

Modern Visualization





Data-Driven Documents



Data Driven Documents (D3.js)



Open source Javascript library for manipulating documents
(similar in nature to jQuery)

- *emphasis on **web standards** (nonproprietary framework)
- *powerful visualization components
- *data-driven approach to **DOM manipulation**.

Data Driven Documents (D3.js)



HTML / JS / CSS / **SVG**

+

Your DATA (csv / json / topojson / tsv / etc)

Data Driven Documents (D3.js)

HTML + Scalable Vector Graphics (SVG)

```
<!DOCTYPE html>
<html>
<body>

<h1>My first SVG</h1>

<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />
</svg>

</body>
</html>
```

Data Driven Documents (D3.js)

HTML + Scalable Vector Graphics (SVG)

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h1>My first SVG</h1>
```

```
<svg width="100" height="100">
```

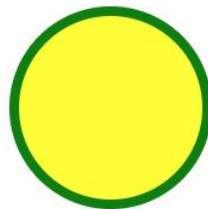
```
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4" fill="yellow" />
</svg>
```

```
</body>
```

```
</html>
```

myfirstsvg.html

My first SVG



Data Driven Documents (D3.js)

D3 basics

Selections:

```
d3.select("body").style("background-color", "black");
```

Data Driven Documents (D3.js)

D3 basics

Selections: `d3.select("body").style("background-color", "black");`

Dynamic changes: `d3.selectAll("p").style("color", function(d, i) {
 return i % 2 ? "red" : "blue";
});`

Data Driven Documents (D3.js)

D3 basics

Selections: `d3.select("body").style("background-color", "black");`

Dynamic changes: `d3.selectAll("p").style("color", function(d, i) {
 return i % 2 ? "red" : "blue";
});`

Creating nodes:

```
d3.select("body")  
  .selectAll("p")  
  .data([4, 8, 15, 16, 23, 42])  
  .enter().append("p")  
    .text(function(d) { return "I'm number " + d + "!"; });
```

Data Driven Documents (D3.js)

Loading csv:



```
country,continent,population,GDPcap,GERD,growth
```

```
Australia,Oceania,22319.07,40718.78167,2.21367,2.48590317
```

```
Austria,Europe,8427.318,42118.46375,2.74826,3.10741128
```

```
Belgium,Europe,10590.44,38809.66436,1.96158,1.89308521
```

```
Canada,America,33909.7,39069.91407,1.80213,3.21494841
```

```
Chile,America,17248.45,15106.73205,0.39451,5.19813626
```

```
Czech Republic,Europe,10286.3,25956.76492,1.52652,1.65489834
```

```
Denmark,Europe,5495.246,40169.83173,3.01937,1.04974368
```

```
Estonia,Europe,1335.347,22403.02459,1.44122,7.63563272
```

```
Finland,Europe,5366.482,37577.71225,3.84137,2.85477157
```

Data Driven Documents (D3.js)

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Estonia,Europe,1335.347,22403.02459,1.44122,7.63563272
Finland,Europe,5366.482,37577.71225,3.84137,2.85477157
```

```
d3.csv("data.csv",function(csv) {
  csv.sort(function(a,b) {return b.population-a.population;}); //
  svg.selectAll("circle").data(csv).enter()
    .append("circle")
    .attr("cx",function(d) {return x(+d.GERD);})
    .attr("cy",function(d) {return y(+d.growth);})
    .attr("r",function(d) {return r(Math.sqrt(+d.population));})
    .style("fill",function(d) {return c(d.continent);})
    .style("opacity",function(d) {return o(+d.GDPcap);})
    .append("title")
    .text(function(d) {return d.country;})
})
```

Data Driven Documents (D3.js)

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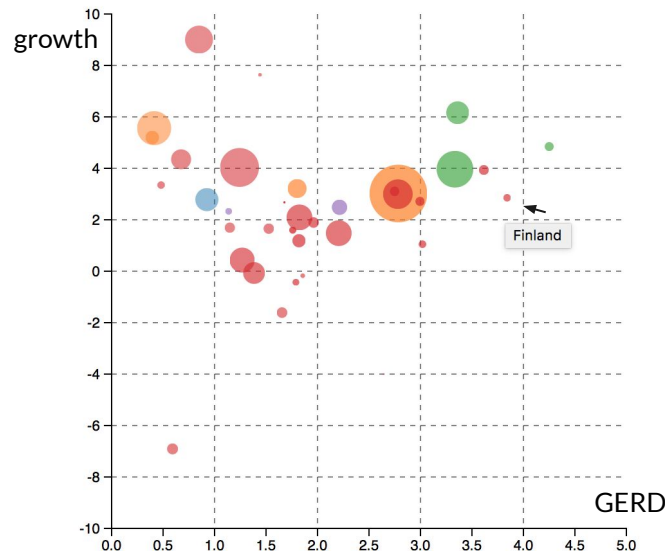
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    .append("title")  
    .text(function(d) {return d.country;})  
})
```



Data Driven Documents (D3.js)

Hello world (en vivo)



STEP 1. Download the visualization via the commandline or browser

```
wget http://www.jeromecukier.net/stuff/data%20example/data-example2.html
```

or

```
curl -O http://www.jeromecukier.net/stuff/data%20example/data-example2.htm
```

OR (in browser “Save Page As”)

Data Driven Documents (D3.js)

Hello world (en vivo)



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STEP 2. Find and get the data, and then look at what you’ve done!

```
wget http://www.jeromecukier.net/stuff/data%20example/data.csv
```

Data Driven Documents (D3.js)

Hello world (en vivo)



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wget http://www.jeromecukier.net/stuff/data%20example/data-example2.html
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```
wget http://www.jeromecukier.net/stuff/data%20example/data.csv
```

STEP 3. Change something (either in the data or the code!)

Data Driven Documents (D3.js)

Tutorials: <https://github.com/d3/d3/wiki/Tutorials>

D3 in Jupyter Notebooks: <http://www.jitsejan.nl/using-d3-in-jupyter-notebook.html>

Build from Scratch

OR

- 1) Find a visualization that roughly suits your needs
(<https://bl.ocks.org/> , <http://blockbuilder.org/search> , etc)
- 2) Download it and figure out how it works
- 3) Put in your own data and change the code accordingly
- 4) Put it up somewhere for others to see (high five yourself)

*right click -> Inspect Element to see code !

