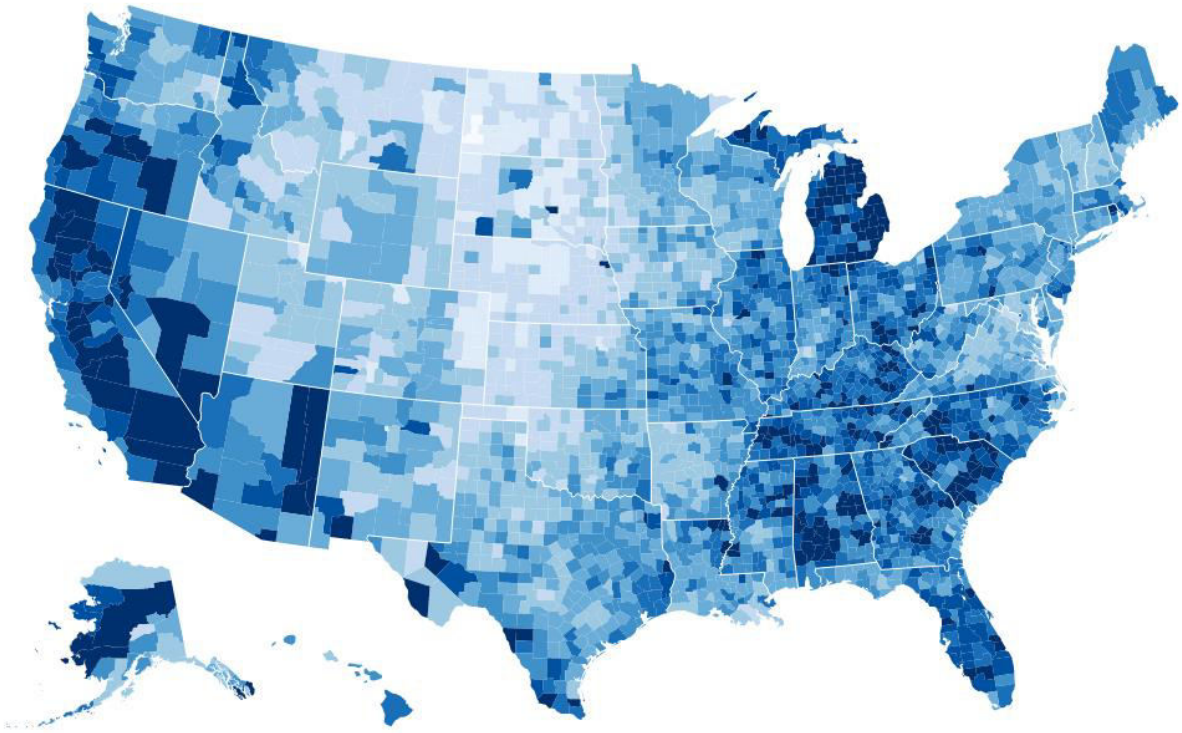
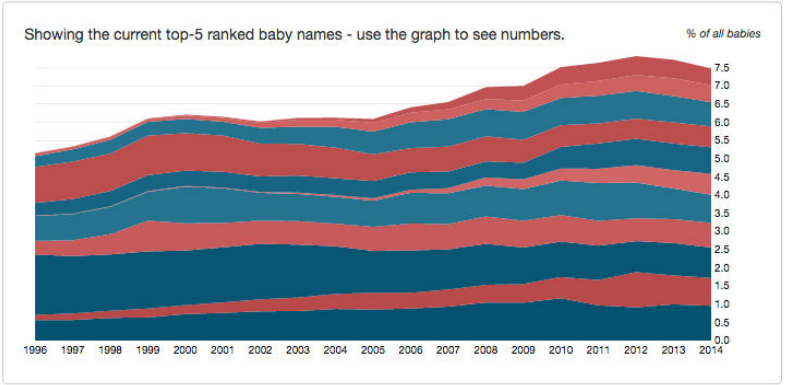
Chapter 1: Getting Started with D3

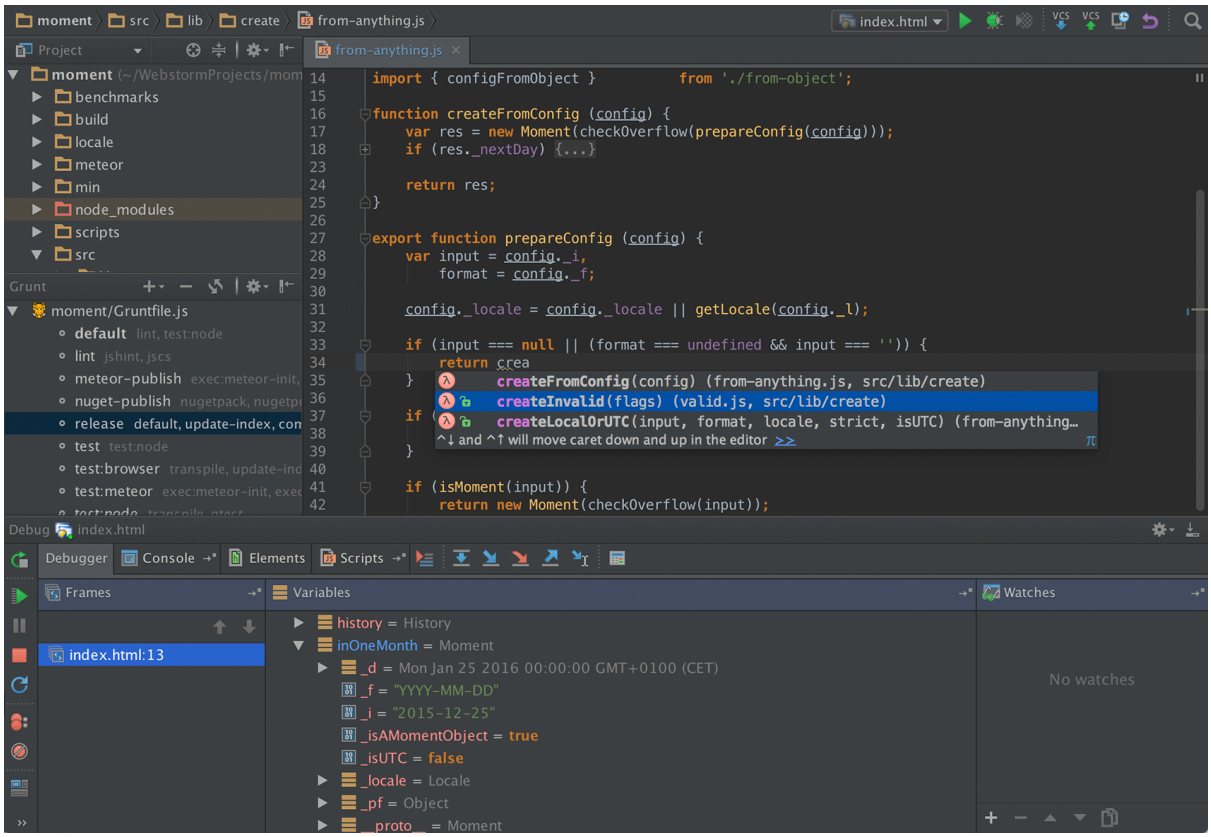


Start typing a name here...

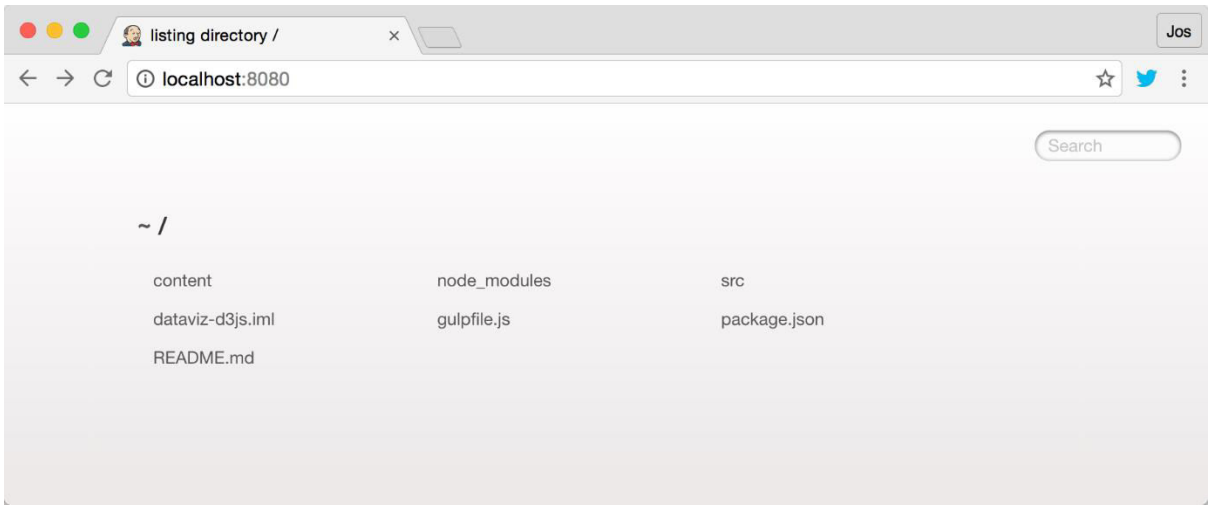
Name	1996 rank	2014 rank
Oliver	23	1
Amelia	63	1
Jack	1	2
Olivia	24	2
Harry	17	3
Isla	382	3
Jacob	35	4
Emily	4	4
Charlie	38	5

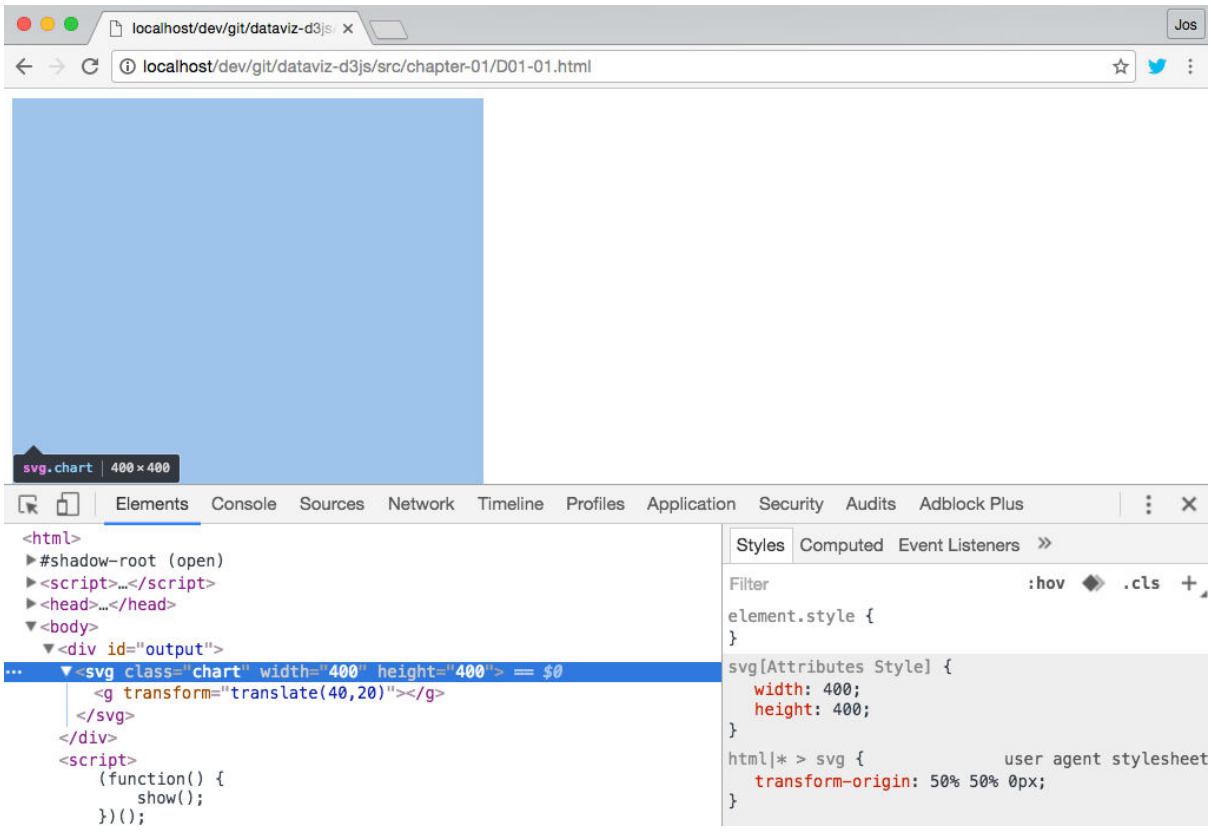


D01-01.js — /Users/jos/dev/git/dataviz-d3js
gulpfile.js
D01-01.js
function show() {
var margin = {top: 20, right: 30, bottom: 130, left: 40},
width = 1860 - margin.left - margin.right,
height = 600 - margin.top - margin.bottom;
var chart = d3.select(".chart")
.attr("width", width + margin.left + margin.right)
.attr("height", height + margin.top + margin.bottom)
.append("g")
.attr("transform", "translate(" + margin.left + "," + margin.top + ")");
var formatDate = d3.timeFormat("%b %Y");
d3.csv("data/sample.csv", function(data) {
// we check for the existence of an svg element
File 0
Project 0
No Issues
src/chapter-01/js/D01-01.js
1:1
LF
UTF-8
JavaScript
+67
12 updates


moment
src
lib
create
from-anything.js
index.html
Project
moment (~/WebstormProjects/mom
benchmarks
build
locale
meteor
min
node_modules
scripts
src
Grunt
moment/Gruntfile.js
default lint, test:node
lint jshint, jscs
meteor-publish exec:meteor-init,
nuget-publish nugetpack, nugetpu
release default, update-index, con
test test:node
test:browser transpile, update-inc
test:meteor exec:meteor-init, exec
from-anything.js
import { configFromObject } from './from-object';
function createFromConfig (config) {
var res = new Moment(checkOverflow(prepareConfig(config)));
if (res._nextDay) {...}
return res;
}
export function prepareConfig (config) {
var input = config._i,
format = config._f;
config._locale = config._locale || getLocale(config._l);
if (input === null || (format === undefined && input === '')) {
return crea
createFromConfig(config) (from-anything.js, src/lib/create)
createInvalid(flags) (valid.js, src/lib/create)
createLocalOrUTC(input, format, locale, strict, isUTC) (from-anything…
^↓ and ^↑ will move caret down and up in the editor >>
if (isMoment(input)) {
return new Moment(checkOverflow(input));
Debug
index.html
Debugger
Console
Elements
Scripts
Frames
index.html:13
Variables
history = History
inOneMonth = Moment
_d = Mon Jan 25 2016 00:00:00 GMT+0100 (CET)
_f = "YYYY-MM-DD"
_i = "2015-12-25"
_isAMomentObject = true
_isUTC = false
_locale = Locale
_pf = Object
__proto__ = Moment
Watches
No watches

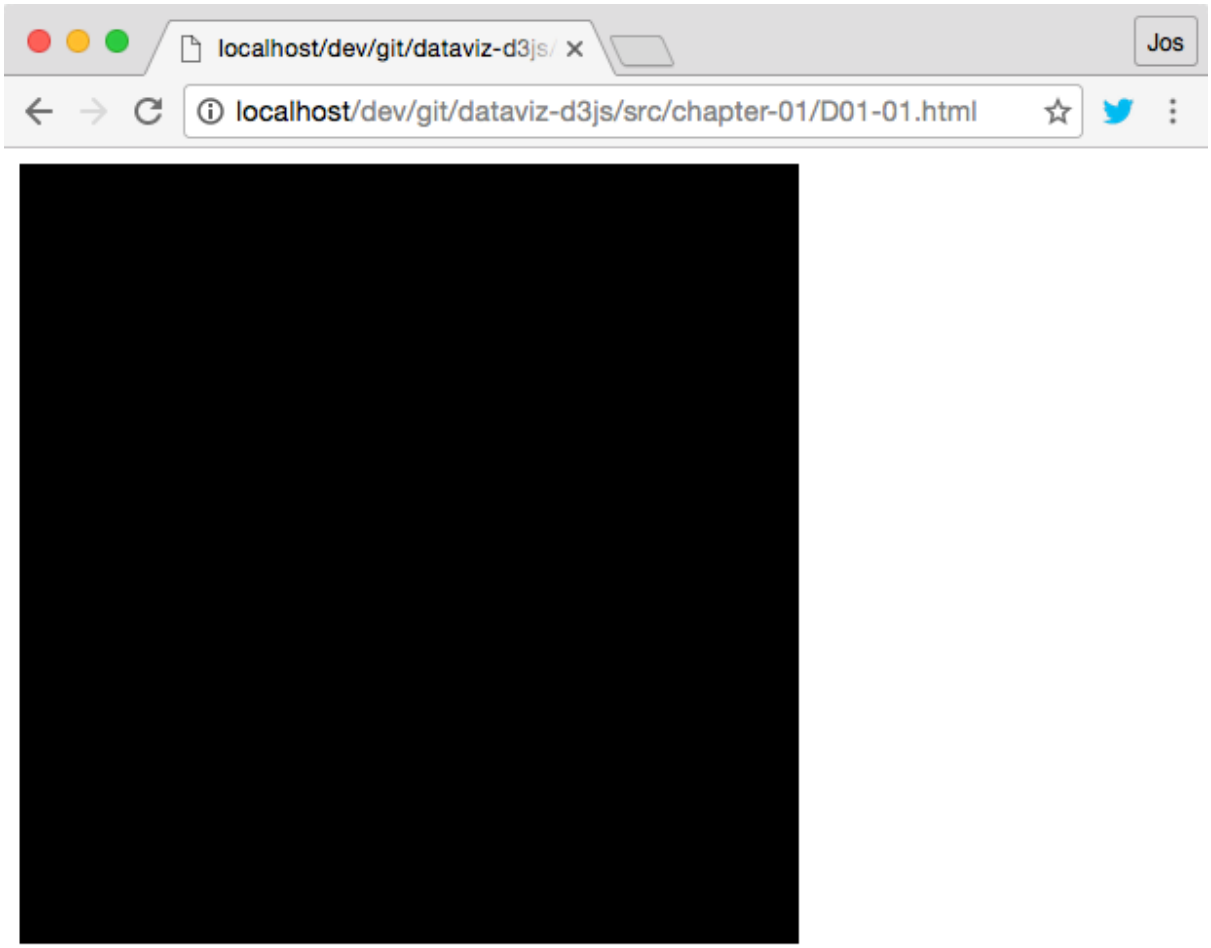
D01-01.html
Jos
file:///Users/jos/dev/git/dataviz-d3js/src/chapter-01/D01-01.html


listing directory /
Jos
localhost:8080
Search
~ /
content
node_modules
src
dataviz-d3js.iml
gulpfile.js
package.json
README.md


localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/src/chapter-01/D01-01.html
svg.chart | 400 × 400
Elements
Console
Sources
Network
Timeline
Profiles
Application
Security
Audits
Adblock Plus
<html>
#shadow-root (open)
<script>…</script>
<head>…</head>
<body>

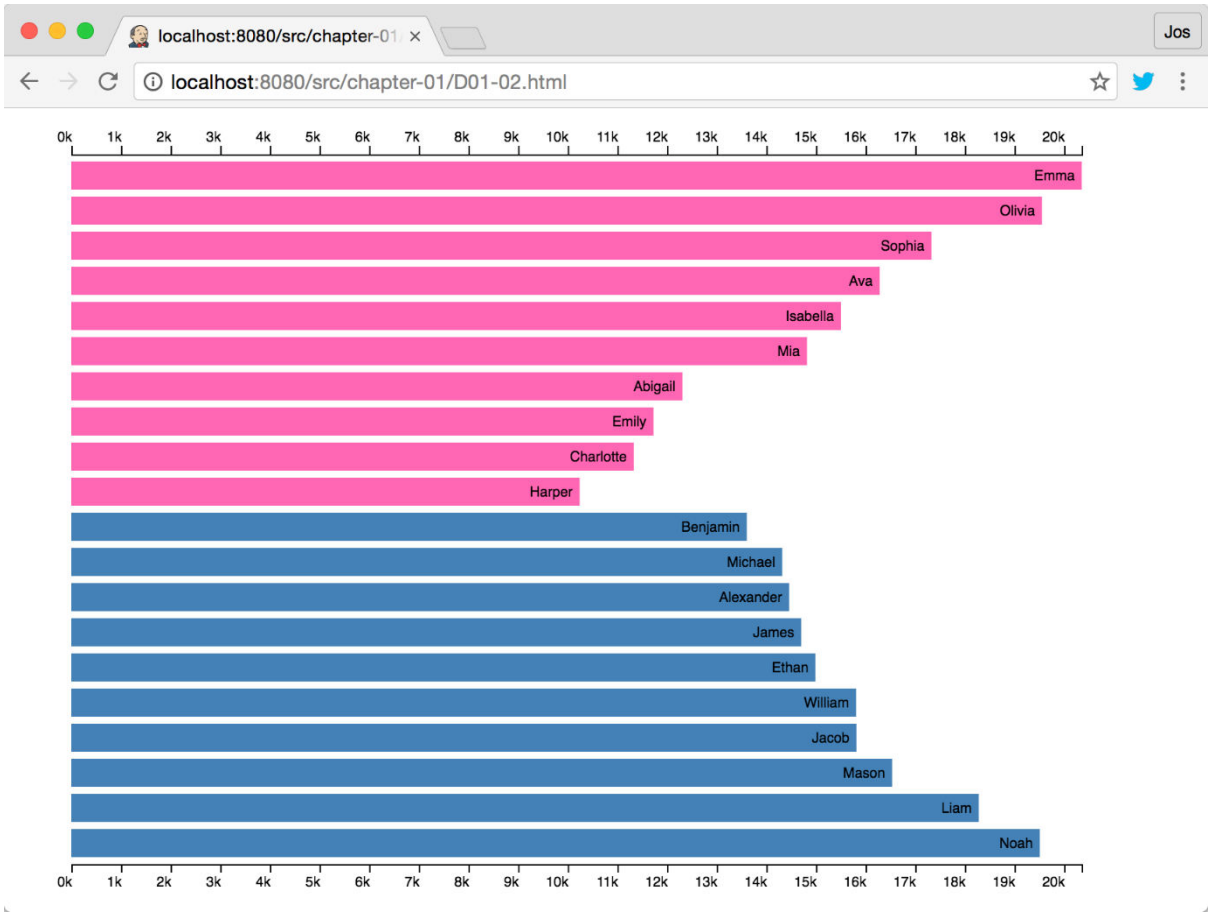
<svg class="chart" width="400" height="400"> == $0
<g transform="translate(40,20)"></g>
</svg>

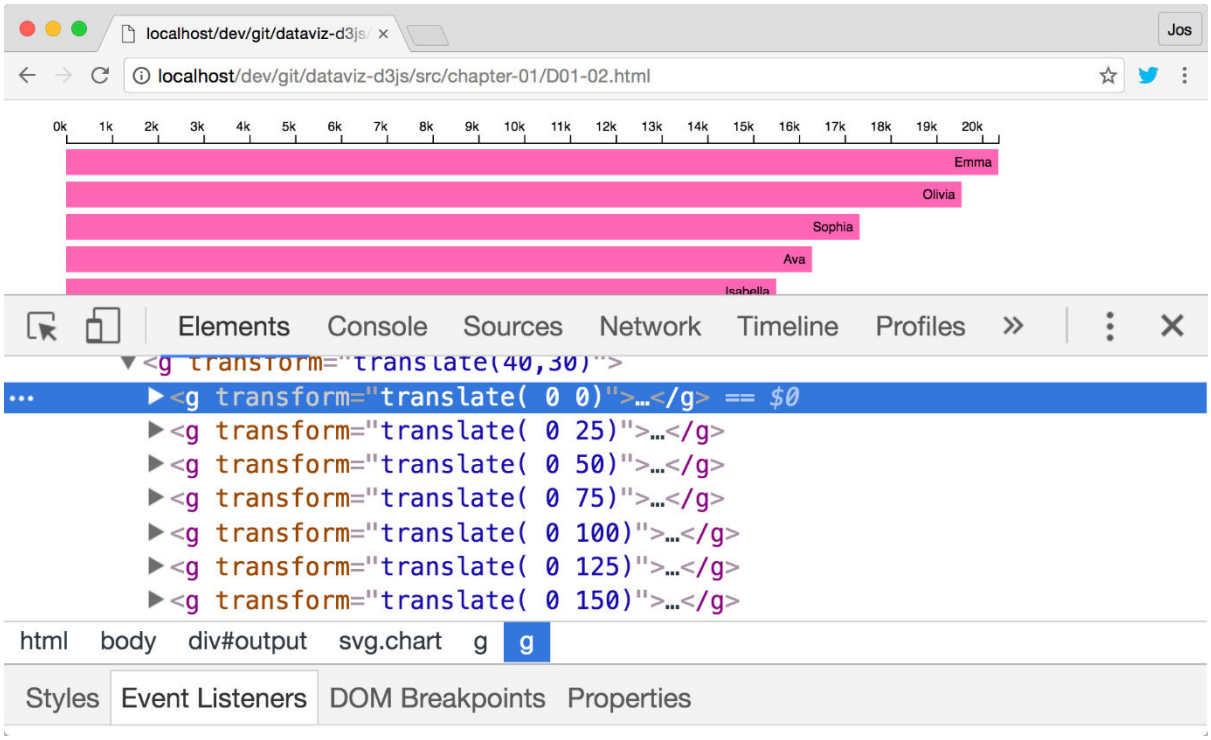
<script>
(function() {
show();
})();
Styles
Computed
Event Listeners
Filter
:hov
.cls
element.style {
}
svg[Attributes Style] {
width: 400;
height: 400;
}
html|* > svg {
user agent stylesheet
transform-origin: 50% 50% 0px;
}

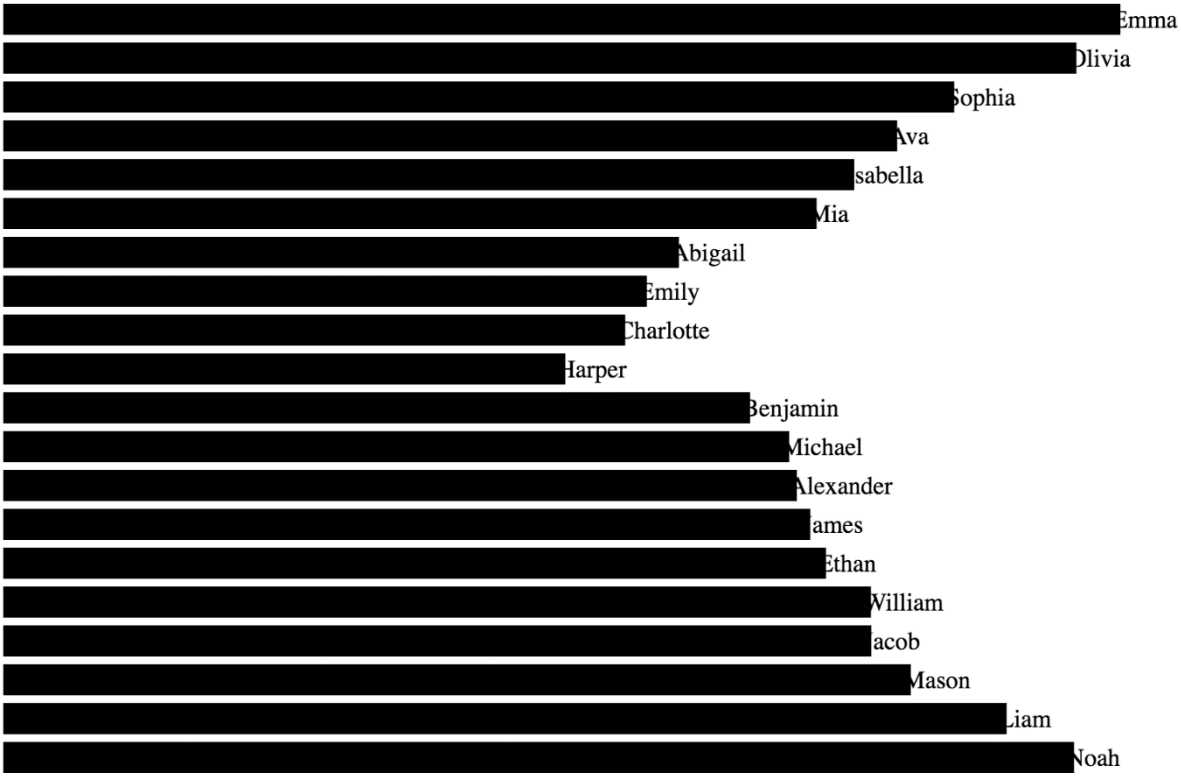

localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/src/chapter-01/D01-01.html

localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/src/chapter-01/D01-01.html

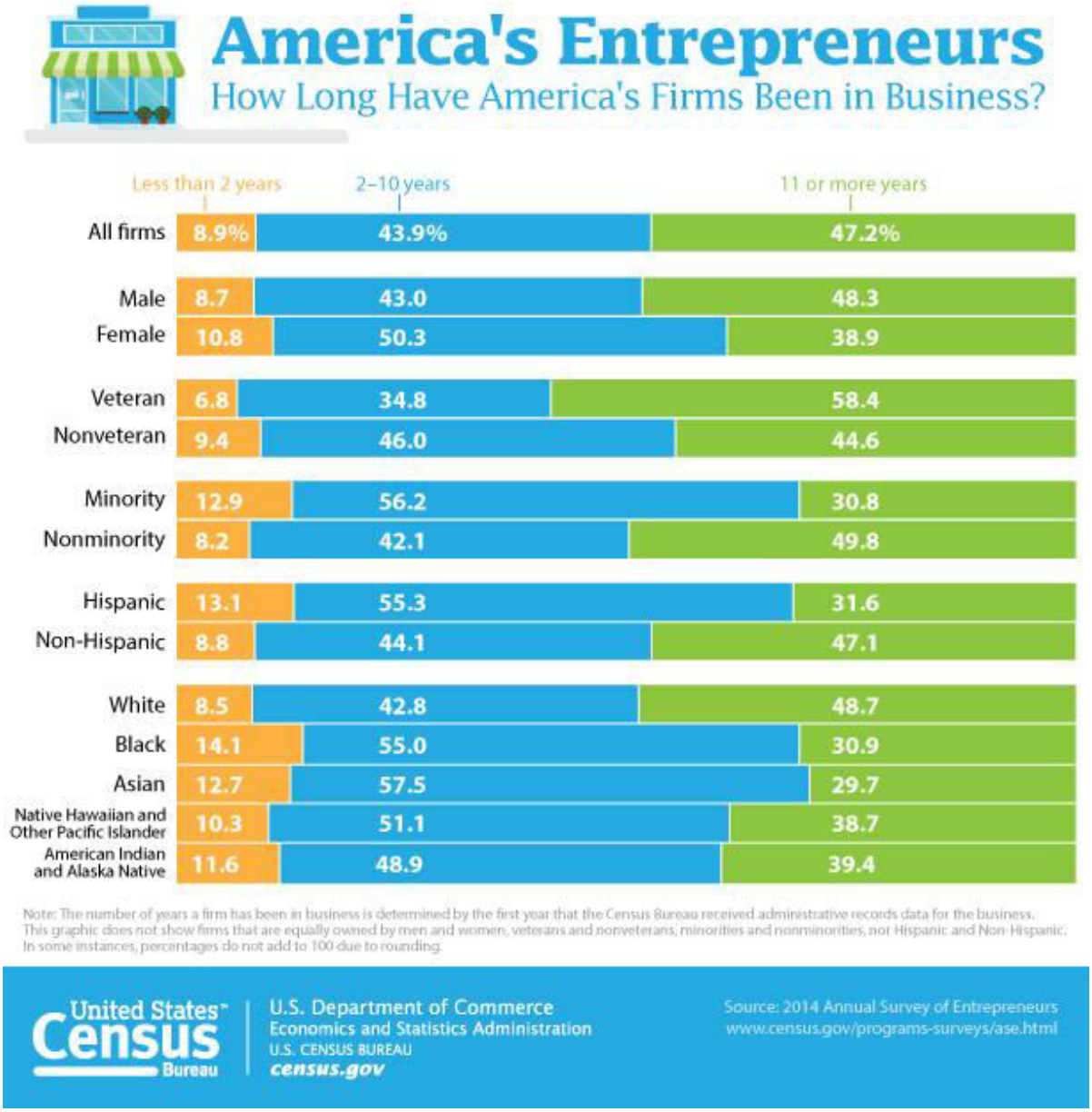
localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/src/chapter-01/D01-01.html

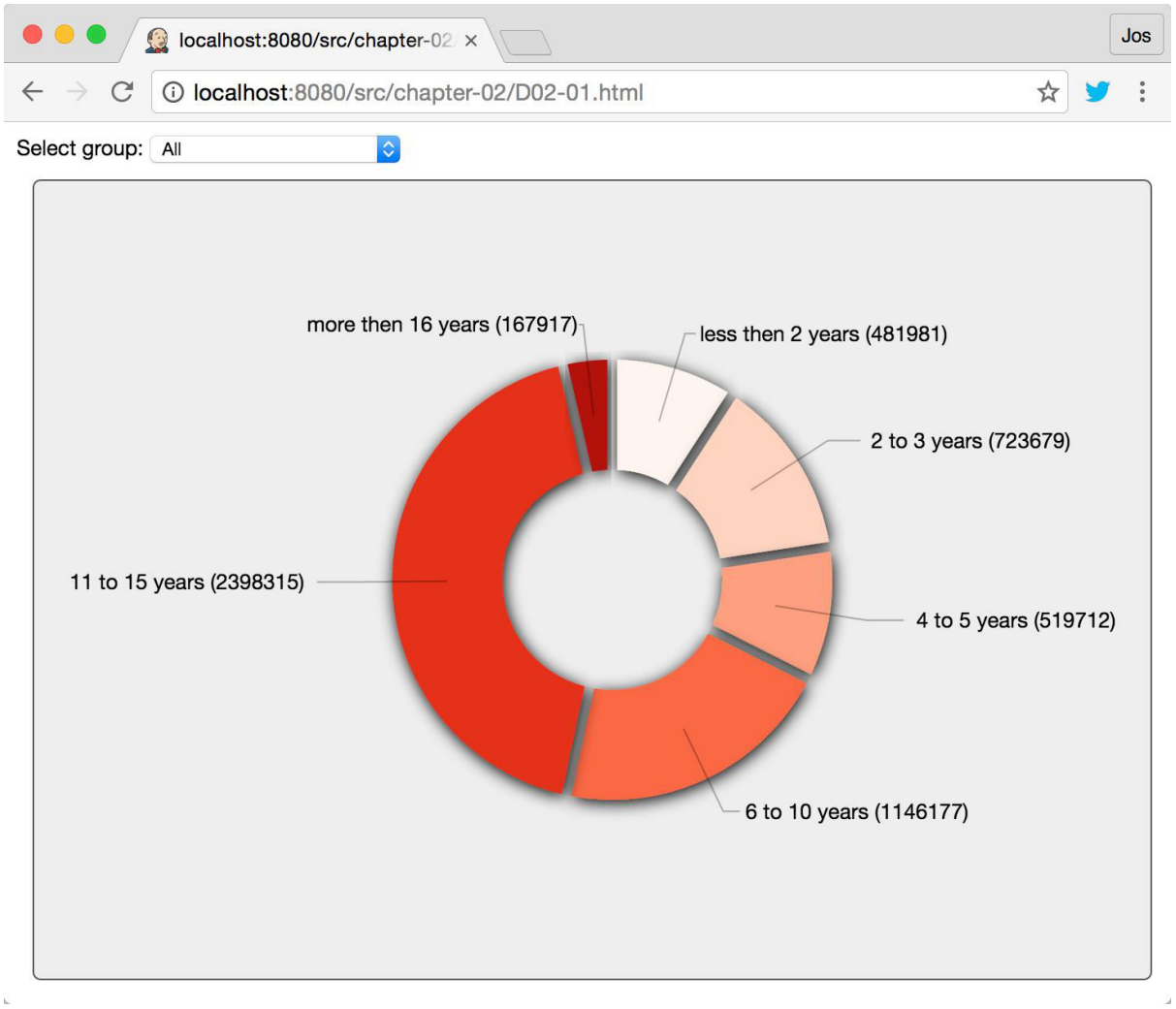

localhost:8080/src/chapter-01
Jos
localhost:8080/src/chapter-01/D01-02.html
0k 1k 2k 3k 4k 5k 6k 7k 8k 9k 10k 11k 12k 13k 14k 15k 16k 17k 18k 19k 20k
Emma
Olivia
Sophia
Ava
Isabella
Mia
Abigail
Emily
Charlotte
Harper
Benjamin
Michael
Alexander
James
Ethan
William
Jacob
Mason
Liam
Noah
0k 1k 2k 3k 4k 5k 6k 7k 8k 9k 10k 11k 12k 13k 14k 15k 16k 17k 18k 19k 20k


localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/src/chapter-01/D01-02.html
0k 1k 2k 3k 4k 5k 6k 7k 8k 9k 10k 11k 12k 13k 14k 15k 16k 17k 18k 19k 20k
Emma
Olivia
Sophia
Ava
Elements Console Sources Network Timeline Profiles
<g transform="translate(40,30)">
<g transform="translate(0 0)">…</g> == $0
<g transform="translate(0 25)">…</g>
<g transform="translate(0 50)">…</g>
<g transform="translate(0 75)">…</g>
<g transform="translate(0 100)">…</g>
<g transform="translate(0 125)">…</g>
<g transform="translate(0 150)">…</g>
html body div#output svg.chart g g
Styles Event Listeners DOM Breakpoints Properties


Emma
Olivia
Sophia
Ava
Isabella
Mia
Abigail
Emily
Charlotte
Harper
Benjamin
Michael
Alexander
James
Ethan
William
Jacob
Mason
Liam
Noah

Chapter 2: Basic Charts and Shapes




localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-01.html
Select group:
All
more then 16 years (167917)
less then 2 years (481981)
2 to 3 years (723679)
11 to 15 years (2398315)
4 to 5 years (519712)
6 to 10 years (1146177)

d3.interpolateViridis

d3.interpolateInferno

d3.interpolateMagma

d3.interpolatePlasma

d3.interpolateWarm

d3.interpolateCool

d3.interpolateRainbow

d3.interpolateCubehelixDefault

d3.interpolateBlues

d3.interpolateGreens

d3.interpolateGreys

d3.interpolateOranges

d3.interpolatePurples

d3.interpolateReds

d3.schemeAccent

d3.schemeDark2

d3.schemePaired

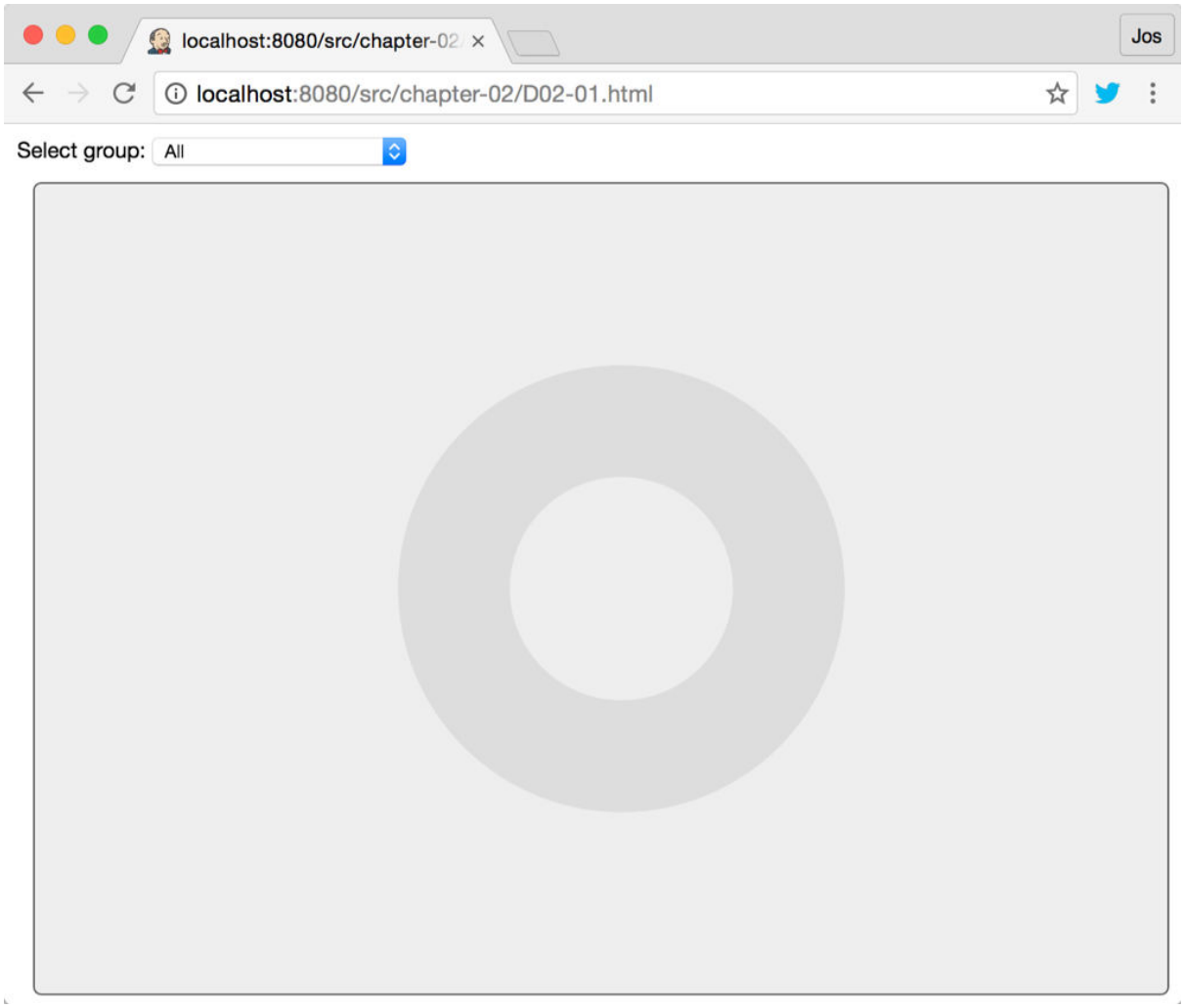
d3.schemePastel1

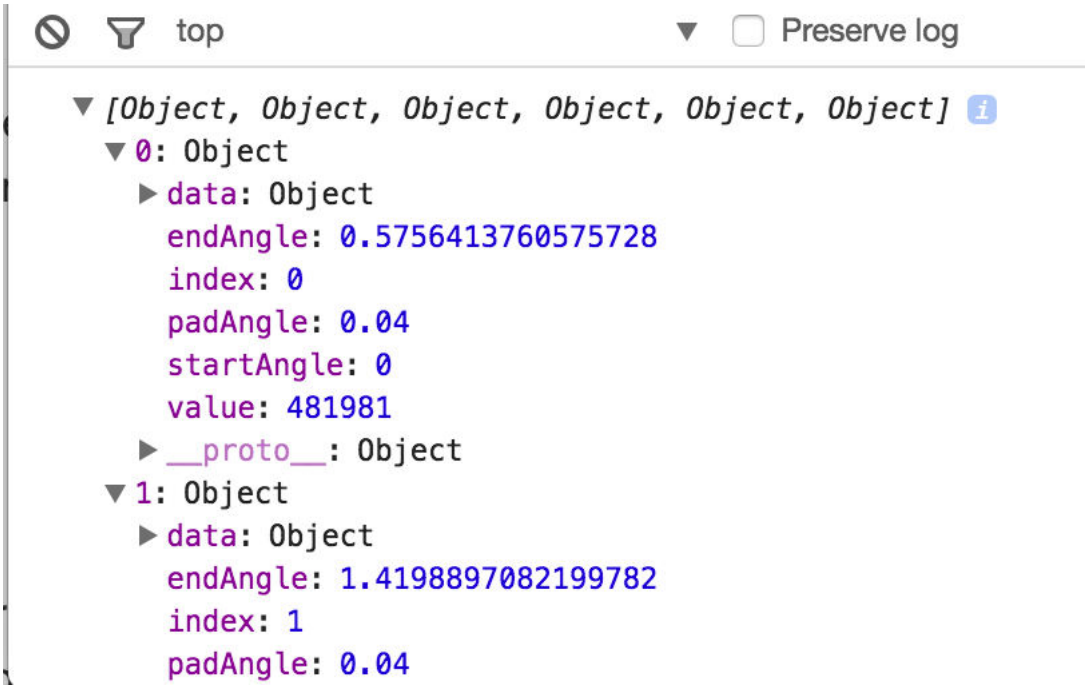
d3.schemePastel2

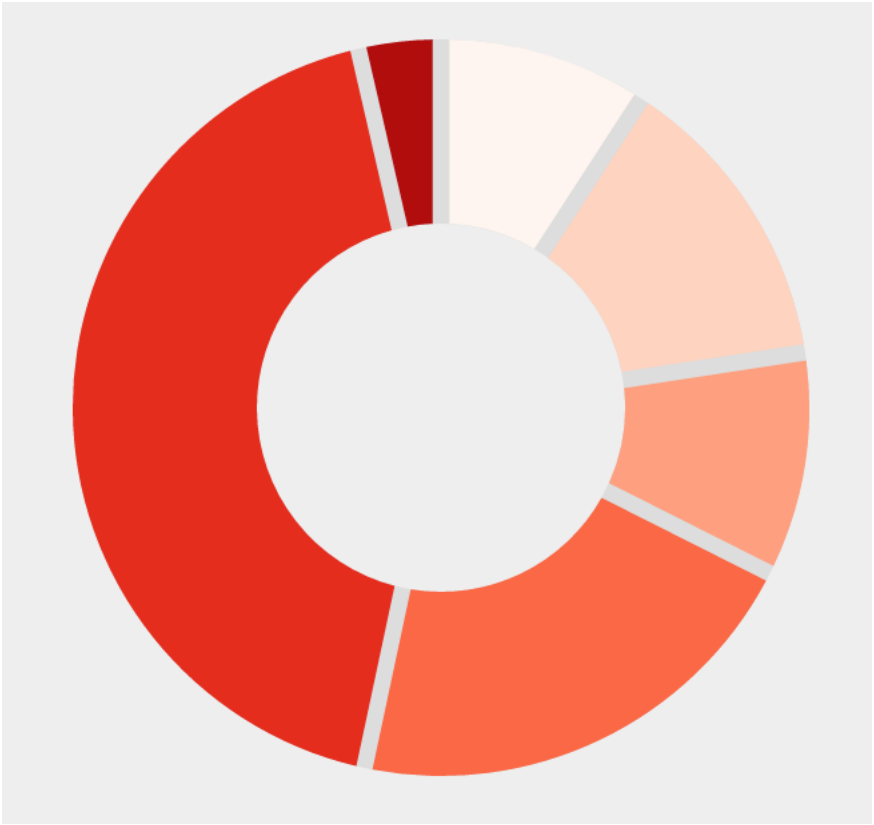
d3.schemeSet1

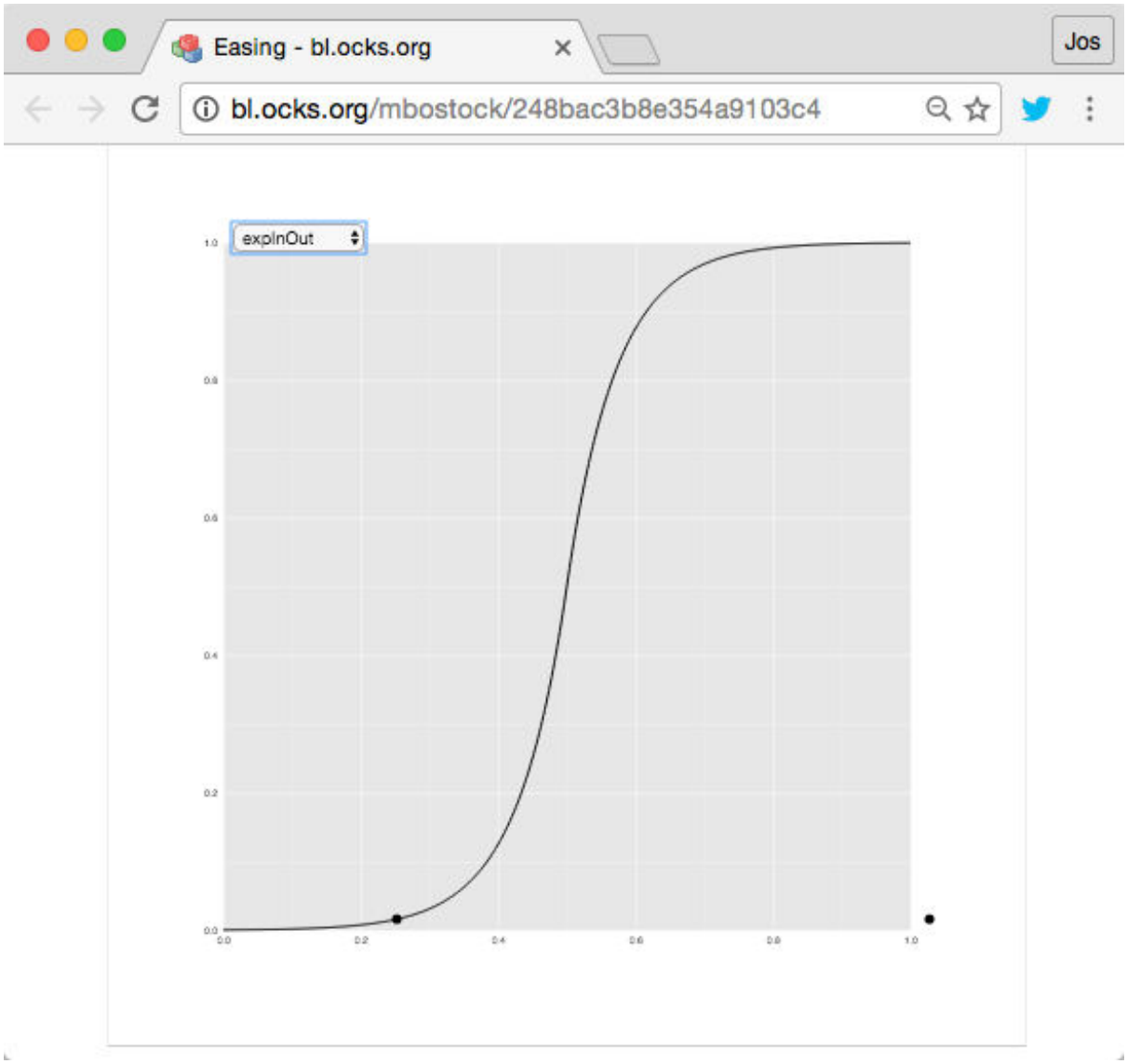
d3.schemeSet2

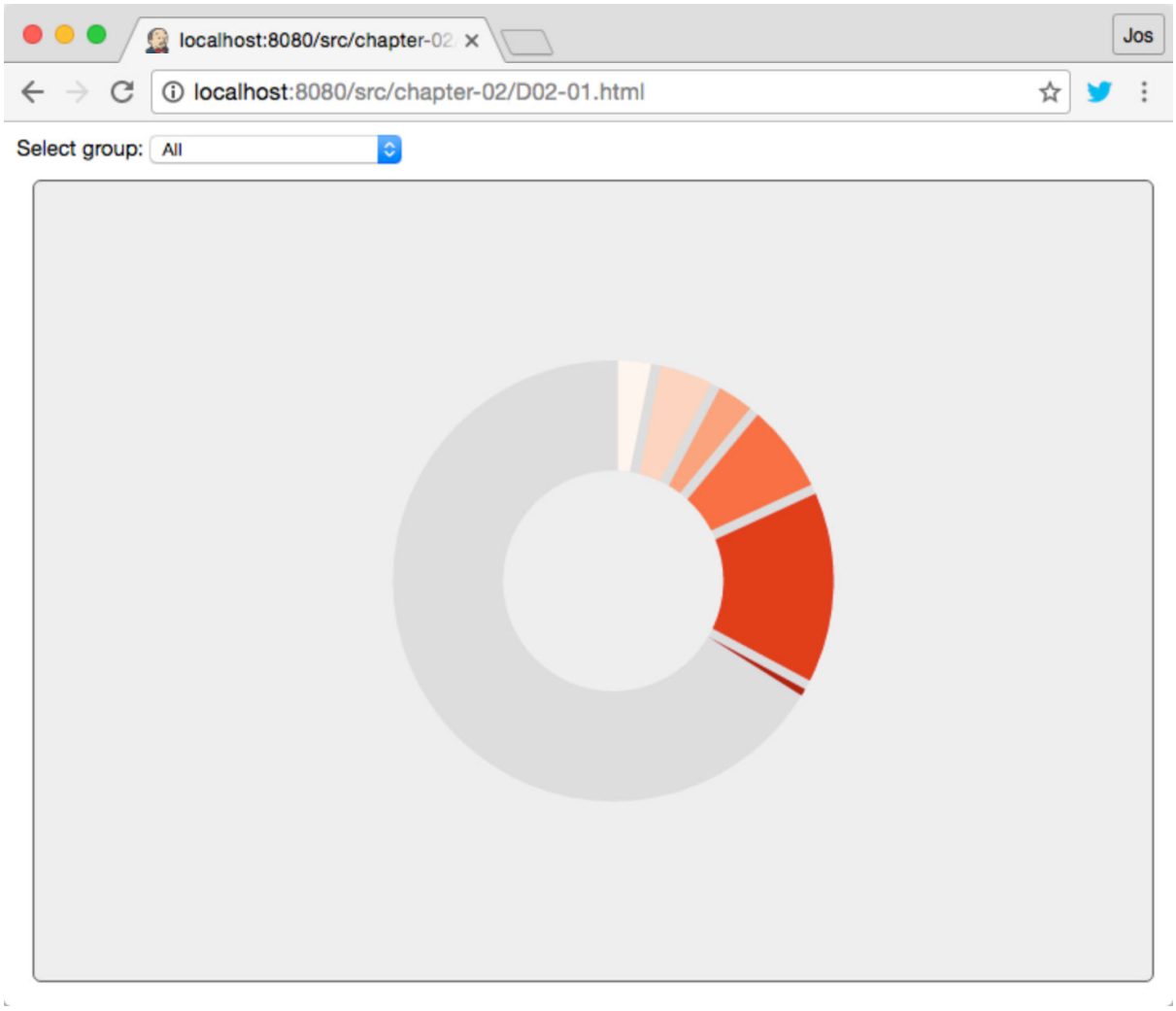
d3.schemeSet3

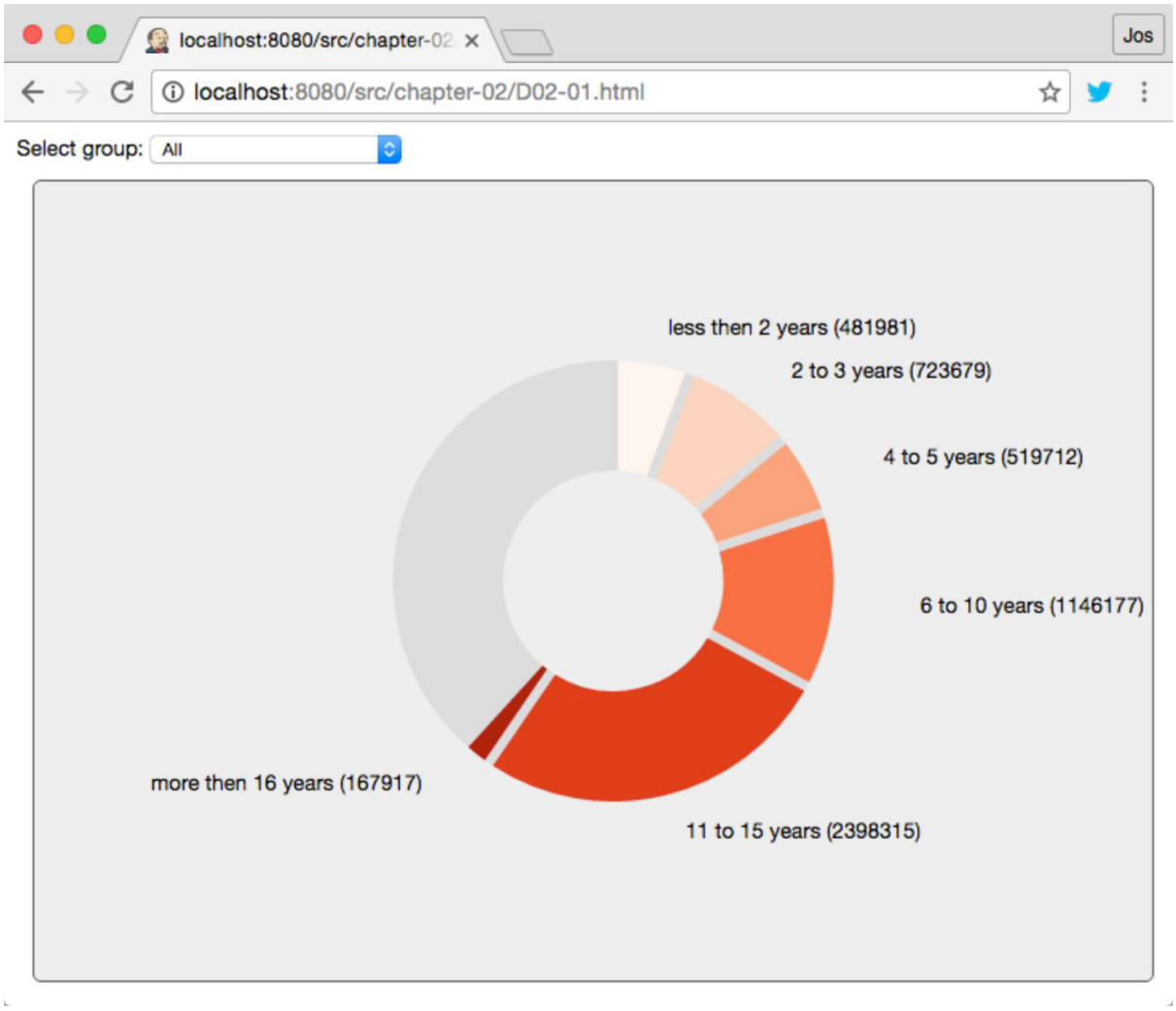

localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-01.html
Select group:
All

