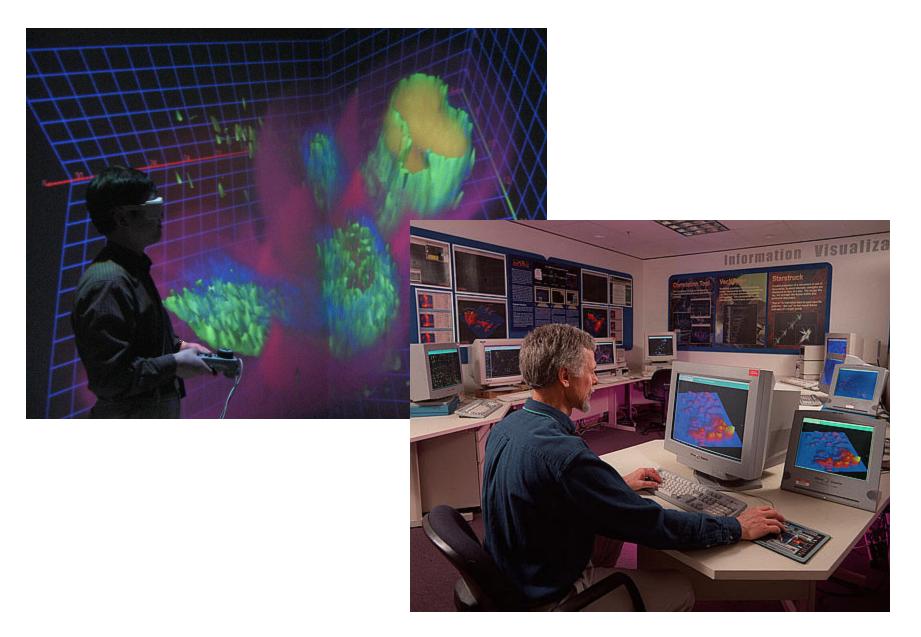
Visualization as a medium



Fernanda Viégas Martin Wattenberg

flowing media

The visualization pedigree...



But the scientists don't have a monopoly...

Artists...



109 Homes for Sale, Seattle/Tacoma



117 Homes for Sale, Chicagoland



124 Homes for Sale, The 5 Boroughs



121 Homes for Sale, LA/Orange County



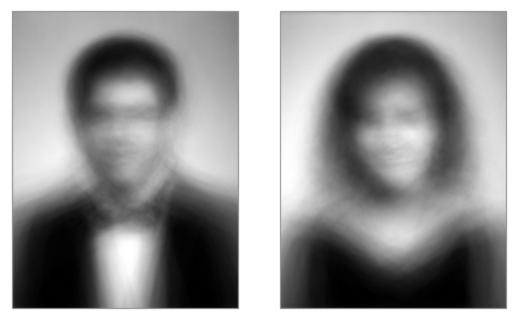
114 Homes for Sale, Dallas/Ft. Worth Metroplex



