EICS 2014 - Industrial Panel at the sixth ACM SIGCHI Symposium on **Engineering Interactive Computing Systems 2014**
CNR Rome, Italy, June 19, 2014

Information Design

Attracting designers into data visualisation: why & how

Marina Geymonat – Research Projects

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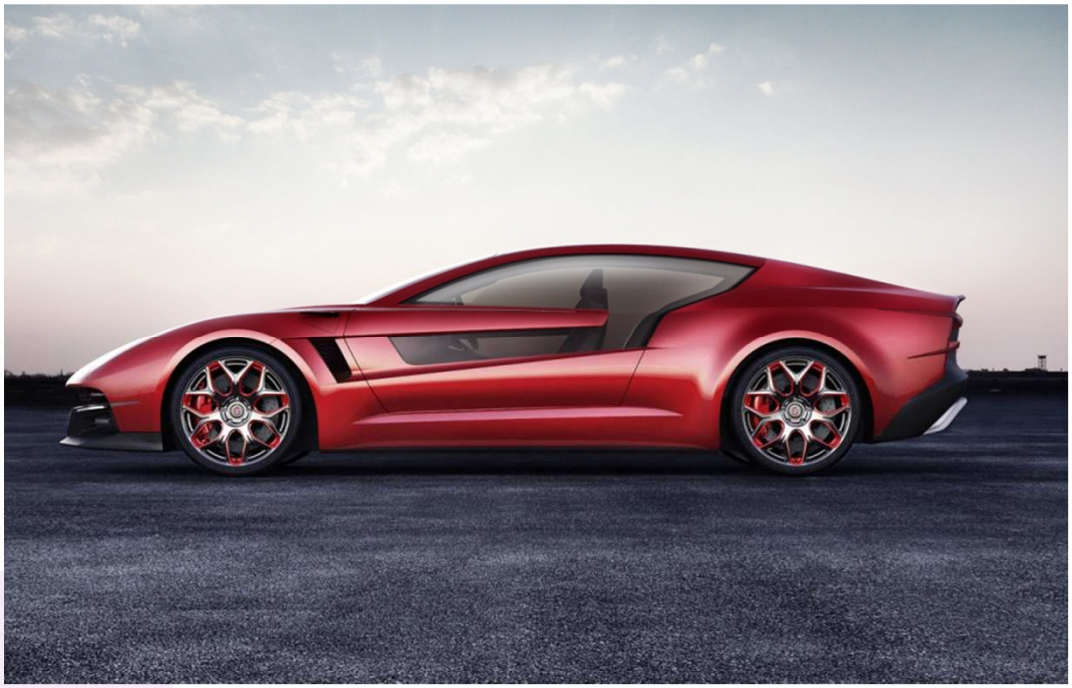
EICS 2014 - Industrial Panel
CNR Rome, Italy, June 19, 2014