*for local development, you may need a web server (see www.mamp.info for a simple one)

Data Driven Documents (D3.js)

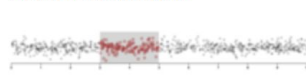


Mike Bostock's Blocks

Updated November 19, 2017

[Popular](#) / [About](#)

Click to Select All



Radial Force



Municipalities of Mexico II

Municipalities of Mexico

Sankey Diagram



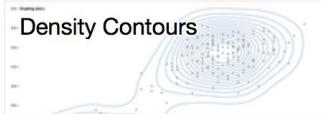
Adjustable Link Strength



Density Contours II



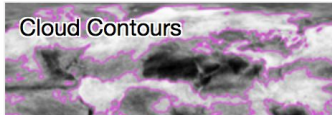
Density Contours



GeoJSON in Three.js



Cloud Contours



GeoTIFF Contours II



GeoTIFF Contours



Contour Plot III



Contour Plot II



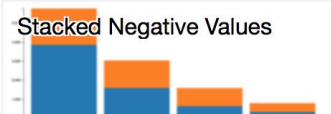
Tobler–Mercator



Hello



Stacked Negative Values



Winding Order



Antimeridian Cutting II



Force-Directed Tree II



Circle Piano



Border Mesh



I Make Circles



Polygon Clipping III



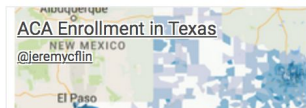
Search the BLocks

Texas username API functions: d3... any version

☐ with thumbnail image

Showing 83/83 of the most relevant blocks.

Abilene
El Paso
NEW MEXICO
@jeremycflin



D3: Map of Texas
@uafrazier



Texas death penalty
@BenHeubl



Solar Energy Production in Texas
@jeremycflin



D3: Texas Tornado Map (2014)
@uafrazier



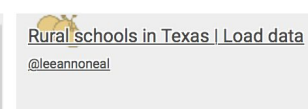
Sexual Assaults Reported by Tex...
@jeremycflin



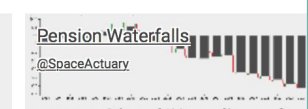
D3: Texas Tornado Map (2014) v2
@uafrazier



Rural schools in Texas | Load data
@leannoneal



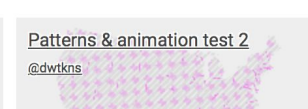
Pension Waterfalls
@SpaceActuary



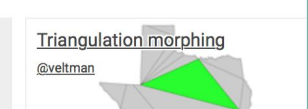
Commuter Congestion Traffic
@Sania1



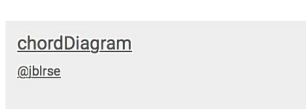
Patterns & animation test 2
@dwtkns



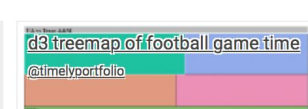
Triangulation morphing
@veltman



chordDiagram
@blrse



d3 treemap of football game time
@timelyportfolio



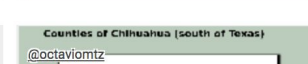
D3 Plus Ring Network
@PatMartin



NHTSA Time Series



Countries of Chihuahua (south of Texas)
@octaviomtz



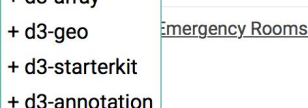
NHTSA Time Series Storyboard ...



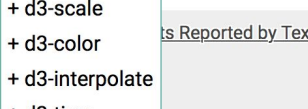
Datamaps version of http://porta...



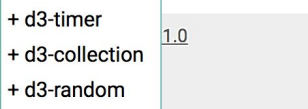
Emergency Rooms...



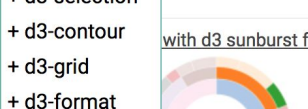
ts Reported by Tex...



1.0



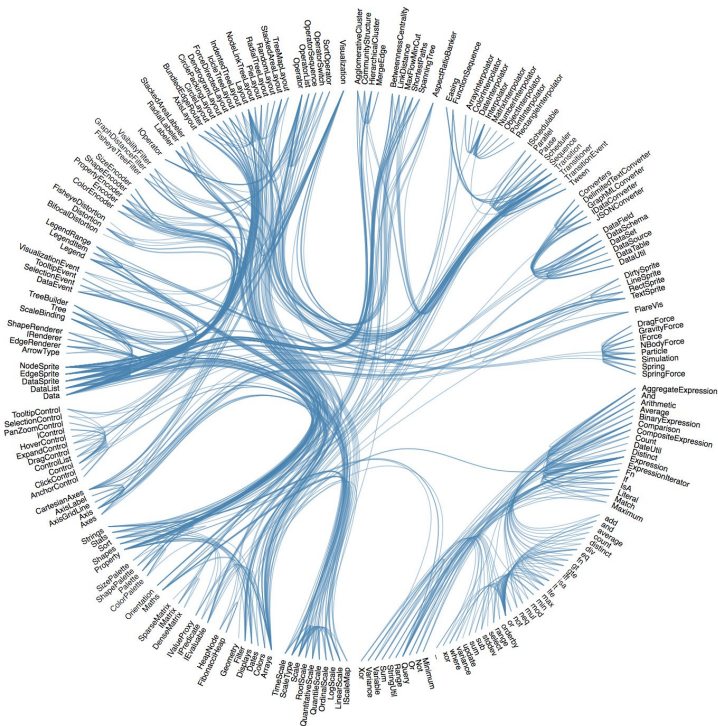
with d3 sunburst f...



<http://blockbuilder.org/search>

Data Driven Documents (D3.js)

Hierarchical Edge Bundling



```
<!DOCTYPE html>
<style>

.node {
  font: 10px sans-serif;
}

.link {
  stroke: steelblue;
  stroke-opacity: 0.5;
  fill: none;
  pointer-events: none;
}

</style>
<body>
<script src="https://d3js.org/d3.v4.min.js"></script>
<script>

var diameter = 960,
    radius = diameter / 2,
    innerRadius = radius - 120;

var cluster = d3.cluster()
    .size([360, innerRadius]);

var line = d3.radialLine()
    .curve(d3.curveBundle.beta(0.85))
    .radius(function(d) { return d.y; })
    .angle(function(d) { return d.x / 180 * Math.PI; });

var svg = d3.select("body").append("svg")
    .attr("width", diameter)
    .attr("height", diameter)
    .append("g")
    .attr("transform", "translate(" + radius + "," + radius + ")");

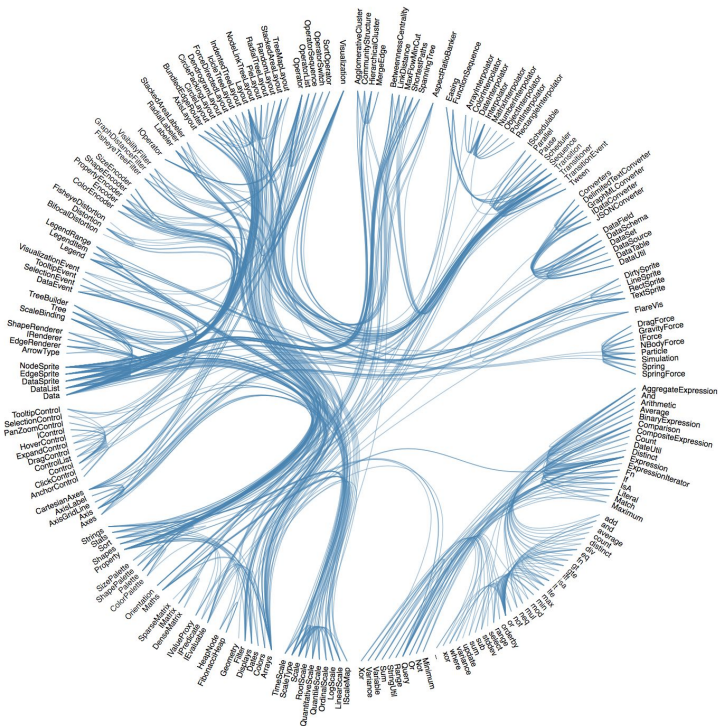
var link = svg.append("g").selectAll(".link"),
    node = svg.append("g").selectAll(".node");

d3.json("flare.json", function(error, classes) {
  if (error) throw error;

  var root = packageHierarchy(classes)
    .sum(function(d) { return d.size; });

  cluster(root);
```