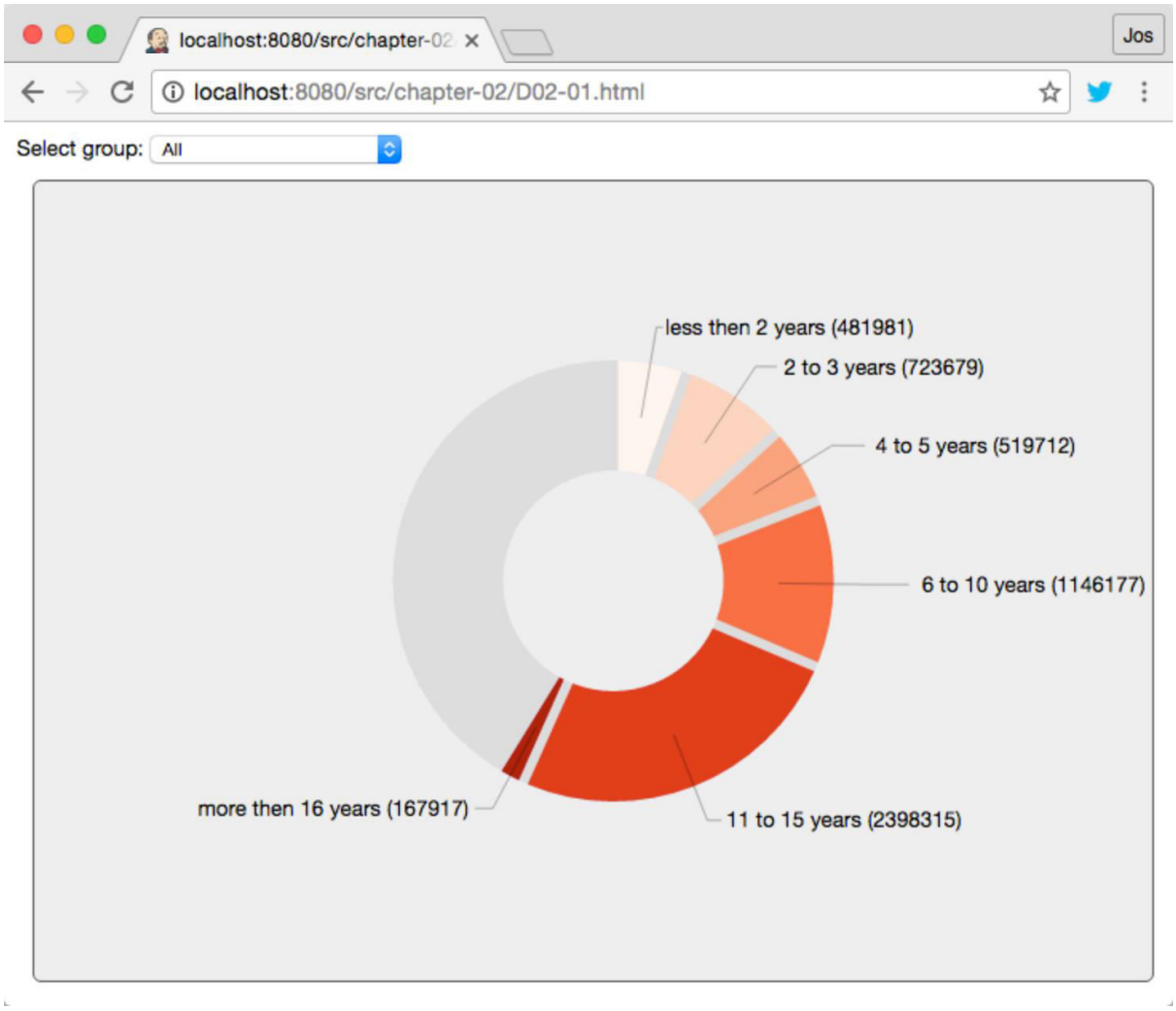

top
Preserve log
[Object, Object, Object, Object, Object, Object]
0: Object
data: Object
endAngle: 0.5756413760575728
index: 0
padAngle: 0.04
startAngle: 0
value: 481981
__proto__: Object
1: Object
data: Object
endAngle: 1.4198897082199782
index: 1
padAngle: 0.04

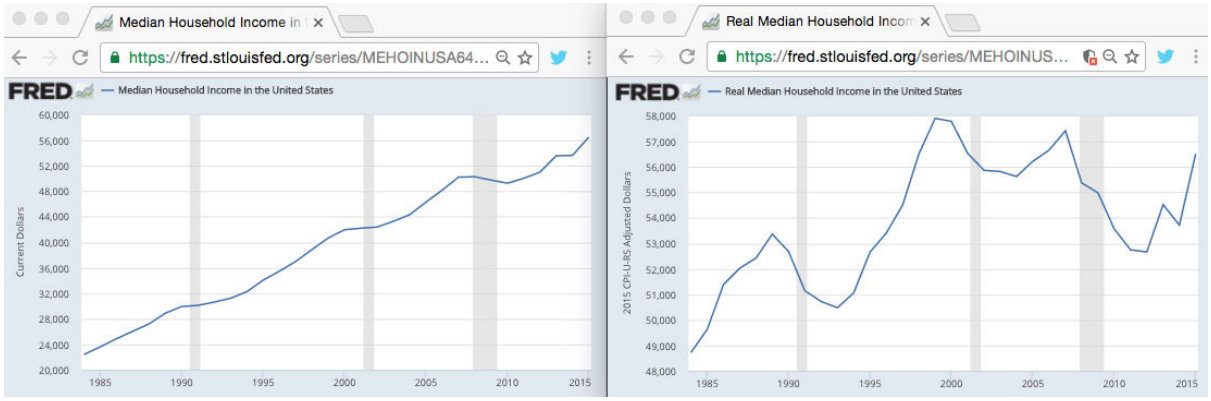


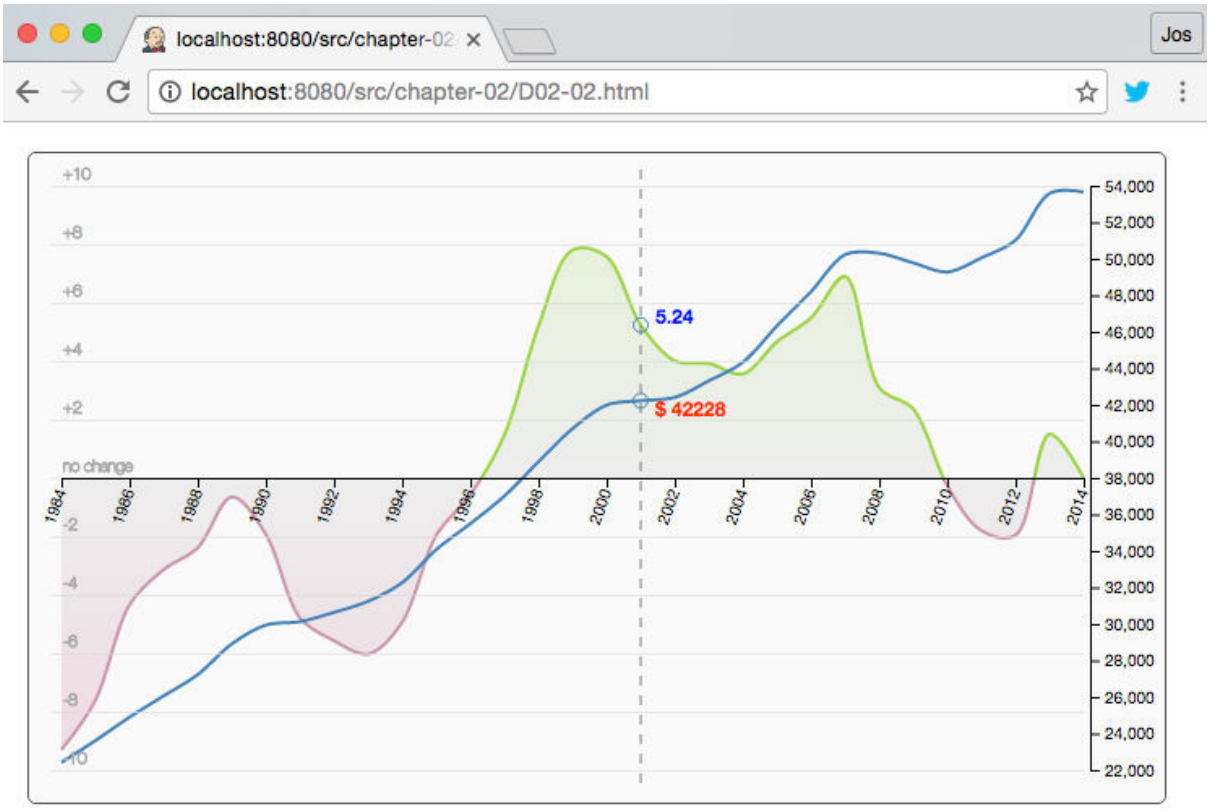

Easing - bl.ocks.org
Jos
bl.ocks.org/mbostock/248bac3b8e354a9103c4
expInOut
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0

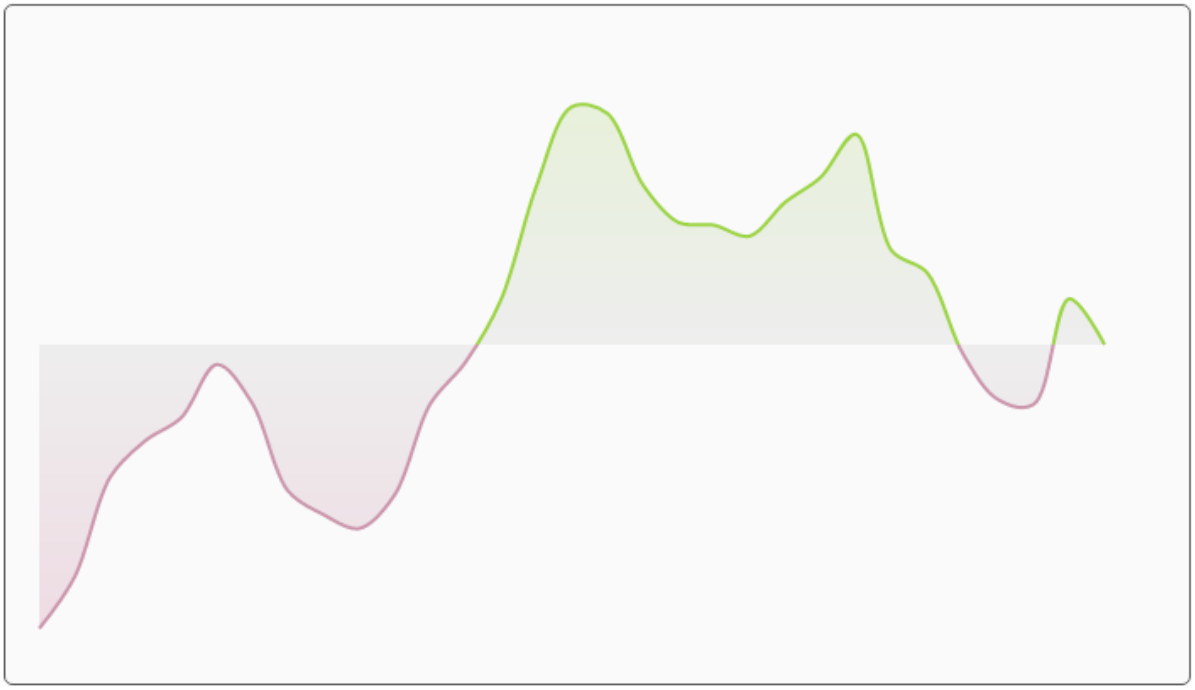

localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-01.html
Select group:
All

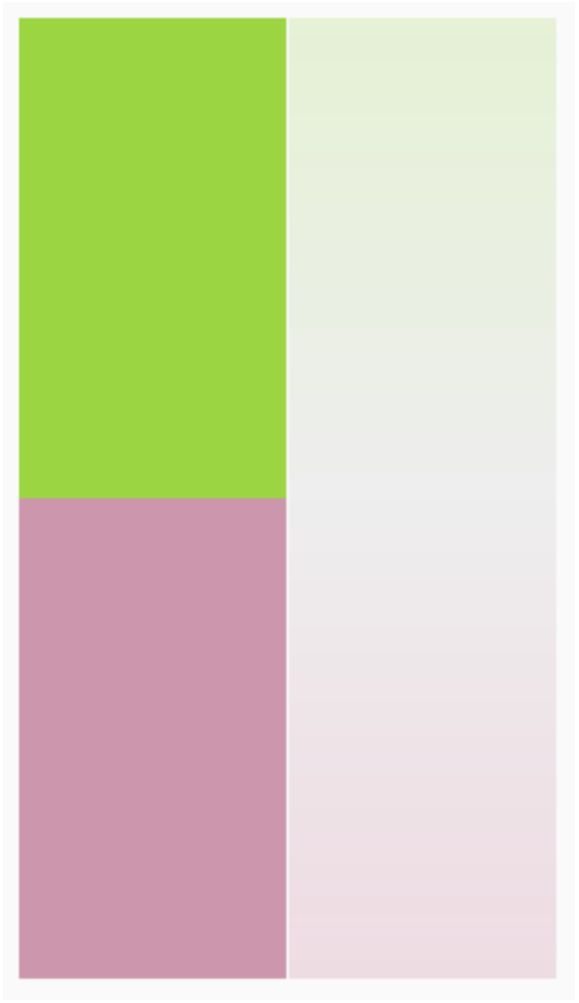

localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-01.html
Select group:
All
less then 2 years (481981)
2 to 3 years (723679)
4 to 5 years (519712)
6 to 10 years (1146177)
11 to 15 years (2398315)
more then 16 years (167917)

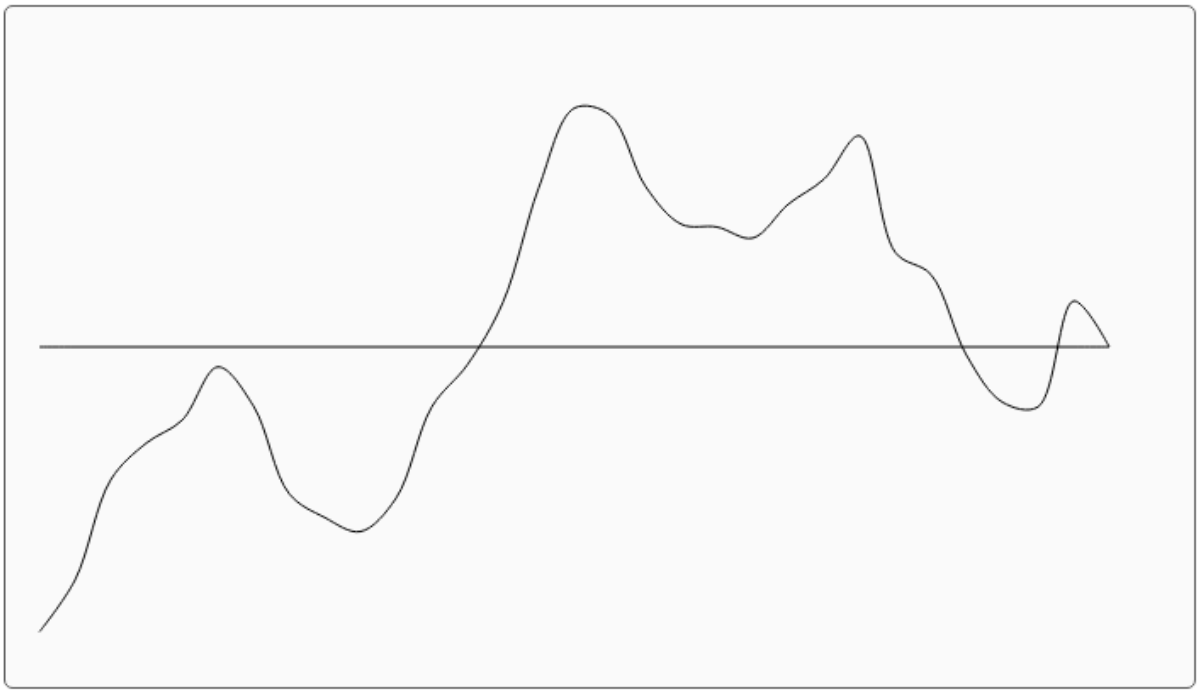

localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-01.html
Select group:
All
less then 2 years (481981)
2 to 3 years (723679)
4 to 5 years (519712)
6 to 10 years (1146177)
11 to 15 years (2398315)
more then 16 years (167917)

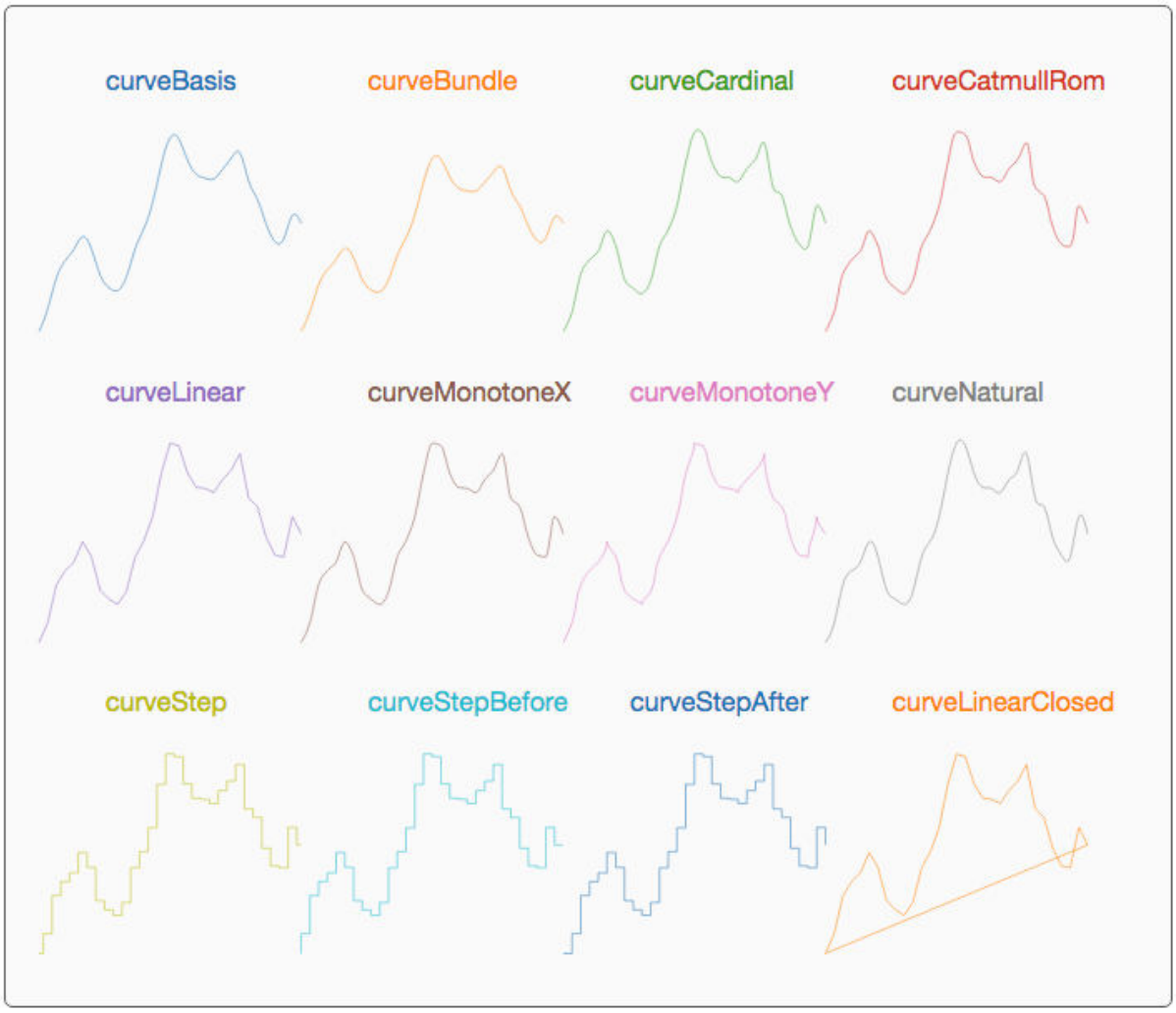

Median Household Income in
https://fred.stlouisfed.org/series/MEHOINUSA64...
FRED
Median Household Income in the United States
Current Dollars
60,000
56,000
52,000
48,000
44,000
40,000
36,000
32,000
28,000
24,000
20,000
1985
1990
1995
2000
2005
2010
2015
Real Median Household Incom
https://fred.stlouisfed.org/series/MEHOINUS...
FRED
Real Median Household Income in the United States
2015 CPI-U-RS Adjusted Dollars
58,000
57,000
56,000
55,000
54,000
53,000
52,000
51,000
50,000
49,000
48,000
1985
1990
1995
2000
2005
2010
2015

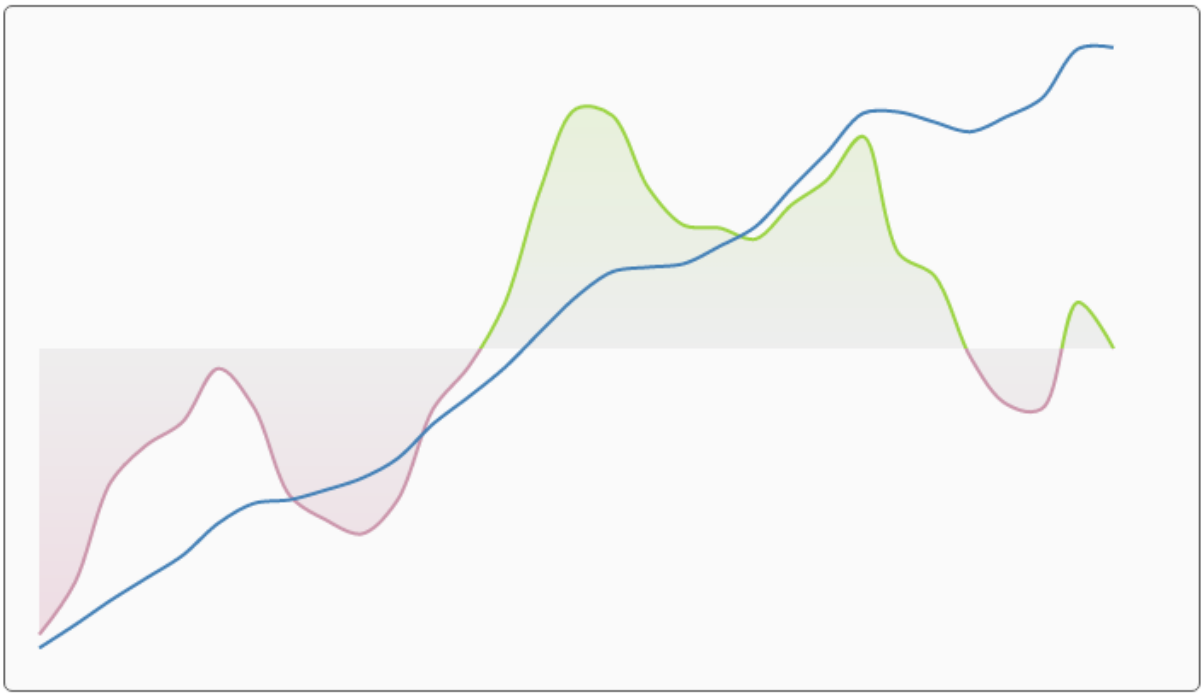

localhost:8080/src/chapter-02
Jos
localhost:8080/src/chapter-02/D02-02.html
+10
+8
+6
+4
+2
no change
-2
-4
-6
-8
-10
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
5.24
$ 42228
54,000
52,000
50,000
48,000
46,000
44,000
42,000
40,000
38,000
36,000
34,000
32,000
30,000
28,000
26,000
24,000
22,000

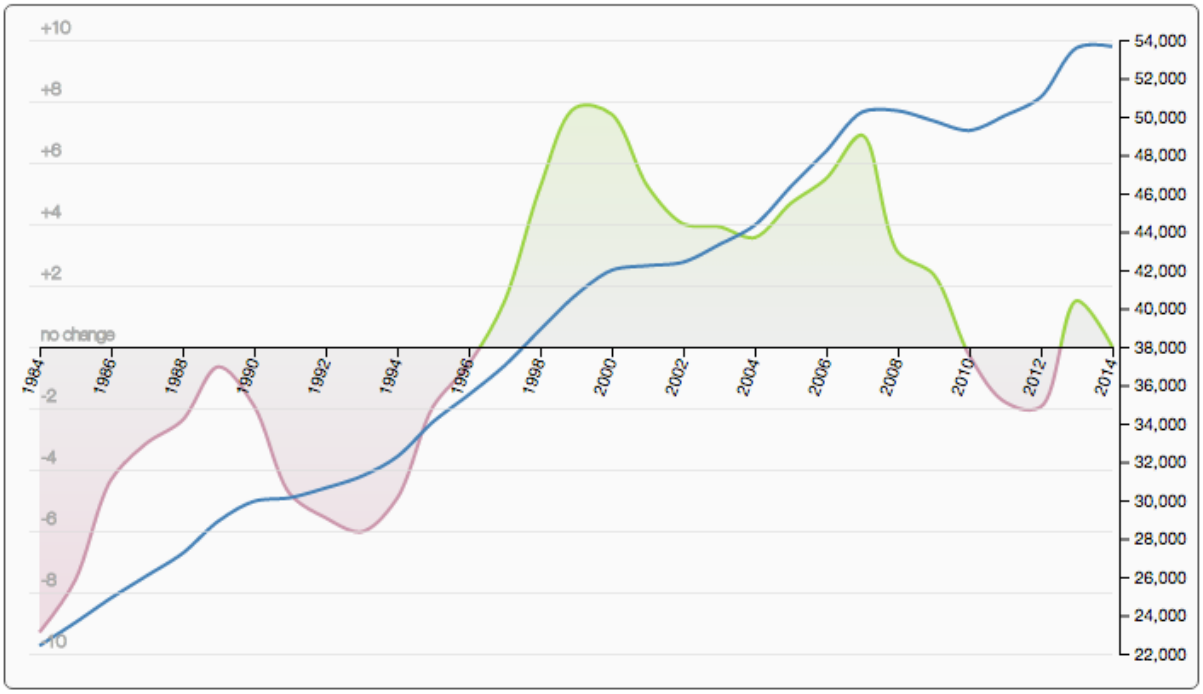




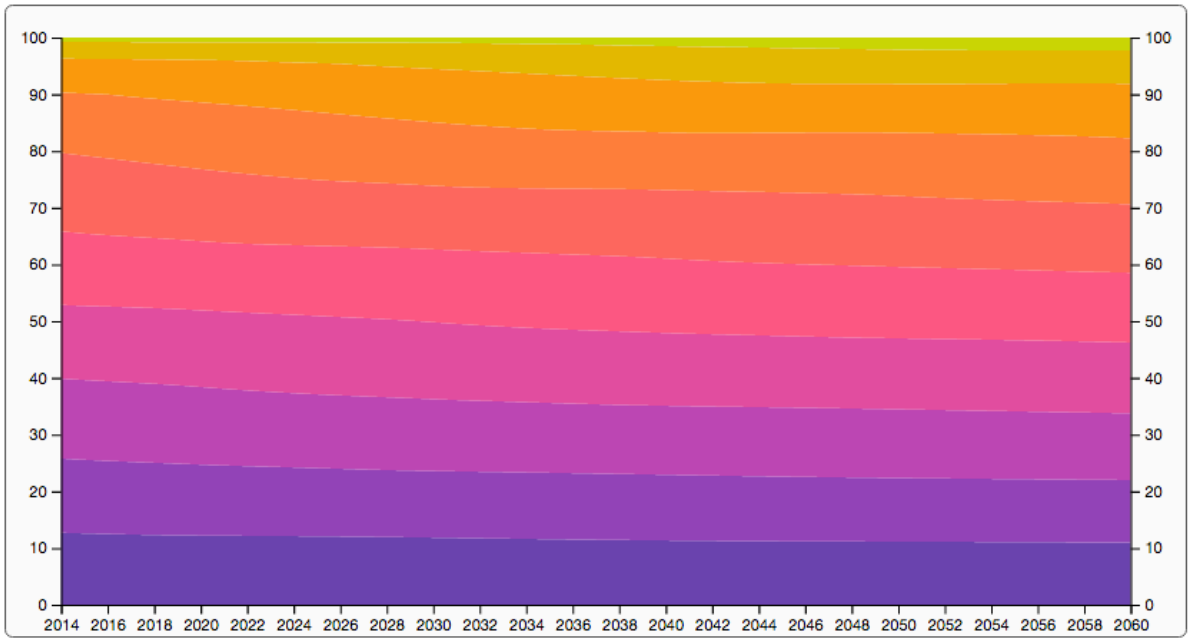


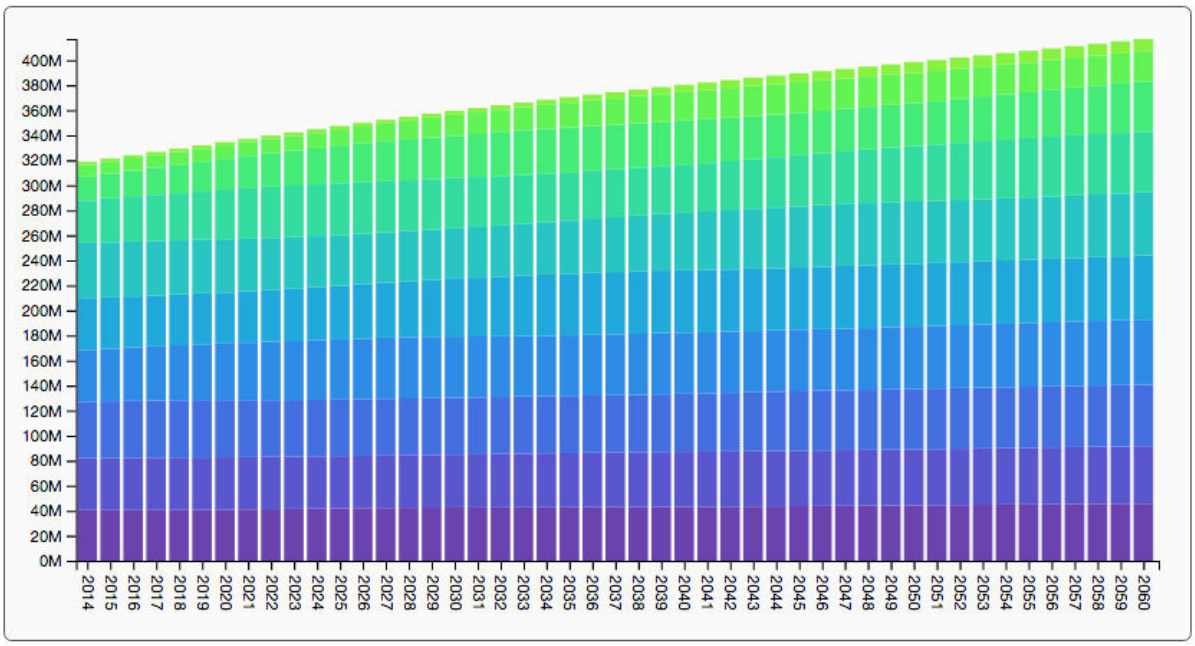

curveBasis
curveBundle
curveCardinal
curveCatmullRom
curveLinear
curveMonotoneX
curveMonotoneY
curveNatural
curveStep
curveStepBefore
curveStepAfter
curveLinearClosed




+10
+8
+6
+4
+2
no change
-2
-4
-6
-8
-10
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
54,000
52,000
50,000
48,000
46,000
44,000
42,000
40,000
38,000
36,000
34,000
32,000
30,000
28,000
26,000
24,000
22,000

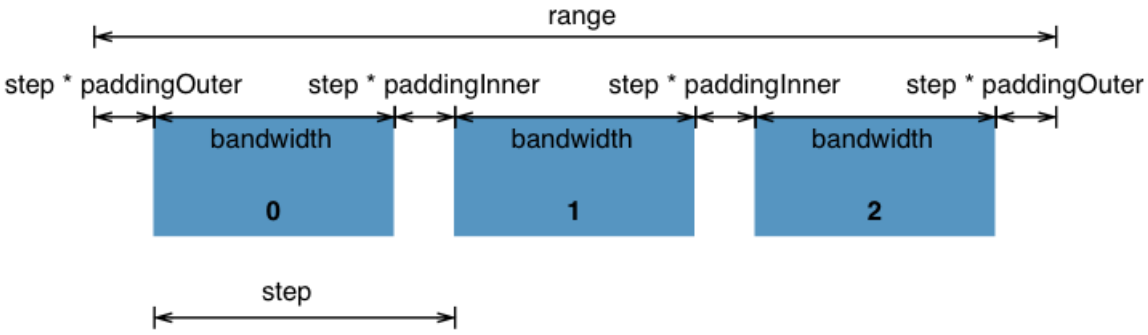
1.46
$37005
1996
1998
2000


100
90
80
70
60
50
40
30
20
10
0
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
2036
2038
2040
2042
2044
2046
2048
2050
2052
2054
2056
2058
2060

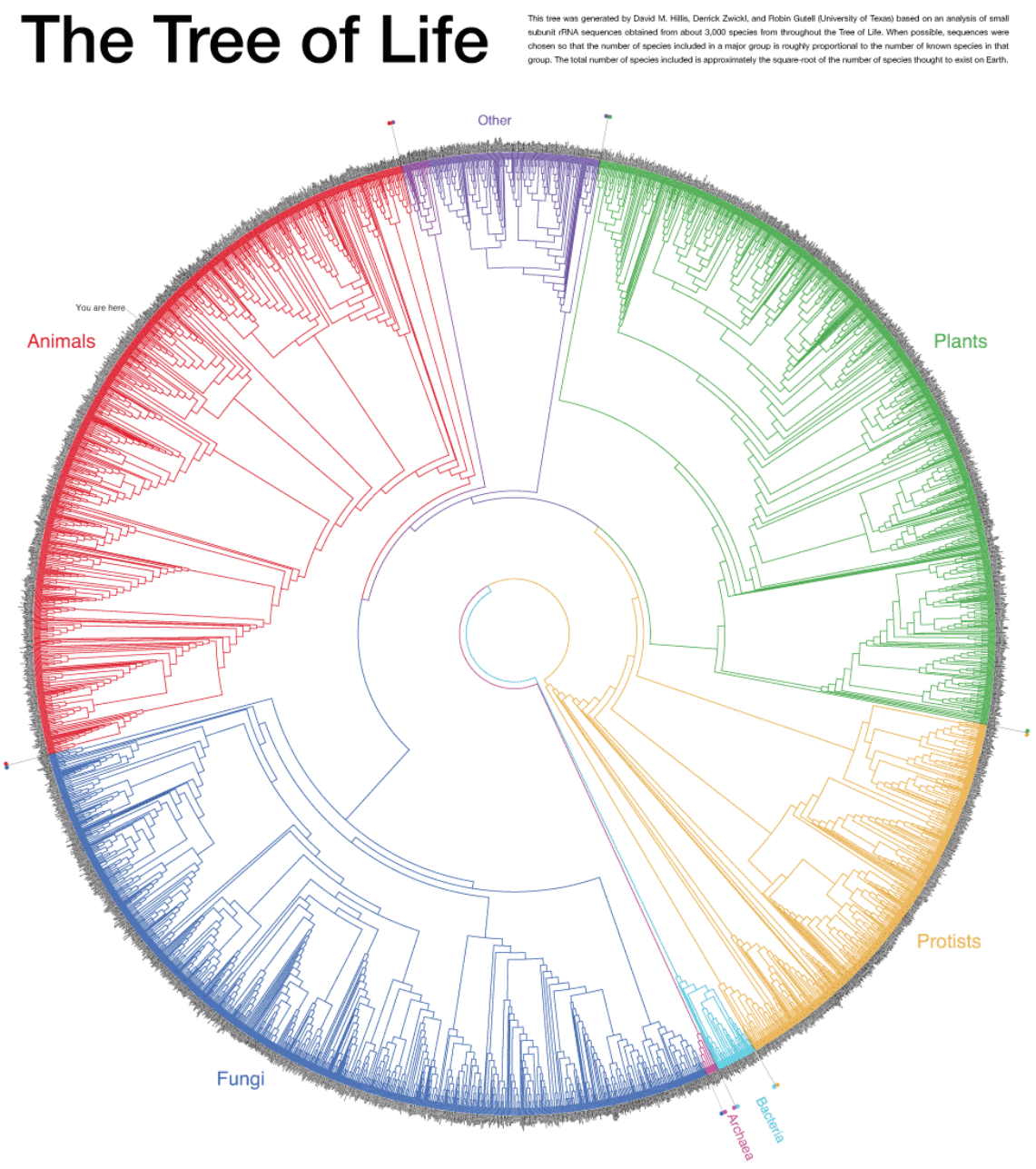


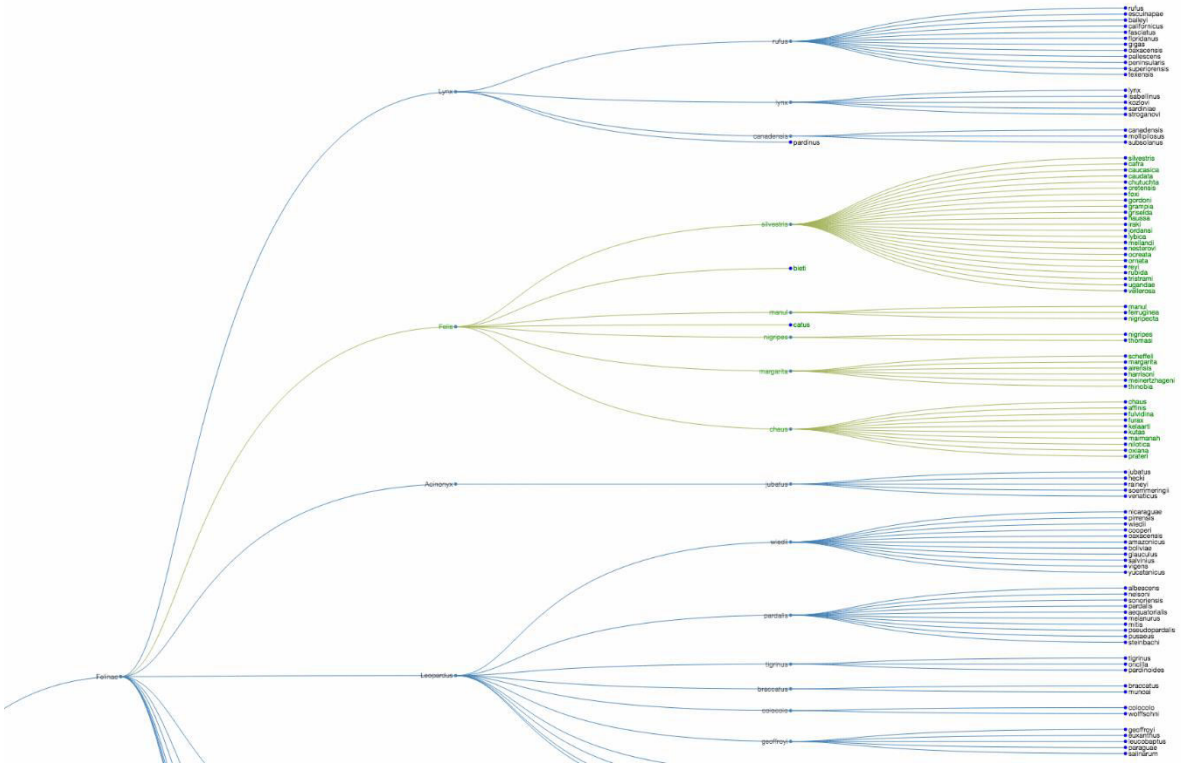

```
0: 40427758
1: 41681751
2: 45213477
3: 42005558
4: 40994700
5: 44122655
6: 35187055
7: 19626018
8: 9680443
9: 2429449
total: 321368864
year: 2015
```

```
> series[0][0]
<- [0, 40419482]
> series[1][0]
<- [40419482, 82135202]
> series[2][0]
<- [82135202, 127036898]
> series[3][0]
<- [127036898, 168456331]
```


range
step * paddingOuter
step * paddingInner
step * paddingInner
step * paddingOuter
bandwidth
0
bandwidth
1
bandwidth
2
step

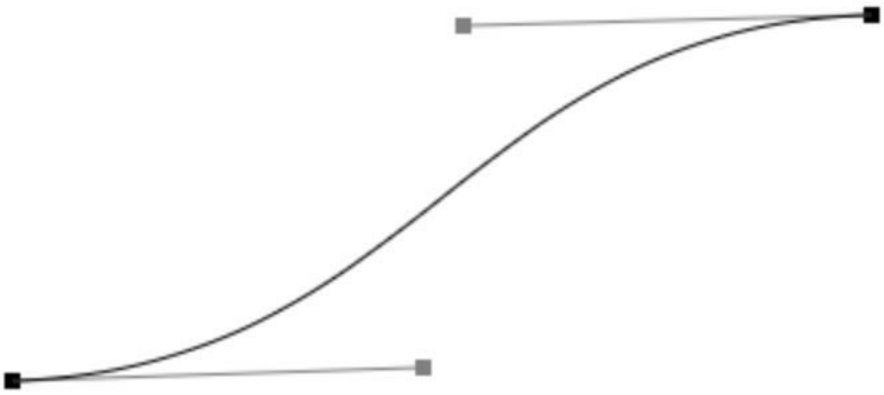
Chapter 3: Working with Hierarchical Data

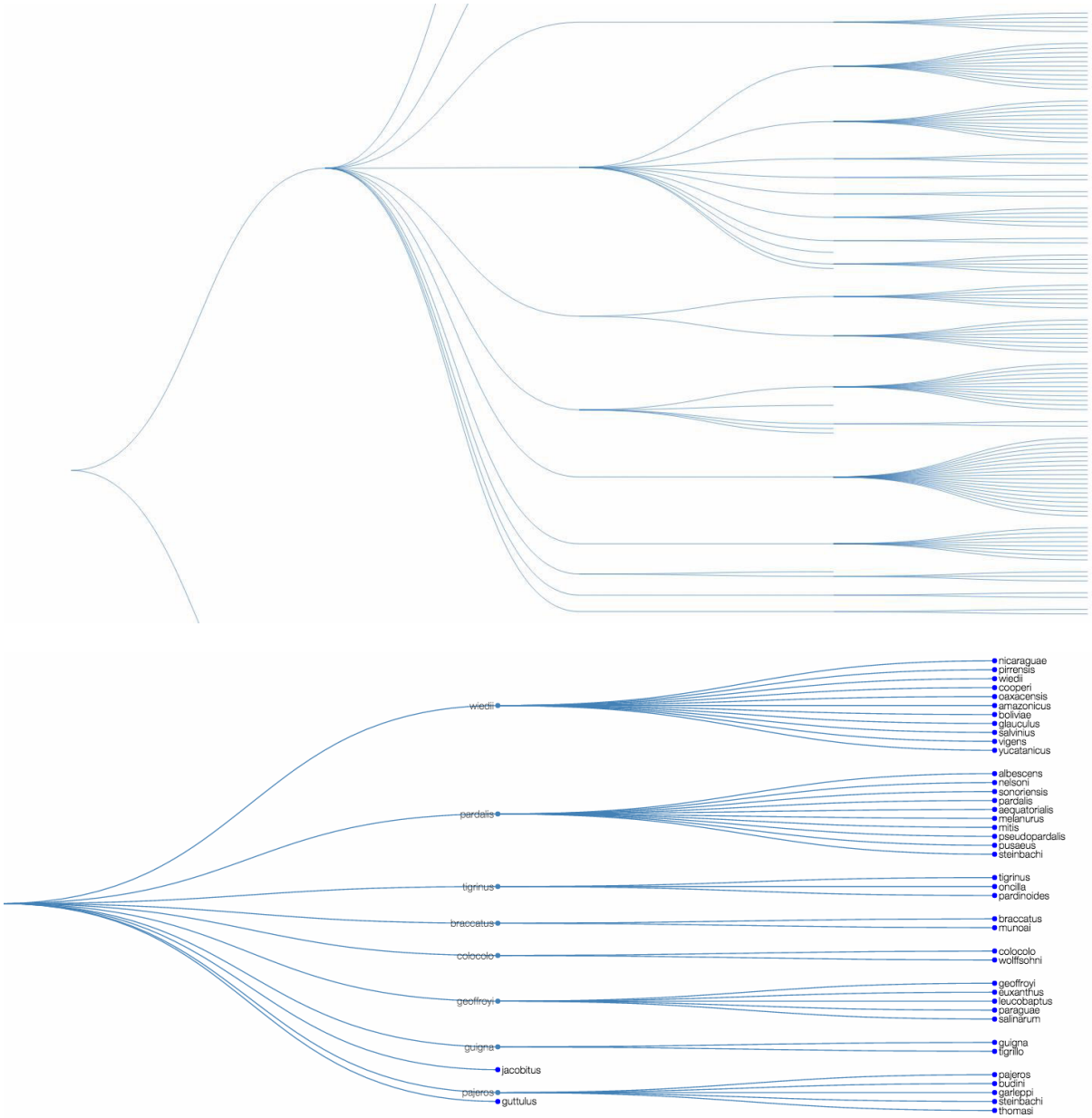


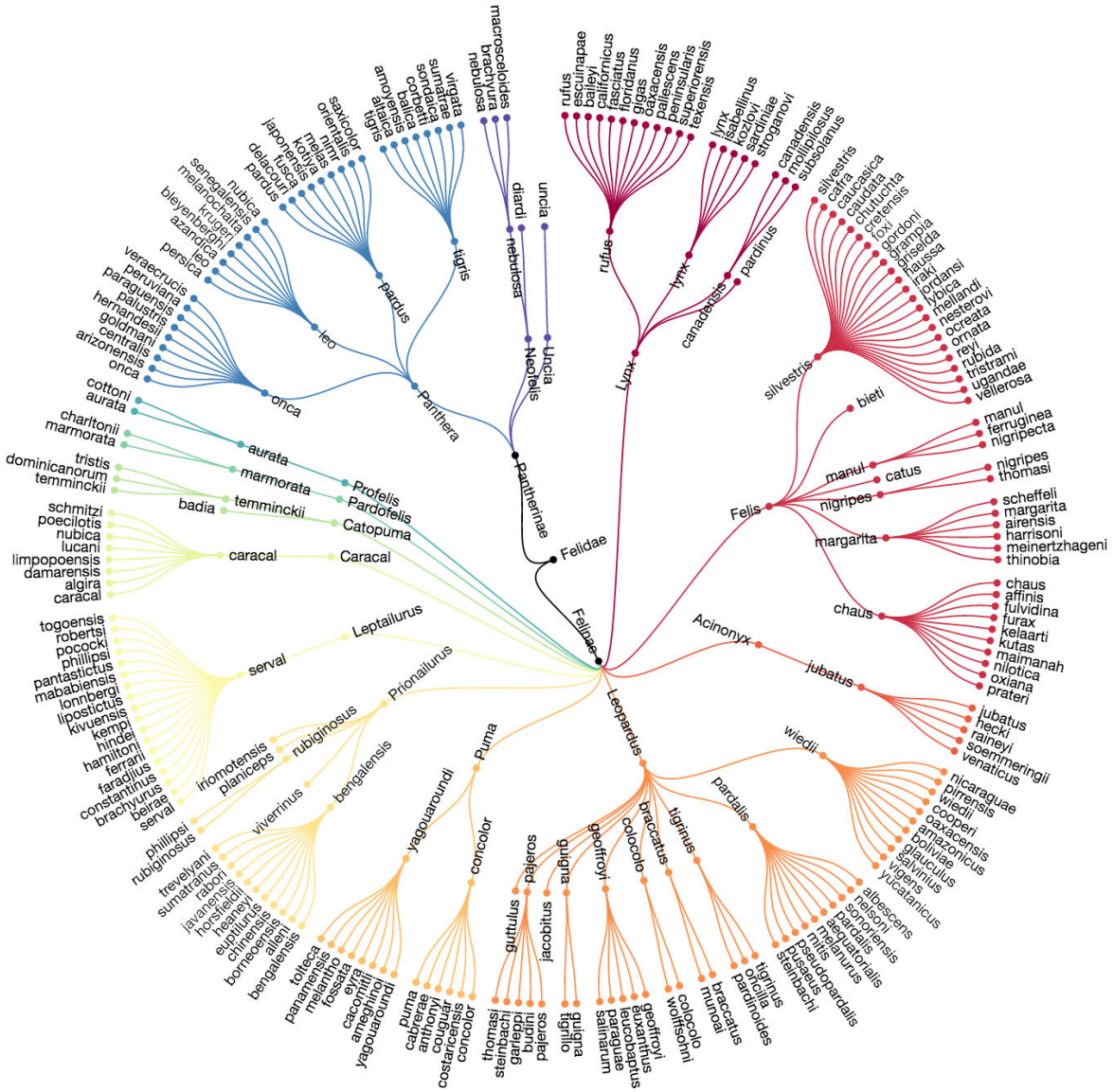



```
▼ Node {data: Object, height: 4, depth: 0, parent: null, id: "180580"…} i
  ▼ children: Array[2]
    ▶ 0: Node
    ▶ 1: Node
      length: 2
    ▶ __proto__: Array[0]
  ▼ data: Object
      description: "cats"
      id: "180580"
      name: "Felidae"
      parentId: ""
    ▶ __proto__: Object
    depth: 0
    height: 4
    id: "180580"
    parent: null
  ▶ __proto__: Object
```

