Information Design

Professor Danne Woo

infodesign.dannewoo.com

ARTS 269

Spring 2020

Wednesday 1:40 PM – 5:30 PM

Klapper 107

Data Viz and Infographics

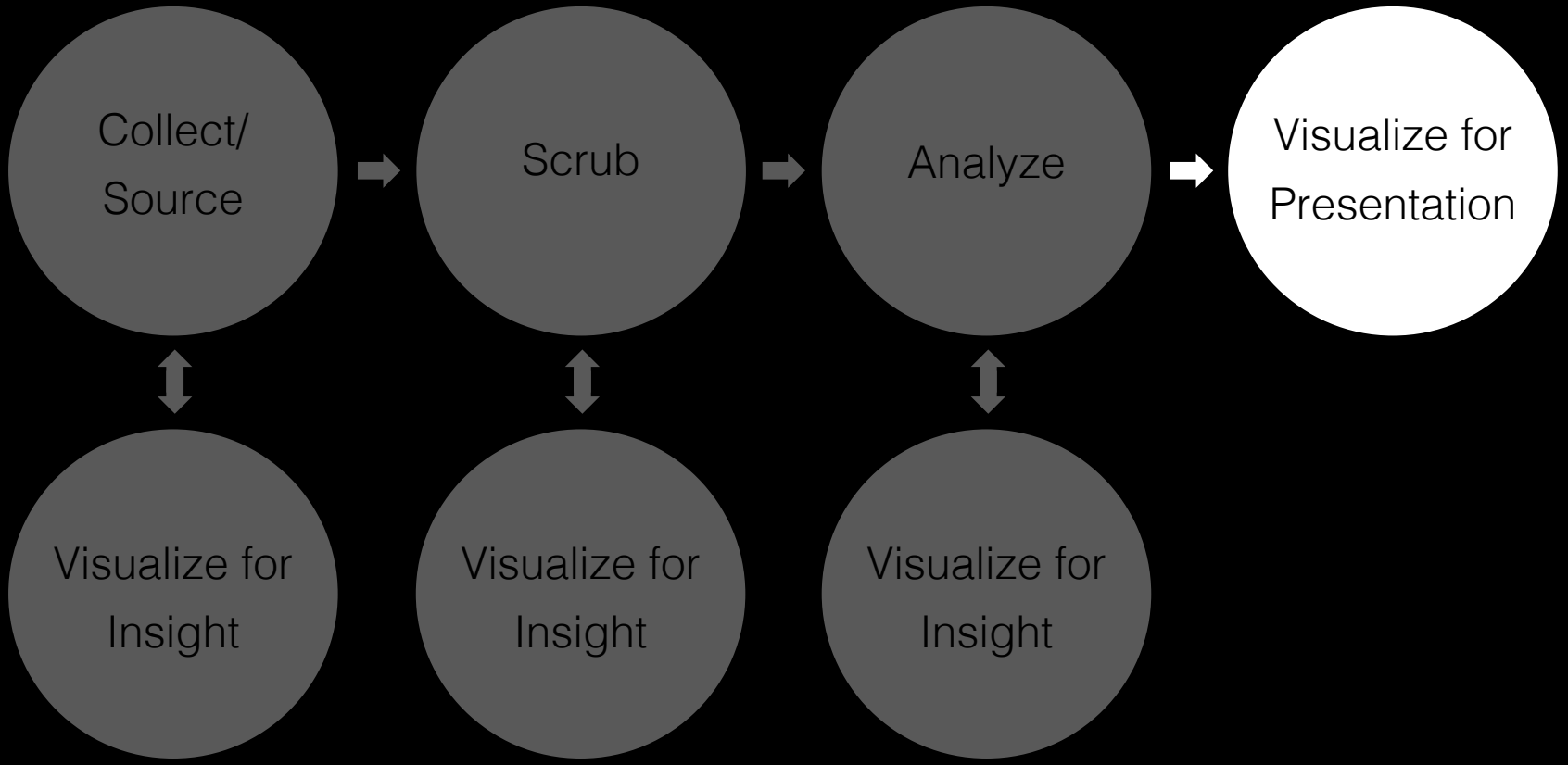
Week 4: The Psychology of Information Design and Illustrator

Week 5: Infographics, Data Storytelling and Datavisual

Week 6: Field Trip

Week 7: Midterm

Data Pipeline

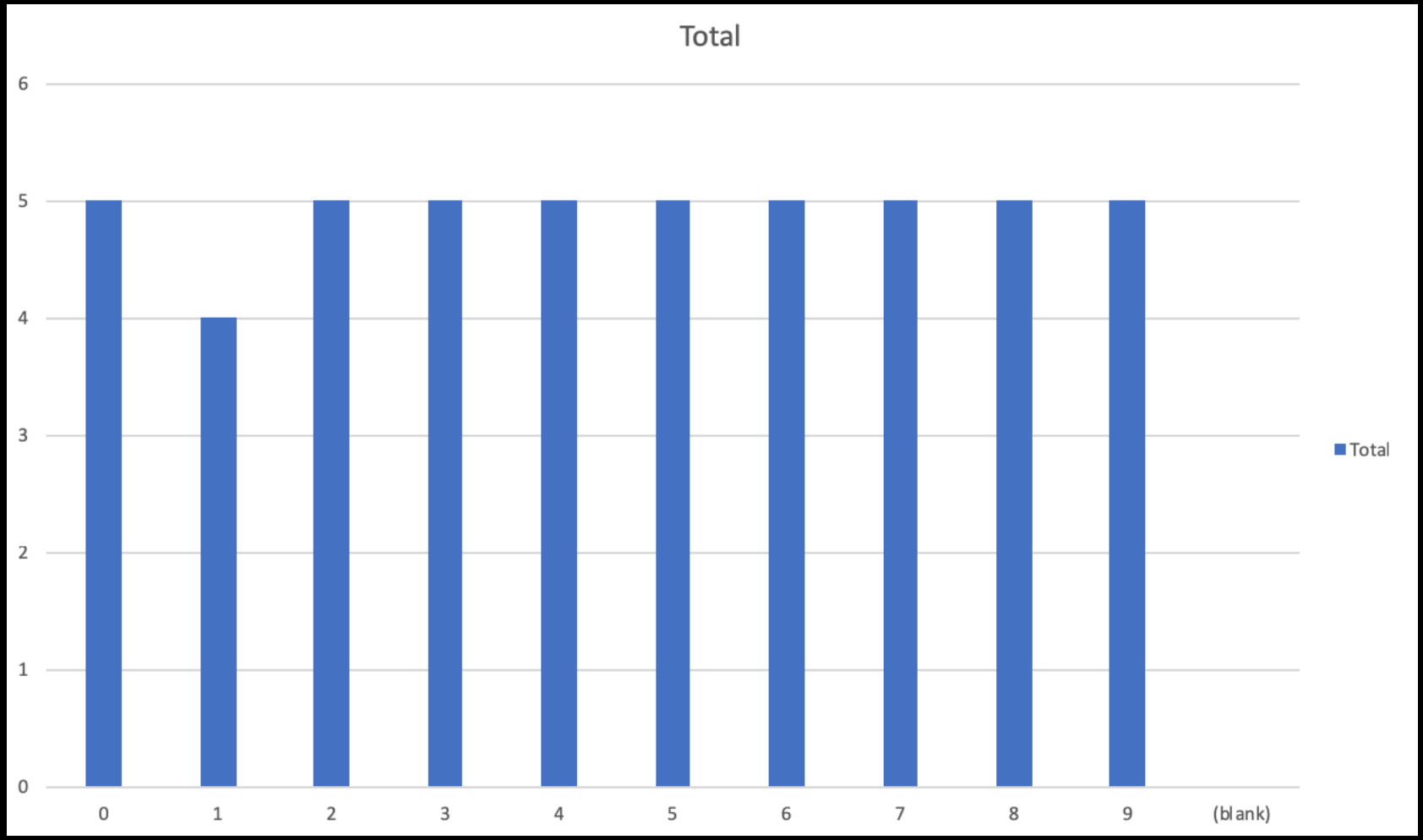


Perceiving Values

18 x 24 = ?

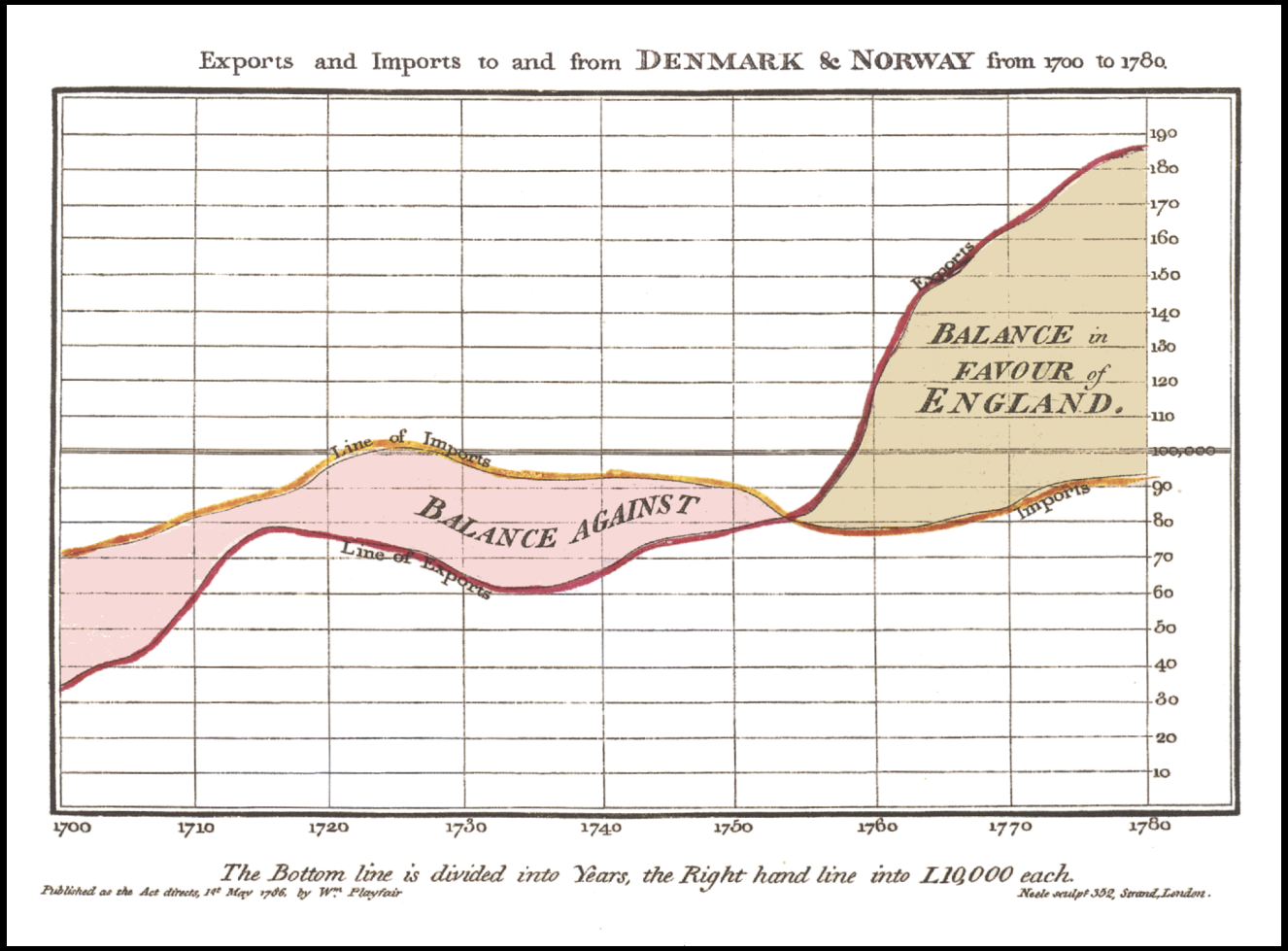
Perceiving Values

Perceiving Values



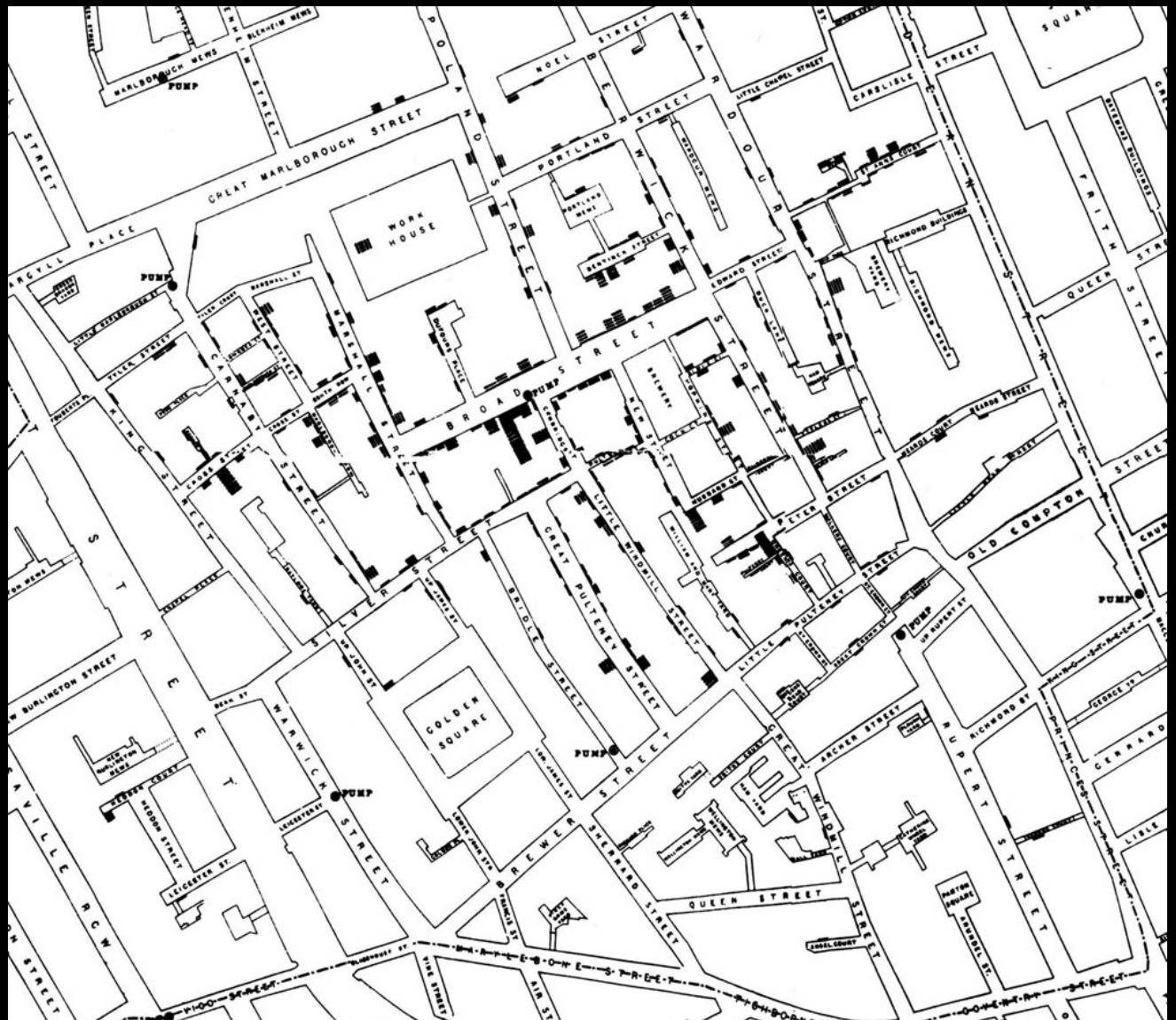
Perceiving Values

William Playfair, 1786



Perceiving Values

John Snow, 1854



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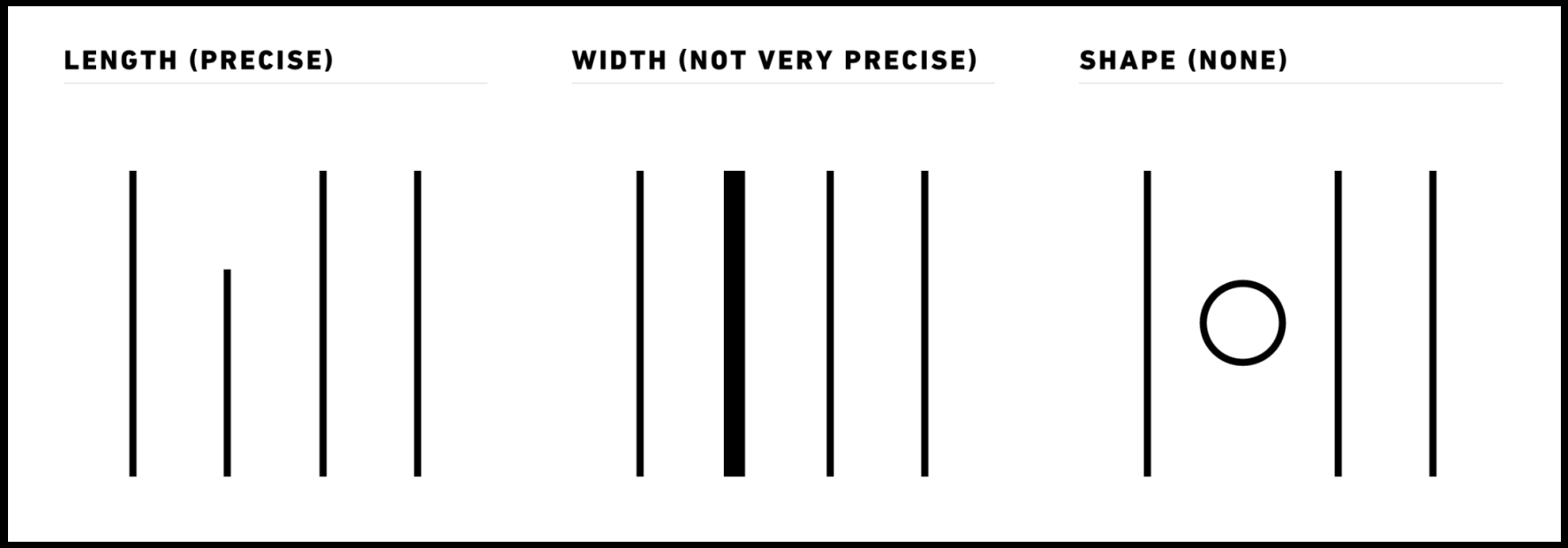
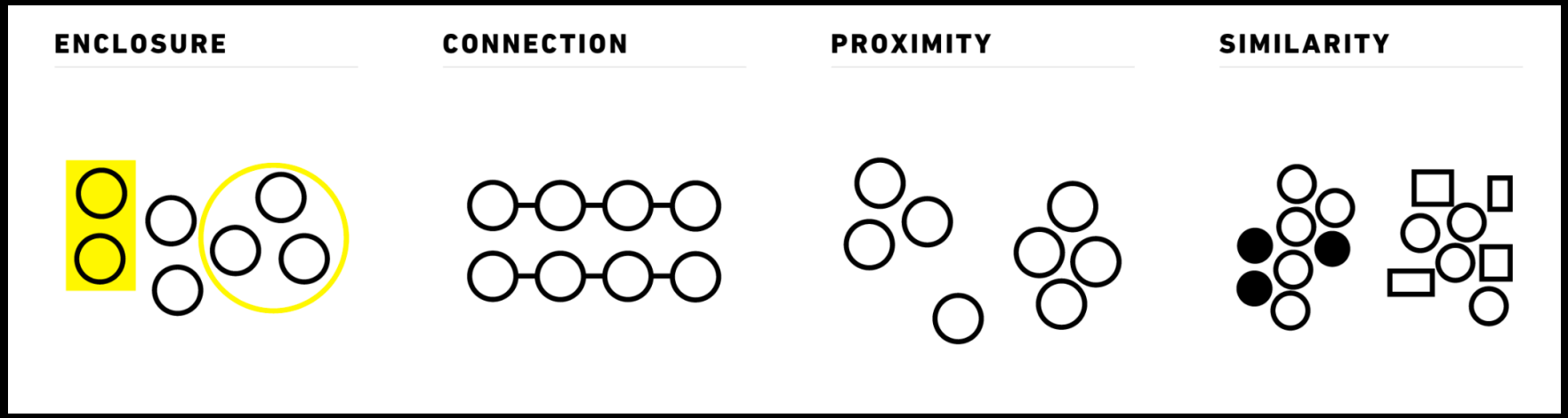


Perceiving Values

Perceiving Values



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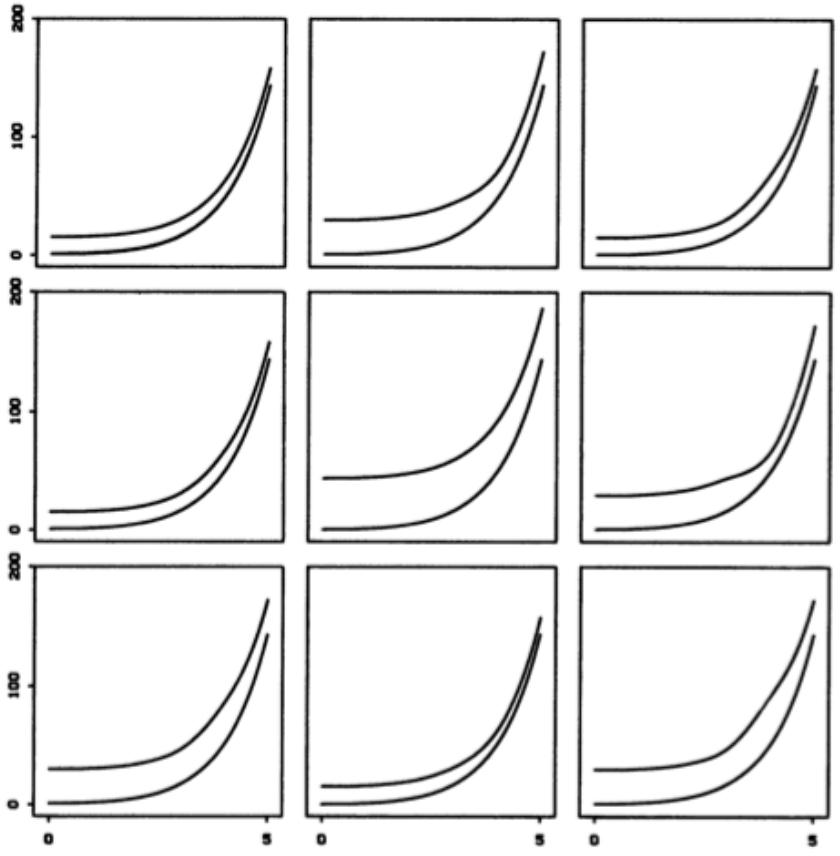


Figure 26. Curve-difference chart.