Data Driven Documents (D3.js)



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!DOCTYPE html>
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  stroke: steelblue;
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    .append("g")
    .attr("transform", "translate(" + radius + "," + radius + ")");

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    node = svg.append("g").selectAll(".node");

d3.json("flare.json", function(error, classes) {
  if (error) throw error;

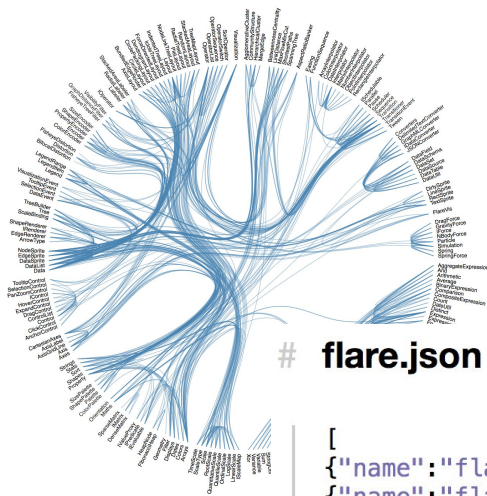
  var root = packageHierarchy(classes)
      .sum(function(d) { return d.size; });

  cluster(root);

```

Data Driven Documents (D3.js)

Hierarchical Edge Bundling



your data