engagment



behavioural psycology

social dynamics

purpose

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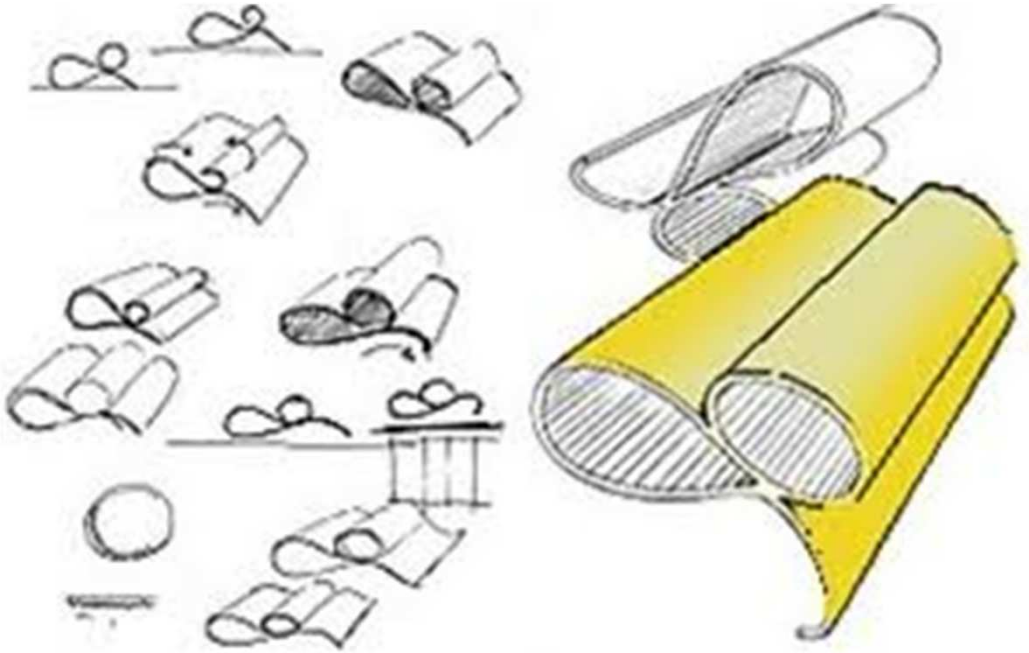
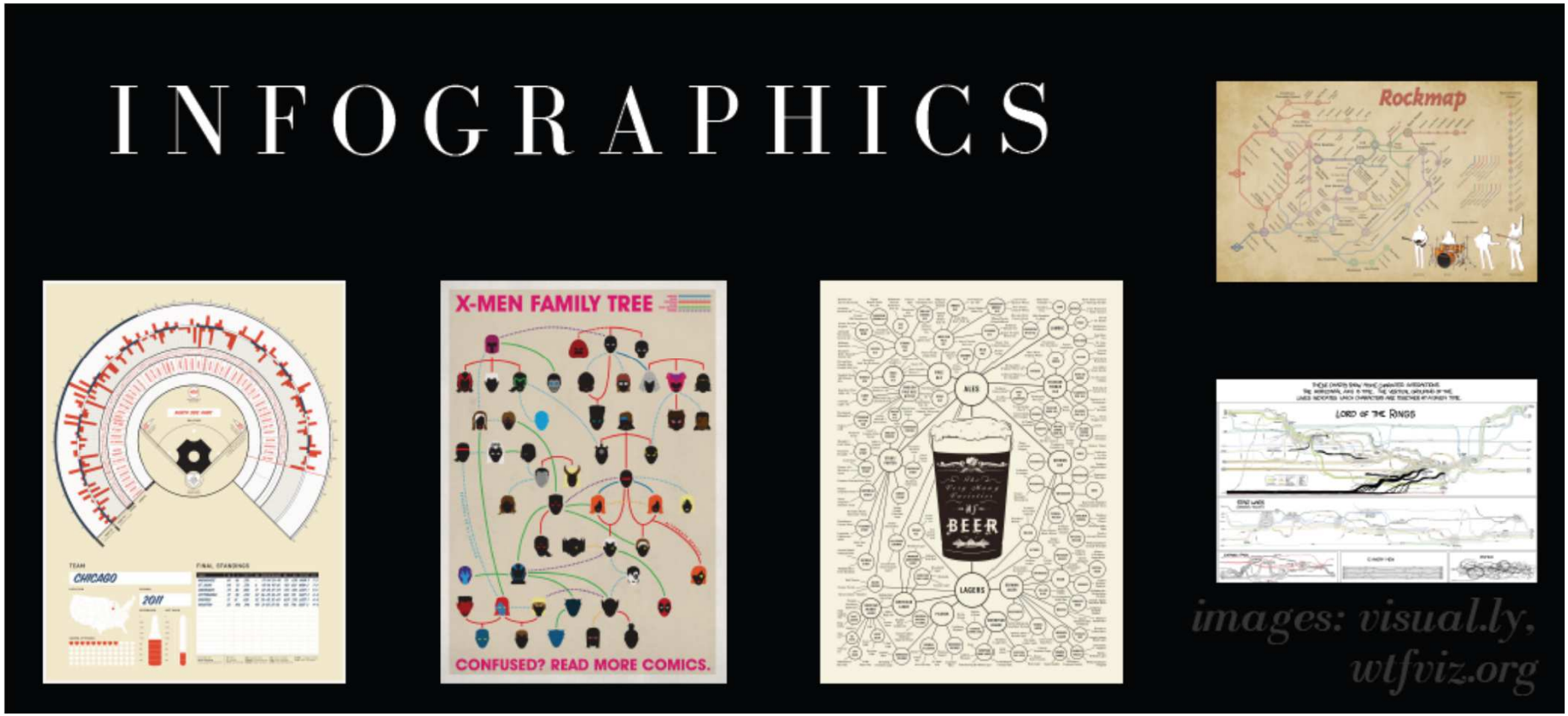