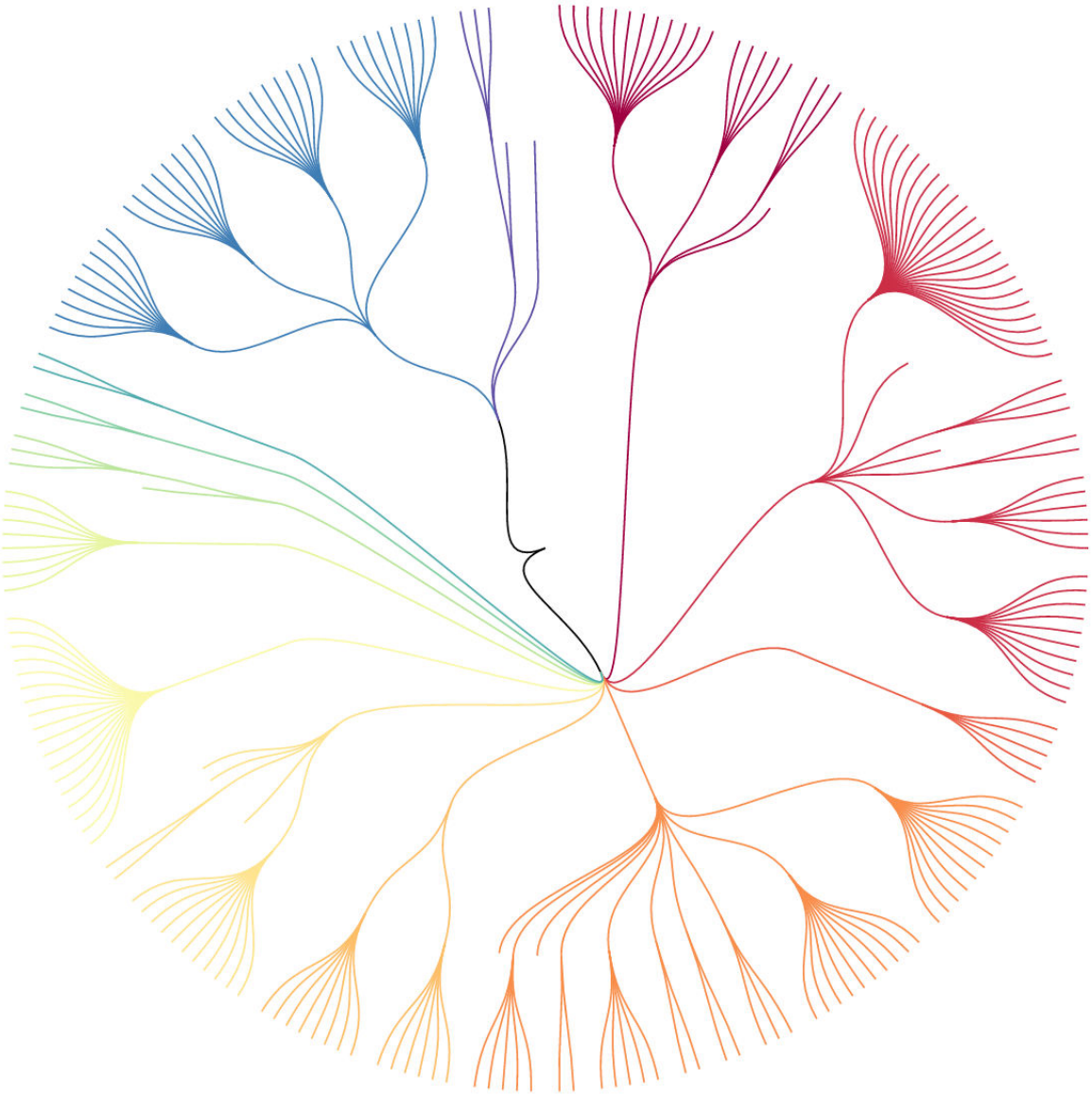
```
▼ 10: Node
  ▼ children: Array[1]
    ▼ 0: Node
      ▶ children: Array[2]
      ▶ data: Object
        depth: 3
        height: 1
        id: "621874"
      ▶ parent: Node
        x: 770.625
        y: 600
      ▶ __proto__: Object
        length: 1
    ▶ __proto__: Array[0]
  ▶ data: Object
    depth: 2
    height: 2
    id: "621781"
  ▶ parent: Node
    x: 770.625
    y: 400
```

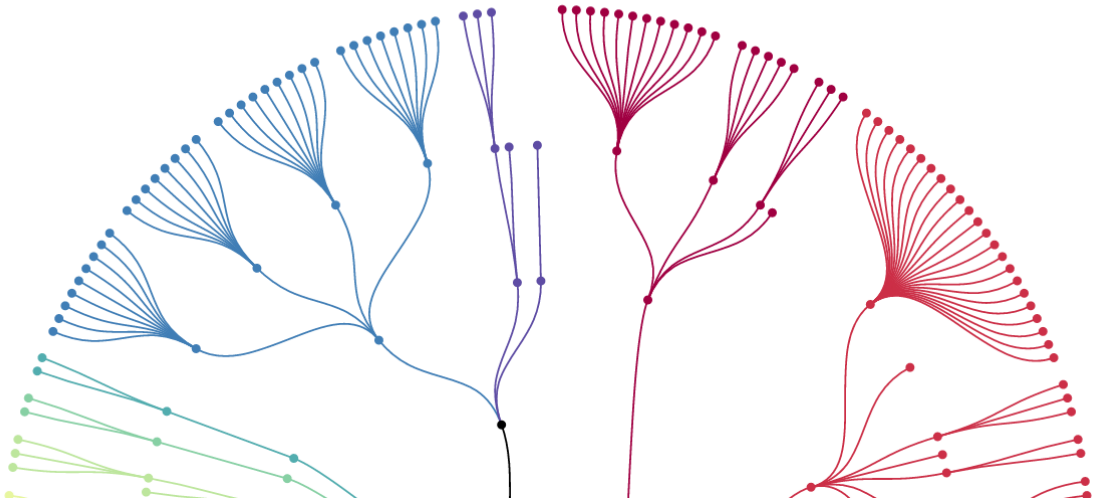



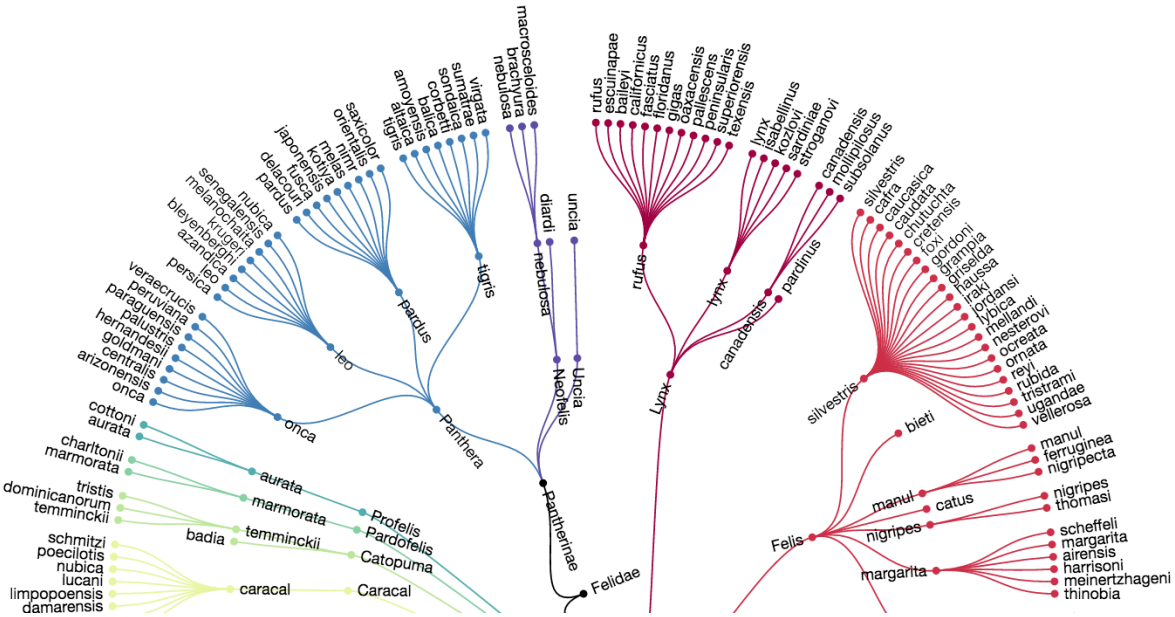

wiedii
pardalis
tigrinus
braccatus
colocolo
geoffroyi
guigna
jacobitus
pajeros
guttulus
nicaraguae
pirrensis
wiedii
cooperi
oaxacensis
amazonicus
boliviae
glauculus
salvinius
vigens
yucatanicus
albescens
nelsoni
sonoriensis
pardalis
aequatorialis
melanurus
mitis
pseudopardalis
pusaeus
steinbachi
tigrinus
oncilla
pardinoides
braccatus
munoai
colocolo
wolffsohni
geoffroyi
euxanthus
leucobaptus
paraguae
salinarum
guigna
tigrillo
pajeros
budini
garleppi
steinbachi
thomasi

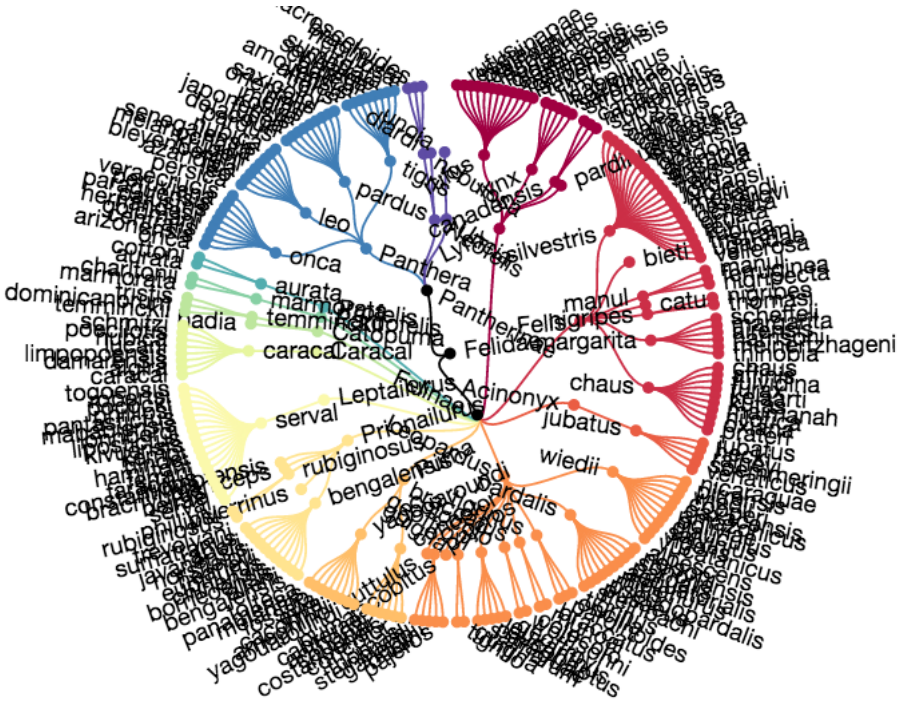


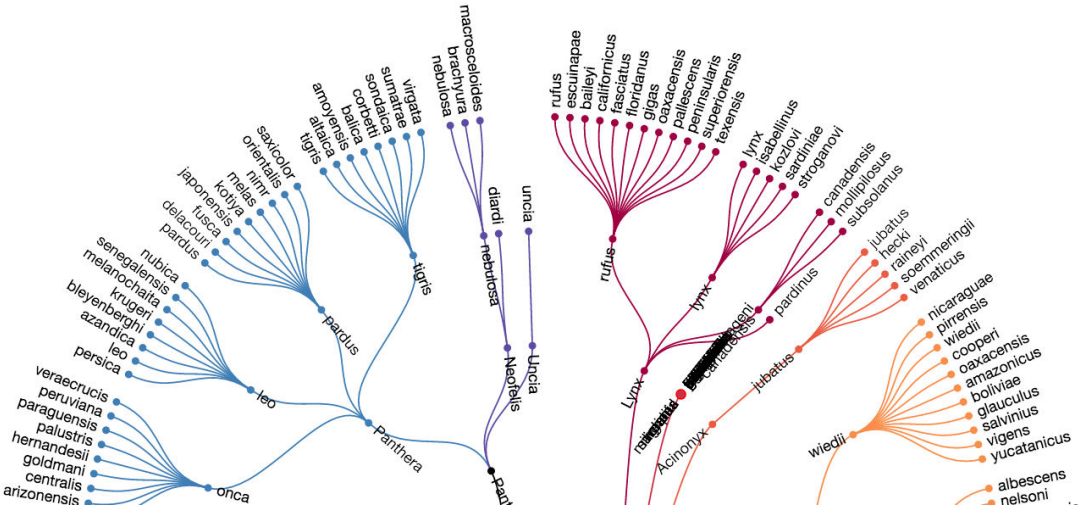
Felidae
Pantherinae
Felinae
Panthera
Neofelis
Uncia
Lynx
Leopardus
Leptailurus
Prionailurus
Puma
Acinonyx
Felis
Pardofelis
Catopuma
Caracal
Profelis
tigris
pardus
leo
onca
nebulosa
diardi
uncia
rufus
lynx
canadensis
pardinus
silvestris
bieti
manul
catus
nigripes
margarita
chaus
jubatus
wiedii
pardalis
tigrinus
braccatus
colocolo
geoffroyi
guigna
pajeros
guttulus
jacobitus
concolor
yagouaroundi
serval
bengalensis
viverrinus
rubiginosus
iriomotensis
planiceps
phillipsi
rubiginosus

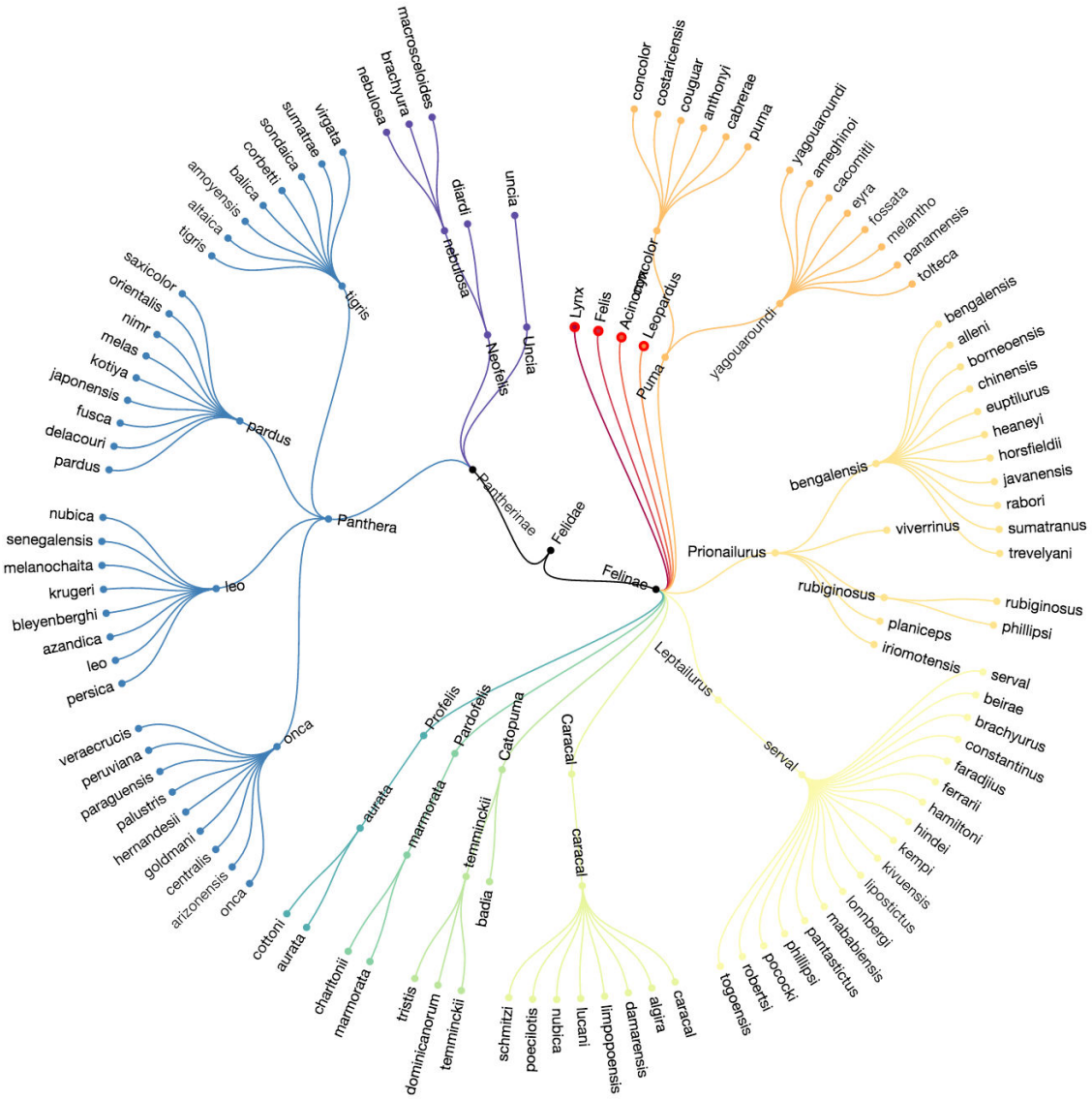




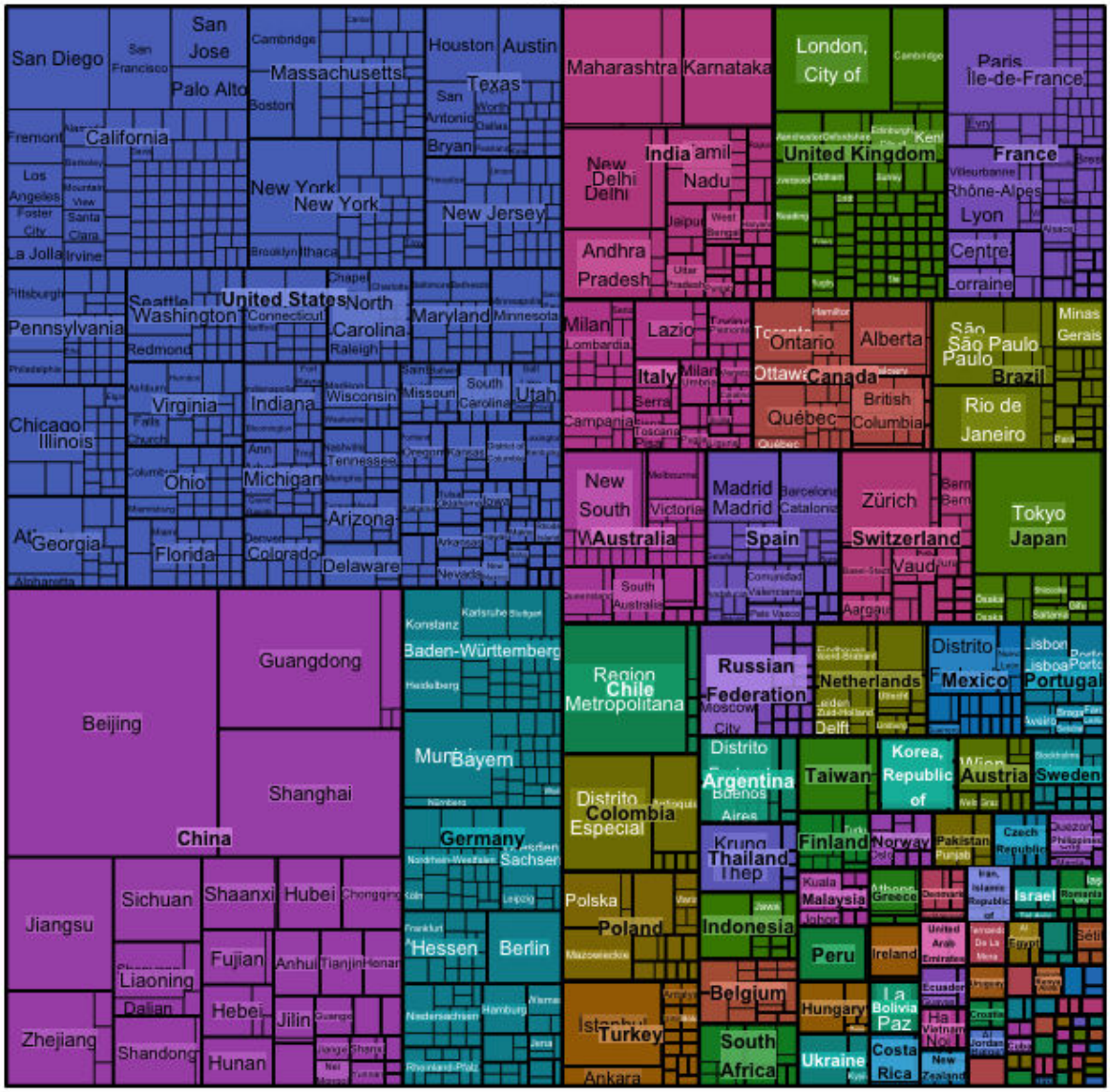

macroscelioides
brachyura
nebulosa
virgata
sumatrae
sondaica
corbetti
balica
amoyensis
altaica
tigris
saxicolor
orientalis
nimr
melas
kotiya
japonensis
fusca
delacouri
pardus
nubica
senegalensis
melanochaita
krugeri
bleyenberghi
azandica
leo
persica
veraecrucis
peruviana
paraguensis
palustris
hernandesi
goldmani
centralis
arizonensis
onca
cottoni
aurata
charltonii
marmorata
tristis
dominicanorum
temminckii
schmitzi
poecilotis
nubica
lucani
limpopoensis
damarensis
diardi
uncia
nebulosa
Uncia
Neofelis
Panthera
Pantherinae
Felidae
rufus
escuinapae
bailey
californicus
fasciatus
floridanus
gigas
oaxacensis
pallescens
peninsularis
superiorensis
texensis
lynx
isabellinus
kozlovi
sardiniae
stroganovi
canadensis
mollipilosus
subsolanus
silvestris
cafra
caucasica
caudata
chutuchta
cretensis
foxi
gordoni
grampia
griselda
haussa
iraki
jordansi
lybica
mellandi
nesterovi
ocreata
ornata
reyi
rubida
tristrami
ugandae
vellerosa
pardinus
canadensis
Lynx
bieti
manul
ferruginea
nigripecta
catus
nigripes
thomasi
Felis
scheffeli
margarita
airensis
harrisoni
meinertzhageni
thinobia
margarita
Profelis
Pardofelis
Catopuma
Caracal
badia
temminckii
caracal

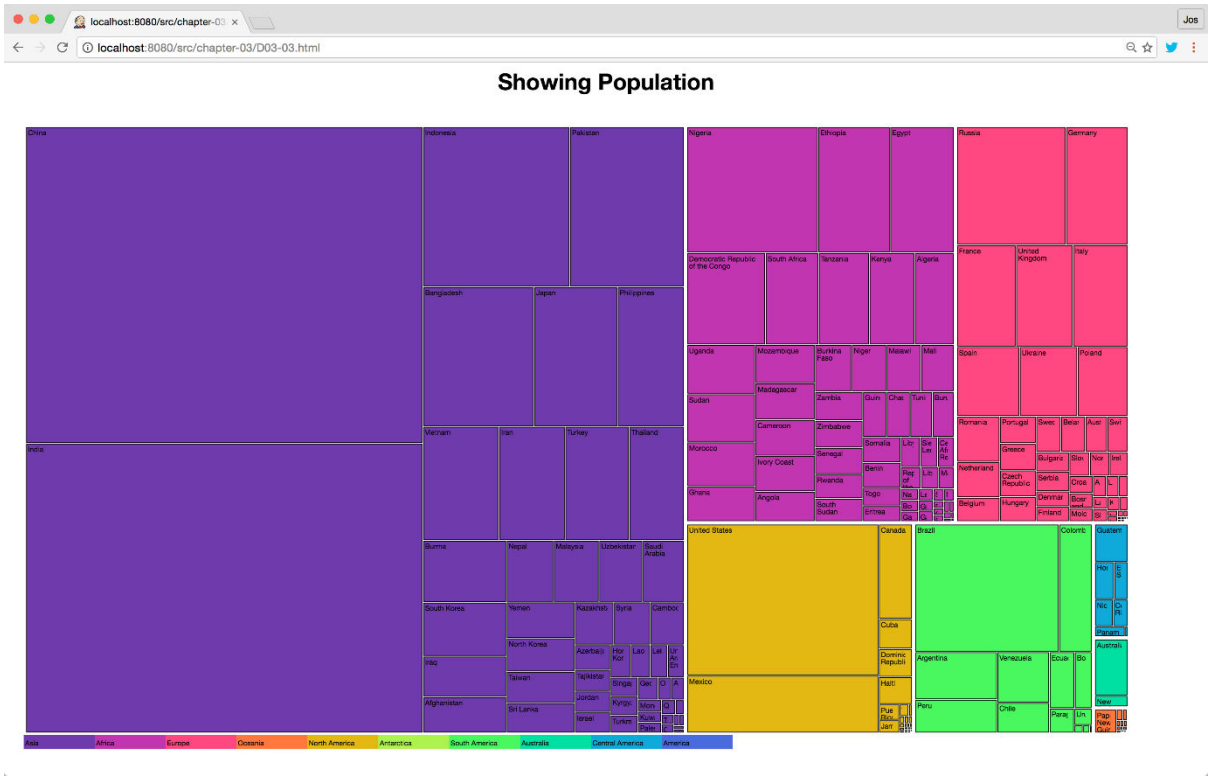

pardus
leo
onca
aurata
Panthera
Pantherinae
Felidae
silvestris
bieti
manul
catus
margarita
chaus
jubatus
wiedii
Acinonyx
serval
rubiginosus
bengalensis
Leptailurus
Caracal
caracal
badia
temminckii
marmorata
tigris
diardi
nebulosa
canadensis
pardinus
Lynx
Felis
nigripes
meinertzhageni
thinobia
cobitus
uttulus
pardalis


macrosceloides
brachyura
nebulosa
virgata
sumatrae
sondaica
corbetti
balica
amoyensis
altaica
tigris
saxicolor
orientalis
nimr
melas
kotiya
japonensis
fusca
delacouri
pardus
nubica
senegalensis
melanochaita
krugeri
bleyenberghi
azandica
leo
persica
veraecrucis
peruviana
paraguensis
palustris
hernandesii
goldmani
centralis
arizonensis
onca
Panthera
diardi
uncia
Neofelis
Uncia
rufus
escuinapae
baileyi
californicus
fasciatus
floridanus
gigas
oaxacensis
pallescens
peninsularis
superiorensis
texensis
lynx
isabellinus
kozlovi
sardiniae
stroganovi
canadensis
mollipilosus
subsolanus
jubatus
hecki
raineyi
soemmeringii
venaticus
pardinus
Lynx
Acinonyx
nicaraguae
pirrensis
wiedii
cooperi
oaxacensis
amazonicus
boliviae
glauculus
salvinius
vigens
yucatanicus
albescens
nelsoni

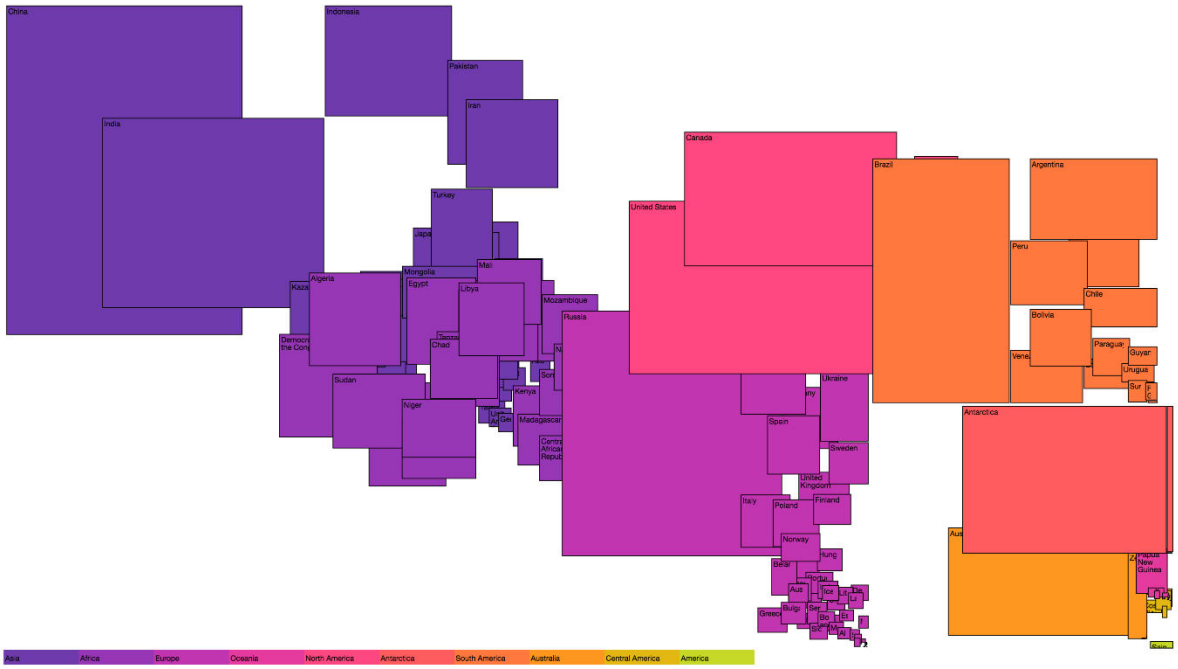

macrosceloides
brachyura
nebulosa
virgata
sumatrae
sondaica
corbetti
balica
amoyensis
altaica
tigris
saxicolor
orientalis
nimr
melas
kotiya
japonensis
fusca
delacouri
pardus
nubica
senegalensis
melanochaita
krugeri
bleyenberghi
azandica
leo
persica
veraecrucis
peruviana
paraguensis
palustris
hernandesii
goldmani
centralis
arizonensis
onca
Panthera
diardi
uncia
Neofelis
Uncia
Pantherinae
Felidae
Felinae
concolor
costaricensis
couguar
anthonyi
cabrerae
puma
yagouaroundi
ameghinoi
cacomitli
eyra
fossata
melantho
panamensis
tolteca
Lynx
Felis
Acinonyx
Leopardus
Puma
bengalensis
alleni
borneoensis
chinensis
euptilurus
heaneyi
horsfieldii
javanensis
rabori
sumatranus
trevelyani
viverrinus
Prionailurus
rubiginosus
planiceps
iriomotensis
phillipsi
Leptailurus
serval
beirae
brachyurus
constantinus
faradjius
ferrarii
hamiltoni
hindei
kempi
kivuensis
lipostictus
lonnbergi
mababiensis
pantastictus
phillipsi
pococki
robertsi
togoensis
Caracal
caracal
algira
damarensis
limpopoensis
lucani
nubica
poecilotis
schmitzi
Catopuma
temminckii
badia
Pardofelis
marmorata
tristis
dominicanorum
temminckii
charltonii
marmorata
Profelis
aurata
cottoni
aurata

Size

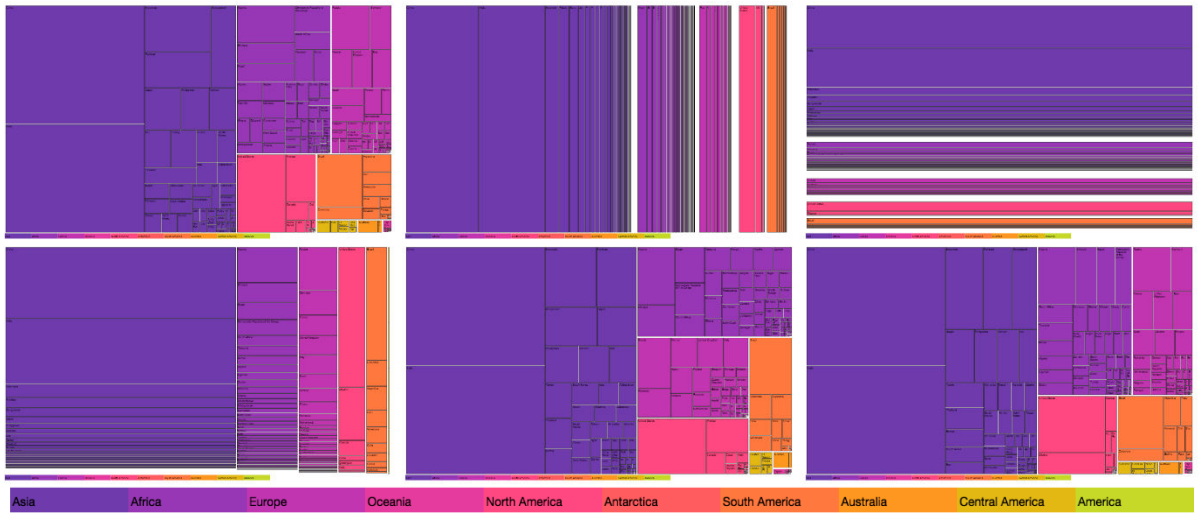

San Diego
San Francisco
San Jose
Palo Alto
Cambridge
Massachusetts
Boston
Houston
Austin
Texas
San Antonio
Bryan
Dallas
Fremont
California
Los Angeles
Foster City
Santa Clara
La Jolla
Irvine
New York
New York
Brooklyn
Ithaca
New Jersey
Maharashtra
Karnataka
London, City of
Cambridge
Paris
Île-de-France
India
New Delhi
Delhi
Tamil Nadu
Jaipur
West Bengal
Andhra Pradesh
Uttar Pradesh
United Kingdom
Kent
France
Rhône-Alpes
Lyon
Centre
Lorraine
Pittsburgh
Pennsylvania
Seattle
Washington
United States
Connecticut
Redmond
North Carolina
Raleigh
Maryland
Minnesota
Milan
Lombardia
Lazio
Italy
Toronto
Ontario
Alberta
Ottawa
Canada
Québec
British Columbia
São Paulo
São Paulo
Brazil
Rio de Janeiro
Minas Gerais
Chicago
Illinois
Virginia
Indiana
Wisconsin
Missouri
South Carolina
Utah
Ohio
Michigan
Tennessee
Oregon
Kansas
Arizona
Georgia
Florida
Colorado
Delaware
Nevada
Arkansas
New South Wales
Victoria
Australia
Madrid
Madrid
Barcelona
Catalonia
Spain
Zürich
Switzerland
Vaud
Aargau
Tokyo
Japan
Beijing
Guangdong
Shanghai
China
Jiangsu
Sichuan
Shaanxi
Hubei
Chongqing
Fujian
Anhui
Tianjin
Henan
Liaoning
Dalian
Hebei
Jilin
Zhejiang
Shandong
Hunan
Konstanz
Karlsruhe
Stuttgart
Baden-Württemberg
Heidelberg
München
Bayern
Nürnberg
Germany
Nordrhein-Westfalen
Köln
Leipzig
Sachsen
Frankfurt
Hessen
Berlin
Niedersachsen
Hamburg
Rheinland-Pfalz
Region Metropolitana
Chile
Russian Federation
Moscow City
Netherlands
Delft
Distrito Federal
Mexico
Lisbon
Lisboa
Porto
Portugal
Distrito Capital
Colombia
Especial
Antioquia
Distrito Capital
Argentina
Buenos Aires
Taiwan
Korea, Republic of
Wien
Austria
Sweden
Krung Thep
Thailand
Finland
Norway
Oslo
Pakistan
Punjab
Czech Republic
Quezon
Philippines
Polska
Poland
Mazowieckie
Kuala Lumpur
Malaysia
Athens
Greece
Denmark
Iran, Islamic Republic of
Israel
Romania
Jawa
Indonesia
Peru
Ireland
United Arab Emirates
Egypt
Séti
Belgium
Hungary
Ecuador
La Paz
Bolivia
Ha Noi
Vietnam
Croatia
Istanbul
Turkey
Ankara
South Africa
Ukraine
Costa Rica
New Zealand
Jordan
Serbia



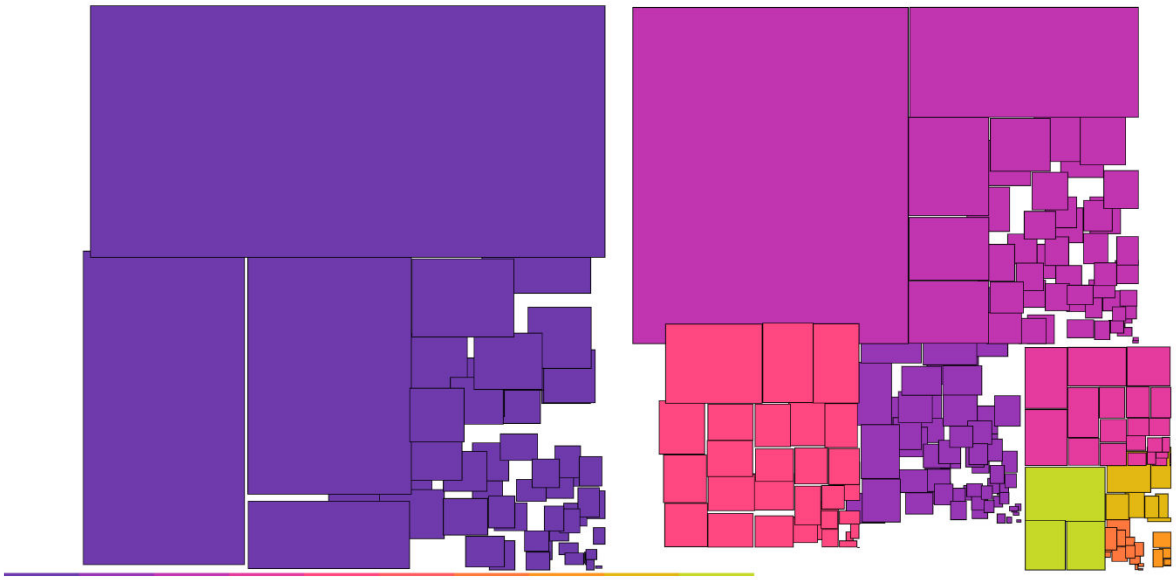
Showing Area

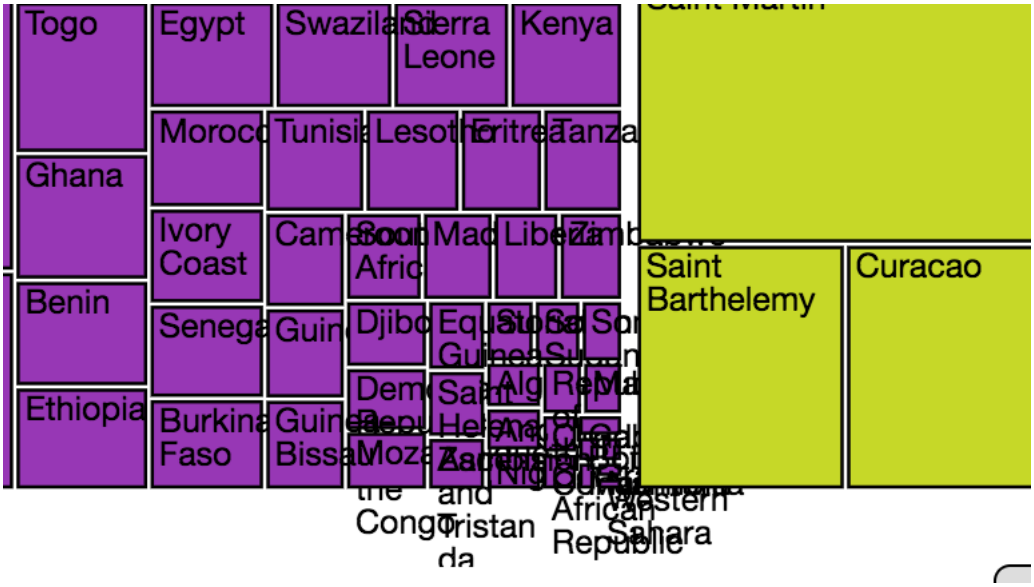


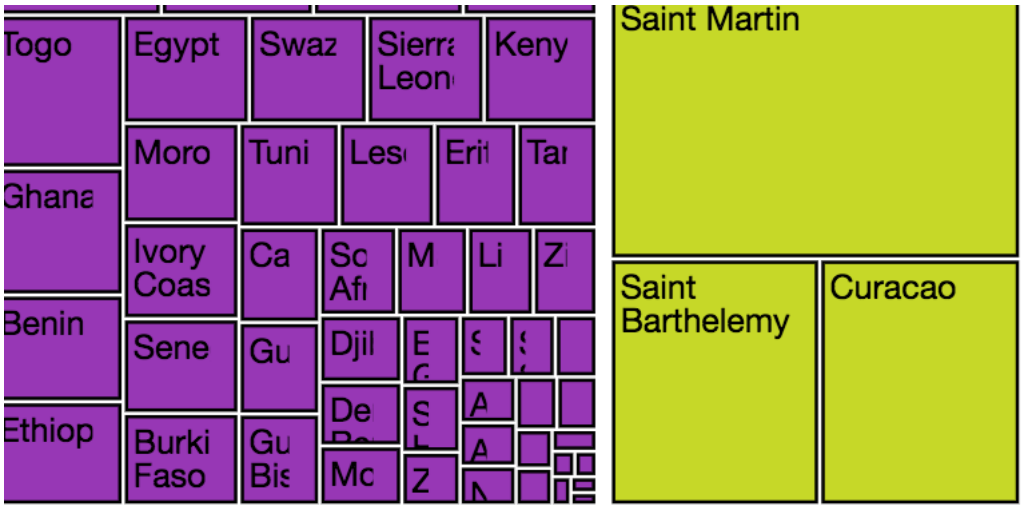
```
▼ Array[10] i
  ▼ 0: Object
      key: "Asia"
    ▶ values: Array[51]
    ▶ __proto__: Object
  ▼ 1: Object
      key: "Africa"
    ▼ values: Array[59]
      ▼ 0: Object
          Area: 1001450
          Birthrate: "22.9"
          Capital: ""
          Coastline: "2450"
          Continent: "Africa"
          Country (de): "Ägypten"
          Country (en): "Egypt"
          Country (local): "Misr"
          Country code: "EG"
```

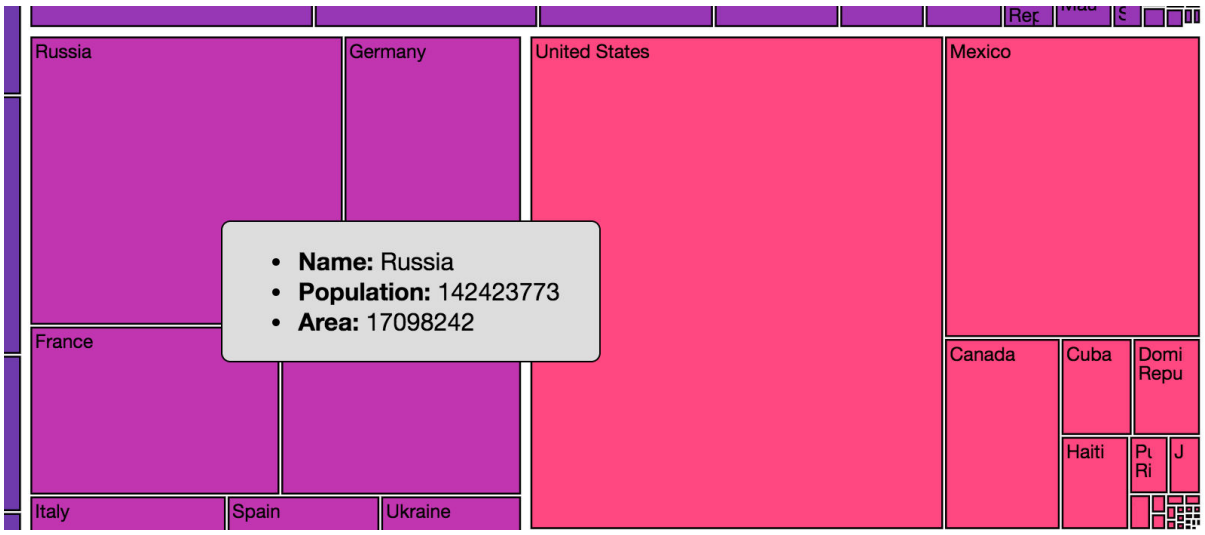



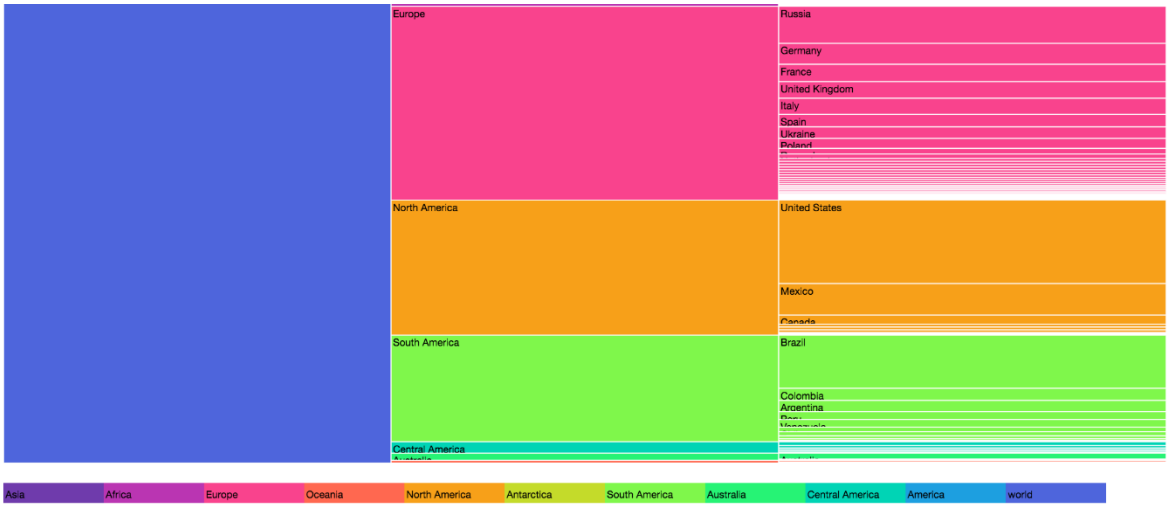
```
▼ Node {data: Object, height: 2, depth: 0, parent: null, children: Array[10]…} i
  ▼ children: Array[10]
    ▼ 0: Node
      ▼ children: Array[51]
        ▼ 0: Node
          ▶ data: Object
            depth: 2
            height: 0
          ▶ parent: Node
            value: 1367485388
            x0: 4
            x1: 561.9180548350575
            y0: 4
            y1: 447.8769874386519
          ▶ __proto__: Object
        ▶ 1: Node
        ▶ 2: Node
```

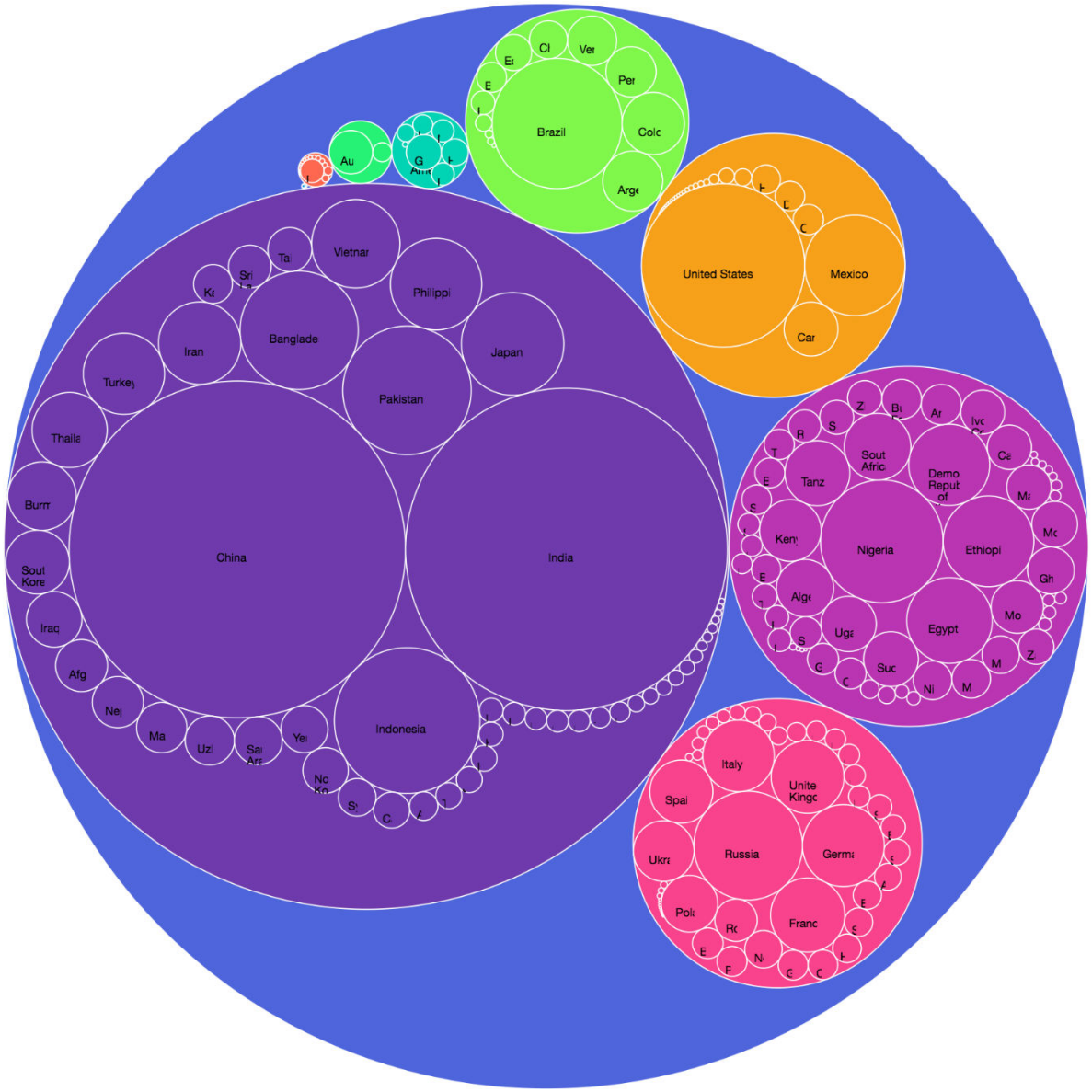



Togo
Egypt
Kenya
Ghana
Ivory Coast
Benin
Ethiopia
Saint Barthelemy
Curacao

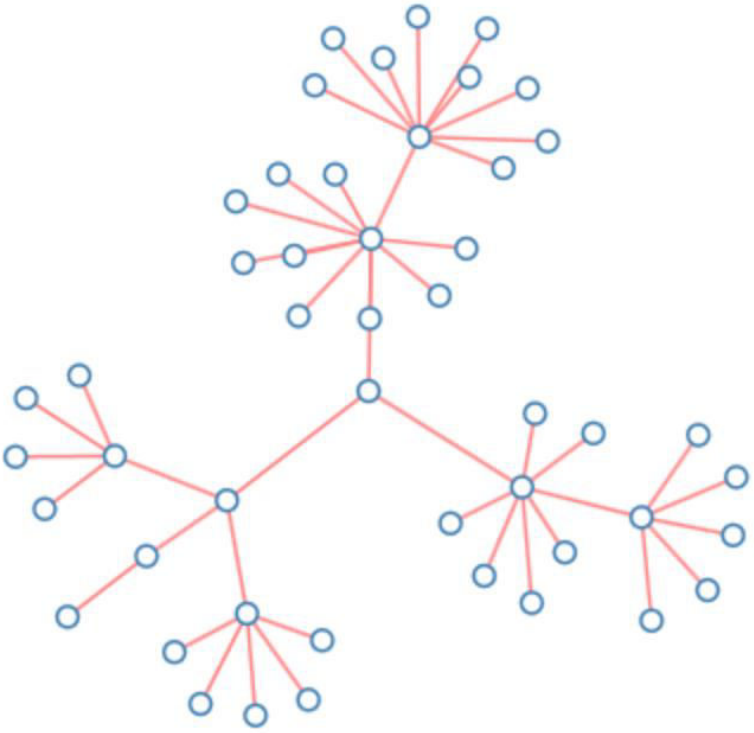

Togo
Egypt
Keny
Ghana
Ivory Coas
Benin
Sene
Ethiop
Burki Faso
Saint Martin
Saint Barthelemy
Curacao

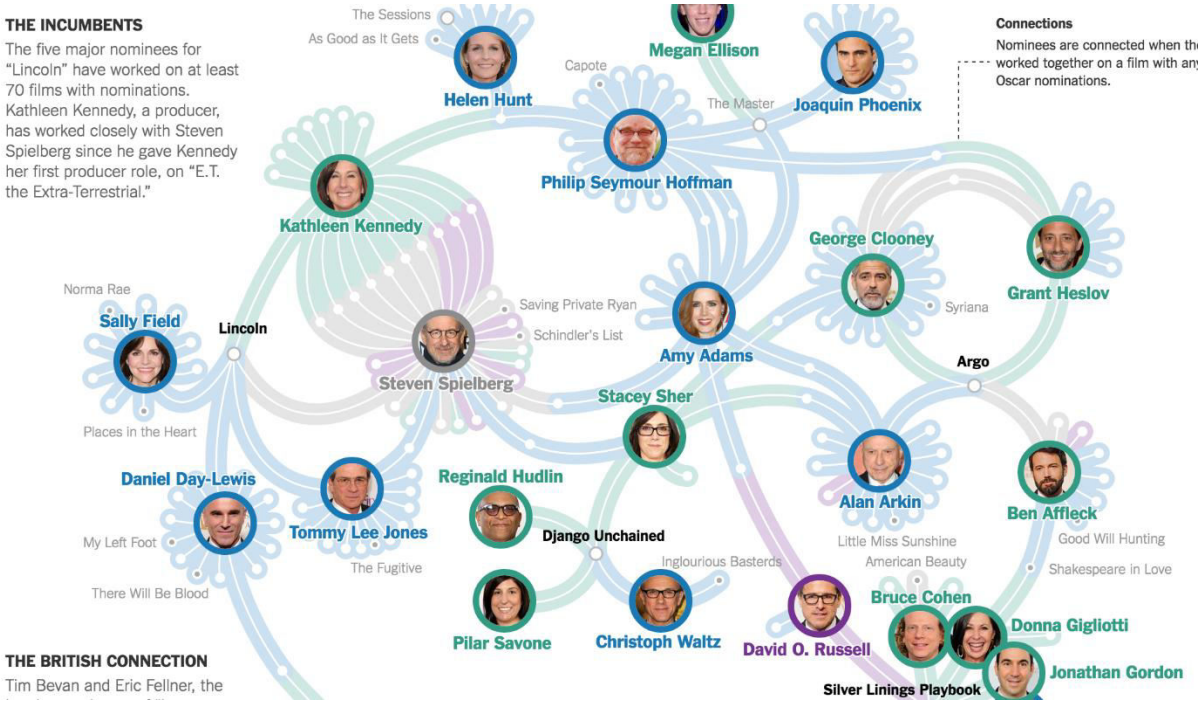

Russia
Germany
United States
Mexico
France
Canada
Cuba
Haiti
Italy
Spain
Ukraine
Name: Russia
Population: 142423773
Area: 17098242