112 Homes for Sale, Miami-Dade County

Homes for Sale

Jason Salavon



The Class of 1988





The Class of 1988 The Class of 1967

Jason Salavon

The Class of 1967







The 1960s

The 1970s

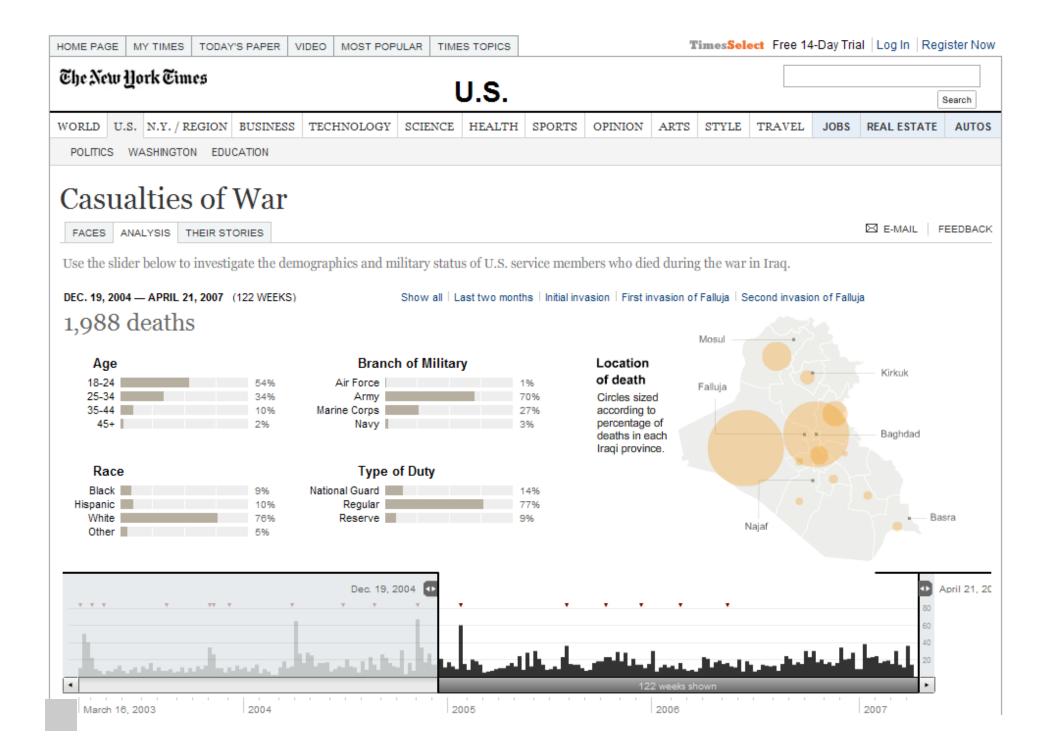
The 1980s

The 1990s

Every Playboy Centerfold, The Decades

Jason Salavon

And web visualization is news... that's fit to print



The New York Times

February 25, 2007

No 2005

sales

-

+12.5%

- ----

Truck Sales Slip, Tripping Up Chrysler

Over the past few years, Chrysler executives said they were following the lead of Toyota and Honda, focusing on vehicles that met the needs of their customers. But as American consumers turned away from large trucks and S.U.V.'s in 2006, Chrysler continued to churn out big vehicles, which are now sitting unsold at dealerships across the country.



SALES CHANGE 105 TO 106 Chrysler Group -7.0%

Trucks/vans/S.U.V.'s 1.6 million Cars 0.5 million Pickups, minivans and S.U.V.'s made up 76 percent of Chrysler's sales, which left it vulnerable when consumers shifted to cars.



General Motors		-8.	7%
Trucks/vans/S.U.V.'s	2.5	milli	ion
Cars	1.6	mill	ion

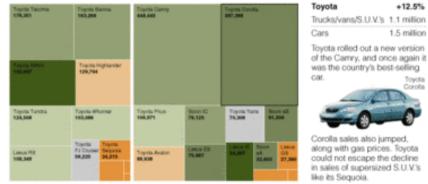
G.M. introduced new versions of its large S.U.V.'s in late 2005, hoping they would bolster sales. Instead, sales of big vehicles were hurt when gas prices climbed. One of the few standouts was the Chevrolet HHR, new in 2005.



The Chevrolet Impala, with or without flashing lights, did well in 2006, when a redesign came out

636,089			246,7	7	200,000				,445	
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Chevrolet Tahoe 181,491	Satur: Voe 80,581	OAC Yukon 71,476	Chevrolet Uplander 54,000	Chevrolet Avalariche \$7,879	Portlac Grand Pris 198,434		142,0		Rock Locardo ROCE	
	Chevrolet Buburben 27,211	HURINA' HO 54,082	Review Toronal ALICE	Cadilar Excelorite 38,917	Buick LaCrosse T1,879	111	1 M 1	Purties Vibe 45,225	010 017 34.3	
Chavedal Express 123,166	GMC Envry 74,402	Rendezvous 45,954 GMC Yuken XI, 45,413			Chevrolet Avec 56,244	Carl CTI S40		Carlo	9-3 34,134	