```
[
  {
    "name": "flare.analytics.cluster.AgglomerativeCluster", "size": 3938, "imports": ["flare.animate.Transitio",
    {
      "name": "flare.analytics.cluster.CommunityStructure", "size": 3812, "imports": ["flare.analytics.cluster",
    {
      "name": "flare.analytics.cluster.HierarchicalCluster", "size": 6714, "imports": ["flare.vis.data.EdgeSpr",
    {
      "name": "flare.analytics.cluster.MergeEdge", "size": 743, "imports": []},
    {
      "name": "flare.analytics.graph.BetweennessCentrality", "size": 3534, "imports": ["flare.animate.Transiti",
    {
      "name": "flare.analytics.graph.LinkDistance", "size": 5731, "imports": ["flare.animate.Transitioner", "fl",
    {
      "name": "flare.analytics.graph.MaxFlowMinCut", "size": 7840, "imports": ["flare.animate.Transitioner", "f",
    {
      "name": "flare.analytics.graph.ShortestPaths", "size": 5914, "imports": ["flare.vis.data.EdgeSprite", "fl",
    {
      "name": "flare.analytics.graph.SpanningTree", "size": 3416, "imports": ["flare.animate.Transitioner", "fl",
    {
      "name": "flare.analytics.optimization.AspectRatioBanker", "size": 7074, "imports": ["flare.animate.Trans",
    {
      "name": "flare.animate.Easing", "size": 17010, "imports": ["flare.animate.Transition"]}},
    {
      "name": "flare.animate.FunctionSequence", "size": 5842, "imports": ["flare.util.Maths", "flare.animate.Tr",
    {
      "name": "flare.animate.interpolate.ArrayInterpolator", "size": 1983, "imports": ["flare.util.Arrays", "fl",
    {
      "name": "flare.animate.interpolate.ColorInterpolator", "size": 2047, "imports": ["flare.animate.interpol
```

Argentina_1994

[view constitution](#)

Similarity Country

58	United_States_of_America_1992	view constitution
45	Congo_2001	view constitution
39	Micronesia_1990	view constitution
39	Lebanon_2004	view constitution
33	Saudi_Arabia_2005	view constitution
33	Libya_2012	view constitution
30	Belgium_2012	view constitution
29	Canada_2011	view constitution
29	Mexico_2007	view constitution
28	Czech_Republic_2013	view constitution
25	Mauritania_2012	view constitution
23	Australia_1985	view constitution
23	Uruguay_2004	view constitution
23	Malawi_1999	view constitution
23	Cameroon_2008	view constitution
23	Gabon_1997	view constitution
