

the **future** of **data** and **design** ...
... in **visualization research**

@mattbrehmer
May 19 2015

MEMBERS



Tamara Munzner



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RECENT NEWS

5/02/2015 [PAPER]:

Detangler: Visual Analytics for Multiplex Networks

by Benjamin Renoust (National Institute of Informatics, Tokyo, Japan), Guy Melançon (Université de Bordeaux), and Tamara Munzner was accepted to *EuroVis 2015*, May 25-29 in Cagliari, Italy.

Benjamin will present this paper in the *Graphs* session on Thursday, May 28 at 11 am.

[\[pre-print pdf\]](#)

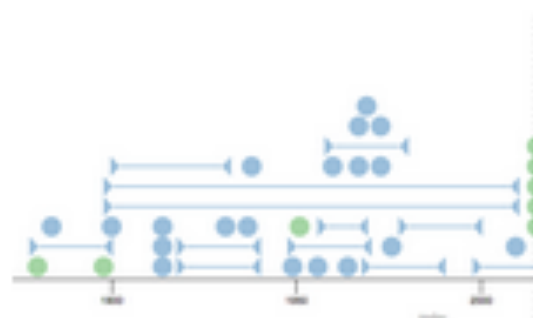


2/23/2015 [SOFTWARE]:

TimeLineCurator

We released a browser-based visualization tool for curating timelines generated from freeform text. Try it out and let us know what you think!

[\[web application\]](#)



2/19-20/2015 [TALK]:

Book tour talks: Tableau, Microsoft Research, giCentre

Tamara Munzner spoke on *Visualization Analysis and Design* at Tableau Software 2/20, and Microsoft Research 2/19. Her seminar at City University London's *giCentre* was on Feb 3.

[\[slides\]](#)



12/22/2014 [PODCAST]:

Data Stories #44: w/ Tamara Munzner

Enrico Bertini and Moritz Stefaner interview Tamara Munzner in their bi-weekly podcast on data visualization.

[\[episode\]](#)



cs.ubc.ca/group/infovis

research papers
talk slides
demo videos
open source software
vis design resources

what is **visualization research**?

technique-driven $\leftrightarrow$ problem-driven

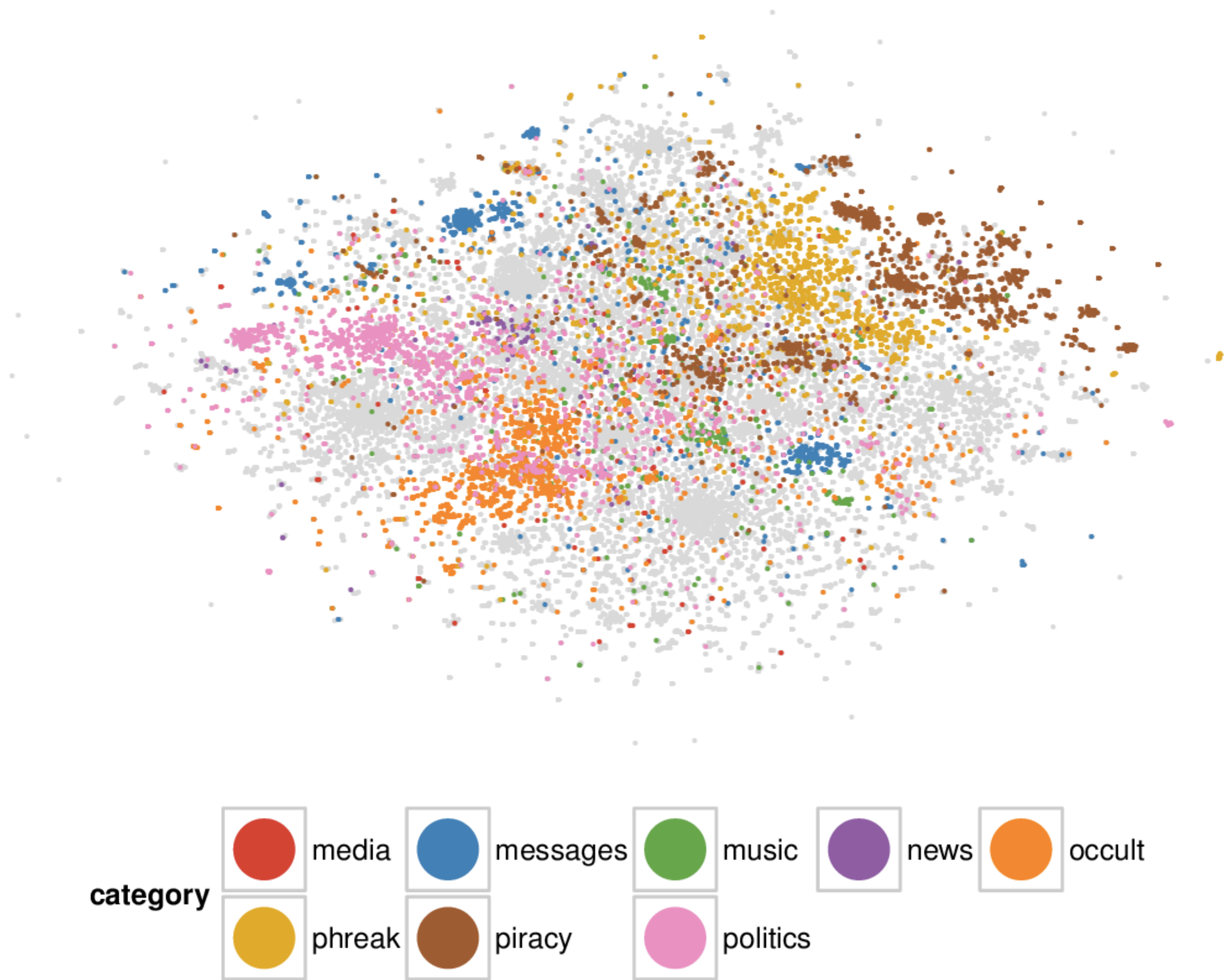
what is visualization research?