	Trucks/vans/S.U.V.'s 1.8	-8.3% Put P dense million million	Part Exception 196,457	Port Explorer 179,229	Ford Fodus 177,000	Ford Taxrus 178,880
late 2005 and sold well in its first full year. Fait Sectioner Means Full Means	vehicles, the F-Series, sh in 2006, with sales dropp percent. One of Ford's by spots was the new Fusio sedan, which made its d late 2005 and sold well in	umped ing 13 ight n ebut in	107,000	92,429	106,530	Part Passes HEIRI



Honda Odyssey 137,819	Honda Pilot 152,154	Honda Accord 354,441	Honds Ovic 316,638	
Munda (2014) 178,008	Acura Horeix Horeix MDX Exempt Adda 54,121 51,829 Sta		Acres 11	Acura Handa Fe
			71,548	TEX 27,994

Niesan Marano R1,342	Nissan Patrindar 73,134	72,9	en Titten Ke	Nonue Africa. 232,457		Nissan Sentra 117,822
Neser Frontier	Nosari Xiaria 49,395	Nimati Armatia 32,894	Nesat Guart 31,365	Nesser Maxima 66,763	1-8-VE G35/45	
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Nyunda Sonate 148,013		Kin Sockina 87,818		Kia Spectra 78,067		24,190	Dater 5 Series 56,758 Mini Dosper 36,575	
		Kin Screeto 64,872	Kia	Kia filo 28.568				
njuritai Hjundai Elantita M,735 98,853	Ka Sportage 97,879	38,404						
		Suberu Forester 51,258	Suberu Legecy 84,442	Subaru Ingrasia 40,148	Marcadan M-Class P1,692	5-Class 30,899	E-Cisto 50,110	

Cars	1.5 million
of the Camry	out a new version , and once again it try's best-selling
car.	Toyota
-	0-0
Constant and an	also is service of

Corolla sales also jumped, along with gas prices. Toyota could not escape the decline in sales of supersized S.U.V.'s like its Sequoia.

Honda	+3.2%
Trucks/vans/S.U.V.'s	0.7 million
Cars	0.8 million
Like the Corolla, the Honda Civic did well Accord stalled. Buye seems, are waiting for	I. But the ers, it or the new

version to be released this year. Honda



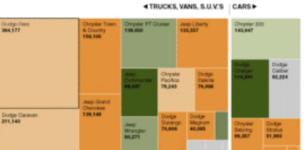
Nissan -5.3% Trucks/vans/S.U.V.'s 0.5 million Cars 0.6 million