user interaction models

But when it comes to **tools** for visualizing data…

… and when I told him to use **data analysis & visualization tools…**

Attracting designers into data visualization: **why**



AVI 2014: Reflections on How Designers Design with Data

Alex Bigelow, Steven Drucker, Danyel Fisher, Miriah Meyer
University of Utah {abigelow, miriah} @cs.utah.edu
Microsoft Research {sdrucker, danyelf}@microsoft.com

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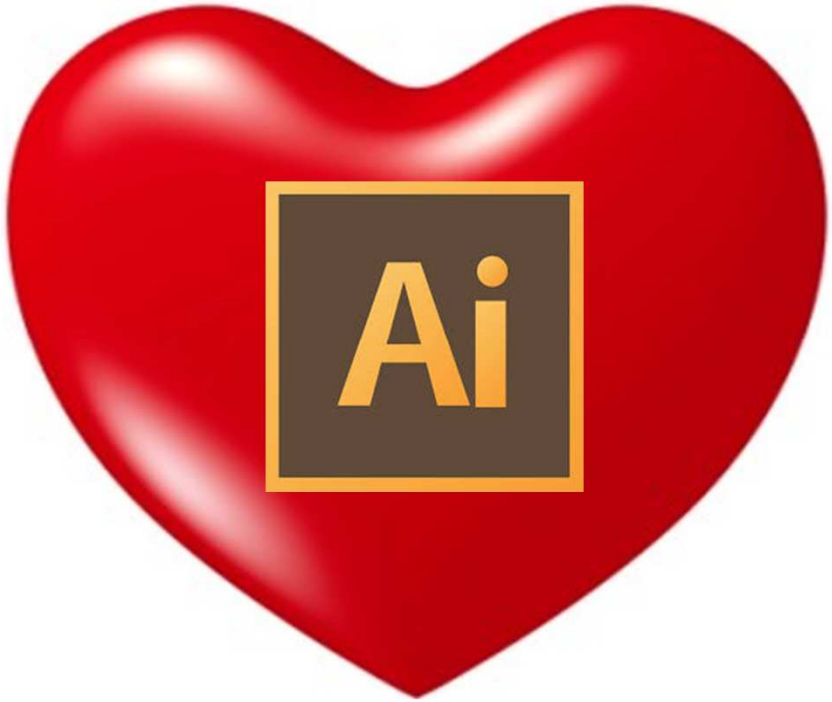
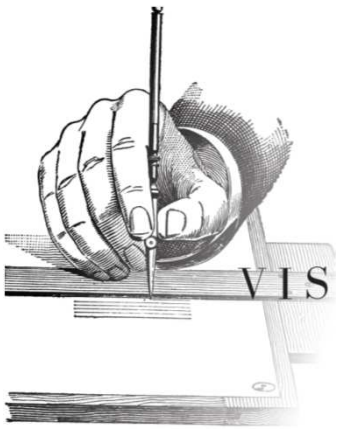
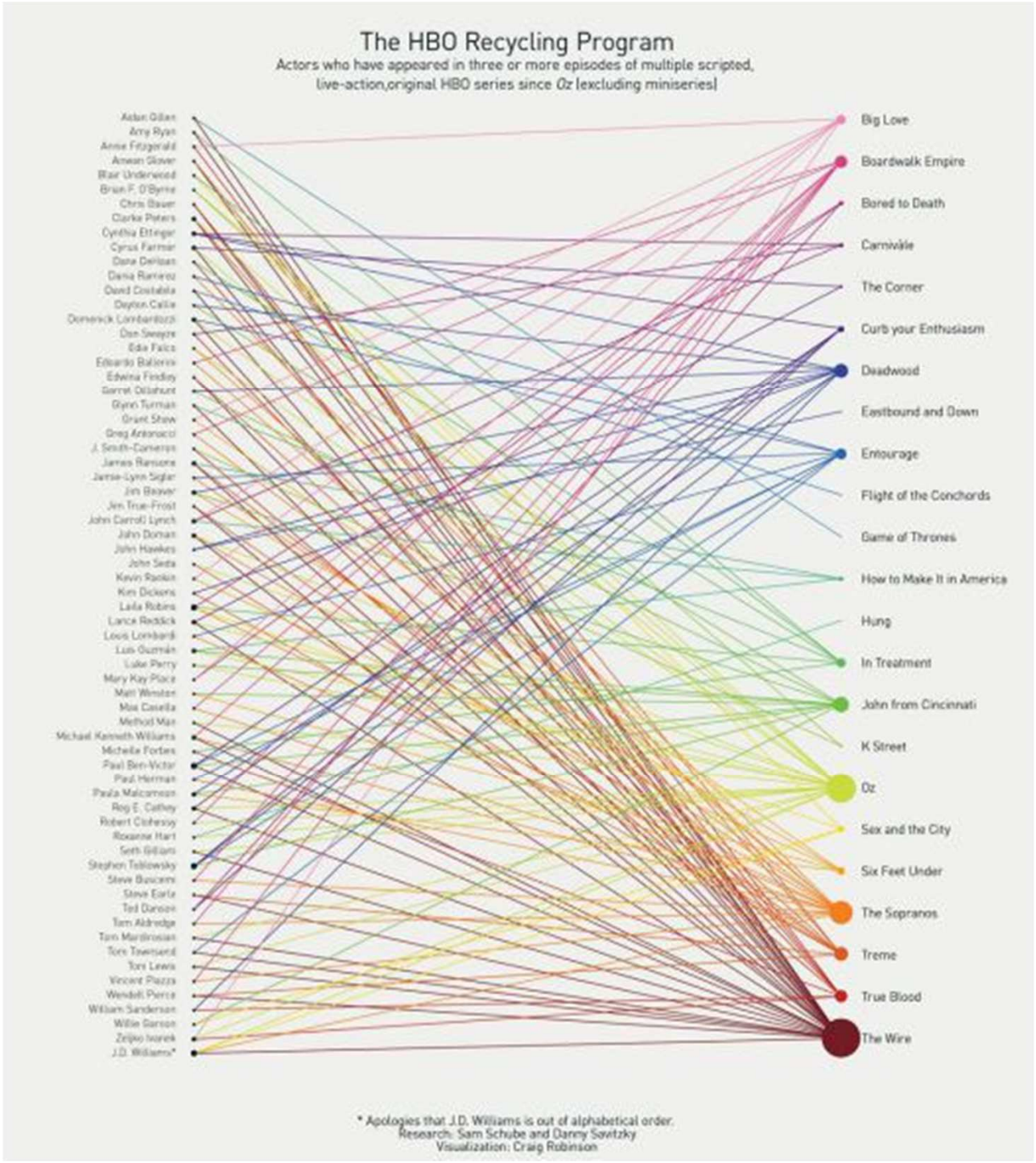
based on data



