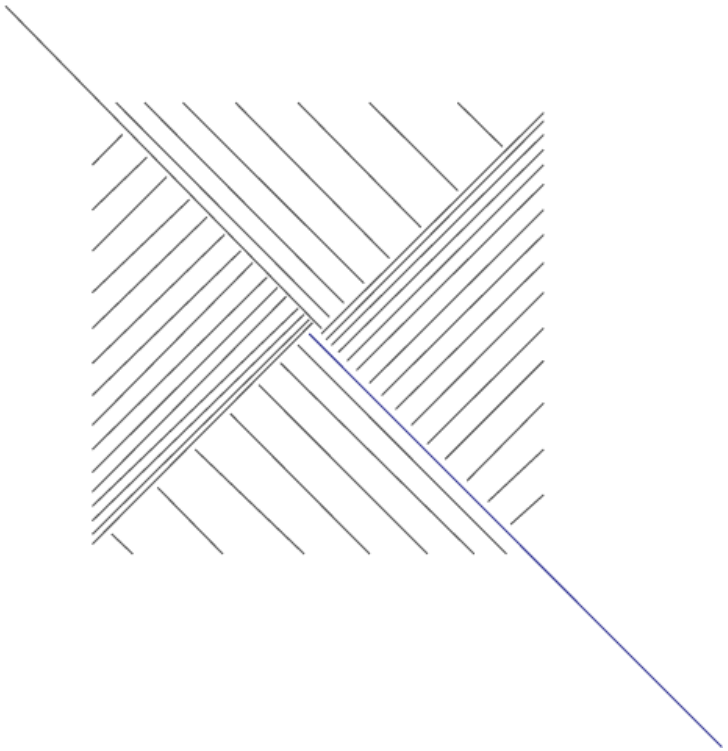

4

Communication Design

Images that speak for themselves

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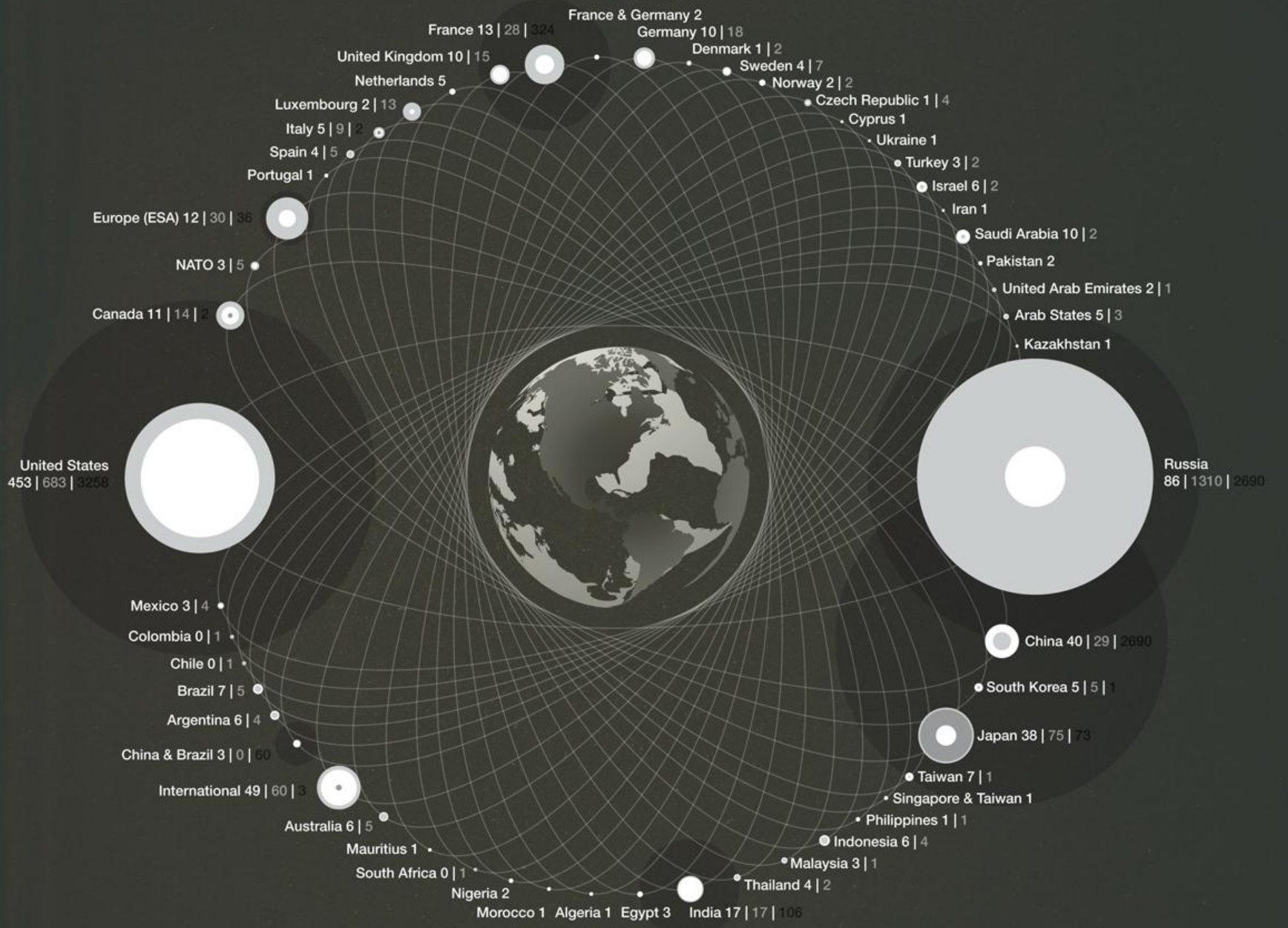
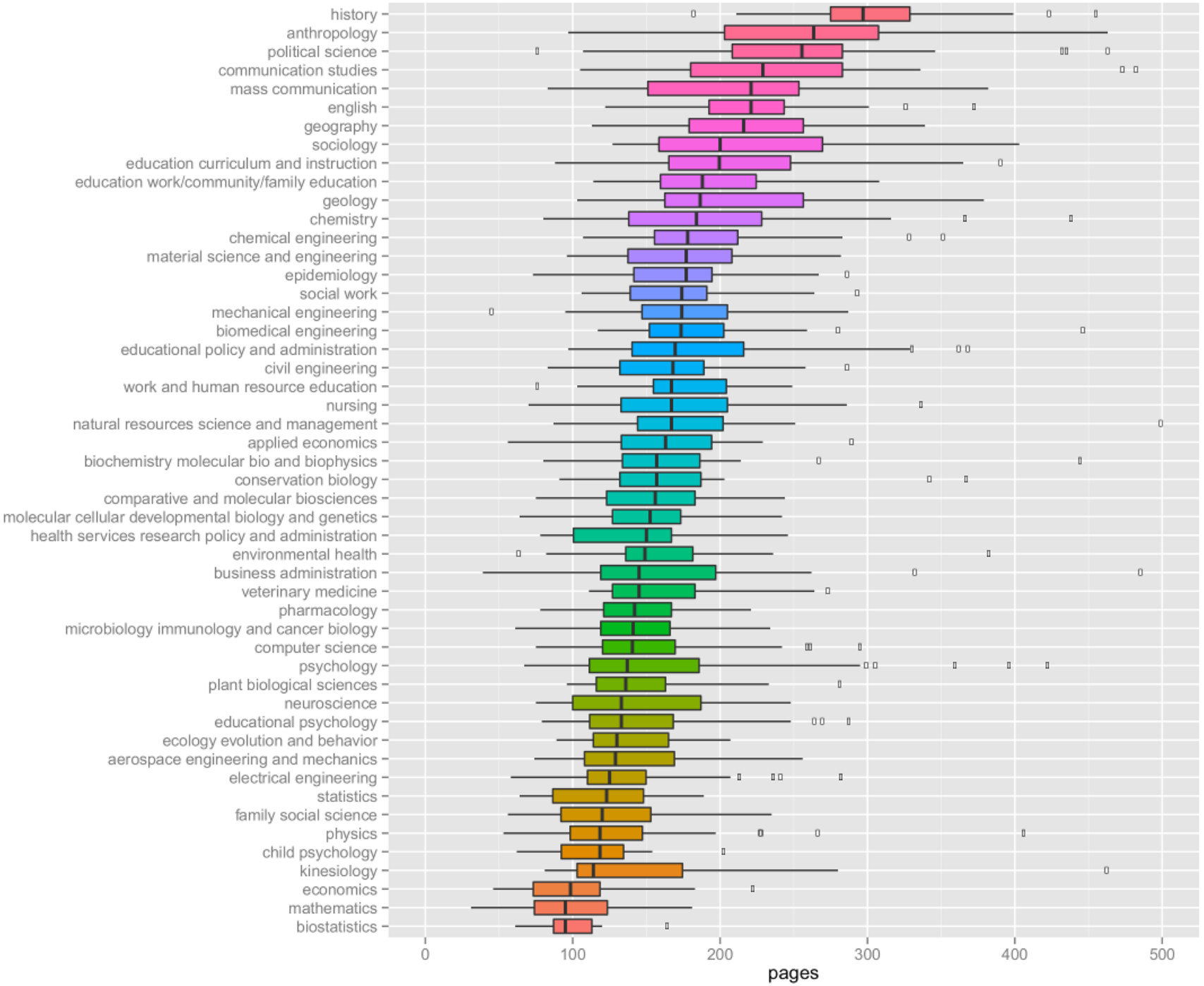
Kevin McVey
CS1501 – Fall 2013

“Y’all hella smart.”

- Kevin McVey


France & Germany 2
France 13 | 28 | 324
Germany 10 | 18
United Kingdom 10 | 15
Denmark 1 | 2
Netherlands 5
Sweden 4 | 7
Luxembourg 2 | 13
Norway 2 | 2
Italy 5 | 9 | 2
Czech Republic 1 | 4
Spain 4 | 5
Cyprus 1
Portugal 1
Ukraine 1
Europe (ESA) 12 | 30 | 36
Turkey 3 | 2
Israel 6 | 2
NATO 3 | 5
Iran 1
Saudi Arabia 10 | 2
Canada 11 | 14 | 2
Pakistan 2
United Arab Emirates 2 | 1
Arab States 5 | 3
Kazakhstan 1
United States
453 | 683 | 3258
Russia
86 | 1310 | 2690
Mexico 3 | 4
Colombia 0 | 1
China 40 | 29 | 2690
Chile 0 | 1
South Korea 5 | 5 | 1
Brazil 7 | 5
Japan 38 | 75 | 73
Argentina 6 | 4
China & Brazil 3 | 0 | 30
Taiwan 7 | 1
International 49 | 60 | 3
Singapore & Taiwan 1
Philippines 1 | 1
Australia 6 | 5
Indonesia 6 | 4
Mauritius 1
Malaysia 3 | 1
South Africa 0 | 1
Thailand 4 | 2
Nigeria 2
Morocco 1
Algeria 1
Egypt 3
India 17 | 17 | 106

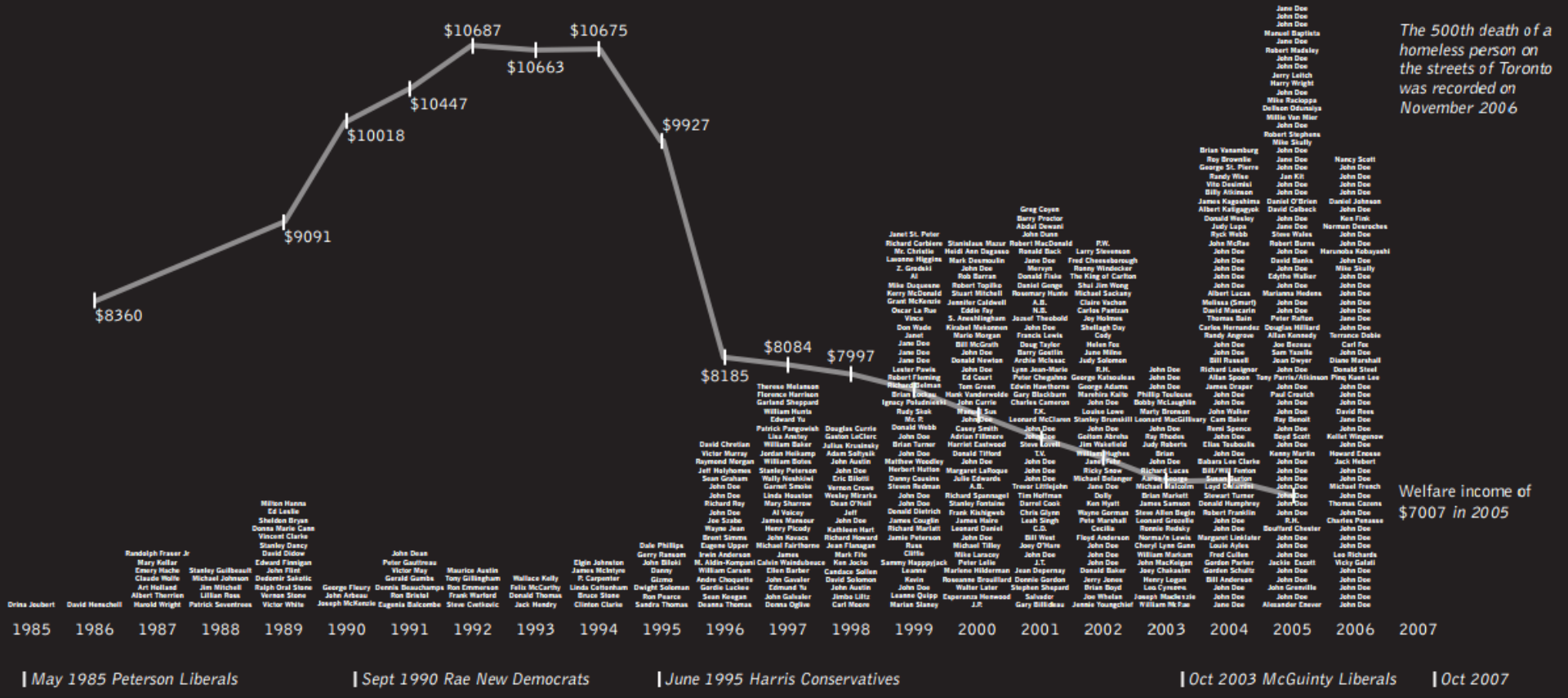

history
anthropology
political science
communication studies
mass communication
english
geography
sociology
education curriculum and instruction
education work/community/family education
geology
chemistry
chemical engineering
material science and engineering
epidemiology
social work
mechanical engineering
biomedical engineering
educational policy and administration
civil engineering
work and human resource education
nursing
natural resources science and management
applied economics
biochemistry molecular bio and biophysics
conservation biology
comparative and molecular biosciences
molecular cellular developmental biology and genetics
health services research policy and administration
environmental health
business administration
veterinary medicine
pharmacology
microbiology immunology and cancer biology
computer science
psychology
plant biological sciences
neuroscience
educational psychology
ecology evolution and behavior
aerospace engineering and mechanics
electrical engineering
statistics
family social science
physics
child psychology
kinesiology
economics
mathematics
biostatistics
0
100
200
300
400
500
pages