BMW +2.1% Trucks/vans/S.U.V.'s 0.1 million Cars 0.3 million

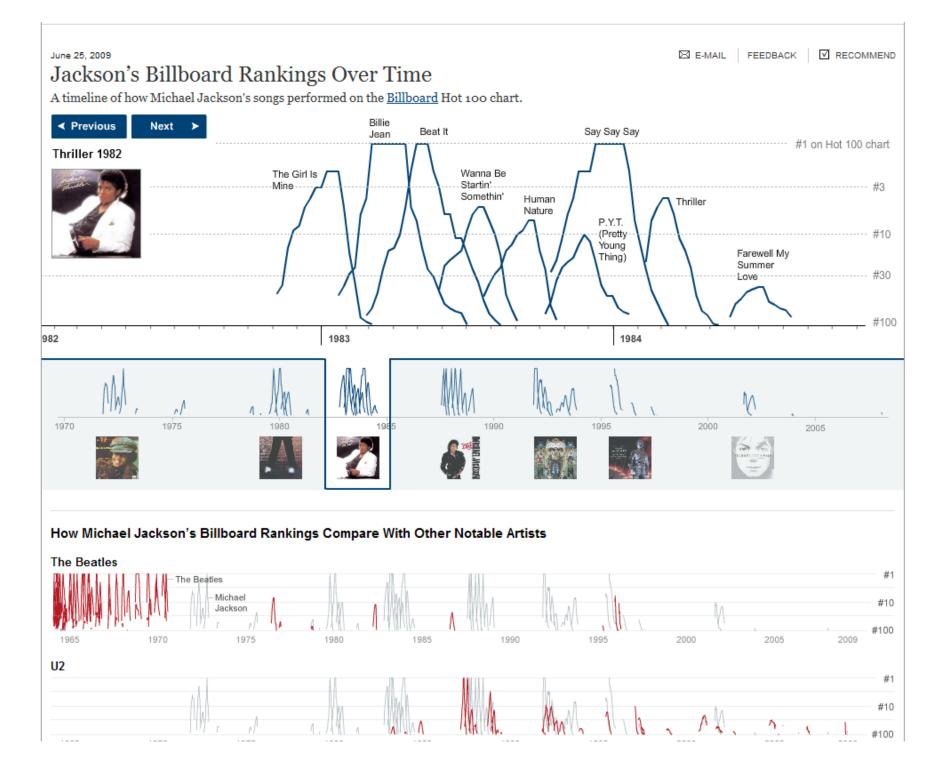
Mercedes-Benz +10.3%

Trucks/vans/S.U.V.'s 0.1 million Cars 0.2 million

Mercedes-Benz, owned by DaimlerChrysler, had a comeback in 2006, thanks to a new version of its flagship S-Class. BMW sales were helped by a new version of its



OMC Blank



We've gone from here...



We've gone from here...

To here.





We've gone from here...

To here.





The photojournalism of the 21st century?

But what if you're not a data whiz?

But what if you're not a data whiz?





A website where you can:

- view and discuss visualizations
- view and discuss data
- create visualizations from existing data
- upload their own data to visualize

Logged in as Fernanda B. Viegas | Logout data sets ¥

explore data sets topic hubs my stuff

participate

create visualization upload data set

learn more

quick start about Many Eyes

Try Our Featured Visualizations



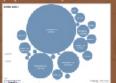
Parliament



Ireland: Where do

people come from?

Social Network Monthly Visitors (April 2007)



Featured Topic Hubs (dive into a topic of interest, or create a hub of your own)



0

OECD Factbook

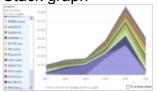
check out the new community features on Many Eyes

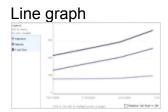
many eyes beta

for shared visualization and discovery



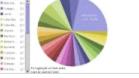
Stack graph







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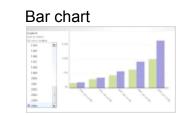
Matrix chart

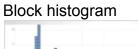


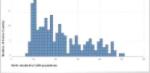


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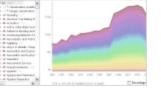
Tag cloud







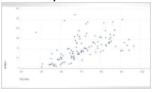
Stack graph for categories



Word Tree an



Scatterplot



Bubble chart



Network diagram



Phrase Net



So what are people doing?

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2 Crossway uses the network diagram tool to create a graph visualization

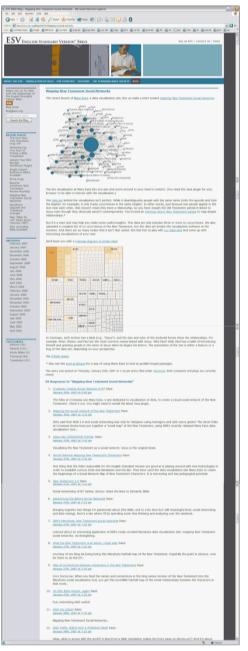
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2 Crossway uses the network diagram tool to create a graph visualization



The long list of responses / trackbacks on the ESV blog entry: a discussion about the visualization and analysis. **3** Crossway writes about the visualization on ESV blog