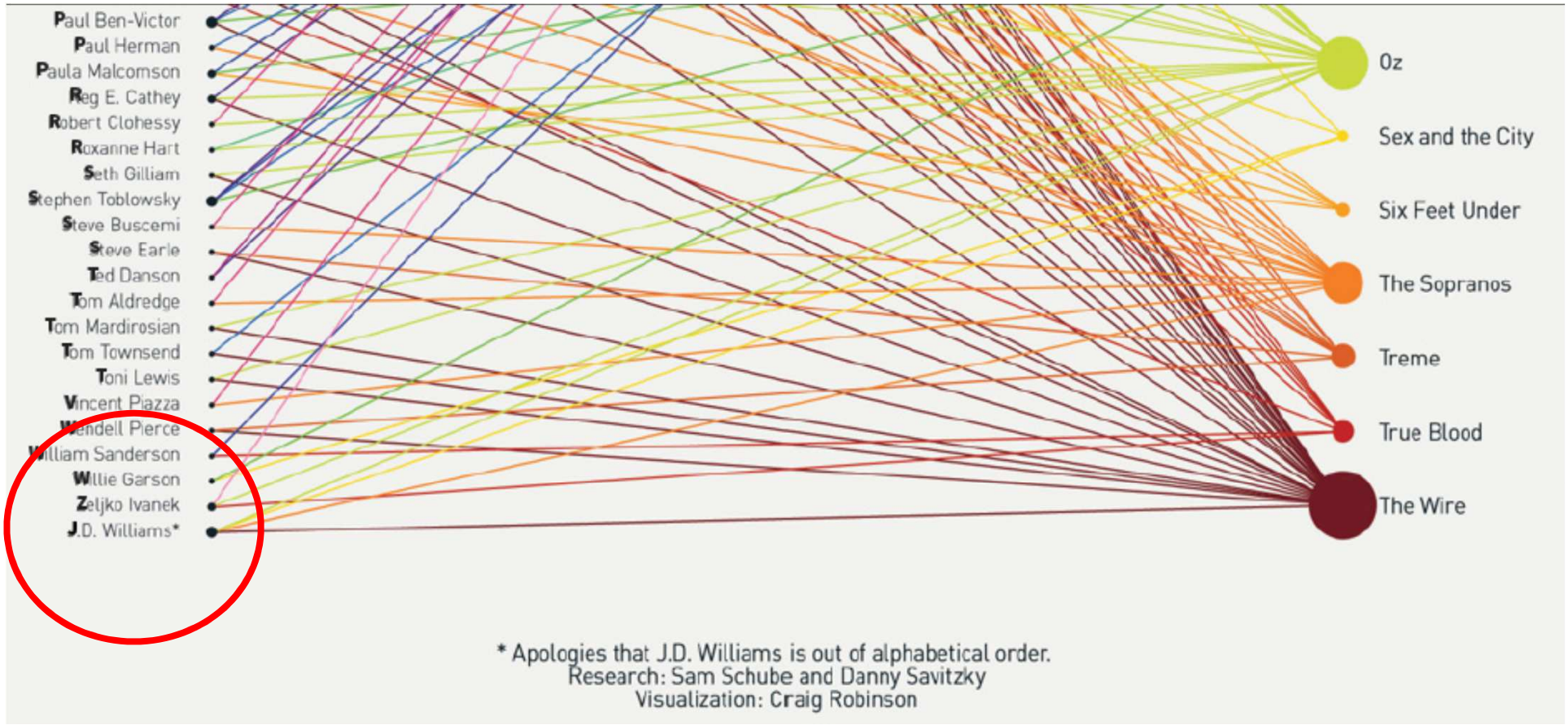
free from data

?


VIS


The HBO Recycling Program
Actors who have appeared in three or more episodes of multiple scripted, live-action,original HBO series since Oz (excluding miniseries)
Aidan Gillen
Amy Ryan
Anne Fitzgerald
Anwan Glover
Blair Underwood
Brian F. O'Byrne
Chris Bauer
Clarke Peters
Cynthia Ettinger
Cyrus Farmar
Dana Delloan
Dania Ramirez
David Costabile
Deyon Callie
Domenick Lombardozzi
Don Sweeyre
Edie Falco
Edoardo Ballerini
Edwina Findley
Garret Dillahunt
Glynn Turman
Grant Show
Greg Antonacci
J. Smith-Cameron
James Ransone
Jamie-Lynn Sigler
Jim Beaver
Jim True-Frost
John Carroll Lynch
John Doman
John Hawkes
John Seda
Kevin Rankin
Kim Dickens
Lada Robins
Lance Reddick
Louis Lombardi
Luis Guzmán
Luke Perry
Mary Kay Place
Matt Winston
Max Casella
Method Man
Michael Kenneth Williams
Michelle Forbes
Paul Ben-Victor
Paul Herman
Paula Malcomson
Reg E. Cathey
Robert Clohessy
Roxanne Hart
Seth Gilliam
Stephen Tobolowsky
Steve Buscemi
Steve Earle
Ted Danson
Tom Aldredge
Tom Mardirosian
Tom Townsend
Tori Lewis
Vincent Piazza
Wendell Pierce
William Sanderson
Willie Garson
Zeljko Ivanek
J.D. Williams*
Big Love
Boardwalk Empire
Bored to Death
Carnivàle
The Corner
Curb your Enthusiasm
Deadwood
Eastbound and Down
Entourage
Flight of the Conchords
Game of Thrones
How to Make It in America
Hung
In Treatment
John from Cincinnati
K Street
Oz
Sex and the City
Six Feet Under
The Sopranos
Treme
True Blood
The Wire
* Apologies that J.D. Williams is out of alphabetical order.
Research: Sam Schube and Danny Savitzky
Visualization: Craig Robinson