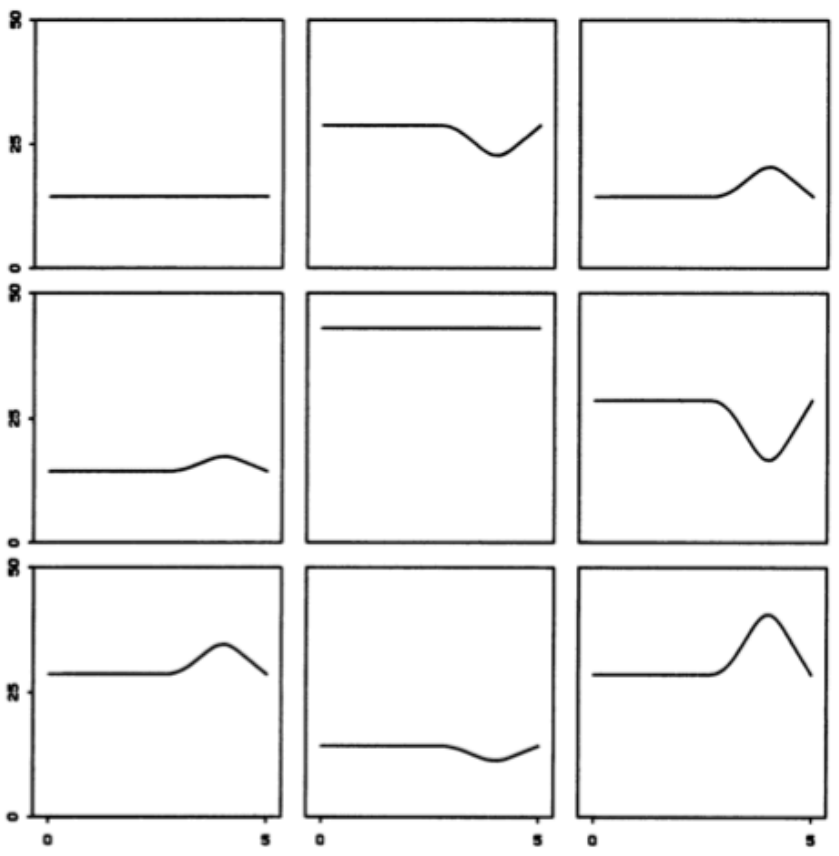
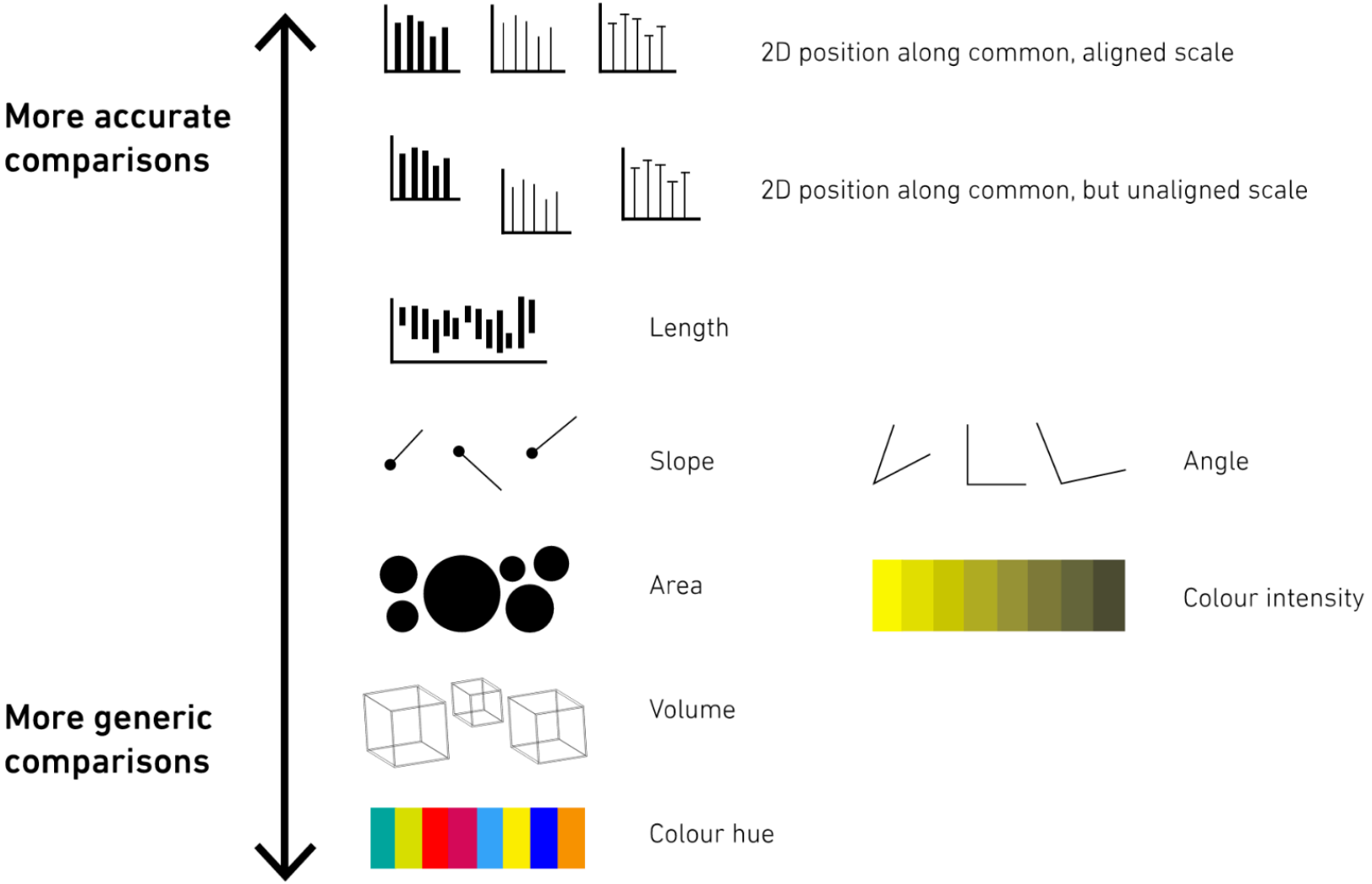


Figure 27. Curve differences.

Perceiving Values



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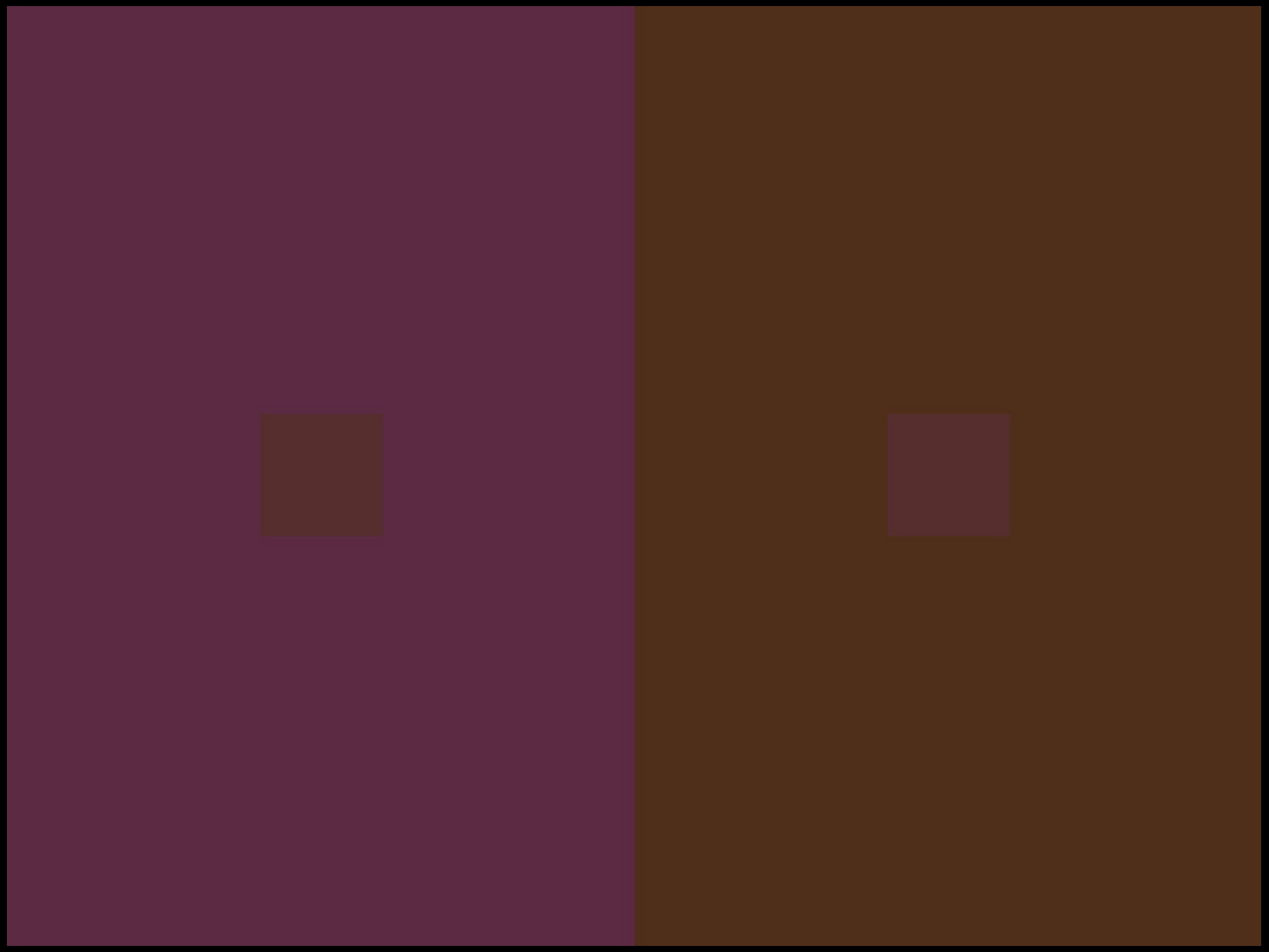

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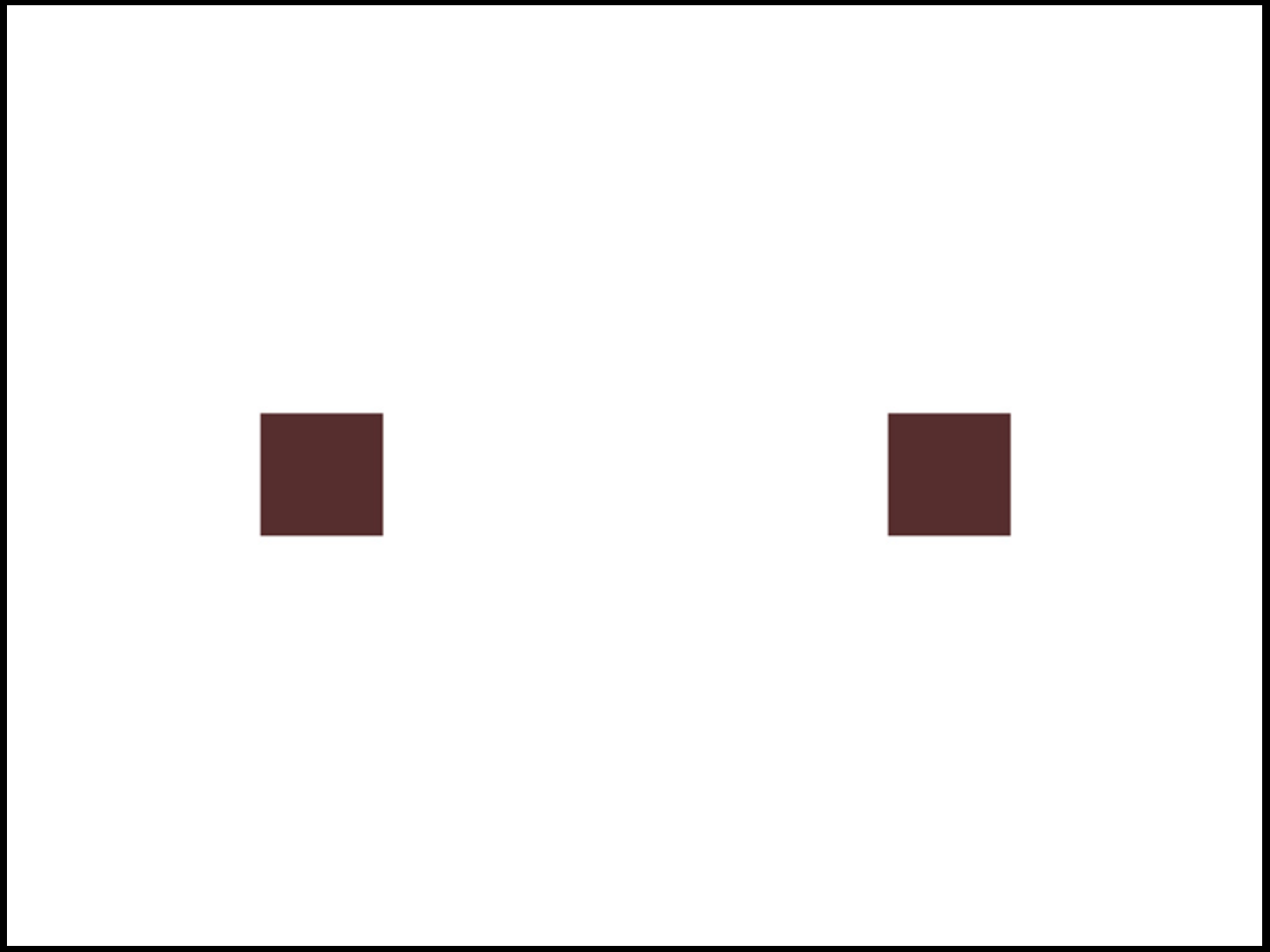
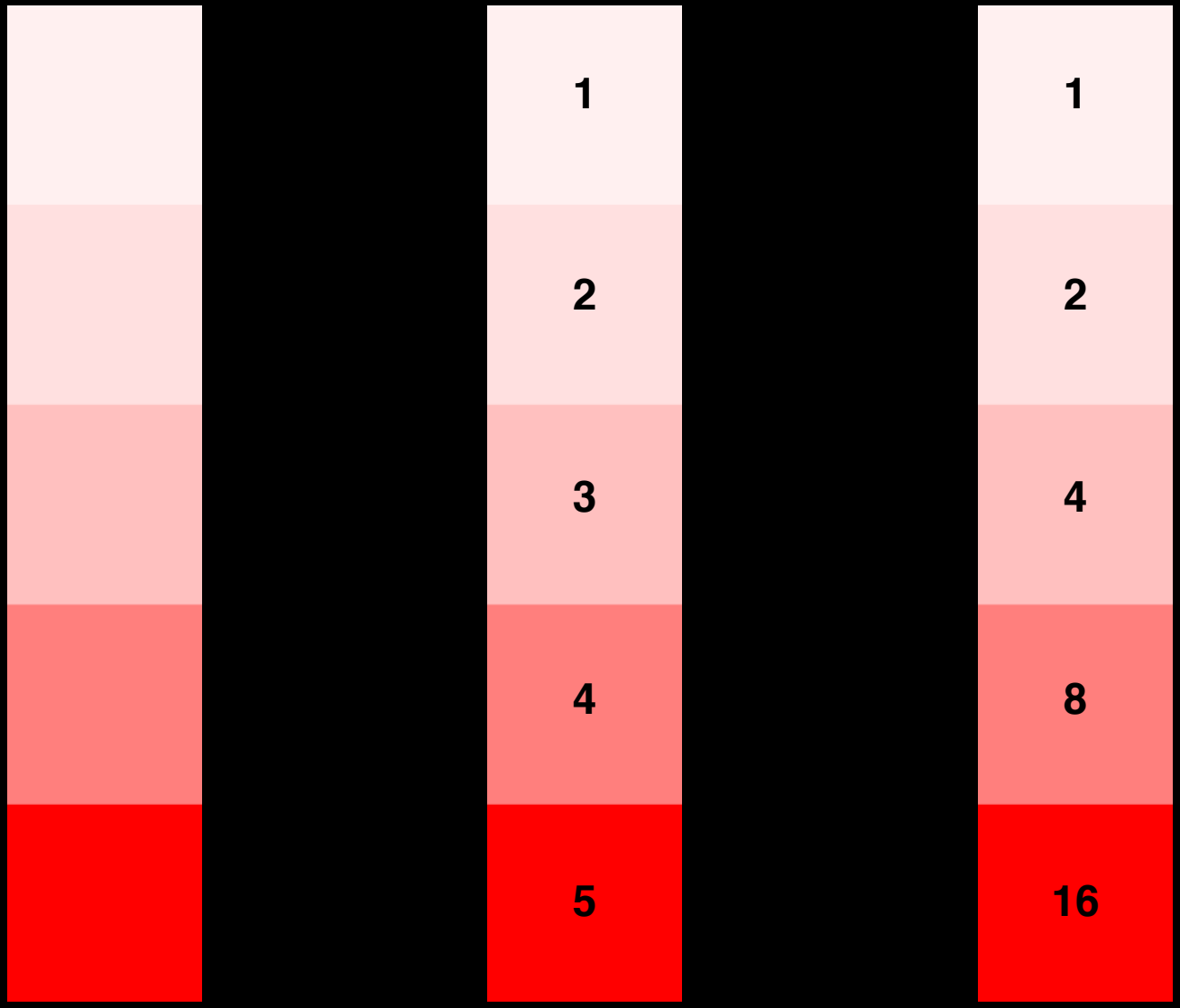


Perceiving Values

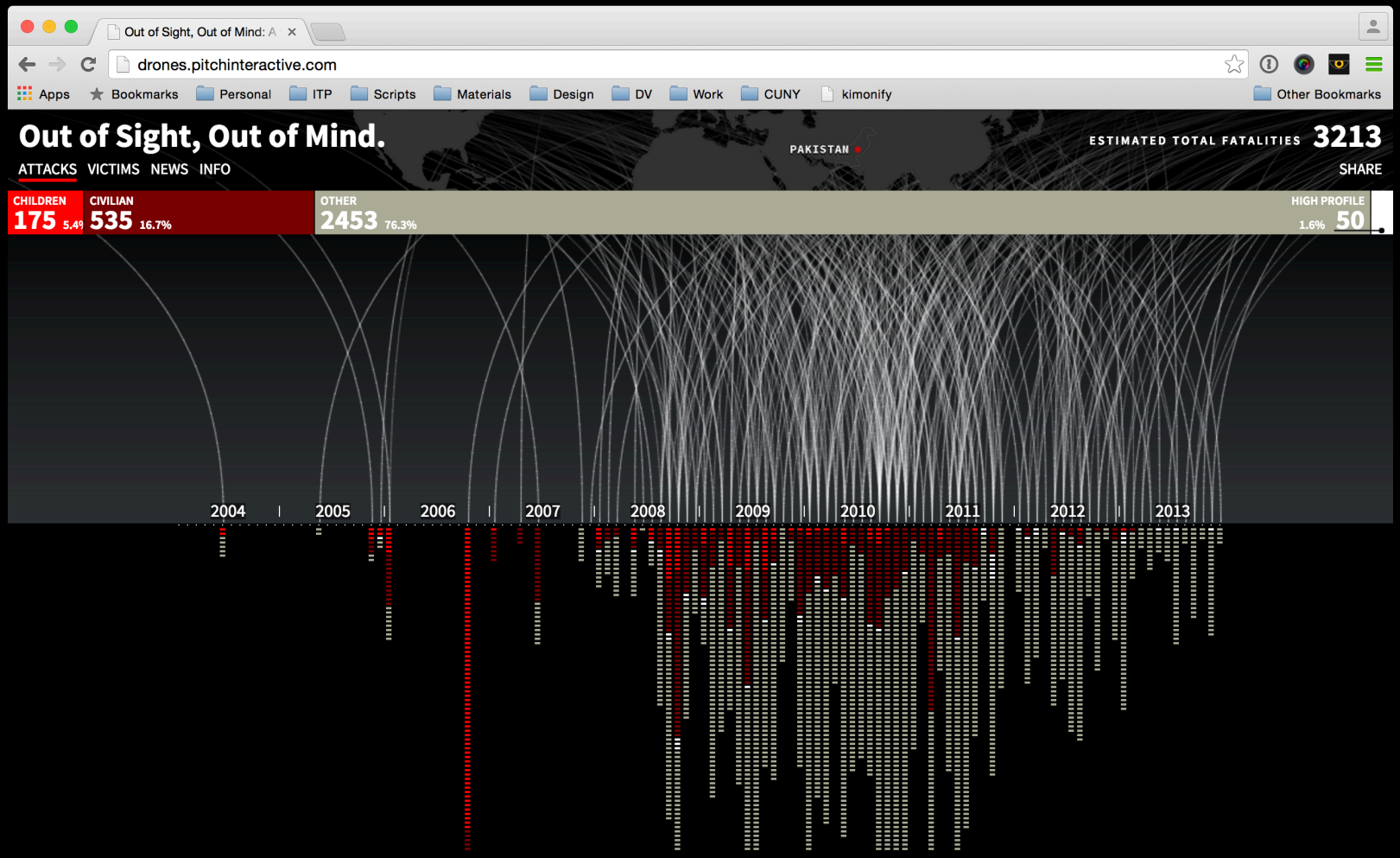
Perceiving Values



Perceiving Values

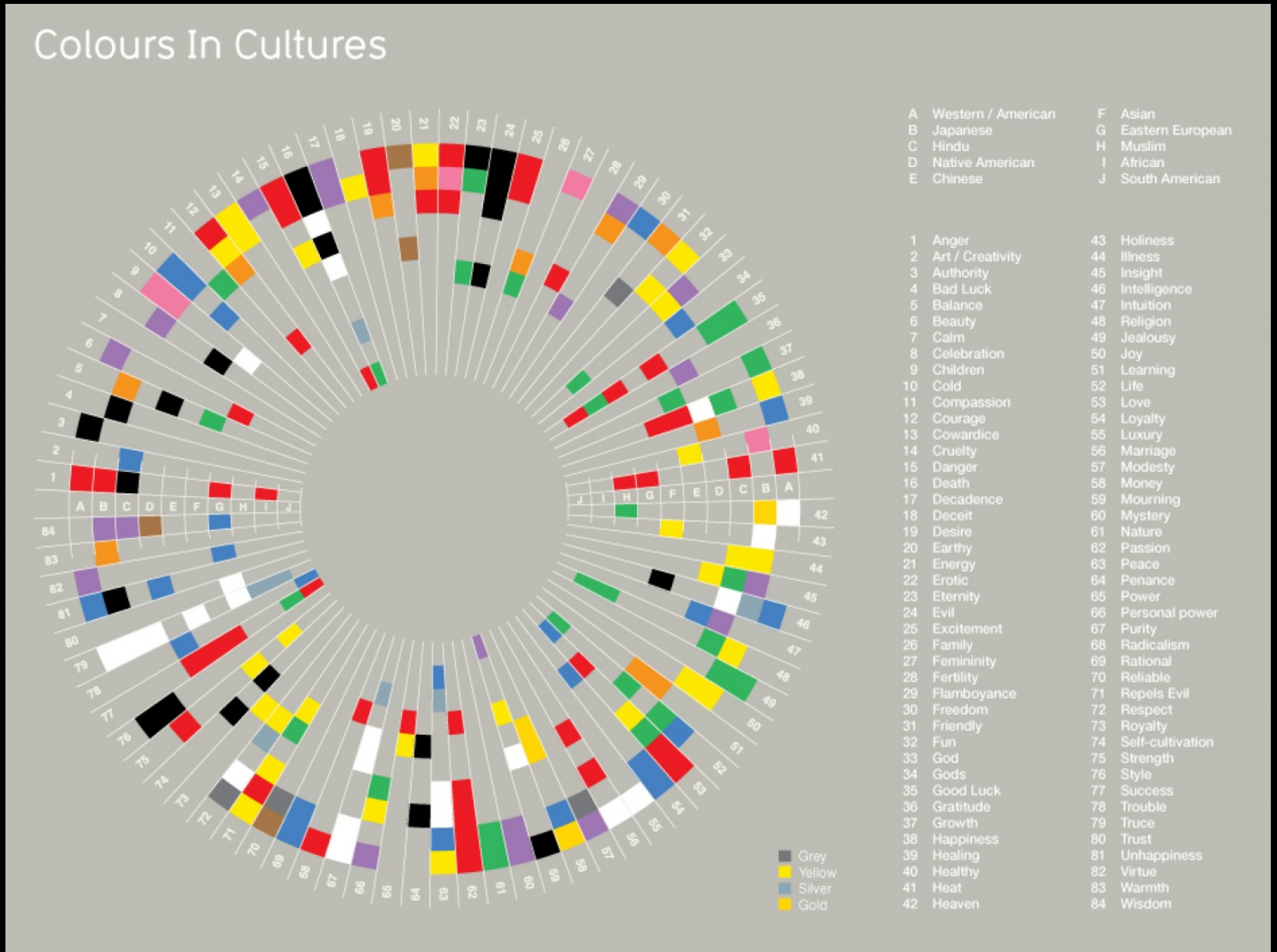
Perceiving Values

Perceiving Values



drones.pitchinteractive.com

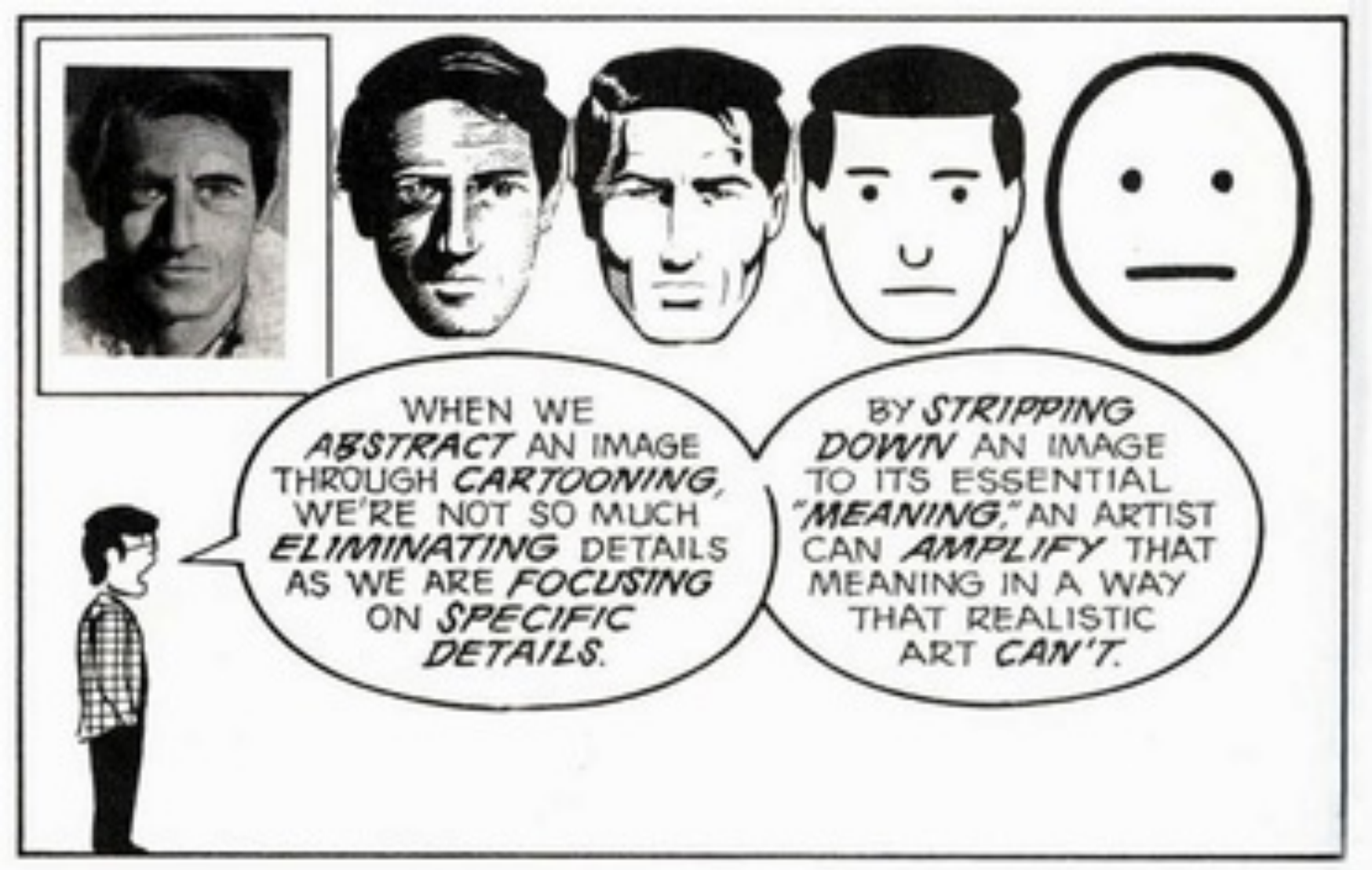
Perceiving Values



Perceiving Values

	Death	Love
Western/American	Black	Red
Japanese	Black	Red
Hindu	White	Green
Native American	Black	Yellow
Chinese	White	
Asian		
Eastern European		Red
Muslim	Light Blue	
African		Green
South American	Green	