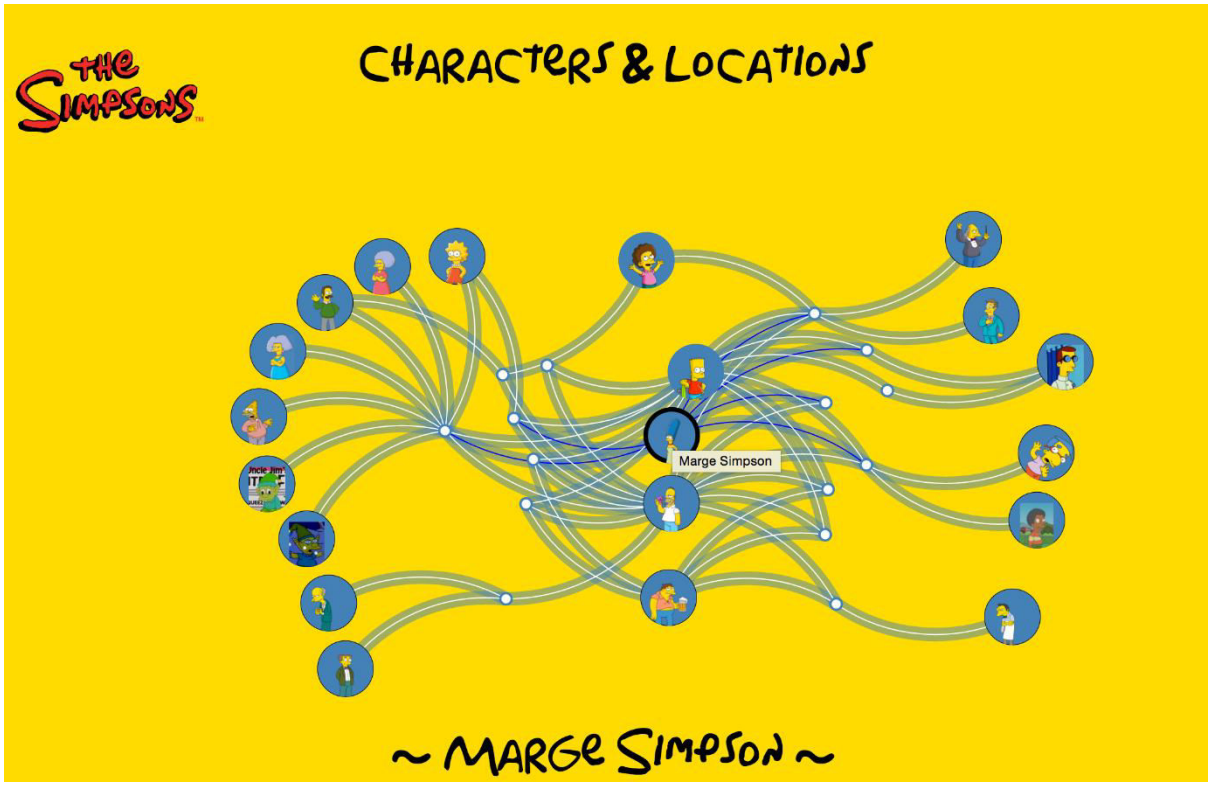

Europe
North America
South America
Central America
Russia
Germany
France
United Kingdom
Italy
Spain
Ukraine
United States
Mexico
Brazil
Colombia
Argentina
Asia
Africa
Europe
Oceania
North America
Antarctica
South America
Australia
Central America
America
world


Brazil
United States
Mexico
Vietnam
Philippi
Iran
Banglade
Japan
Pakistan
China
India
Indonesia
Nigeria
Ethiopi
Egypt
Italy
Russia

Chapter 4: Visualizing Graphs





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  ▼<g transform="translate(20,20)">
    ▼<g class="title">
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      xmlns:svg="http://www.w3.org/2000/svg" xmlns="http://www.w3.org/2000/svg" xmlns:sodipodi="http://sodipodi.sourceforge.net/DTD/sodipodi-0.dtd"
      xmlns:inkscape="http://www.inkscape.org/namespaces/inkscape" height="133" width="300" version="1.1" id="svg2" inkscape:version="0.91 r13725"
      sodipodi:docname="The_Simpsons_Logo.svg">
        ▶<metadata id="metadata52">…</metadata>
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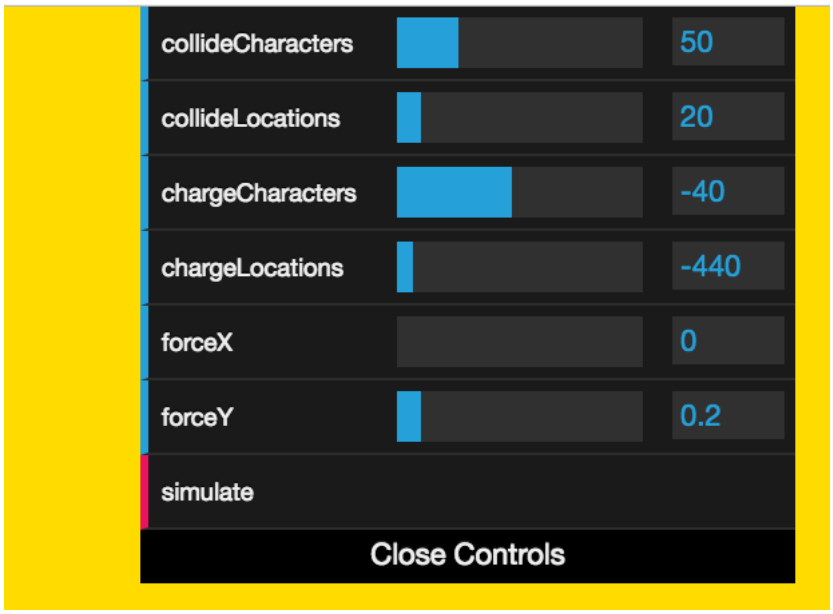
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collideLocations
20
chargeCharacters
-40
chargeLocations
-440
forceX
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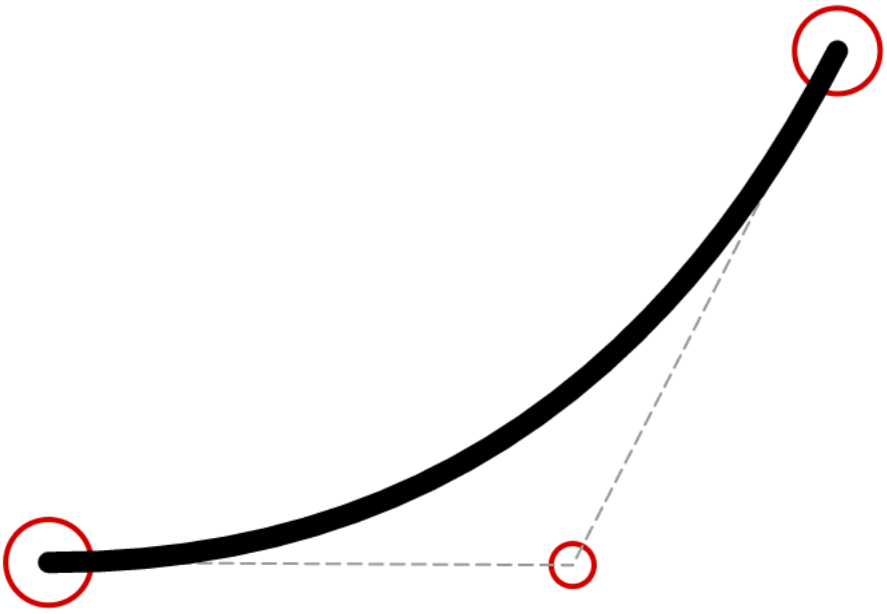
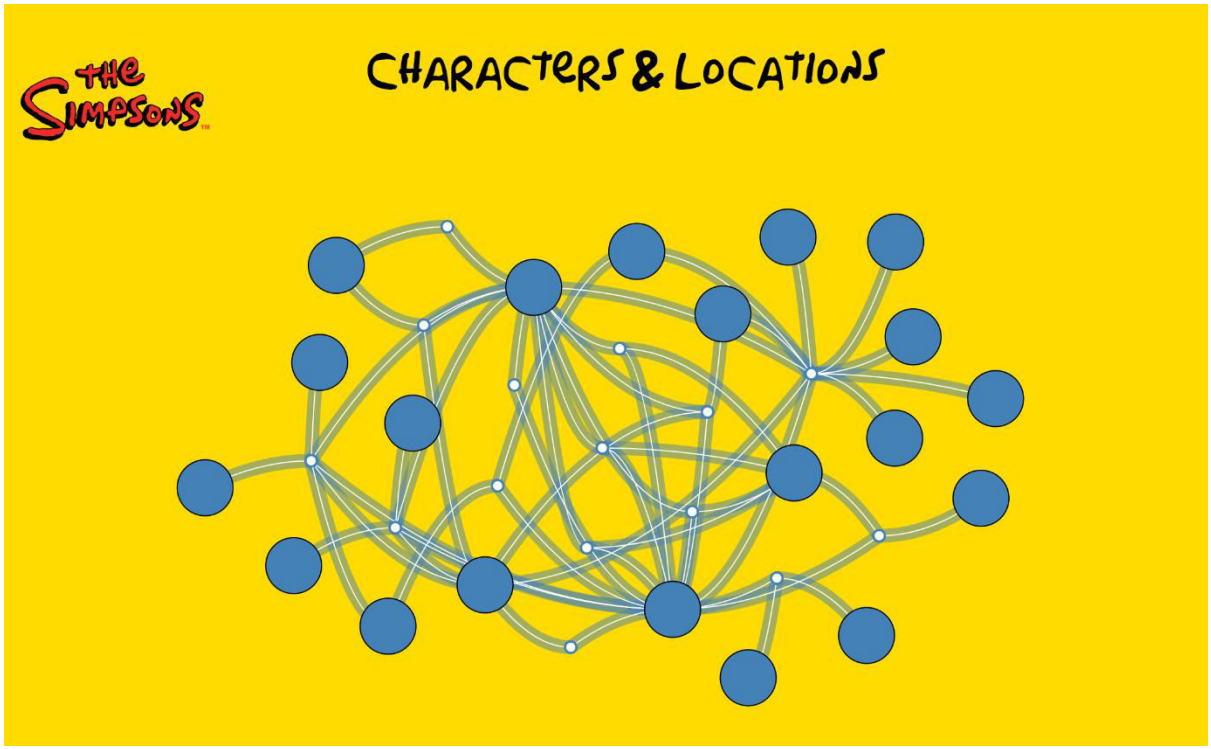
forceY
0.2
simulate
Close Controls





images

Search

Name	Date Modified	Size	Kind
abraham simpson.png	11 Oct 2016 20:36	14 KB	PNG image
barney gumble.png	12 Oct 2016 08:41	13 KB	PNG image
bart simpson.png	12 Oct 2016 08:41	13 KB	PNG image
brainy.png	12 Oct 2016 08:41	22 KB	PNG image
bubbles.png	12 Oct 2016 08:41	4 KB	PNG image
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dog o' war.png	12 Oct 2016 08:41	23 KB	PNG image
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homer simpson.png	12 Oct 2016 08:41	13 KB	PNG image
hypnotist.png	12 Oct 2016 08:41	22 KB	PNG image
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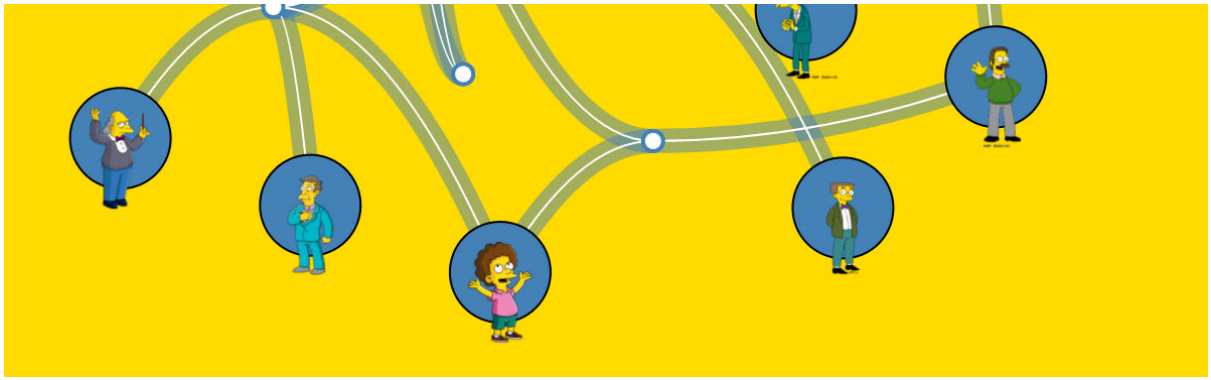
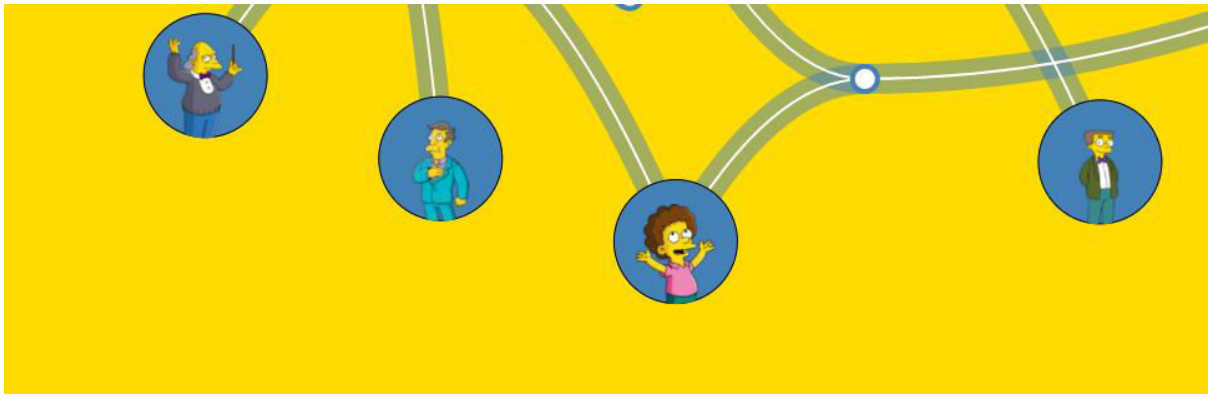
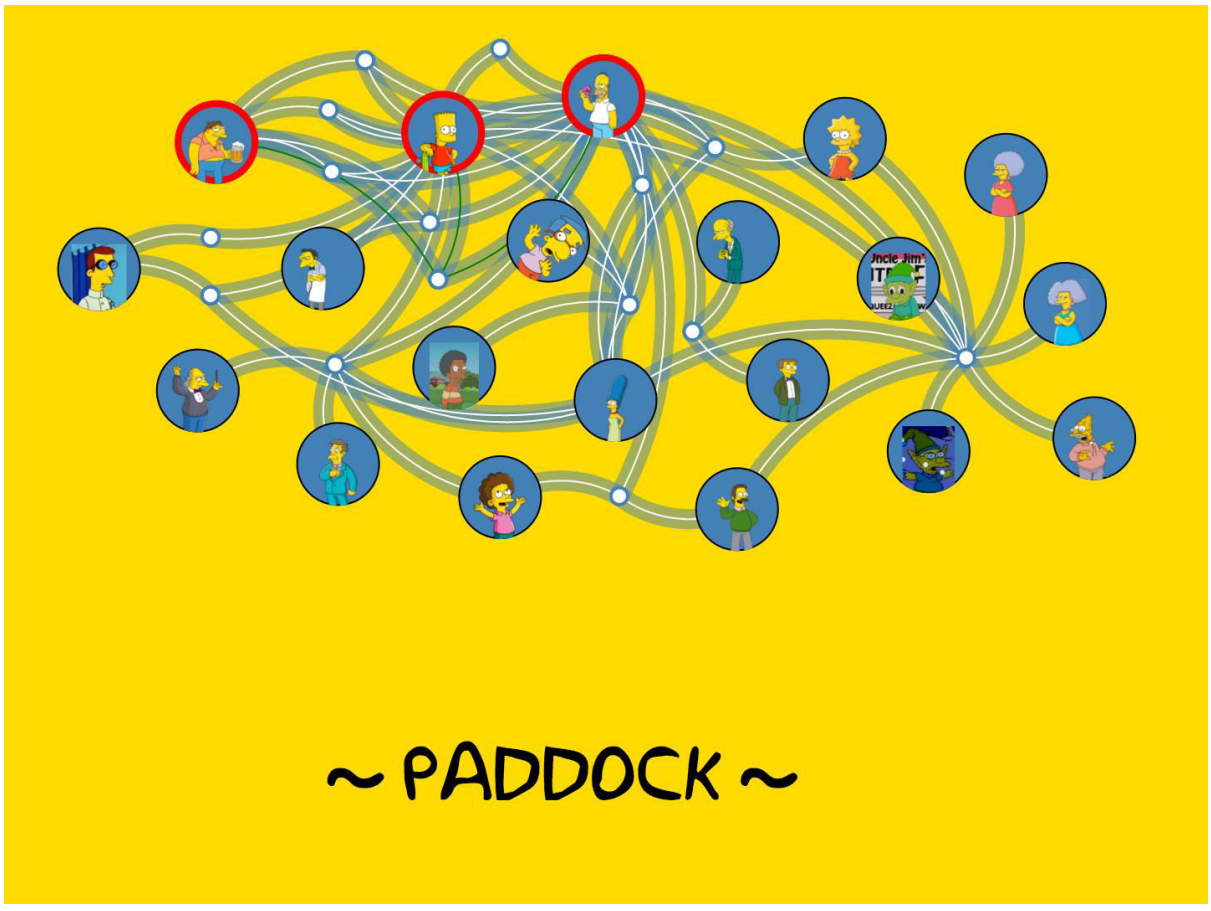
jaffee.png	12 Oct 2016 08:41	20 KB	PNG image

59 items, 152,74 GB available



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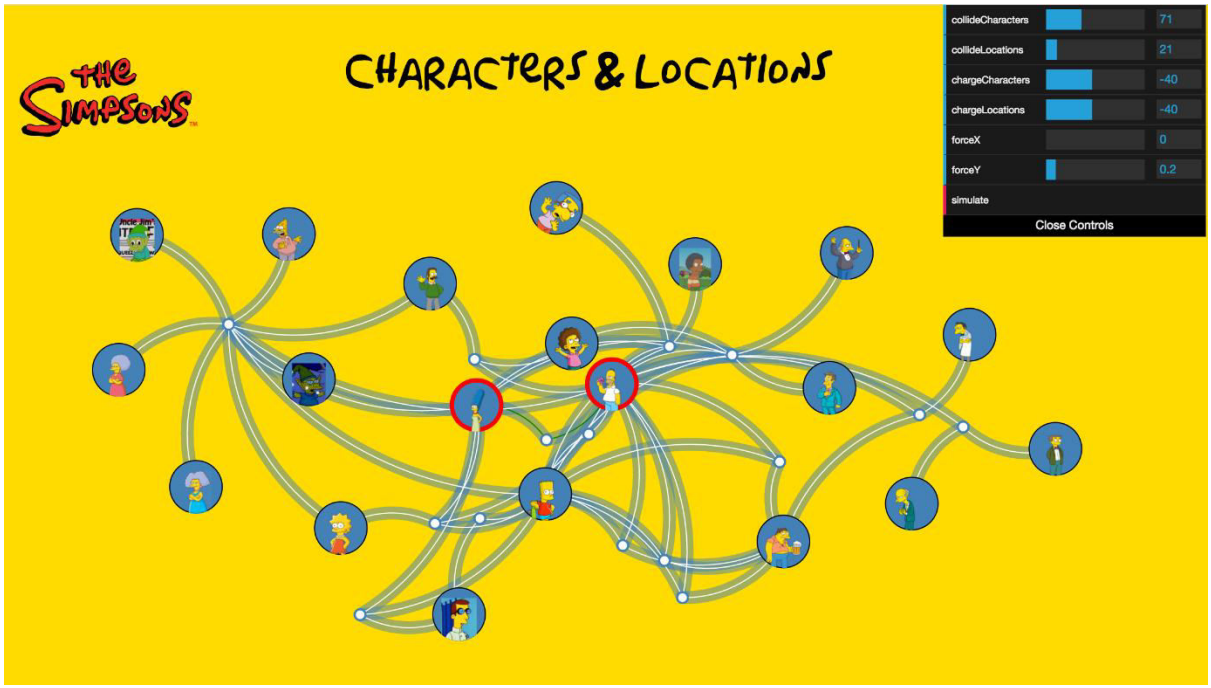
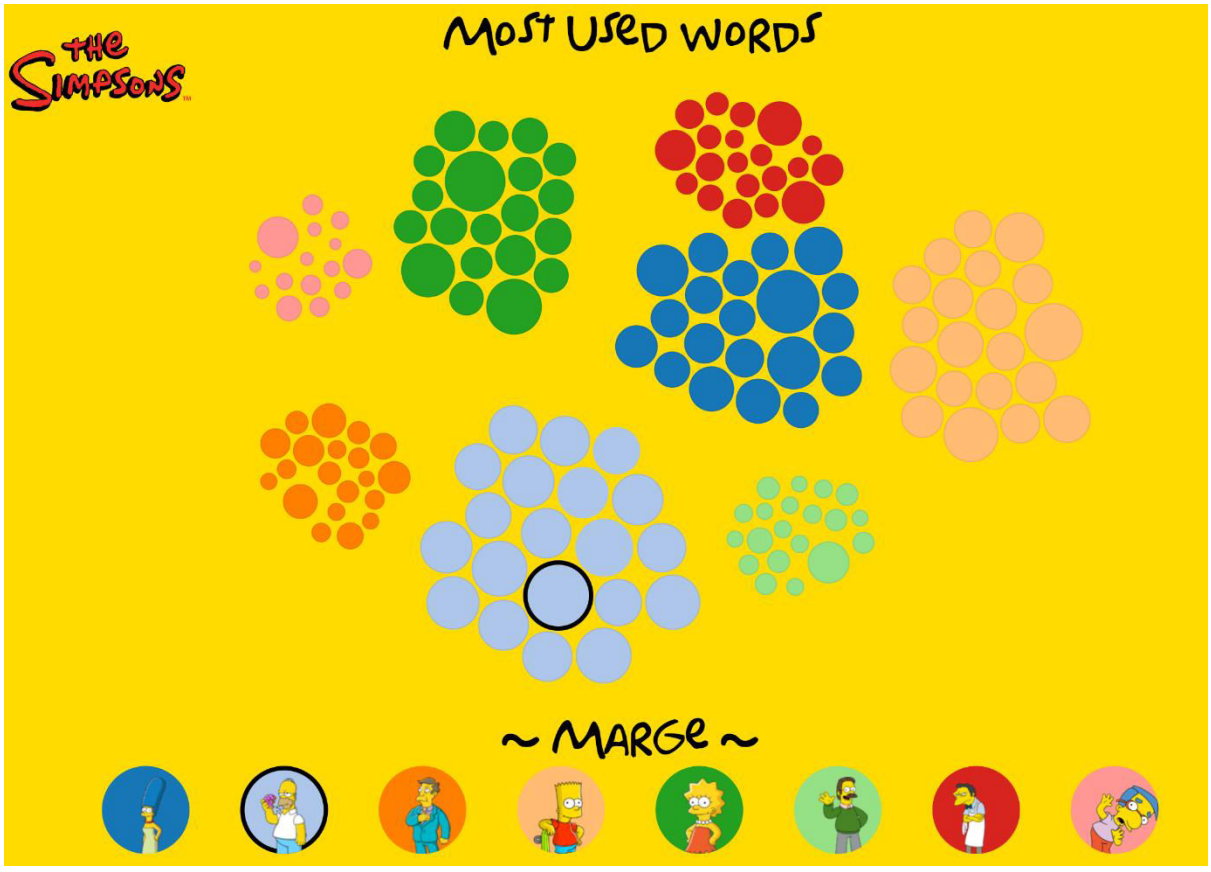
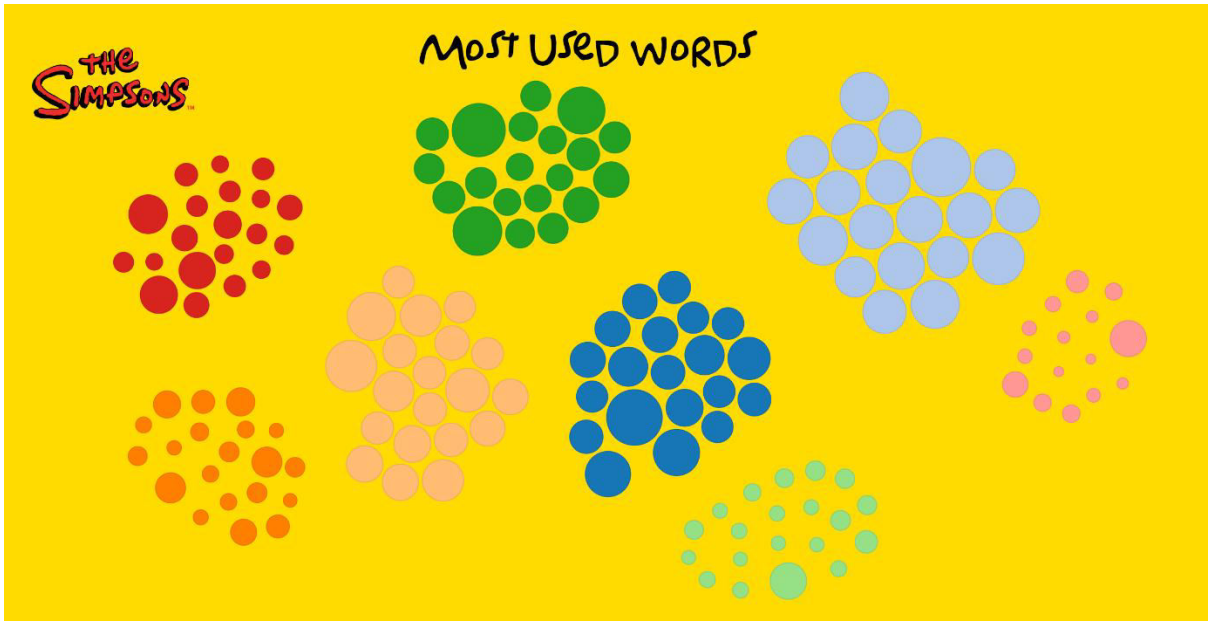
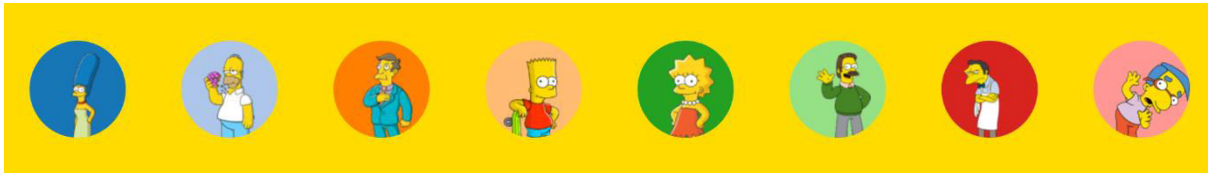
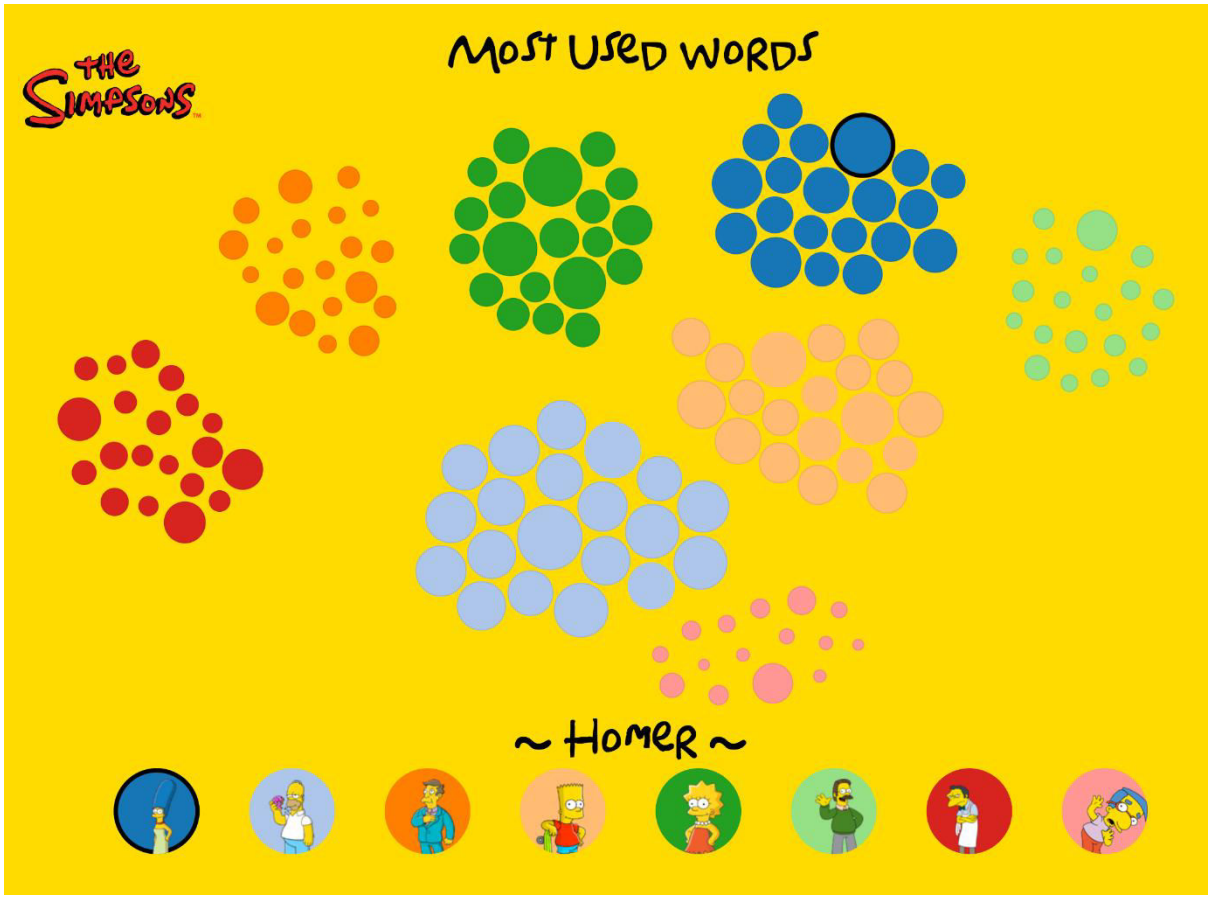
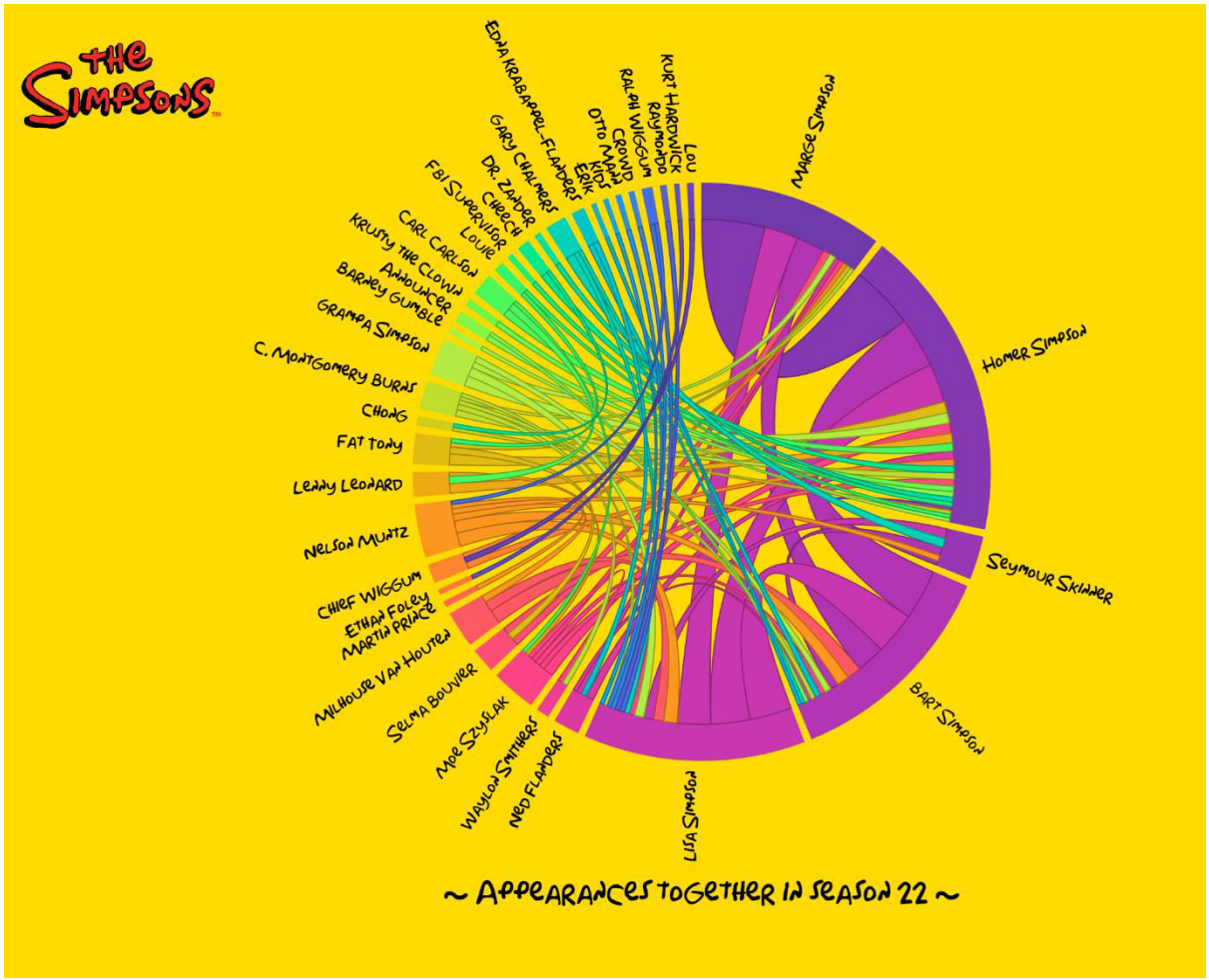

THE SIMPSONS
CHARACTERS & LOCATIONS
collideCharacters 71
collideLocations 21
chargeCharacters -40
chargeLocations -40
forceX 0
forceY 0.2
simulate
Close Controls

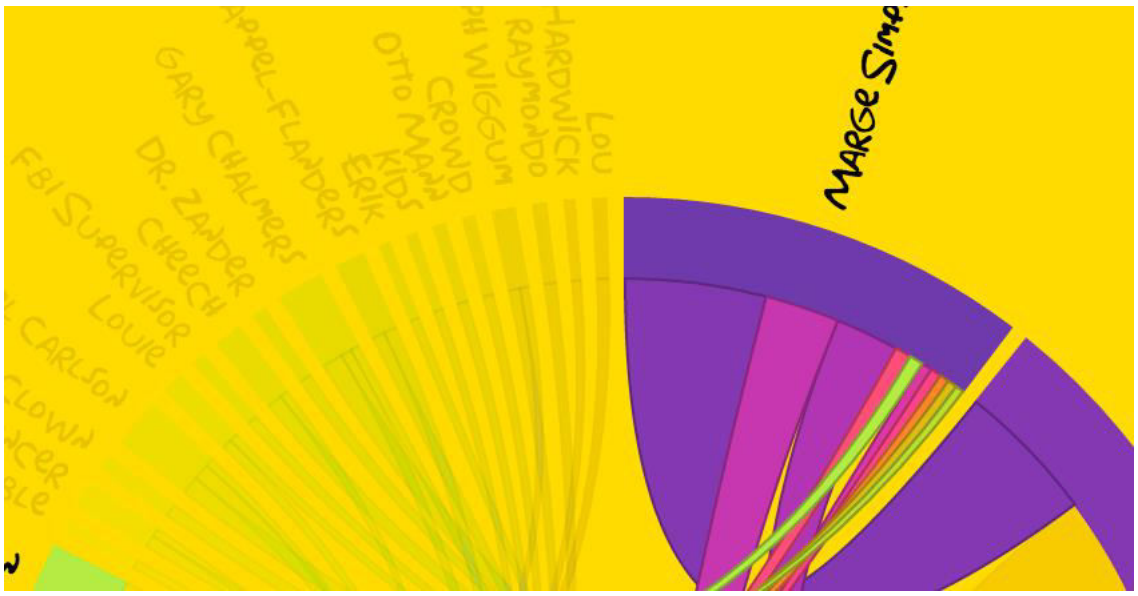

THE SIMPSONS
MOST USED WORDS
~ MARGE ~

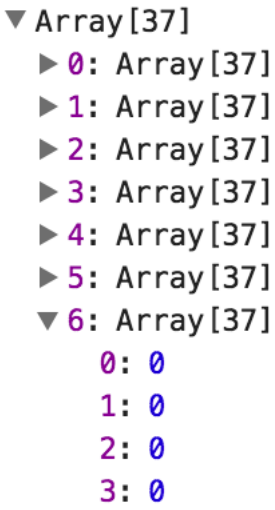

THE SIMPSONS
Most Used Words




THE SIMPSONS
Most Used Words
~ Homer ~


the Simpsons
Edna Krabappel-Flanders
Gary Chalmers
Dr. Zander
Chreech
FBI Supervisor
Louie
Carl Carlson
Krusty the Clown
Annoluncer
Barney Gumble
Grampa Simpson
C. Montgomery Burns
Chong
Fat Tony
Leary Leonard
Nelson Muntz
Chief Wiggum
Ethan Foley
Martin Prince
Milhouse Van Houten
Selma Bouvier
Moe Szyslak
Waylon Smithers
Ned Flanders
Lisa Simpson
Bart Simpson
Seymour Skinner
Homer Simpson
Marge Simpson
Lou
Kurt Hardwick
Raymondo
Ralph Wiggum
Crowd
Otto Mann
Kids
Erik
~ Appearances together in season 22 ~

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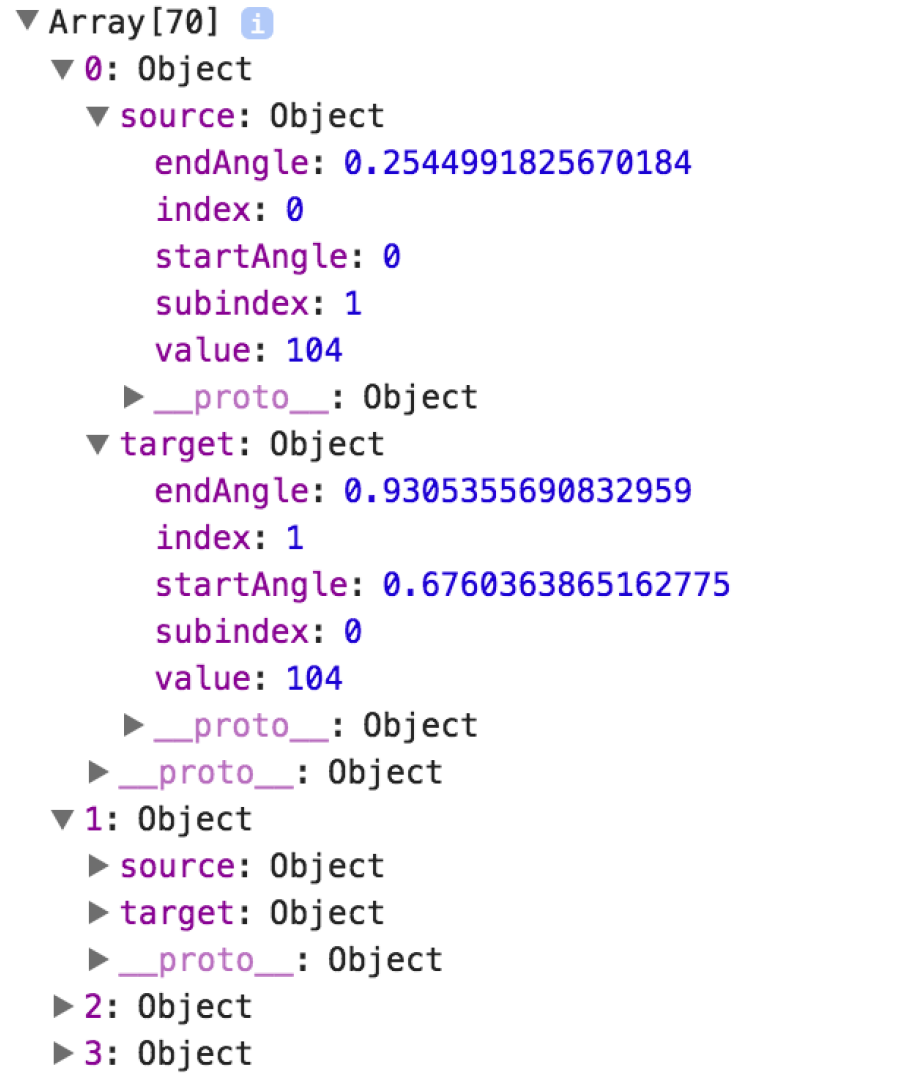
▶ 0: Array[37]
▶ 1: Array[37]
▶ 2: Array[37]
▶ 3: Array[37]
▶ 4: Array[37]
▶ 5: Array[37]
▼ 6: Array[37]
0: 0
1: 0
2: 0
3: 0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startAngle: 0
subindex: 1
value: 104
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▼ target: Object
endAngle: 0.9305355690832959
index: 1
startAngle: 0.6760363865162775
subindex: 0
value: 104
▶ __proto__: Object
▶ __proto__: Object
▼ 1: Object
▶ source: Object
▶ target: Object
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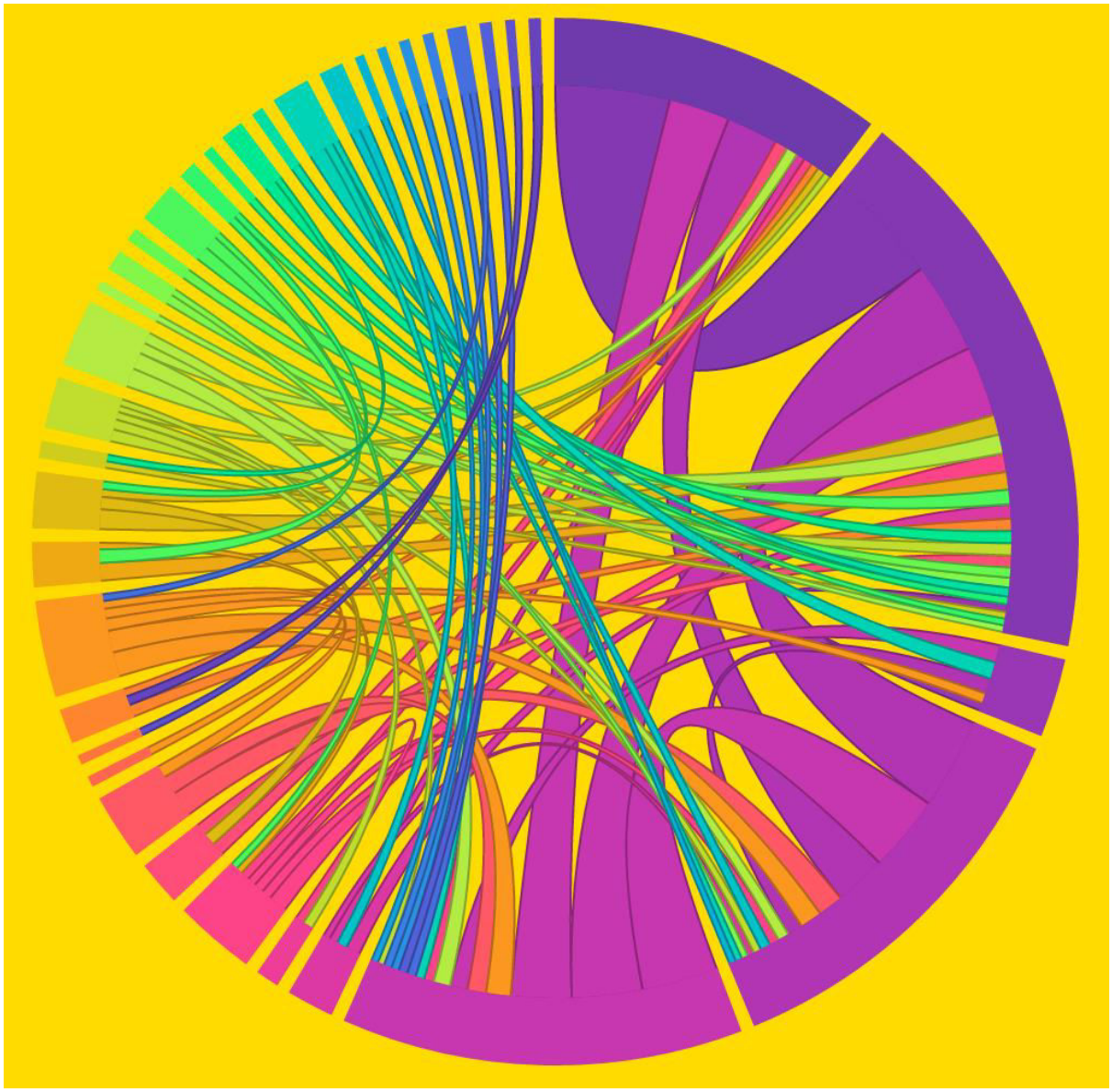
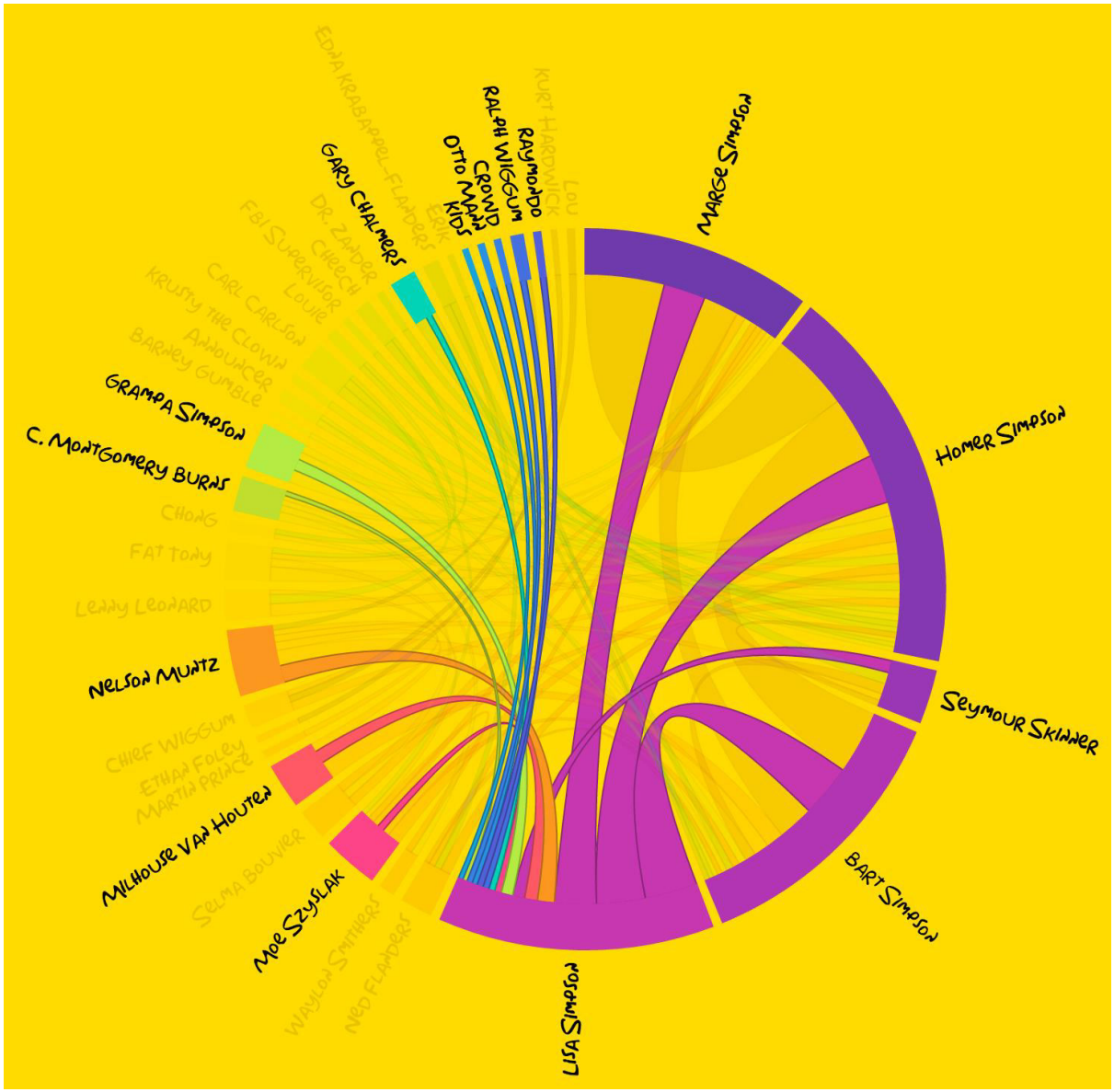
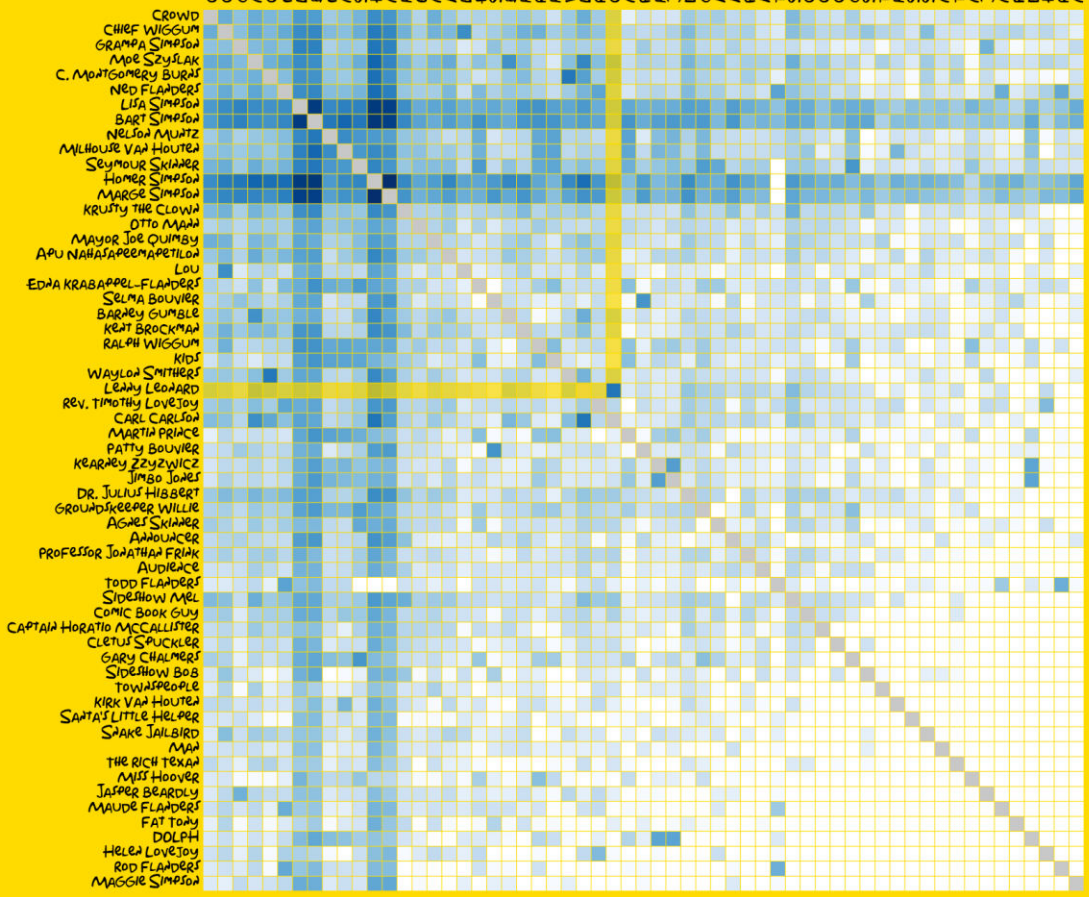
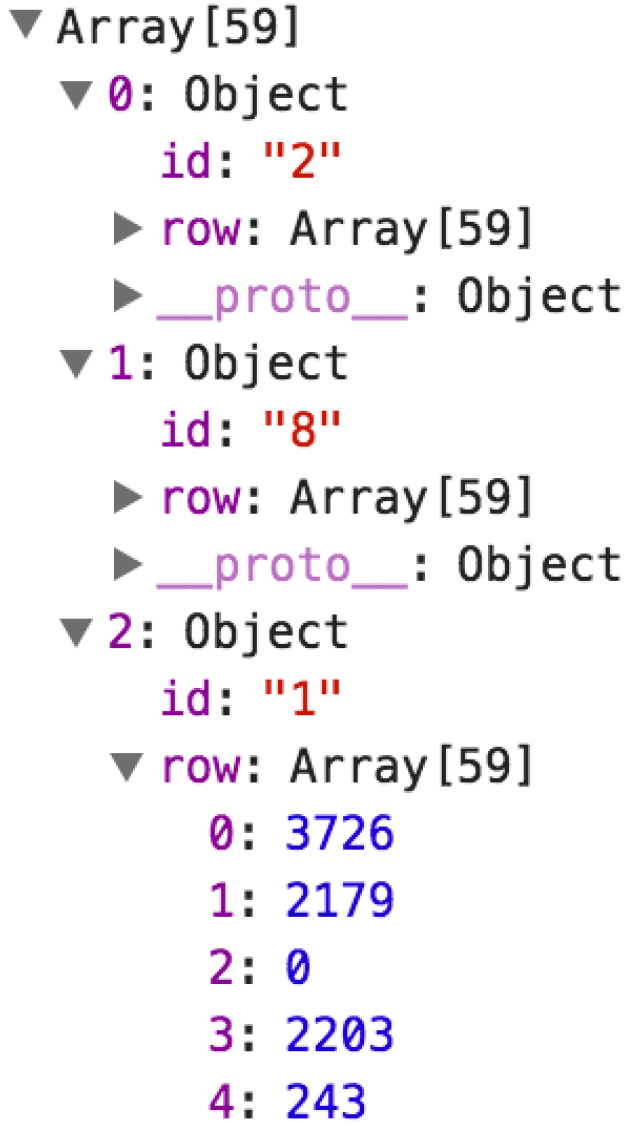
▶ 2: Object
▶ 3: Object




Marge Simpson
Homer Simpson
Seymour Skinner
Bart Simpson
Lisa Simpson
Moe Szyslak
Milhouse Van Houten
Nelson Muntz
C. Montgomery Burns
Grampa Simpson
Gary Chalmers
Otto Mann
Ralph Wiggum
Raymondo
Crowd
Kids
Edna Krabappel-Flanders
Kurt Hardwick
Lou
Eddie
Dr. Zander
Cheech
FBI Supervisor
Louie
Carl Carlson
Krusty the Clown
Announcer
Barney Gumble
Chong
Fat Tony
Leddy Leonard
Chief Wiggum
Ethan Foley
Martin Prince
Selma Bouvier
Waylon Smithers
Ned Flanders