21	Nigeria_1999	view constitution
21	Honduras_2013	view constitution
21	Djibouti_2010	view constitution
20	German_Federal_Republic_2012	view constitution
20	Luxembourg_2009	view constitution
20	France_2008	view constitution
19	Cote_Divoire_2004	view constitution
18	Costa_Rica_2011	view constitution
18	Mali_1992	view constitution
18	El_Salvador_2003	view constitution
18	Italy_2012	view constitution
18	Russia_2014	view constitution
17	Malaysia_2007	view constitution
17	Cornoros_2009	view constitution
17	Austria_2013	view constitution
17	Togo_2007	view constitution
16	Brazil_2014	view constitution
16	Peru_2009	view constitution
16	Equatorial_Guinea_1995	view constitution
15	Colombia_2013	view constitution

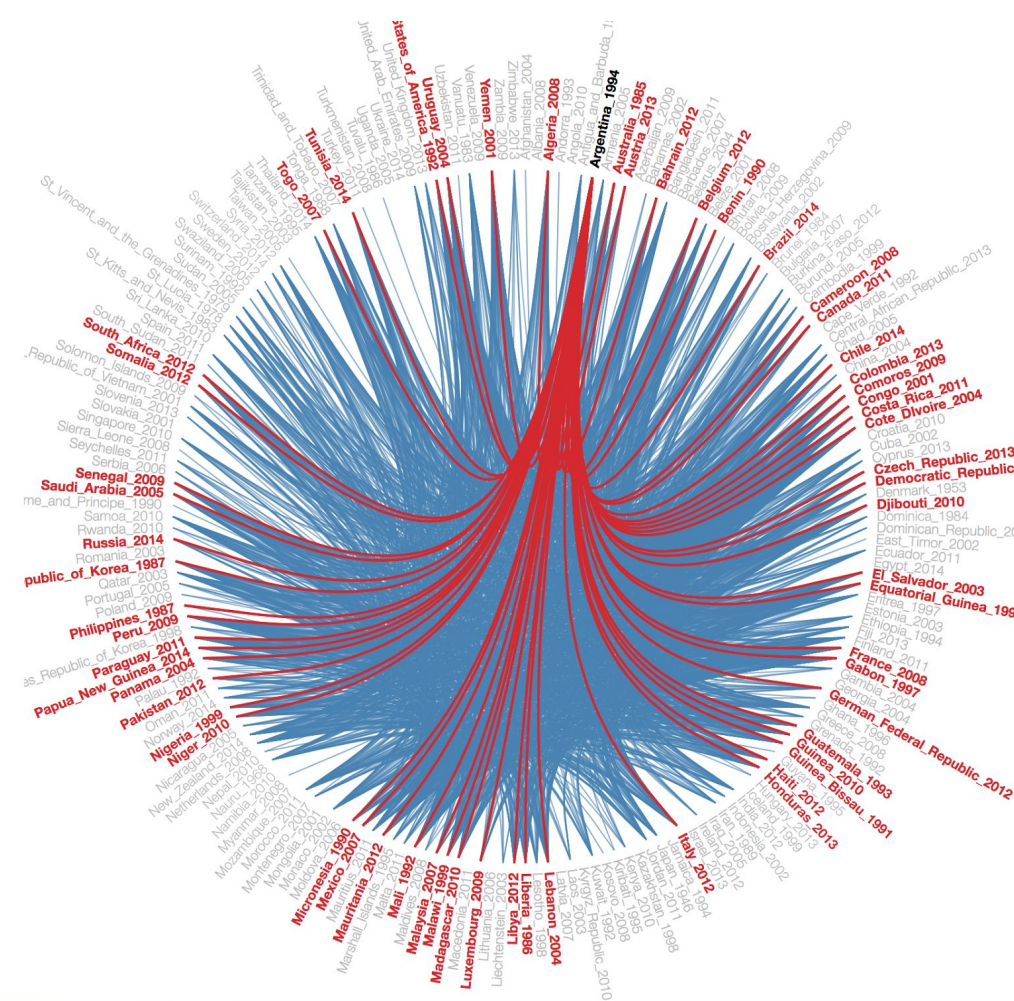
viz 101:

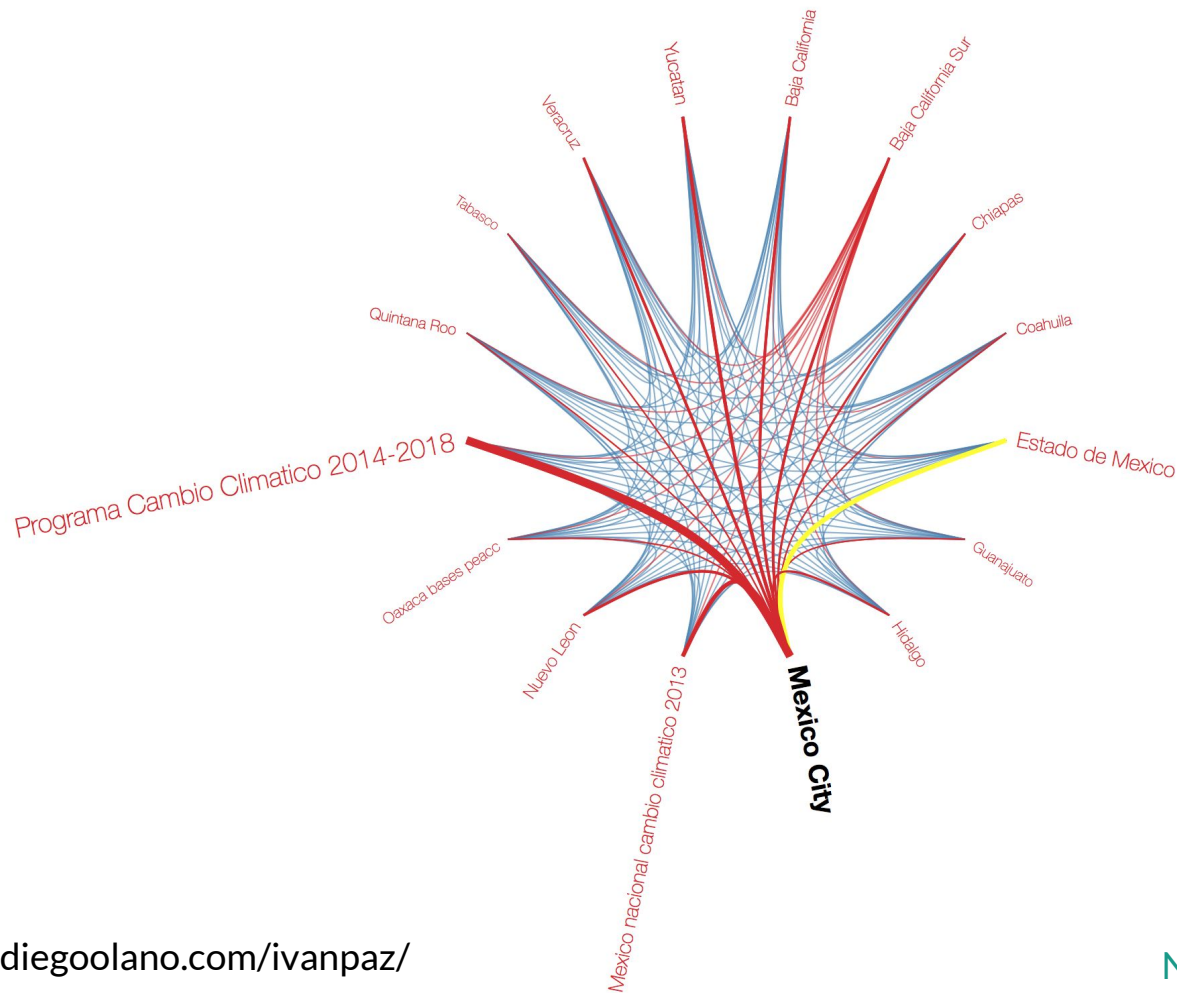
Size Matters
Color Matters

What's the story?

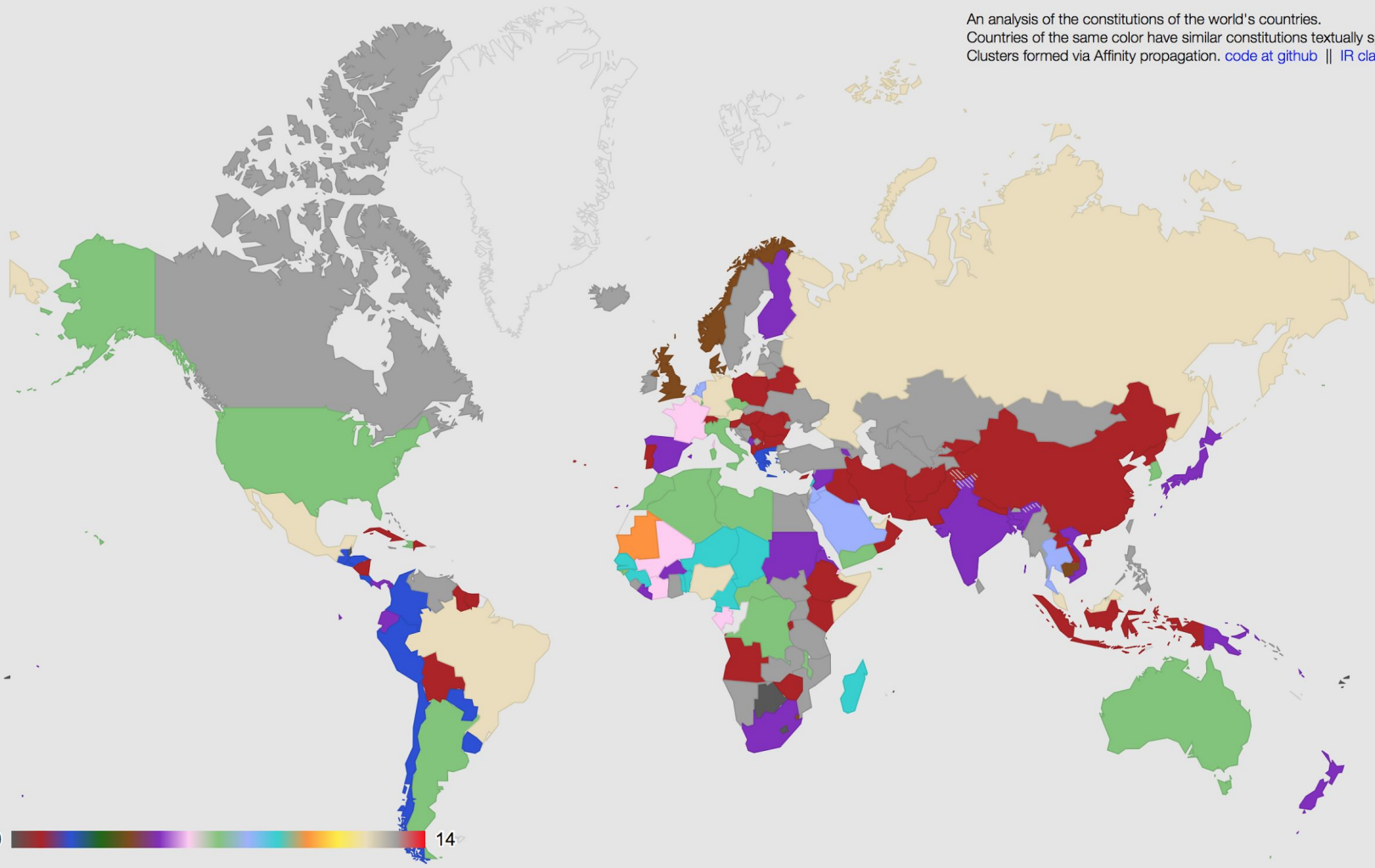
See Tufte

https://www.edwardtufte.com/tufte/books_ei





An analysis of the constitutions of the world's countries.
Countries of the same color have similar constitutions textually speaking.
Clusters formed via Affinity propagation. [code at github](#) || [IR class report](#)



Exact same data as presented before !

<http://diegoolano.com/ir/constitutions-map.html>

BLUE ISLANDS

- Jefferson, AL

• Conecuh, AL

• Coconino, AZ

• Alachua, FL

• St. Lucie, FL

• Clarke, GA

• Liberty, GA

• Hawaii, HI

• Kauai, HI

• Maui, HI

• Maui, HI

• Maui, HI

• Maui, HI

• Honolulu, HI

• Kauai, HI

• Latah, ID

• Blaine, ID

• Putnam, IL

• Champaign, IL

• Jackson, IL

• Alexander, IL

• Delaware, IN

• Marion, IN

• Vigo, IN

• Monroe, IN

• Perry, IN

• Douglas, KS

• Jefferson, KY

• Franklin, KY

• Elliott, KY

• Fayette, KY

• Caddo, LA

• Orleans, LA

• Dukes, MA

• Nantucket, MA

• Gogebie, MI

• Isabella, MI

• Muskegon, MI

• Marquette, MI

• Kittson, MN

• Boone, MO

• Jasper, MS

• Jefferson Davis, MS

• Pike, MS
- Glacier, MT

• Roosevelt, MT

• Missoula, MT

• Big Horn, MT

• Buncombe, NC

• Mecklenburg, NC

• Rolette, ND

• Benson, ND

• Steele, ND

• Thurston, NE

• Washoe, NV

• Monroe, NY

• Richmond, NY

• Franklin, OH

• Montgomery, OH

• Athens, OH

• Hamilton, OH

• Allegheny, PA

• Dauphin, PA

• McCormick, SC

• Buffalo, SD