Perceiving Values



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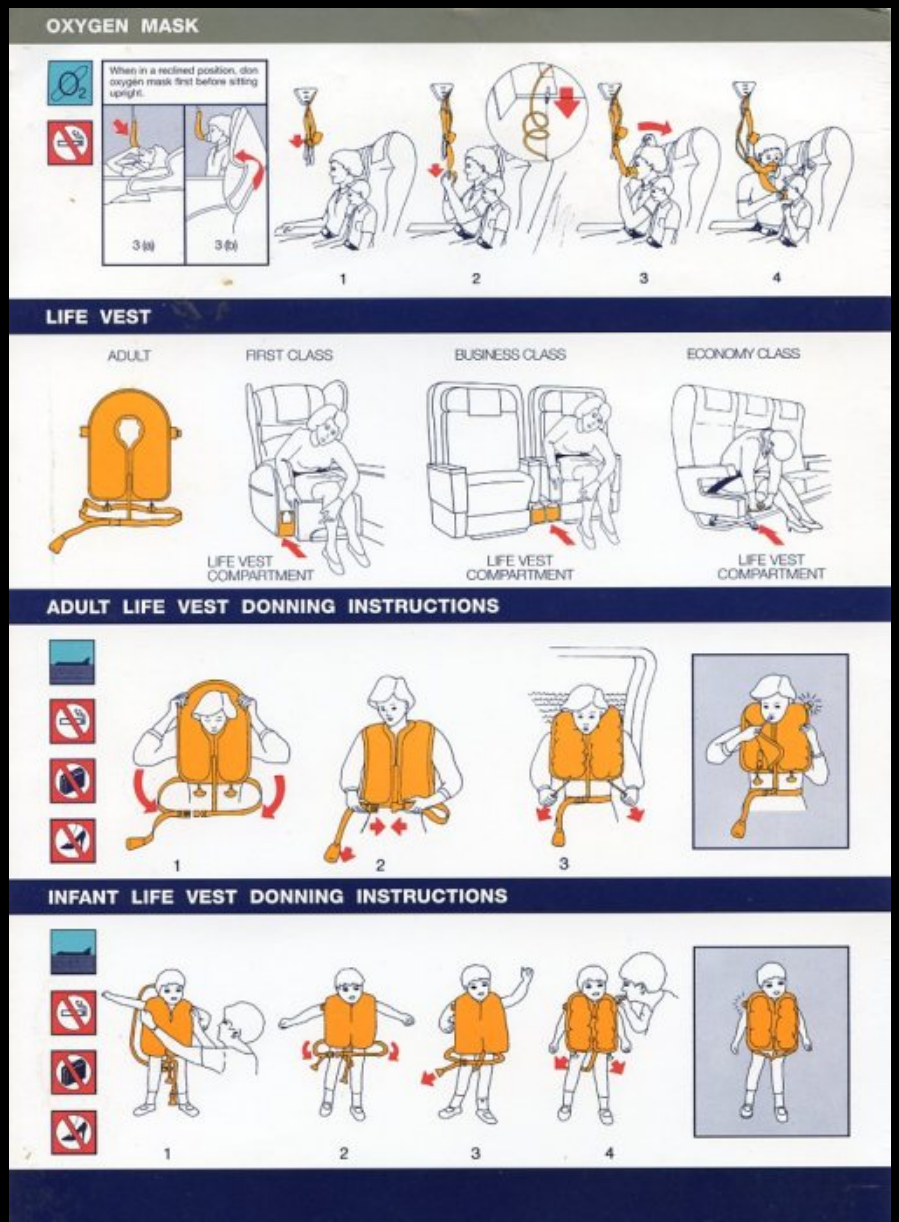
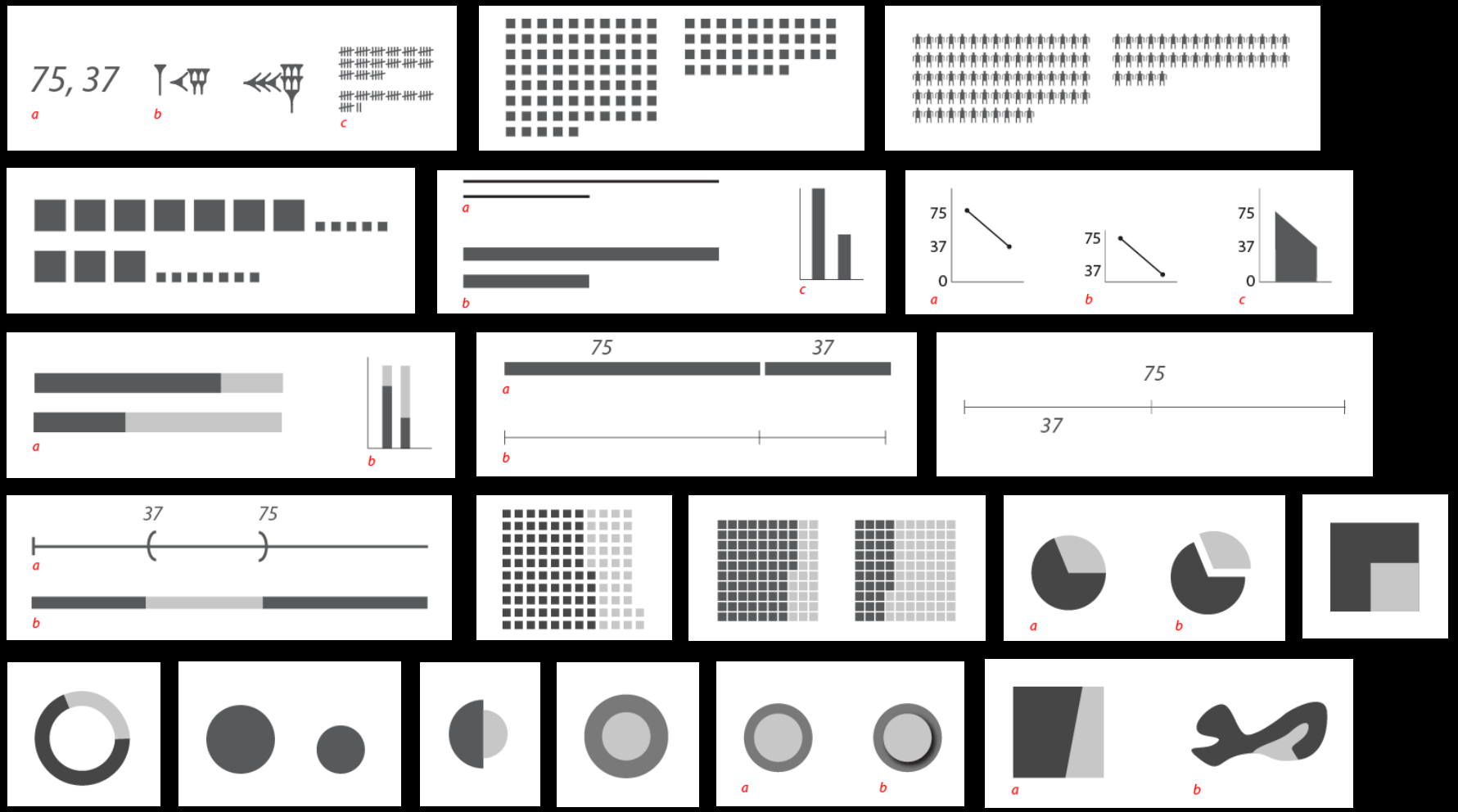


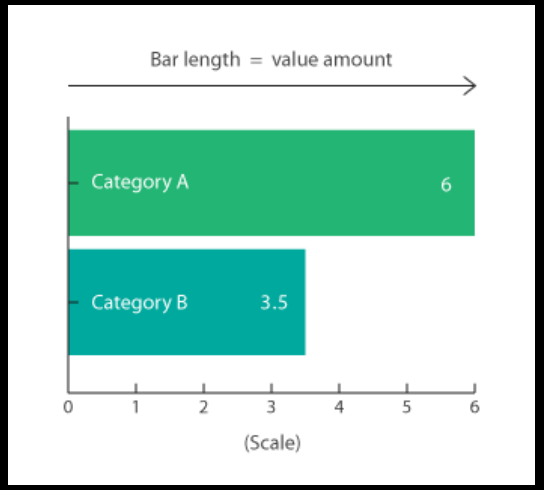
Perceiving Values

Perceiving Values



http://blog.visual.ly/45-ways-to-communicate-two-quantities/

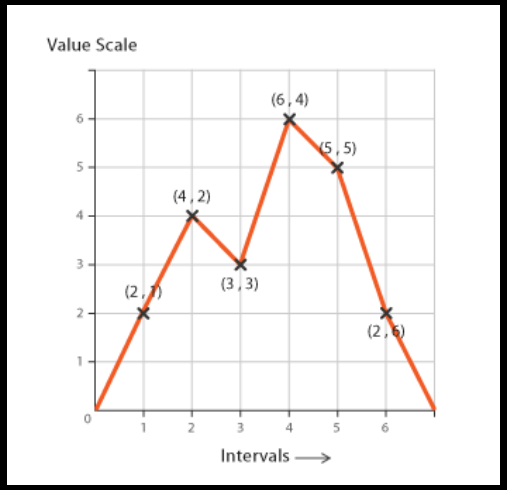
Perceiving Values



Bar Chart

Categorical Data

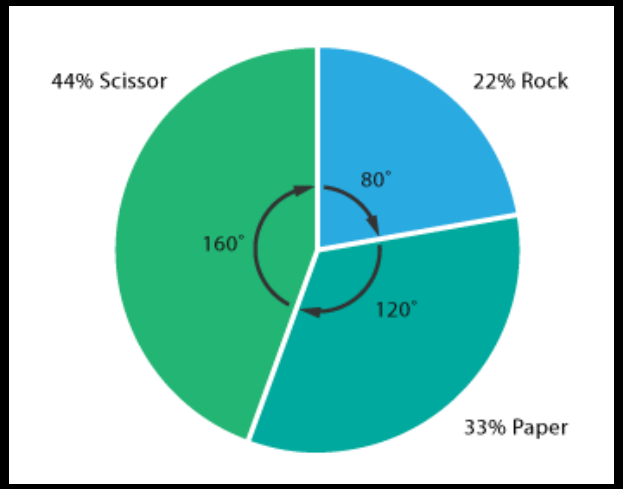
Apples, Oranges and Bananas



Line/Area Chart

Time Based Data

1991, 1992, 1993, 1994



Pie/Donut Chart

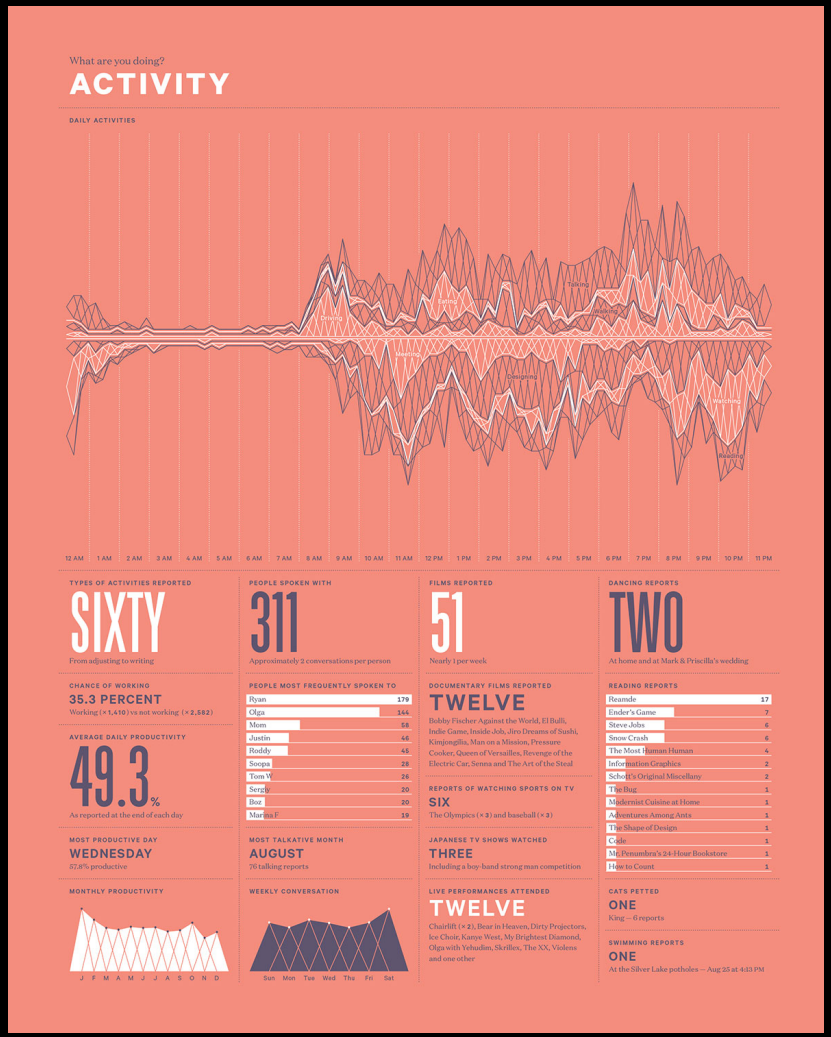
Parts of a Whole

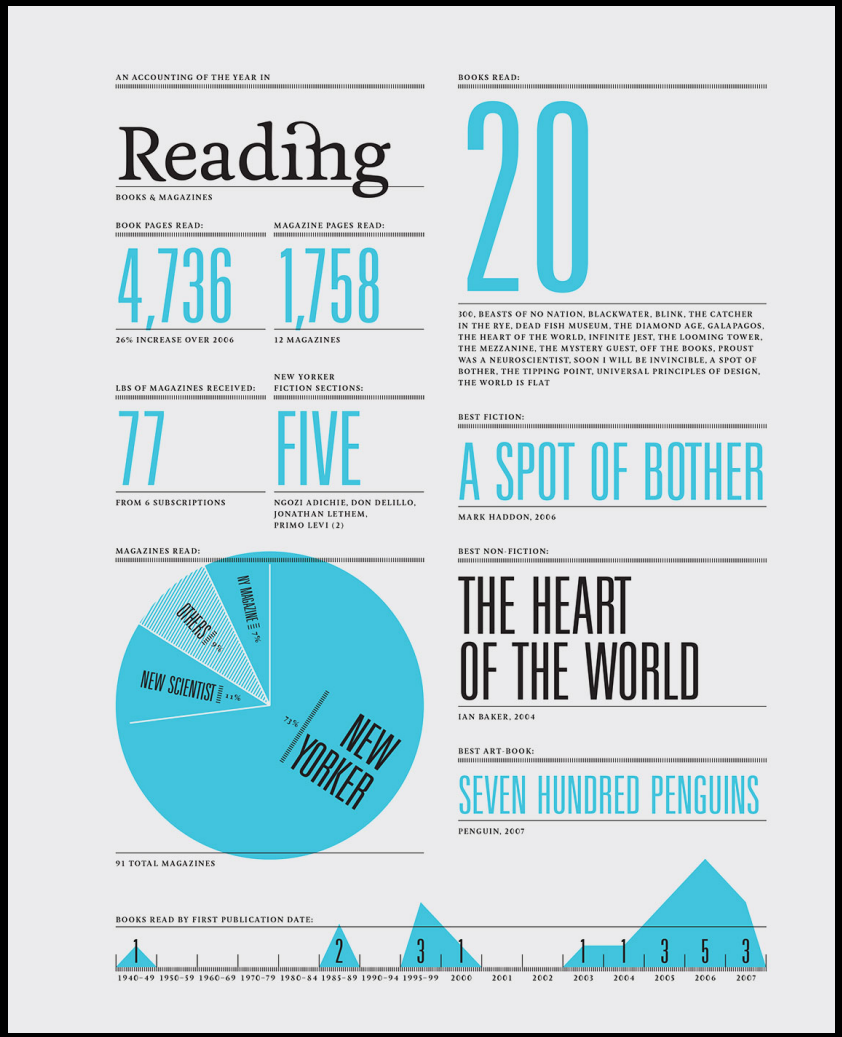
44%, 22%, 33%

Must add up to 100%

http://datavizcatalogue.com/

Perceiving Values





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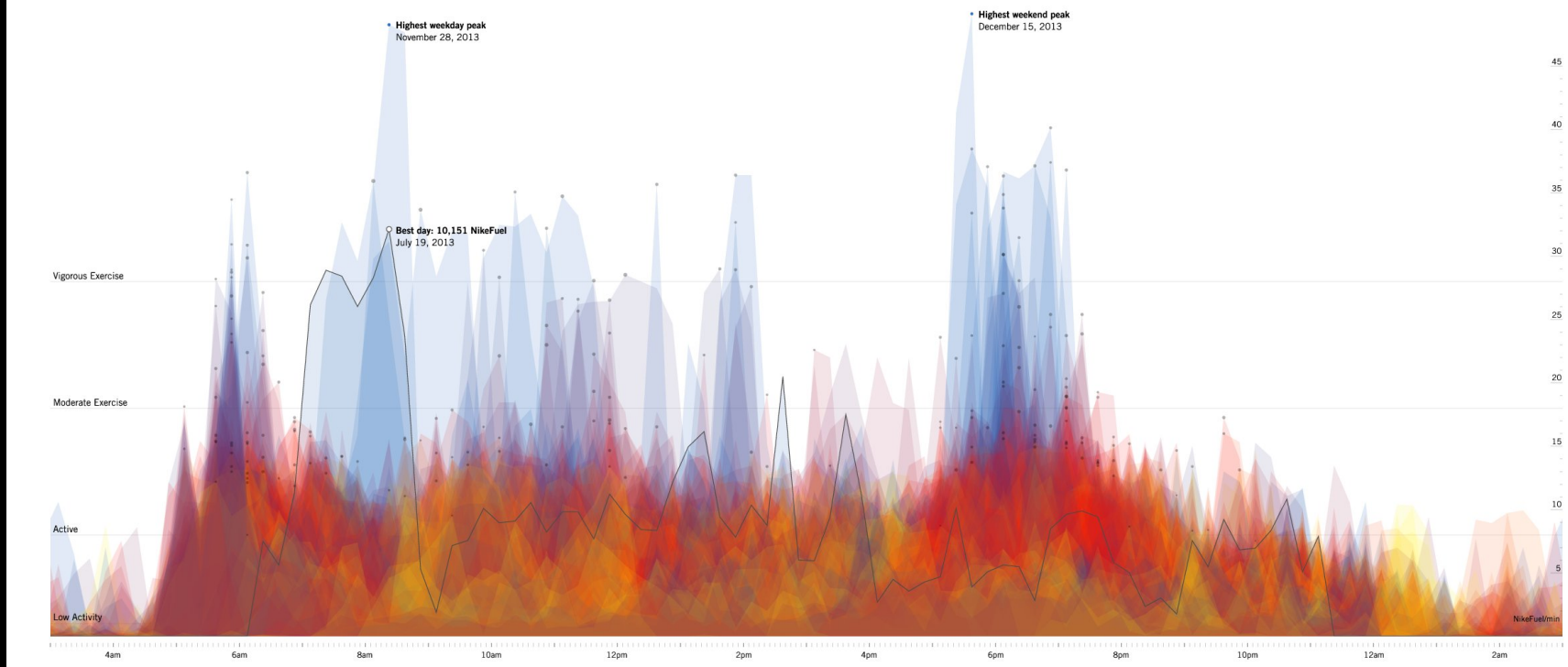
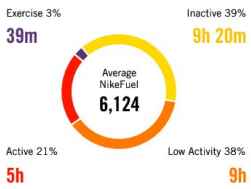


2013 YEAR IN NIKEFUEL

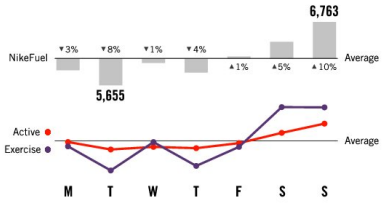
NICHOLAS A.

- Vigorous Exercise
- Moderate Exercise
- Active
- Low Activity
- Inactive

DAILY MOVEMENT



WEEKLY MOVEMENT



WEEKLY EXERCISE

See the U.S. Department of Health and Human Services' Physical Activity Guidelines at hhs.gov for recommended physical activity levels.