technique-driven $\leftrightarrow$ problem-driven

technique-driven

developing
techniques & algorithms

example:
visualizing large
document collections



Dimensionality reduction for documents with nearest neighbor queries.
Ingram & Munzner. In J. Neurocomputing (2014)

technique-driven

perceptual studies

example:
graph readability
metrics



A search-set model of path tracing in graphs.
Dawson, McGrenere, & Munzner. In J. Information Visualization (in press)

what is visualization research?

technique-driven $\leftrightarrow$ **problem-driven**

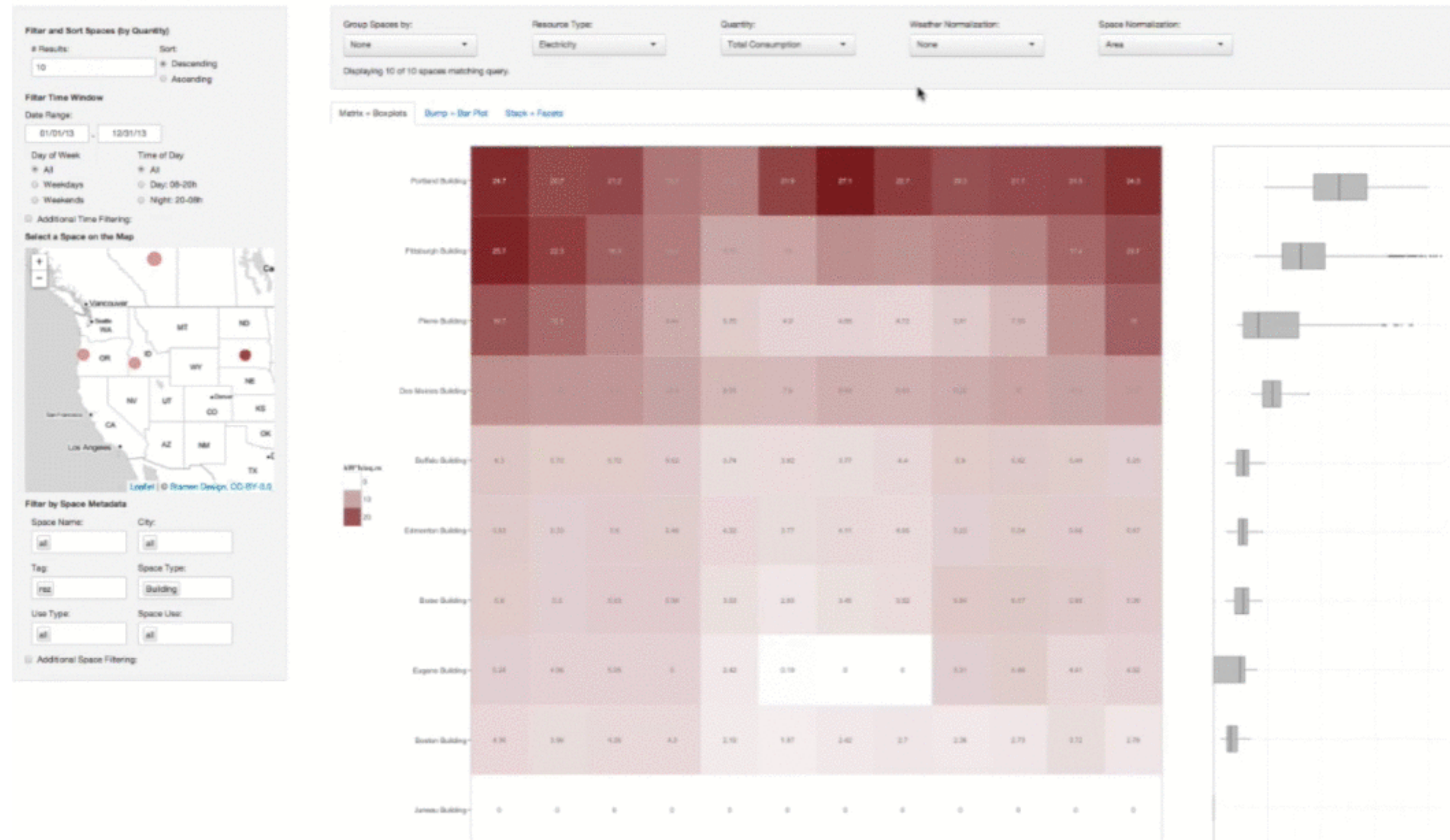
problem-driven

external collaborations

real data, real use cases

example:
energy portfolios analysis

Portfolio Visualization Sandbox



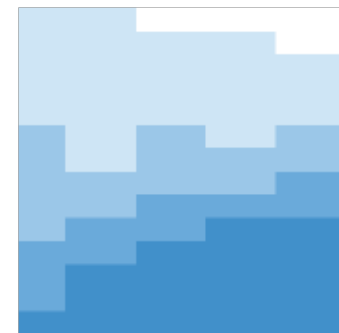
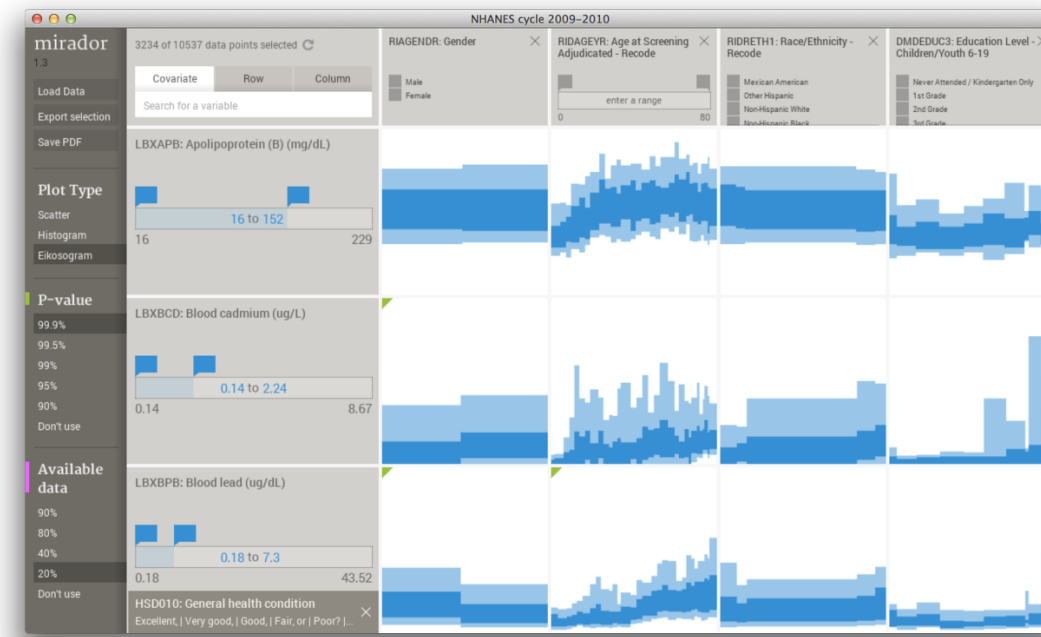
Matches, mismatches & methods: Multiple-view workflows for energy portfolio analysis.
Brehmer, Ng, Tate, & Munzner. (in review)