Attracting designers into data visualization: **why**



AVI 2014: Reflections on How Designers Design with Data
Alex Bigelow

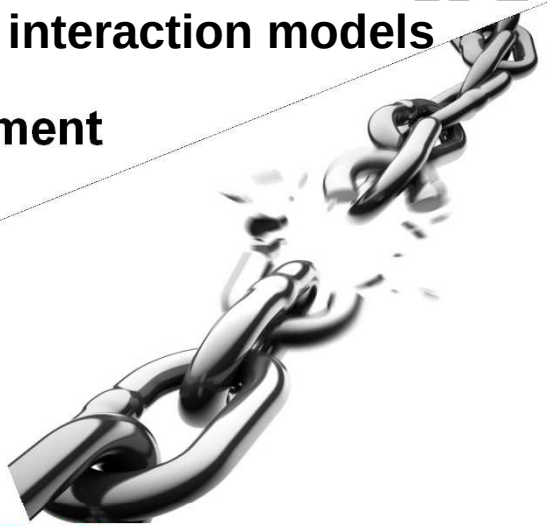
behavioural psychology

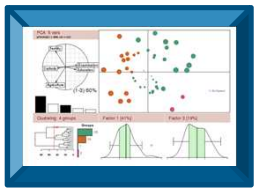
user interaction models

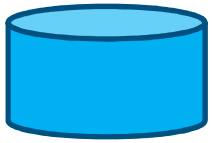
purpose

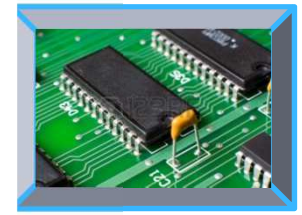
engagement

social dynamics









$$nm = \frac{1}{4}\mathrm{Re}\left\{\int_{V_m} dv\left[i\omega\mathbf{A}_n - \nabla\phi_n\right]^* \cdot \mathbf{J}_m\right\}$$

$$\frac{1}{4}\mathrm{Re}\left\{\int_{V_m} dv\left[\int_{V_n} dv \frac{e^{ik|\mathbf{r_m}-\mathbf{r_n}|}}{4\pi|\mathbf{r_m}-\mathbf{r_n}|}\left(i\omega\mu_0\mathbf{J}_n + \frac{\rho_n}{\varepsilon_0}\nabla\right)\right]^* \cdot \mathbf{J}_m\right. \quad (38)$$

$$\left.\frac{\omega}{16\pi}\int_{V_m} dv \int_{V_n} dv\,\mathrm{Re}\left\{\left(\frac{\rho_n^*\rho_m}{\varepsilon_0} - \mu_0\mathbf{J}_n^* \cdot \mathbf{J}_m\right)\frac{e^{ik|\mathbf{r}_m-\mathbf{r}_n|}}{4\pi|\mathbf{r}_m-\mathbf{r}_n|}\right\}\right.$$

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behavioural psychology

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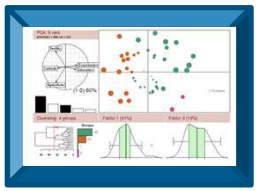
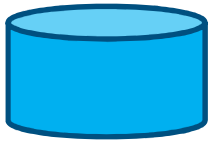
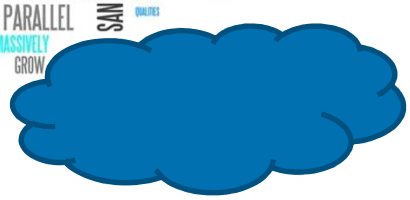
user interaction







$$_{nm} = \frac{1}{4}\mathrm{Re}\left\{\int_{V_m} dv\left[i\omega\mathbf{A}_n - \nabla\phi_n\right]^* \cdot \mathbf{J}_m\right\}$$

$$\frac{1}{4}\mathrm{Re}\left\{\int_{V_m} dv\left[\int_{V_n} dv \frac{e^{ik|\mathbf{r_m}-\mathbf{r_n}|}}{4\pi|\mathbf{r_m}-\mathbf{r_n}|}\left(i\omega\mu_0\mathbf{J}_n + \frac{\rho_n}{\varepsilon_0}\nabla\right)\right]^* \cdot \mathbf{J}_m\right. \quad (38)$$