WORKOUTS

3.0
Average per week

66%
Weeks with 3+ workouts

Workout: 18+ NikeFuel per minute for 30+ consecutive minutes

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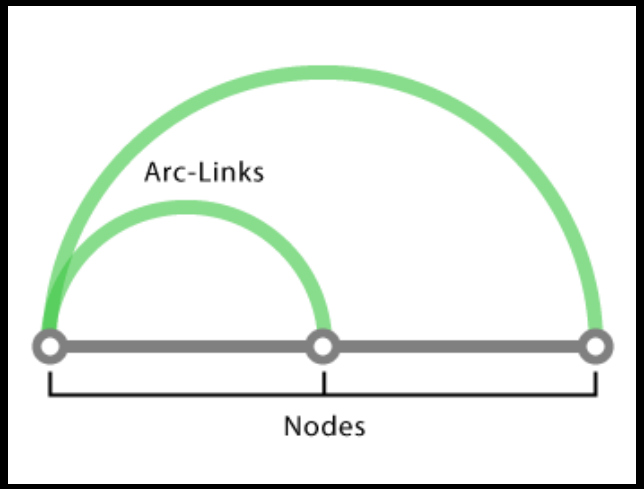
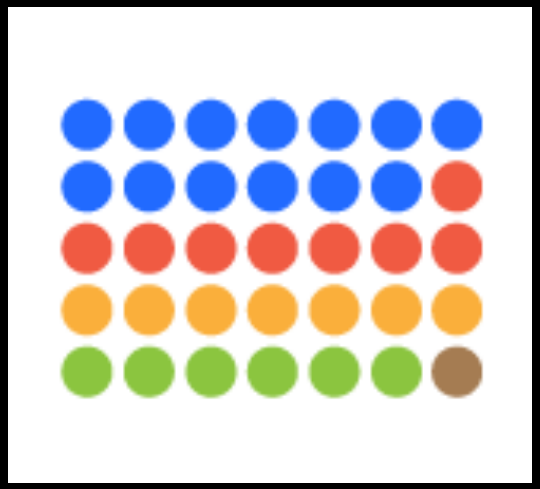
Perceiving Values



Node-Based Chart

Network Data

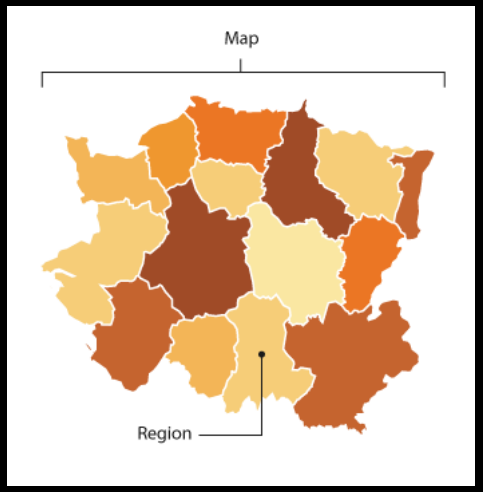
John is connected to Sally, Sarah and Chris



Dot Matrix

Categorical Data

Apples, Oranges and Bananas



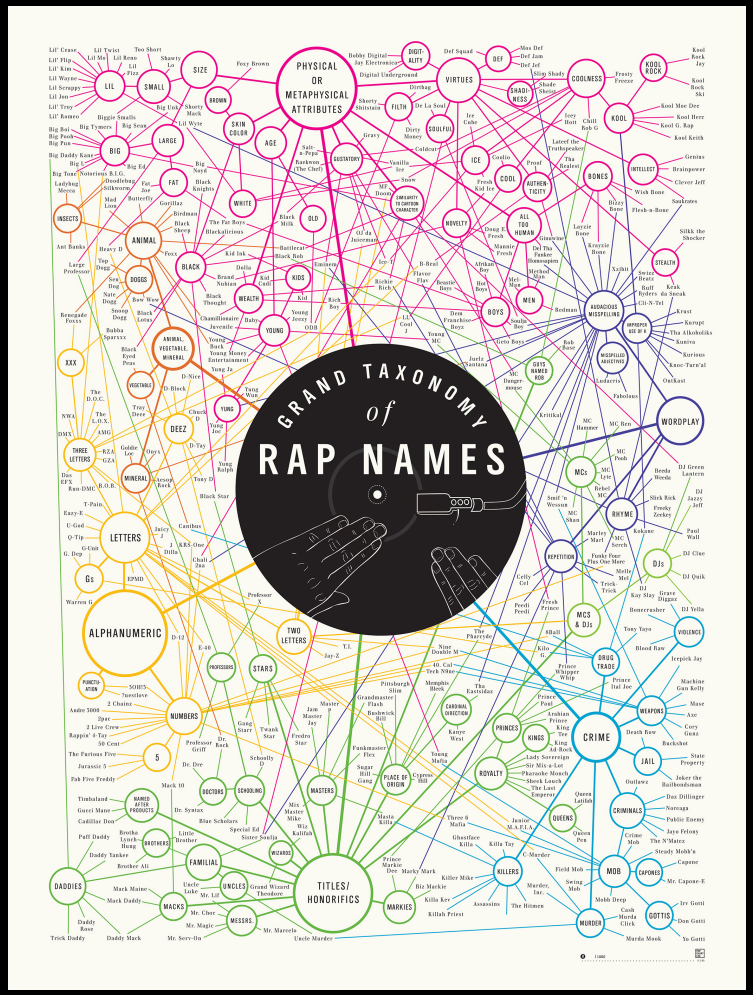
Choropleth Map

Geographical Data

New York, Hawaii, Alaska

http://datavizcatalogue.com/

Perceiving Values



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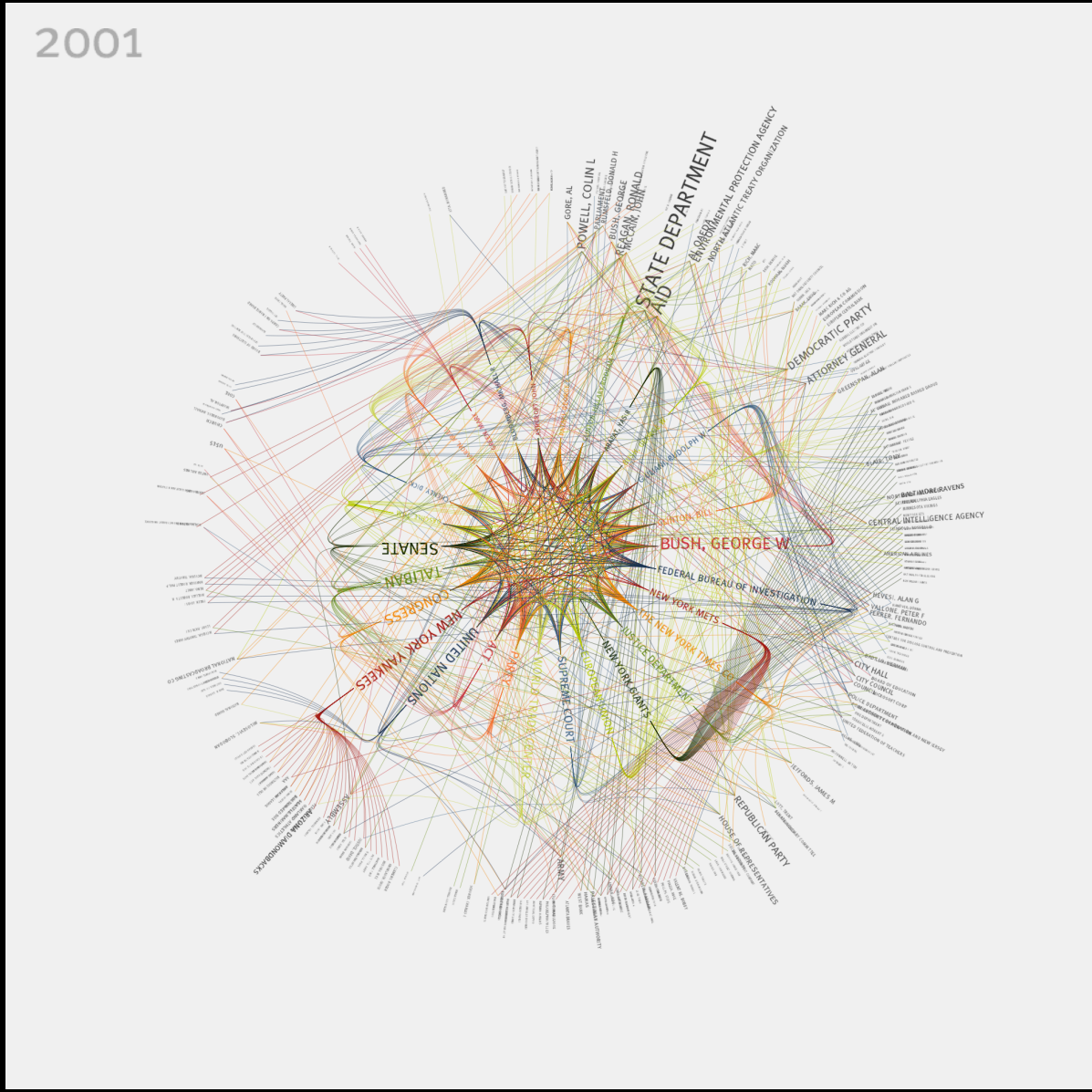

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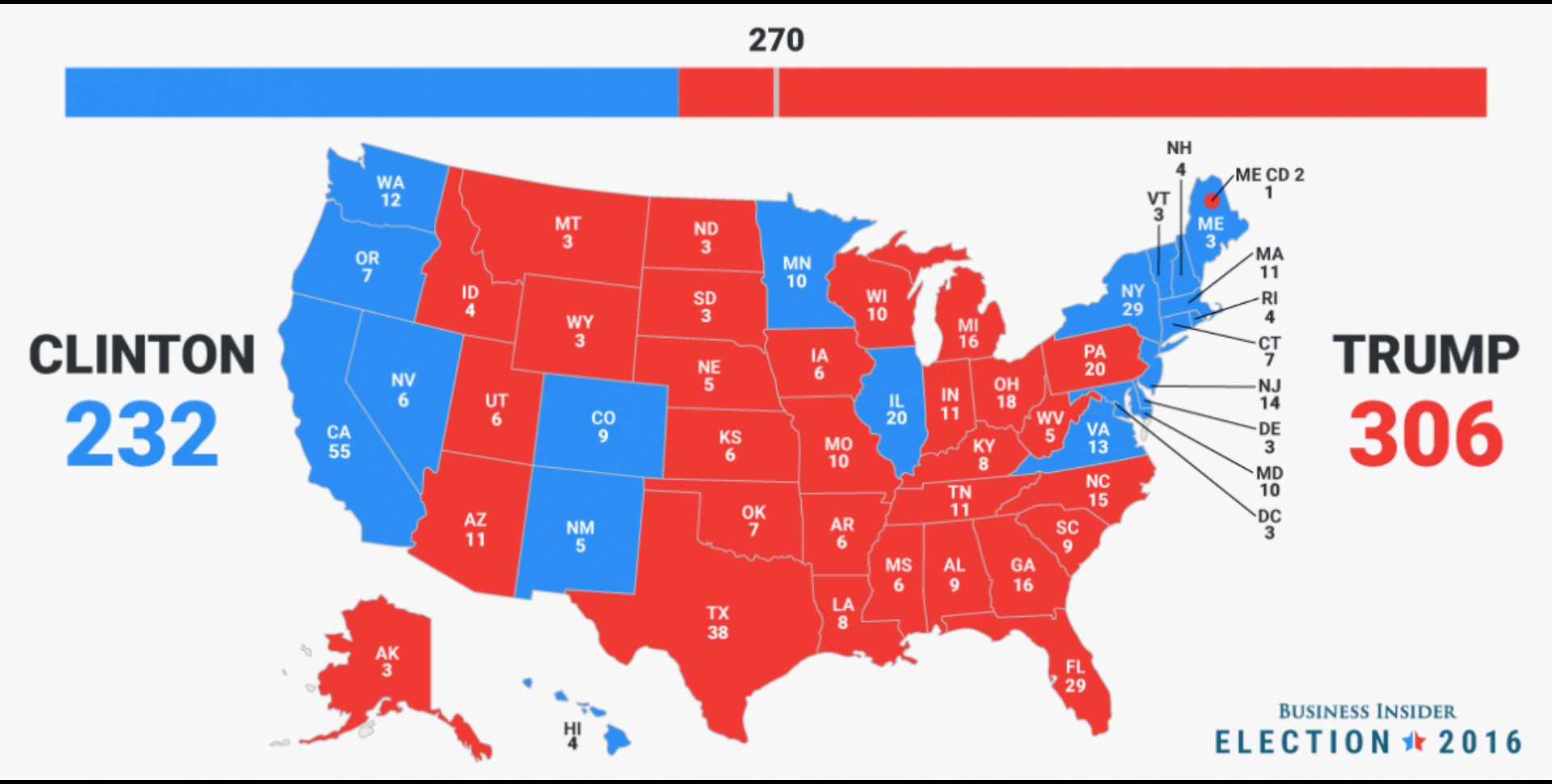

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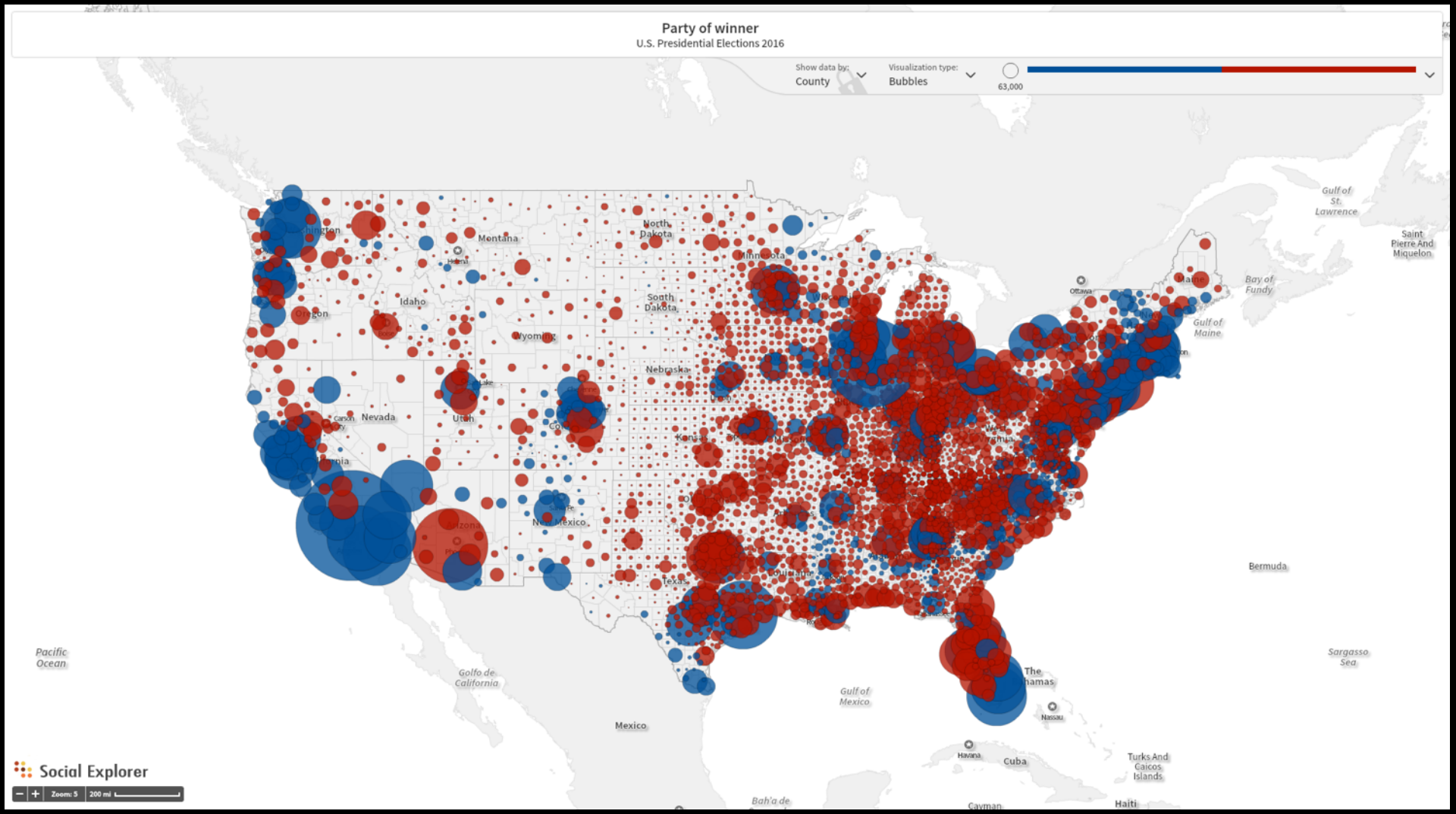

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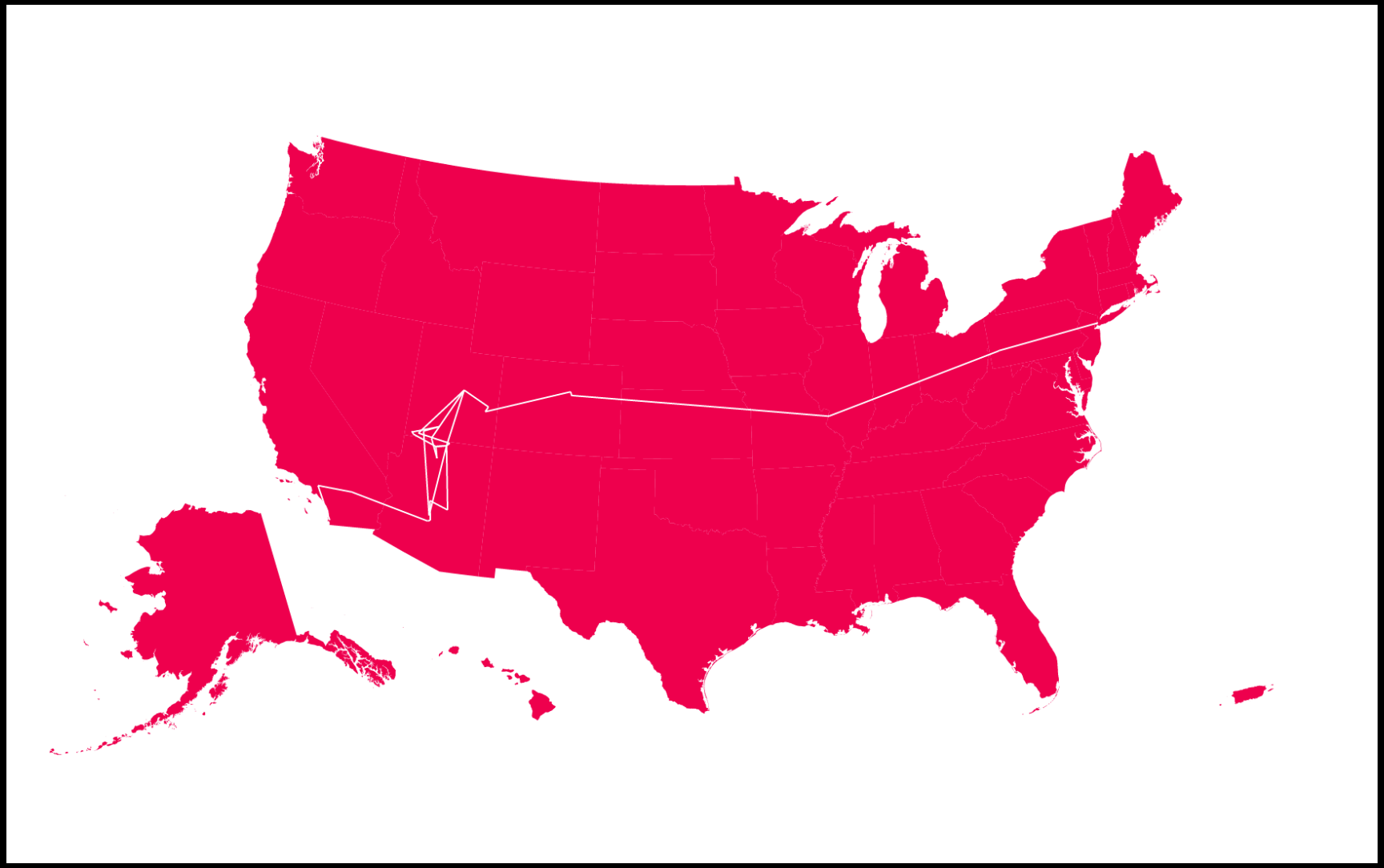

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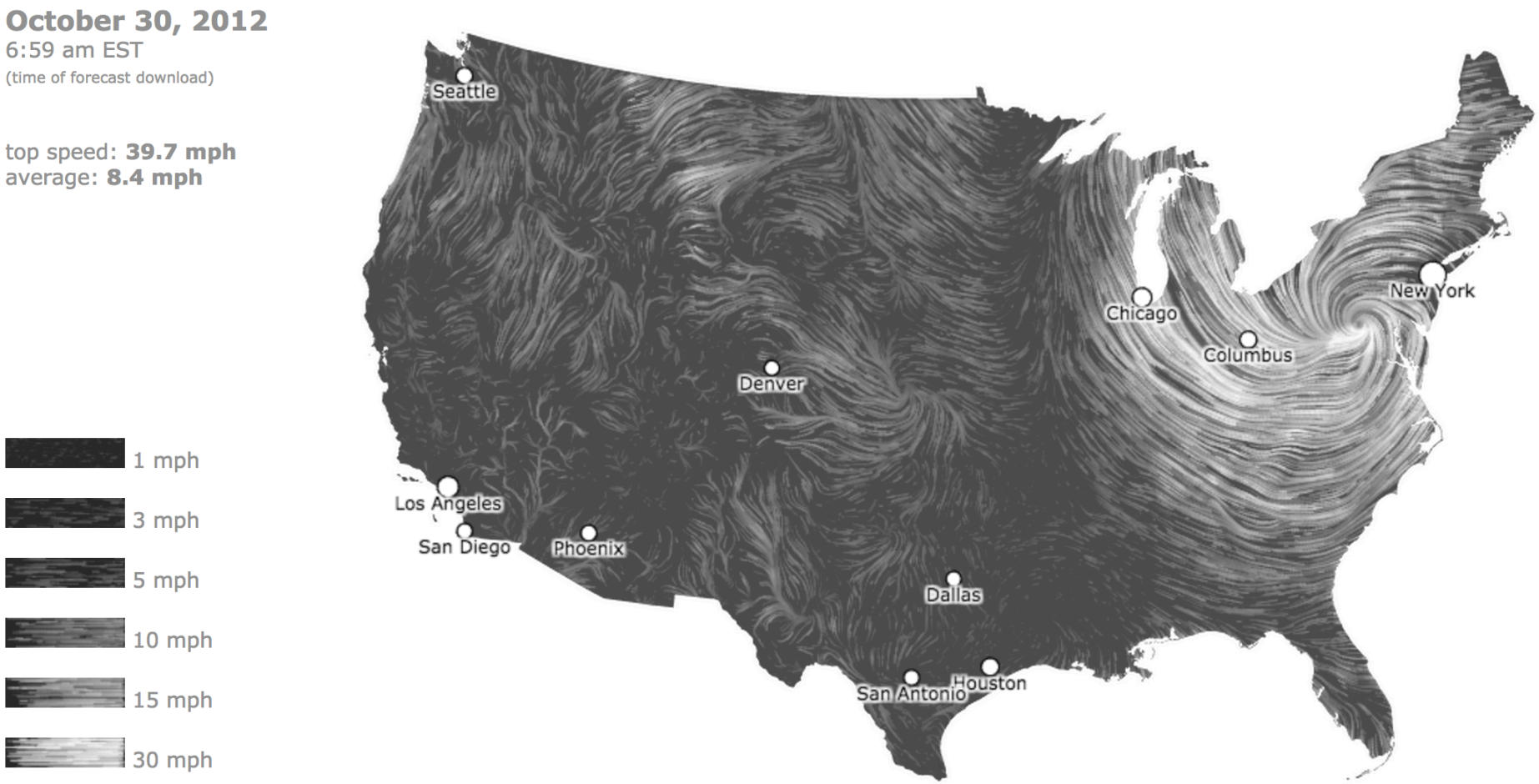
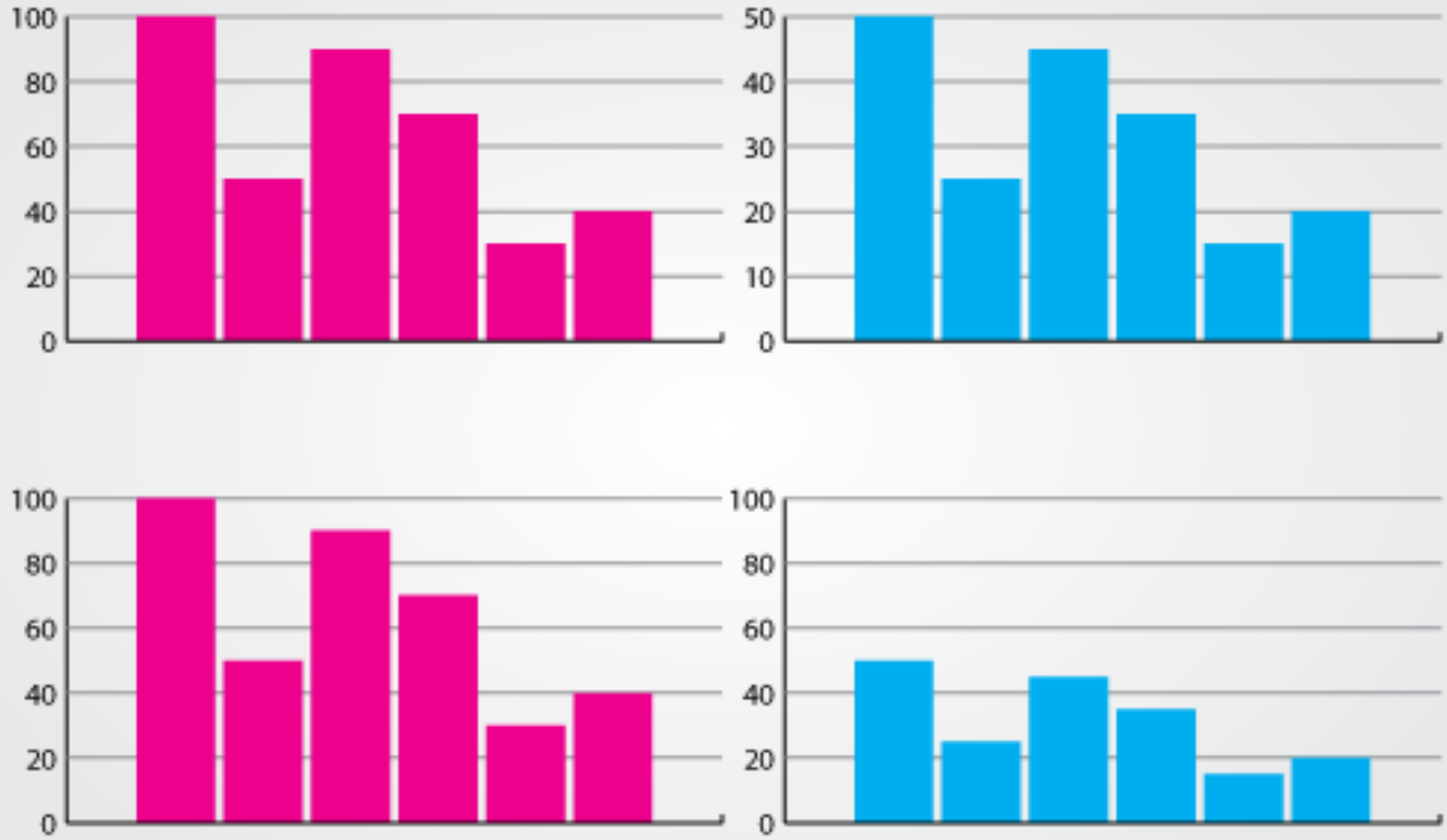