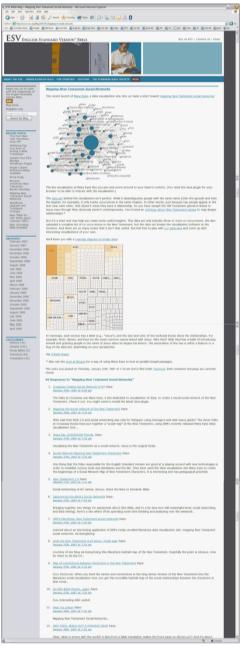


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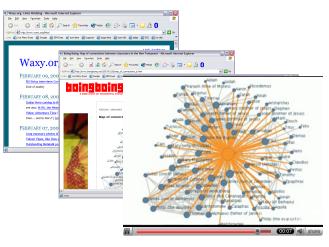
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The long list of responses / trackbacks on the ESV blog entry: a discussion about the visualization and analysis. **3** Crossway writes about the visualization on ESV blog



4 Many blogs (almost 100 by Google's count) write about crossway's blog entry.

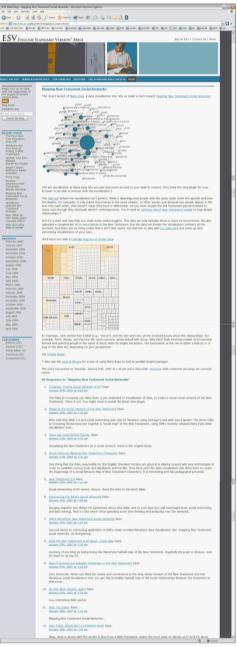


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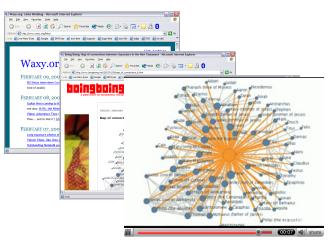
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The long list of responses / trackbacks on the ESV blog entry: a discussion about the visualization and analysis. **3** Crossway writes about the visualization on ESV blog



4 Many blogs (almost 100 by Google's count) write about crossway's blog entry.



5 One of these bloggers posts new data to Many Eyes—and, of course, blogs about the results.



Analysis by non-experts



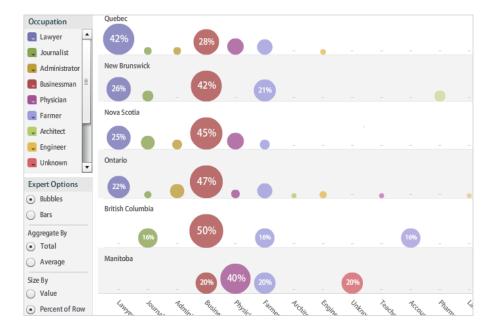
"I hadn't tried those arrangements, and now it shows something else quite interesting."

"It seems to me that the tendril on the right, composed of recent anthropogneic [sic] CO2 points, says that the coefficient of temperature versus CO2 for anthropogneic [sic] CO2 is roughly 1 degree C per 100 ppm of CO2, and this applies to CO2 levels above 300 ppm."

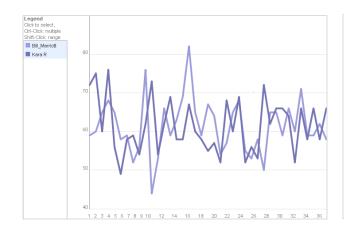
"I've since revised the script that created the pairs so the date nearest to a corresponding data point was used as opposed to simply the last data point."

