of 81 NRoff Vec, you can see the more treatise change color to the equations Pactities in 1927 and obstimuting to early 1938. The mortes described of the to 1939 water.









with time?
The sets pits an disensifier parature for

 The largest sessonal valuation is in the northern latticides.

There's a problem with pressure!

- In 1898 many/coaline will bit a dismetti in crease in presents.
 These relations are primary in the right attack regions of the study.
- Cn studying the change from month to month, the posters seeme to observe milks yand June 1909. The coding to be the poster of the coding to the coding
- trappears to be a data quality problem. It could be a change in new pressure is computed, or it may refer to real problem becamp in the mountain regions.







4'x4'

Dramatic visual, which also serves as lookup to the main parts of poster.

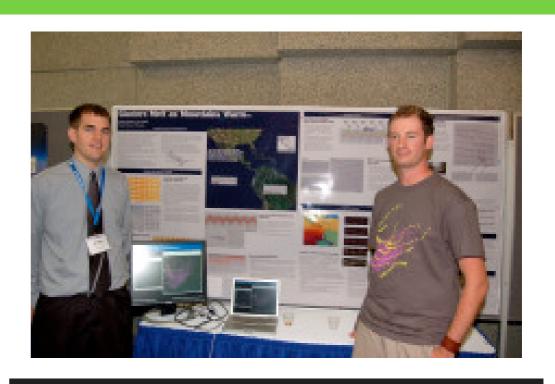
MULTIMEDIA SUPPLEMENTS



A movie or computer demo can illustrate the dynamic rather than static nature of your work.



Multimedia draws attention.

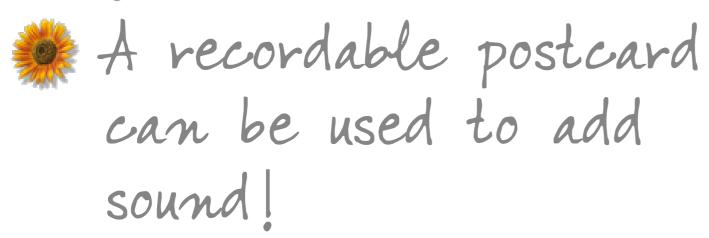


Interactive graphics used in the production of "Glaciers melt as mountains warm"

Hadley Wickham, Jon Hobbs, Di Cook, Heike Hofmann

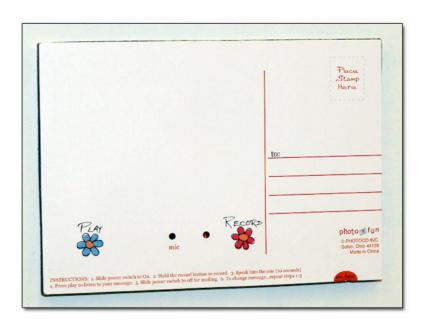
MULTIMEDIA SUPPLEMENTS

A digital photo frame might be incorporated directly into your poster to display a sequence of photos or graphs.



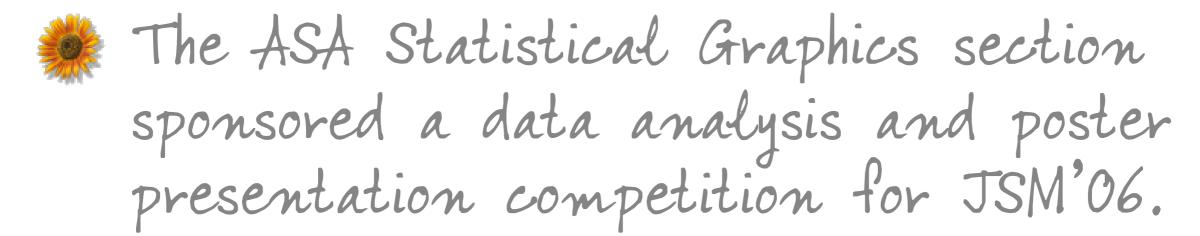


http://blog.scifi.com/tech/archives/2006/10/13/new_memoryframe.html



http://www.swarthmore.edu/NatSci/cpurrin1/images/soundrecorder.jpg

DATA EXPO POSTERS



Good place to see examples of wellconstructed posters and multimedia supplements.