Common Sense Revolution

Ontario Welfare Income for a Single Person in 2005 Constant Dollars &
Homeless Persons Who Have Died on the Streets of Toronto 1985–2006

(National Council of Welfare & the Toronto Disaster Relief Committee)

© Scott Sørli



Scale states equally

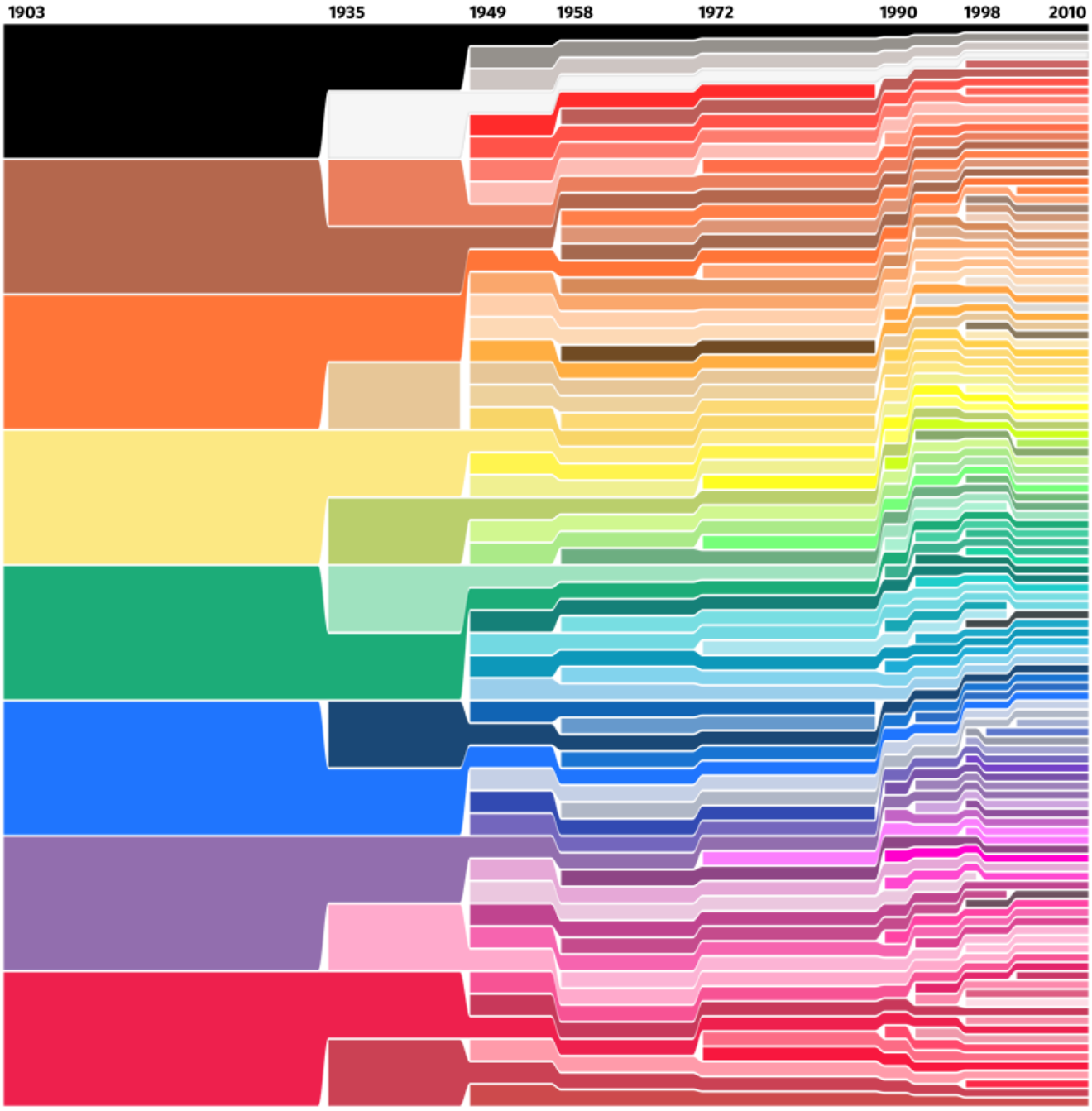
Scale states by population

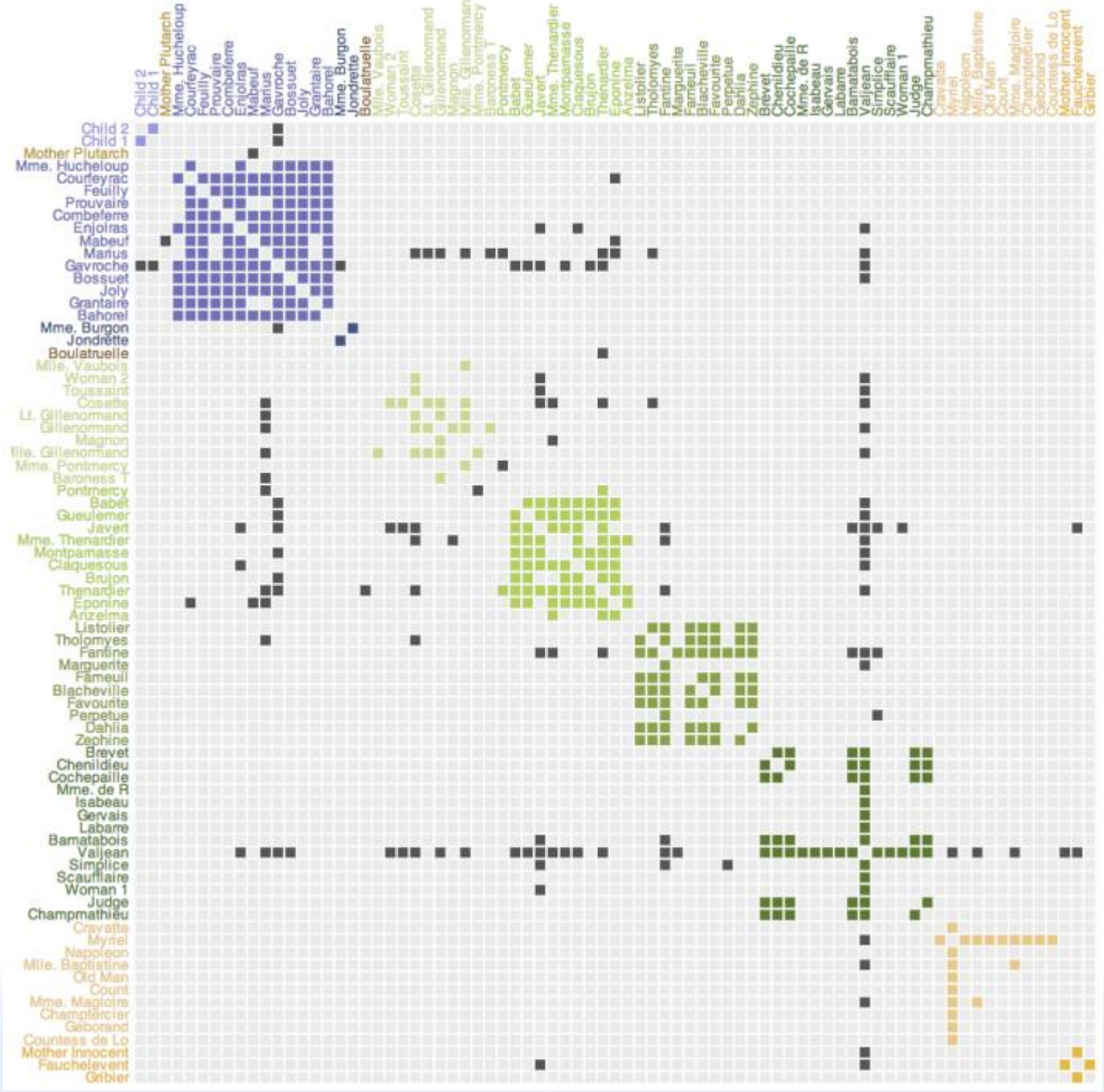
Where your friends live

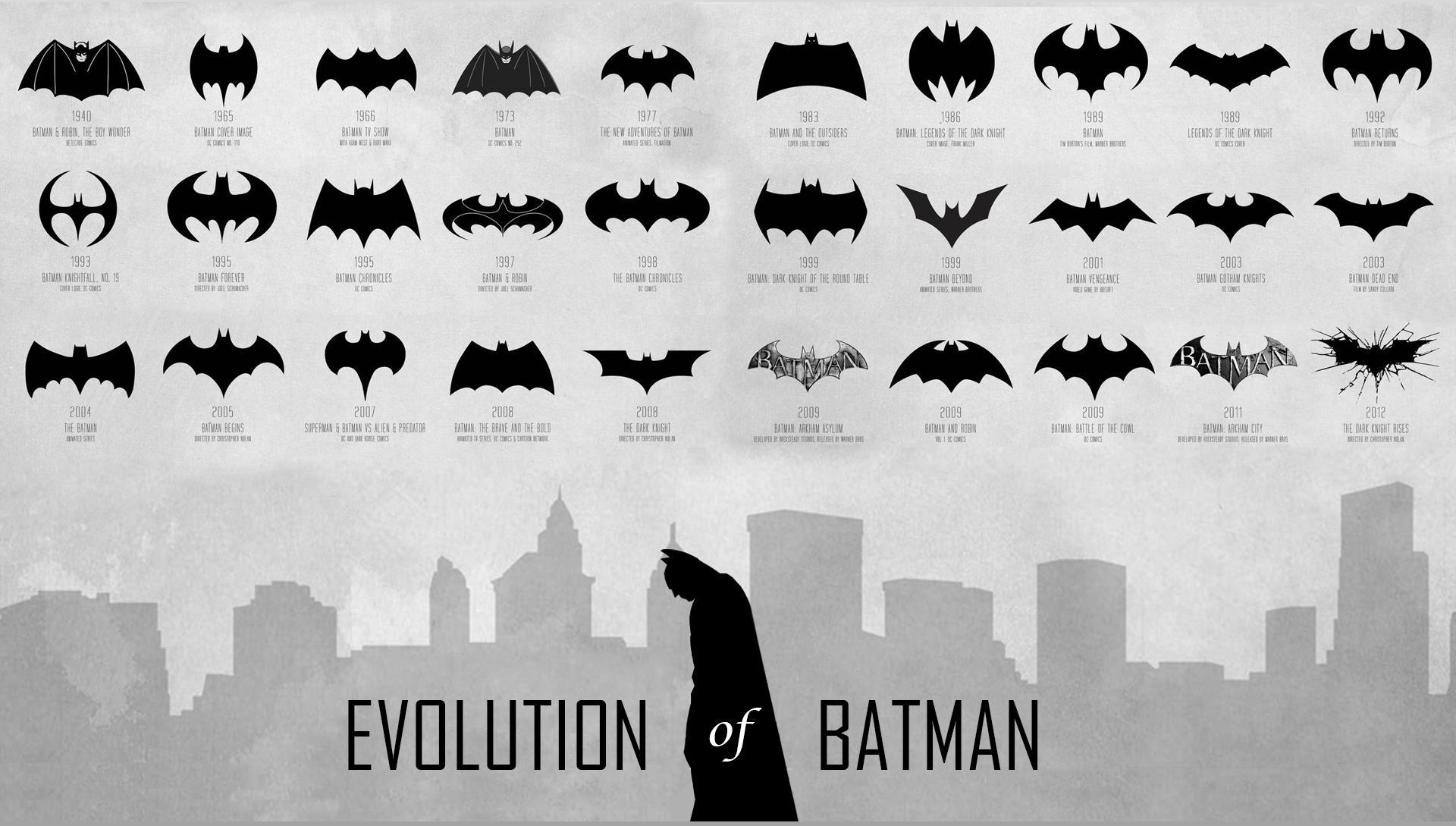
Connect to Facebook to see the rights of states where your friends live. Your information will not be saved.

Share your state on Facebook

You are connected to Facebook. Logout.