~ Appearances together in all seasons ~

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id: "2"
▶ row: Array[59]
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▼ 1: Object
id: "8"
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id: "1"
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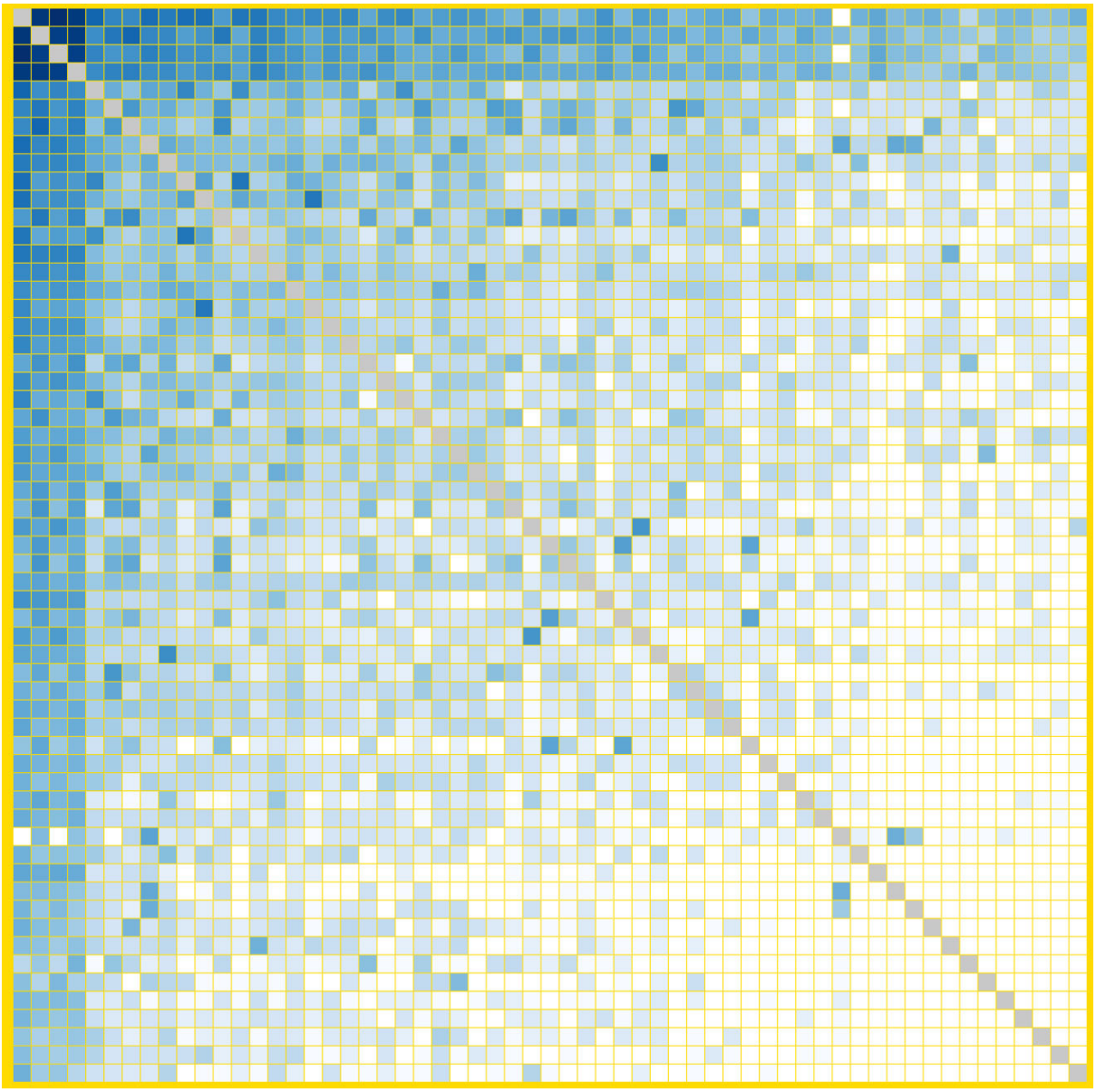
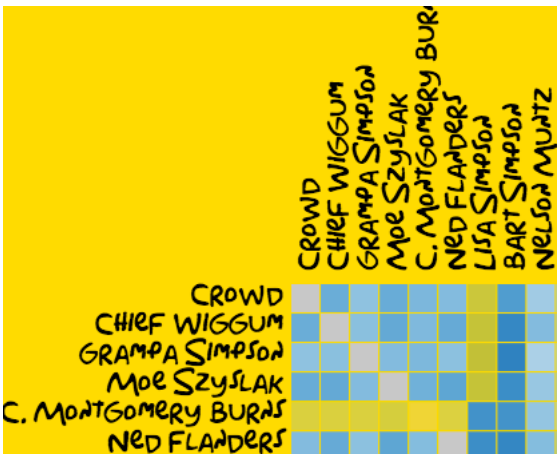
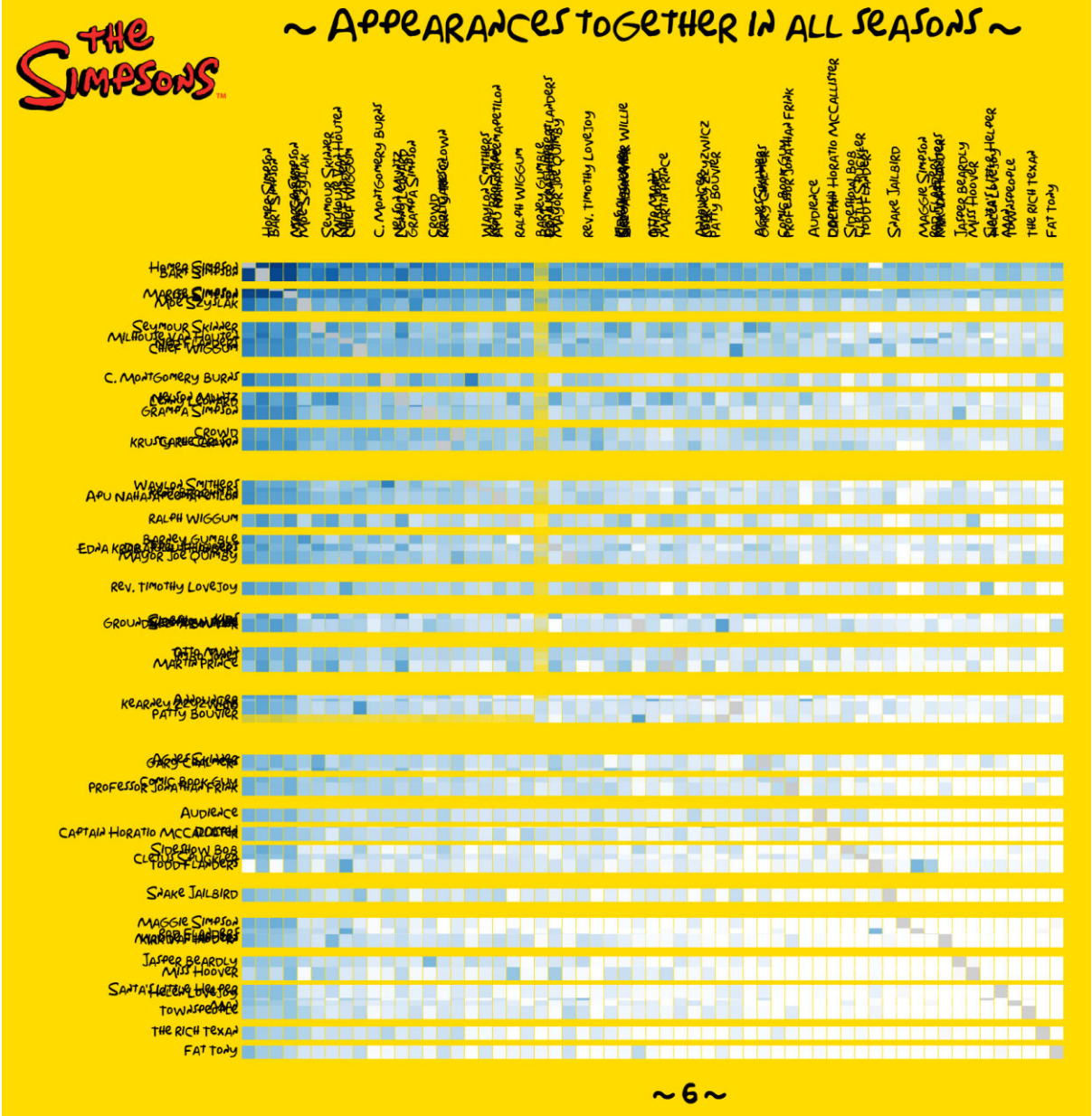
0: 3726
1: 2179
2: 0
3: 2203
4: 243

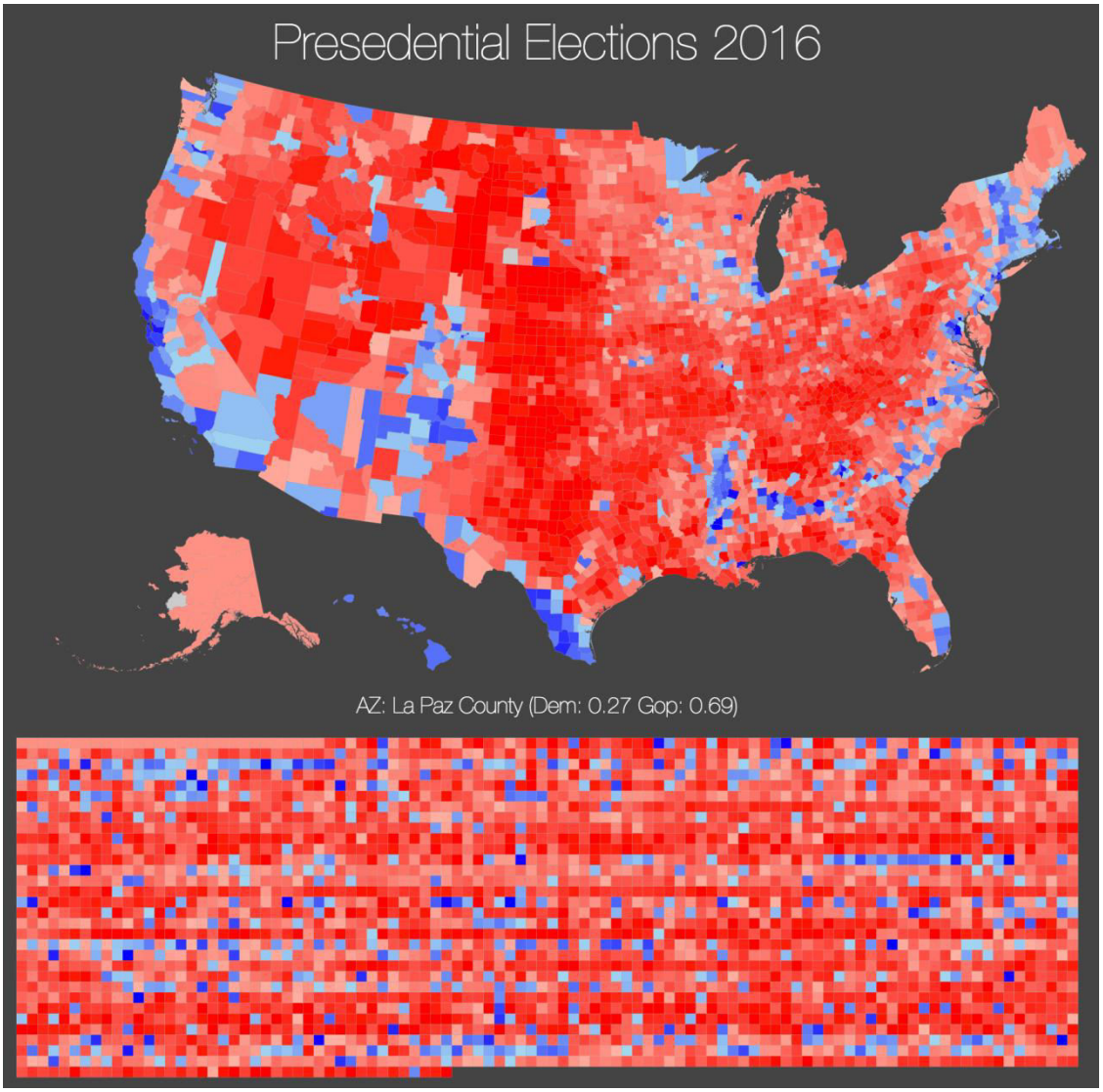


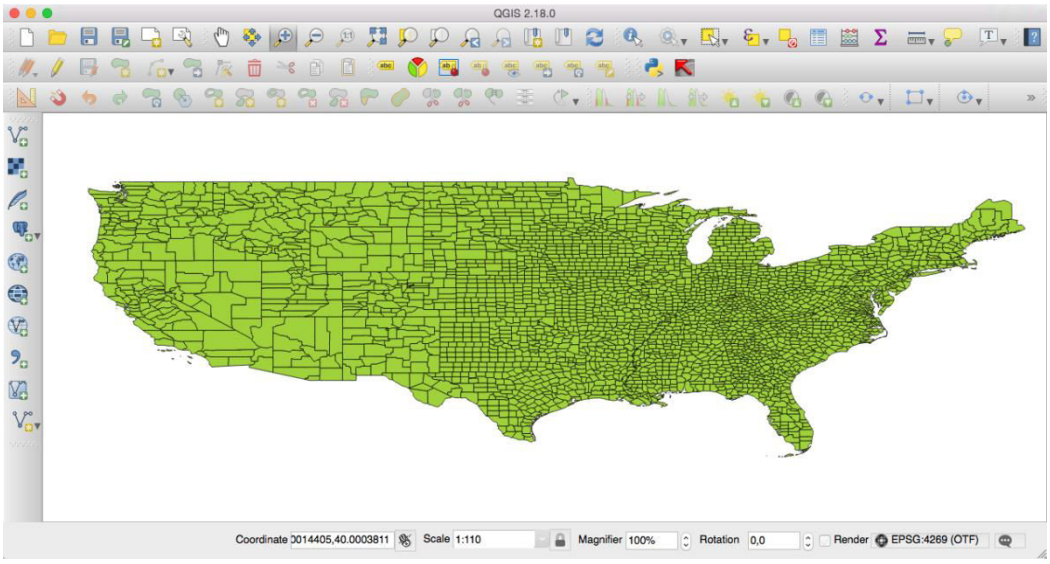

CROWD
CHIEF WIGGUM
GRAMPA SIMPSON
MOE SZYSLAK
C. MONTGOMERY BURNS
NED FLANDERS
LISA SIMPSON
BART SIMPSON
NELSON MUNTZ
CROWD
CHIEF WIGGUM
GRAMPA SIMPSON
MOE SZYSLAK
C. MONTGOMERY BURNS
NED FLANDERS

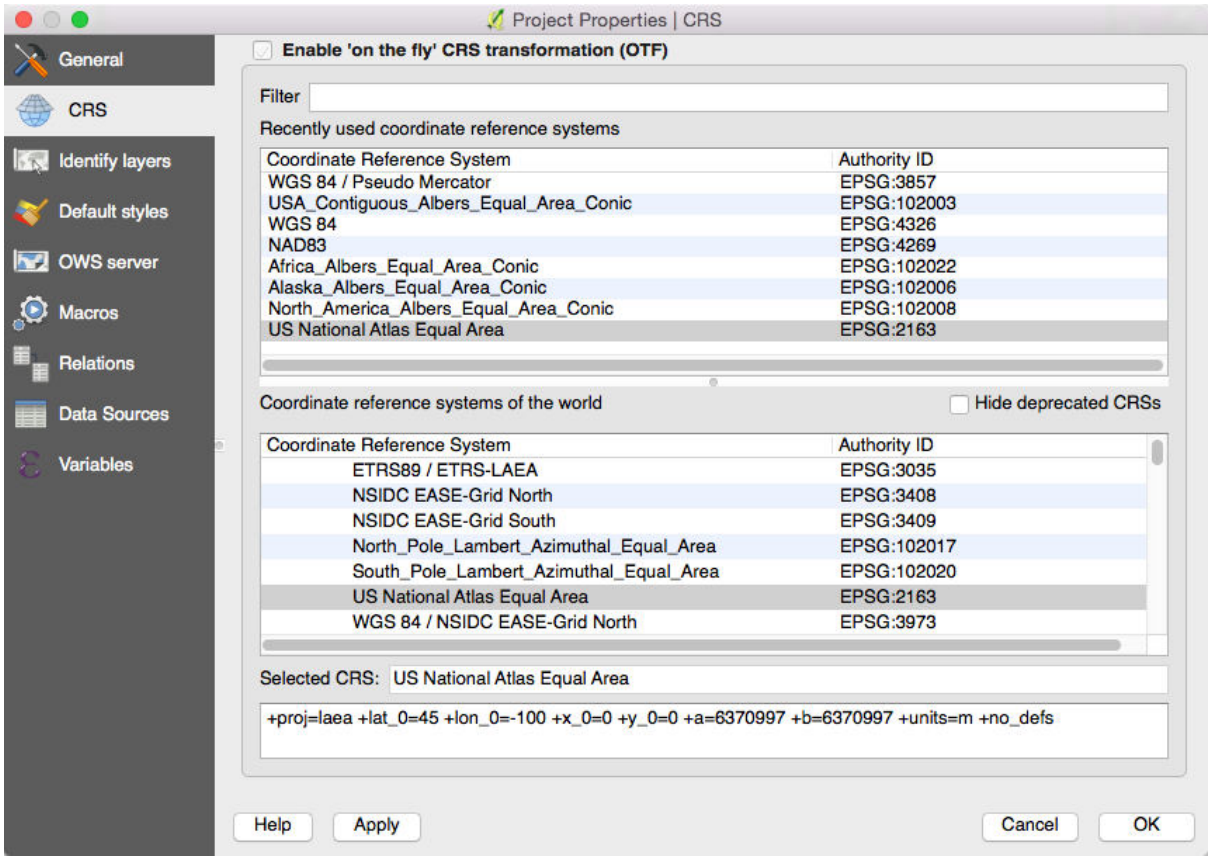
~ Appearances together in all seasons ~



Chapter 5: Working with Geo Data



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General
CRS
Identify layers
Default styles
OWS server
Macros
Relations
Data Sources
Variables
Enable 'on the fly' CRS transformation (OTF)
Filter
Recently used coordinate reference systems
Coordinate Reference System
Authority ID
WGS 84 / Pseudo Mercator
EPSG:3857
USA_Contiguous_Albers_Equal_Area_Conic
EPSG:102003
WGS 84
EPSG:4326
NAD83
EPSG:4269
Africa_Albers_Equal_Area_Conic
EPSG:102022
Alaska_Albers_Equal_Area_Conic
EPSG:102006
North_America_Albers_Equal_Area_Conic
EPSG:102008
US National Atlas Equal Area
EPSG:2163
Coordinate reference systems of the world
Hide deprecated CRSs
Coordinate Reference System
Authority ID
ETRS89 / ETRS-LAEA
EPSG:3035
NSIDC EASE-Grid North
EPSG:3408
NSIDC EASE-Grid South
EPSG:3409
North_Pole_Lambert_Azimuthal_Equal_Area
EPSG:102017
South_Pole_Lambert_Azimuthal_Equal_Area
EPSG:102020
US National Atlas Equal Area
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WGS 84 / NSIDC EASE-Grid North
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Selected CRS:
US National Atlas Equal Area
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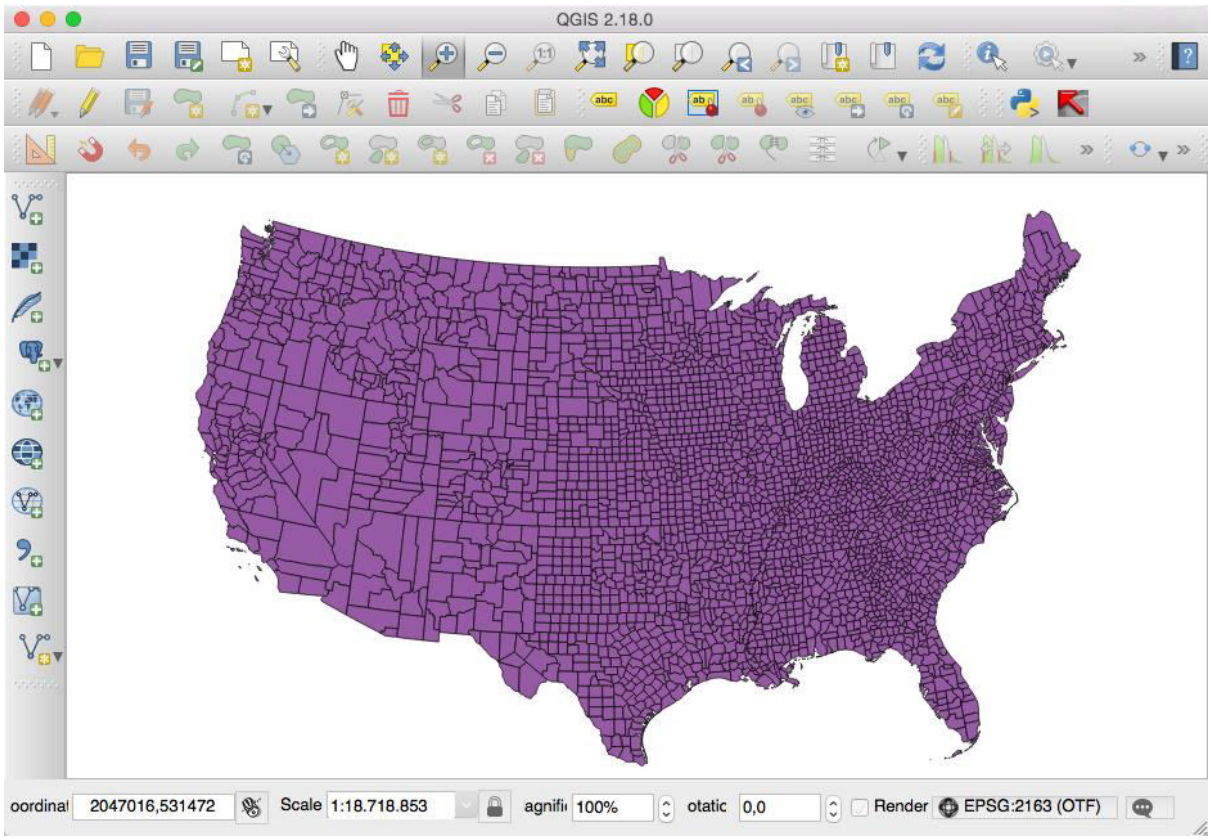
Apply
Cancel
OK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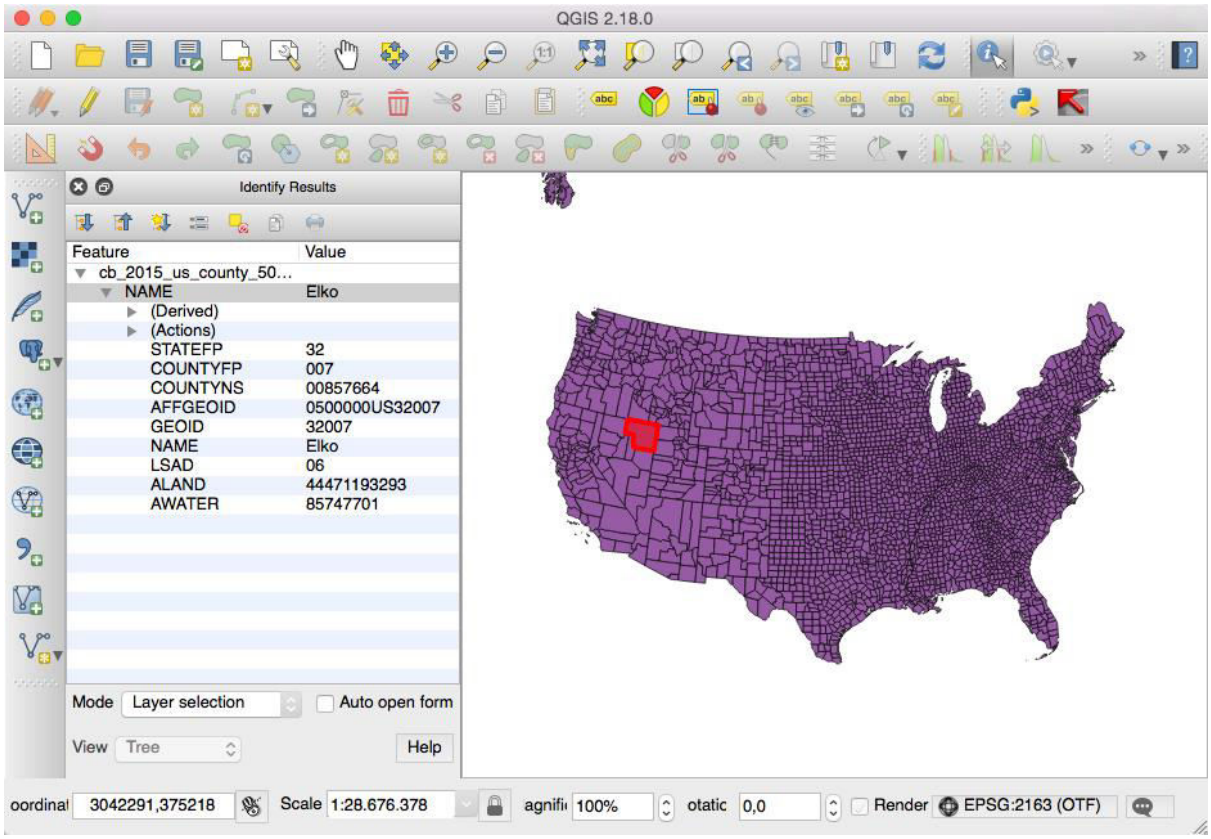
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(Derived)
(Actions)
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COUNTYFP
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COUNTYNS
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AFFGEOID
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GEOID
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NAME
Elko
LSAD
06
ALAND
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AWATER
85747701
Mode
Layer selection
Auto open form
View
Tree
Help
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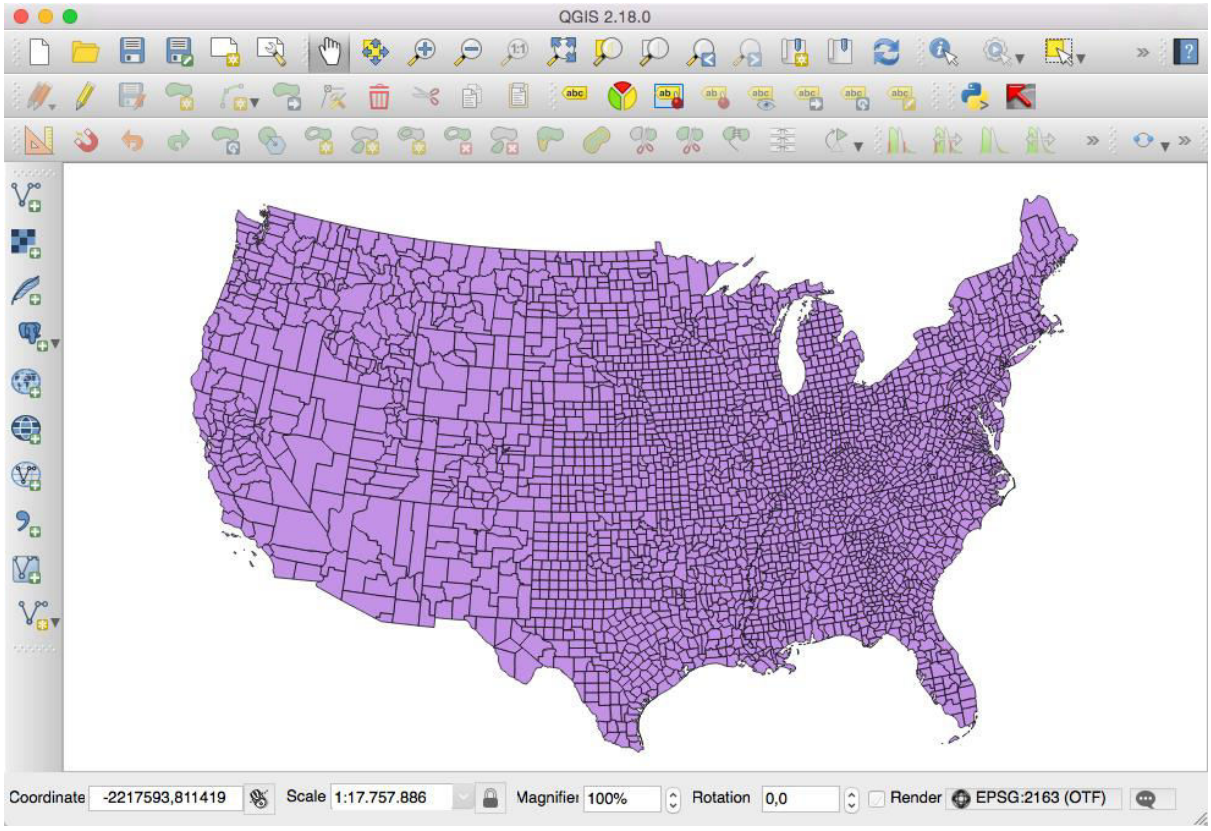
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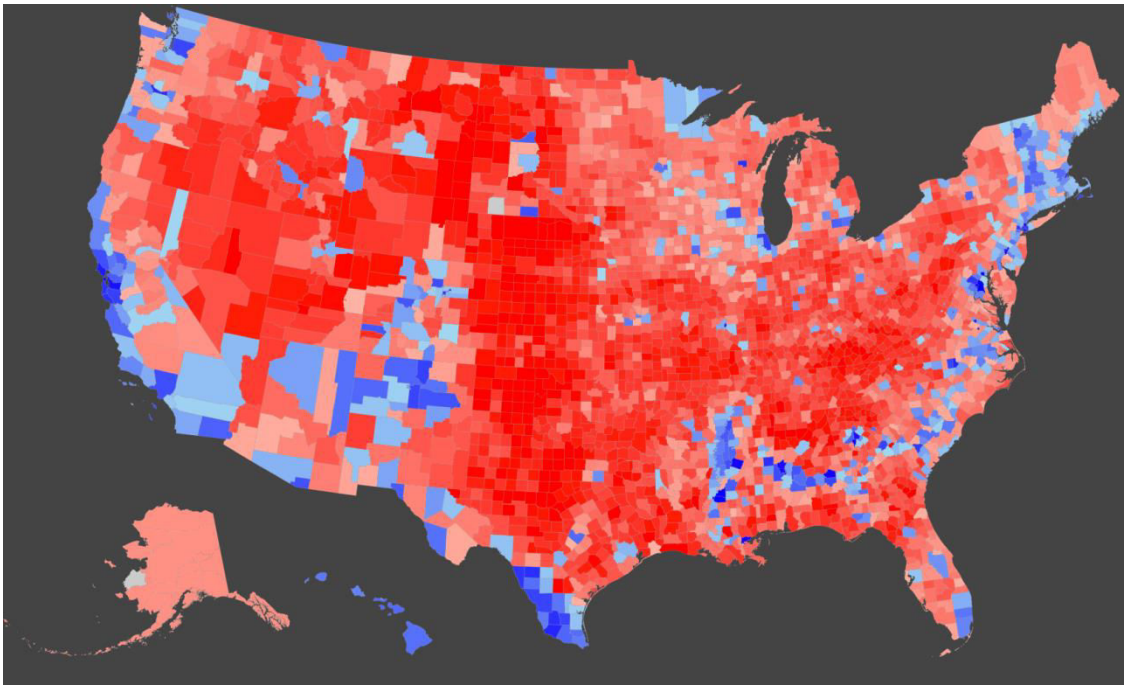
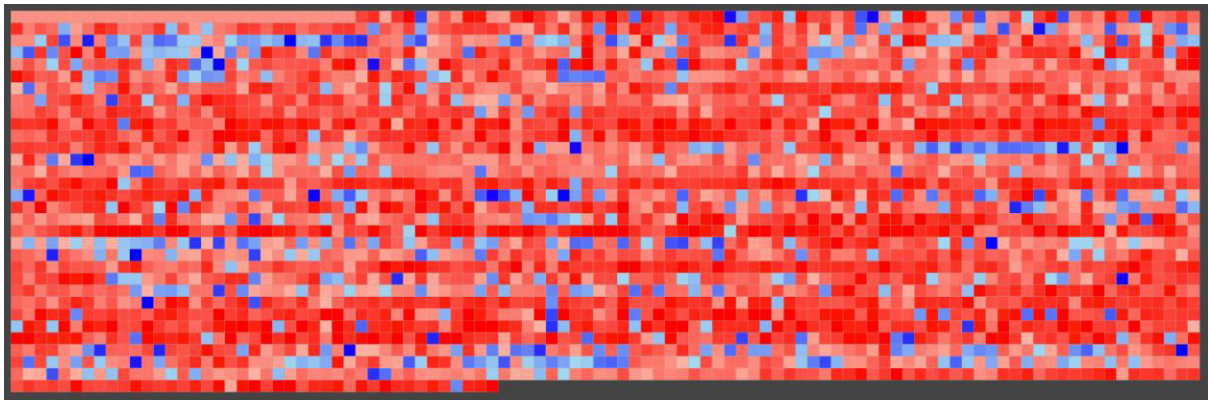
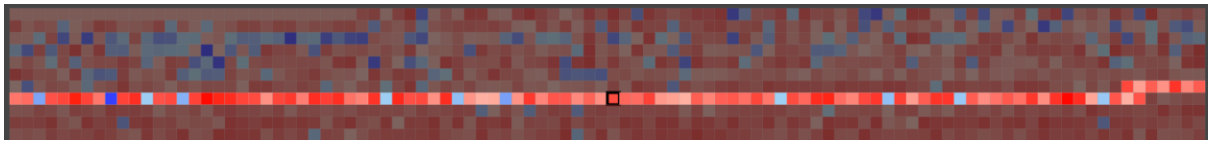
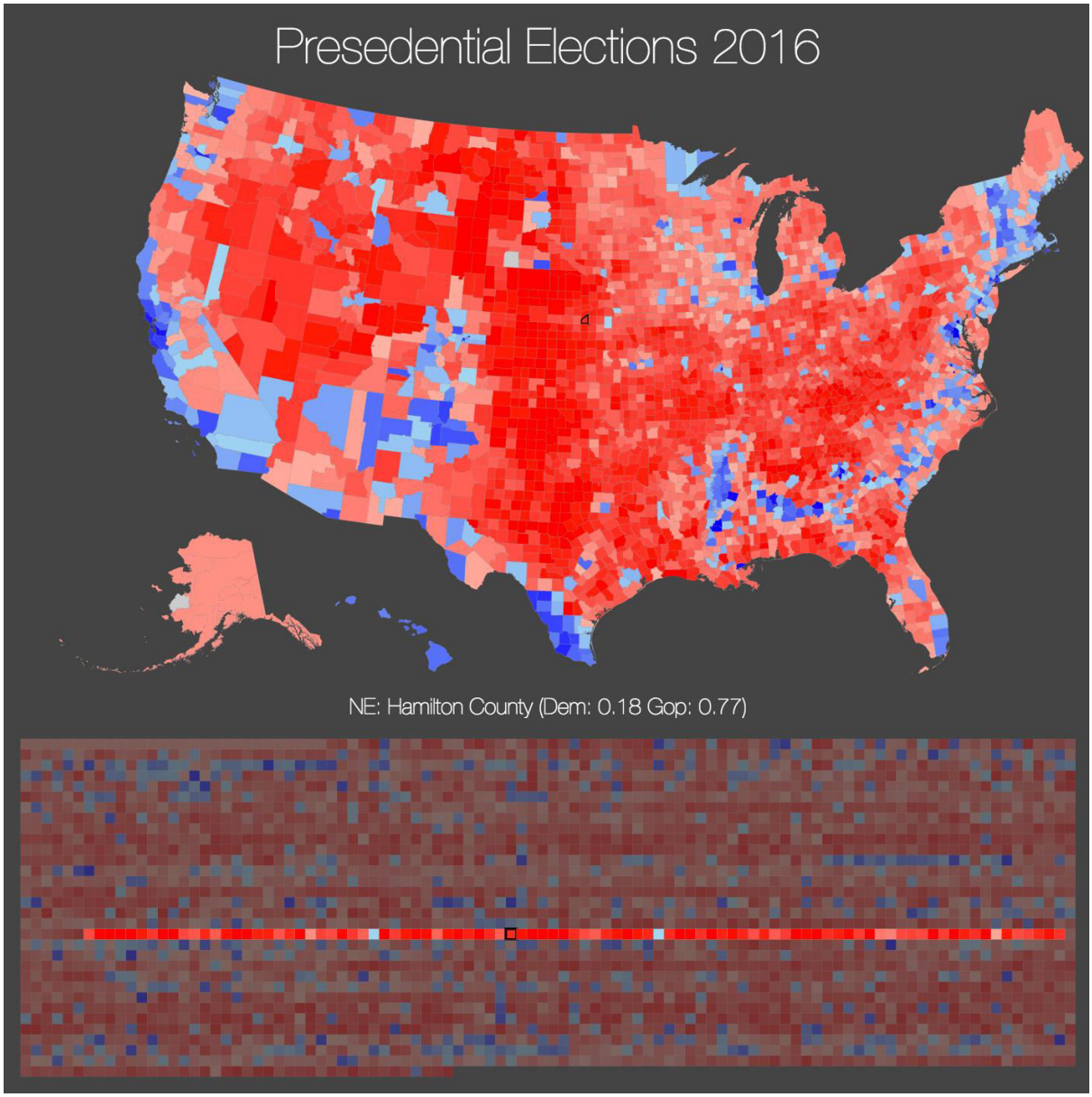


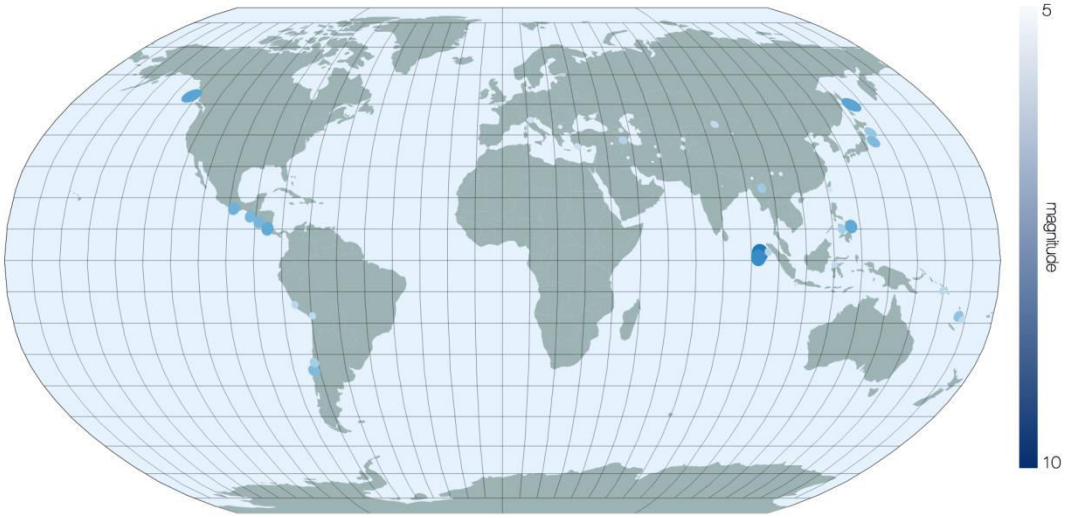





Presedential Elections 2016
NE: Hamilton County (Dem: 0.18 Gop: 0.77)