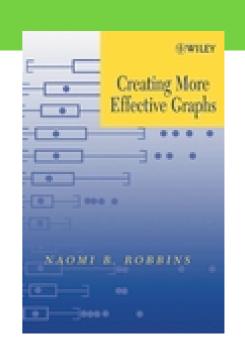
http://www.amstat-online.org/sections/graphics/dataexpo/ 2006entries.php

SOFTWARE

- Adobe InDesign: Figures kept in separate files so master file remains small.
- Powerpoint: templates available on web, but unwieldy for large posters and graphics.

GOOD GRAPHICS PRINCIPLES

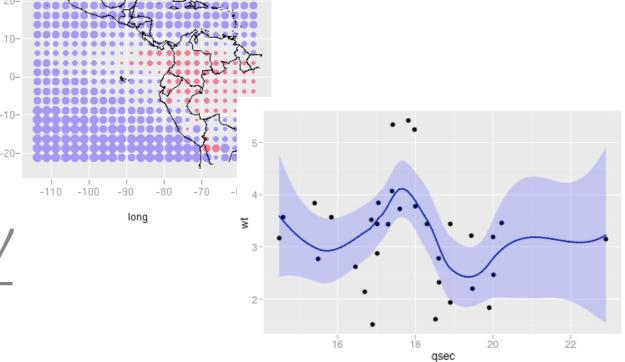
Naomi Robbins (2006) Creating More Effective Graphs http://www.wiley.com/



R package: ggplot2

Hadley Wickham

http://had.co.nz/ggplot2/



COGNITIVE PERCEPTION

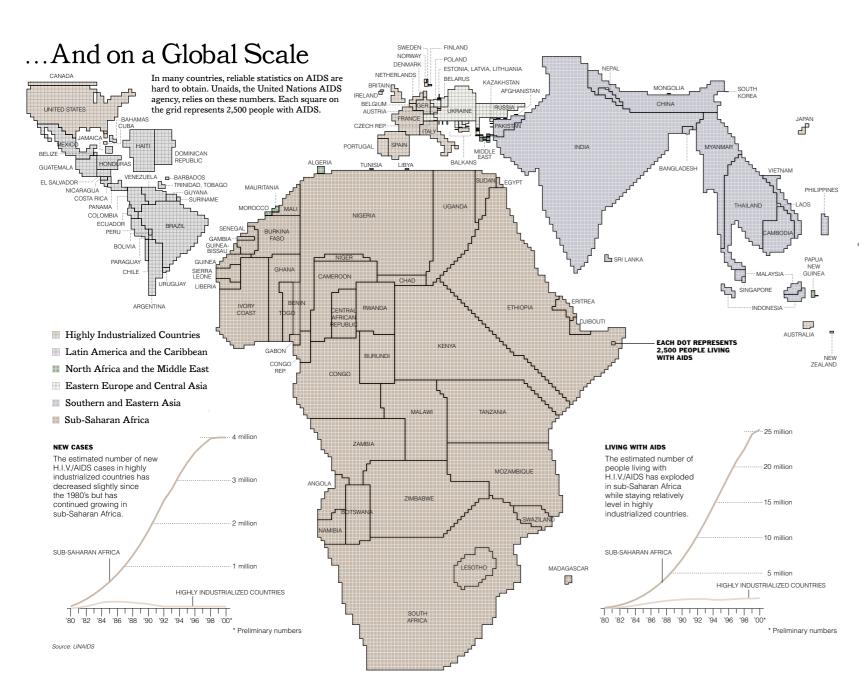


Familiarity and surprise: Following conventions (eg Tufte, Wainer) captures an audience by familiar, ease of interpretation.BUT



Breaking conventions elicits interest.

COGNITIVE PERCEPTION



Map is familiar, draws in the reader.

AND convention is broken by the size of country, which is interesting encouraging the curious reader to learn more.

CONCLUDING COMMENTS

- Posters ablow the presenter to engage the audience in small groups for individualized discussion.
- From experience: If its a big poster print it in a couple of smaller pieces for transporting to the meeting!
- You're a story teller.

RESOURCES



http://www.lib.uct.ac.za/infolit/ poster2a.htm



http://www.swarthmore.edu/NatSci/cpurrin1/ posteradvice.htm