1903
1935
1949
1958
1972
1990
1998
2010
http://www.weathersealed.com/tags/crayons/

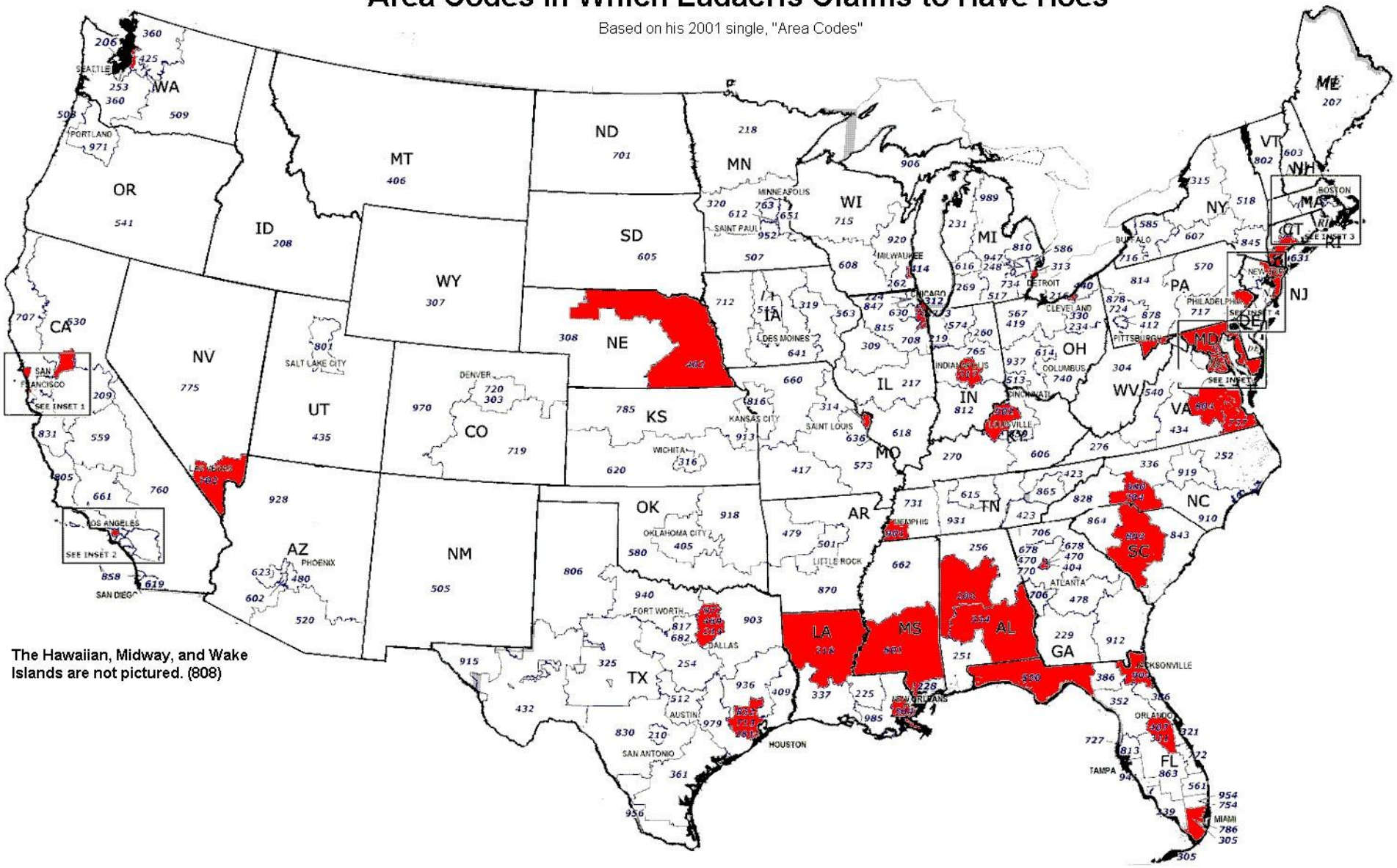

Child 2
Child 1
Mother Plutarch
Mme. Hucheloup
Courfeyrac
Feuilly
Prouvaire
Combeferre
Enjolras
Mabeuf
Marius
Gavroche
Bossuet
Joly
Grantaire
Bahorel
Mme. Burgon
Jondrette
Boulatruelle
Mlle. Vaubois
Woman 2
Toussaint
Cosette
Lt. Gillenormand
Gillenormand
Magnon
Mlle. Gillenormand
Mme. Pontmercy
Baroness T
Pontmercy
Babet
Gueulemer
Javert
Mme. Thenardier
Montparnasse
Claquesous
Brujon
Thenardier
Eponine
Anzelma
Listolier
Tholomyes
Fantine
Marguerite
Fameuil
Blacheville
Favourite
Perpetue
Dahlia
Zephine
Brevet
Chenildieu
Cochepaille
Mme. de R
Isabeau
Gervais
Labarre
Bamatabois
Valjean
Simplice
Scaufflaire
Woman 1
Judge
Champmathieu
Cravatte
Myriel
Napoleon
Mlle. Baptistine
Old Man
Count
Mme. Magloire
Champtercier
Geborand
Countess de Lo
Mother Innocent
Fauchelevent
Gribier



EVOLUTION *of* BATMAN

Area Codes In Which Ludacris Claims to Have Hoes

Based on his 2001 single, "Area Codes"



The Hawaiian, Midway, and Wake Islands are not pictured. (808)

Graphical Excellence is all about making large data sets comprehensible and helping the audience to make connections.

Graphical Excellence is all about making large data sets comprehensible and helping the audience to make connections.

$$2 + 2 = 5$$

Communication Design

Communication Design

A design discipline focused upon studying the effectiveness of written and visual communication.

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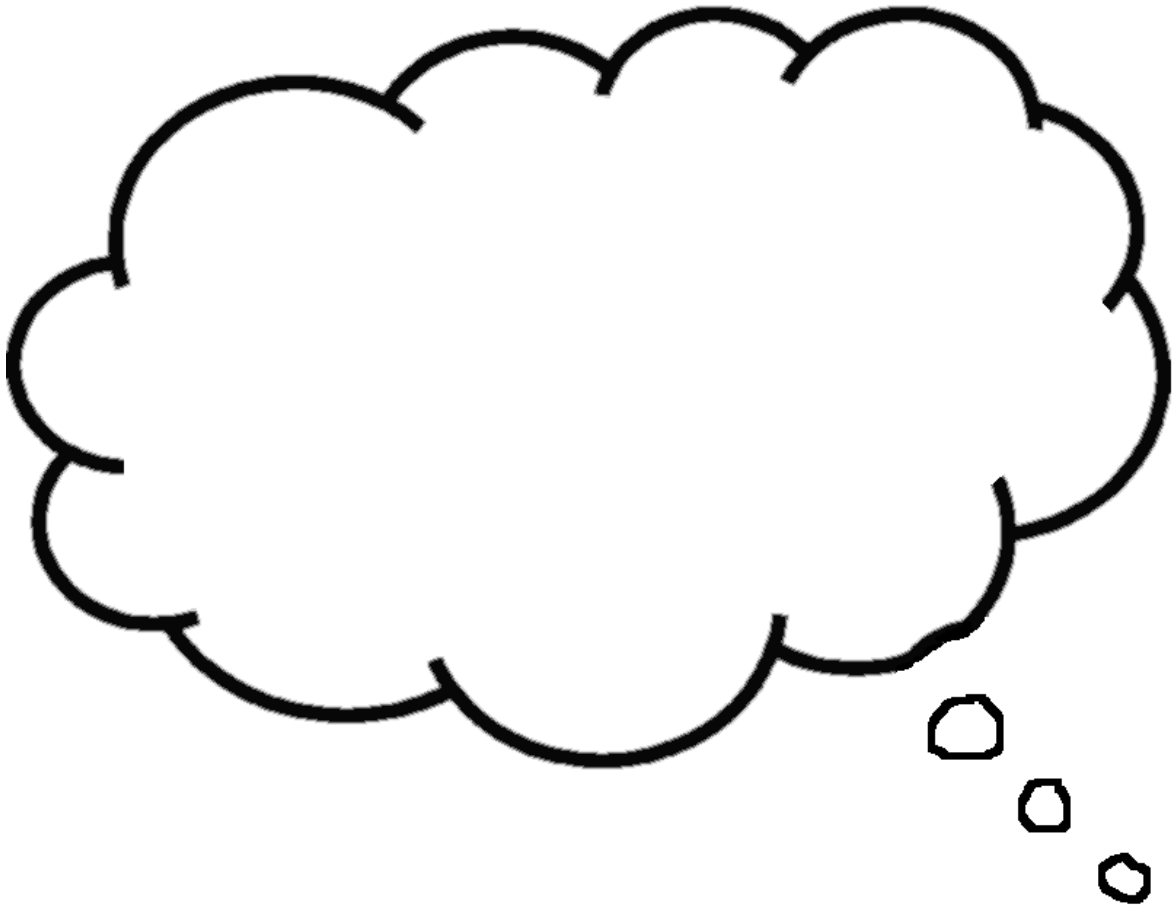
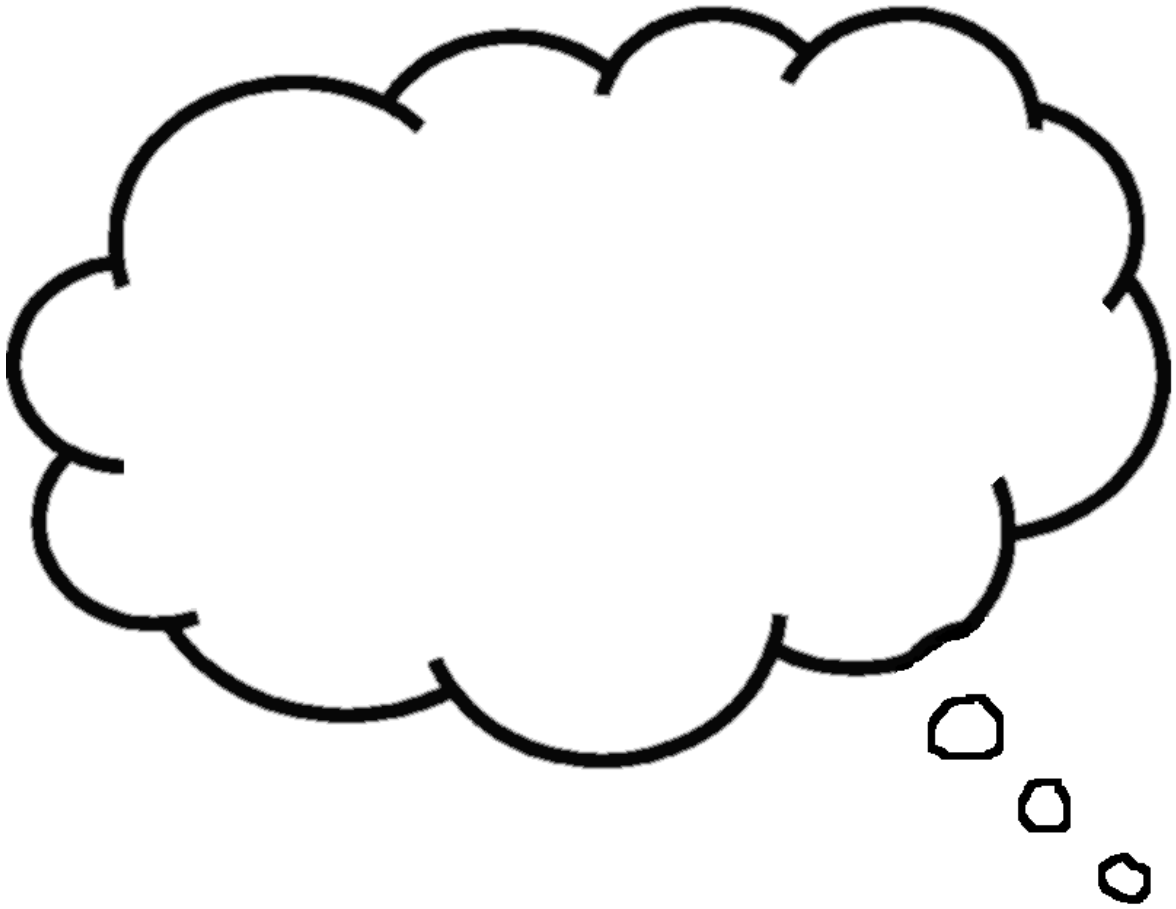
"Caution" / "Warning"

“Play”





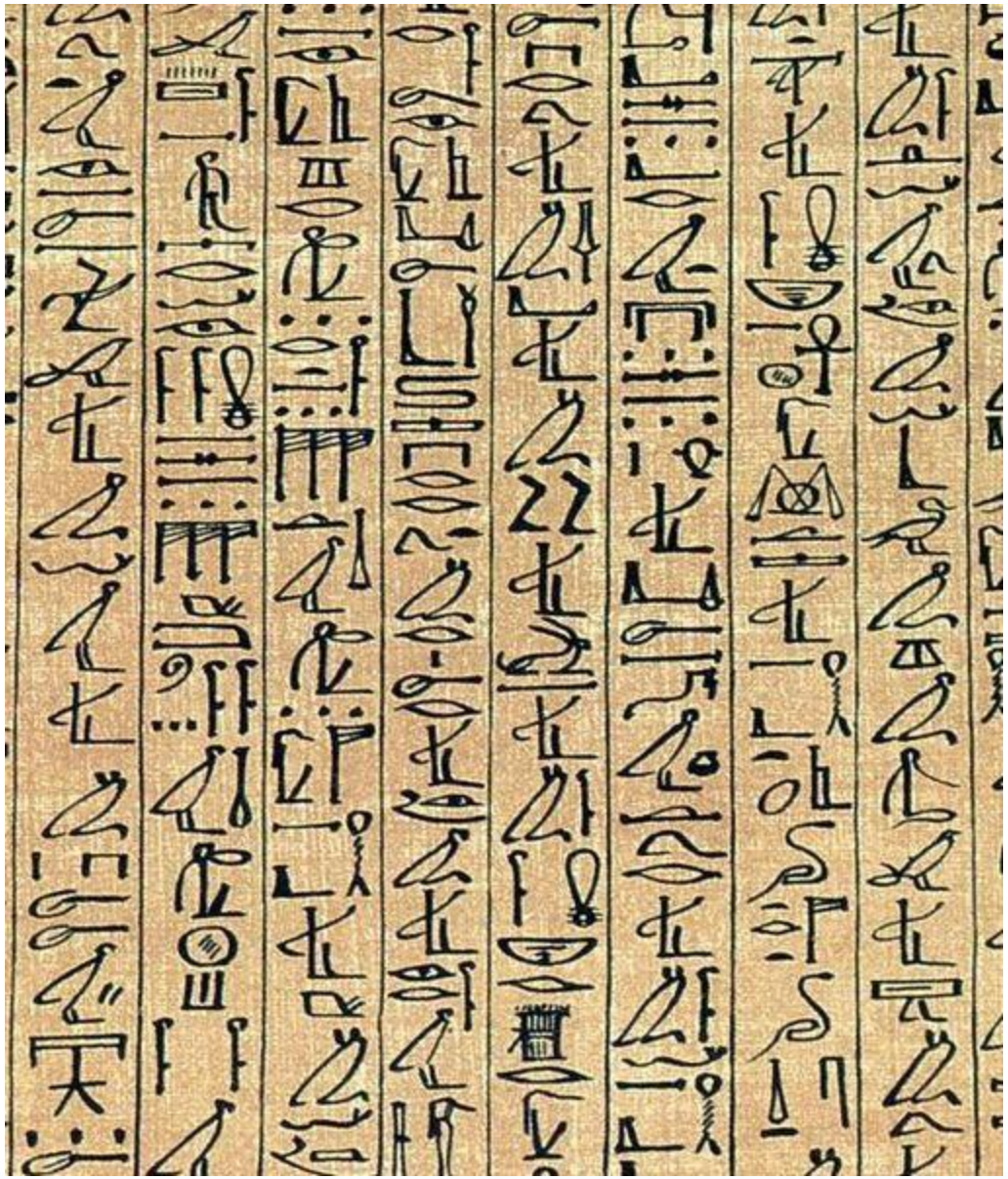
"Thought" ("Gas?" "Gunfire?")