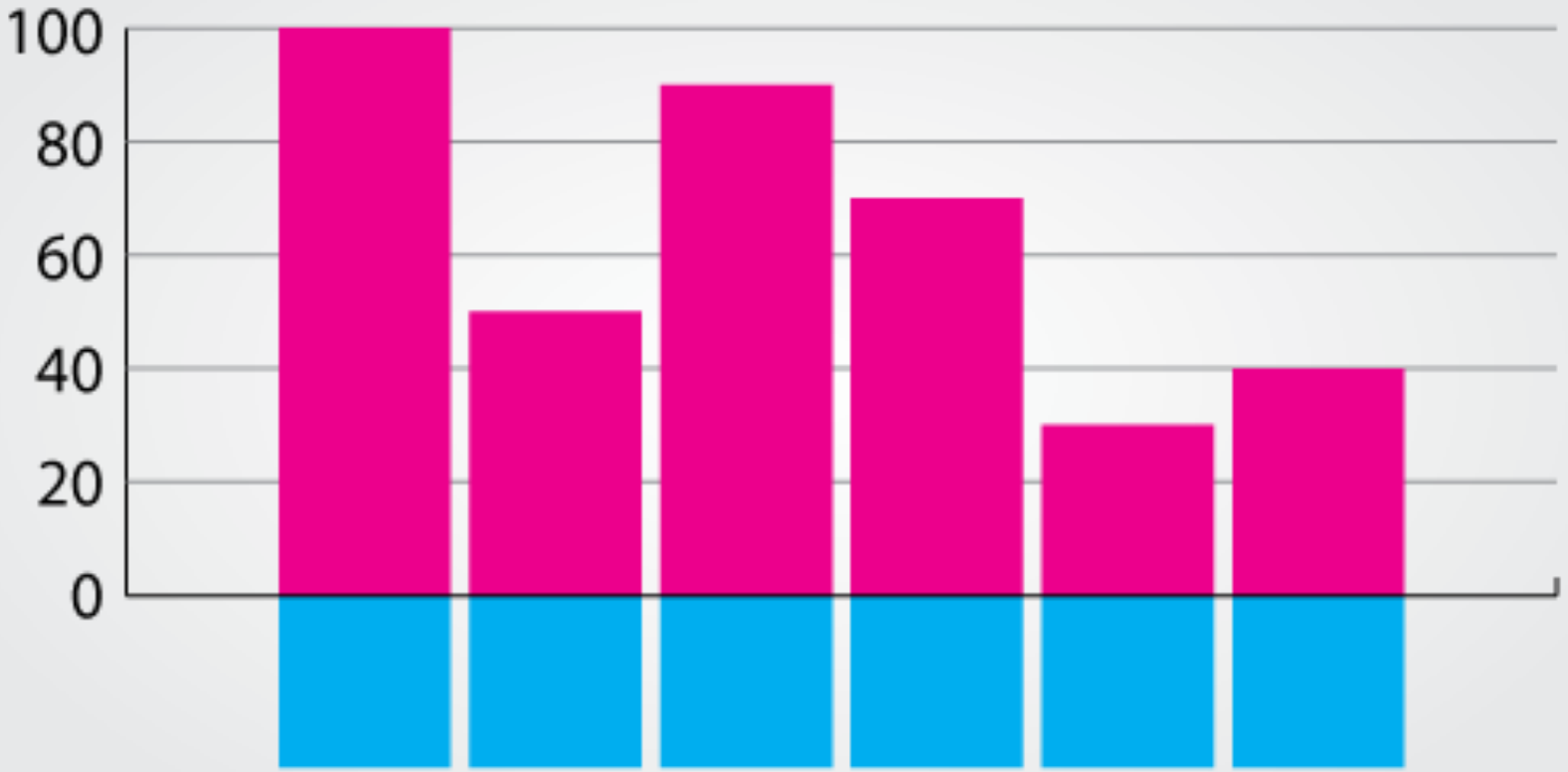
Perceiving Values

http://datavizcatalogue.com/

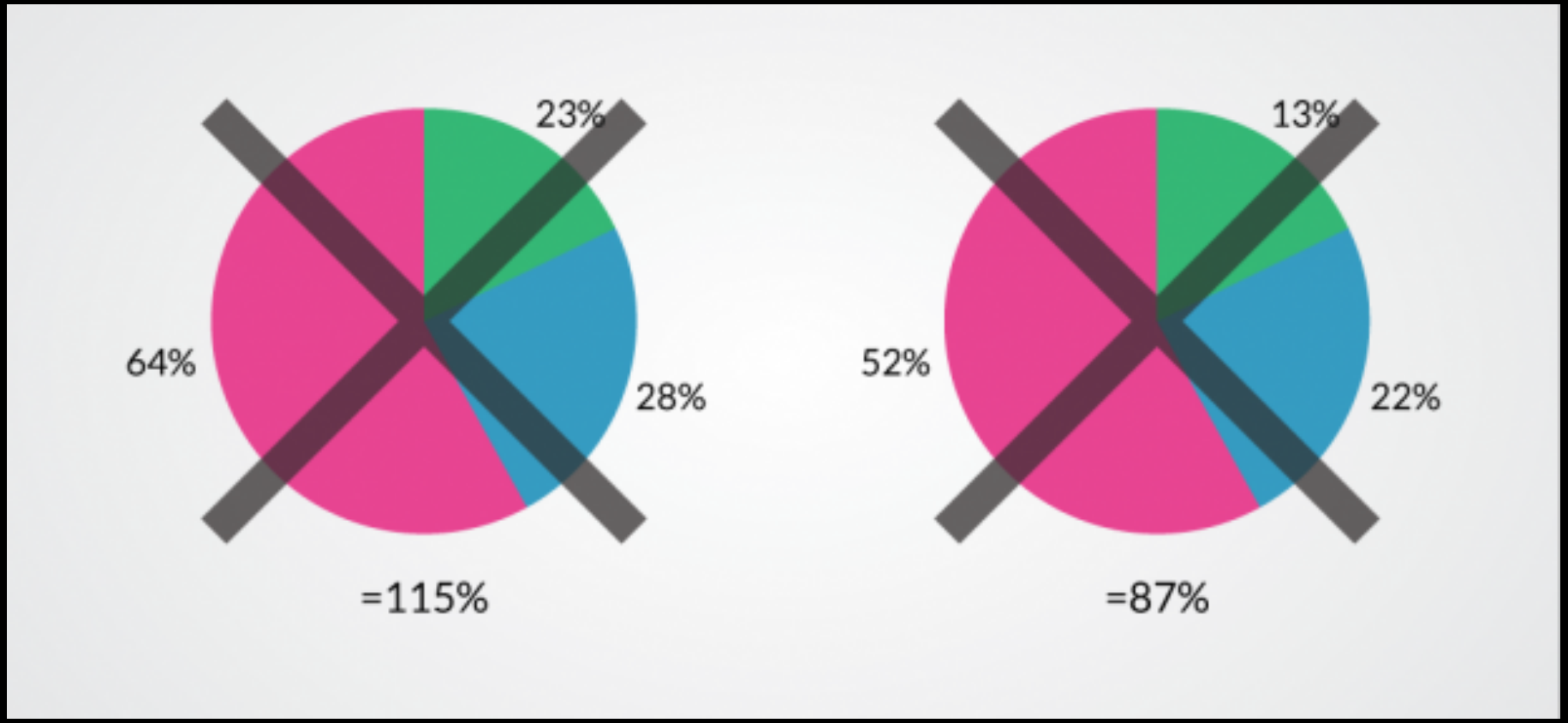
Design – Bad Habits



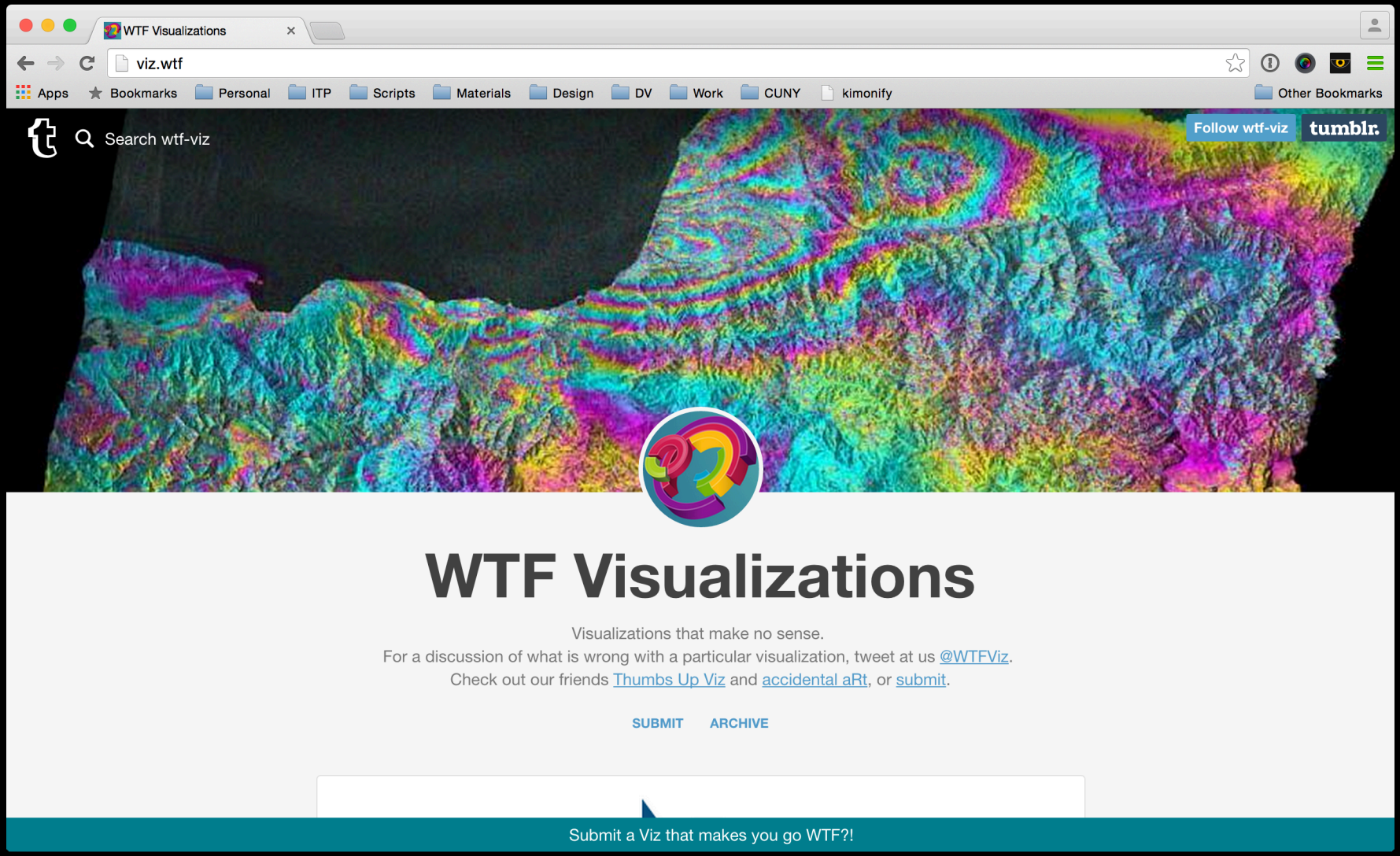
Design – Bad Habits



Design – Bad Habits



Design – Bad Habits



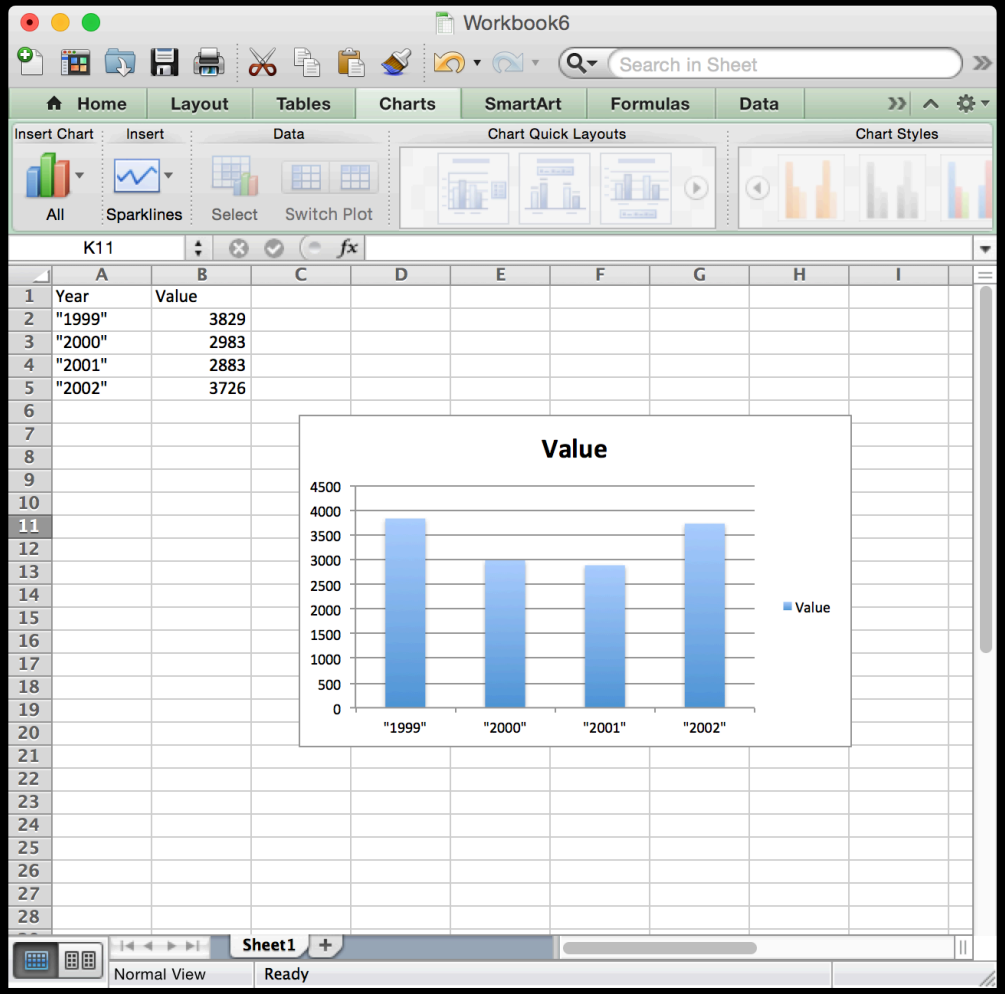
viz.wtf

Tools

Adobe Illustrator

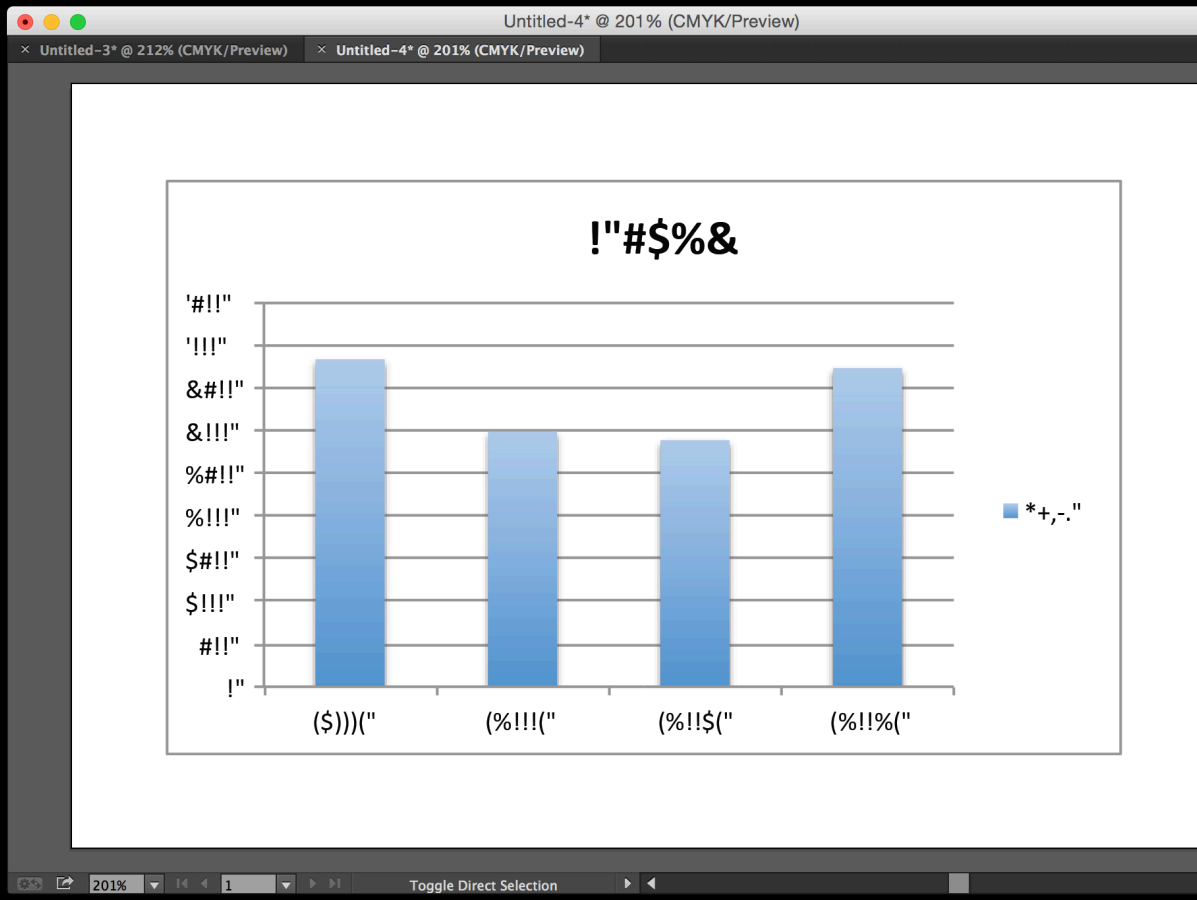
What not to do

Tracing from Image



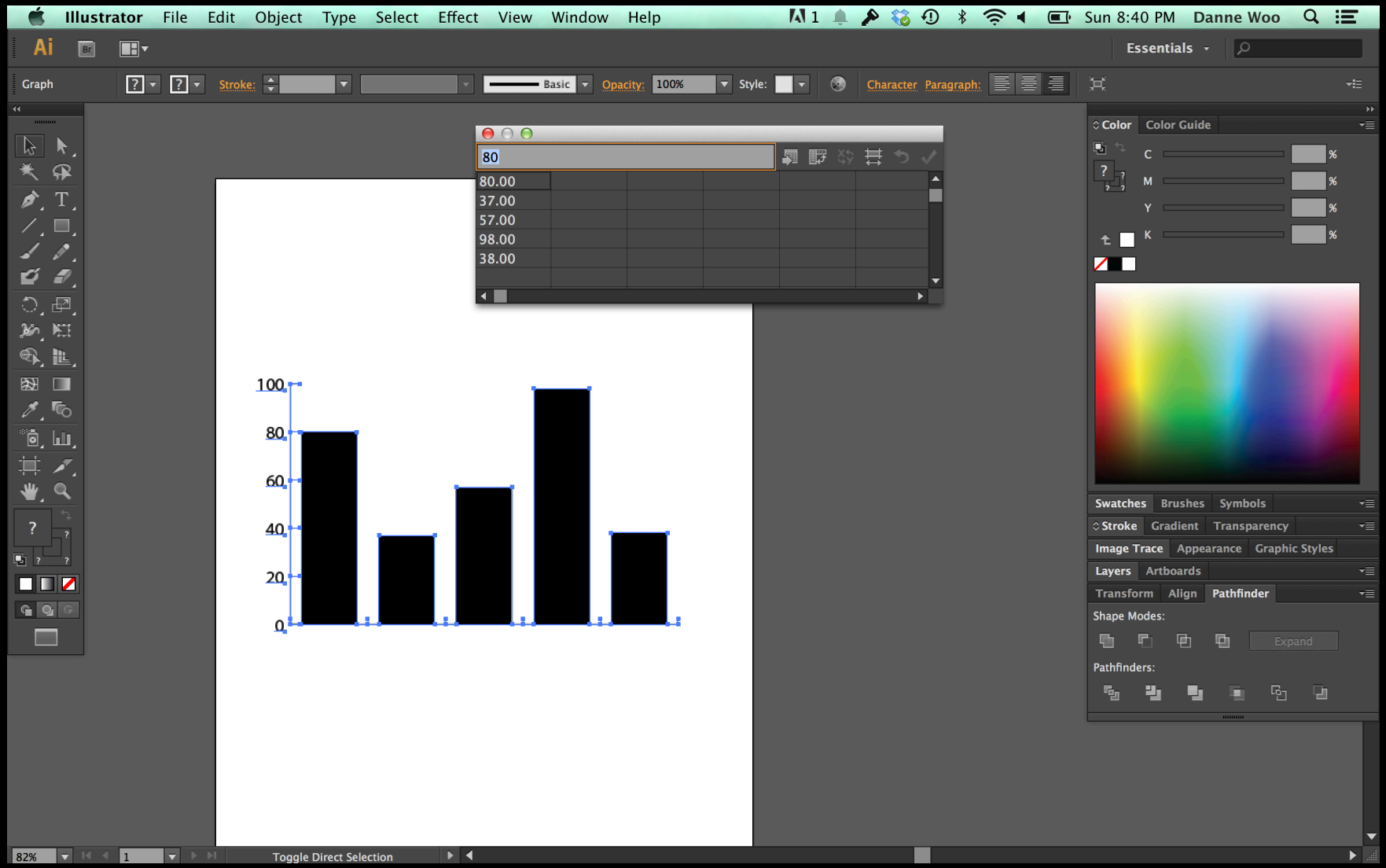
What not to do

Copy and paste from another program like Excel (Slightly better than tracing)