current trends & the future of
visualization research

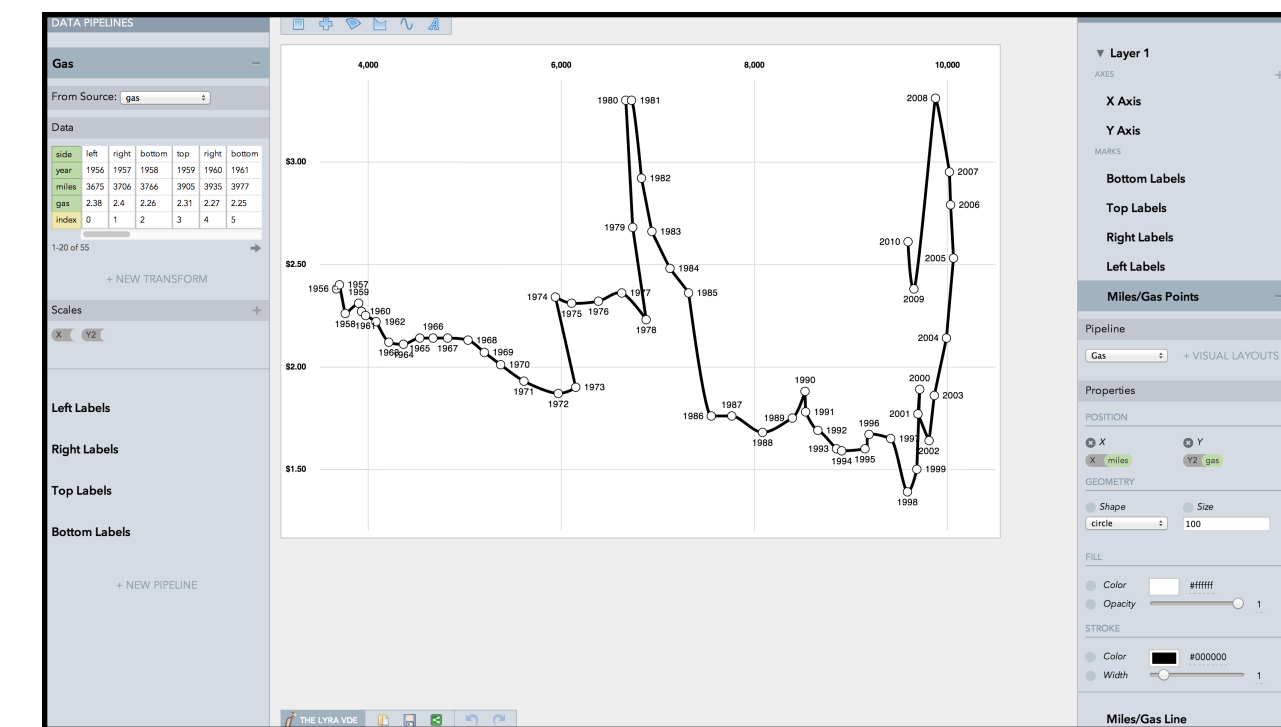
lowering the bar



tableau.com