Robinson

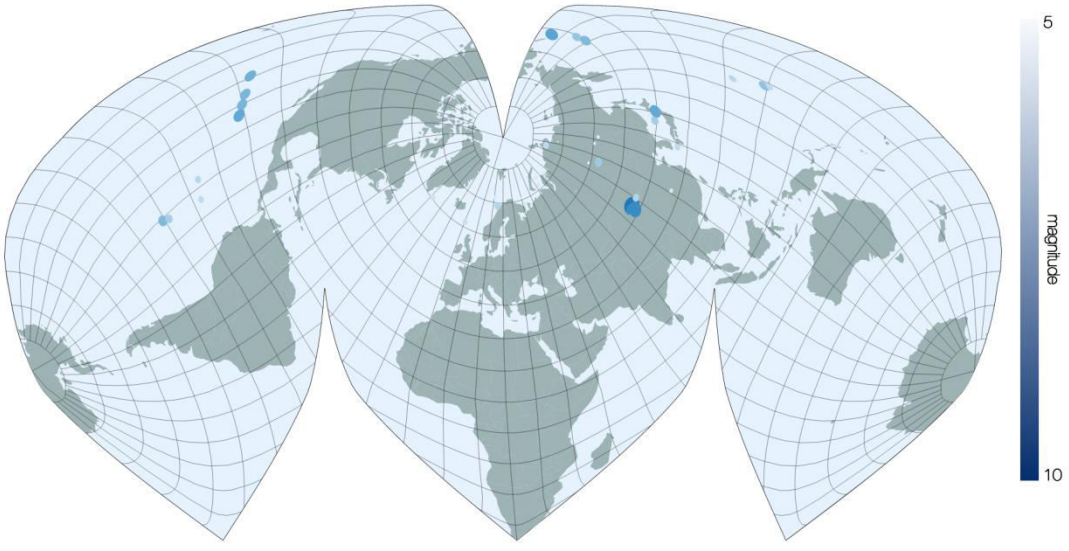
World Earthquake data
2012



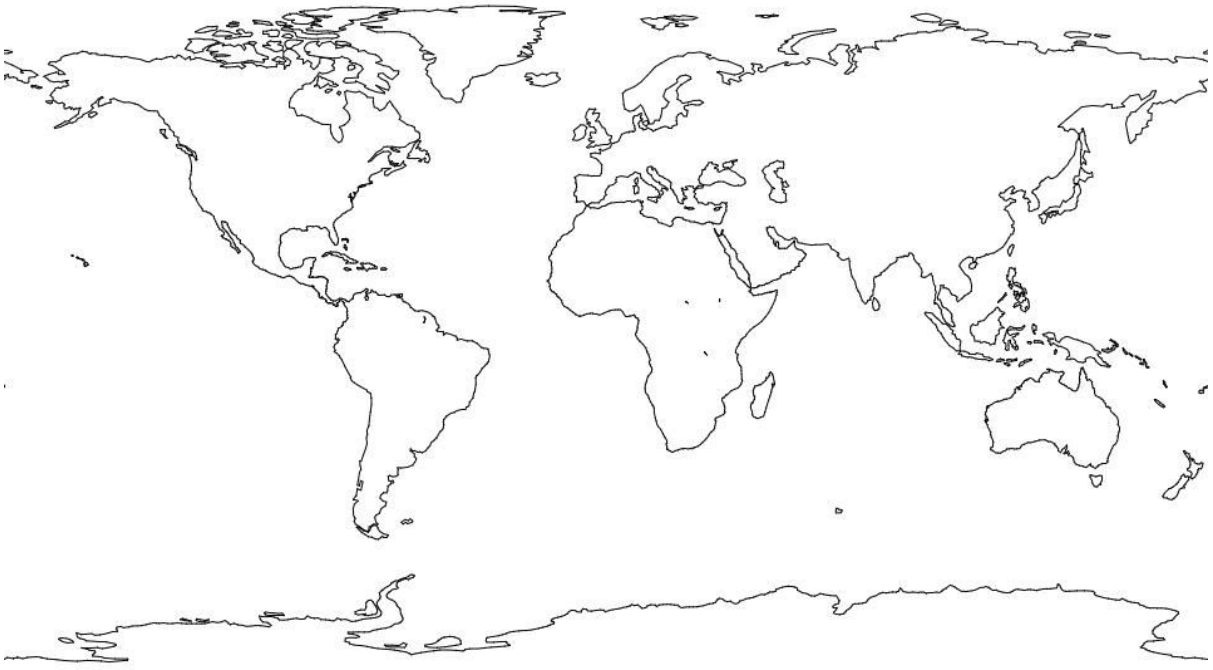
~ Select Year ~

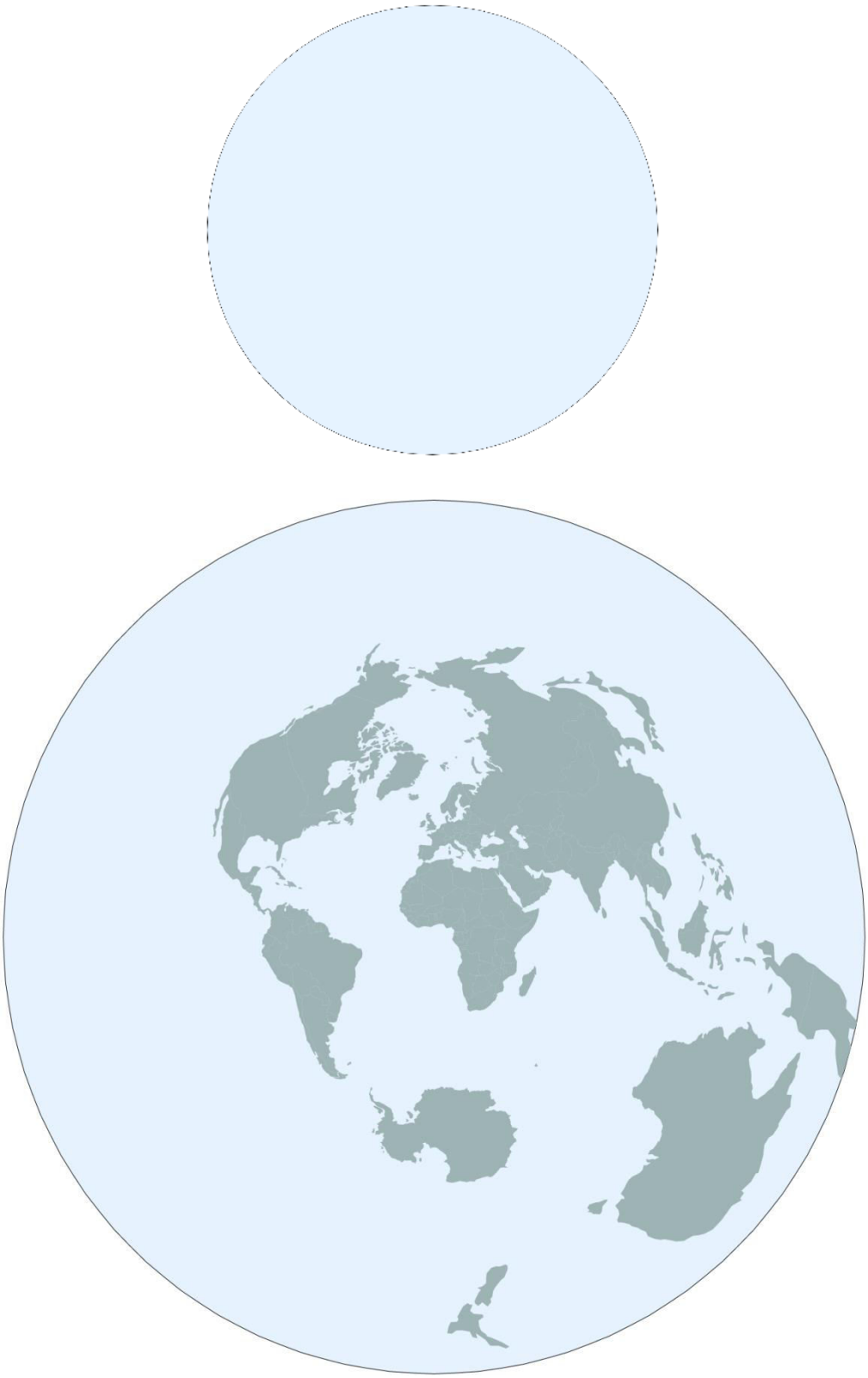
InterruptedSinuMollweide

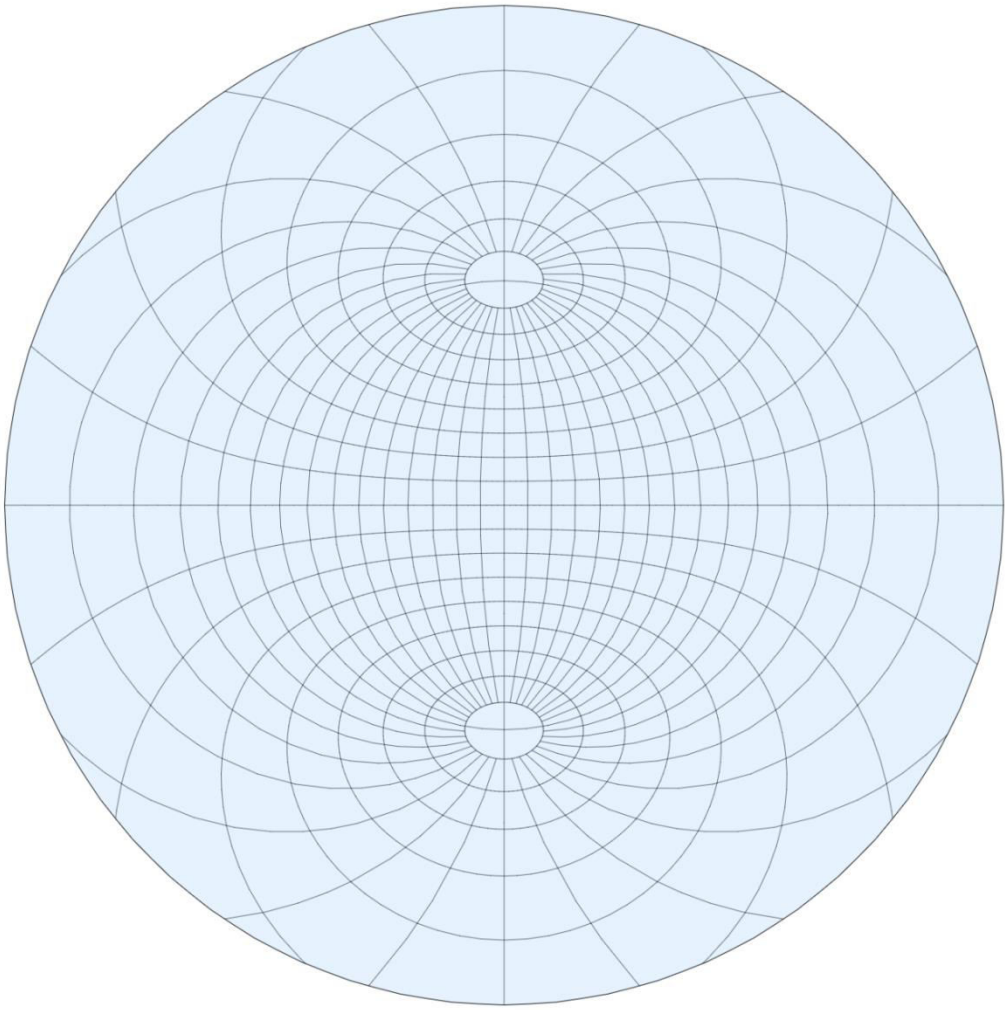
World Earthquake data
2012

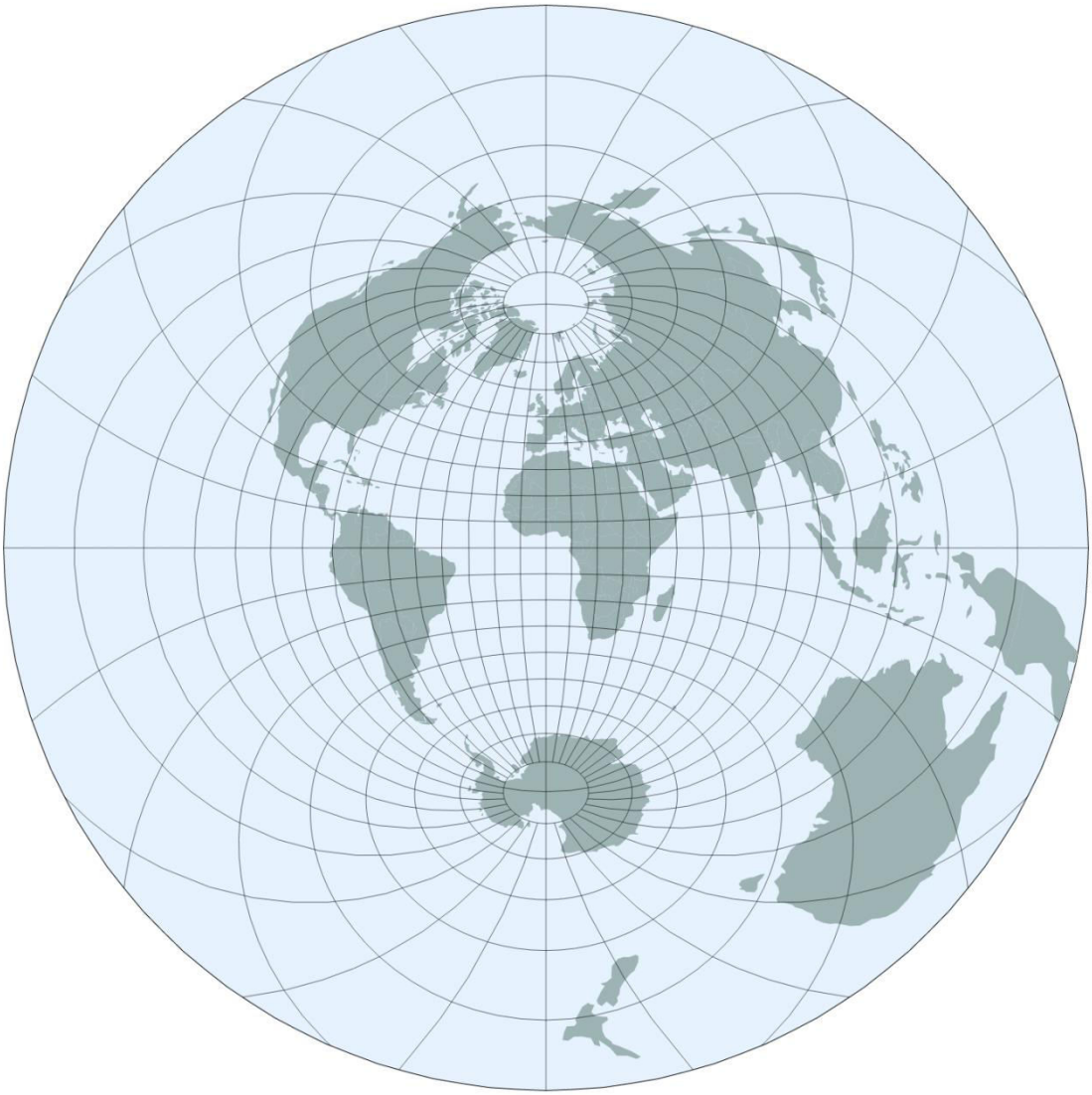


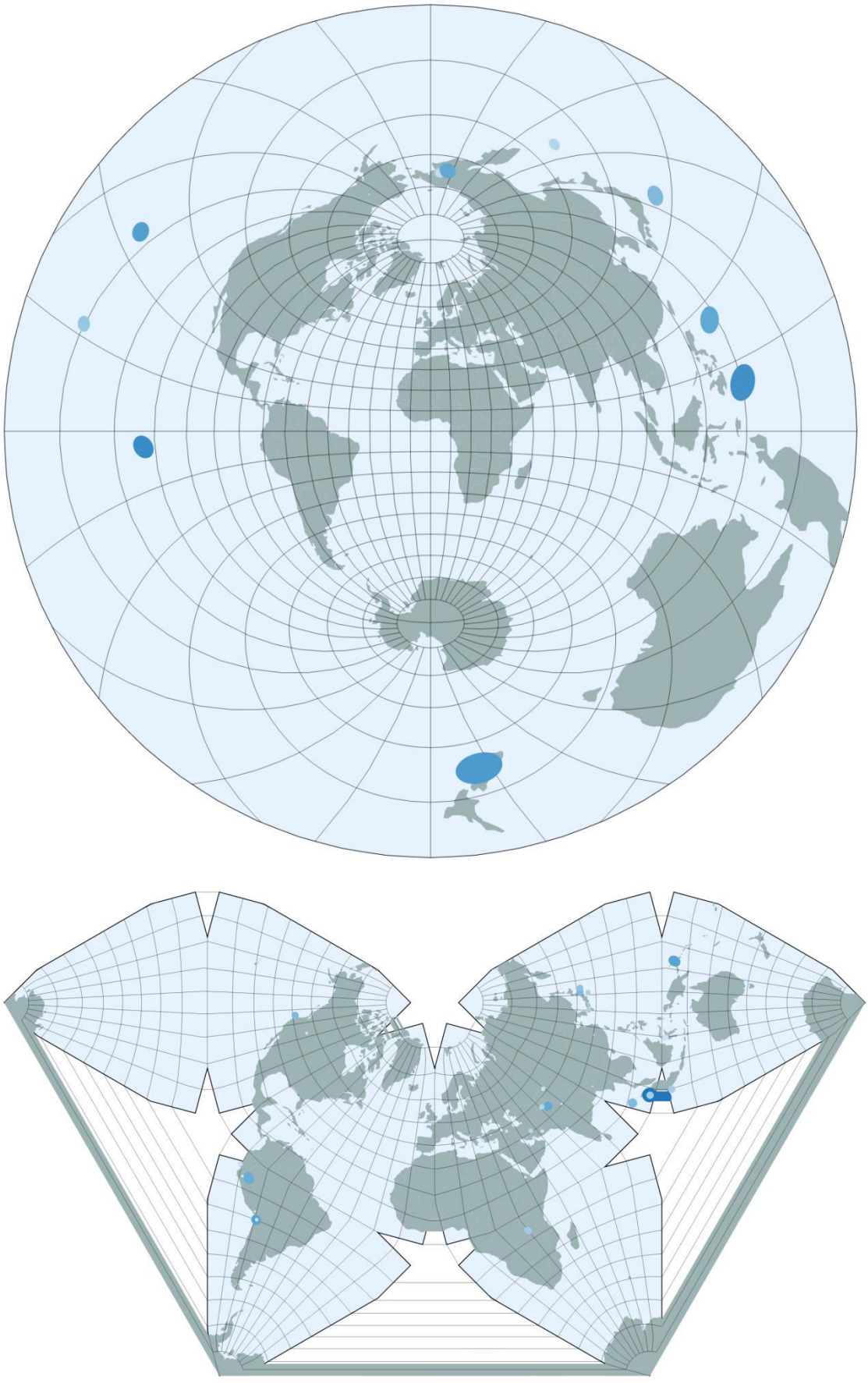
~ Select Year ~

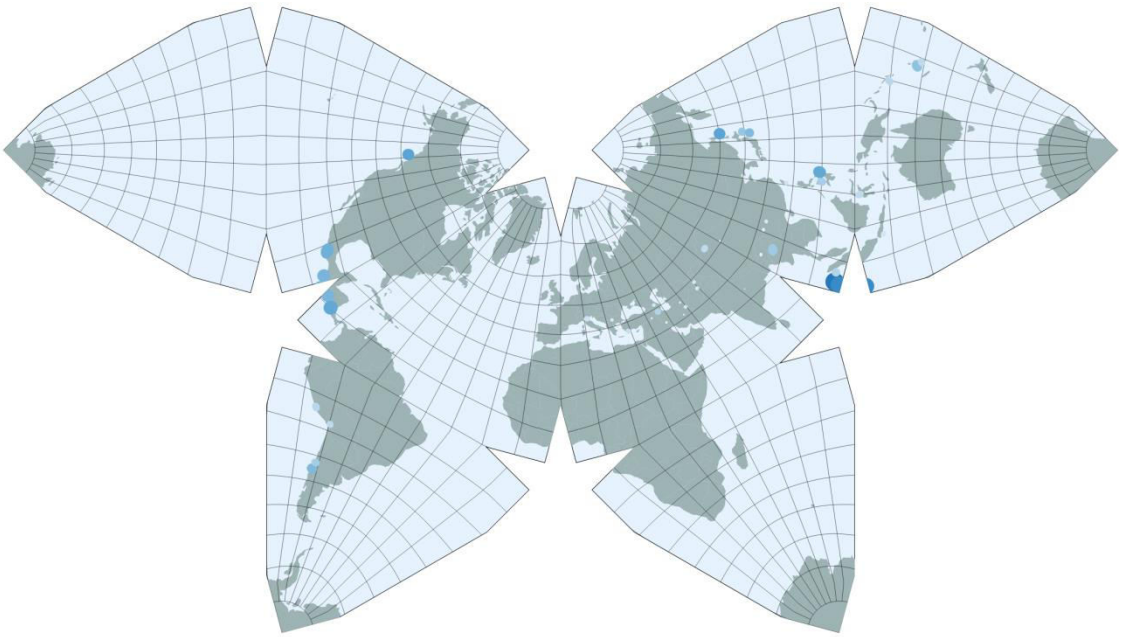


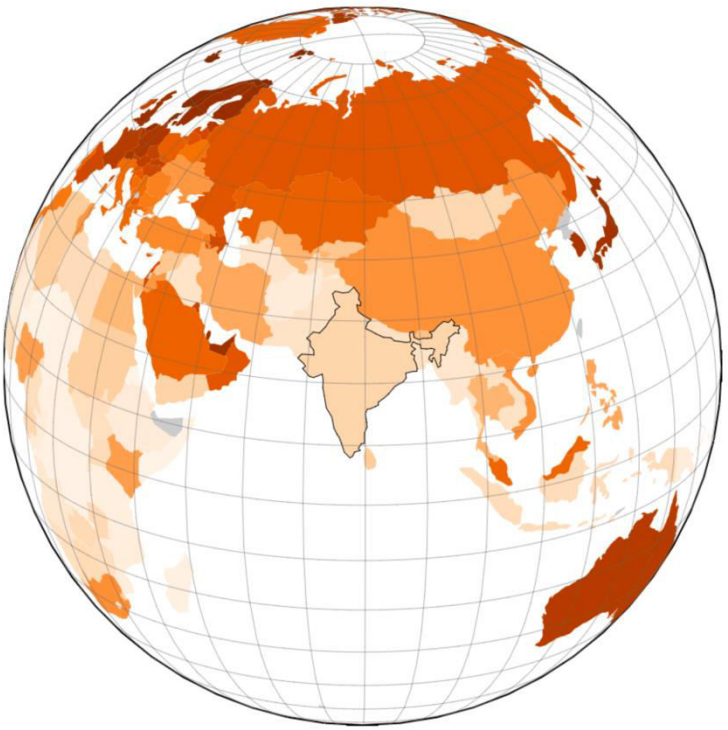












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AUS	AUT	AZE	BHS	BHR	BGD	BRB	BLR	BEL
BLZ	BEN	BMU	BTN	BOL	BIH	BWA	BRA	BRN
BGR	BFA	BDI	CPV	KHM	CMR	CAN	CYM	CAF
TCD	CHL	CHN	COL	COM	ZAR	COG	CRI	CIV
HRV	CUB	CYP	CZE	DNK	DJI	DMA	DOM	ECU
EGY	SLV	GNQ	ERI	EST	ETH	FRO	FJI	FIN
FRA	PYF	GAB	GMB	GEO	DEU	GHA	GRC	GRL
GRD	GUM	GTM	GIN	GNB	GUY	HTI	HND	HKG
HUN	ISL	IND	IDN	IRN	IRQ	IRL	ISR	ITA
JAM	JPN	JOR	KAZ	KEN	KIR	KOR	KWT	KGZ
LAO	LVA	LBN	LSO	LBR	LBY	LIE	LTU	LUX
MAC	MKD	MDG	MWI	MYS	MDV	MLI	MLT	MHL
MRT	MUS	MEX	FSM	MDA	MCO	MNG	MNE	MAR
MOZ	MMR	NAM	NPL	NLD	NCL	NZL	NIC	NER
NGA	NOR	OMN	PAK	PAN	PNG	PRY	PER	PHL
POL	PRT	PRI	QAT	ROM	RUS	RWA	WSM	STP
SAU	SEN	SRB	SYC	SLE	SGP	SVK	SVN	SLB
SOM	ZAF	SSD	ESP	LKA	KNA	LCA	VCT	SDN
SUR	SWZ	SWE	CHE	SYR	TJK	TZA	THA	TMP
TGO	TON	TTO	TUN	TUR	TKM	TUV	UGA	UKR
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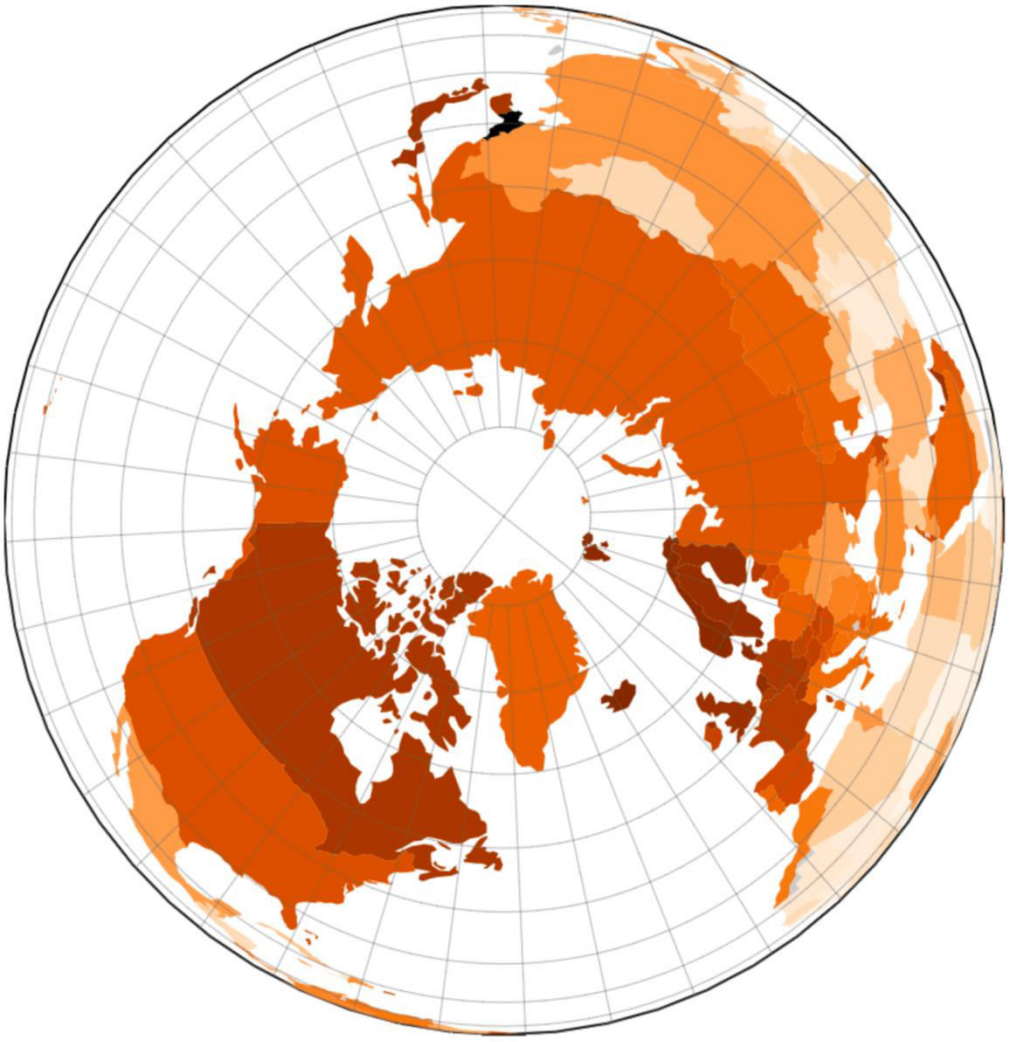
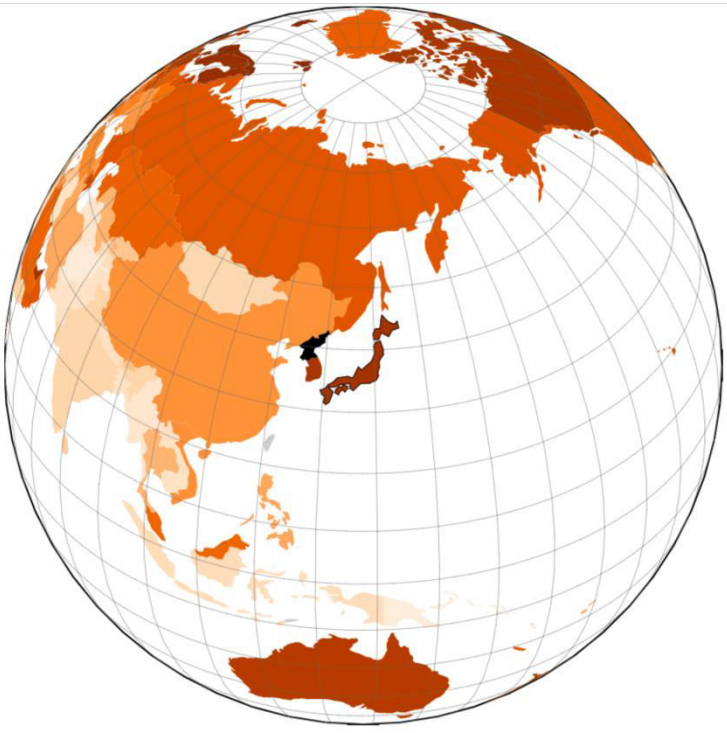
WBG	YEM	ZMB	ZWE					

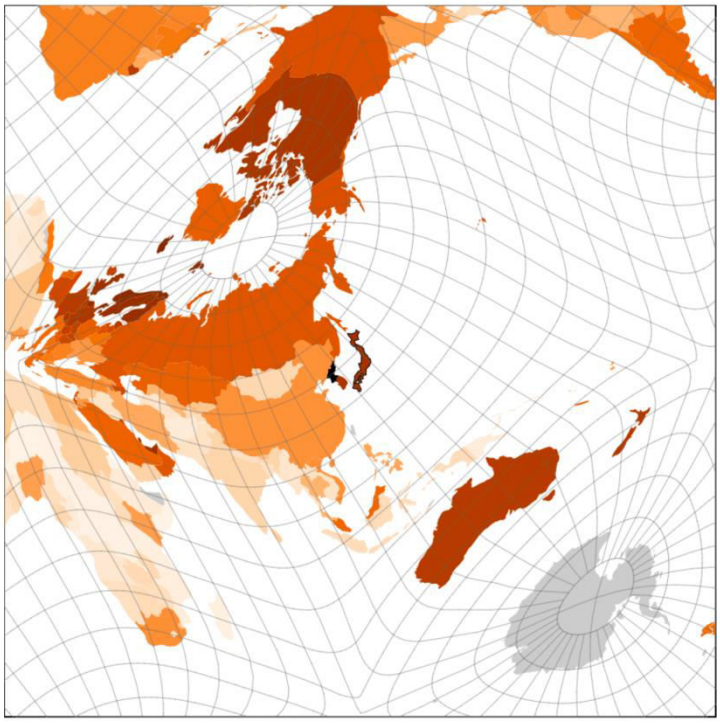
Country: India
Internet Users: 21.00%





AFG	AGO	ALB	ARE	ARG	ARM	AUS	AUT	AZE
BDI	BEL	BEN	BFA	BGD	BGR	BHS	BIH	BLR
BLZ	BOL	BRA	BRN	BTN	BWA	CAF	CAN	CHE
CHL	CHN	CIV	CMR	ZAR	COG	COL	CRI	CUB
CYP	CZE	DEU	DJI	DNK	DOM	DZA	ECU	EGY
ERI	ESP	EST	ETH	FIN	FJI	FRA	GAB	GBR
GEO	GHA	GIN	GMB	GNB	GNQ	GRC	GRL	GTM
GUY	HND	HRV	HTI	HUN	IDN	IND	IRL	IRN
IRQ	ISL	ISR	ITA	JAM	JOR	JPN	KAZ	KEN
KGZ	KHM	KOR	KWT	LAO	LBN	LBR	LBY	LKA
LSO	LTU	LUX	LVA	MAR	MDA	MDG	MEX	MKD
MLI	MMR	MNE	MNG	MOZ	MRT	MWI	MYS	NAM
NCL	NER	NGA	NIC	NLD	NOR	NPL	NZL	OMN
PAK	PAN	PER	PHL	PNG	POL	PRI	PRT	PRY
QAT	ROM	RUS	RWA	SAU	SDN	SSD	SEN	SLB
SLE	SLV	SOM	SRB	SUR	SVK	SVN	SWE	SWZ
SYR	TCD	TGO	THA	TJK	TKM	TTO	TUN	TUR
TZA	UGA	UKR	URY	USA	UZB	VEN	VNM	VUT
YEM	ZAF	ZMB	ZWE					

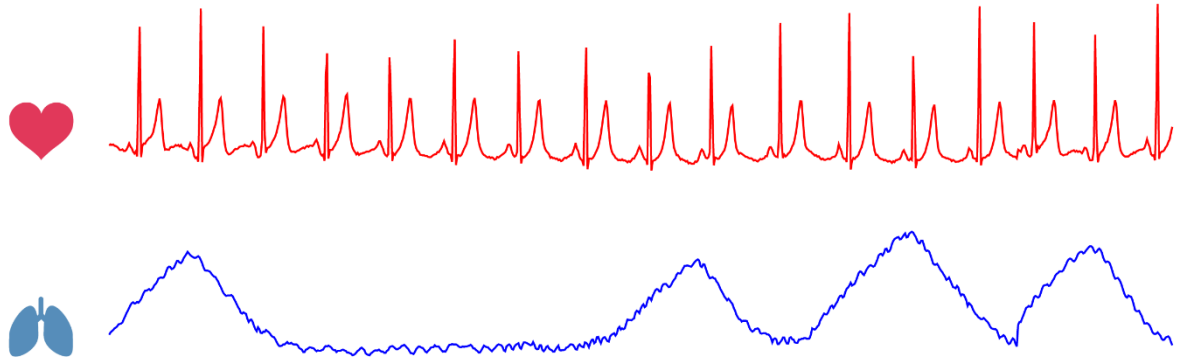
Country: Japan
Internet Users: 89.11%



AFG	AGO	ALB	ARE	ARG	ARM	AUS	AUT	AZE
BDI	BEL	BEN	BFA	BGD	BGR	BHS	BIH	BLR
BLZ	BOL	BRA	BRN	BTN	BWA	CAF	CAN	CHE
CHL	CHN	CIV	CMR	ZAR	COG	COL	CRI	CUB
CYP	CZE	DEU	DJI	DNK	DOM	DZA	ECU	EGY
ER	ESP	EST	ETH	FIN	FJI	FRA	GAB	GBR
GEO	GHA	GIN	GMB	GNB	GNQ	GRC	GRL	GTM
GUY	HND	HRV	HTI	HUN	IDN	IND	IRL	IRN
IRQ	ISL	ISR	ITA	JAM	JOR	JPN	KAZ	KEN
KGZ	K-M	KOR	KWT	LAO	LBN	LBR	LBY	LKA
LSO	LTU	LUX	LVA	MAR	MDA	MDG	MEX	MKD
MLI	MMR	MNE	MNG	MOZ	MRT	MWI	MYS	NAM
NCL	NER	NGA	NIC	NLD	NOR	NPL	NZL	OMN
PAK	PAN	PER	PHL	PNG	POL	PRI	PRT	PRY
QAT	ROM	RUS	RWA	SAU	SDN	SSD	SEN	SLB
SLE	SLV	SOM	SRB	SUR	SWK	SVN	SWE	SWZ
SYR	TCD	TGO	THA	TJK	TKM	TTO	TUN	TUR
TZA	UGA	UKR	URY	USA	UZB	VEN	VNM	VUT
YEM	ZAF	ZMB	ZWE					

Country: Japan
Internet Users: 89.11%

Chapter 6: Visualizing Streaming Data



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f1o03.ecg	15-Aug-1994 15:02	14K	corrected annotations
f1o03.hea	14-Mar-2009 08:48	125	header file
f1o04.dat	25-Nov-1994 17:51	6.9M	digitized signal(s)
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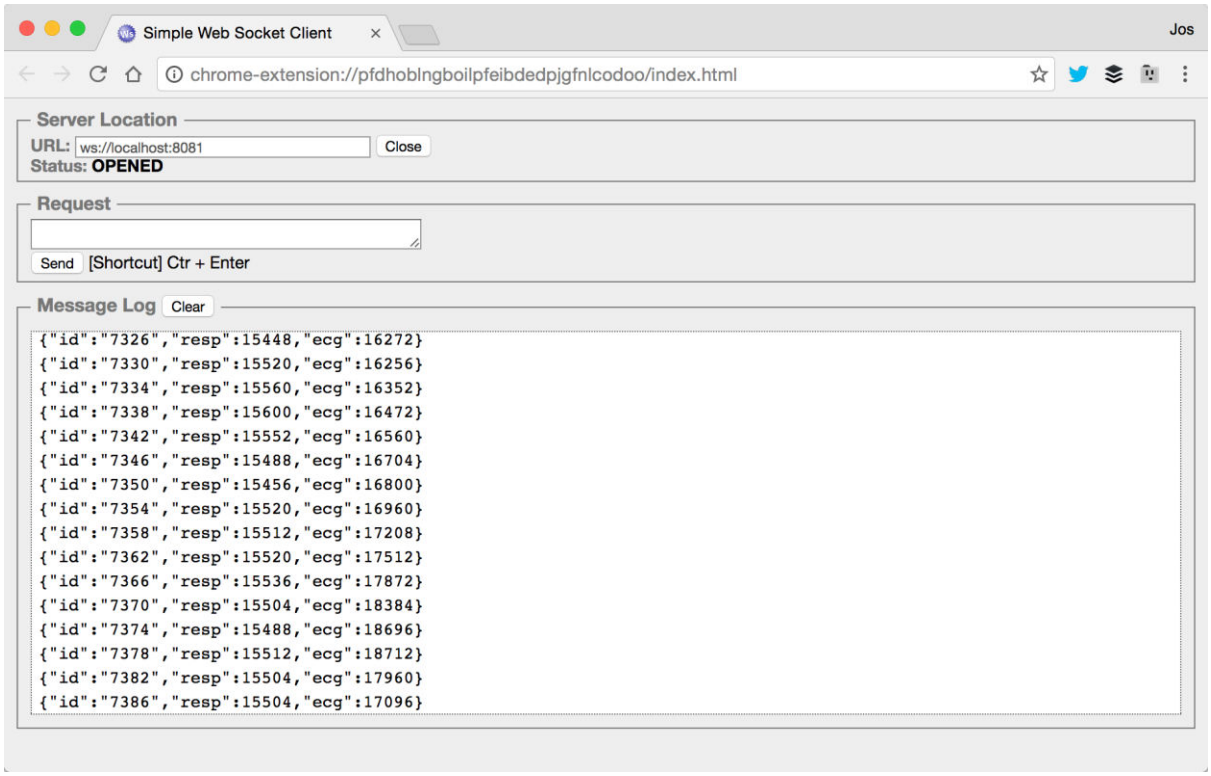

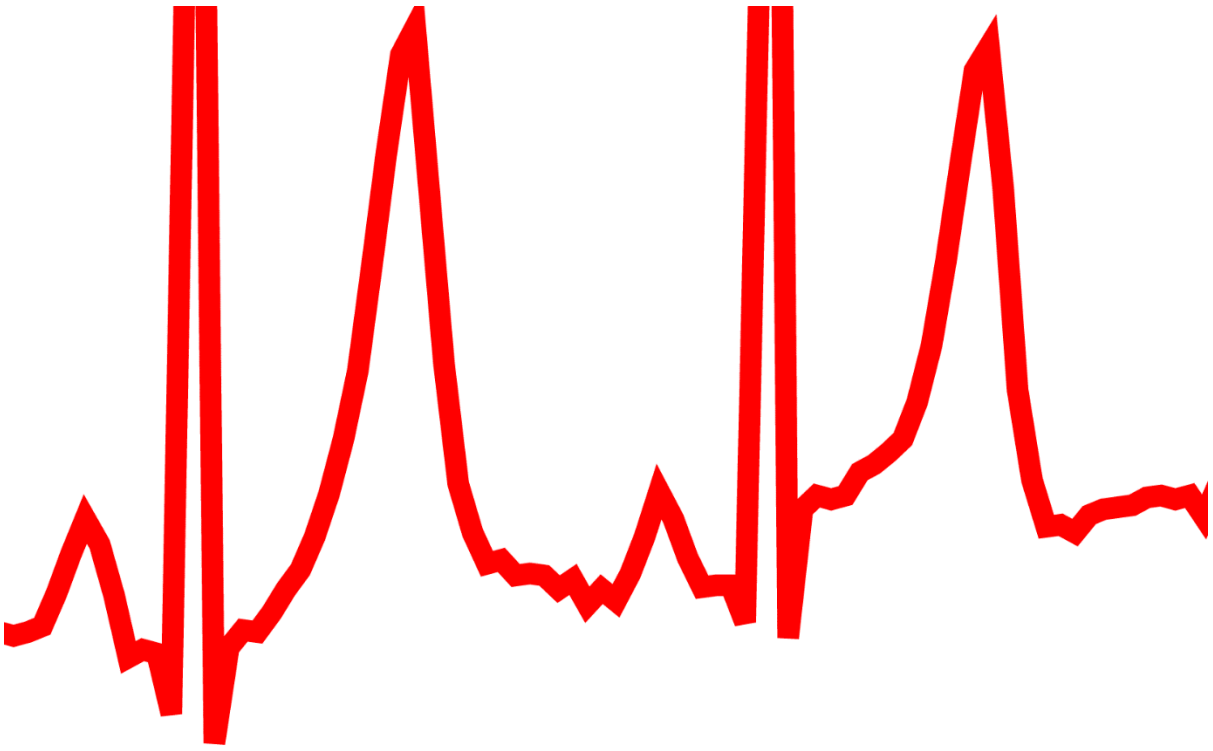

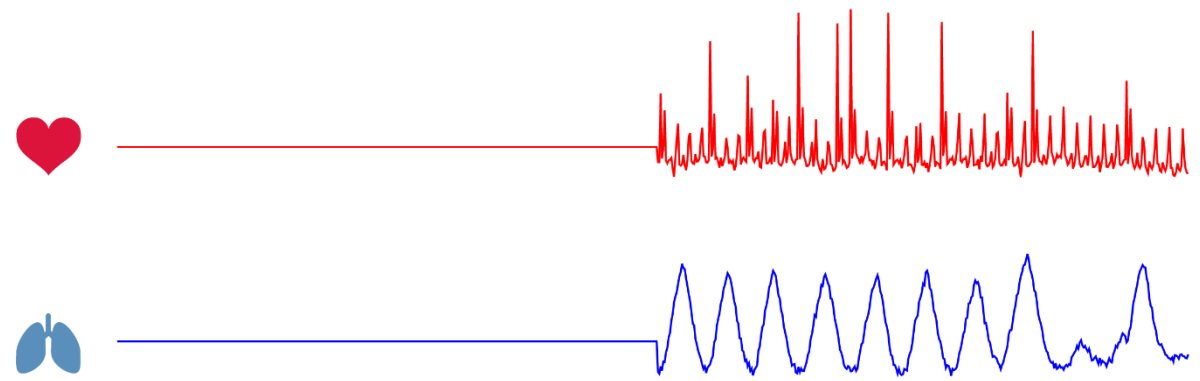

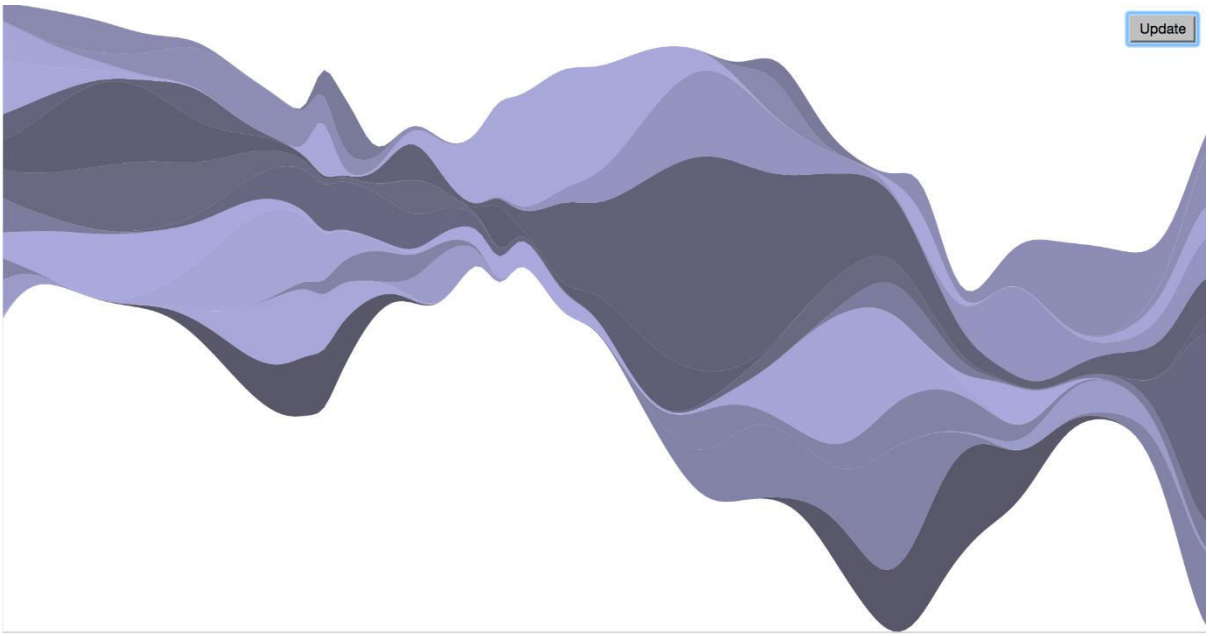
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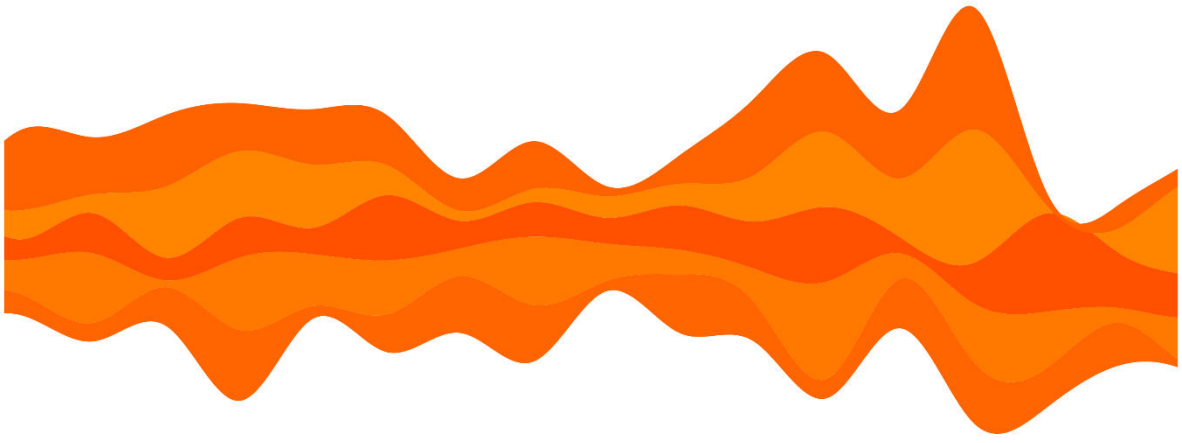

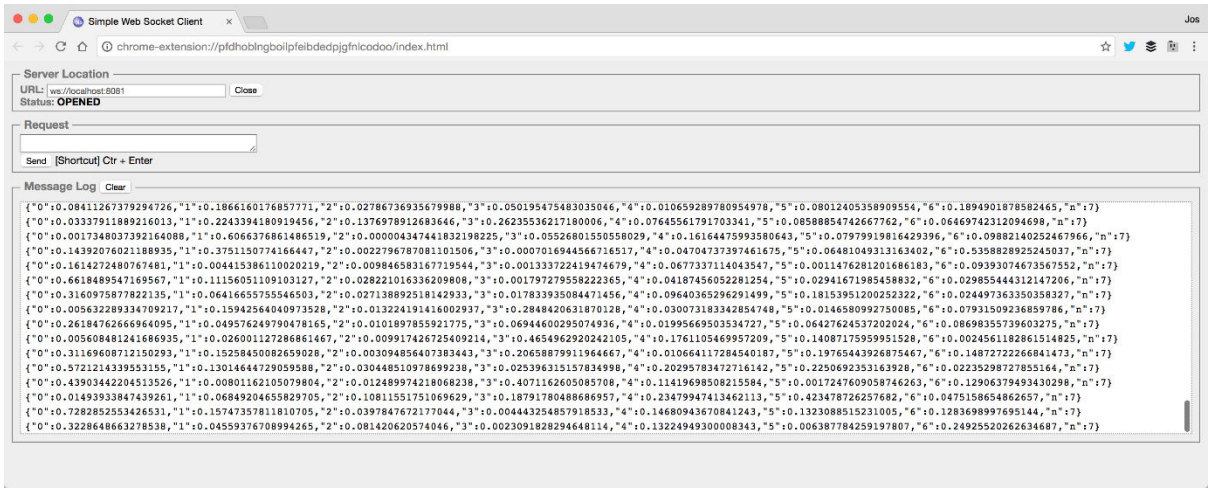

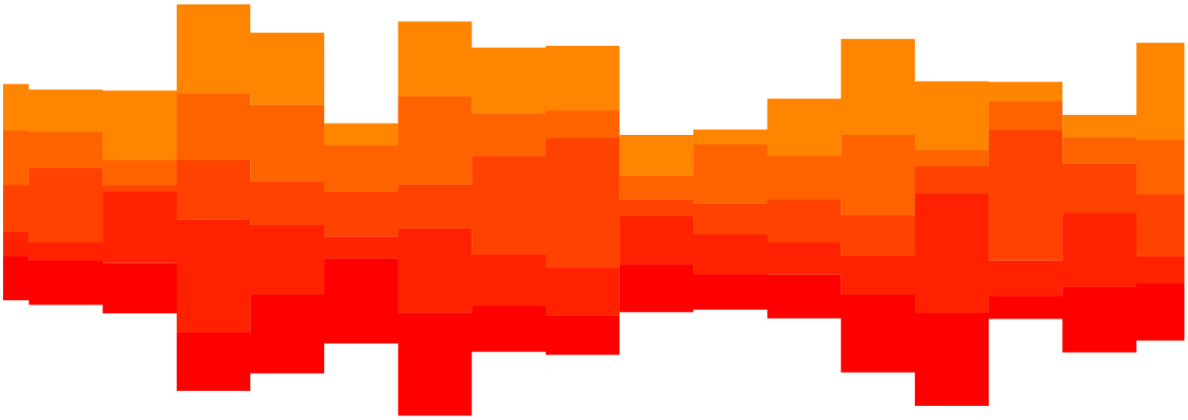

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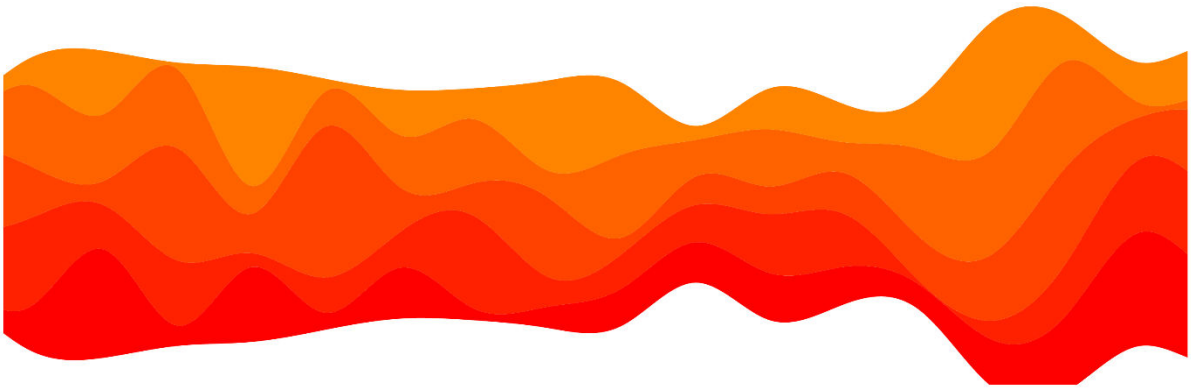

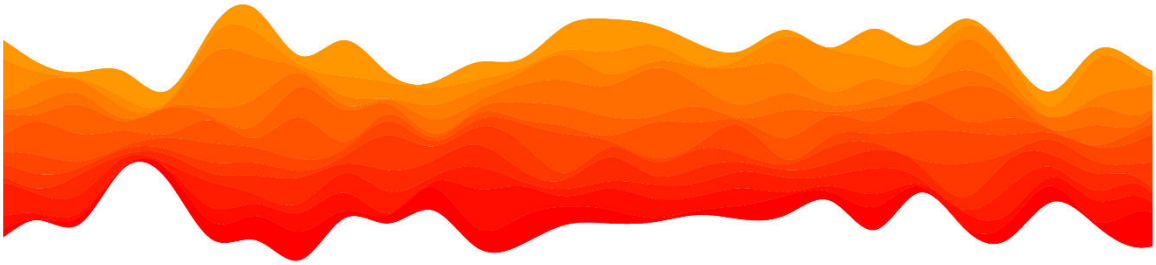

Simple Web Socket Client

Jos

chrome-extension://pfdhoblngboilpfeibdedpjgfnlcodoo/index.html

Server Location

URL: ws://stream.meetup.com/2/rsvps Open

Status: **CLOSED**

Request

Send [Shortcut] Ctr + Enter

Message Log Clear


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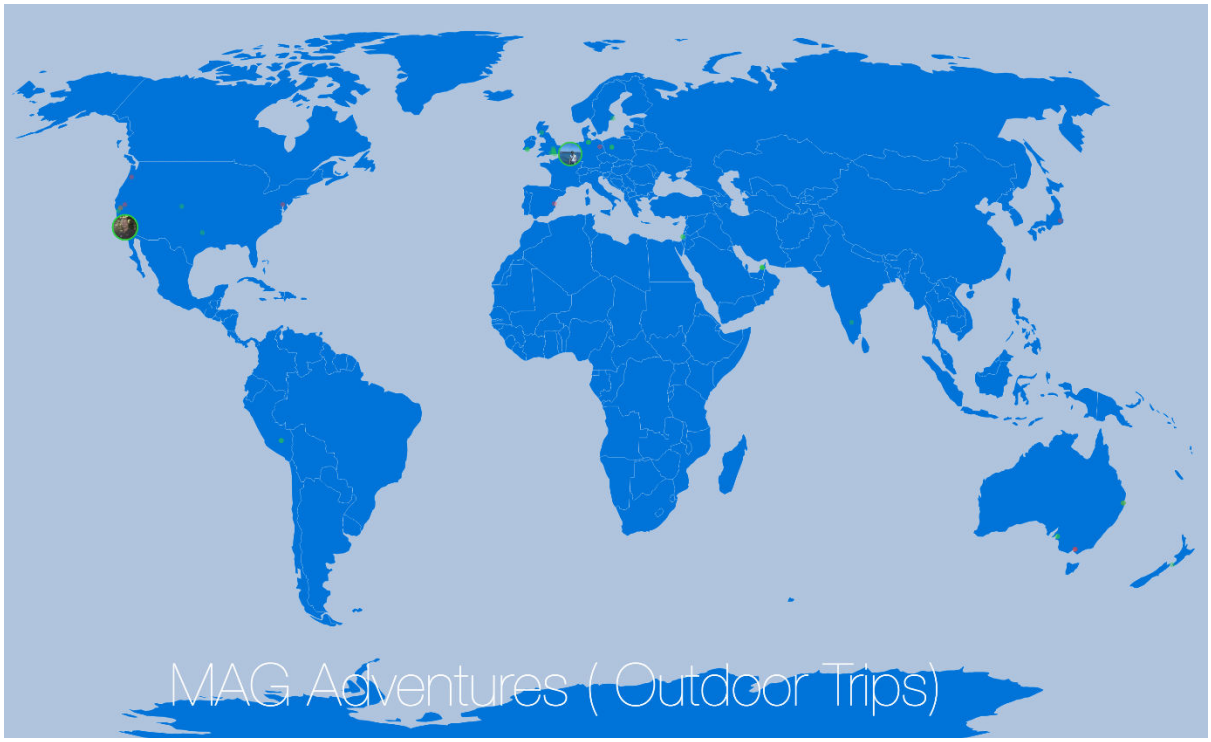
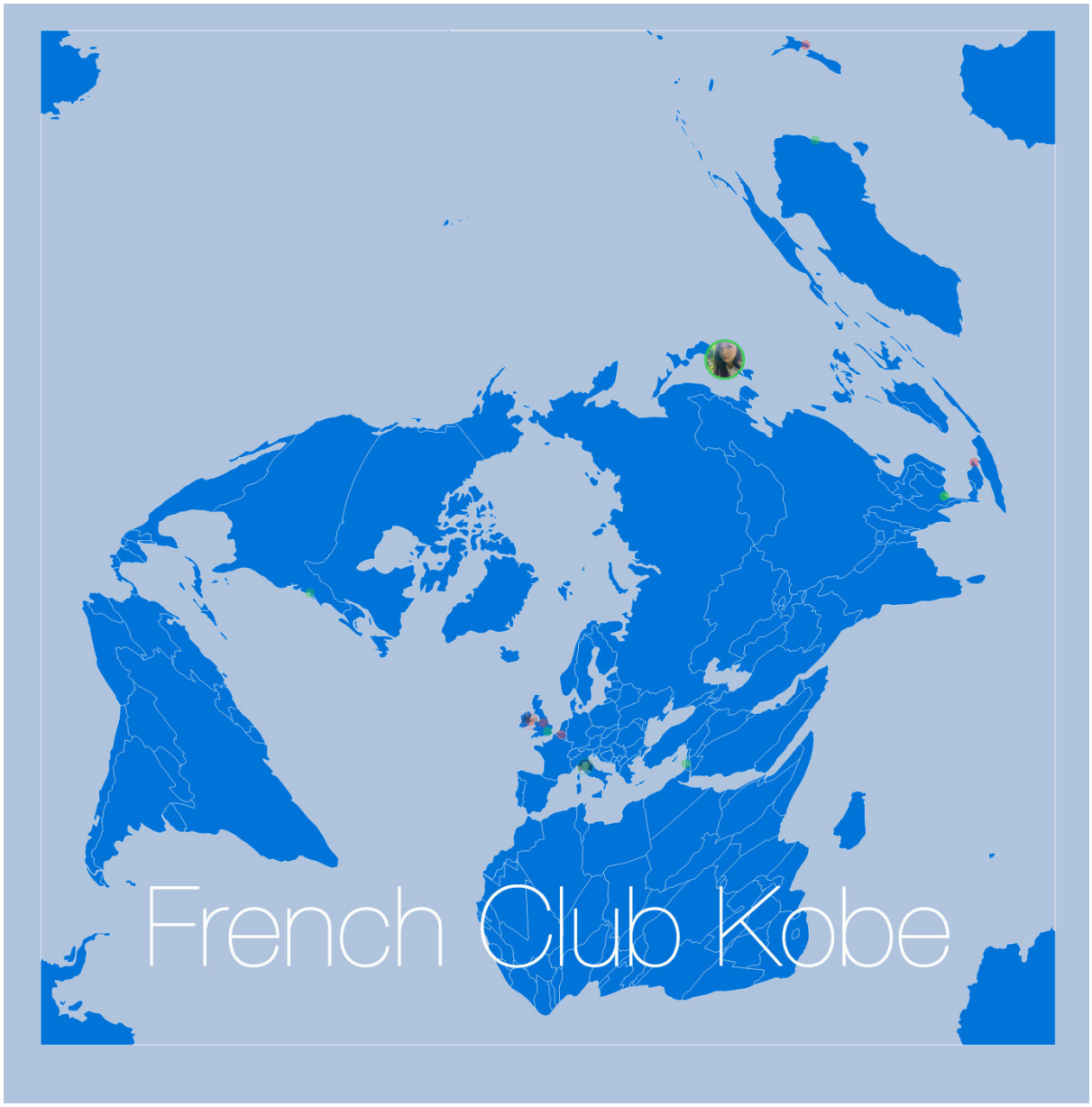
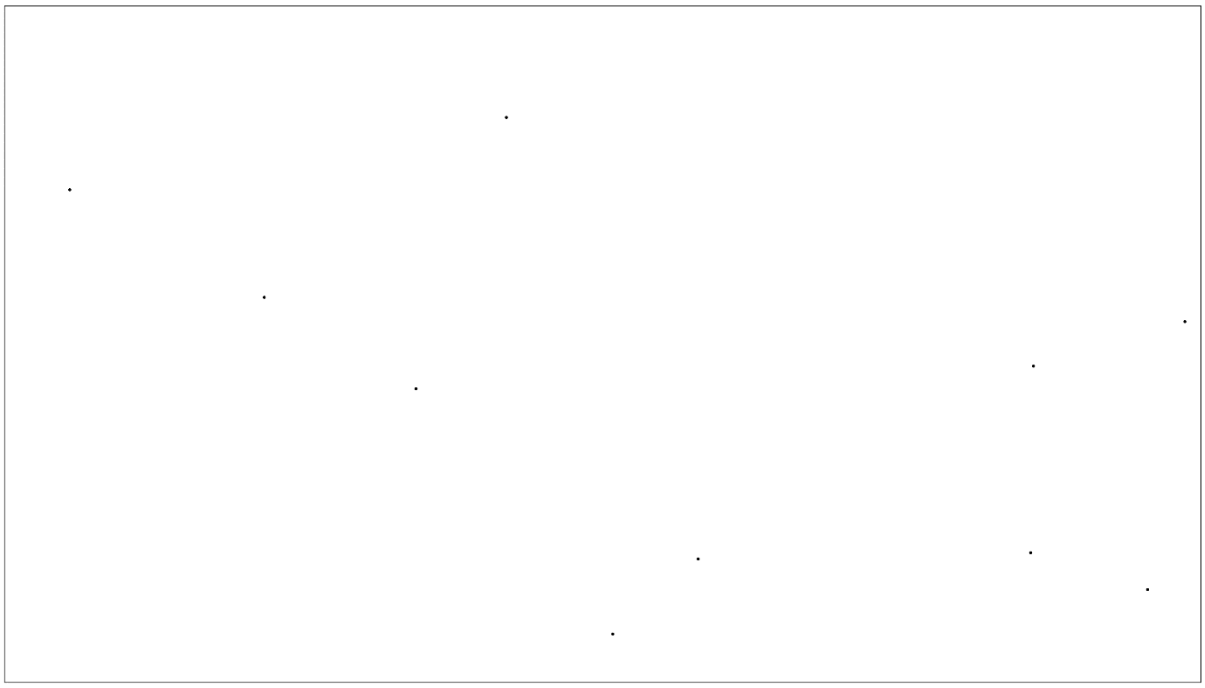
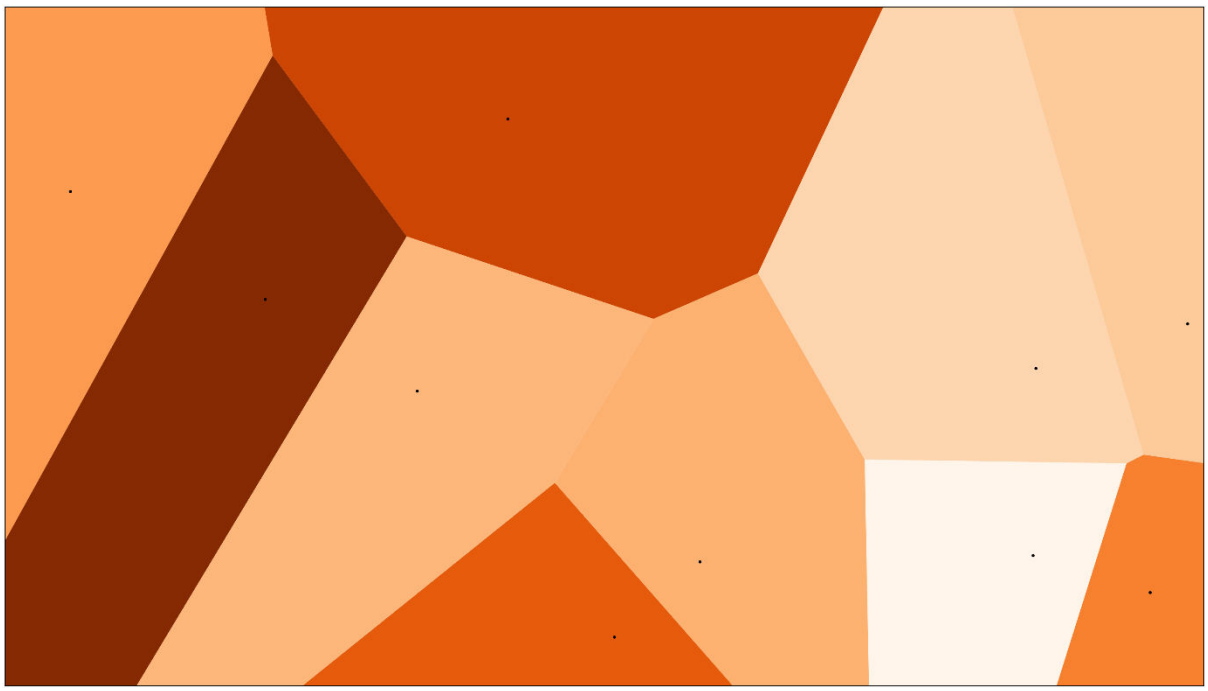

MAG Adventures (Outdoor Trips)

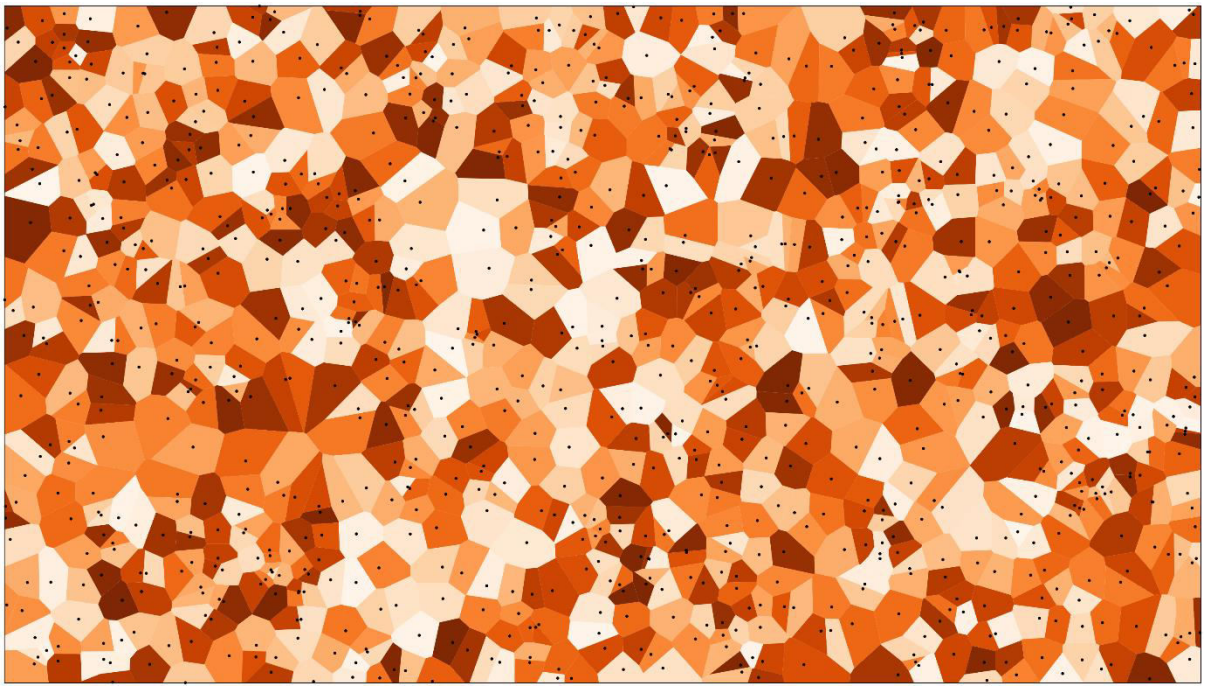
Suwanee Take-a-Hikers

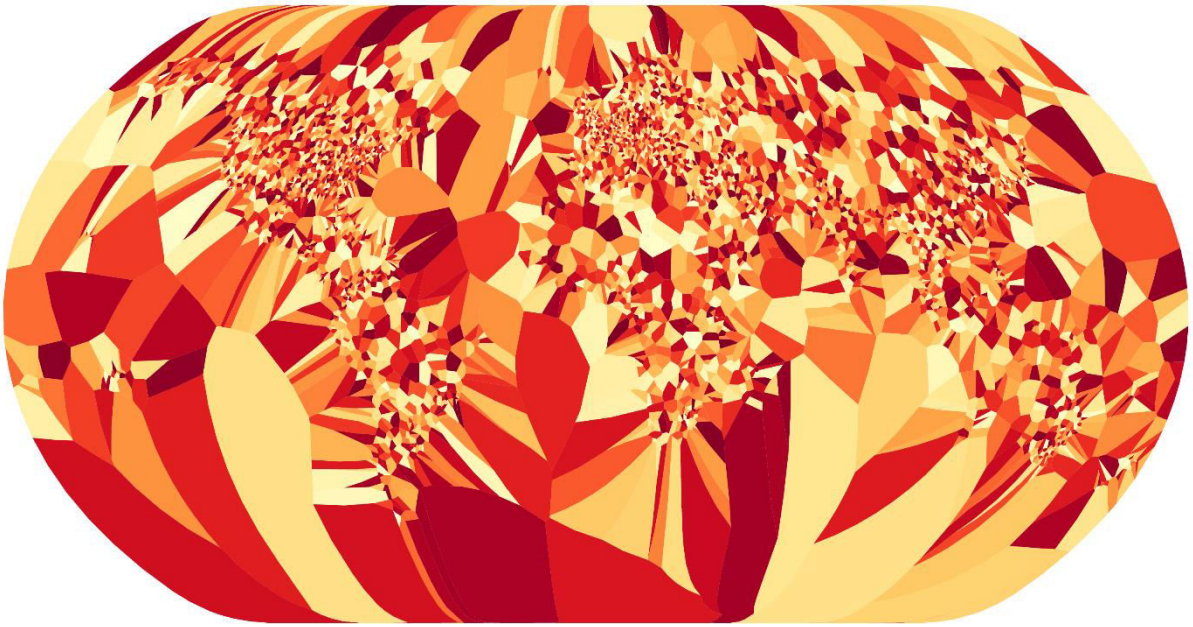

French Club Kobe

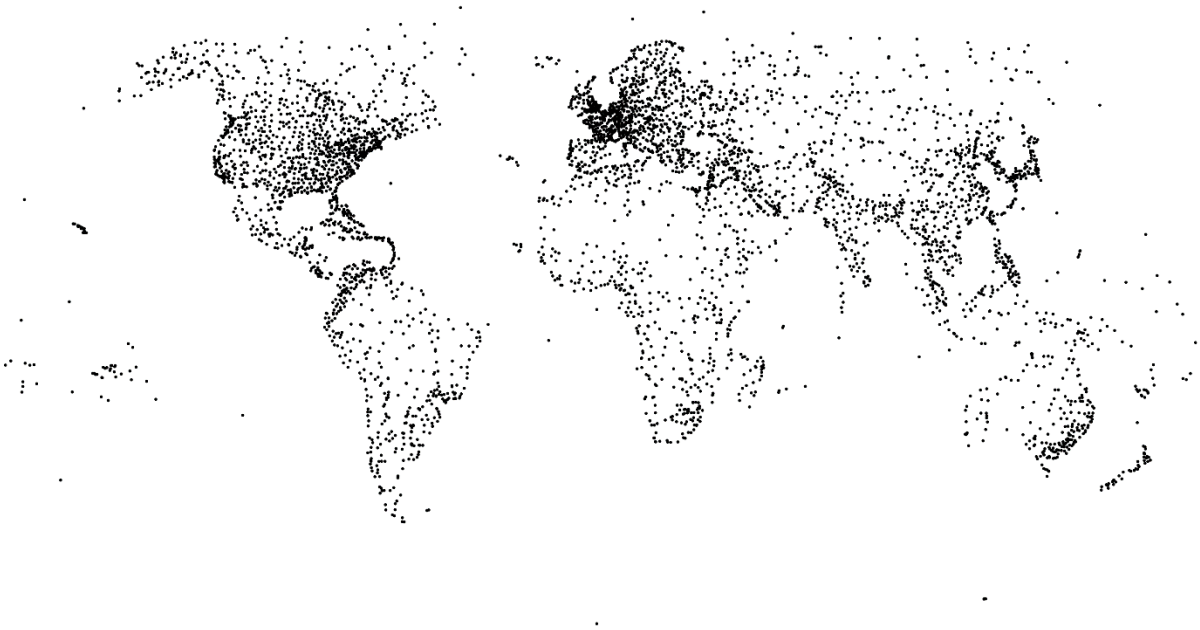
Chapter 7: Voronoi Diagrams and Heatmaps