Some images appear commonly and can be immediately interpreted.

Some images appear commonly and can be immediately interpreted. Culture and past experience plays into this.

Some images appear commonly and can be immediately interpreted. Culture and past experience plays into this.

"Cultural Constraints" –Tom Horton CS3205



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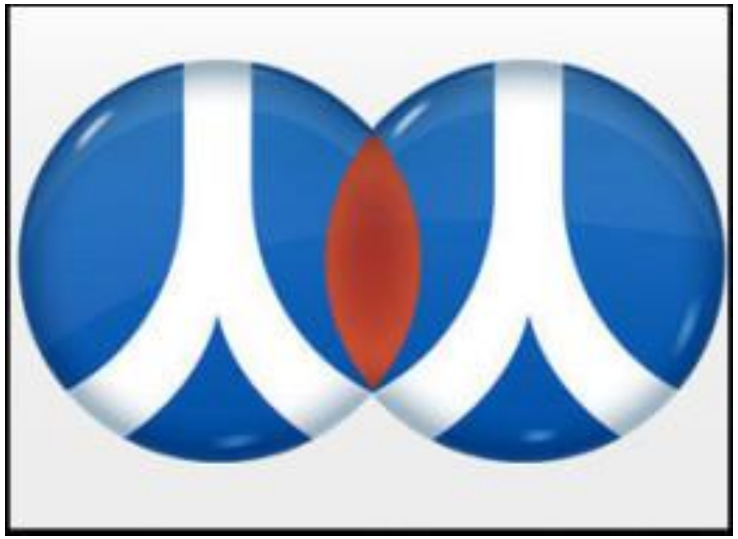
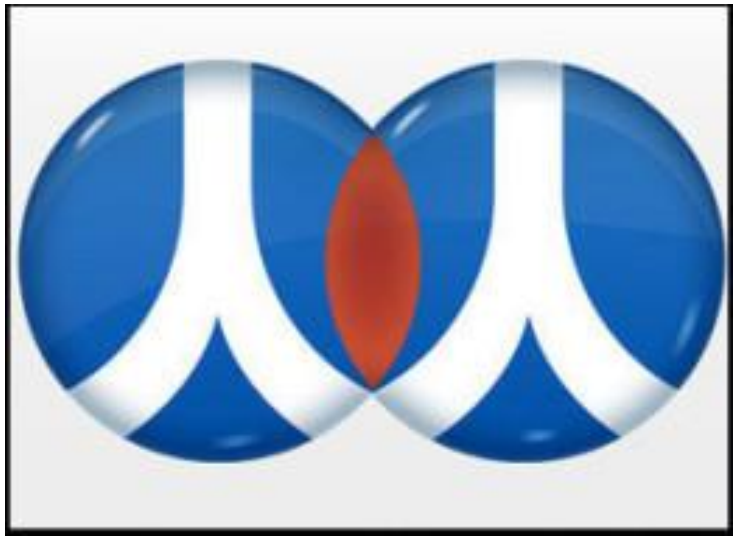


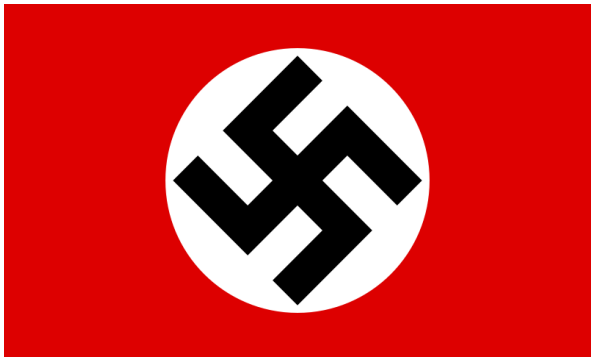
UNIVERSITY of VIRGINIA
ENGINEERING



Renren: a social network

Decoration evoking
"Sacred Force"

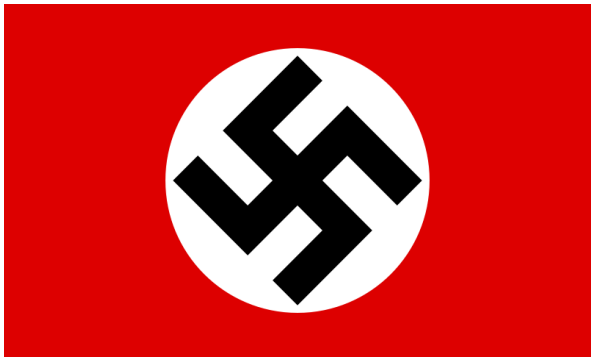
Finnish Air Force



Flag of the Nazi Party

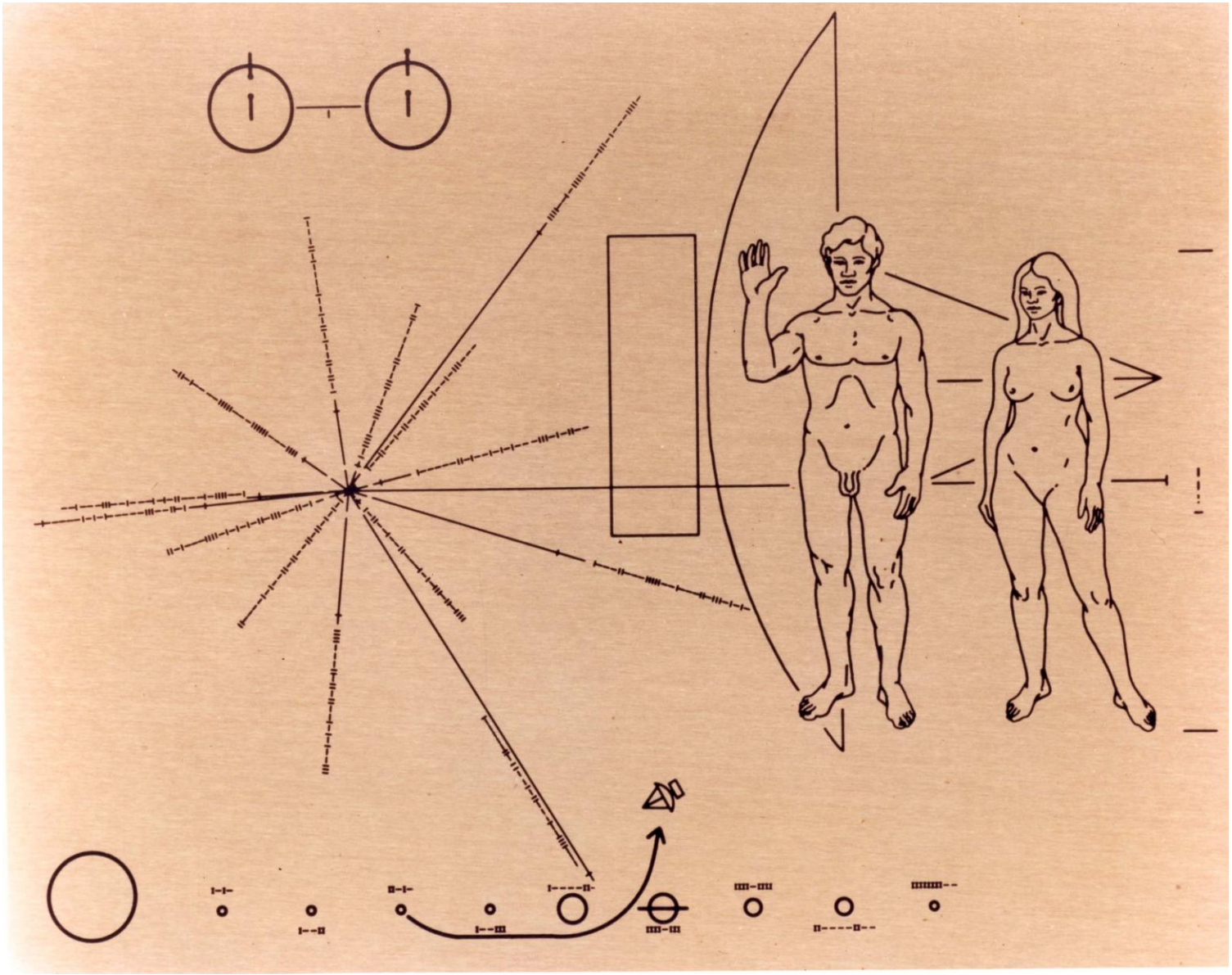
Decoration evoking
"Sacred Force"

Finnish Air Force



Flag of the Nazi Party

It can be important to understand your audience.



Pioneer Plaque
Linda Salzman Sagan, Carl Sagan, Frank Drake

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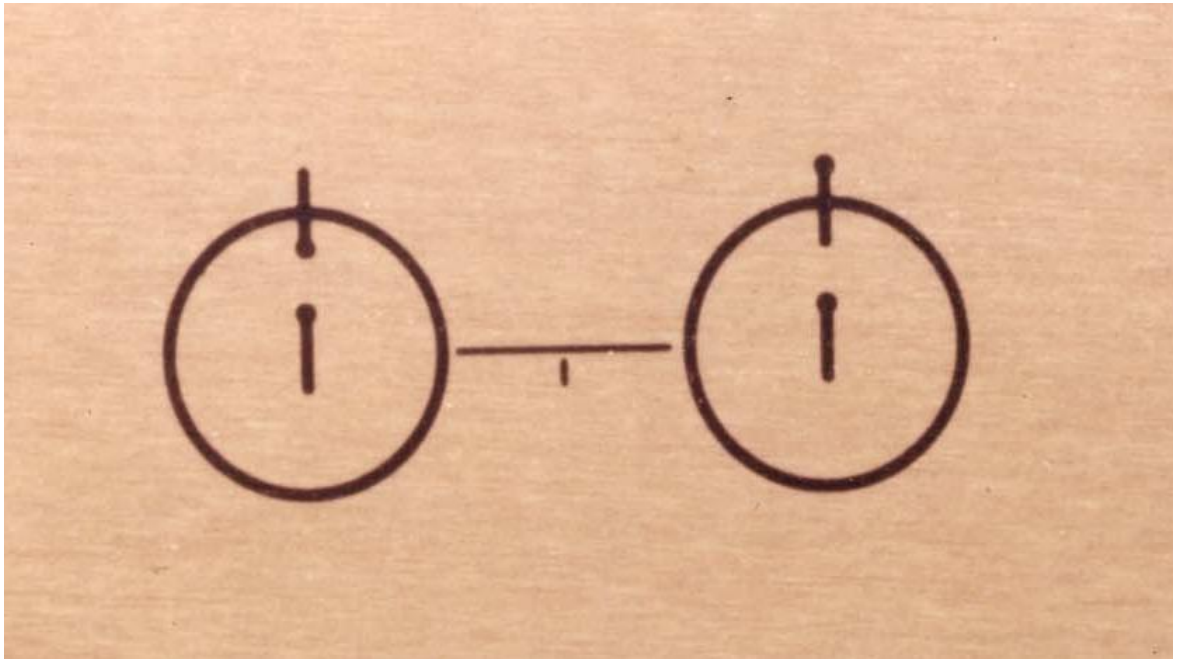
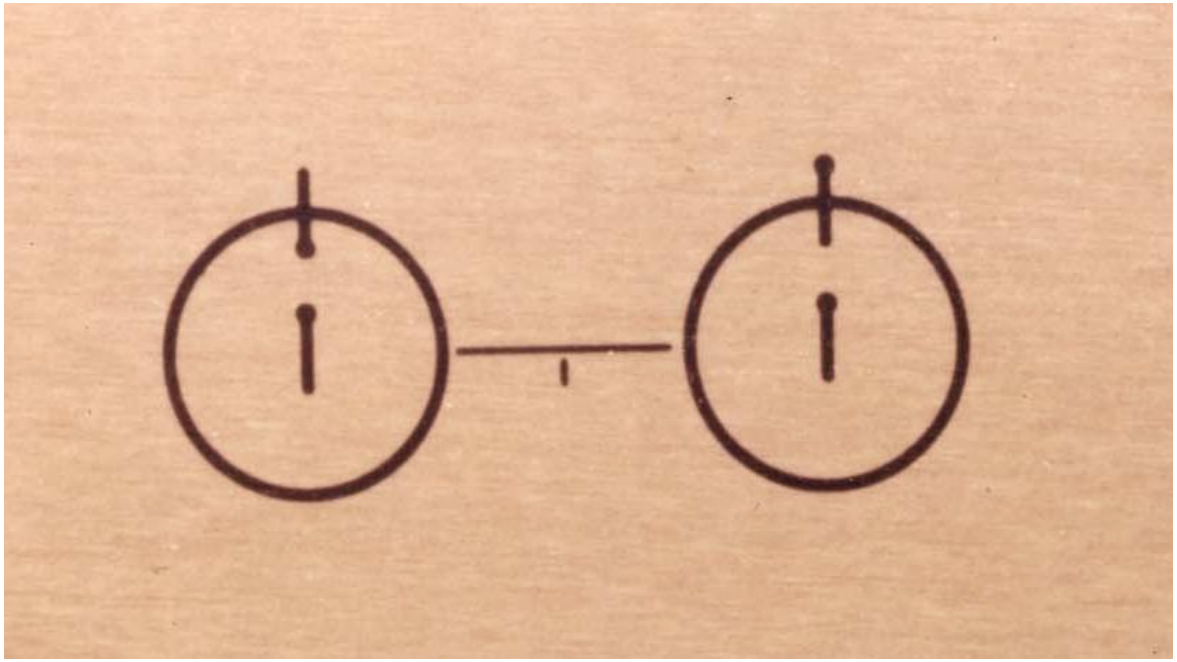
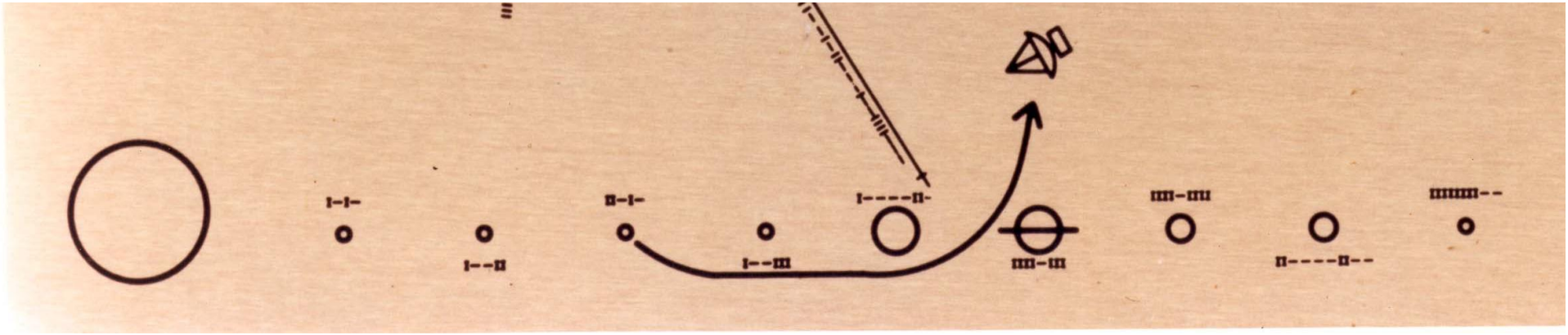