• Shannon, SD

• Todd, SD

• Clay, SD

• Davidson, TN

• Dallas, TX

• Presidio, TX

• Travis, TX

• Val Verde, TX

• Jefferson, TX

• Harris, TX

• Bexar, TX

• Westmoreland, VA

• Northampton, VA

• Roanoke City, VA

• Norfolk City, VA

• Danville City, VA

• San Juan, WA

• Forest, WI

• Menominee, WI

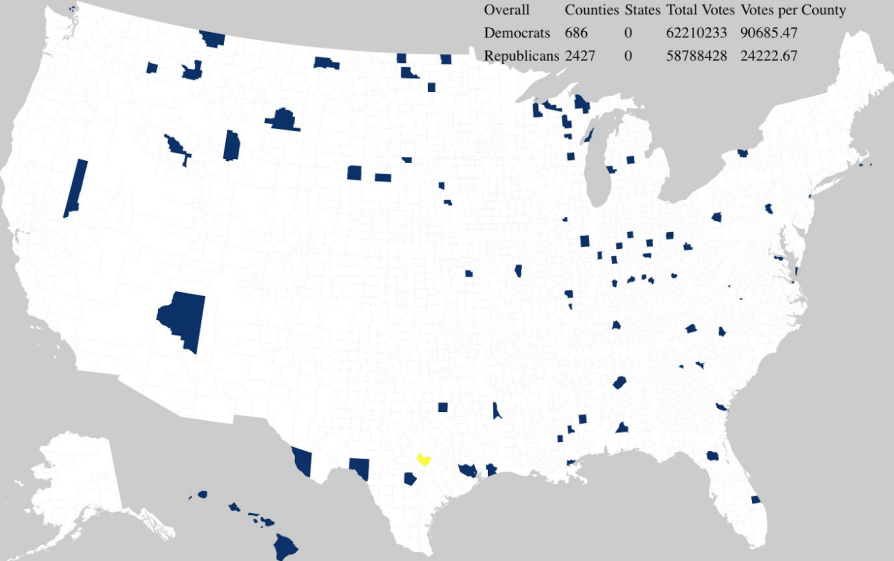
• Winnebago, WI

• Ashland, WI

• Door, WI

• Teton, WY

Overall	Counties	States	Total Votes	Votes per County
Democrats	686	0	62210233	90685.47
Republicans	2427	0	58788428	24222.67



Heaviest GOP (90% up)

- King, TX (96.53%)
- Wibaux, MT (94.39%)
- Roberts, TX (94.23%)
- Madison, ID (94.17%)
- Franklin, ID (94.11%)
- Sterling, TX (93.67%)
- Glasscock, TX (92.28%)
- Hansford, TX (91.88%)
- Oldham, TX (91.72%)
- Rich, UT (91.62%)
- Ochiltree, TX (91.48%)
- Grant, NE (91.48%)
- Millard, UT (91.25%)
- Uintah, UT (91.23%)
- Wallace, KS (91.17%)
- Leslie, KY (91.11%)
- Morgan, UT (91.01%)
- Borden, TX (91.01%)
- Sevier, UT (90.85%)
- Duchesne, UT (90.77%)
- Motley, TX (90.73%)
- Hayes, NE (90.44%)
- Garfield, MT (90.41%)
- Piute, UT (90.39%)
- Cimarron, OK (90.39%)
- Shackelford, TX (90.29%)
- Hartley, TX (90.28%)
- Blaine, NE (90.24%)
- Utah, UT (90.01%)

Heaviest DEM (85% up)

- Shannon, SD (93.95%)
- District of Columbia, DC (92.77%)
- Bronx, NY (91.64%)
- Prince George's, MD (90.78%)
- Petersburg City, VA (90.40%)
- Jefferson, MS (89.06%)
- Baltimore City, MD (88.74%)
- Claiborne, MS (88.40%)
- Macon, AL (87.25%)
- Starr, TX (86.94%)
- Menominee, WI (86.93%)
- San Francisco, CA (86.26%)
- Philadelphia, PA (85.85%)
- New York, NY (85.25%)
- Clayton, GA (85.19%)

HIGHEST GOP VOTE COUNTS

- Maricopa,AZ (654835 votes)
- Orange,CA (541592 votes)
- Tarrant,TX (348686 votes)
- Riverside,CA (290227 votes)
- Duval,FL (211553 votes)
- Salt Lake,UT (198739 votes)
- Collin,TX (195933 votes)

HIGHEST DEMOCRAT VOTE COUNTS

- Los Angeles,CA (1672164 votes)
- Cook,IL (1439123 votes)
- King,WA (599796 votes)
- Wayne,MI (595253 votes)
- Harris,TX (585451 votes)

County: Travis, TX Democrats(231540) vs GOP(139503) with 62.40 % of vote close

- cities:Austin, Del Valle, Leander, Manchaca, Manor, Mc Neil, Pflugerville, Spicewood

- socioeconomic indicators (blue means value is in top 3rd Quartile range, red means in lower 1st Quartile)