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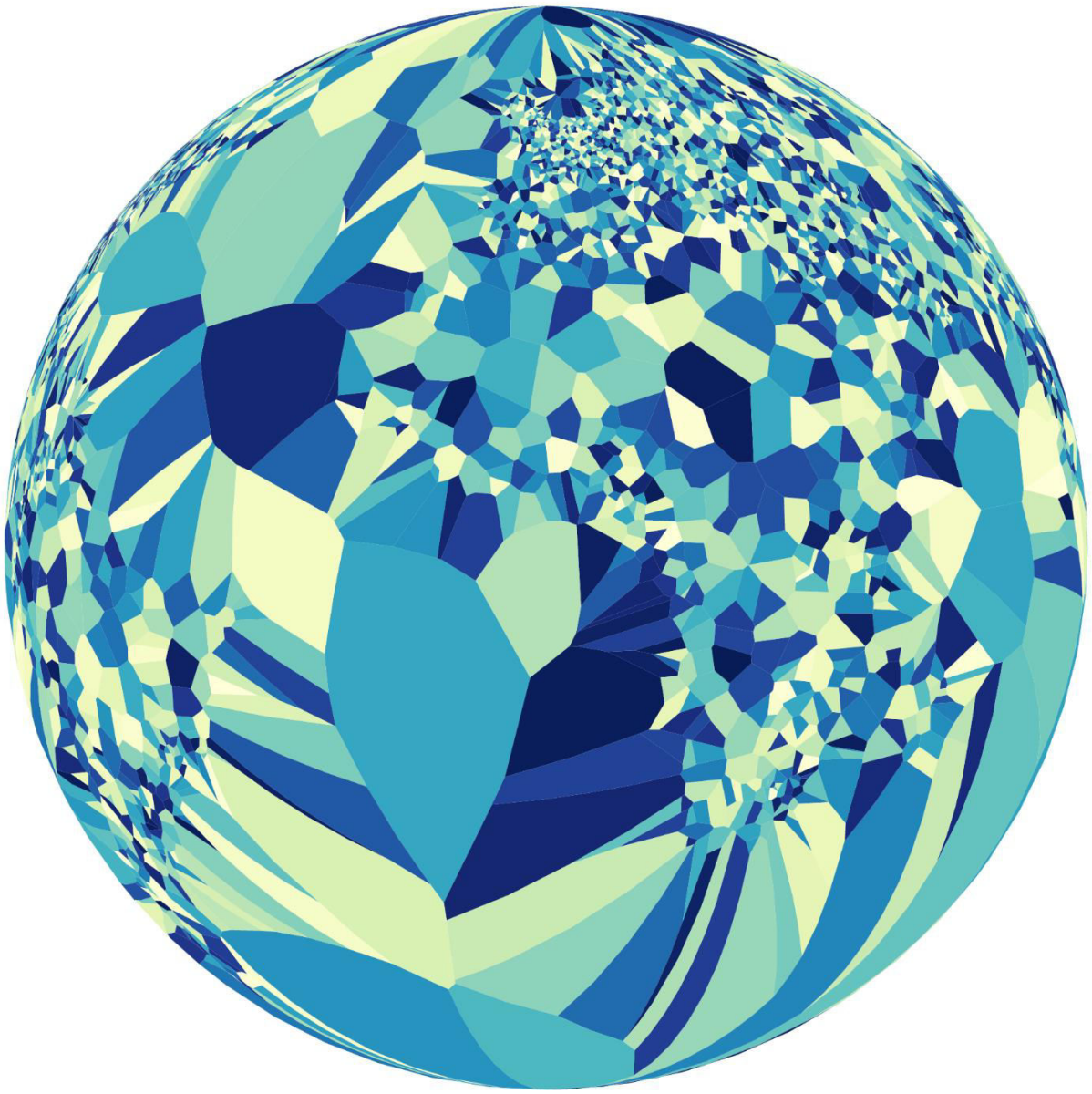
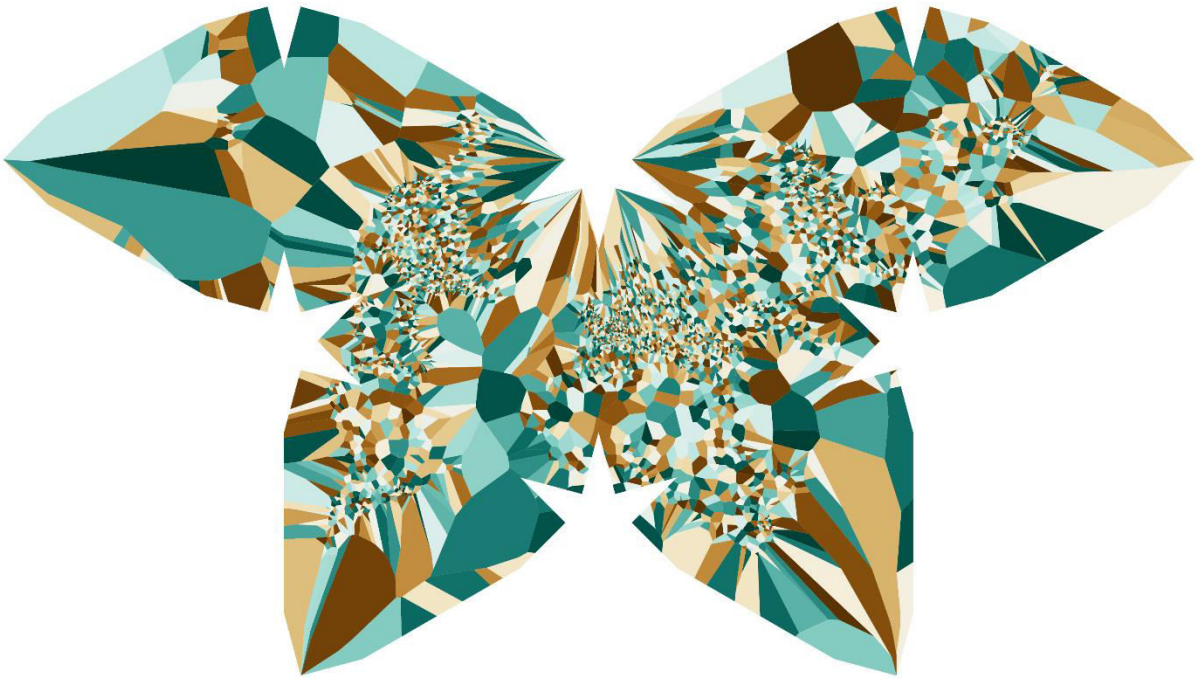
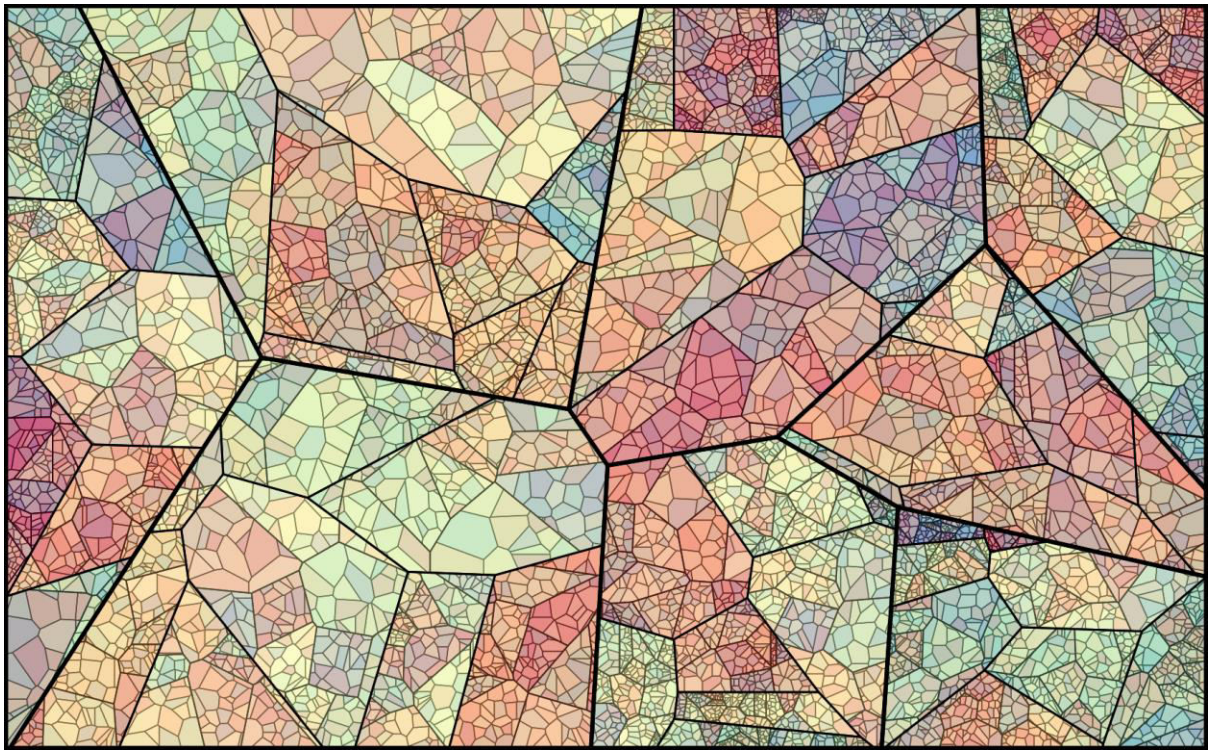
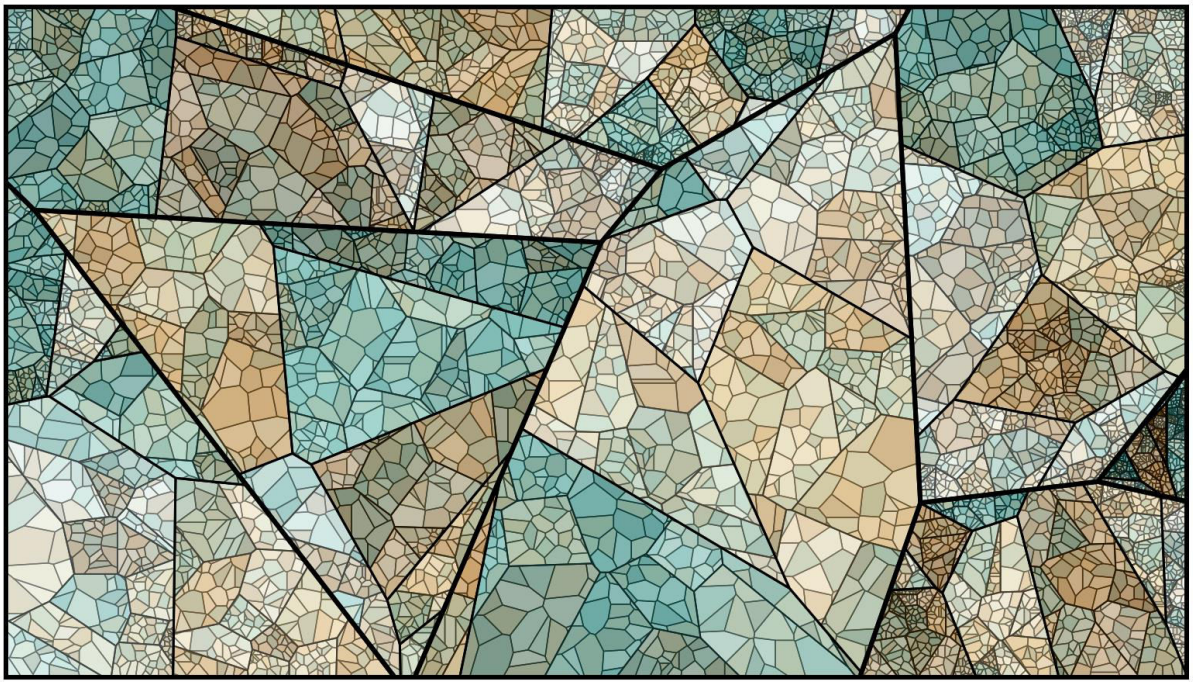
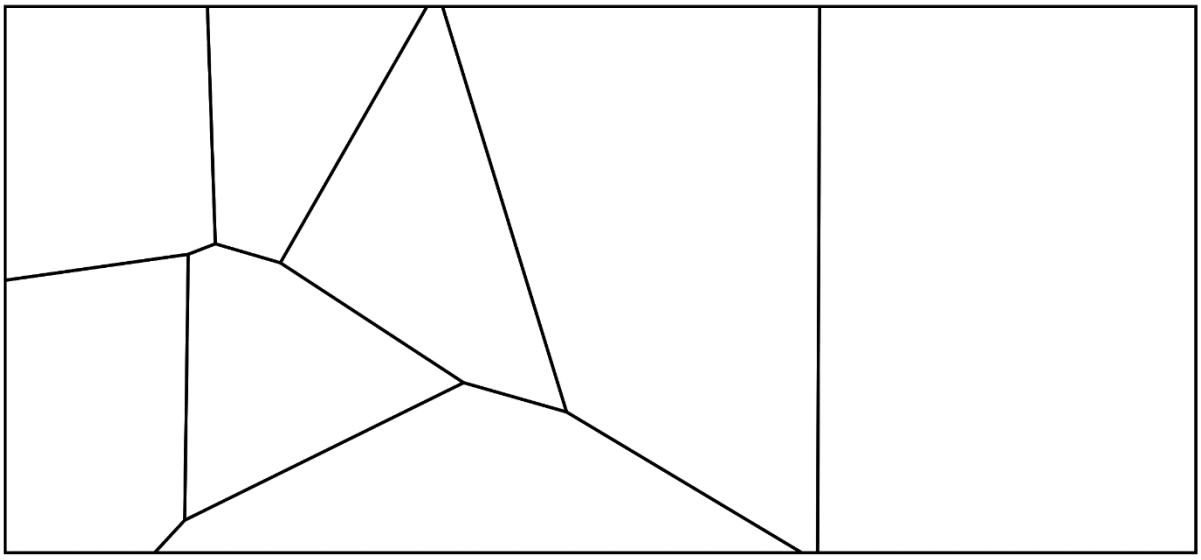
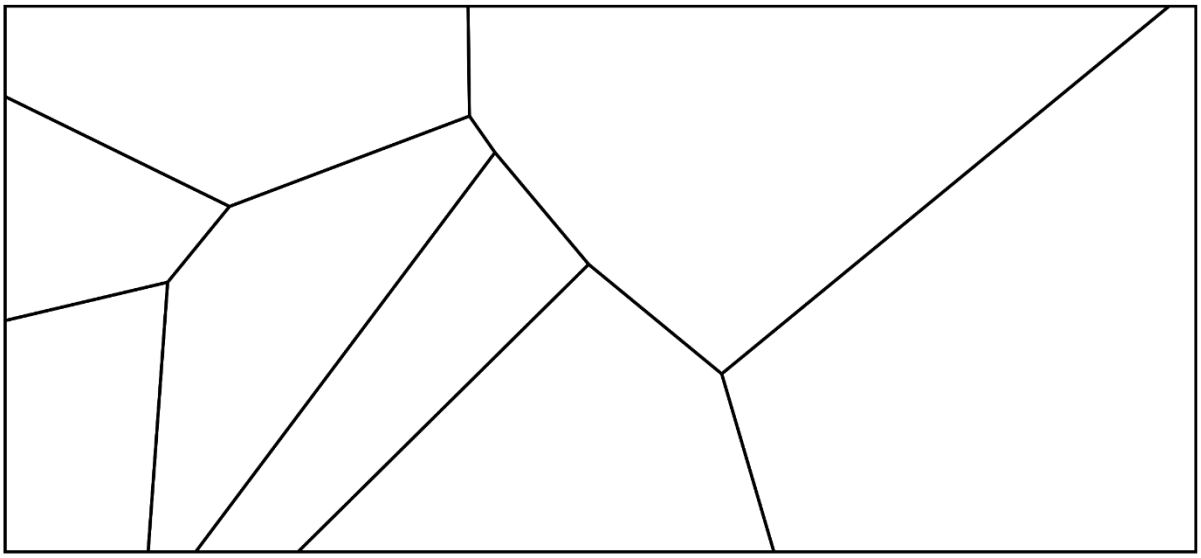


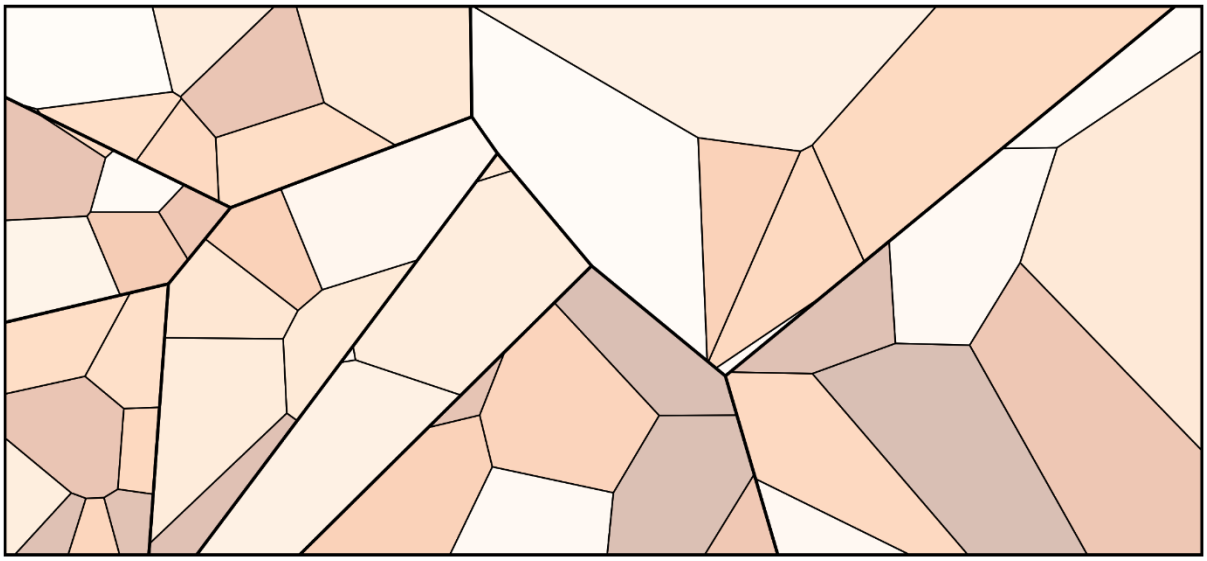


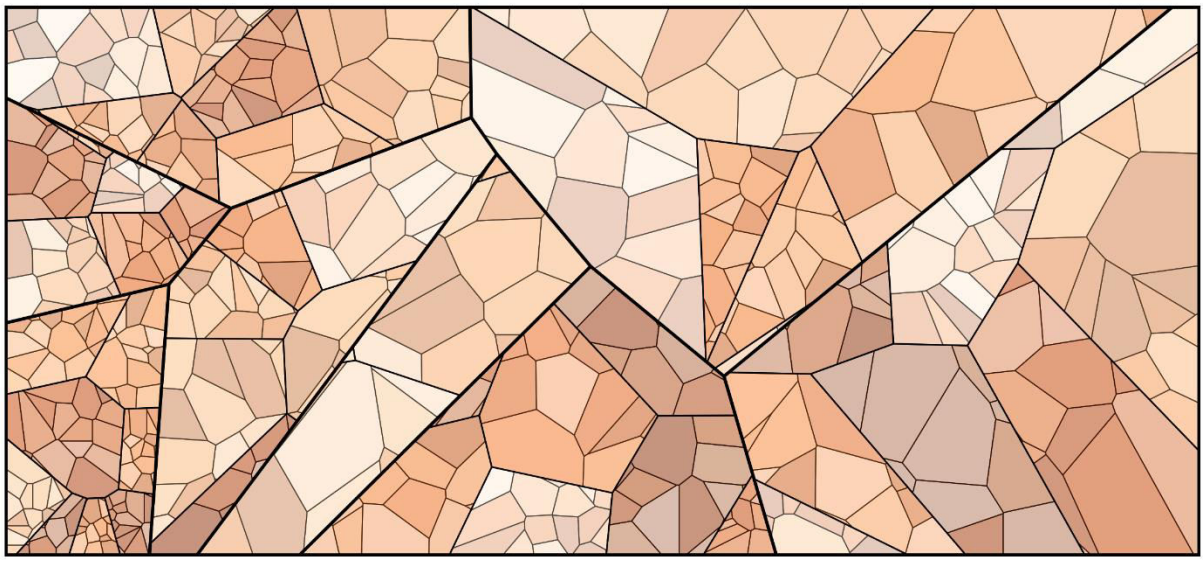


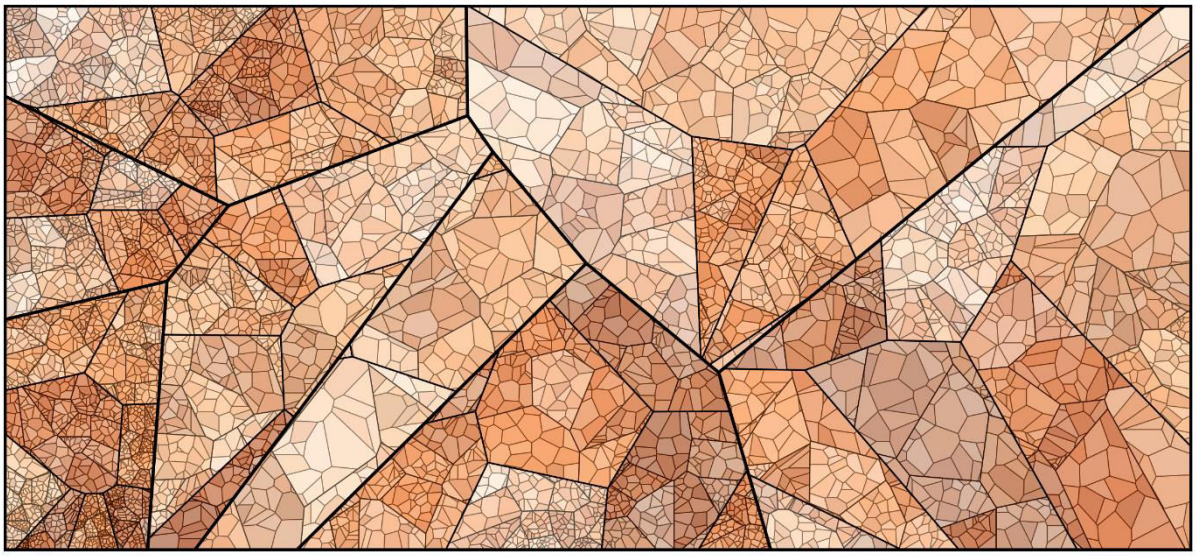




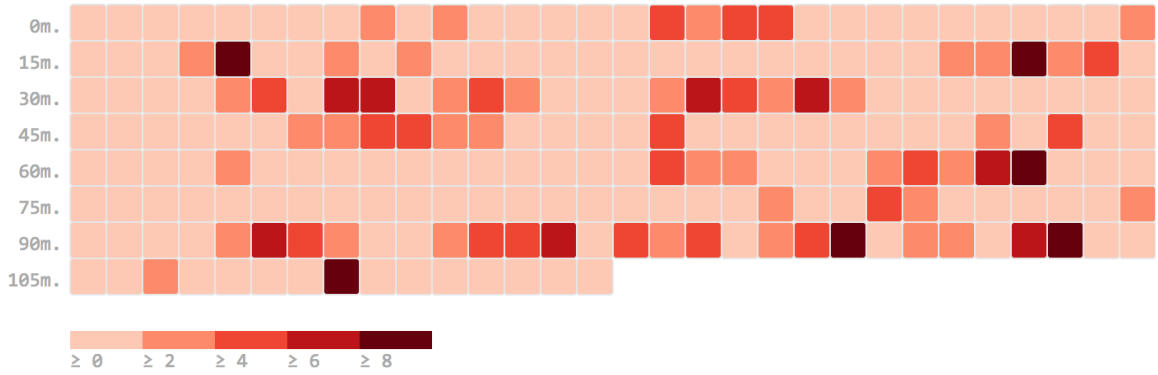




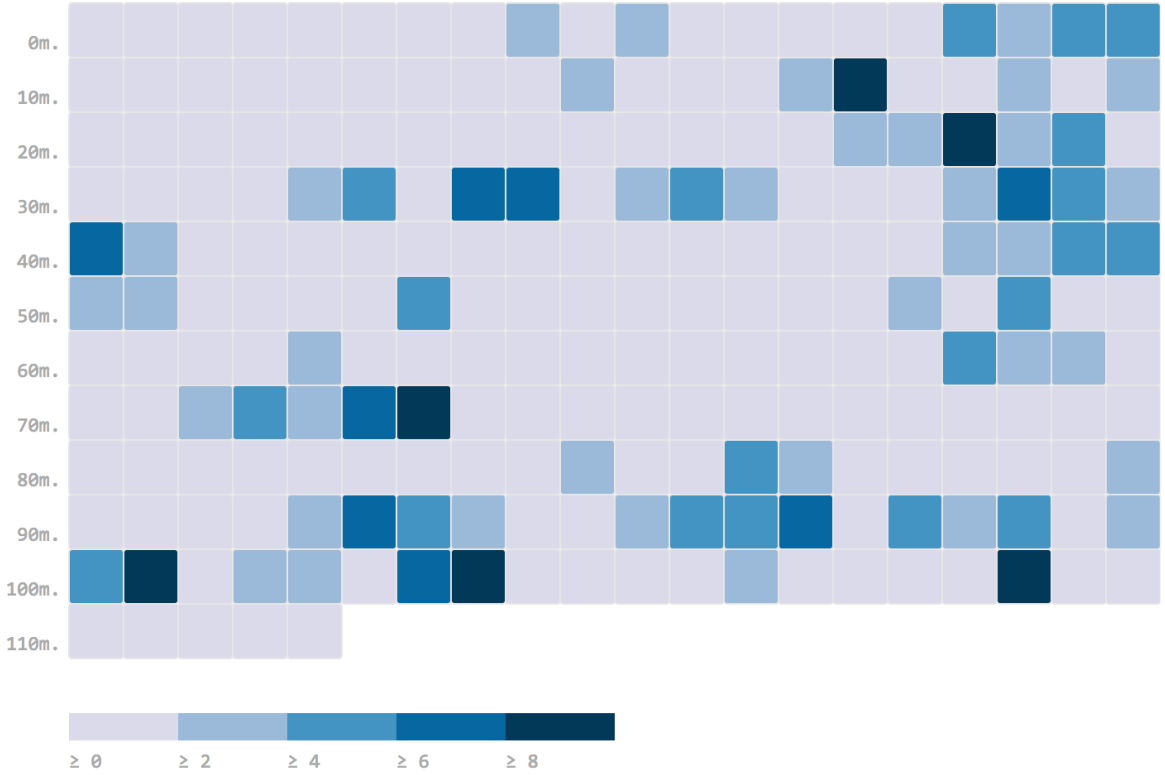




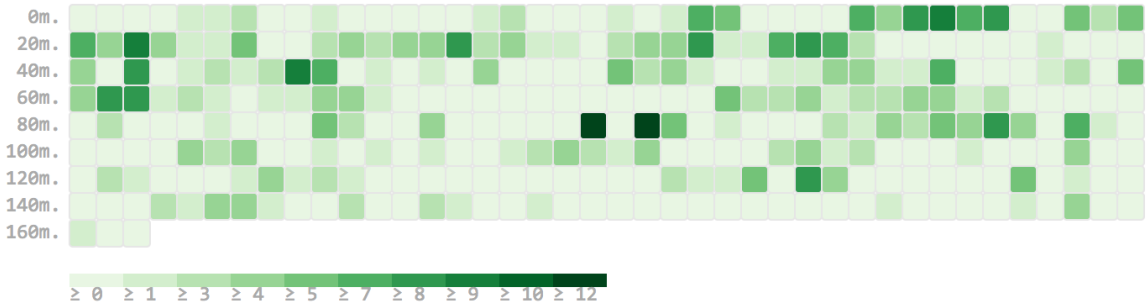
The Big Lebowski

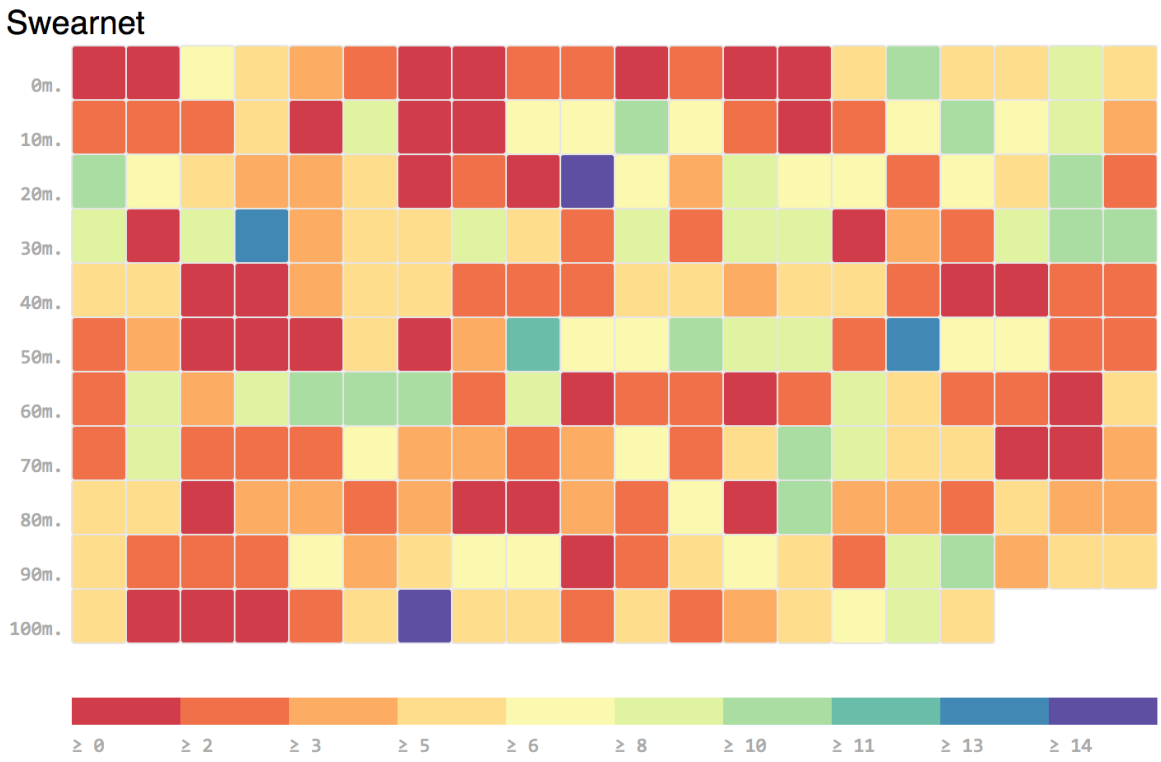


The Big Lebowski



Straight Outta Compton




Swearnet
0m.
10m.
20m.
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40m.
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60m.
70m.
80m.
90m.
100m.
≥ 0
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≥ 3
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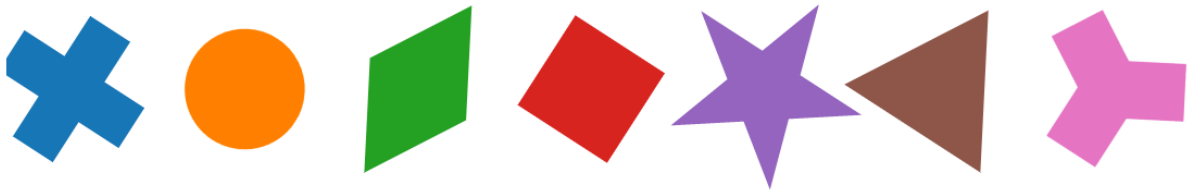
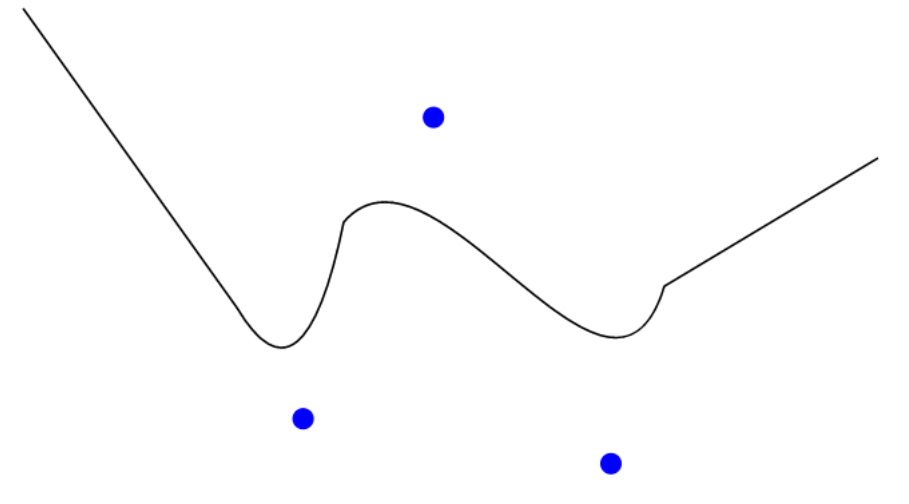
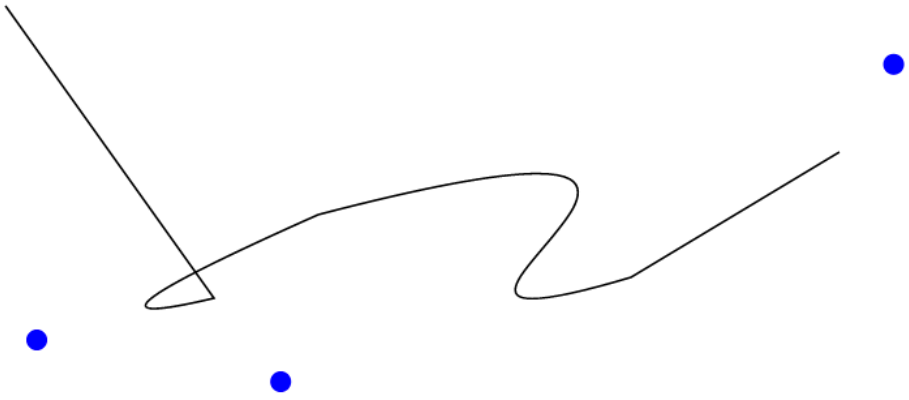
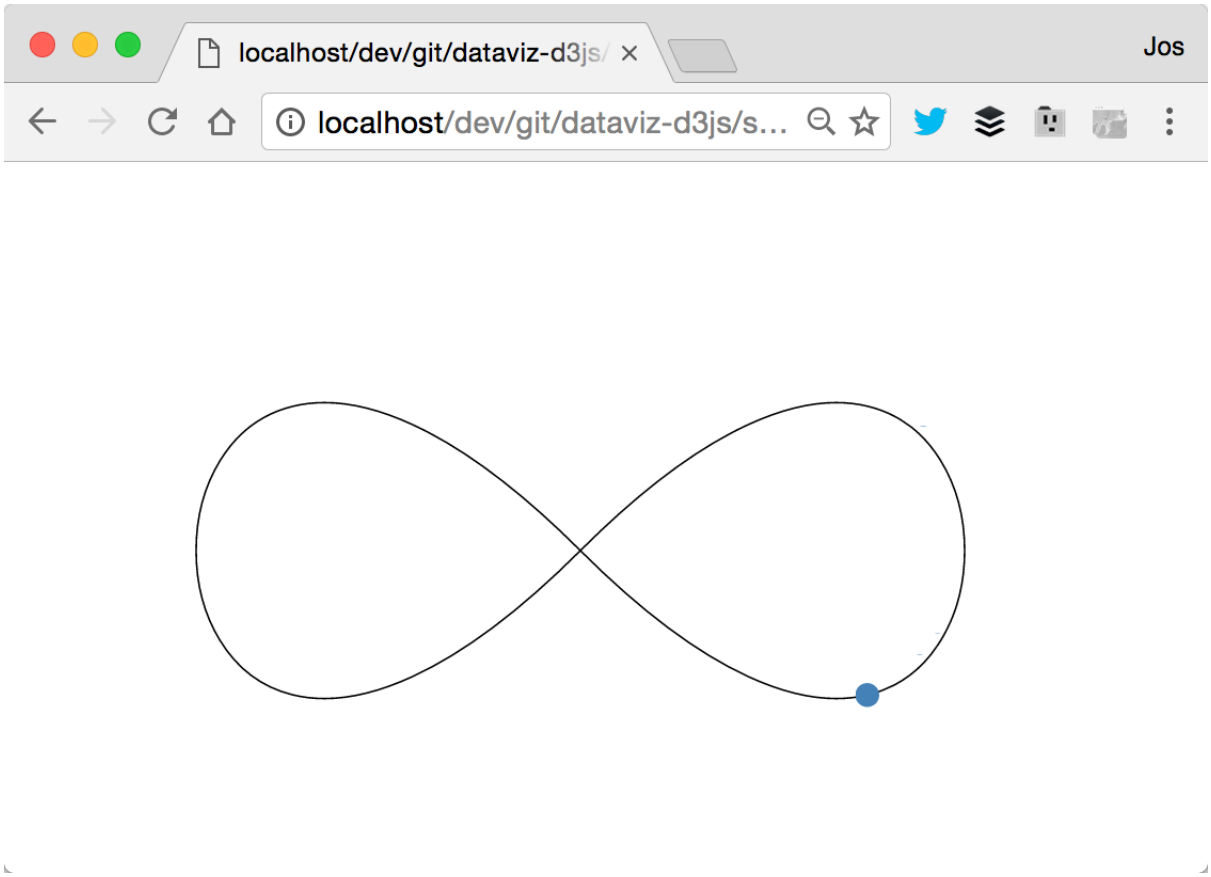
≥ 8
≥ 10
≥ 11
≥ 13
≥ 14

Chapter 8: Custom Shapes and Paths and Using a Brush Selection





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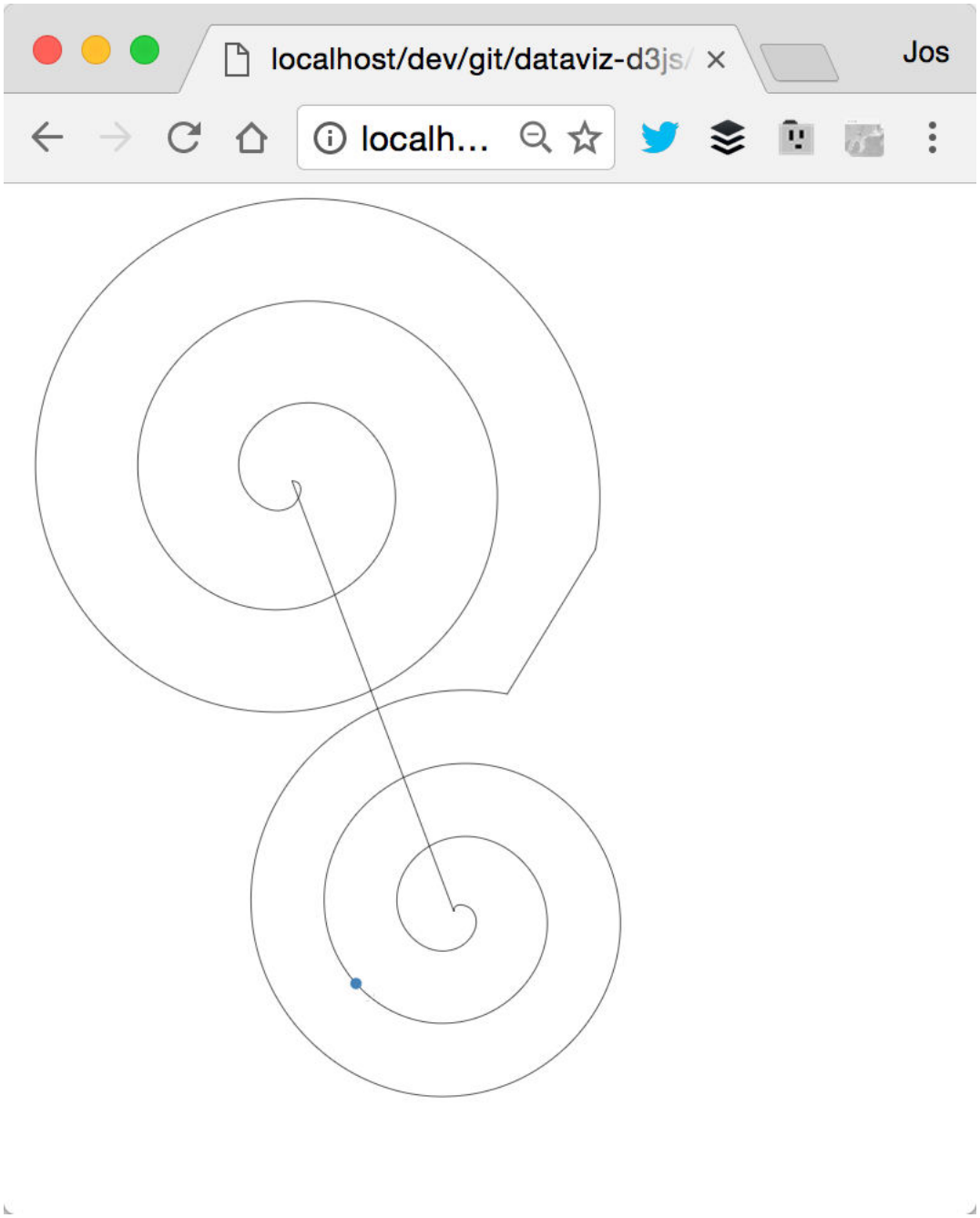
Jos
localhost/dev/git/dataviz-d3js/s...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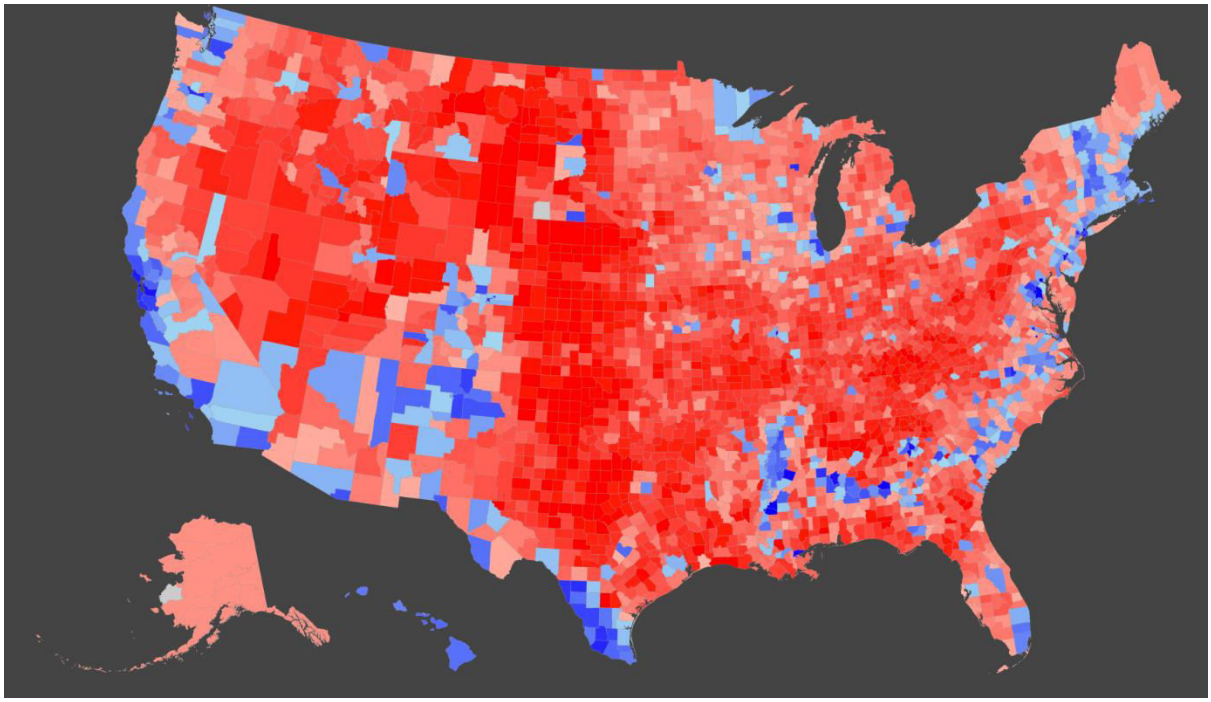
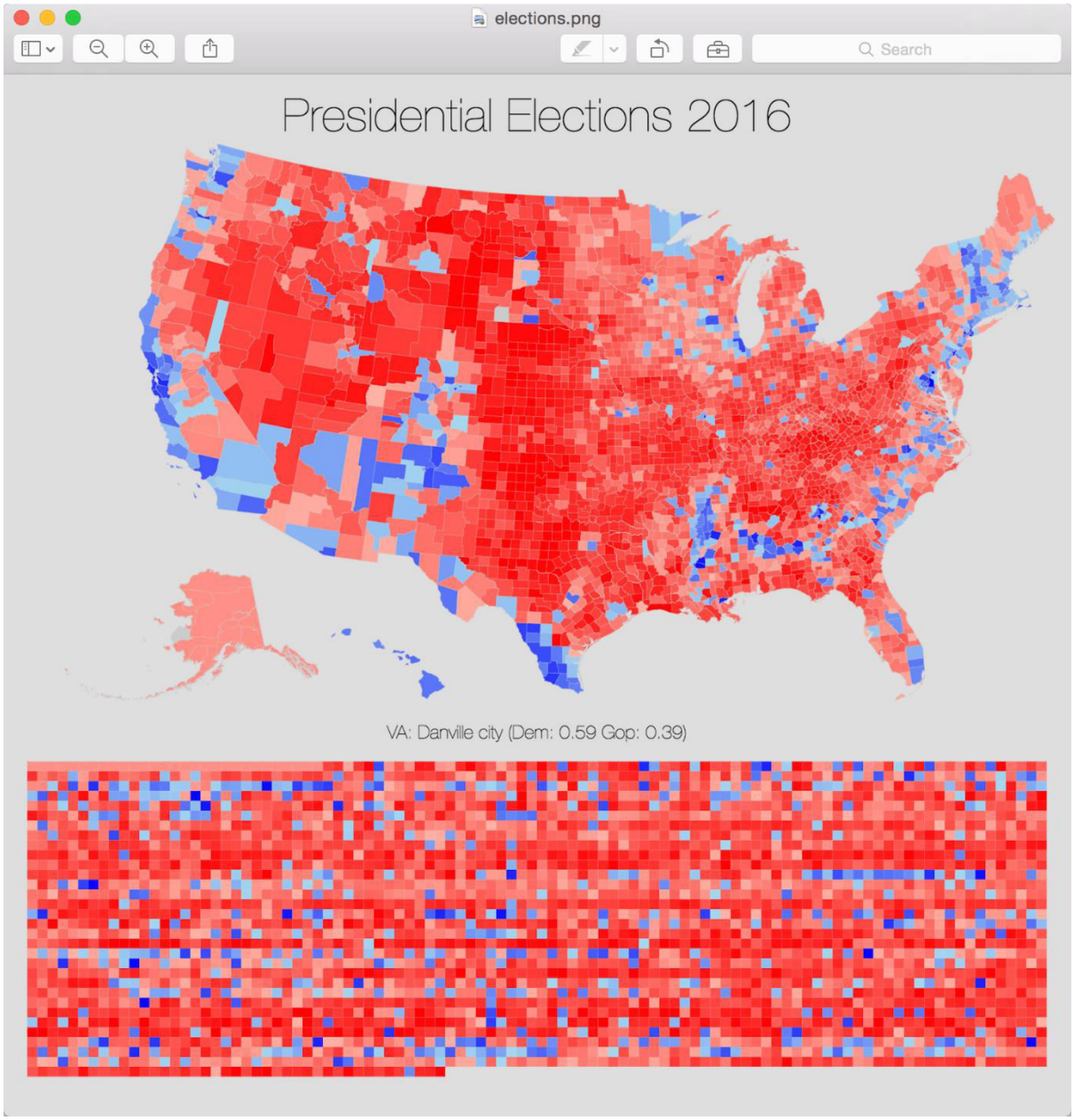
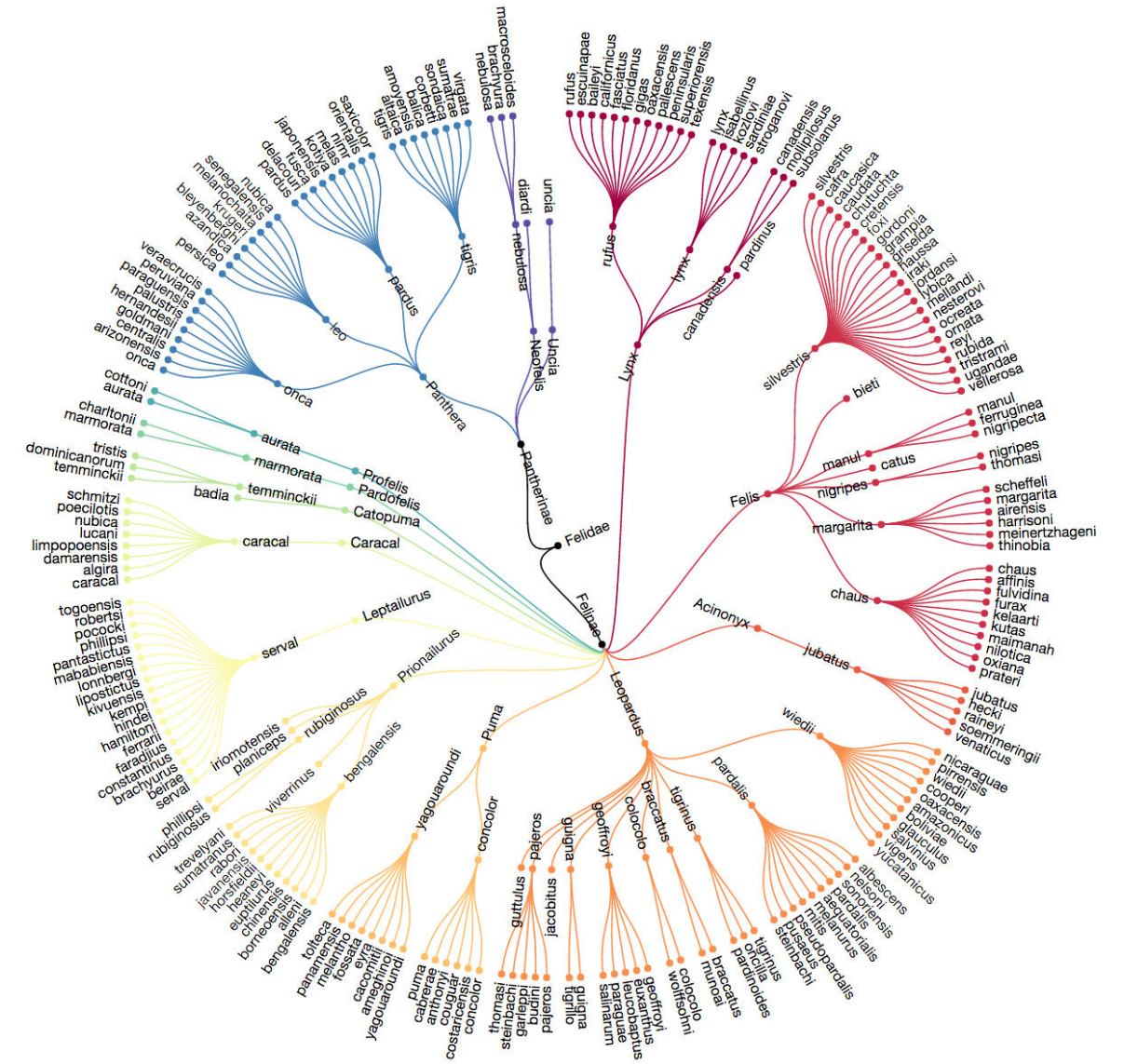
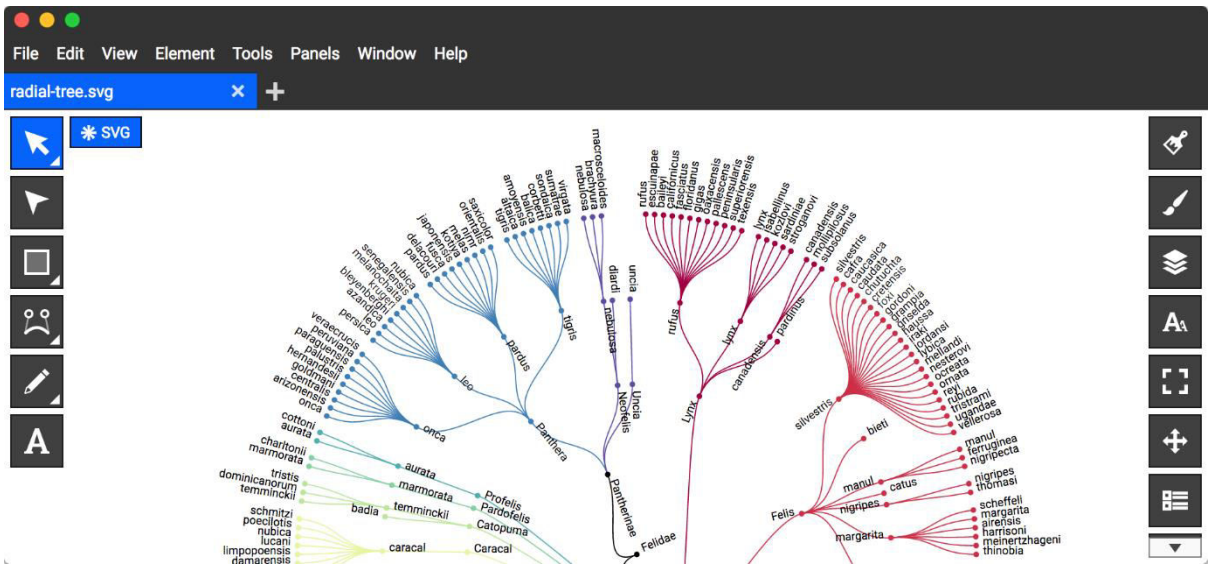
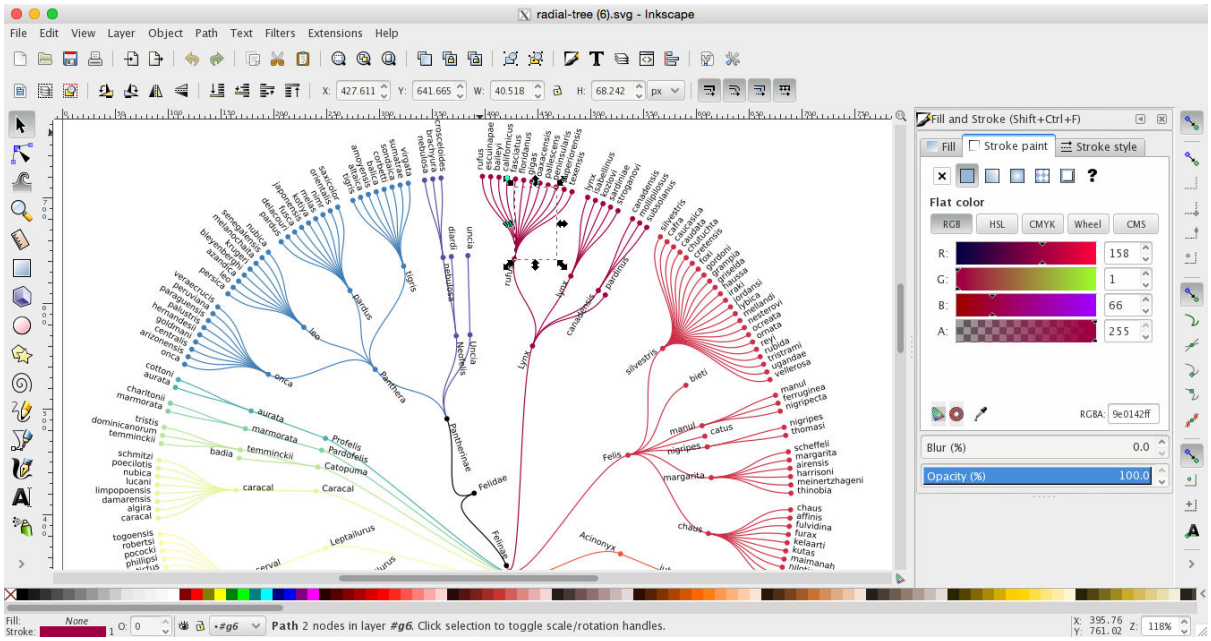