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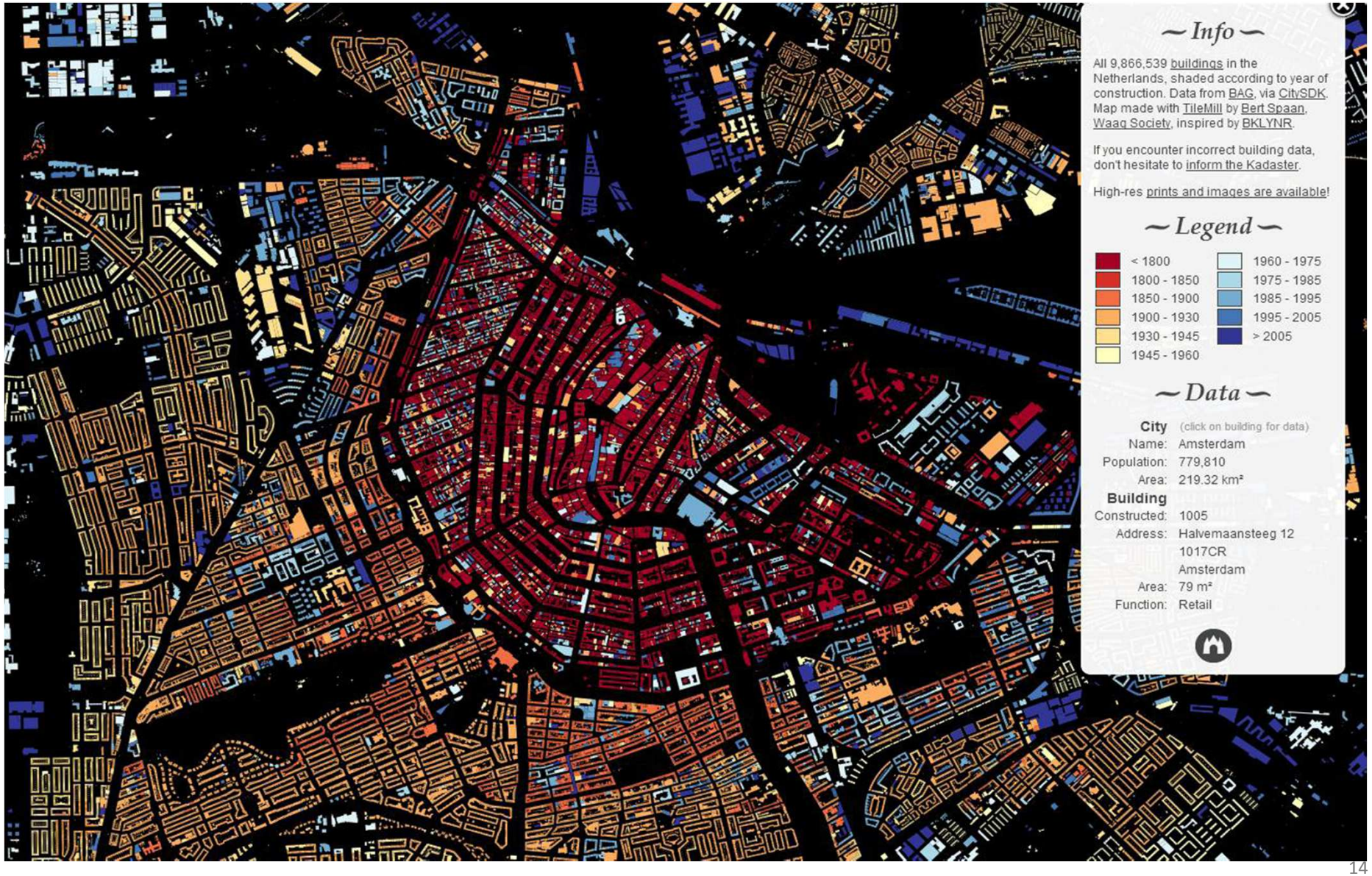
There are great examples



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40
03:21:00
03:21:10
03:20:53
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http://seaoftweets.com
MULTI WAVE

Attracting (more) designers into data visualization: **how?**

Should designer become information scientists and/or viceversa?

