Cool Stuff in Data

Data can be anything!

Julie Deeke

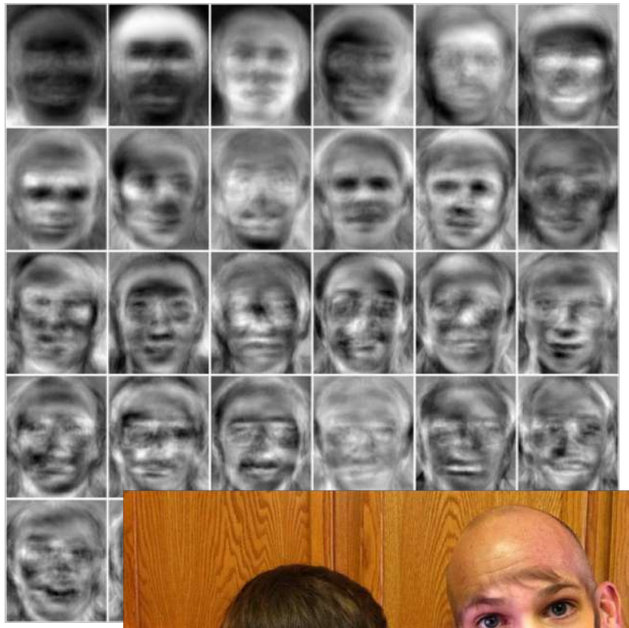
Data can be Numbers

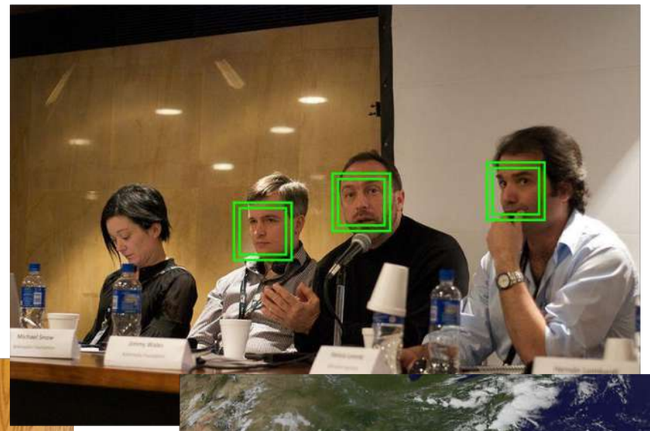
seqn	ridstatr	riagendr	RIDRETH1	dmdmartl	WTINT2YR	WTMEC2YR
62161	2	1	3	5	102641.406	104236.583
62162	2	2	1	NA	15457.737	16116.354
62163	2	1	5	NA	7397.685	7869.485
62164	2	2	3	1	127351.373	127965.226
62165	2	2	4	NA	12209.745	13384.042
62166	2	1	3	NA	60593.637	64068.123
62167	2	1	5	NA	5024.465	5303.683
62168	2	1	5	NA	5897.025	6245.044
62169	2	1	5	5	14391.778	14783.601
62170	2	1	5	NA	7794.527	8291.637

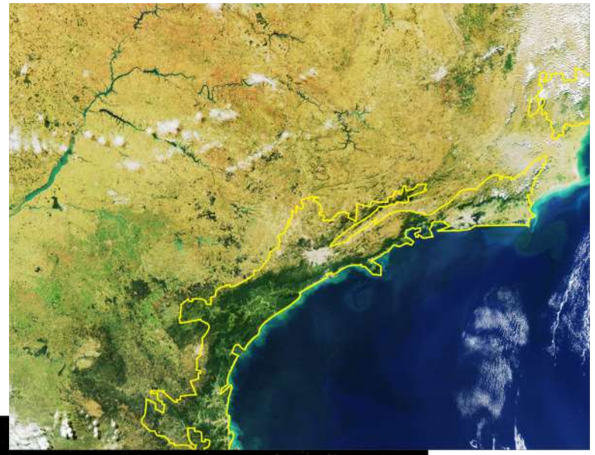
https://www.cdc.gov/nchs/nhanes/index.htm