elections.png
Search
Presidential Elections 2016
VA: Danville city (Dem: 0.59 Gop: 0.39)


macrocelioides
brachyura
nebulosa
diardi
nebulosa
uncia
Neofelis
Uncia
rufus
escuinapae
bailey
californicus
fasciatus
floridanus
gigas
oaxacensis
pallescens
peninsularis
superiorensis
texensis
lynx
isabellinus
kozlovi
sardiniae
stroganovi
canadensis
mollipilosus
subsolanus
pardinus
silvestris
caffra
caucasica
caudata
chutuchta
crefensis
foxi
gordoni
grampia
griselda
hassa
iraki
jordansi
lybica
rhiellandi
nesterovi
ocreata
ornata
reyi
rubida
tristrami
ugandae
vellerosa
Lynx
canadensis
rufus
tigris
amoyensis
altaica
corbetti
balica
sumatrae
virgata
sondaica
tigris
pardus
tigris
japonensis
tusca
delacouri
pardus
saxicolor
orientalis
melas
nimr
konkya
melas
senegalensis
melanochaitis
kruger
nubica
bleyenbergh
azandica
leo
persica
leo
pardus
veraecrucis
peruviana
paraguensis
paustris
hernandesii
goldmani
centralis
arizonensis
onca
onca
Panthera
Pantherinae
Felidae
Felinae
cottoni
aurata
charltonii
marmorata
aurata
tristis
dominicanorum
temminckii
marmorata
Profelis
Pardofelis
badia
temminckii
Catopuma
schmitzi
poecilotis
nubica
lucani
limpopoensis
damarensis
algira
caracal
caracal
Caracal
togoensis
robertsi
pococki
phillipsi
pantastictus
mababiensis
lonnbergi
lipostictus
kivuensis
kempi
hindei
hamiltoni
ferrarii
faradjius
constantinus
brachyurus
beirae
serval
serval
Leptailurus
iriomotensis
planiceps
rubiginosus
Prionailurus
philipsi
rubiginosus
viverrinus
bengalensis
trevelyani
sumatranus
rabori
javanensis
horsfieldii
heaneyi
euptilurus
chinensis
borneoensis
allenii
bengalensis
yagouaroundi
Puma
concolor
tolteca
panamensis
melantho
fossata
eyra
cacomitli
anhegmigo
yagouaroundi
puma
cabrerae
anthonyi
cougar
costaricensis
concolor
Leopardus
pajeros
guttulus
jacobitus
guigna
geoffroyi
tigrillo
guigna
geoffroyi
euxanthus
leucobaptus
braccatus
colocolo
wolffsohni
colocolo
braccatus
munoai
tigrinus
oncilla
pardinoides
tigrinus
pardalis
steinbachi
pseudopardalis
guttulus
thomasi
steinbachi
garleppi
budini
pajeros
pajeros
guigna
tigrillo
guigna
geoffroyi
euxanthus
leucobaptus
paraguae
salinarum
colocolo
wolffsohni
braccatus
munoai
tigrinus
oncilla
pardinoides
pardalis
steinbachi
pseudopardalis
mitis
pusaeus
pardalina
guttulus
albescens
nesiotis
sonorensis
pardalis
mearnsi
anuarorum
wiedii
nicaraguae
wiedii
oaxacensis
amazonicus
glaucula
oliviae
vigens
yucatanicus
vigens
salvinius
Acinonyx
jubatus
jubatus
hecki
raineyi
soemmeringii
venaticus
chaus
chaus
affinis
fulvidina
furax
kelaarti
kutas
maimanah
nigriota
oxiana
prateri
Felis
margarita
margarita
scheffeli
margarita
airensis
harrisoni
meinertzhageni
thinobia
nigripes
catus
manul
nigripes
thomasi
bieti
manul
ferruginea
nigripecta


File
Edit
View
Element
Tools
Panels
Window
Help
radial-tree.svg
SVG


radial-tree (6).svg - Inkscape
File Edit View Layer Object Path Text Filters Extensions Help
Fill and Stroke (Shift+Ctrl+F)
Fill
Stroke paint
Stroke style
Flat color
RGB
HSL
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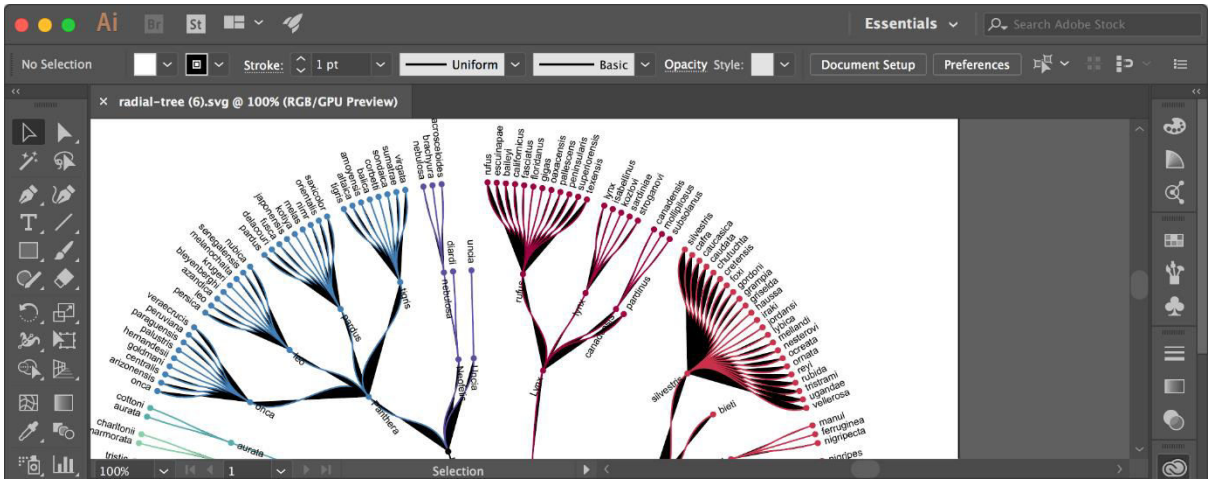
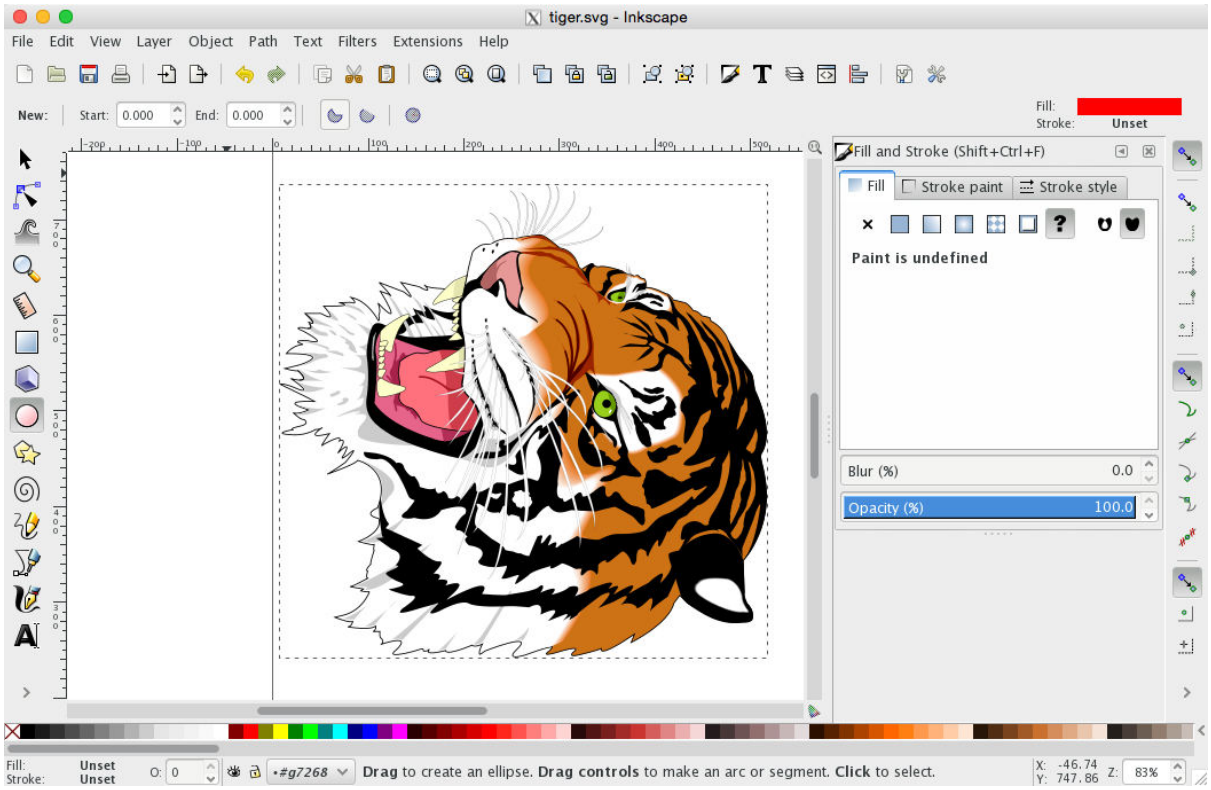
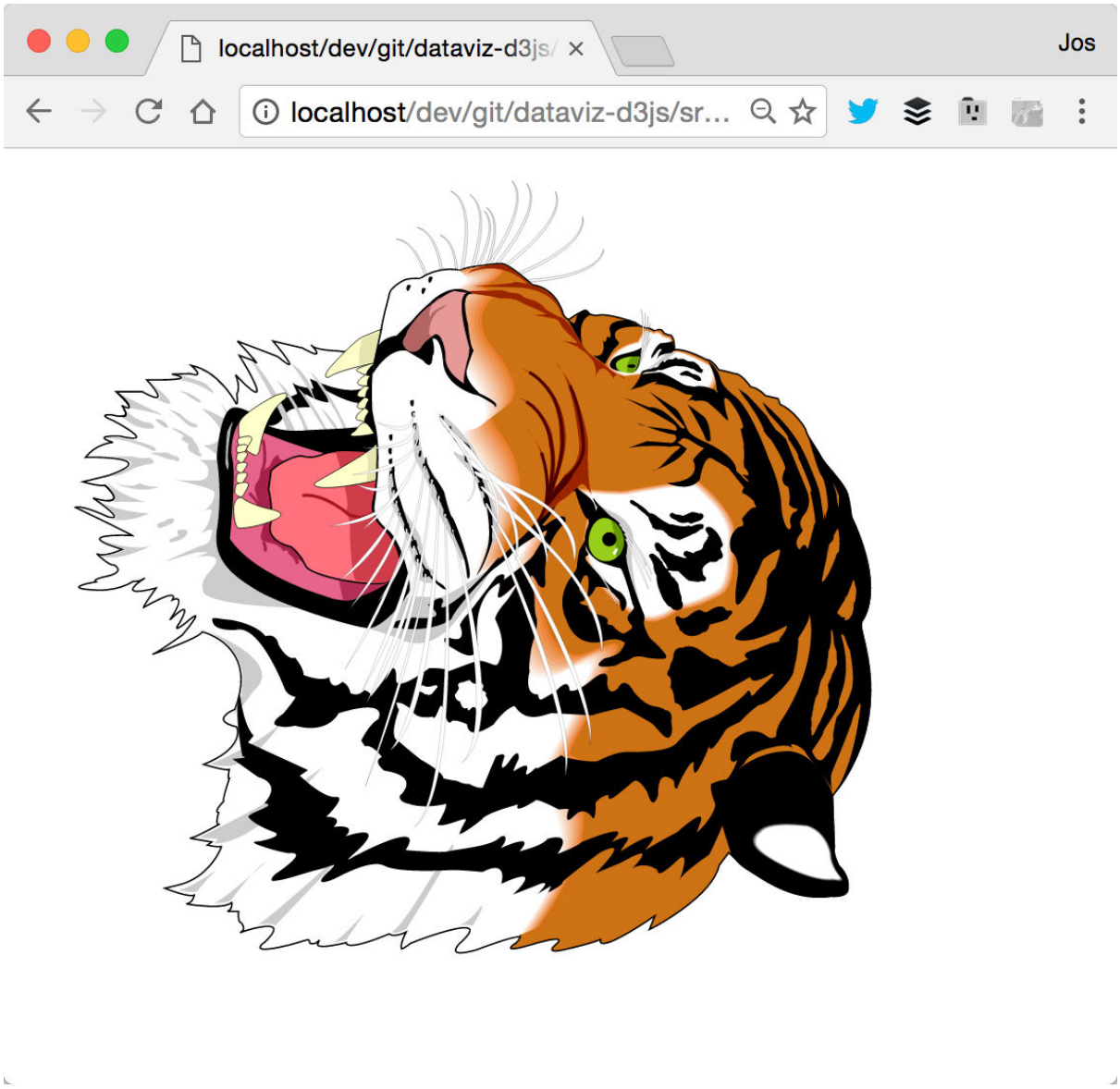
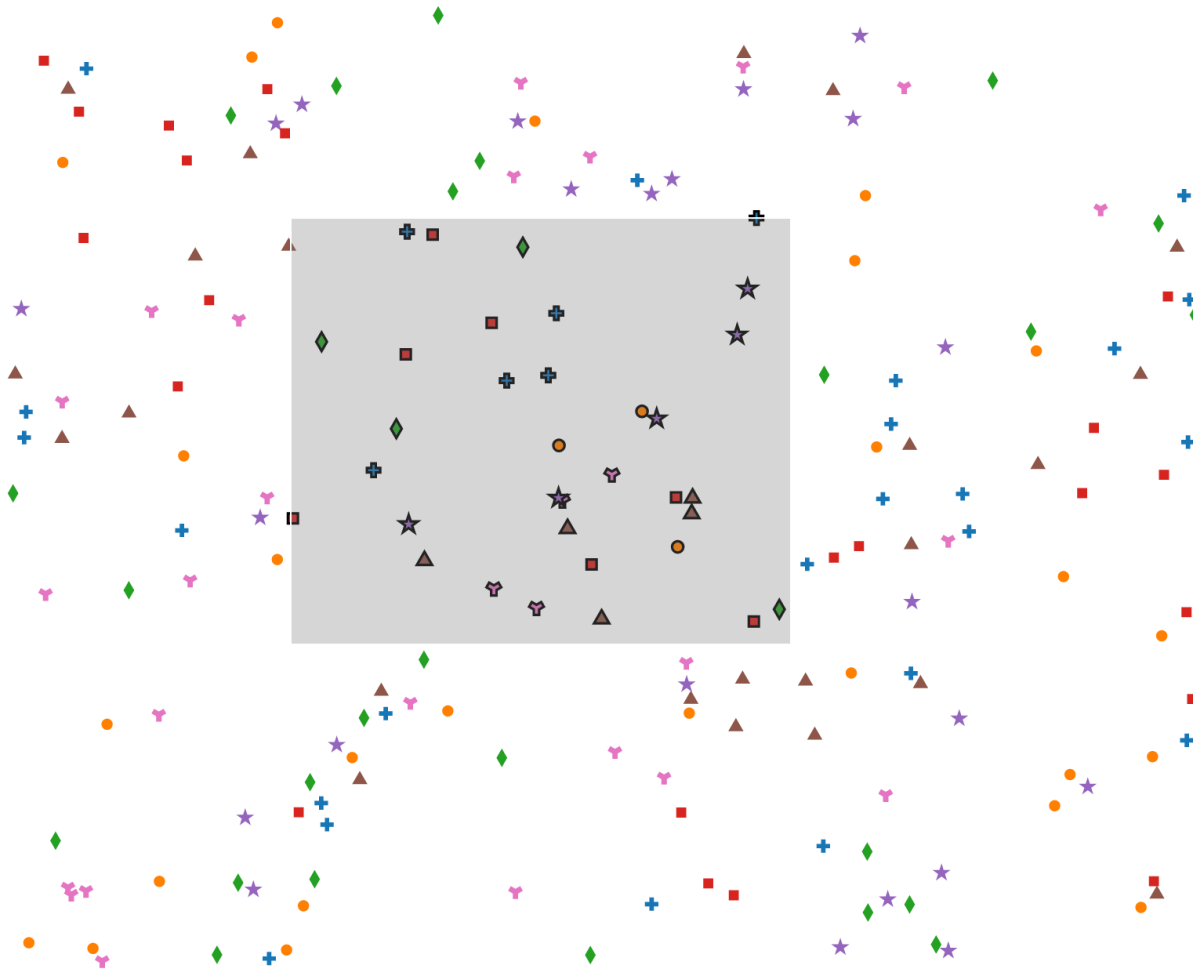
R: 158
G: 1
B: 66
A: 255
RGBA: 9e0142ff
Blur (%) 0.0
Opacity (%) 100.0
Path 2 nodes in layer #g6. Click selection to toggle scale/rotation handles.

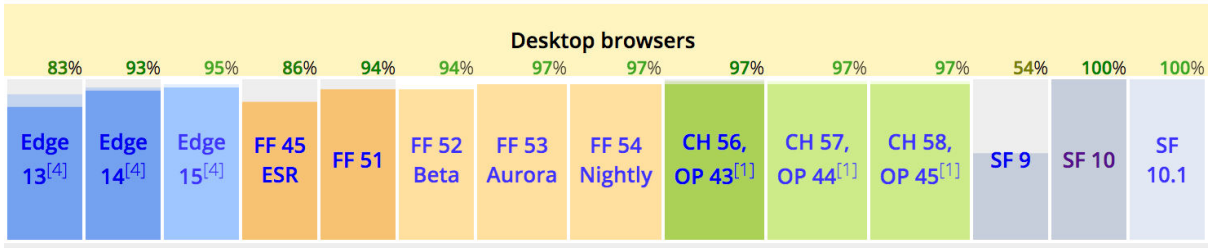

Essentials
Search Adobe Stock
No Selection
Stroke: 1 pt
Uniform
Basic
Opacity Style:
Document Setup
Preferences
radial-tree (6).svg @ 100% (RGB/GPU Preview)
100%
Selection

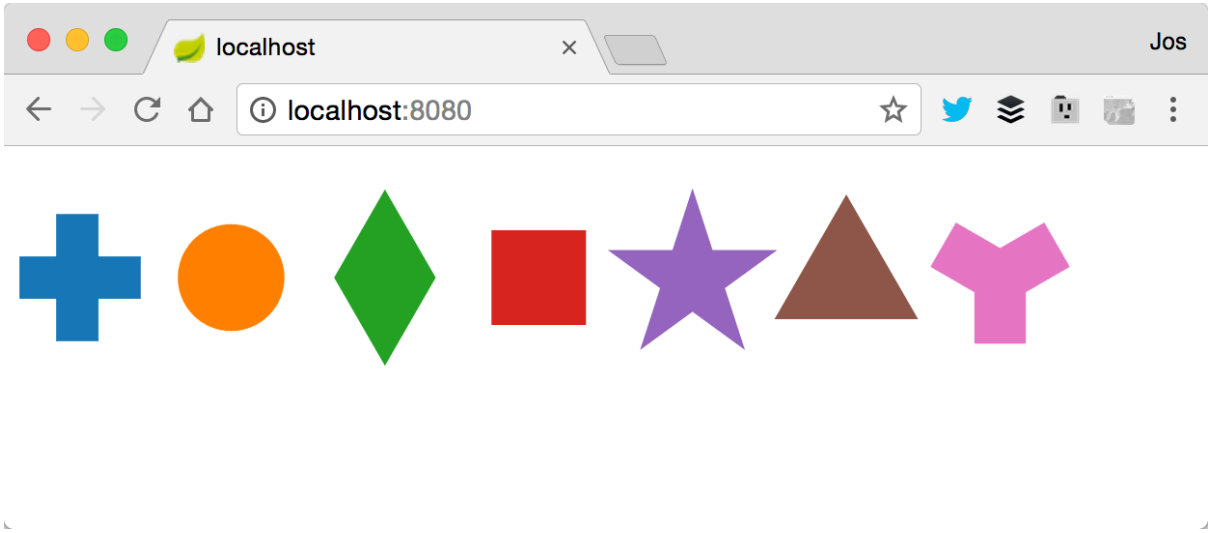

tiger.svg - Inkscape
File Edit View Layer Object Path Text Filters Extensions Help
Fill and Stroke (Shift+Ctrl+F)
Fill
Stroke paint
Stroke style
Paint is undefined
Blur (%) 0.0
Opacity (%) 100.0
Drag to create an ellipse. Drag controls to make an arc or segment. Click to select.

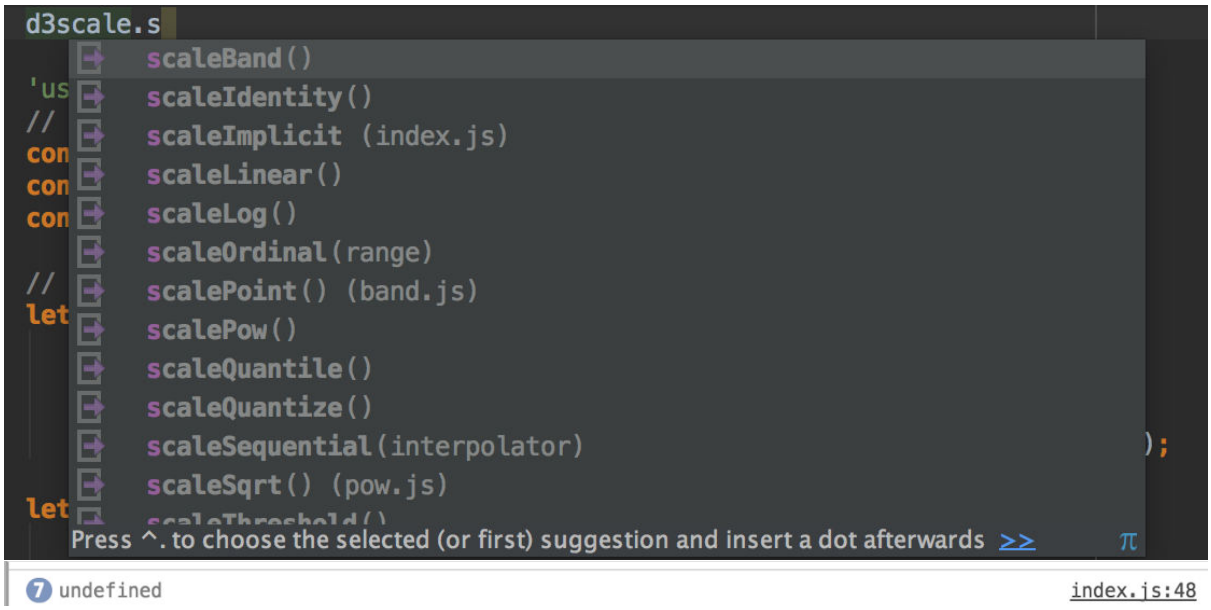

localhost/dev/git/dataviz-d3js/
Jos
localhost/dev/git/dataviz-d3js/sr...

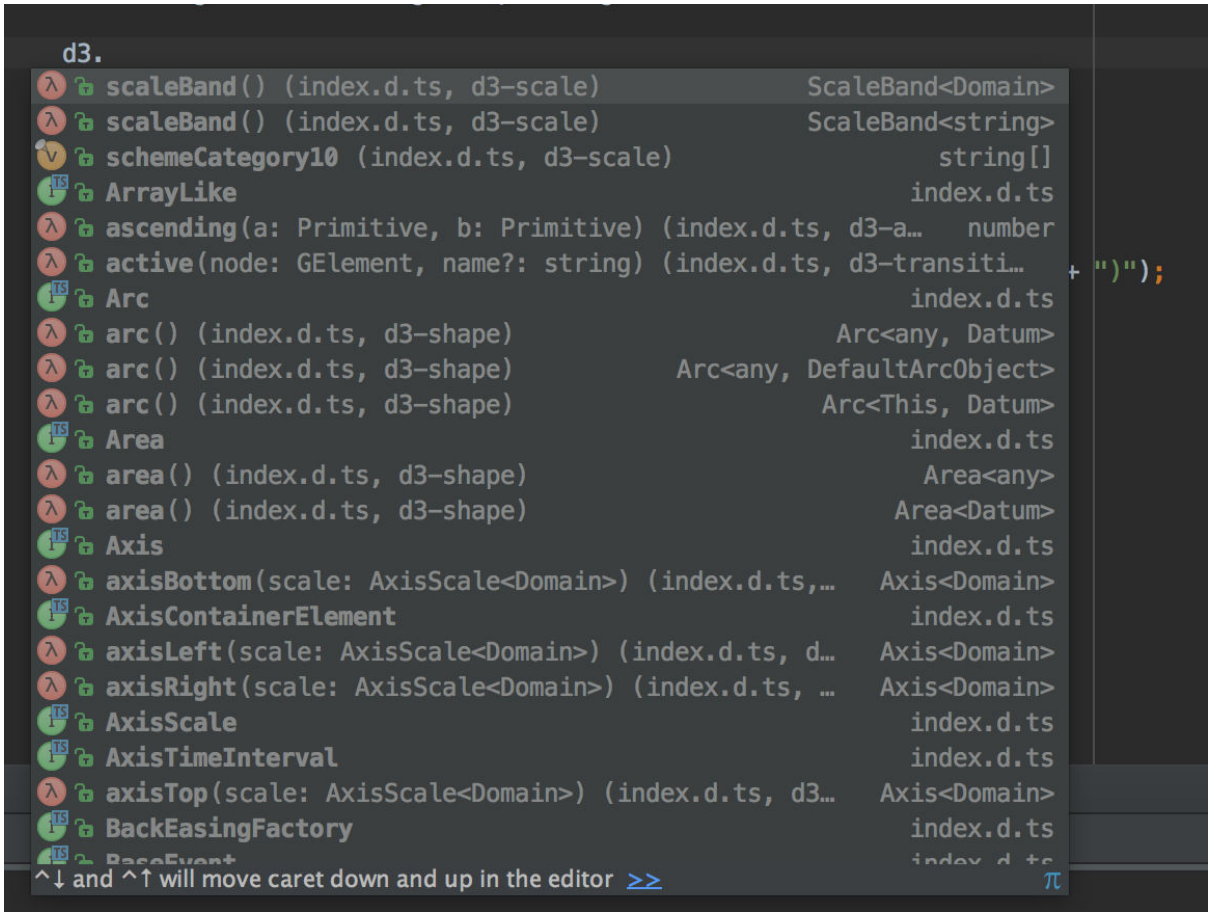


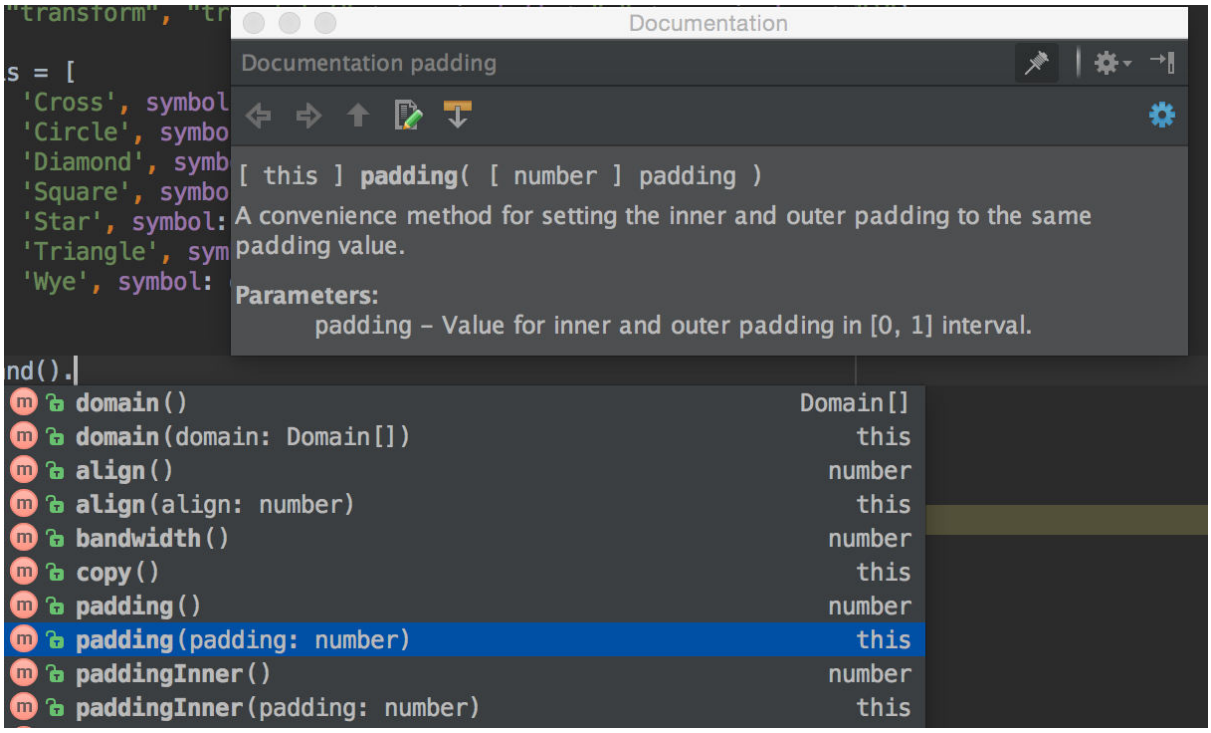
Chapter 9: ES6, TypeScript, and External D3.js Libraries

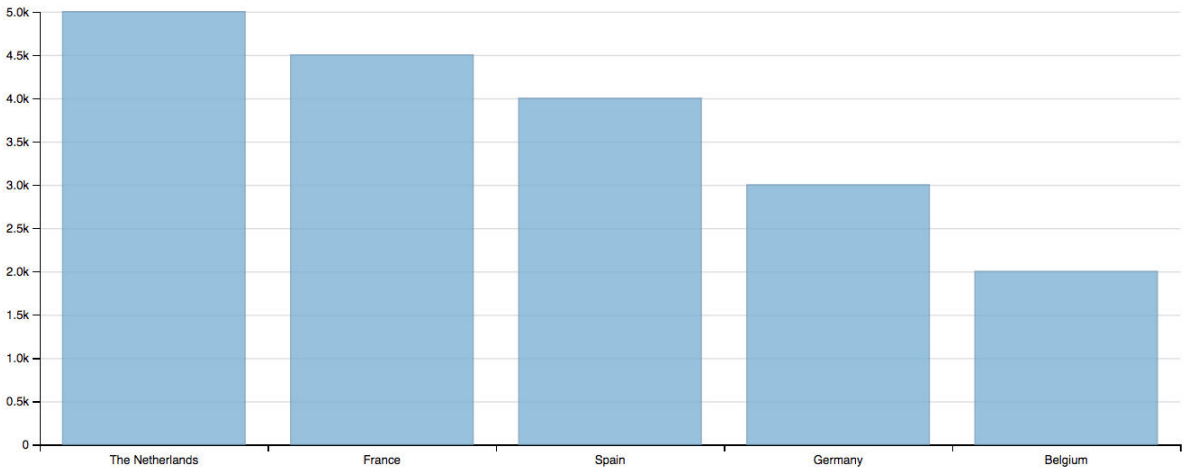







d3.
scaleBand() (index.d.ts, d3-scale) ScaleBand<Domain>
scaleBand() (index.d.ts, d3-scale) ScaleBand<string>
schemeCategory10 (index.d.ts, d3-scale) string[]
ArrayLike index.d.ts
ascending(a: Primitive, b: Primitive) (index.d.ts, d3-a… number
active(node: GElement, name?: string) (index.d.ts, d3-transiti…
Arc index.d.ts
arc() (index.d.ts, d3-shape) Arc<any, Datum>
arc() (index.d.ts, d3-shape) Arc<any, DefaultArcObject>
arc() (index.d.ts, d3-shape) Arc<This, Datum>
Area index.d.ts
area() (index.d.ts, d3-shape) Area<any>
area() (index.d.ts, d3-shape) Area<Datum>
Axis index.d.ts
axisBottom(scale: AxisScale<Domain>) (index.d.ts,… Axis<Domain>
AxisContainerElement index.d.ts
axisLeft(scale: AxisScale<Domain>) (index.d.ts, d… Axis<Domain>
axisRight(scale: AxisScale<Domain>) (index.d.ts, … Axis<Domain>
AxisScale index.d.ts
AxisTimeInterval index.d.ts
axisTop(scale: AxisScale<Domain>) (index.d.ts, d3… Axis<Domain>
BackEasingFactory index.d.ts
^↓ and ^↑ will move caret down and up in the editor >>


Documentation
Documentation padding
[this] padding([number] padding)
A convenience method for setting the inner and outer padding to the same padding value.
Parameters:
padding – Value for inner and outer padding in [0, 1] interval.
domain() Domain[]
domain(domain: Domain[]) this
align() number
align(align: number) this
bandwidth() number
copy() this
padding() number
padding(padding: number) this
paddingInner() number
paddingInner(padding: number) this


5.0k
4.5k
4.0k
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2.0k
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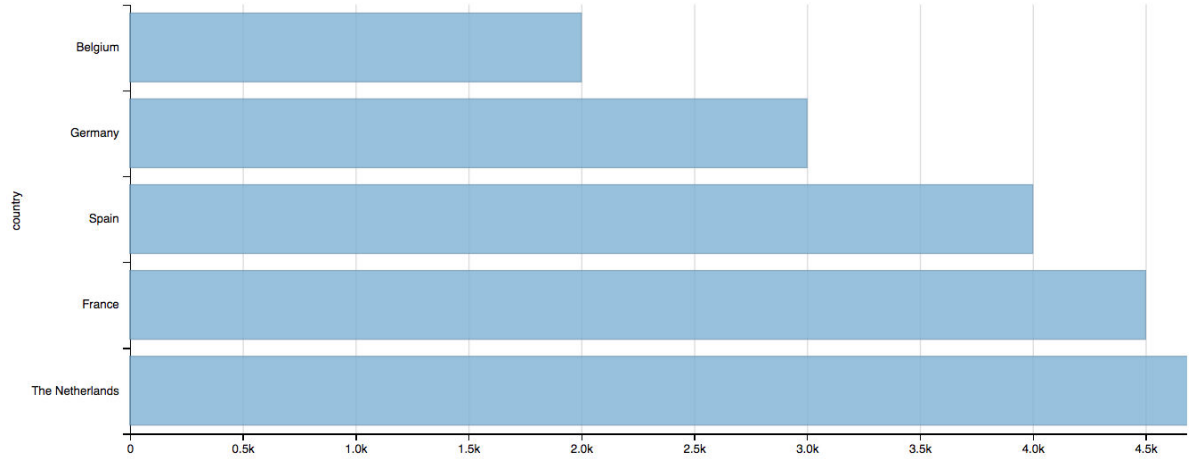
1.0k
0.5k
0
The Netherlands
France
Spain
Germany
Belgium


country
Belgium
Germany
Spain
France
The Netherlands
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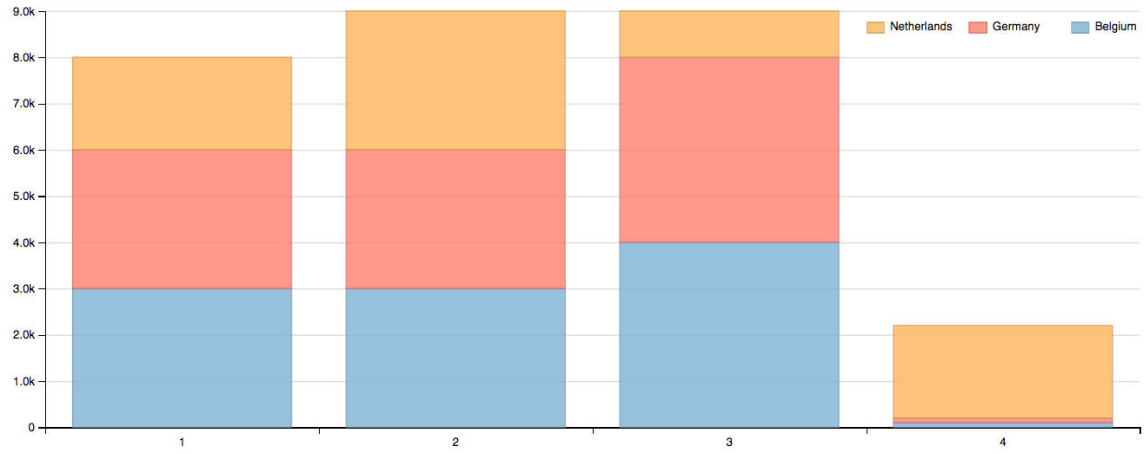
Netherlands
Germany
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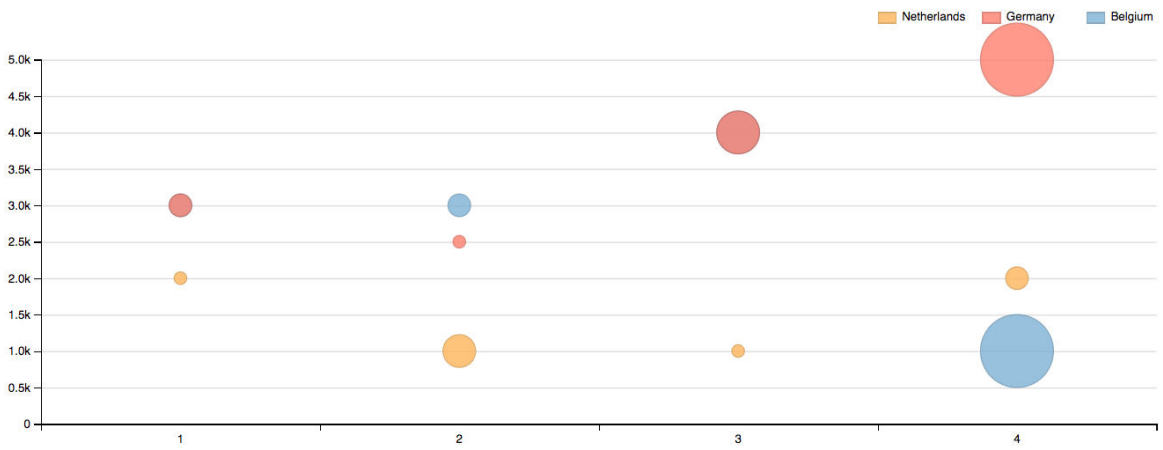
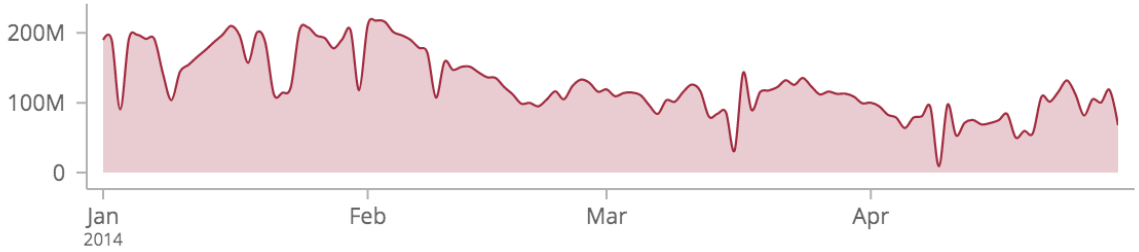
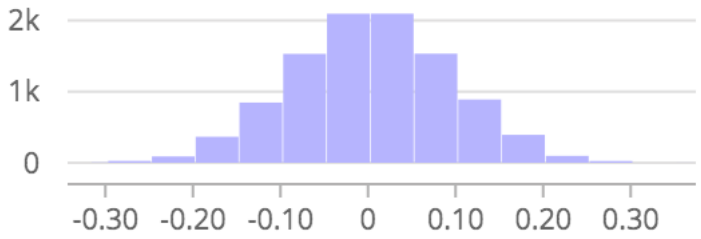
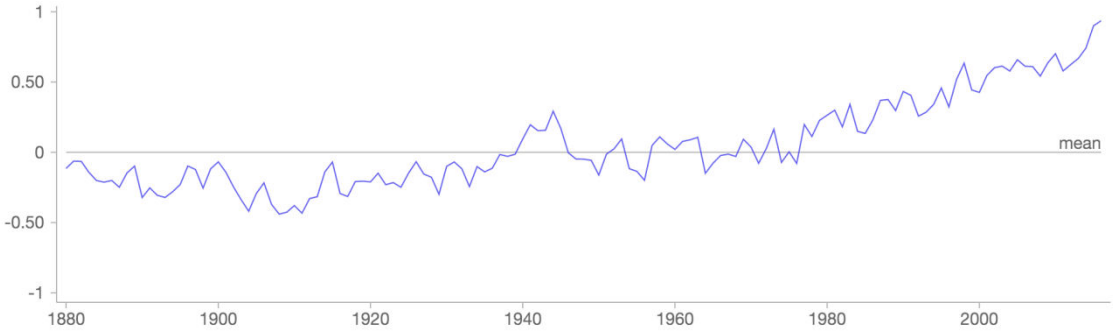
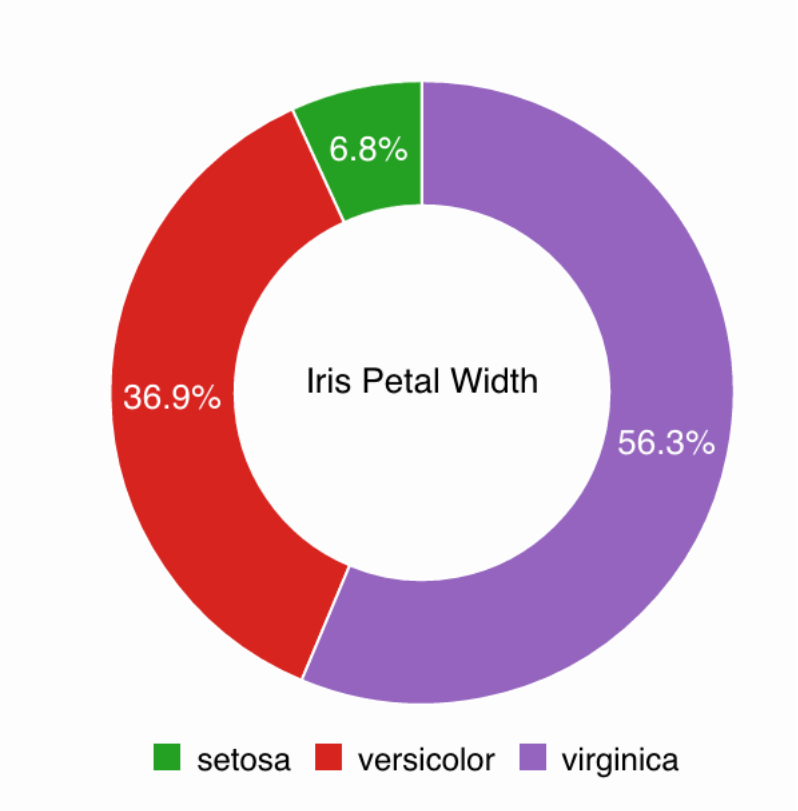


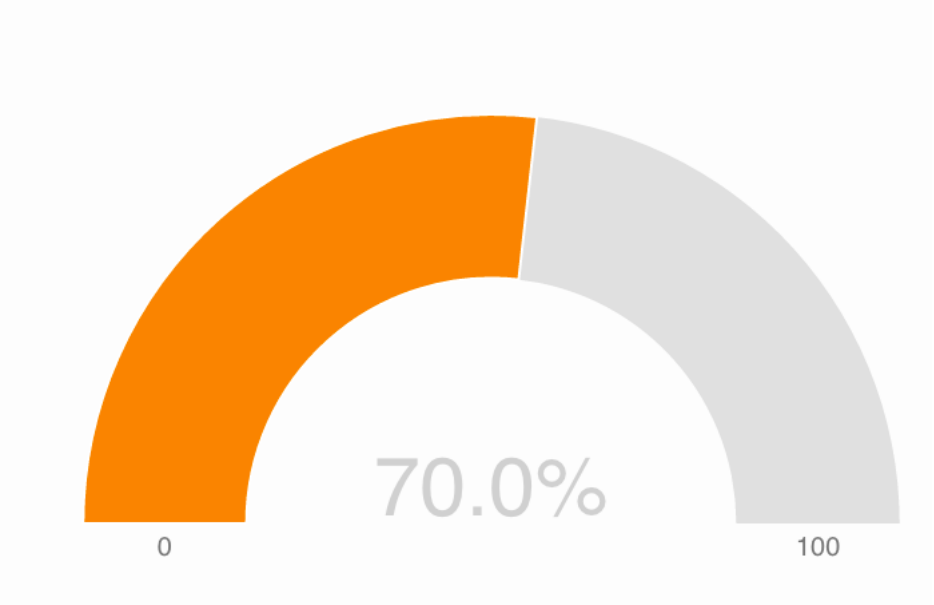




Annual temperature mean




6.8%
36.9%
Iris Petal Width
56.3%
setosa
versicolor
virginica


70.0%
0
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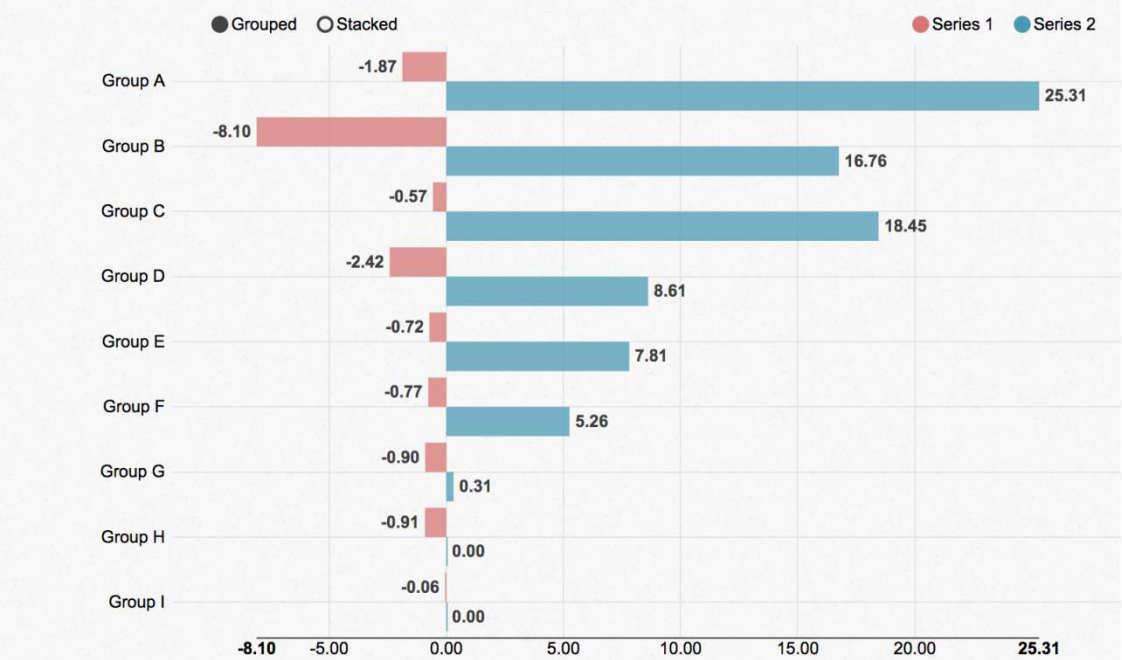
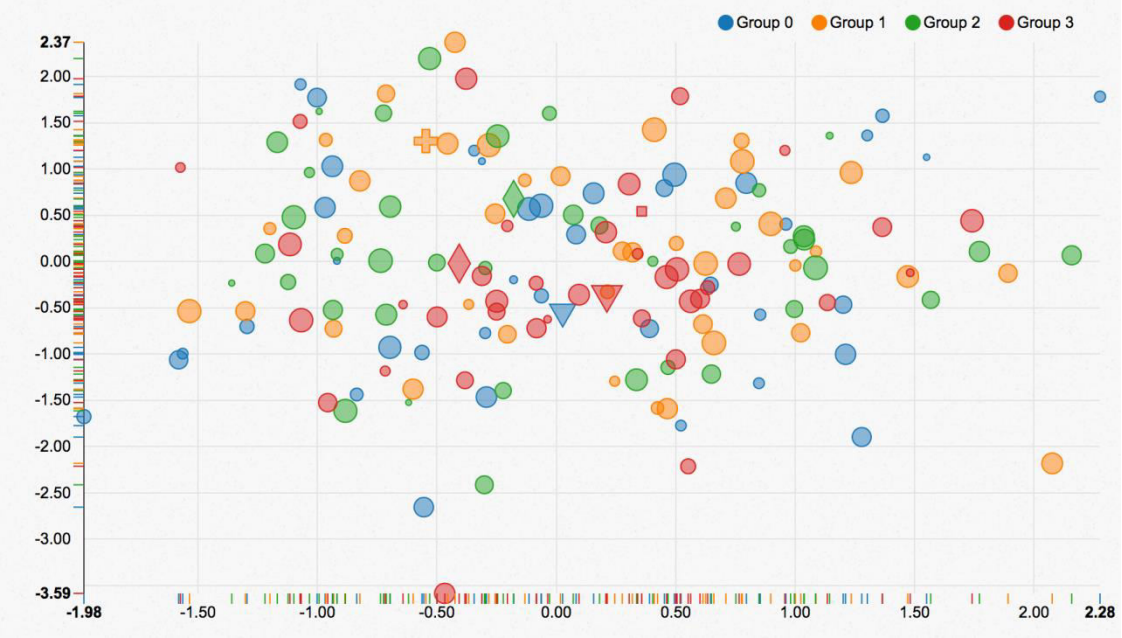

Grouped
Stacked
Series 1
Series 2
Group A
Group B
Group C
Group D
Group E
Group F
Group G
Group H
Group I
-1.87
25.31
-8.10
16.76
-0.57
18.45
-2.42
8.61
-0.72
7.81
-0.77
5.26
-0.90
0.31
-0.91
0.00
-0.06
0.00
-8.10
-5.00
0.00
5.00
10.00
15.00
20.00
25.31


Group 0
Group 1
Group 2
Group 3
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1.50
1.00
0.50
0.00
-0.50
-1.00
-1.50
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-2.50
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-1.00
-0.50
0.00
0.50
1.00
1.50
2.00
2.28