"Hyperfine transition of Hydrogen"



"Hyperfine transition of Hydrogen"

Identifies object as a known element
Establishes "|" as a unit of distance: 23cm (Wavelength)
Establishes "|" as a unit of time: 704.2psec (Frequency 1420MHz)



"Map of the solar system"

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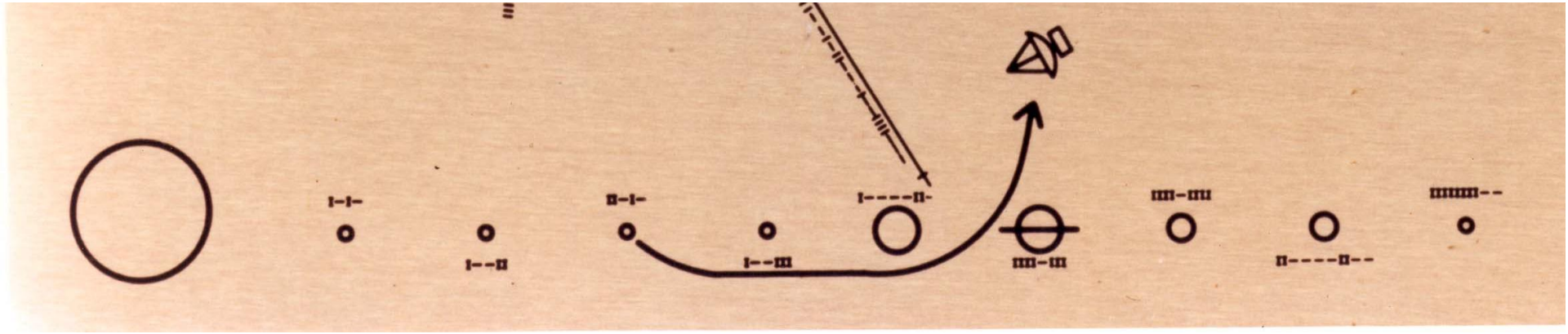
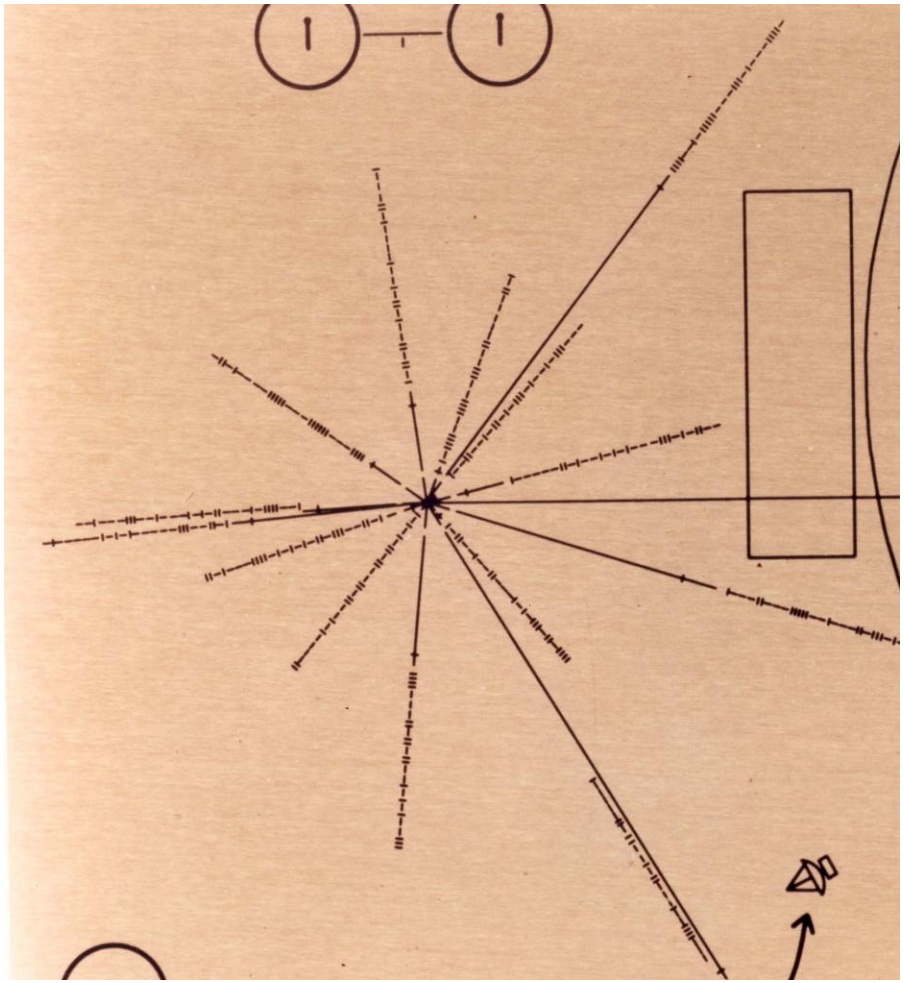
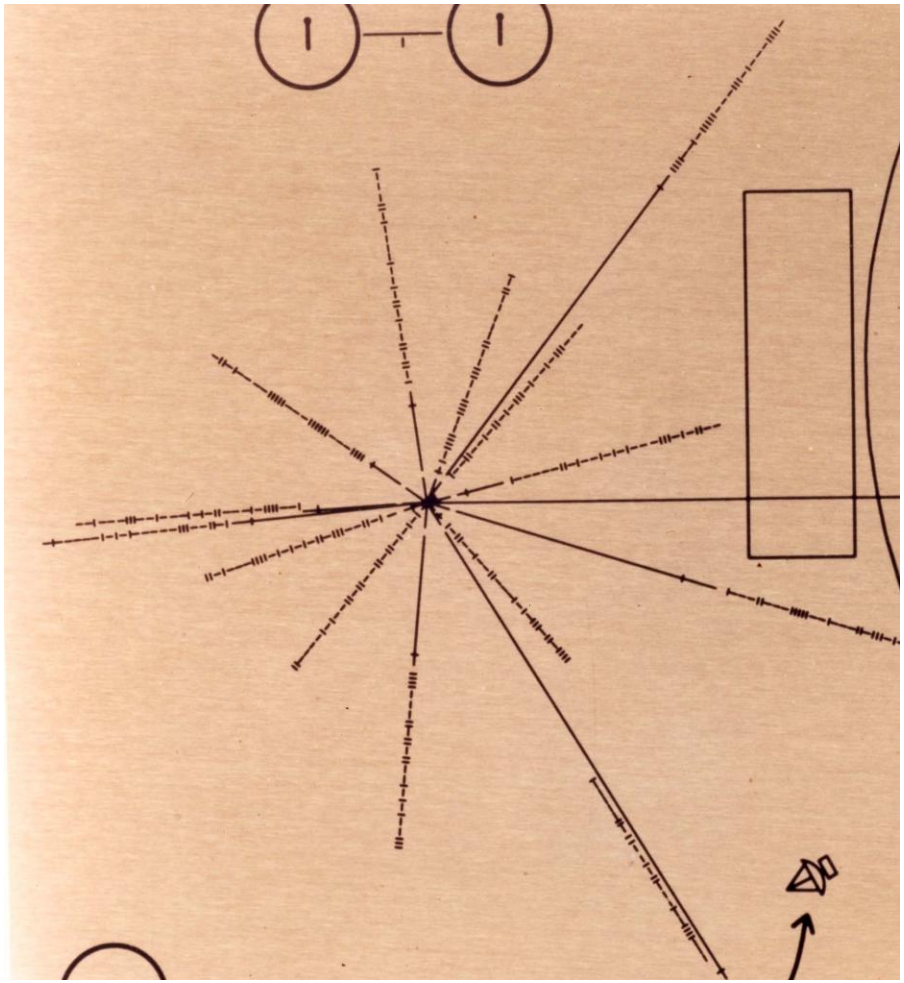


"Map of the solar system"

Shows trajectory of Pioneer spacecraft
Shows planets with representation of distance from the sun



"Position of the sun"



"Position of the sun"

Greater scale of location

Uses 14 pulsars as reference points

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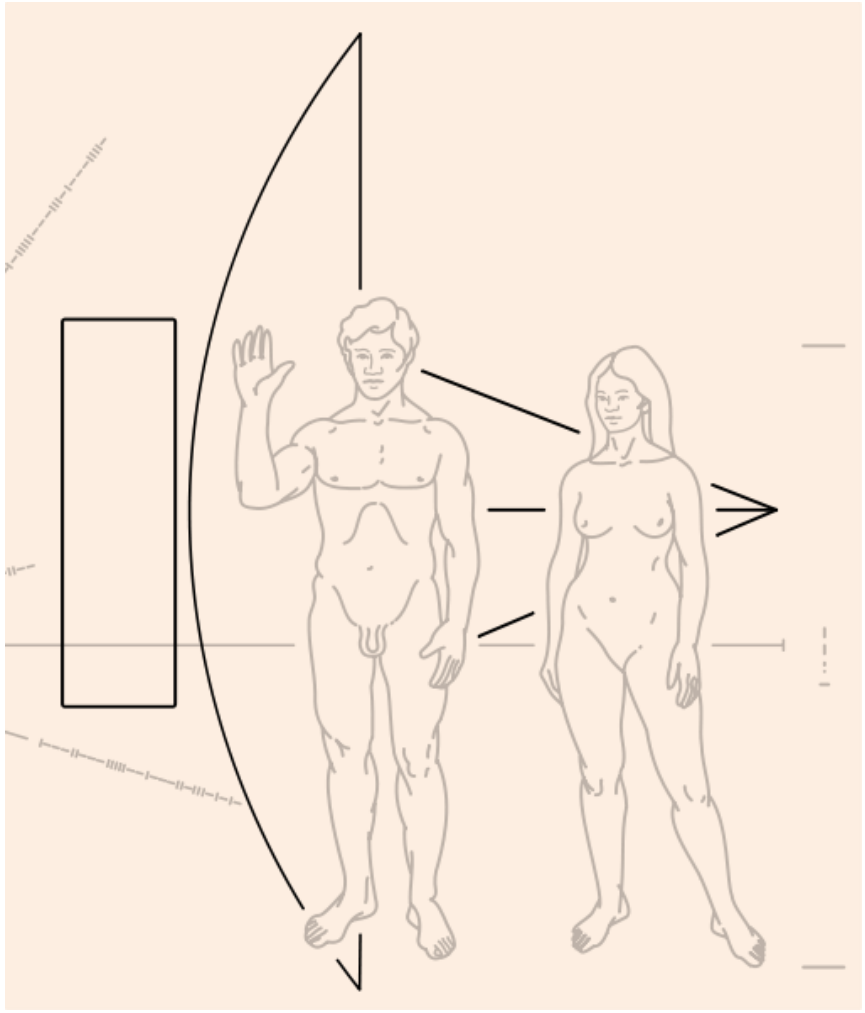
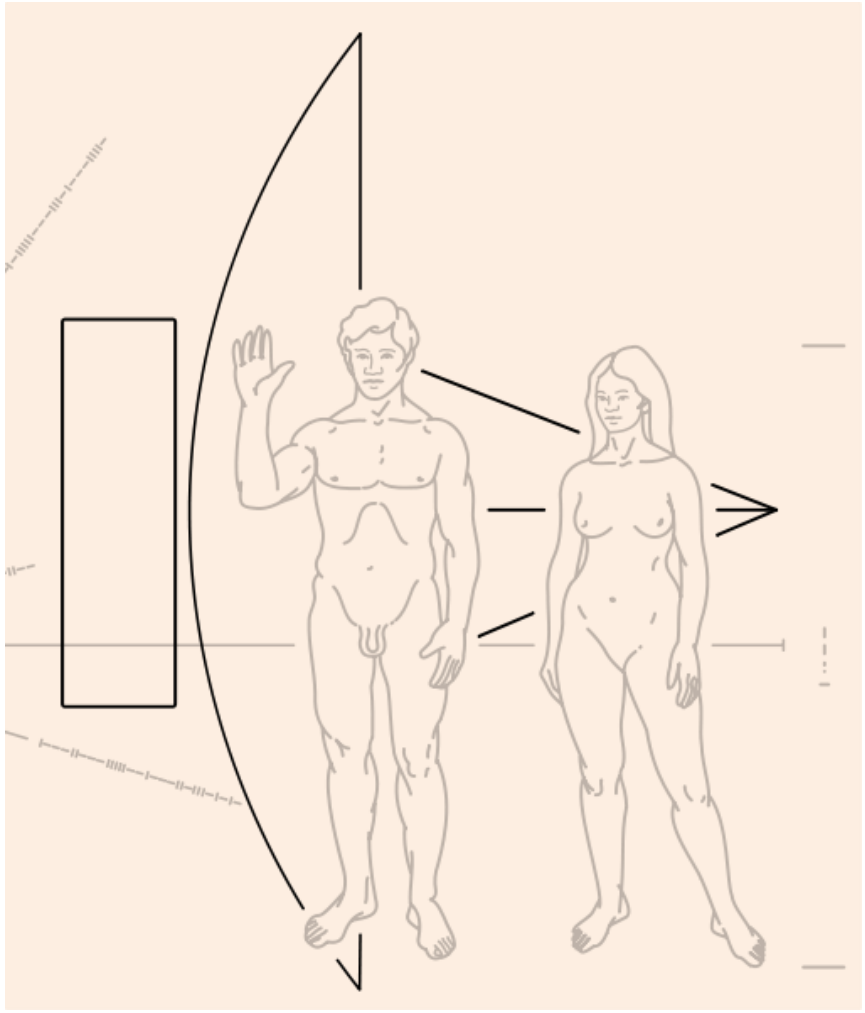


"Pioneer silhouette"



"Pioneer silhouette"

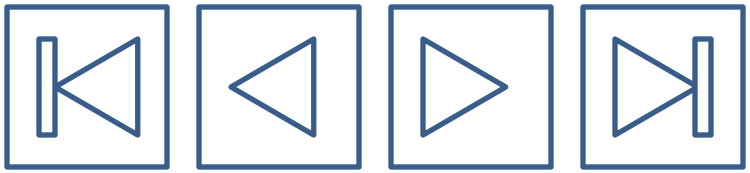
Shows man and woman to scale against a silhouette of the craft itself.