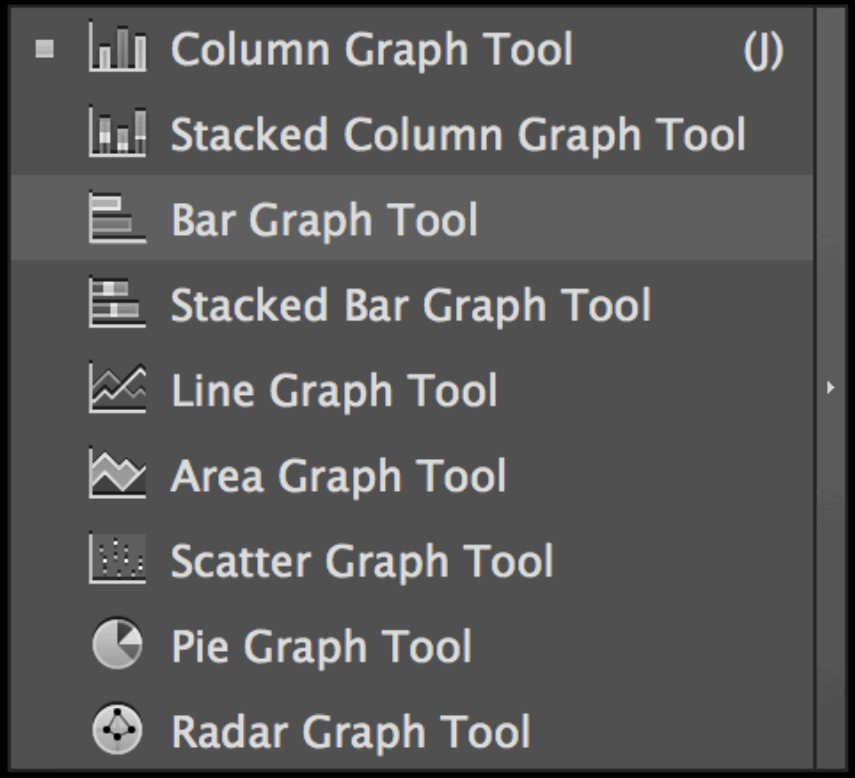
Adobe Illustrator

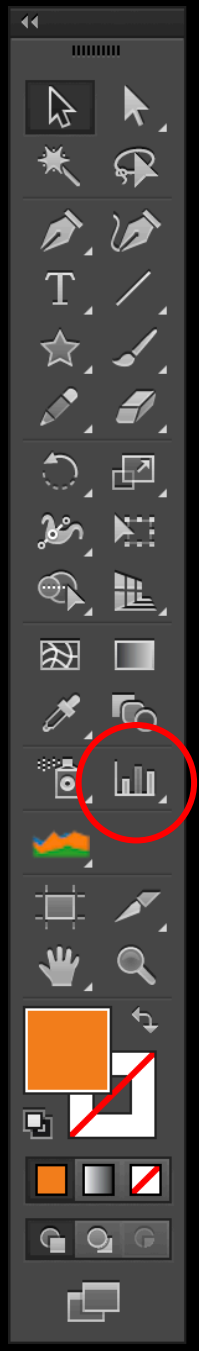
Graphing Tool



Adobe Illustrator

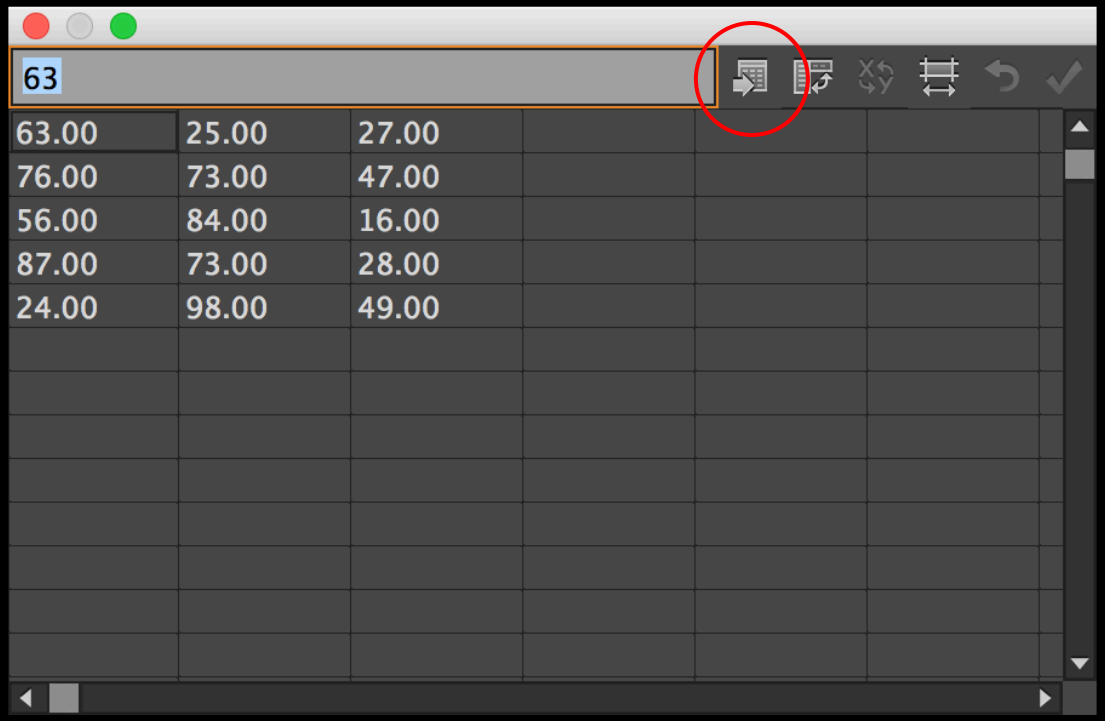
Graphing Tool





Adobe Illustrator

Data Input



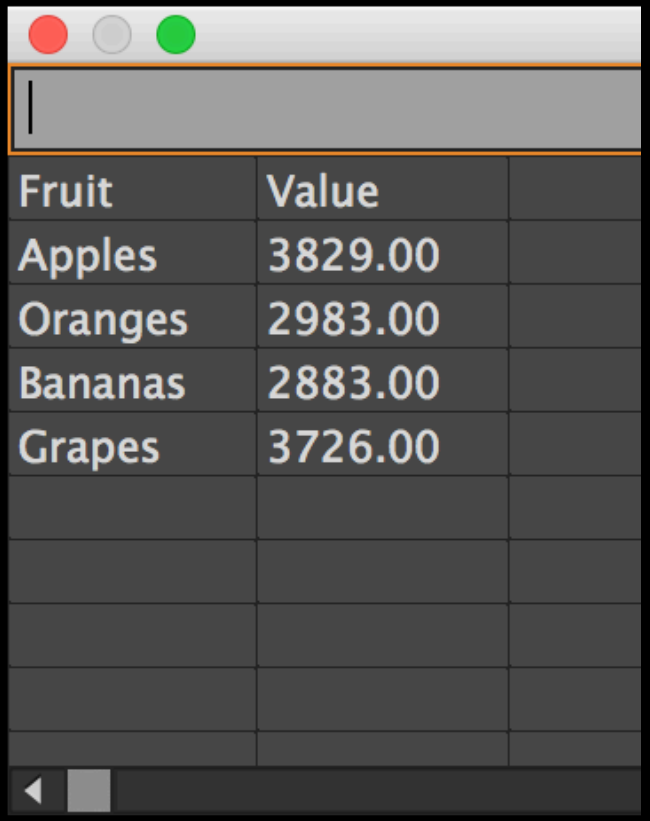
TSV

Tab Separated Values

Adobe Illustrator

Data Input Labels

Label - String



Fruit	Value
Apples	3829.00
Oranges	2983.00
Bananas	2883.00
Grapes	3726.00

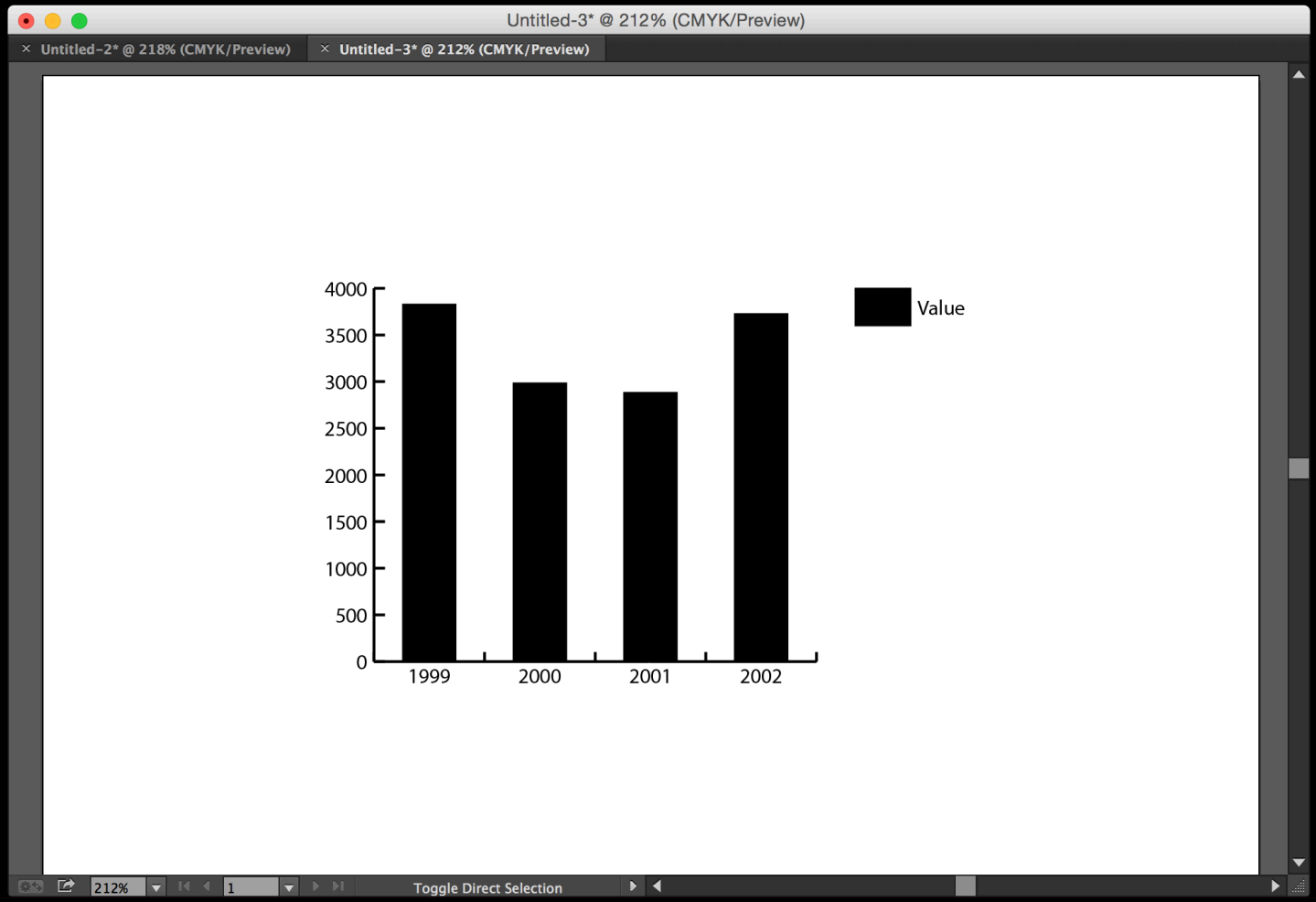
Label - Number

Year	Value
"1999"	3829.00
"2000"	2983.00
"2001"	2883.00
"2002"	3726.00

Adobe Illustrator

Result

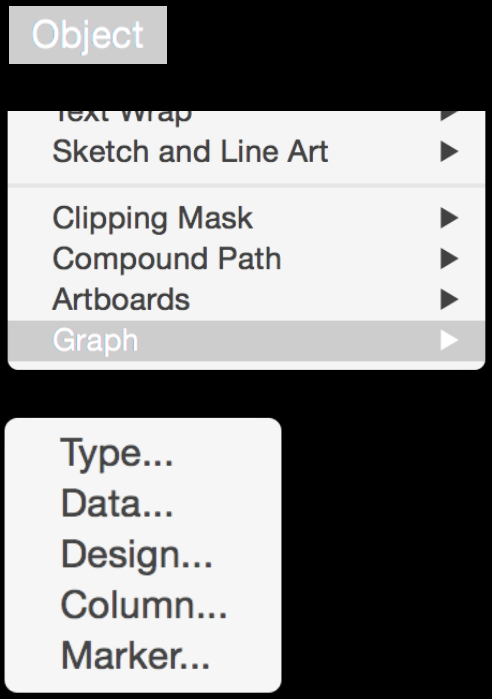
Year	Value
"1999"	3829.00
"2000"	2983.00
"2001"	2883.00
"2002"	3726.00



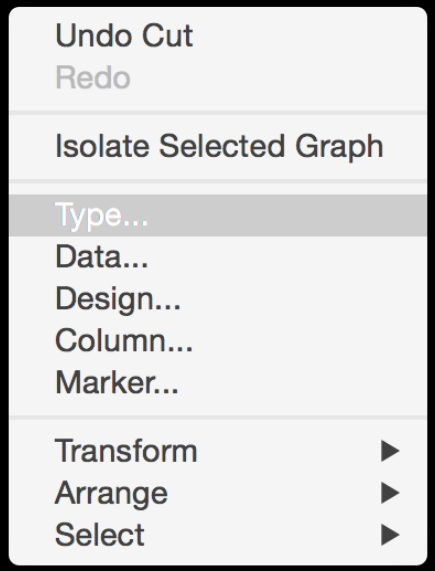
Adobe Illustrator

Graphing Tool Menu

Via Top Menu

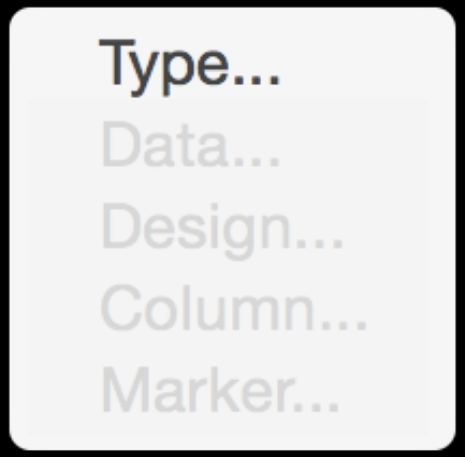


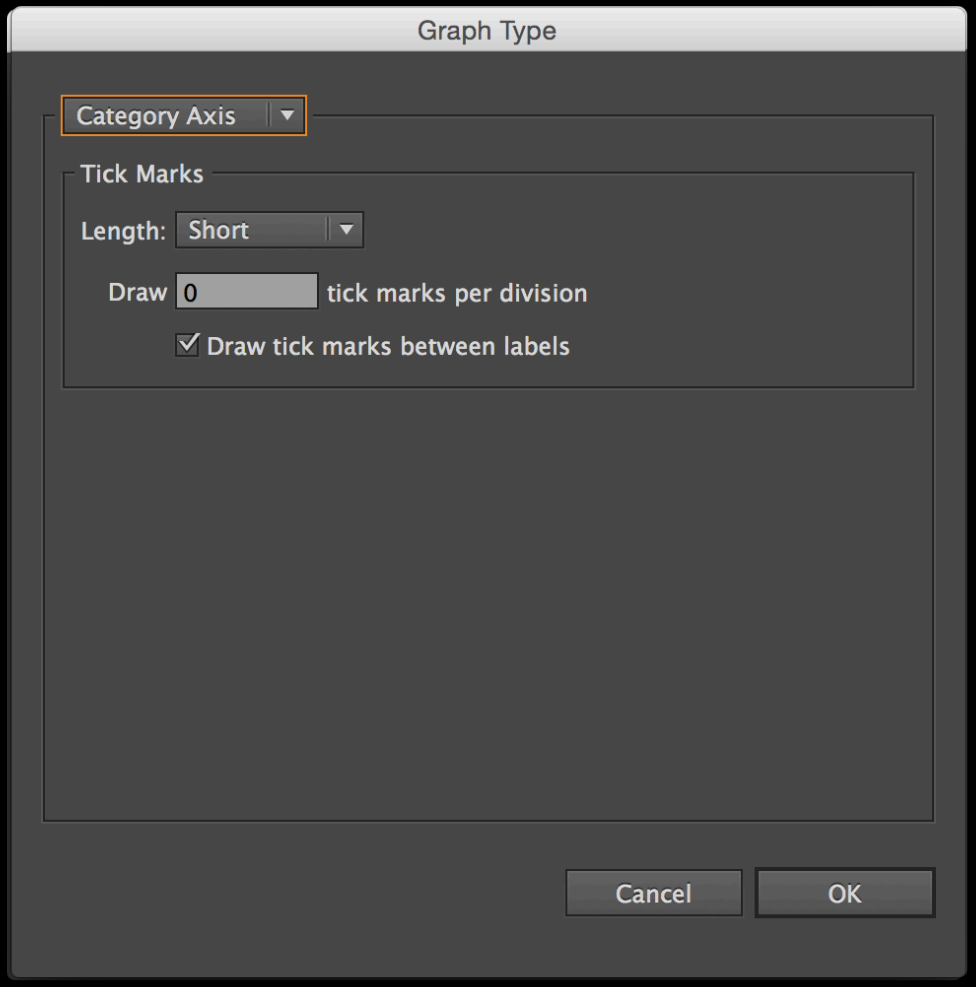
Control Click (Right Click)