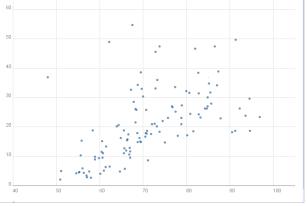
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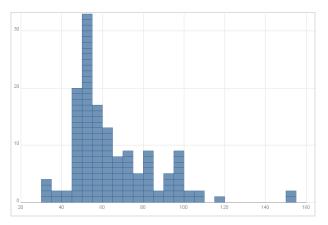
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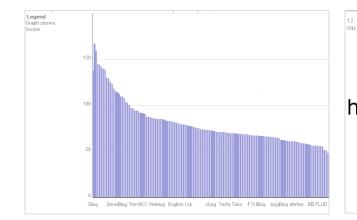


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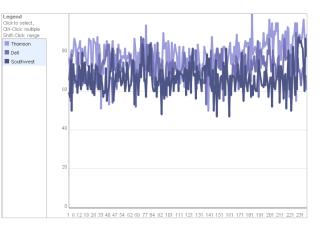






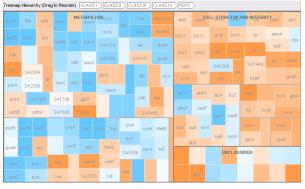






Microarray data

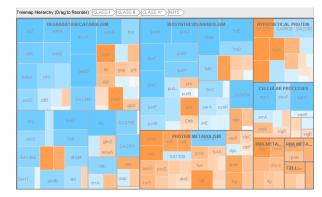
















Earmark Spending by State See which states get the most earmark money per capita.

Visualizing Earmarks

Select Visualizations of 2005 OMB Earmark Data

Visualizations created through $\underline{\mathsf{Many}}\,\underline{\mathsf{Eyes}}$

Download entire data set (Updated 6/12/2007)



Earmarks by Agency See how much money Congress earmarked for projects by agency.



Earmark Description Tag Cloud See the words Congress most frequently uses to describe earmarked projects



Earmarks by Type of Organization

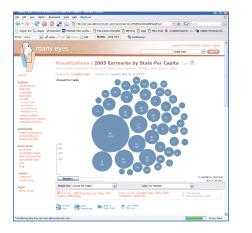
See how much money Congress earmarked for companies, universities, nonprofits and state and local government.

** Visualizations require the latest Java plugin. On Macs: best viewed in Safari.





move. I'll post his comments and some replies later today. I've also set up a page on the wiki where I will collect significant versions of the argument. Summary and criticism there would be helpful.