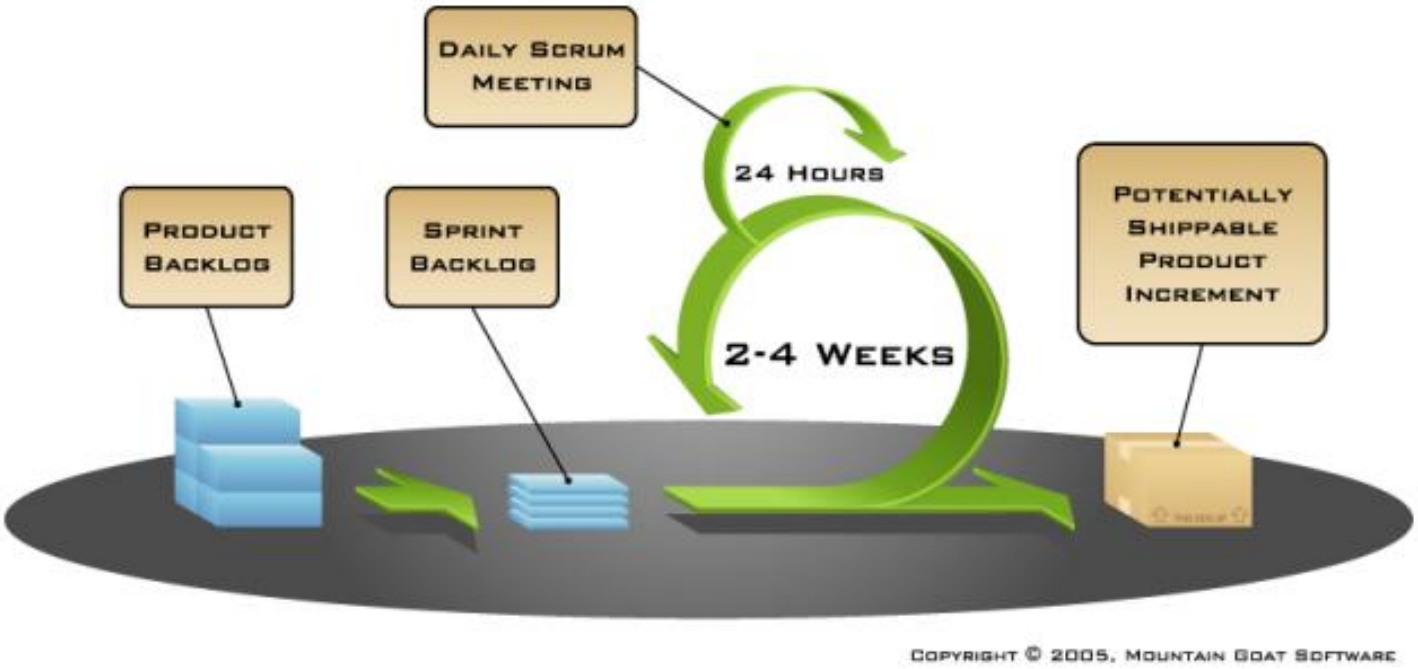
Logical Constraints & Mapping

The relationships between images and their counterparts in the real world.

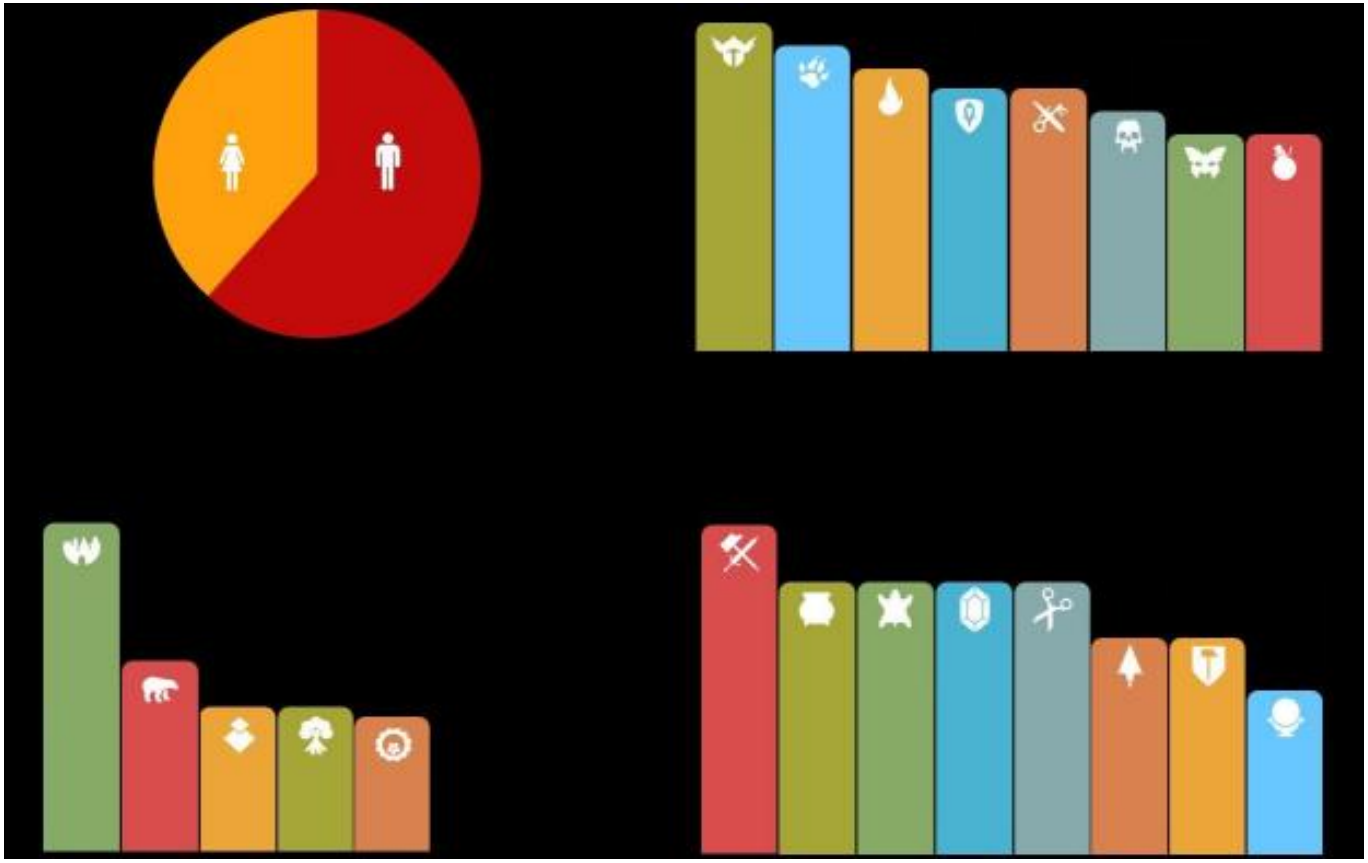
Logical Constraints & Mapping

The relationships between images and their counterparts in the real world.





Icons and shapes used to logically depict the Scrum process



Symbols clean the visualization for their intended audience.

Sometimes being literal helps get the point across…

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... but sometimes it can lead to classic chartjunk.

Consistency

Similar design with similar function.

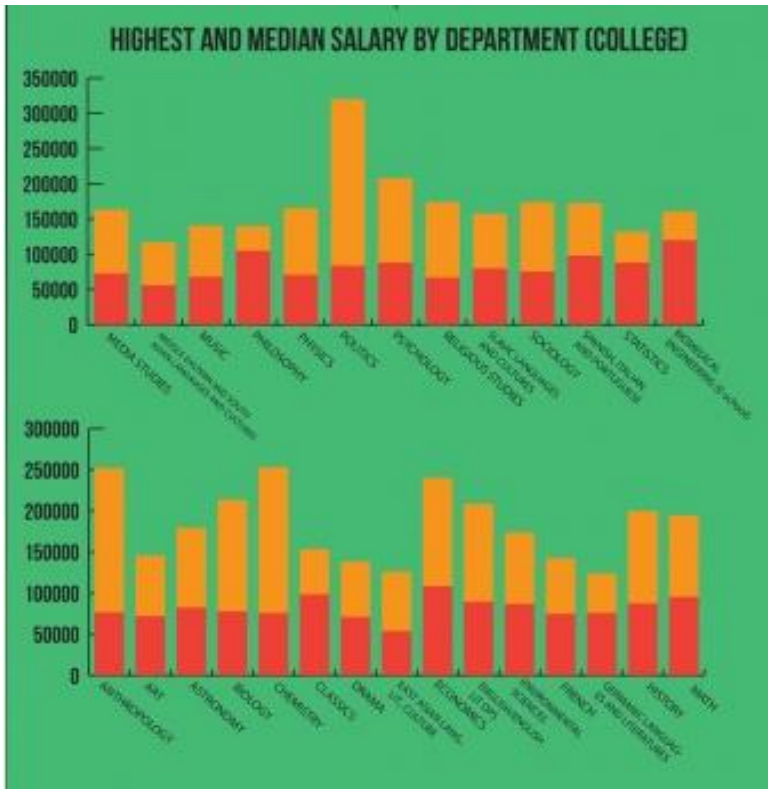
Consistency

Similar design with similar function.

(Seems obvious, right?)

Consistency

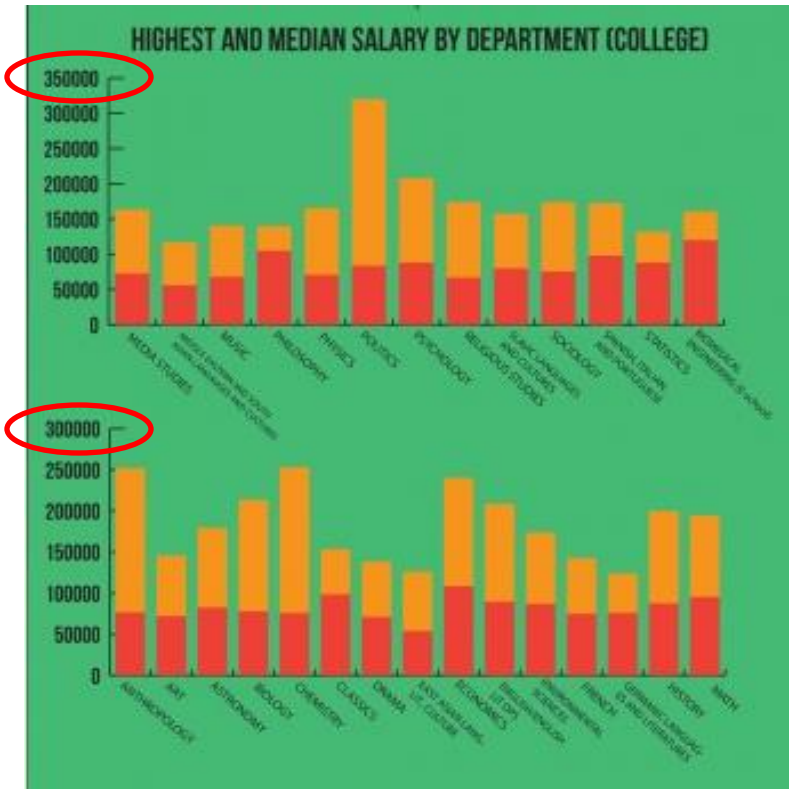
Similar design with similar function.
(Seems obvious, right?)



Cav Daily

Consistency

Similar design with similar function.
(Seems obvious, right?)