Adobe Illustrator

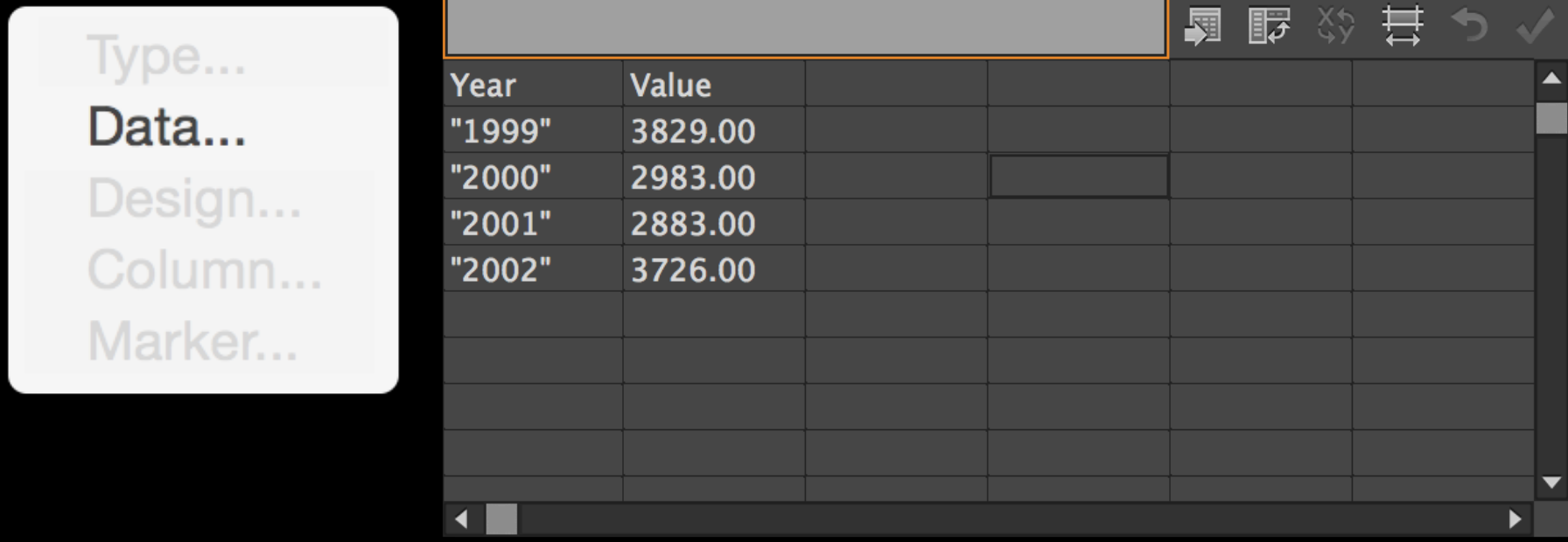
Graphing Tool Type





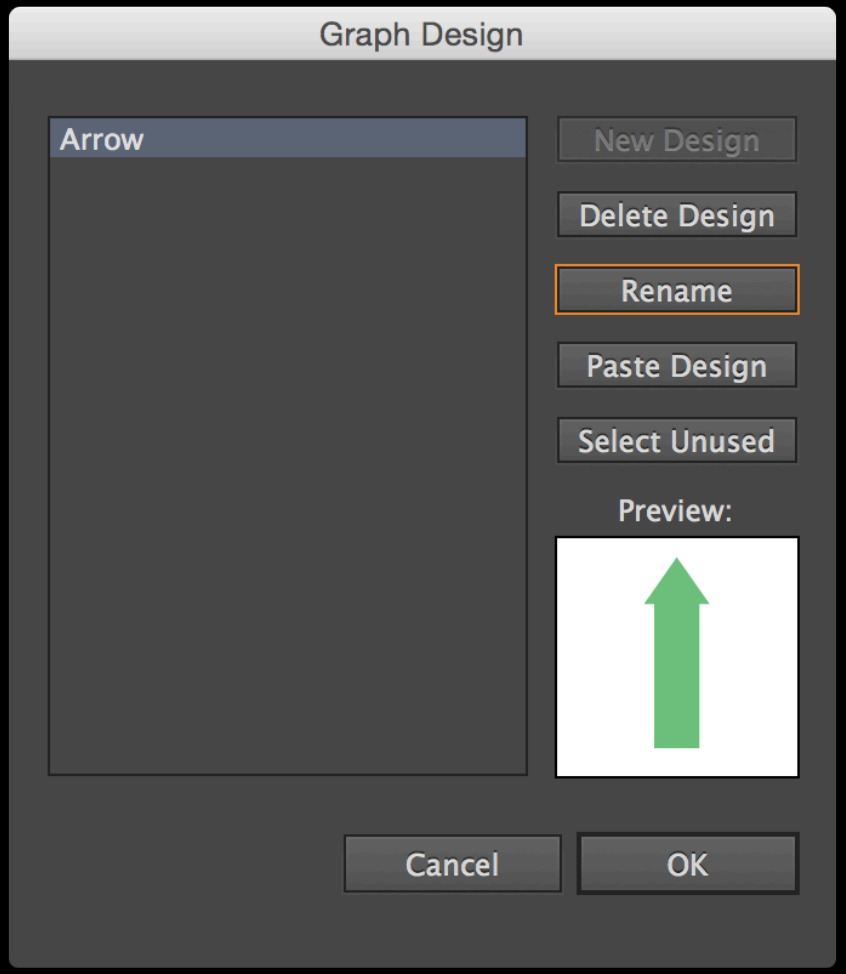
Adobe Illustrator

Graphing Tool Data



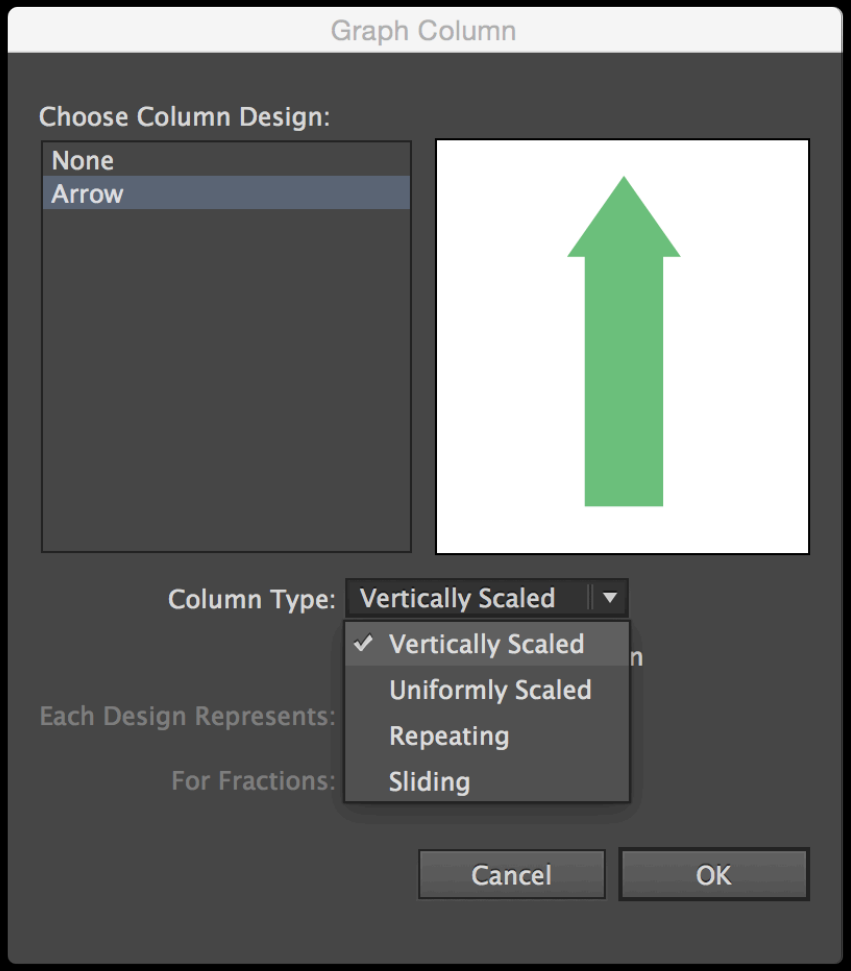
Adobe Illustrator

Graphing Tool Design



Adobe Illustrator

Graphing Tool Column



Adobe Illustrator

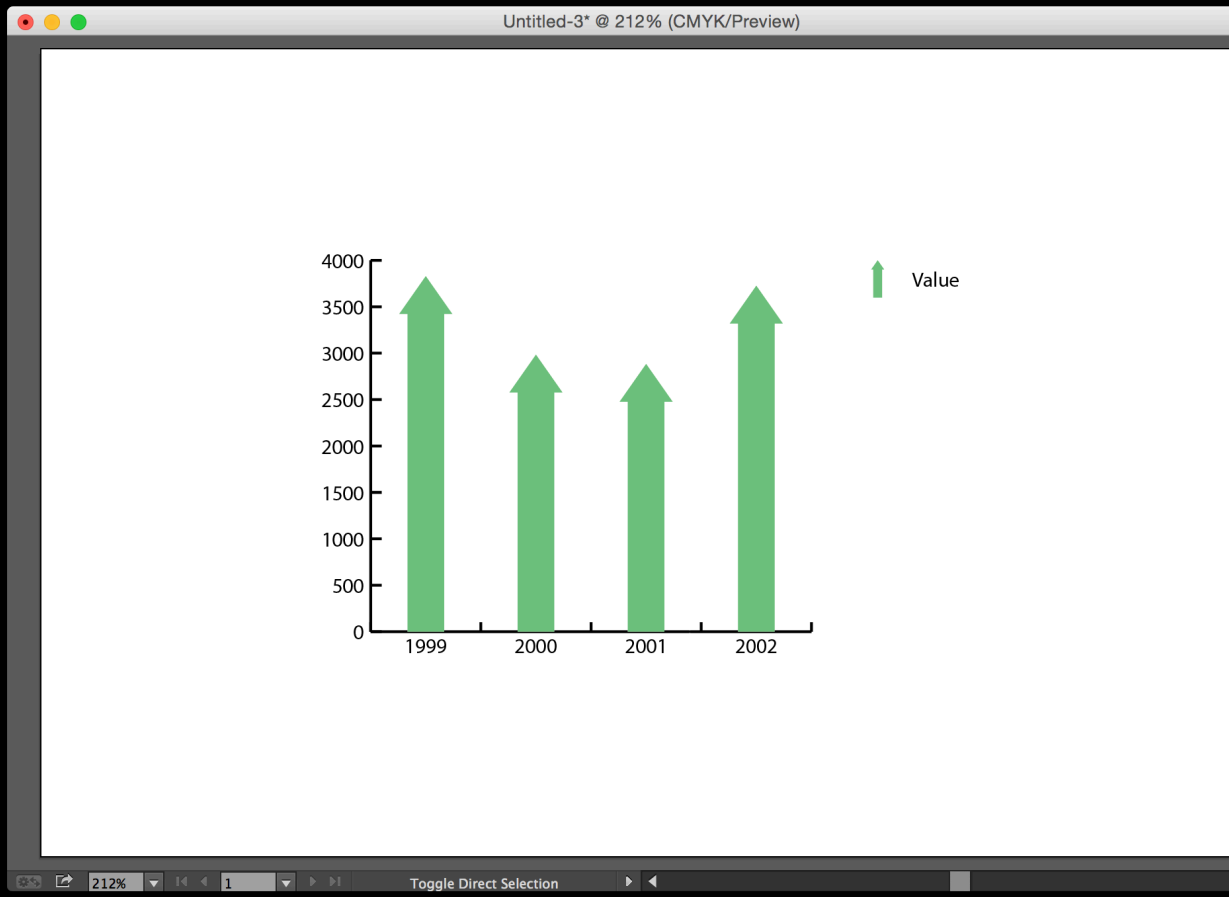
Graphing Tool Column

Vertically Scaled

Uniformly Scaled

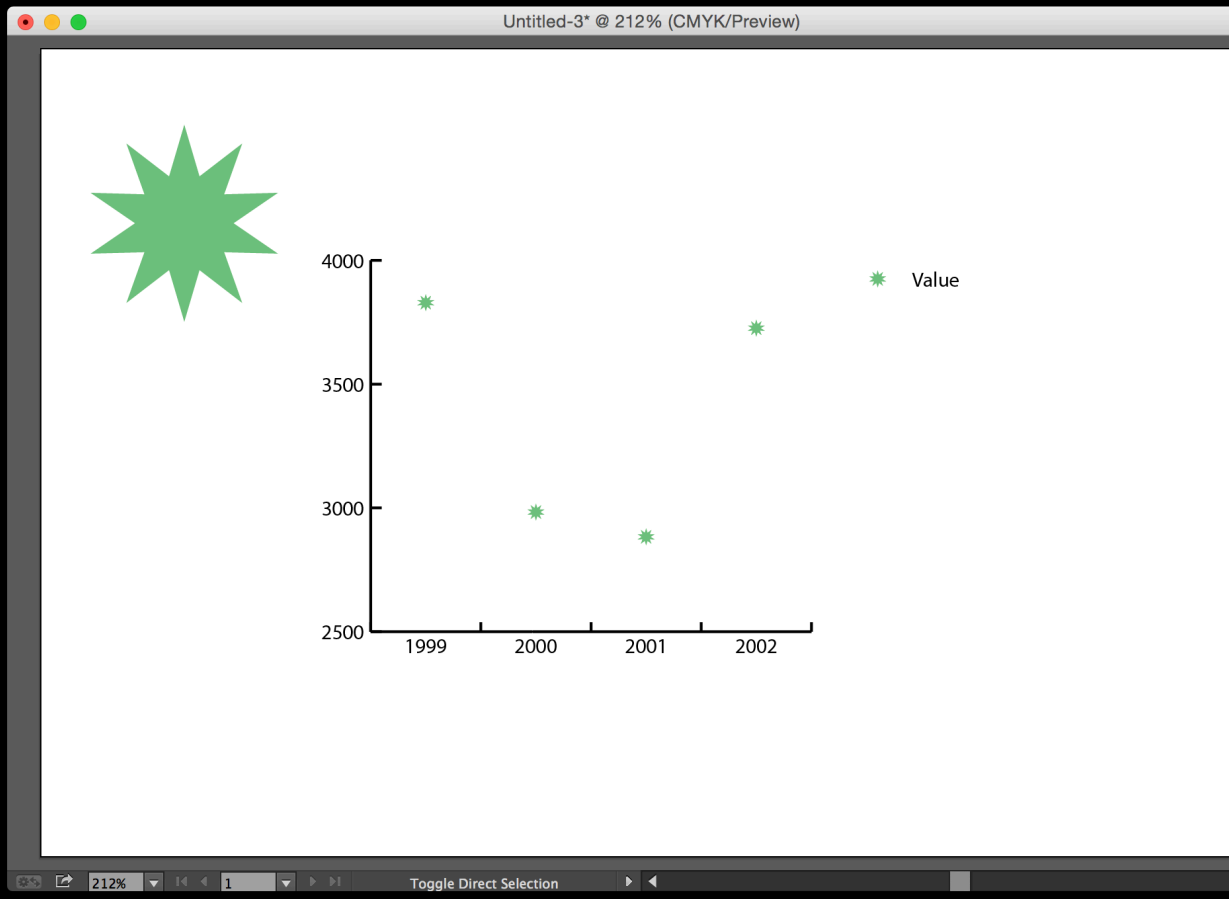
Repeating

Sliding



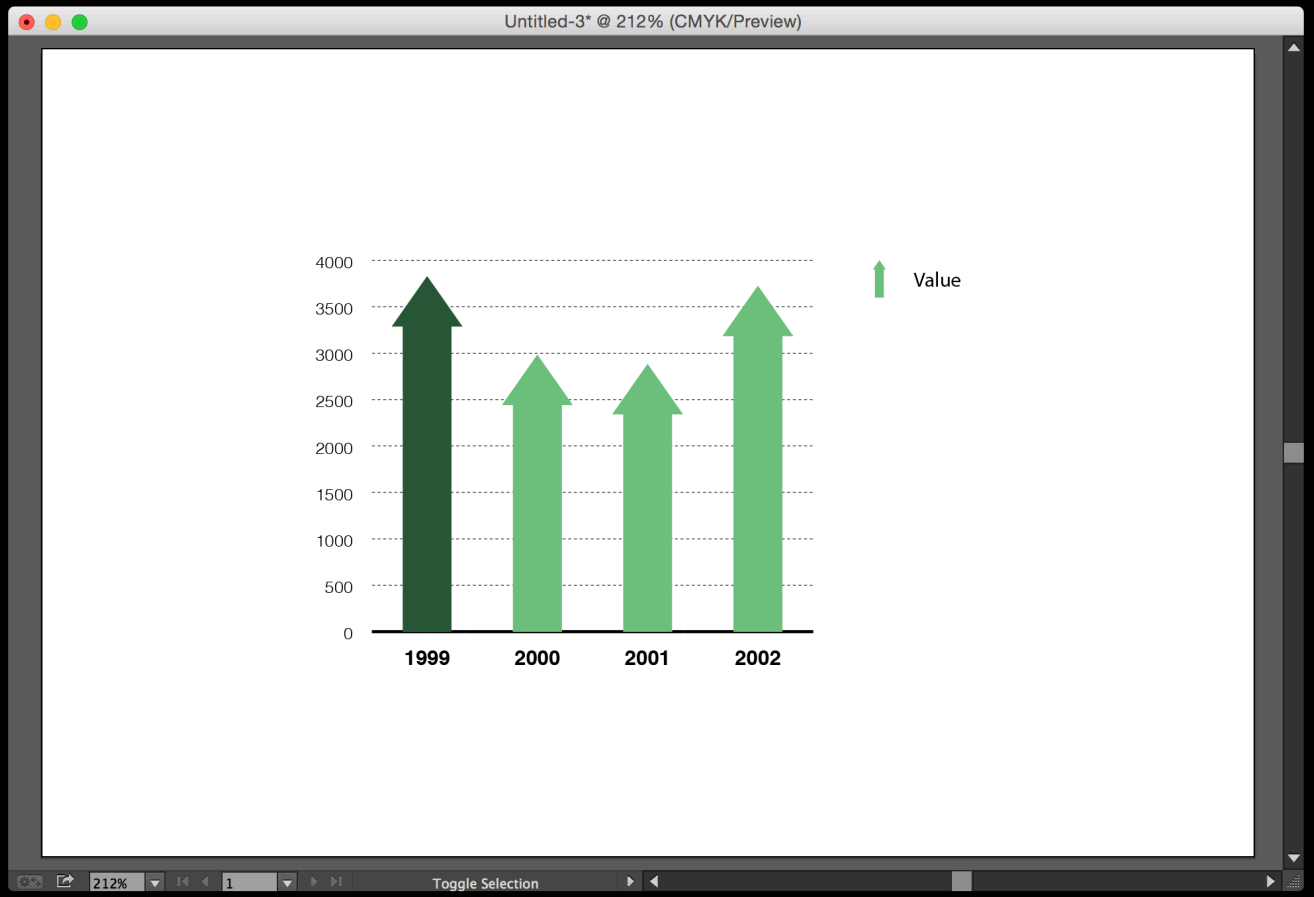
Adobe Illustrator

Graphing Tool Marker



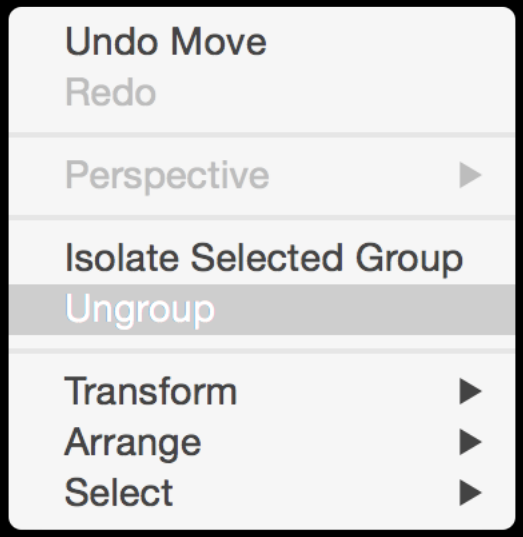
Adobe Illustrator

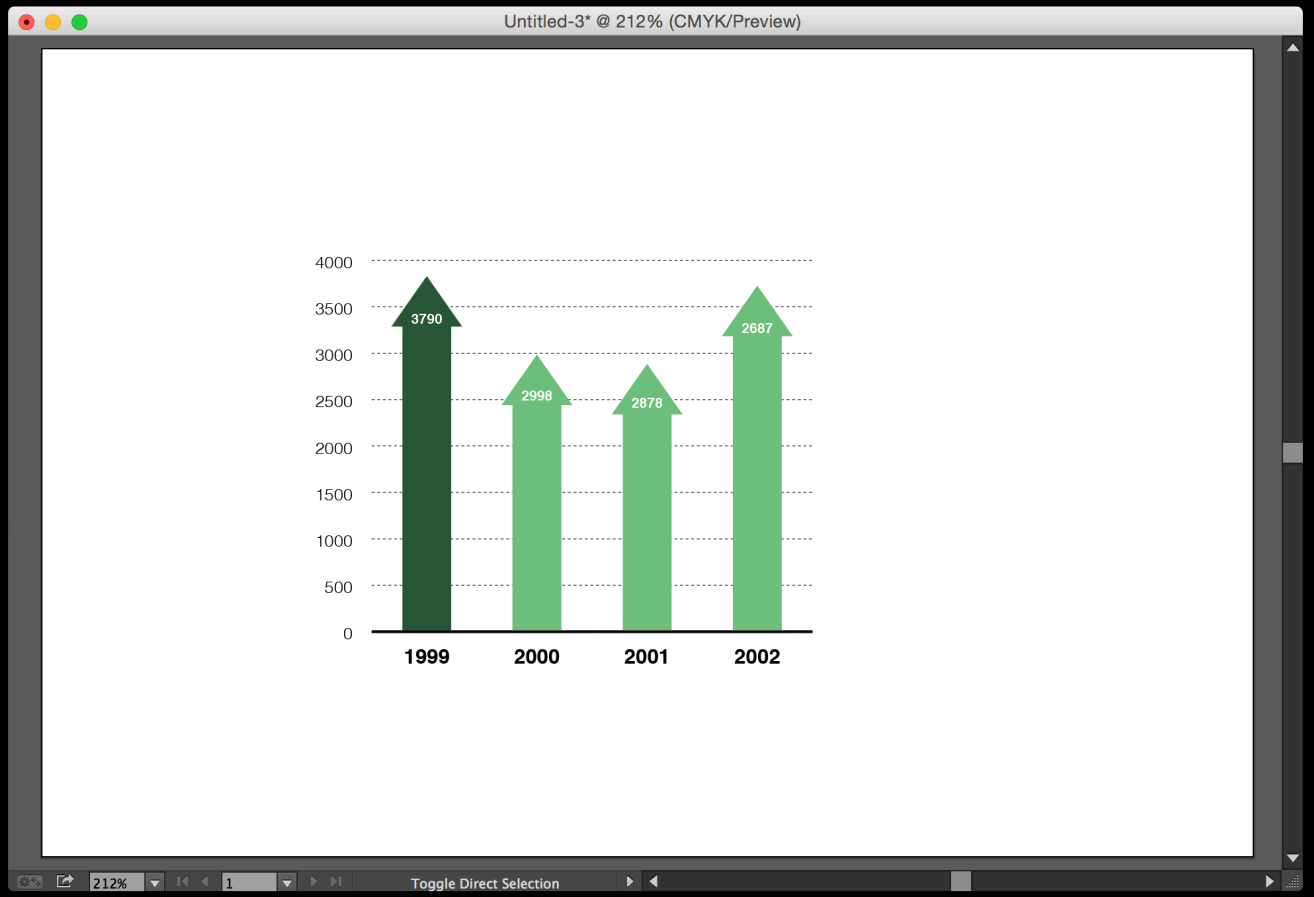
Modifications



Adobe Illustrator

Further Modifications



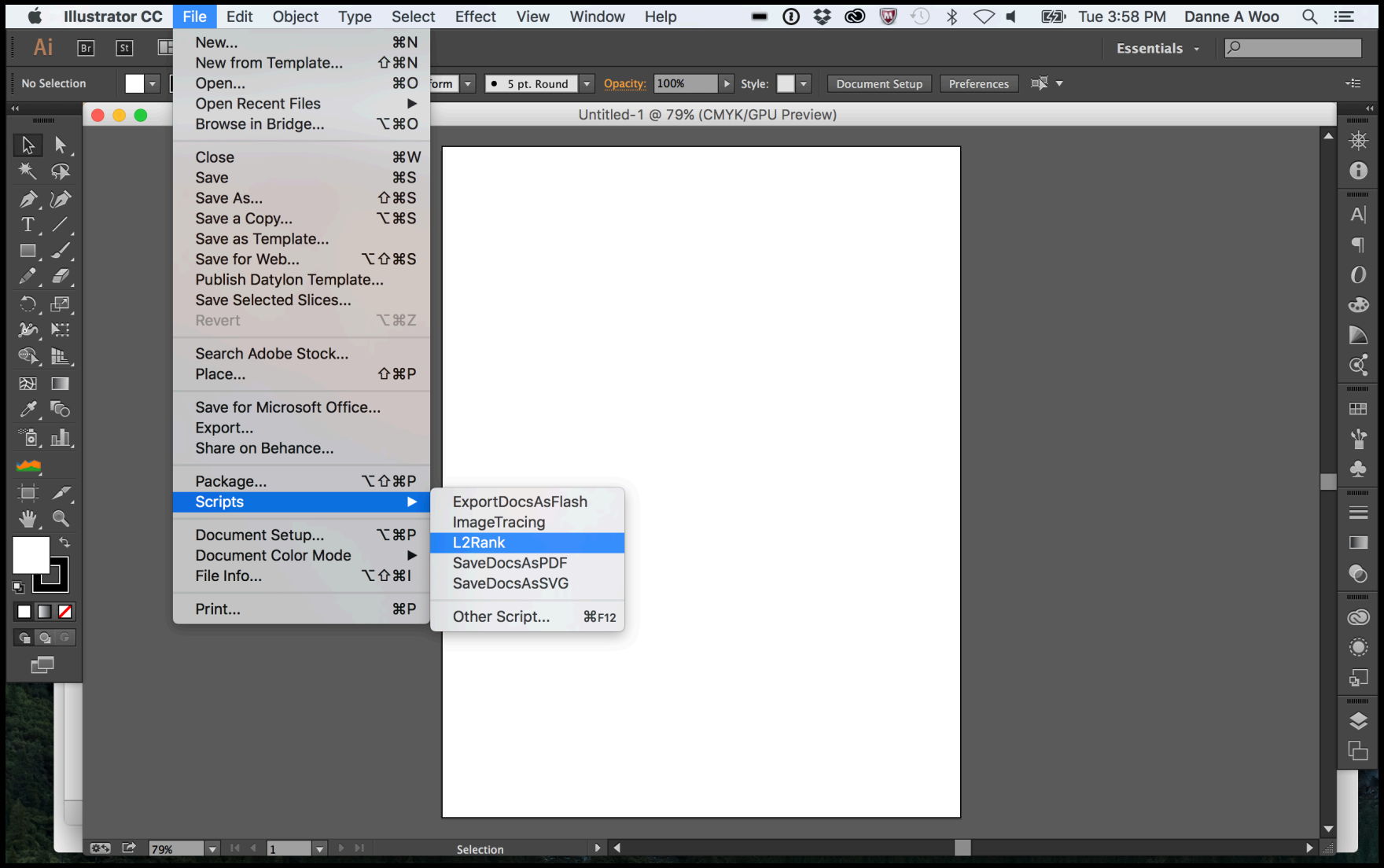


Adobe Illustrator

Negatives

- Limited to the software’s abilities.
- Cant visualize more complex visualizations like maps, connected nodes, etc.
- If you need to ungroup the graph you can not modify the data.
- No value labels.
- Not great for batch projects.

Adobe Scripts



Adobe Scripts

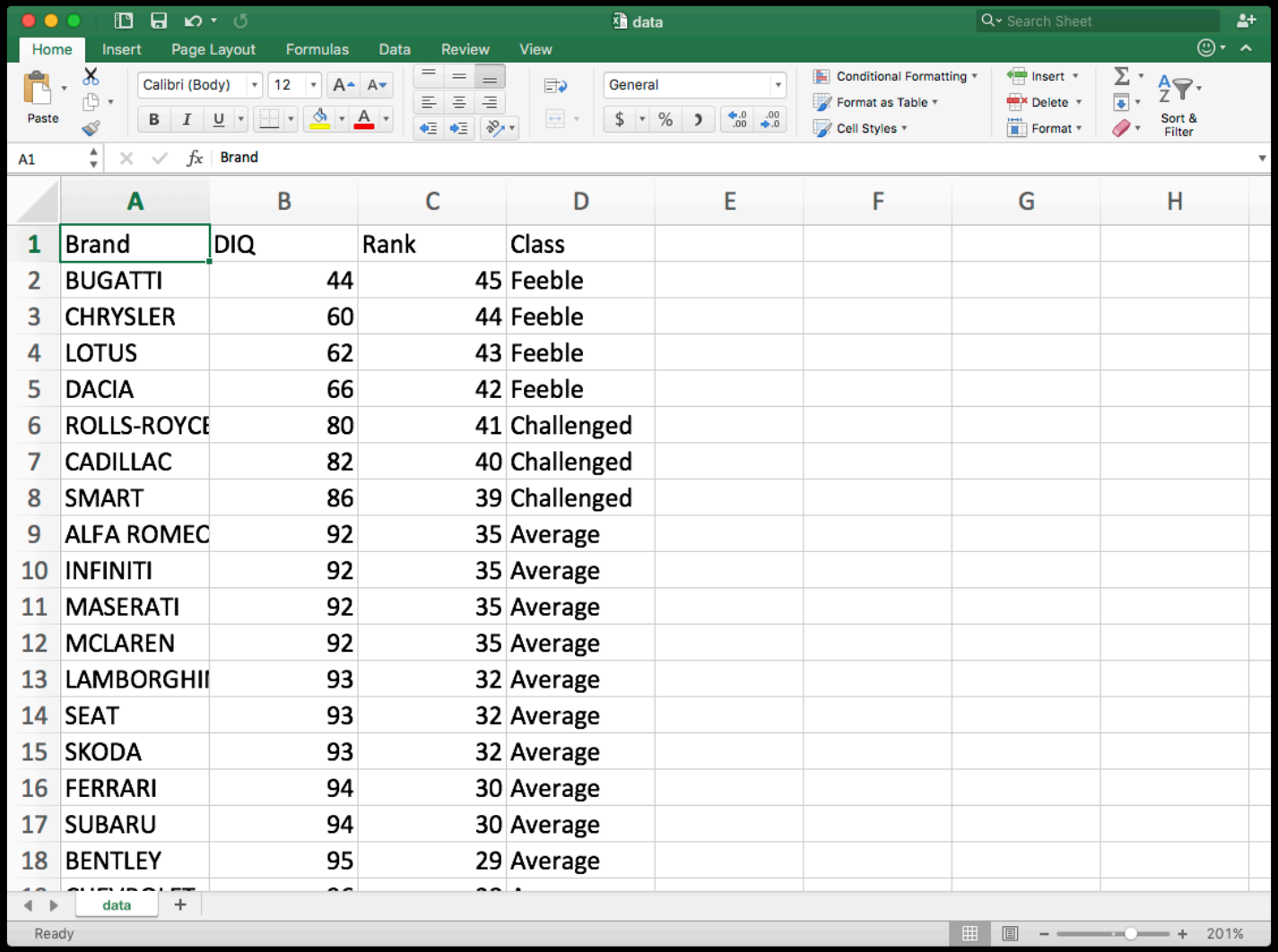
```
var doc = documents.add();
var color = new RGBColor();
color.red = 255;
color.green = 100;
color.blue = 0;

var text = doc.textFrames.add();
text.contents = "Hello class!";
text.textRange.characterAttributes.size = 24;
text.top = 400;
text.left = 200;

var rect = doc.pathItems.rectangle(200, 400, 100, 50);
rect.fillColor = color;
```