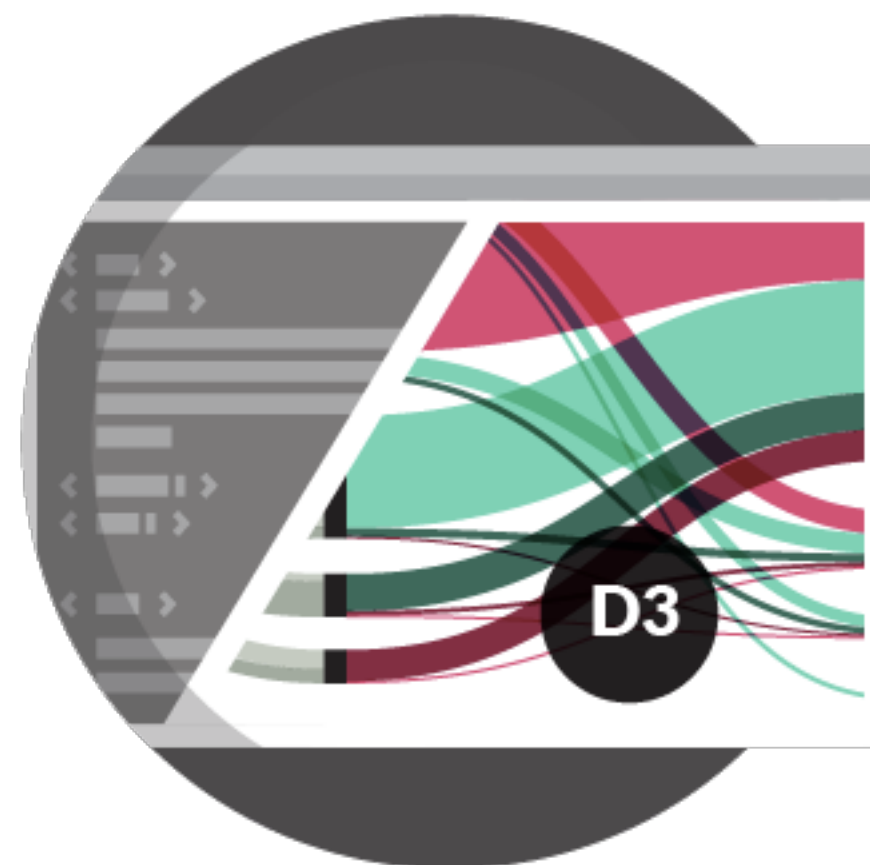
Mirador
by Fathom
fathom.info/mirador



Lyra
by U. Washington IDL
idl.cs.washington.edu/projects/lyra