Cav Daily

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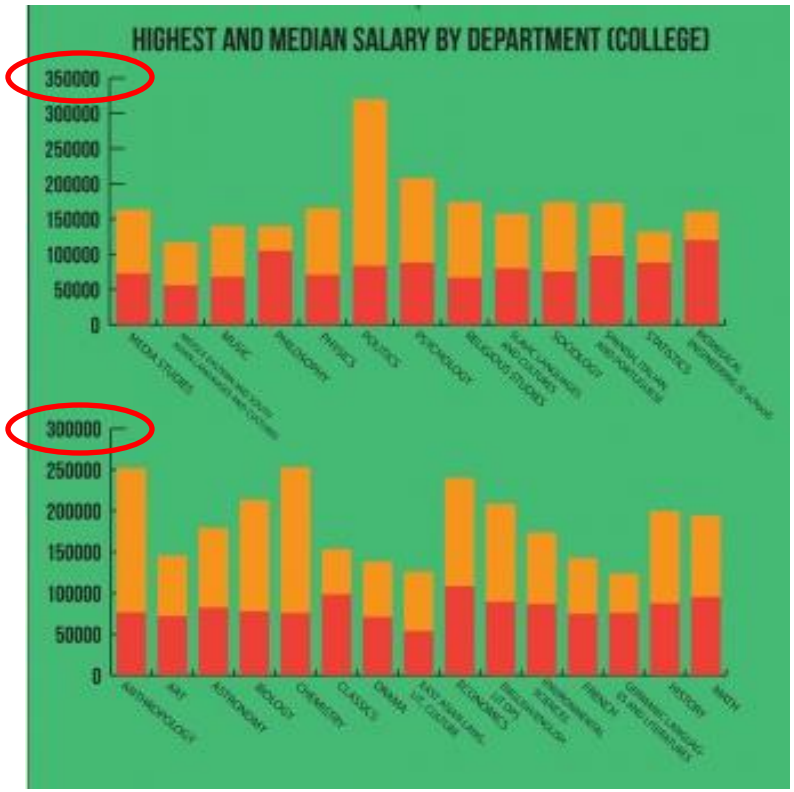

Cav Daily

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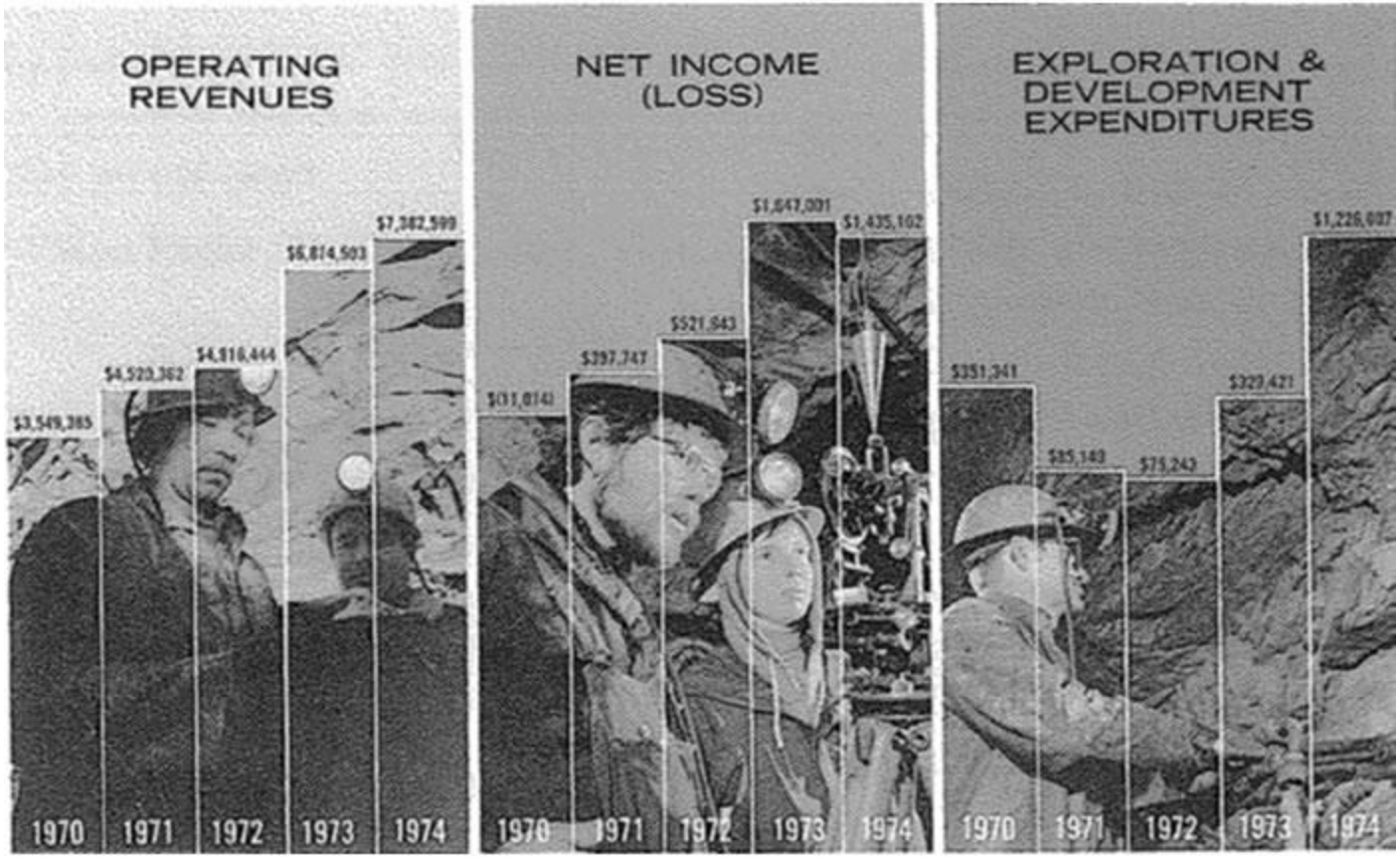

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Similar design with similar function.

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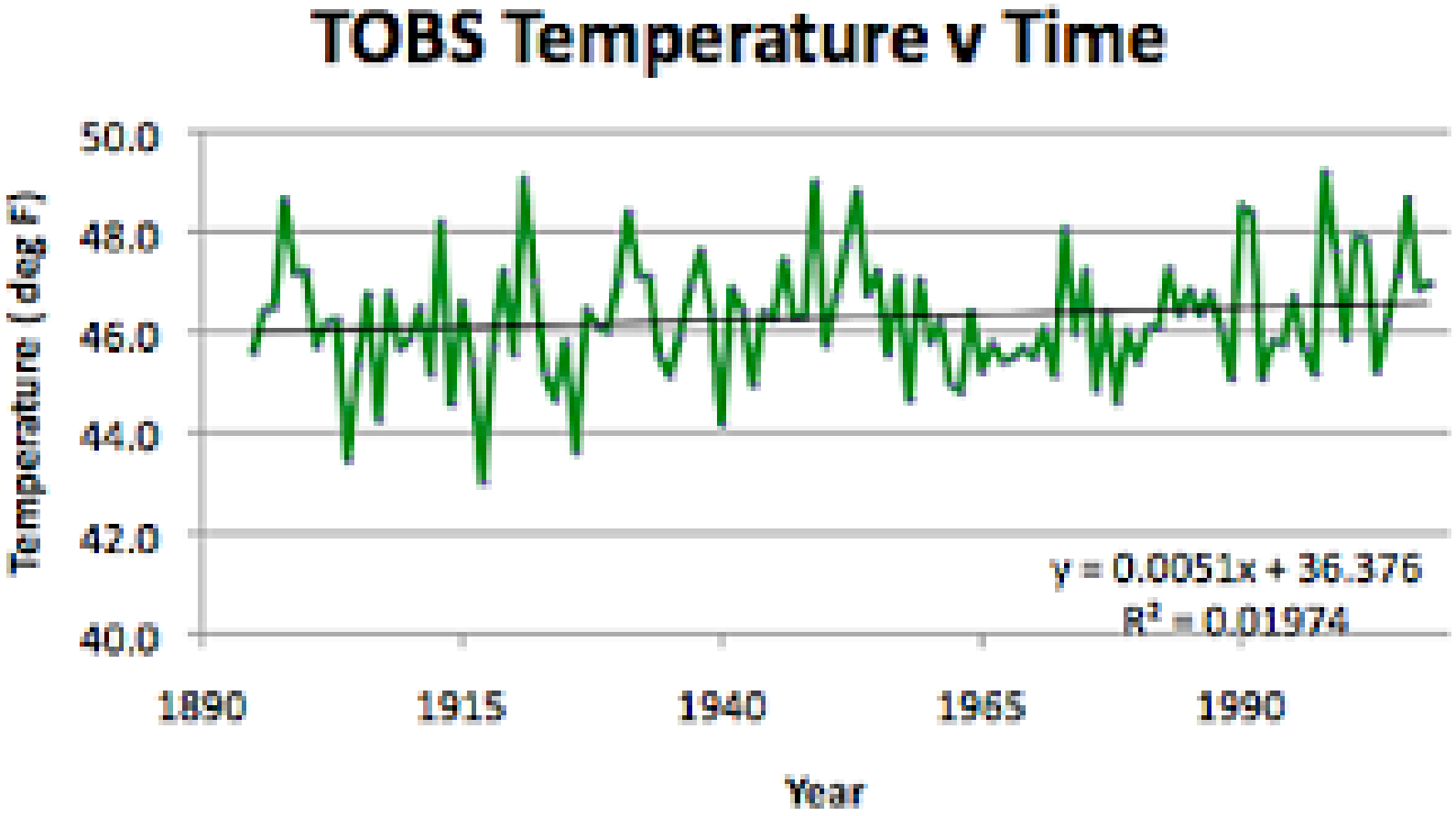
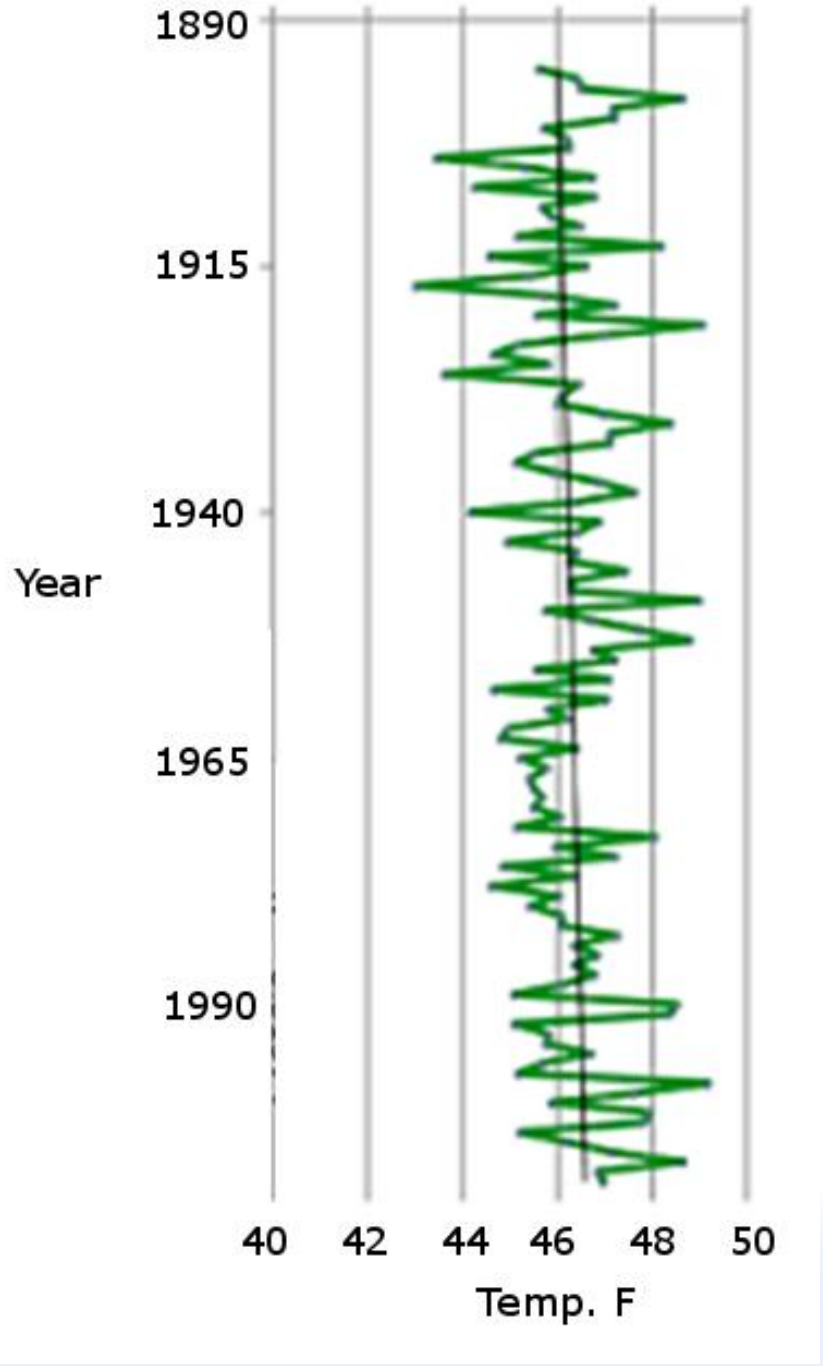
Consistency

Similar design with similar function.
(Seems obvious, right?)

Internal Consistency: operations and design choices within one visualization
External Consistency: operations and design choices across visualizations


TOBS Temperature v Time
Temperature (deg F)
50.0
48.0
46.0
44.0
42.0
40.0
1890
1915
1940
1965
1990
Year
y = 0.0051x + 36.376
R² = 0.01974



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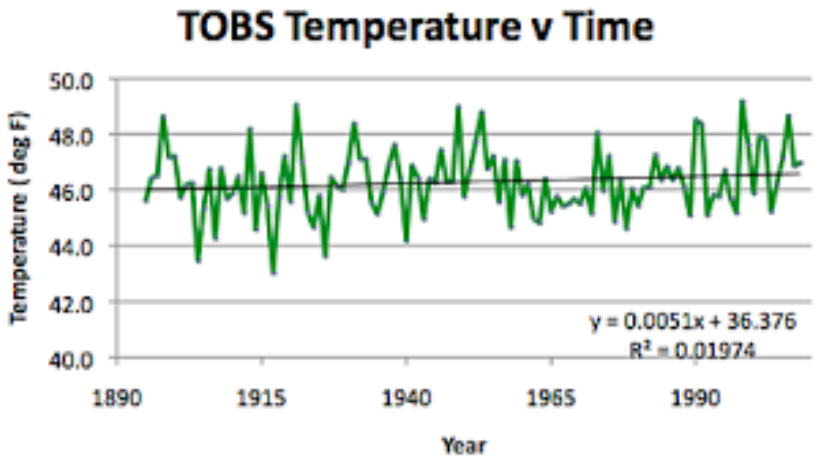