Population	Median earnings	Income index	Education Index	Gini Coeff.	White	African	Asian	Latino	Native American	Other
1024266	30442	67.77	87.38	0.487	50.5	8.1	5.7	33.5	0.3	2

Below Federal Poverty Threshold	Children under 6 in poverty	Children living in poverty	Adults 65 and up in poverty
16.2	21.4	21.4	8

less than highschool	at least high school	at least bachelors	graduate degree	Preschool Enrollment	School enrollment
13.7	86.3	43.5	15.9	46.6	75

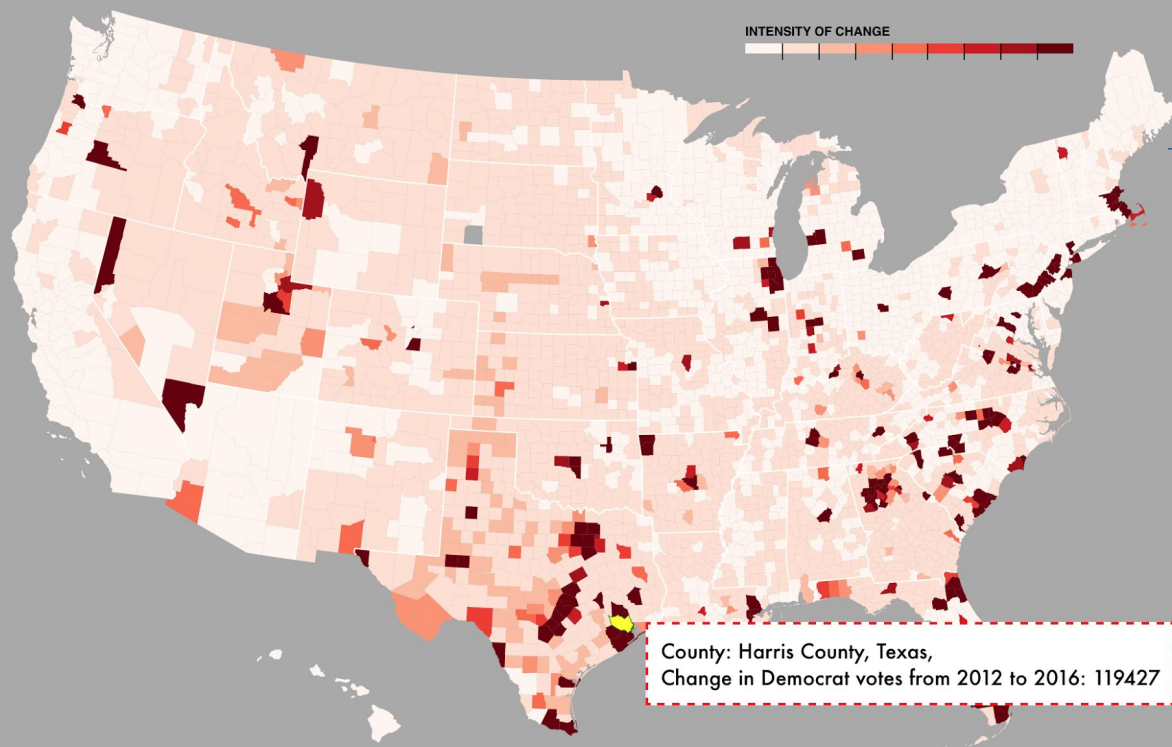
Construction/repair	Farming/fishing/forestry	Management/professional	Production/transport	Sales/office	Service
9.6	0.1	43.8	6.6	23.9	16

- public health indicators (blue means value is in lower 1st quartile, red means in higher 3rd Quartile)

male	female	adultobese	airpollution	ambulatorycare	dentistratio	diabetic	drivealone	excesdrinking	fairpoorhealth	fastfoodresp
51.6	48.4	25	4	57	0.05	7	73	22	14	51

freelunch	gini	healthcosts	healthyfood	illiteracy	lowbirthrate	mammography	mentaldays	motordeath	mphratio	noemotionalsupport
44	0.49	9982	74	12.9	7.4	68.2	3.3	12	0.07	22

noenglish	physicianratio	refcac	rural	sickdays	singleparent	smokers	stdsper100	teenbirthrate	unemployed	uninsured.x	violentcrime	
13.7	0.09		11.1	7	2.8	33	17	599	54	6.9	24	444



INTENSITY OF CHANGE

Raw Change of Voters for Democrats in 2016 Presidential Election

Harris County, Texas	: 119427
Miami-Dade County, Florida	: 81566
Travis County, Texas	: 73687
Orange County, Florida	: 55914
Bexar County, Texas	: 54335
Dallas County, Texas	: 53274
Cook County, Illinois	: 40045
Fairfax County, Virginia	: 39212
Broward County, Florida	: 38644
Collin County, Texas	: 38422
Middlesex County, Massachusetts	: 37115
Tarrant County, Texas	: 34930
Fort Bend County, Texas	: 33331
El Paso County, Texas	: 32557
Gwinnett County, Georgia	: 32554
Wake County, North Carolina	: 31091
Denton County, Texas	: 29022
Fulton County, Georgia	: 26405
Cobb County, Georgia	: 26292
DuPage County, Illinois	: 23039
Williamson County, Texas	: 22377
Palm Beach County, Florida	: 21760
Hidalgo County, Texas	: 20770
Mecklenburg County, North Carolina	: 19996
Hillsborough County, Florida	: 19955
Osceola County, Florida	: 18048
Montgomery County, Pennsylvania	: 17707