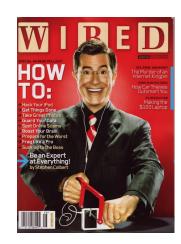


Visualization and the arts





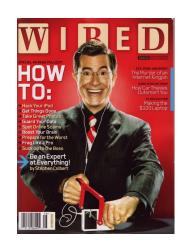


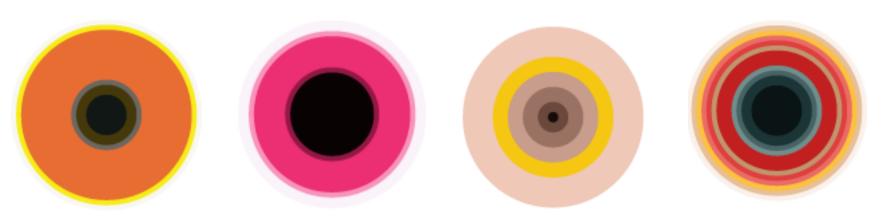


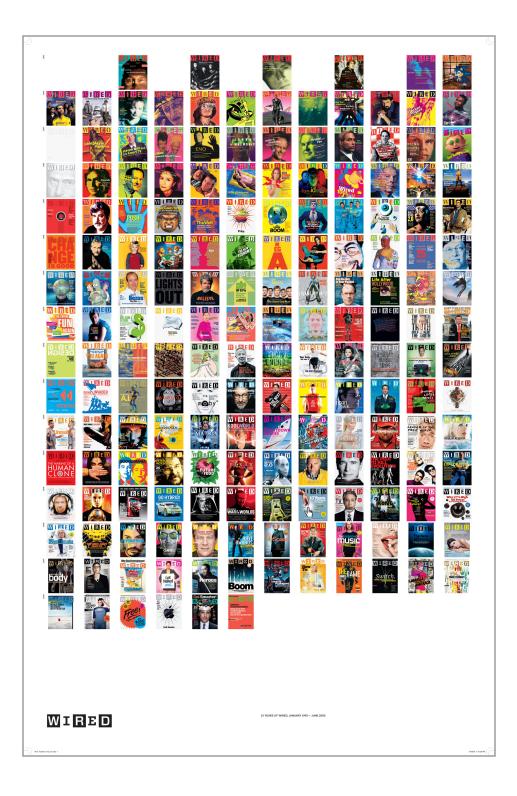


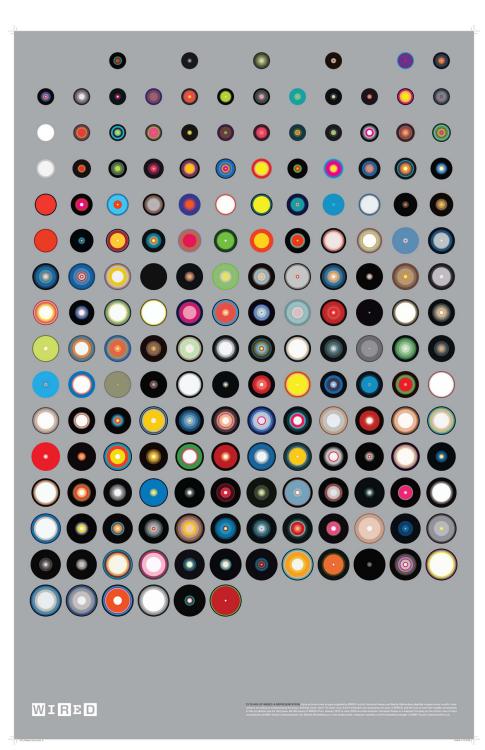


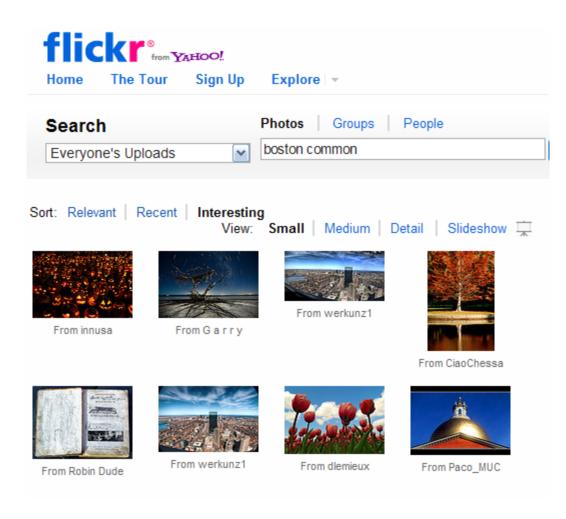
















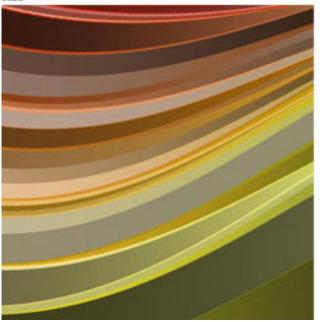






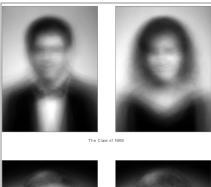


ALL





Art

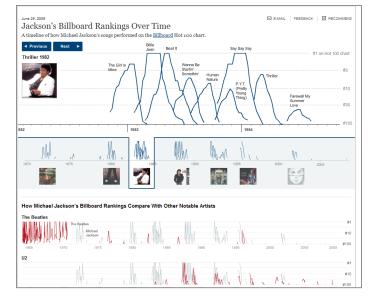




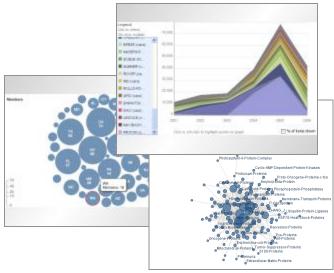
Public Data



Journalism



User participation



Visualization as a medium

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