http://www.adobe.com/devnet/illustrator/scripting.html

Adobe Scripts

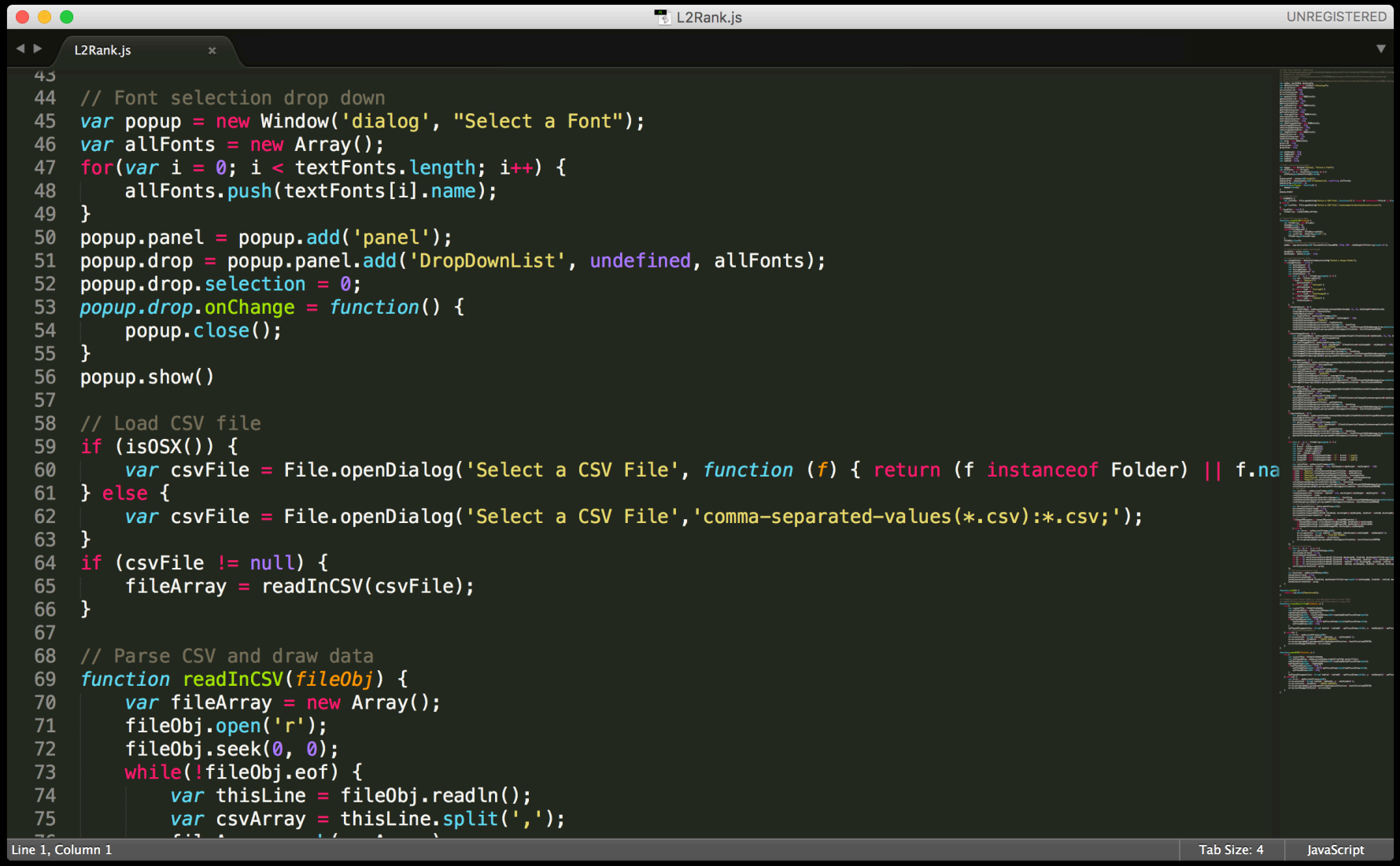
GIFTED	43	Kat Von D	110
	40	Murad	112
	40	laura mercier	112
	40	CLARINS	112
	38	clarisonic	113
	38	Charlotte Tilbury	113
	36	proactiv.	114
	36	GARNIER	114
	35	elf	115
	32	SHISEIDO	116
	32	MAKE UP FOR EVER PROFESSIONAL	116
	32	AVEDA	116

Adobe Scripts



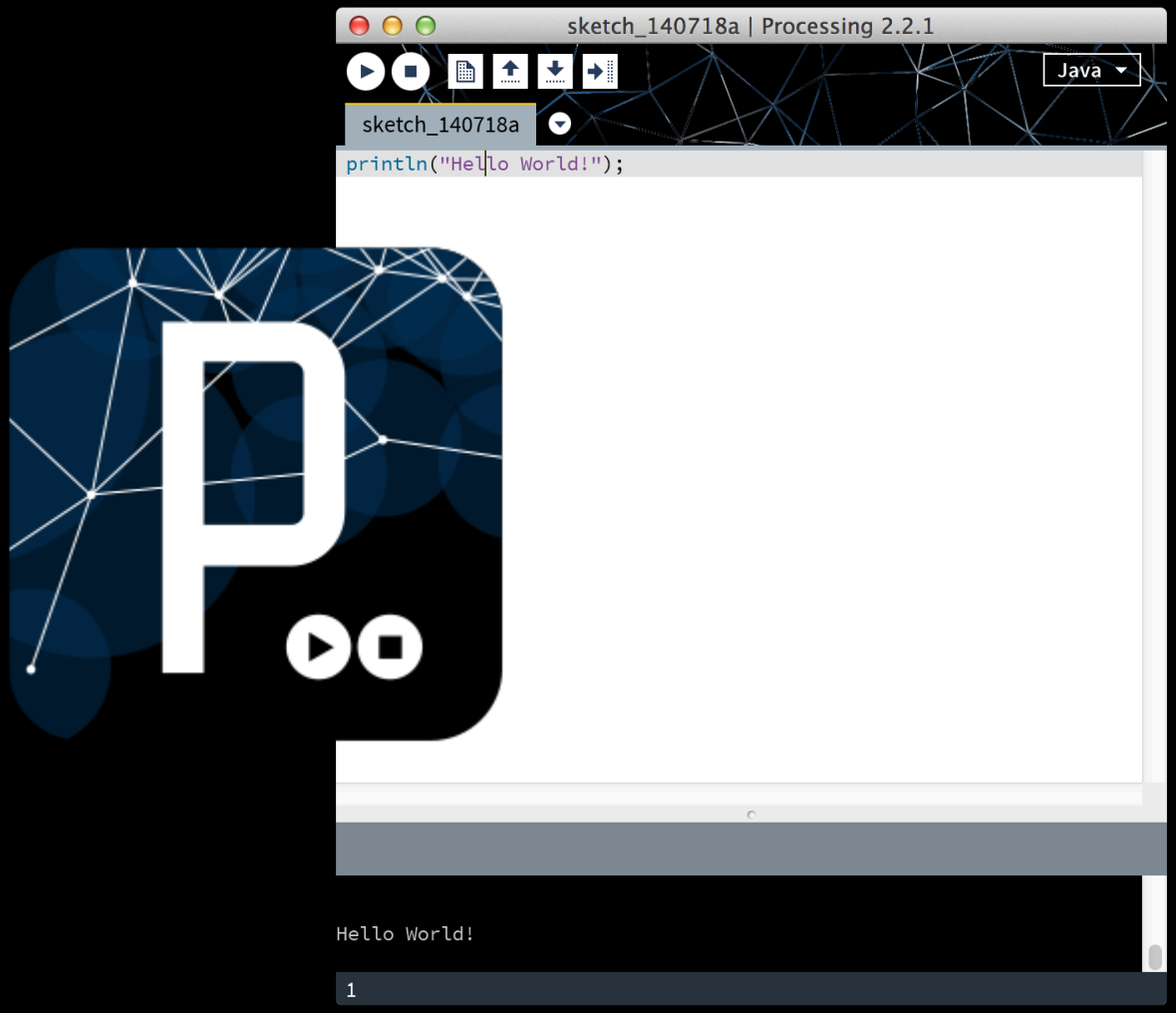
	A	B	C	D	E	F	G	H
1	Brand	DIQ	Rank	Class				
2	BUGATTI	44	45	Feeble				
3	CHRYSLER	60	44	Feeble				
4	LOTUS	62	43	Feeble				
5	DACIA	66	42	Feeble				
6	ROLLS-ROYCE	80	41	Challenged				
7	CADILLAC	82	40	Challenged				
8	SMART	86	39	Challenged				
9	ALFA ROMEO	92	35	Average				
10	INFINITI	92	35	Average				
11	MASERATI	92	35	Average				
12	MCLAREN	92	35	Average				
13	LAMBORGHI	93	32	Average				
14	SEAT	93	32	Average				
15	SKODA	93	32	Average				
16	FERRARI	94	30	Average				
17	SUBARU	94	30	Average				
18	BENTLEY	95	29	Average				

Adobe Scripts

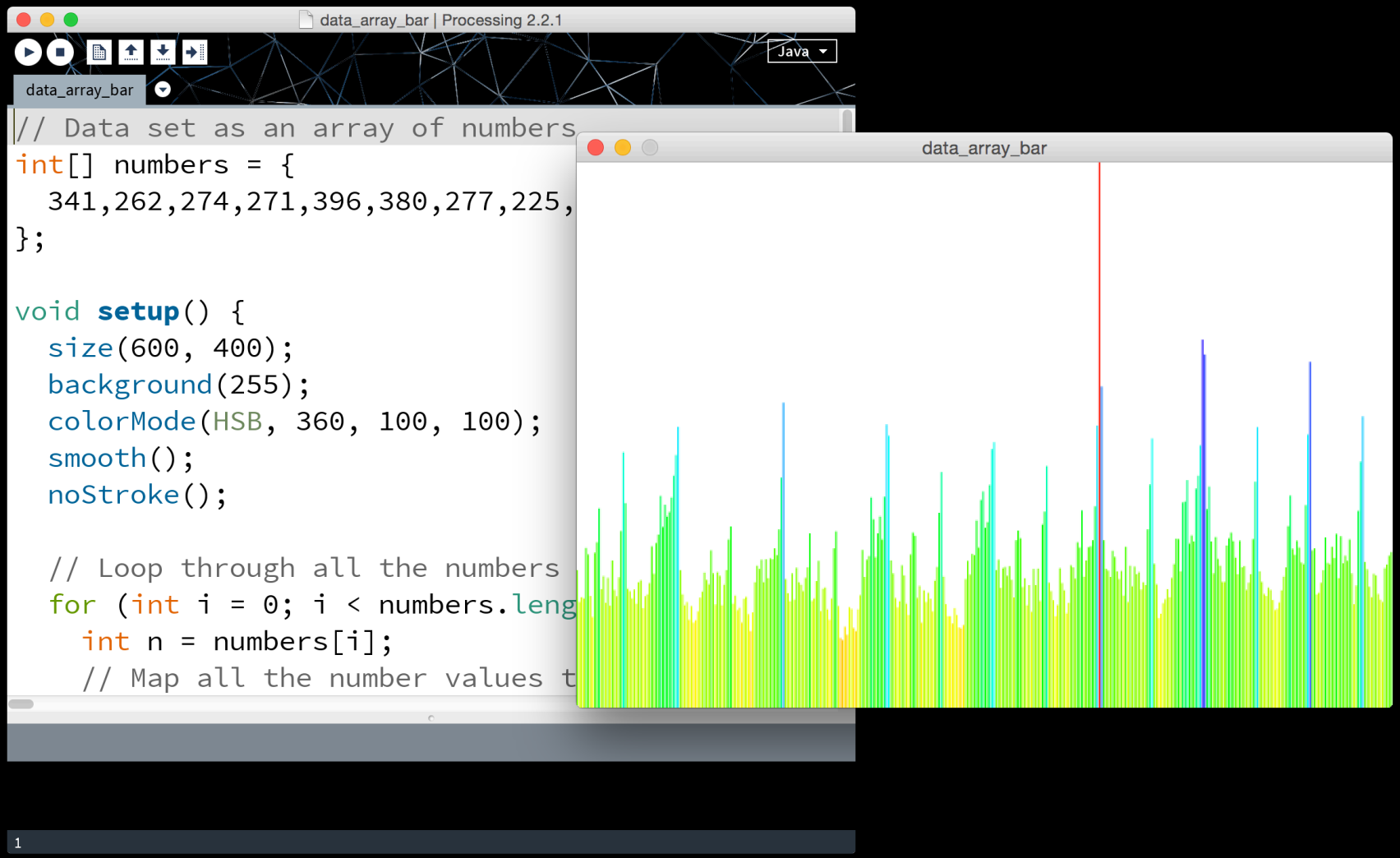


Processing

www.processing.org



Data + Processing



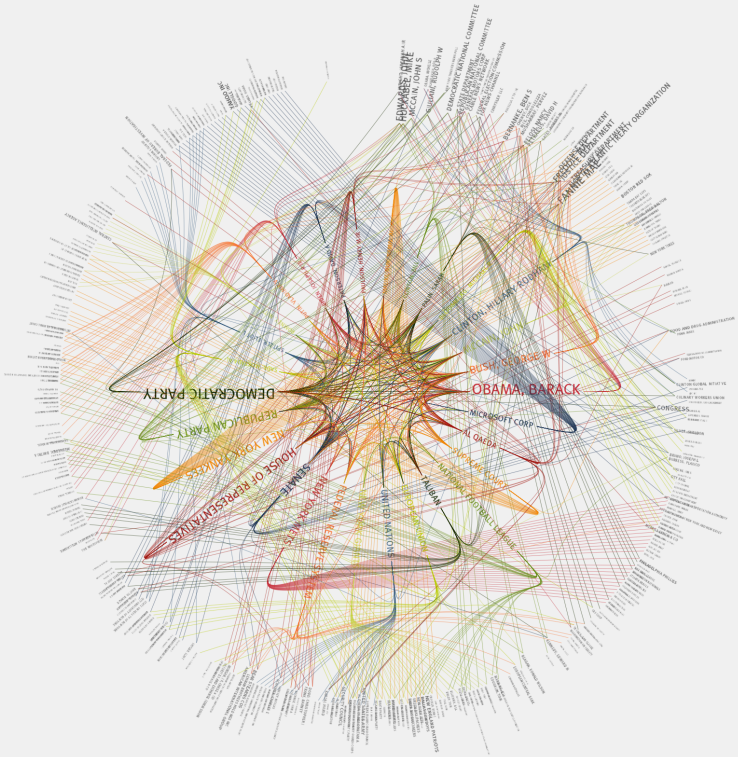
Examples

Nicholas Felton – Annual Reports

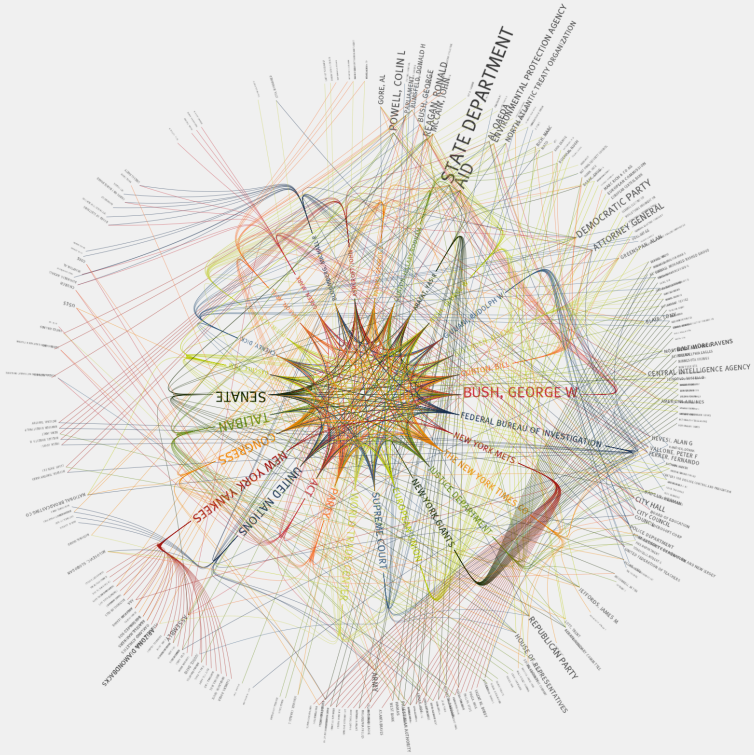
Examples

Jer Thorp – NY Times Posters

2008

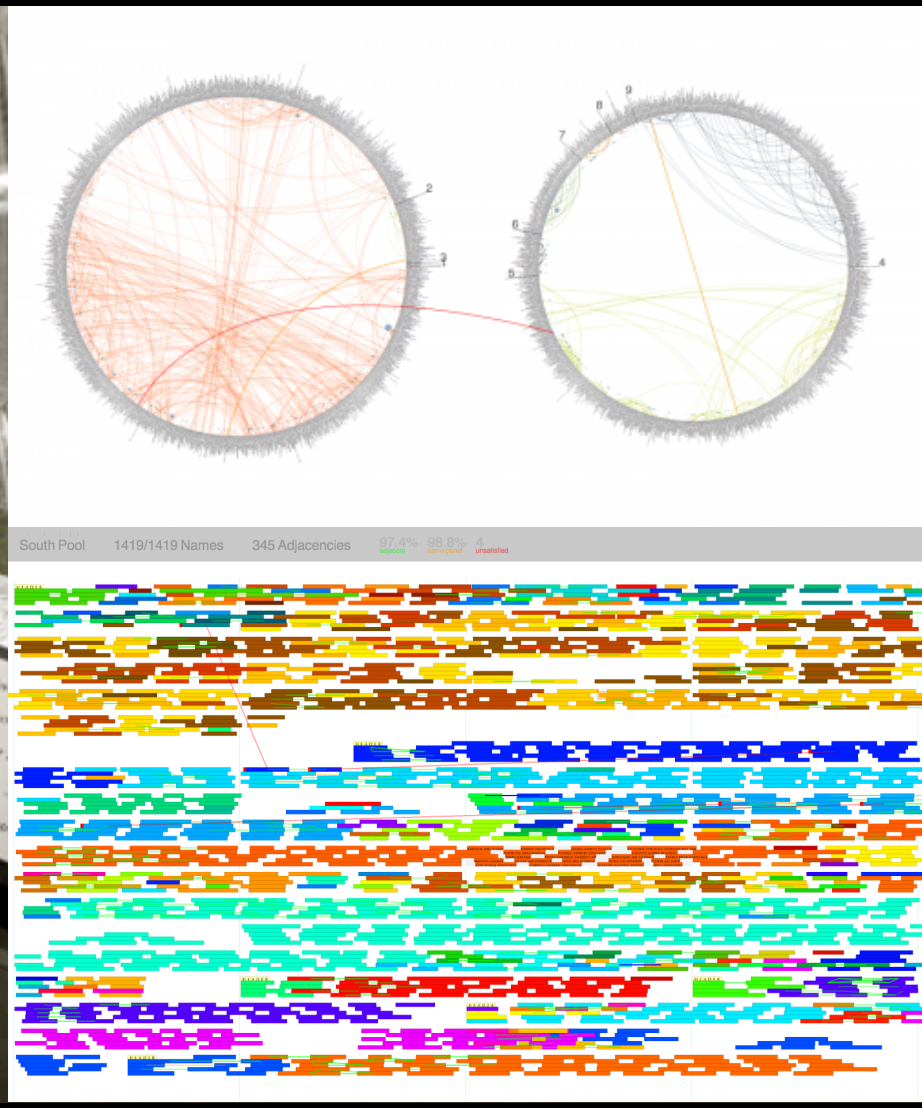


2001



Examples

Jer Thorp – 9/11 Memorial



Examples

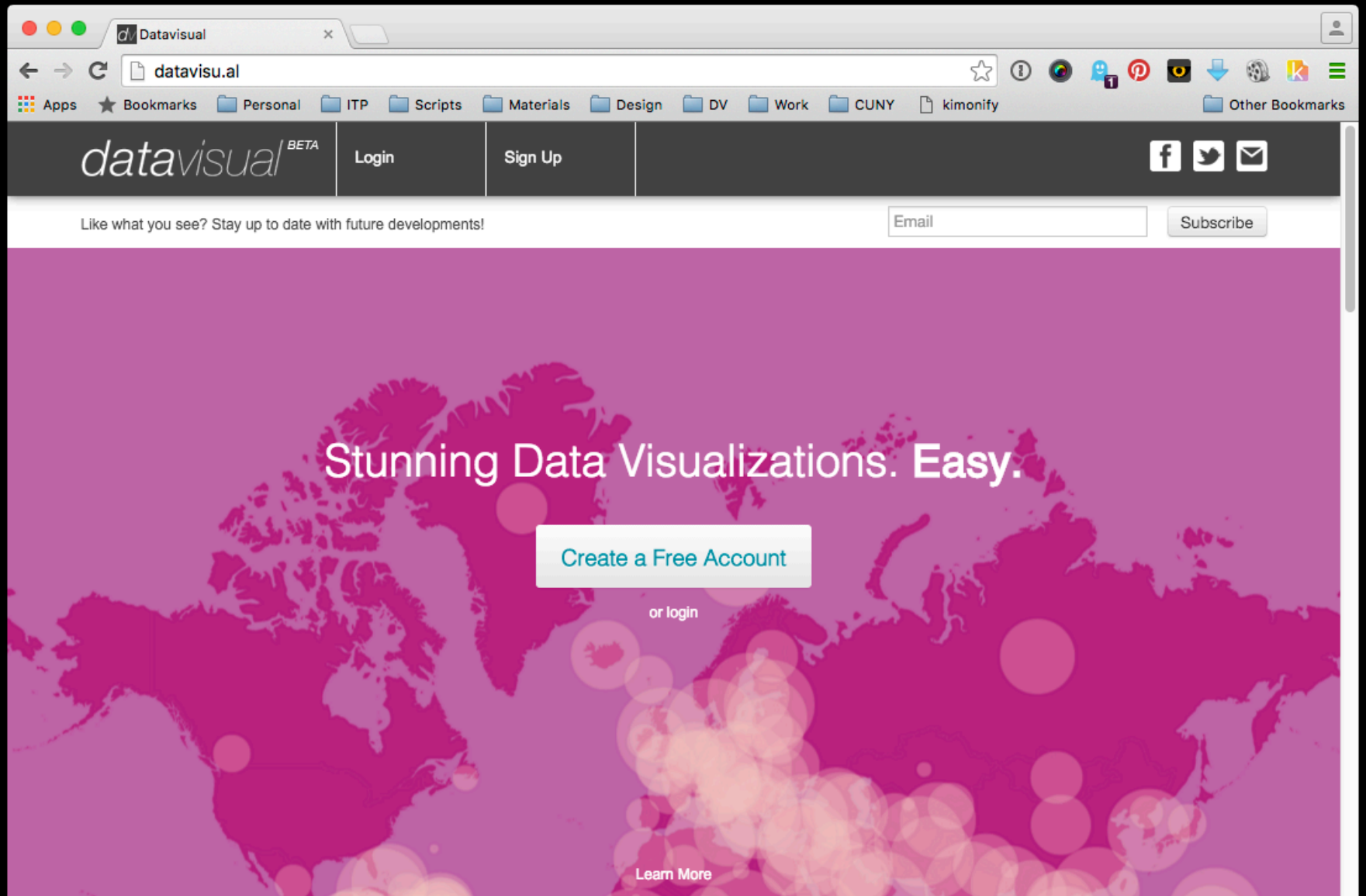
Unnamed Sound Sculpture

Examples

Kyle McDonald – Face Substitution

Datavisual

www.datavisu.al



In Class Assignment

Take one of the data sets you have been playing with the last few weeks and use Adobe Illustrator's Graphing Tool to design a simple chart. Make sure you use the right chart type for the data set you will be visualizing.

Homework

Reading: Pages 153-204

- Find a successful data driven design (chart, graph, map, infographic) to share with the class that you find interesting, beautiful and/or easy to understand. This can be a static visualization, interactive, motion graphic, photographic, wayfinding, etc.

- Find a chart, graph, map or other data visualization that is NOT successful to share with the class.

Homework

- Continue your research and collecting data on the topic you chose to focus on for your midterm. Start sketching out your poster design to determine the layout and the type of content you will be using to create your 20" x 30" poster. Think about the hierarchy of your content and the story you are trying to tell with the data. Do you want to want to call out any data specific points in your design? Include headers, subheaders and captions to make your design as easy to digest as possible. Make sure you save where you found your data to include a source text footnote.

Information Design

Professor Danne Woo

dwoo@qc.cuny.edu

infodesign.dannewoo.com