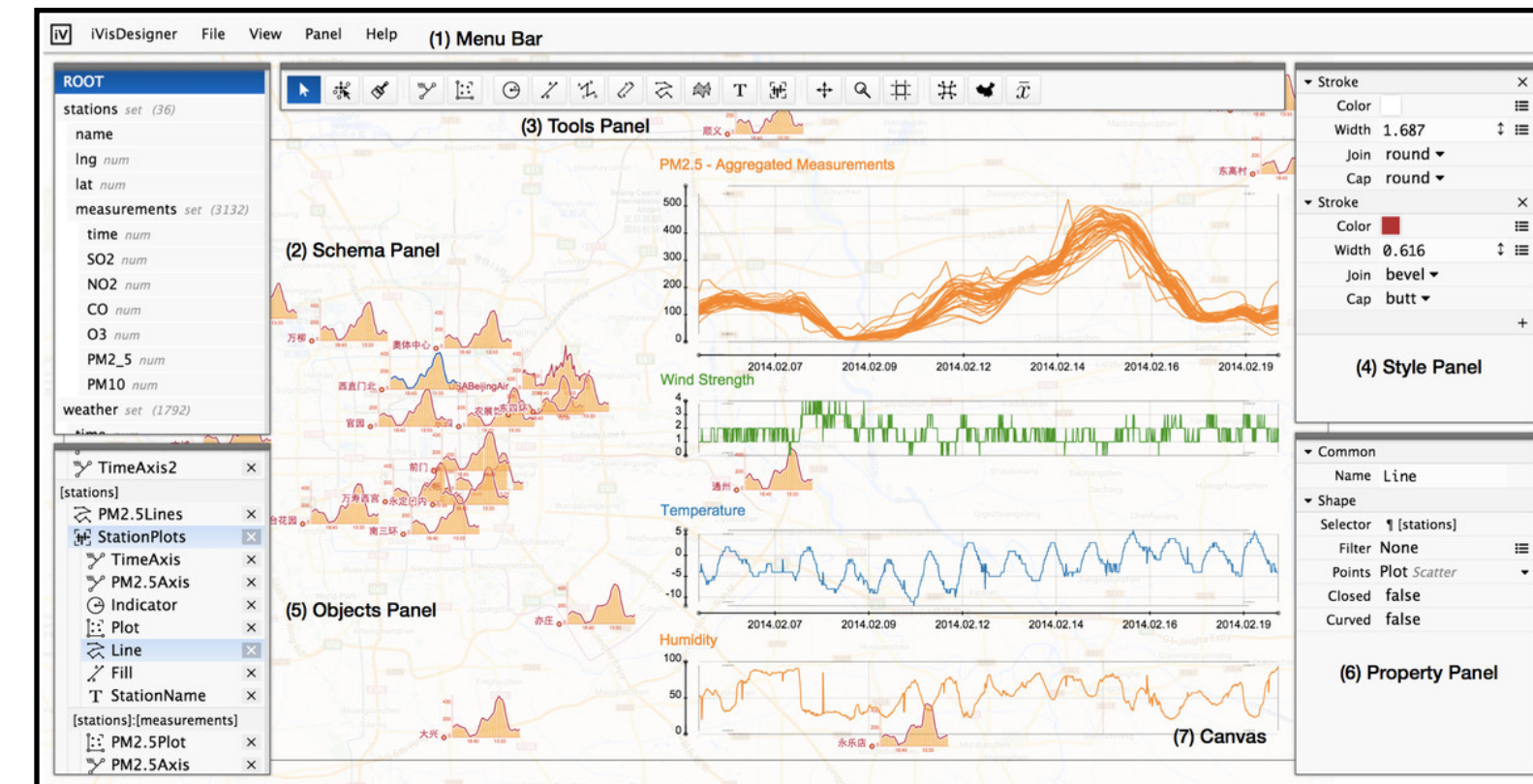
shiny.rstudio.com



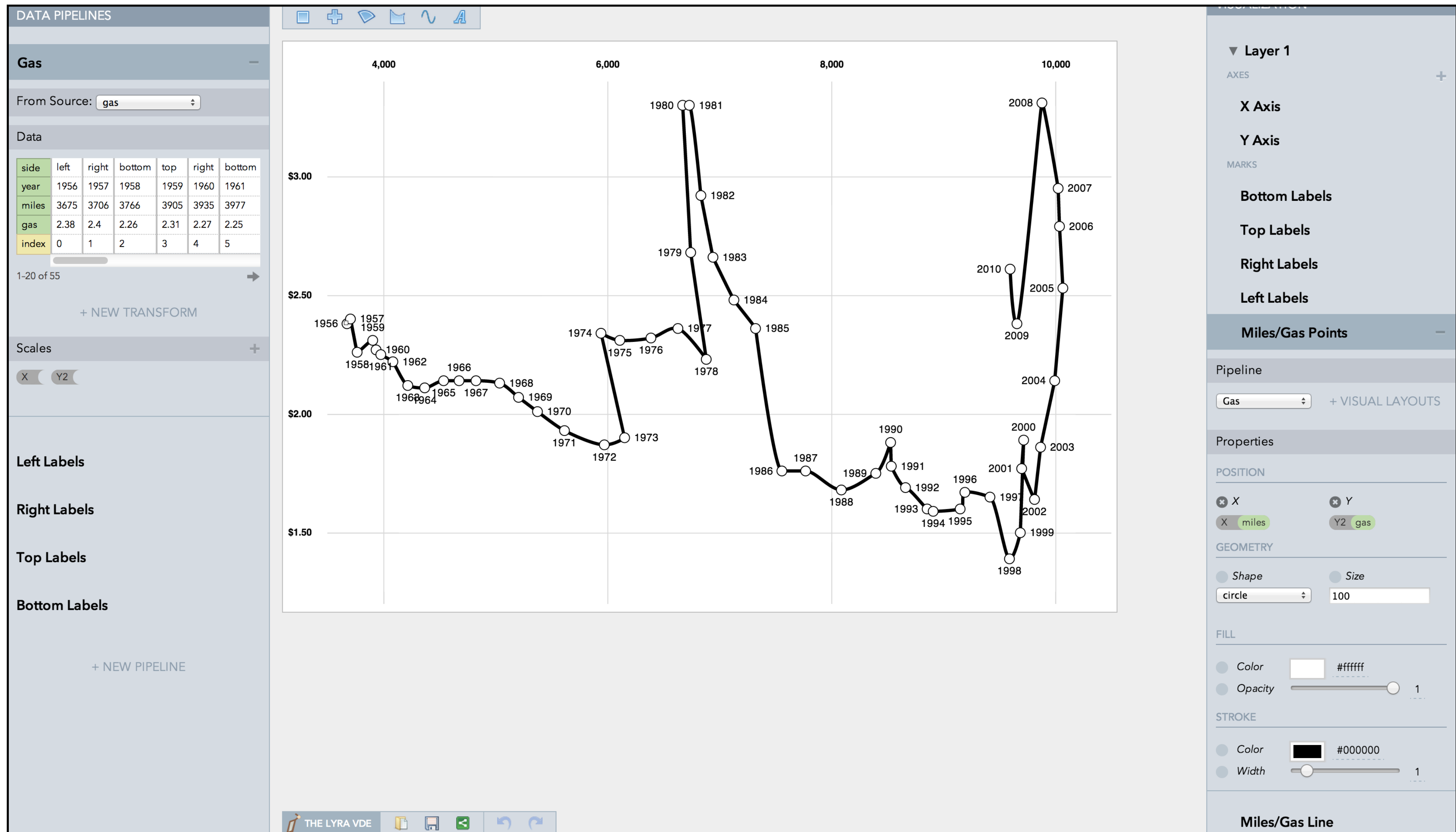
RAW

The missing link between spreadsheets
and vector graphics.