Is there a need for more studies to fill the space “in between”?

Should we create easy tools for designing by hand but also linking to data?

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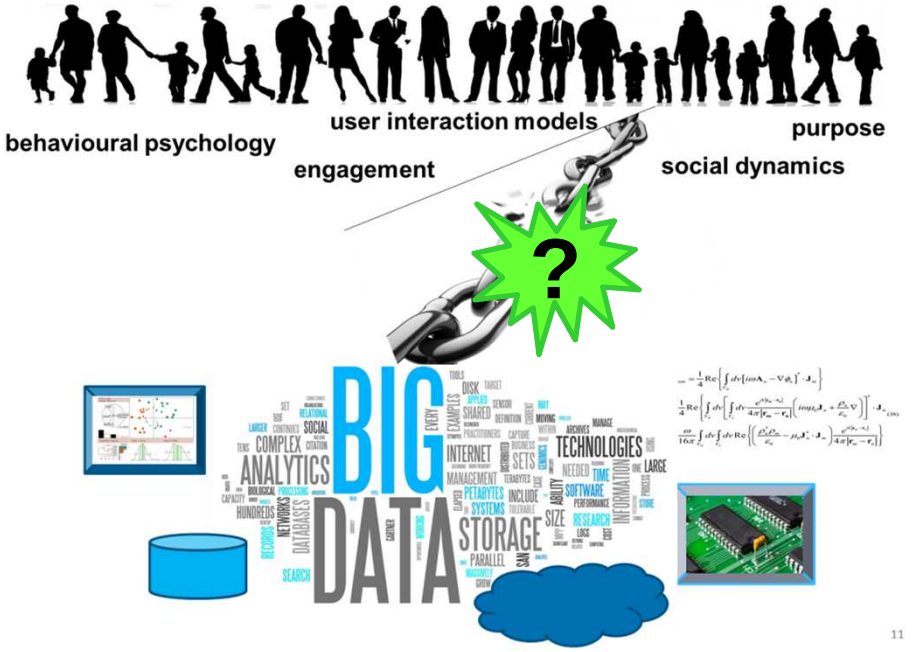

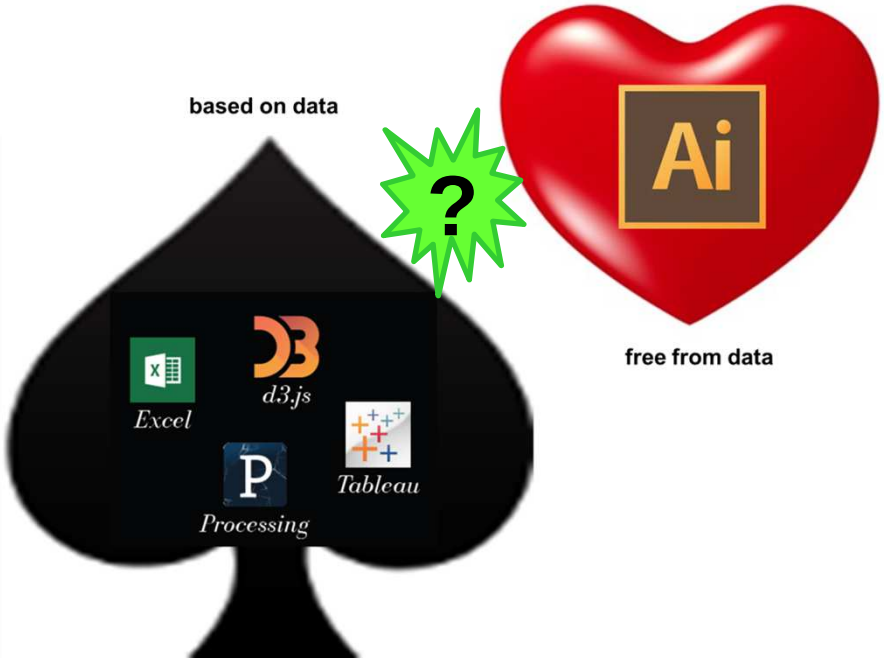

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marina.geymonat@telecomitalia.it

Thank you