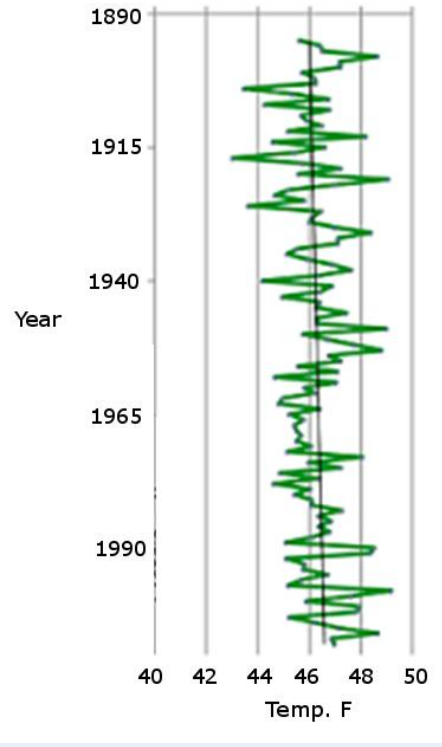

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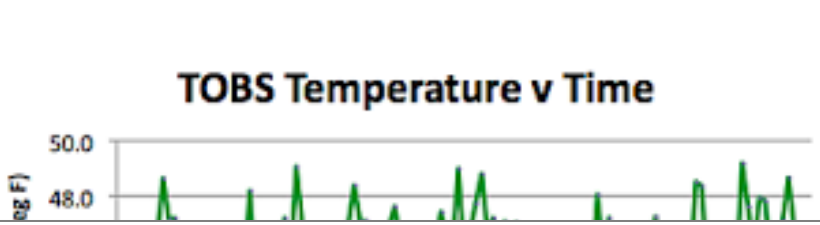
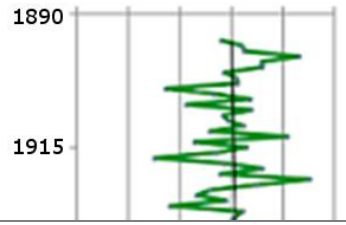
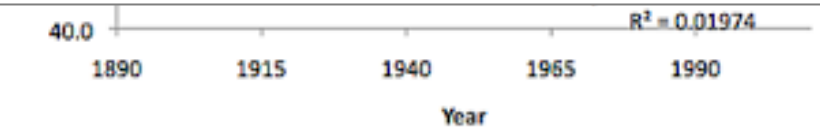
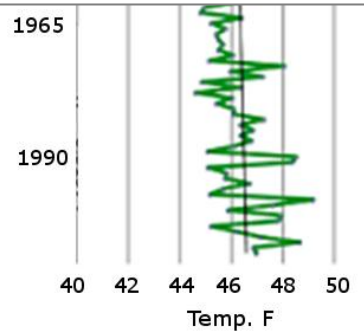




If something is a convention, like cause and effect,
that might be for a good reason.





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Affordance

The quality of an object that allows it to perform an action.

Affordance

The quality of an object that allows it to perform an action.

Push or pull?

Affordance

The quality of an object that allows it to perform an action.

Which affords being picked up more?
Standing more?
Pouring more?

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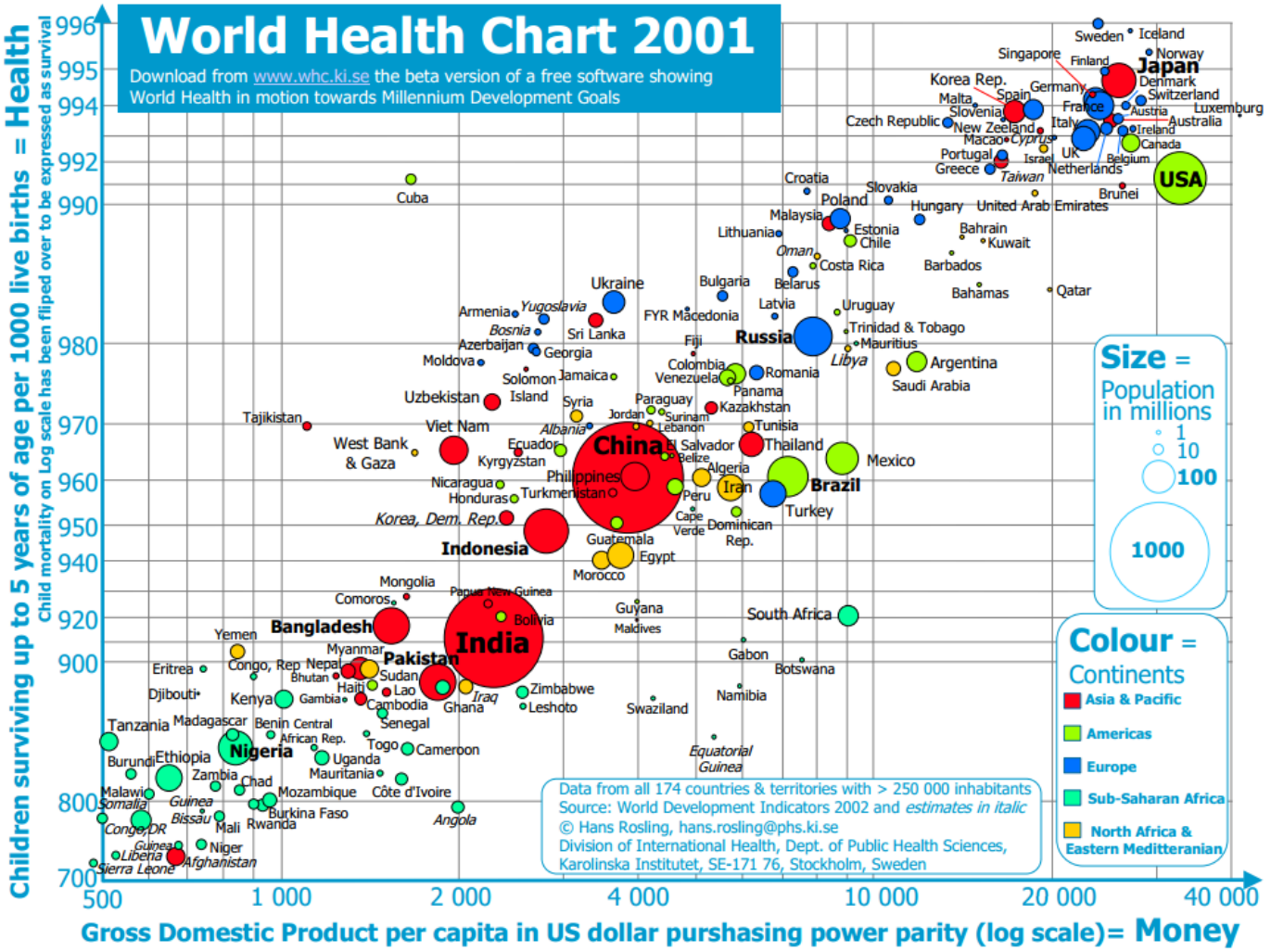
Affordance

The quality of an object that allows it to perform an action.



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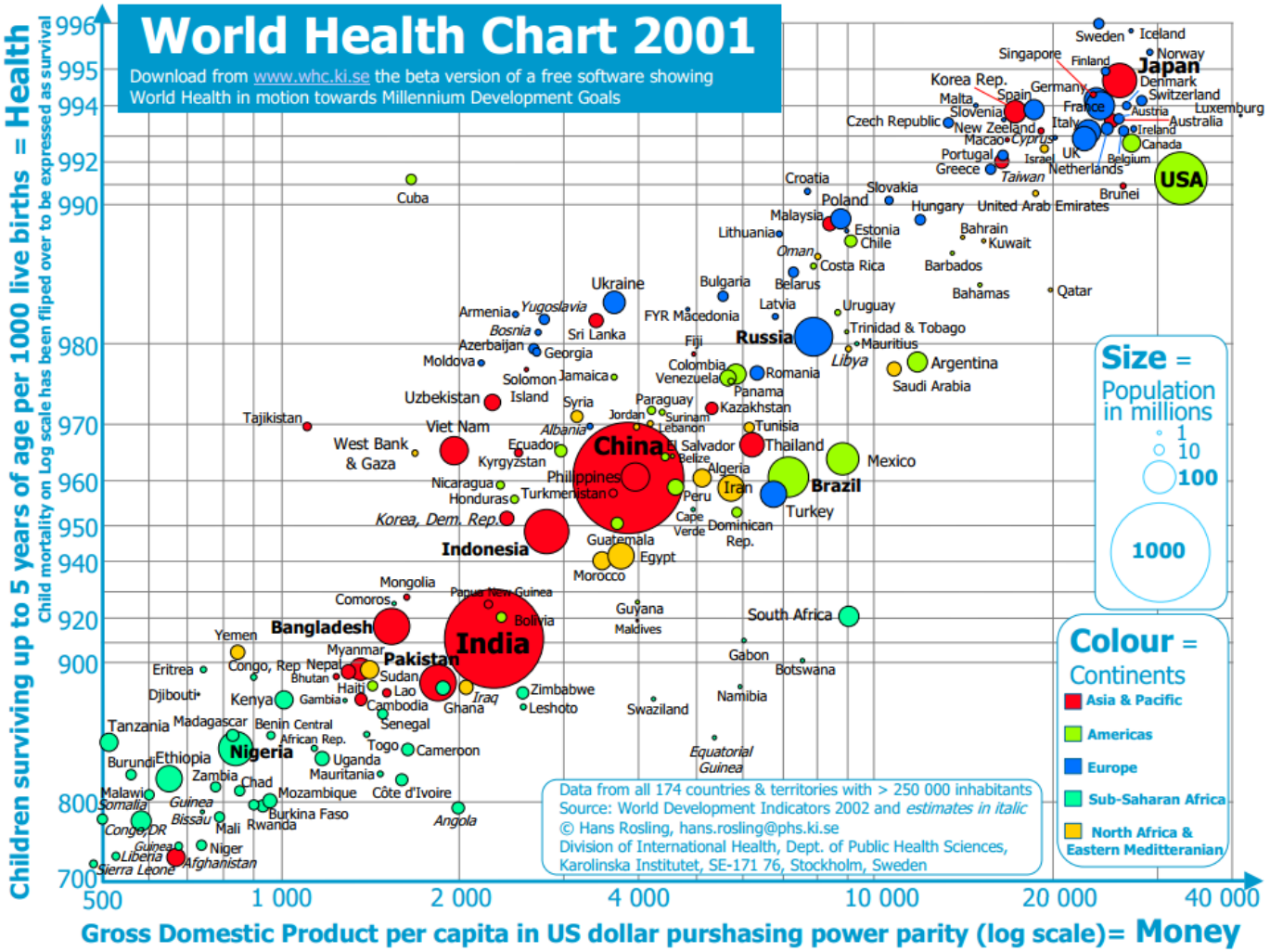

Your visualizations should afford being read,
guiding the eye gently to the information you present

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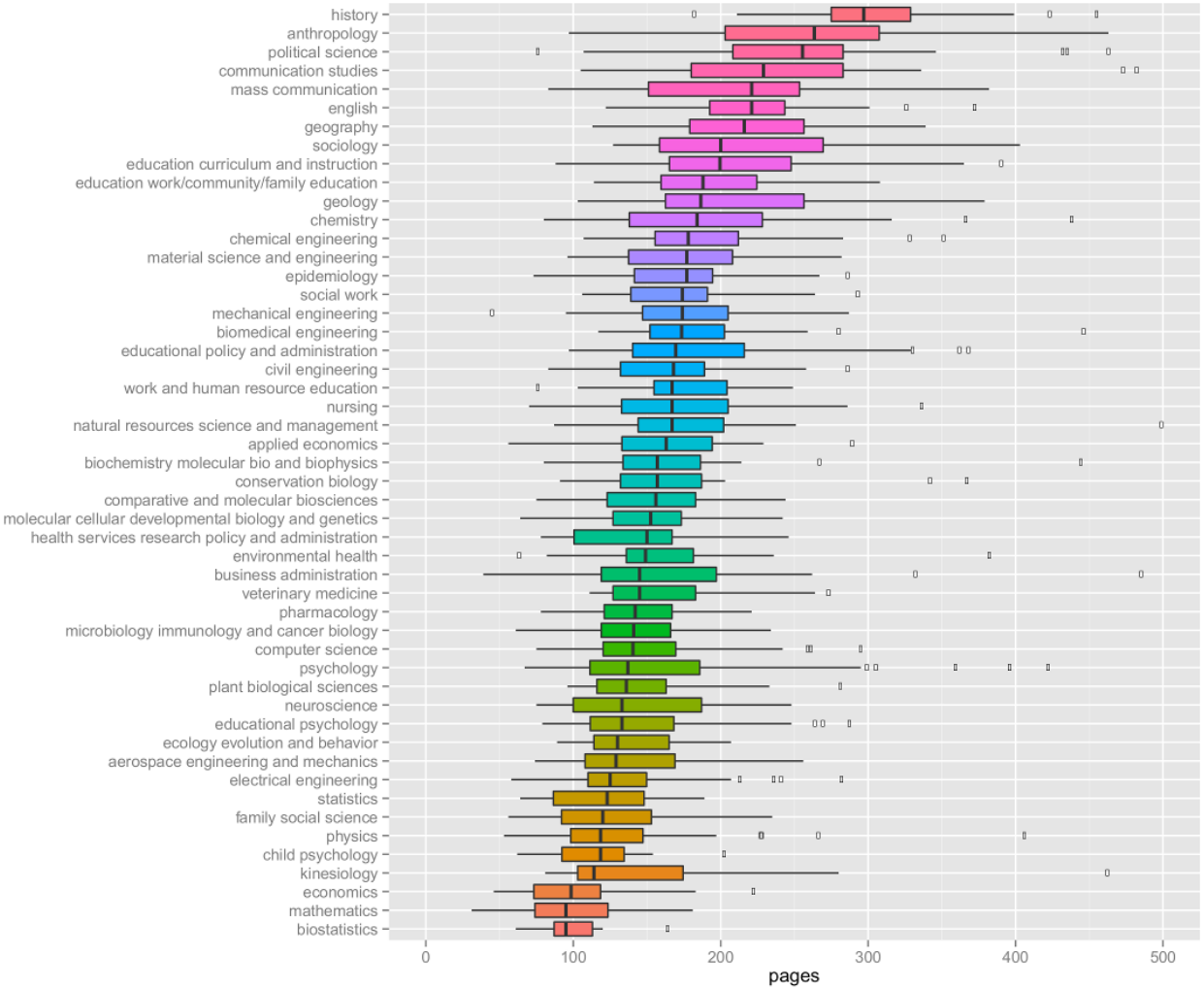

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HOMEWORK

(This is on Collab)

Pick two simple tasks, for instance multiplying numbers or making a ham and cheese sandwich. Draw a guide to explain pictorially how this would work. No words allowed.

(You will not be graded on your artistic abilities, I promise!)