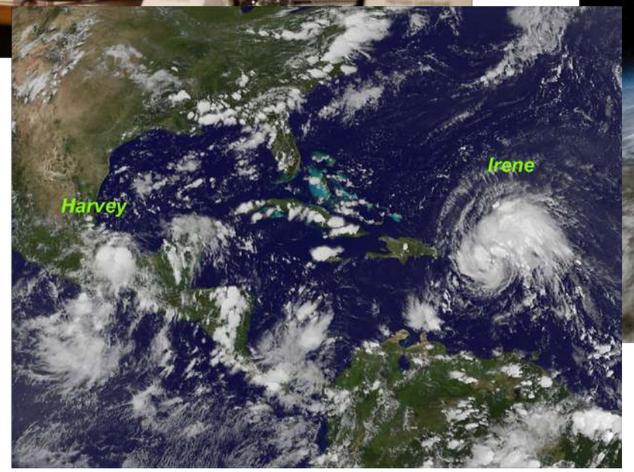
Data can be images

https://quickdraw.withgoogle.com/









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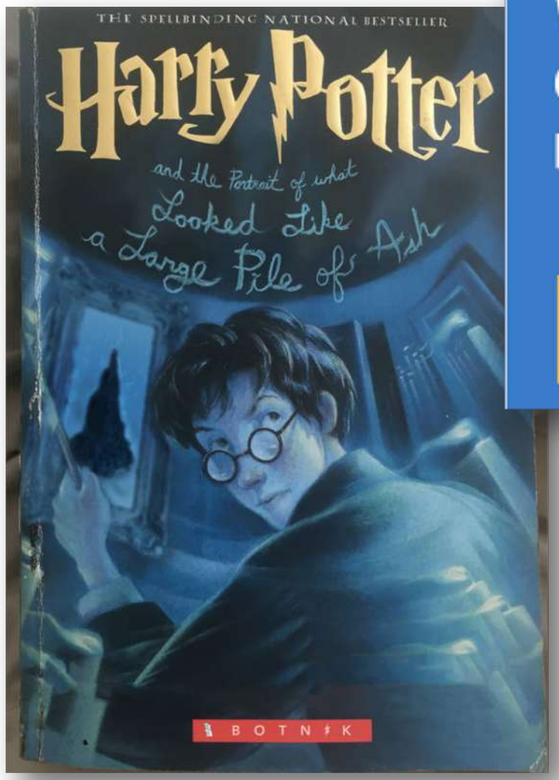
"Face detection" by Sylenius is licensed under CC BY 2.0
"Great picture…" by Dion Hinchcliffe is licensed under CC BY-SA 2.0

Artist concept of the Orbiting Carbon Observatory. Image credit: NASA/JPL
"Satellite view of a hurricane" – CC0 1.0
"Serra do Mar forest WWF.jpg" – CC0 1.0

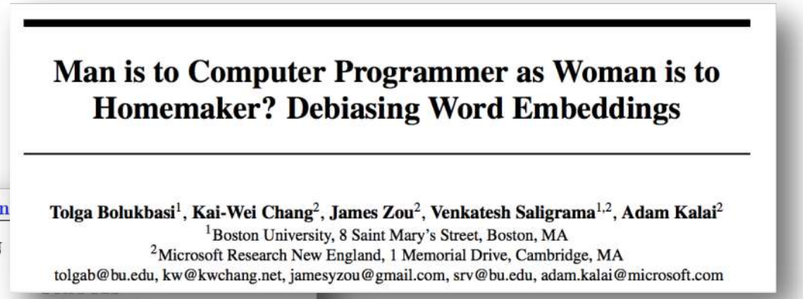
Data can be Words



"Arts"	"Budgets"	"Children"	
NEW	MILLION	CHILDREN	
FILM	TAX	WOMEN	
SHOW	PROGRAM	PEOPLE	
MUSIC	BUDGET	CHILD	EDUCATION
MOVIE	BILLION	YEARS	TEACHERS
PLAY	FEDERAL	FAMILIES	HIGH
MUSICAL	YEAR	WORK	PUBLIC
BEST	SPENDING	PARENTS	TEACHER
ACTOR	NEW	SAYS	BENNETT
FIRST	STATE	FAMILY	MANIGAT
YORK	PLAN	WELFARE	NAMPHY
OPERA	MONEY	MEN	STATE
THEATER	PROGRAMS	PERCENT	PRESIDENT
ACTRESS	GOVERNMENT	CARE	ELEMENTARY
LOVE	CONGRESS	LIFE	HAITI

The William Randolph Hearst Foundation will give $1.25 million to Lincoln Center, Metropolitan Opera Co., New York Philharmonic and Juilliard School. "Our board felt that we had a real opportunity to make a mark on the future of the performing arts with these grants an act every bit as important as our traditional areas of support in health, medical research, education and the social services," Hearst Foundation President Randolph A. Hearst said Monday in announcing the grants. Lincoln Center's share will be $200,000 for its new building, which will house young artists and provide new public facilities. The Metropolitan Opera Co. and New York Philharmonic will receive $400,000 each. The Juilliard School, where music and the performing arts are taught, will get $250,000. The Hearst Foundation, a leading supporter of the Lincoln Center Consolidated Corporate Fund, will make its usual annual $100,000 donation, too.

Figure 8: An example article from the AP corpus. Each color codes a different factor from which the word is putatively generated.