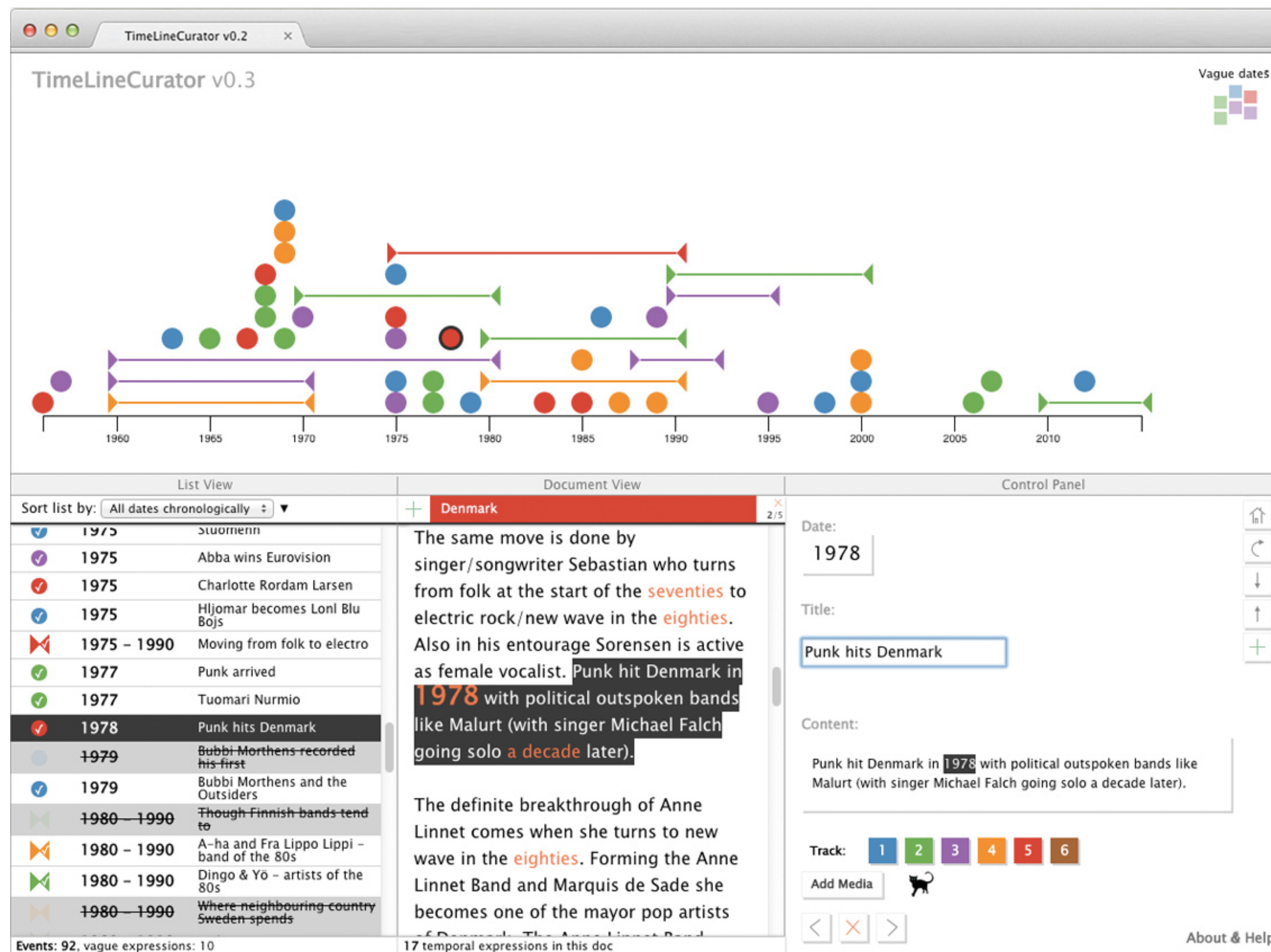
raw.densitydesign.org



iVisDesigner
by Ren, Hollerer, & Yuan
donghaoren.org/ivisdesigner



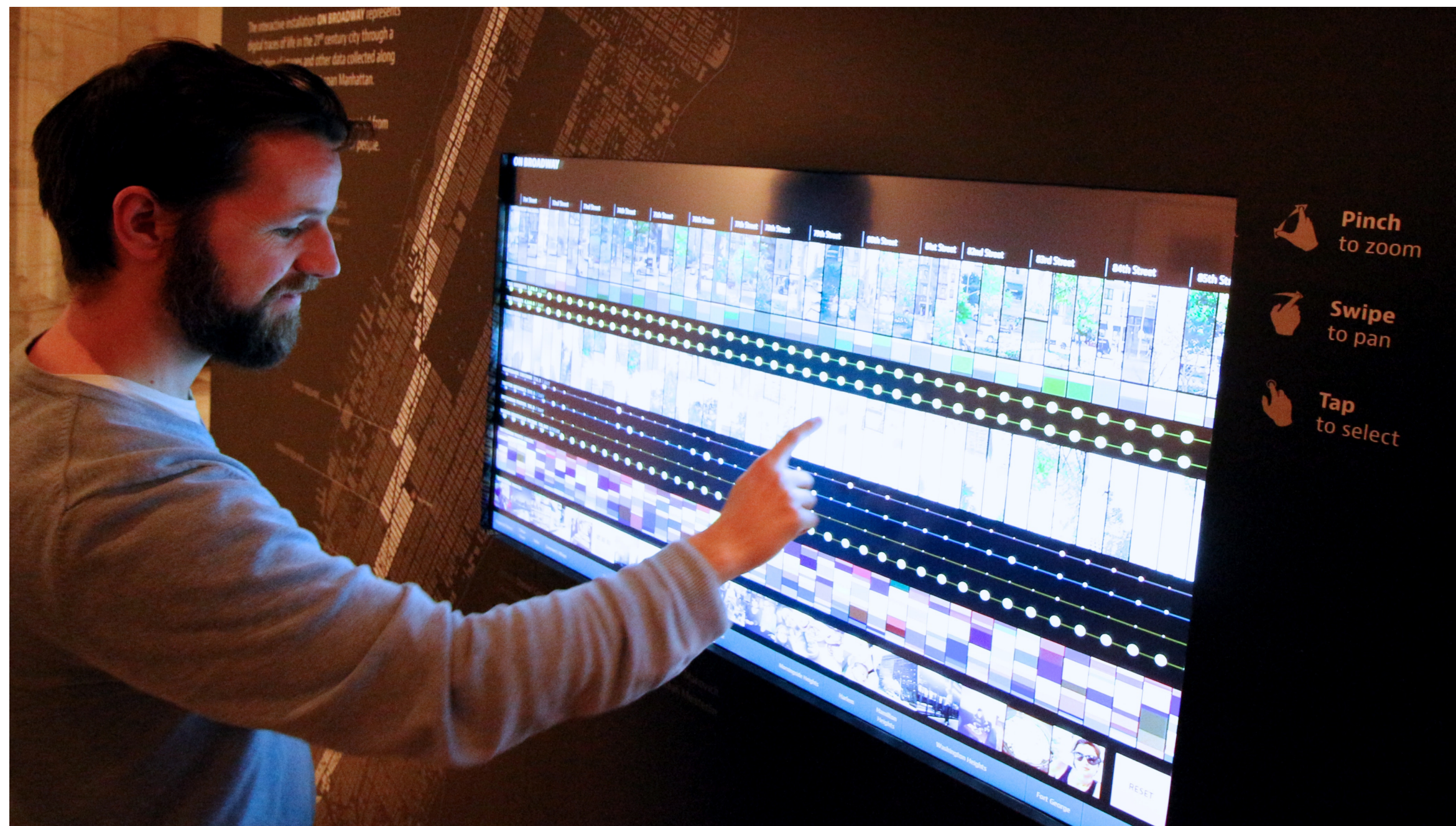
Lyra by Arvind Satyanarayan & Jeff Heer (2014)
idl.cs.washington.edu/projects/lyra
see also Jeff's talk at openvisconf.com



TimeLineCurator by Johanna Fulda, Matt Brehmer, & Tamara Munzner (2015)
cs.ubc.ca/group/infovis/software/TimeLineCurator

visualization
beyond the desktop

visualization beyond the desktop



"On Broadway" (2015)
Goddemeyer et al
on-broadway.nyc

Also see: "Death of the Desktop Workshop" at
IEEE VIS 2014: beyond.wallviz.dk



Jansen et al (CHI '12)
aviz.fr/trc

visualization literacy & data journalism

visualization literacy & data journalism



visuals
team

The New York Times
 **TheUpshot**

Vox

 **FiveThirtyEight**



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