Storytelling in InfoVis

CS 7450 - Information Visualization
October 3, 2012
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Purpose

• Two main uses of infovis
  – Analysis – Understand your data better and act upon that understanding
  – Presentation – Communicate and inform others more effectively

• Today we look at that second one more
Telling Stories

- Data visualization can help to communicate ideas, summarize, influence, unite, explain, persuade

- Visuals can serve as evidence or support

A Famous Example

Hans Rosling shows the best stats you've ever seen

Hans Rosling
Gapminder
2006

They Had Him Back


Discuss

• Why has this had such a big impact?
Characterizing the Area

• Studied storytelling: Described topics as “Narrative Visualization”
  – How does this differ from traditional forms of storytelling
  – Reviews the design space
  – Characterizes genres
  – Describes a framework

Thoughts?

• Discuss
Case Studies

NY Times 2006

Design Space

- Genre
- Visual Narrative
  - Visual structuring
  - Highlighting
  - Transition Guidance
- Narrative Structure
  - Ordering
  - Interactivity
  - Messaging
Genres

- Seven Genres
  - Magazine Style
  - Annotated Chart
  - Partial Oral Poster
  - Flow Chart
  - Comic Strip
  - State Show
  - Film/Video/Animation

Observations

- Clusters of different ordering structures
- Consistency of interaction design
- Under-utilization of narrative messaging
Approach

- Author-driven vs. reader-driven
- Common patterns
  - Martini glass
  - Interactive slideshow
  - Drill-down story

A Hot Topic

VisWeek 2010 Workshop
Reprised again this fall
Interesting talk at workshop

Jessica Hullman
Univ. Michigan

http://thevci.com/storytelling/docs/jessica_hullman.pdf

Journalism Angle

http://datadrivenjournalism.net

See below for event programme and video links. Underlines indicate available videos.
Data Journalism Handbook

Journalism in the Age of Data
Some Examples

News Stories

Tufte praises the work of Megan Jaegerman at NY Times

http://www.edwardtufte.com/bboard/q-and-a-fetch-msg?msg_id=0002w4
An Inconvenient Truth

Gore made extensive use of data graphics

Job Losses

Controversial, see http://soquelbythecreek.blogspot.com/2010/02/what-does-obama-job-chart-really-mean.html
Mariano Rivera


Casualties of War

http://www.cnn.com/homeandaway
VisualEyes

http://www.viseyes.org

The President
Going Interactive

2011 State of Union Address

Side channel
data visualizations
accompanied speech
Data Matters

David McCandless

McCandless Website

http://www.informationisbeautiful.net/

More Visualization Stories

http://www.ted.com/talks/aaron_koblin.html

Aaron Koblin
Questions

• How do these types of visualizations differ from “traditional” infovis?
Questions

- Would you characterize these as information visualizations?
  - Consider some of the different examples

HW 5

- Commercial systems review
  - Any questions?
- Due next Weds Oct 10
Upcoming

- Guest speakers

- Overview and Detail
  - Reading:
    Bederson et al ‘04