Man is to Computer Programmer as Woman is to Homemaker? Debiasing Word Embeddings

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Image source: https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/health-it-and-health-information-exchange
Image source: http://botnik.org/content/harry-potter.html
Image source: Page 17 http://www.jmlr.org/papers/volume3/blei03a/blei03a.pdf
Image source: https://papers.nips.cc/paper/6228-man-is-to-computer-programmer-as-woman-is-to-homemaker-debiasing-word-embeddings.pdf

Data can be Audio

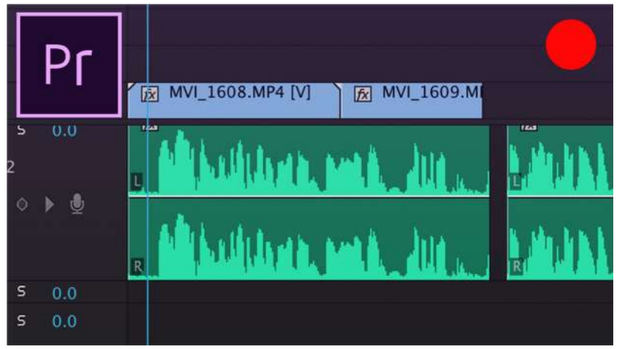
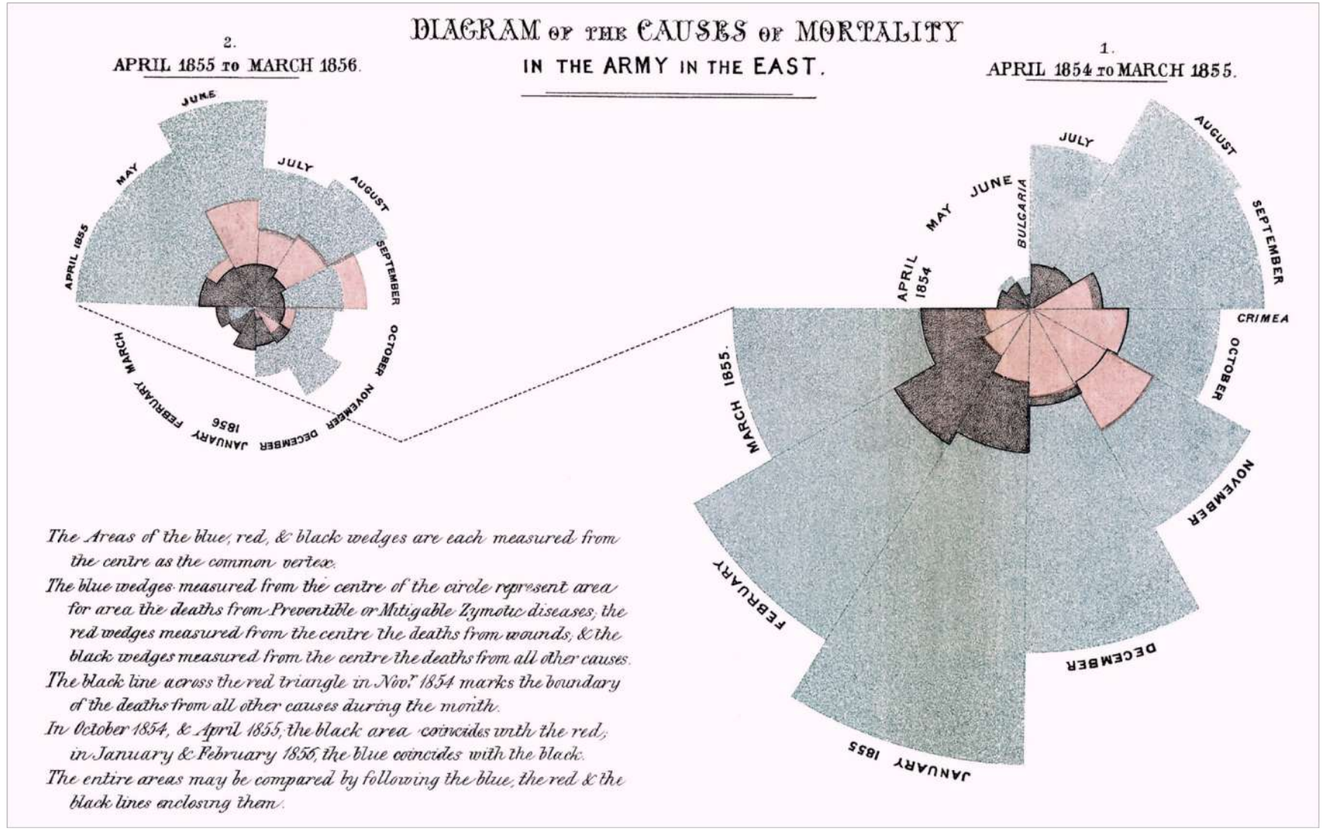


Image source: https://www.youtube.com/watch?v=QGmzll4mmlY

Historical Example