Loudoun County, Virginia	: 17430
Suffolk County, Massachusetts	: 17316
Norfolk County, Massachusetts	: 16415
Chester County, Pennsylvania	: 15877
Johnson County, Kansas	: 15798
Lee County, Florida	: 14568
Lake County, Illinois	: 14429
Morris County, New Jersey	: 14291

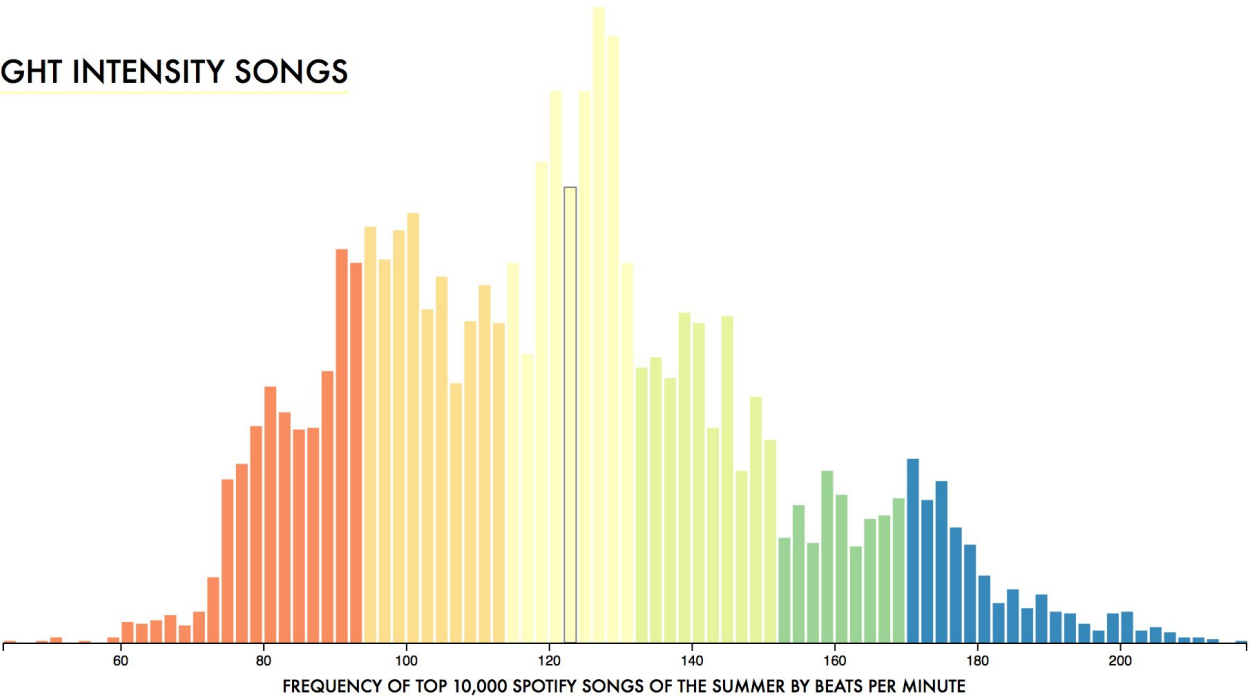
County: Harris County, Texas,
Change in Democrat votes from 2012 to 2016: 119427

Republicans Raw Counts
Republican % Change
Democrat Raw Count
Democrat % Change
2016 Blue Islands

Choropleth showing change from 2012 to 2016

diegoolano.com/electionmap/from_2012_to_2016/

LIGHT INTENSITY SONGS

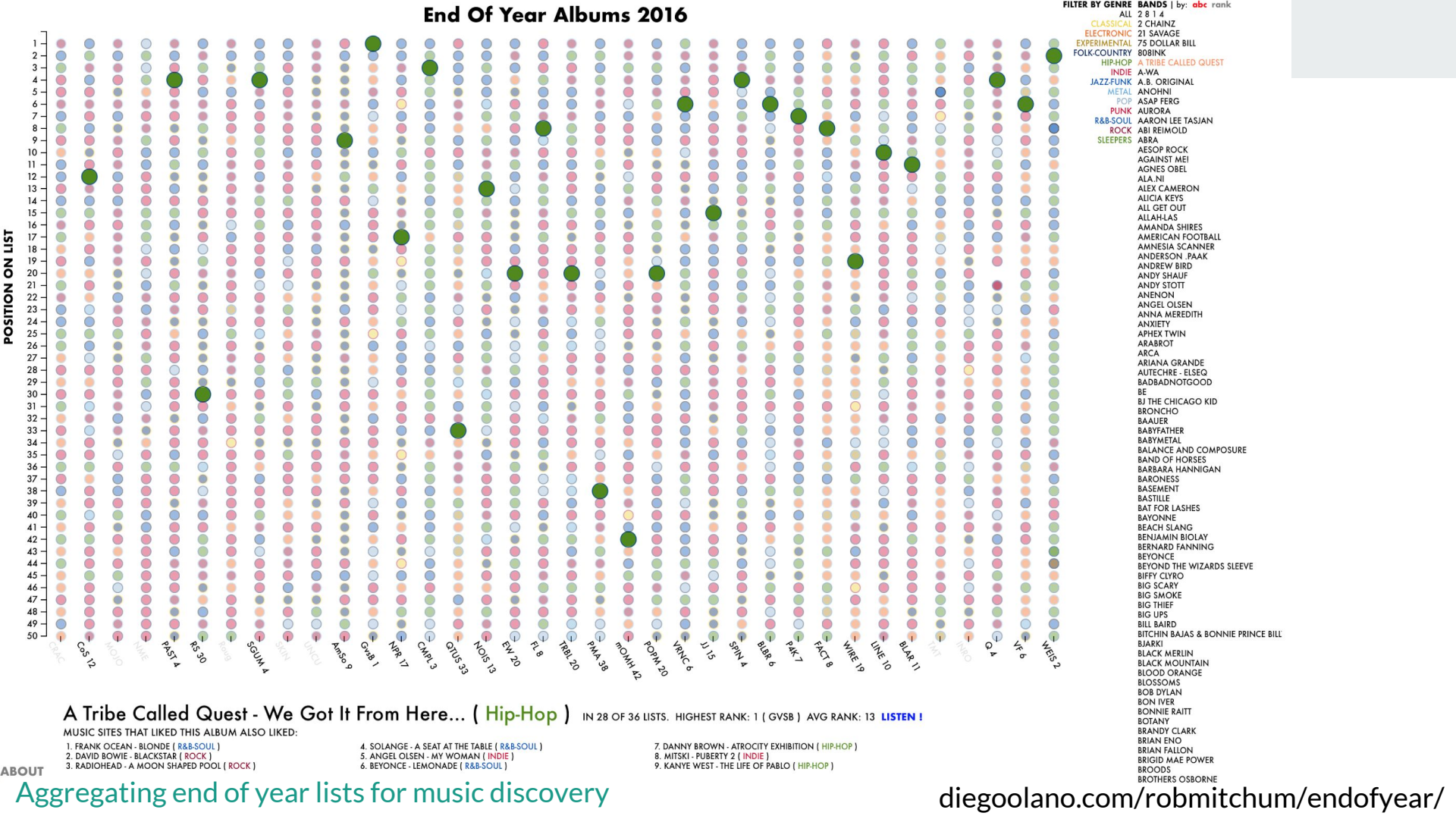


CLARIFY: GROOVE IS IN THE HEART
WORDS: ROB MITCHUM VIZ: DIEGO GARCIA-OLANO

MAX HEART RATE: SHOW TOP:
[CLICK HERE](#) TO CALCULATE YOUR MAXIMUM HEART RATE.

TOP 20 LIGHT SONGS

rank by streams ▾	artist	track	bpm	genre
1	Drake	Too Good	117.98	pop
2	Galantis	No Money	126.01	electro
3	Kungs	This Girl (Kungs Vs. Cookin' On 3 Burners)	121.97	r&b/jazz/blues
4	DNCE	Cake By The Ocean	119.01	pop



2017 MUSIC FESTIVALS

☒ UNIQUE TO FESTIVAL
☒ NON-UNIQUE
☒ ALL FEMALE
☐ ALL MALE
☒ MIXED GENDER

SORT BY:

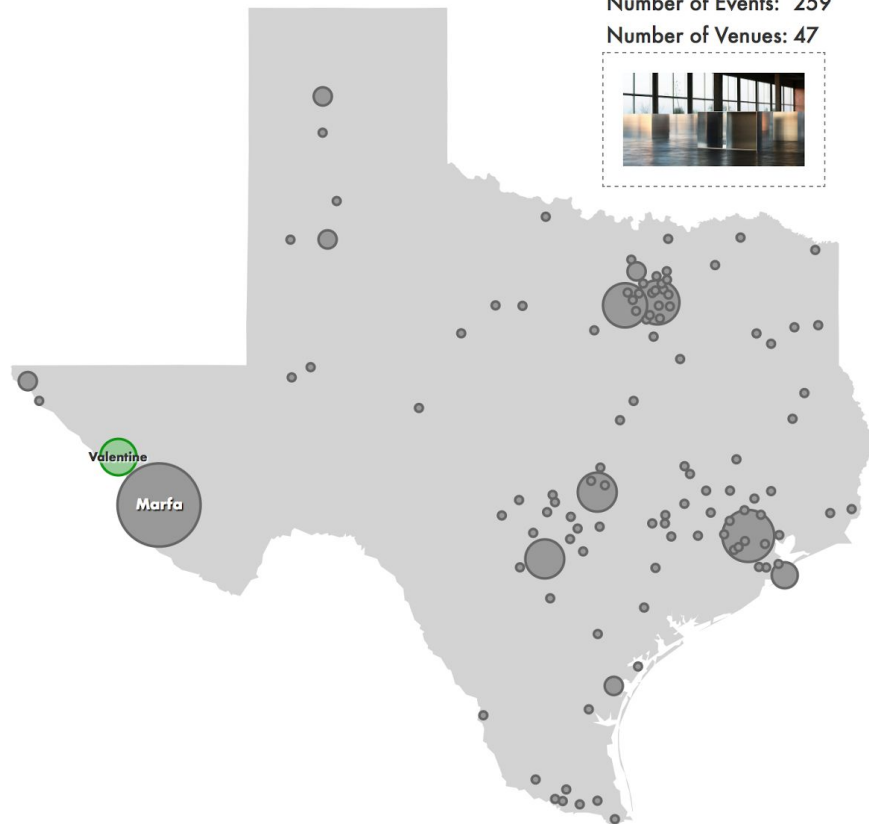
CHRONOLOGICAL
% FEMALE
% FEMALE+MIXED
NUMBER OF BANDS
UNIQUE BANDS
% UNIQUE BANDS

4/14, CA COACHELLA @ LADY GAGA — LORDE — THE XX — THE HEAD AND THE HEART — PHANTOGRAM — KEHLANI — LITTLE DRAGON — BANKS — GROUPOVE — TOVE LO @ ROISIN MURPHY — CRYSTAL CASTLES — KIIARA @ BROODS @ MAYA JANE COLES — WARPAINT @ NAO — OH WONDER — SOFI TUKKER — ZIPPER CLUB — MITSKI @ TENNIS @ FLOORPLAN @ THE ATOMICS @ HINDS — THE LEMON TWIGS — NORA EN PURE @ HANNAH WANTS — ANNA LUNOE — GRACE MITCHELL @ MOSS KENA @ TACOCAT @ ALISON SWING @ SHURA @ HONEY DIJON @ JEN FERRER @ ELI & FUR	4/28, LA JAZZFEST @ MEGHAN TRAINOR — LORDE — ALABAMA SHAKES @ PATTI LABELLE — CORINNE BAILEY RAE — IRMA THOMAS @ ELLE KING — RHIANNON GIDDENS @ THE LONE BELLOW — HERB ALPERT & LANI HALL — MARGO PRICE @ JOHNNYSWIM @ LAKE STREET DIVE @ MS. LISA FISCHER & GRAND BATON — MARY MARY	5/3, FL SUNFEST @ TORI KELLY @ RACHEL PLATTEN — TINASHE — THE STRUMBELLAS — THE NAKED AND FAMOUS @ AMBROSIA — LILLIE MAE @ LEILANI WOLFGAMM @ TAYLA PARK @ OCEAN PARK STANDOFF @ MADAME MAYHEM @ MERESHA @ ROANOKE	5/12, GA SHAKYKNEES — THE XX — LCD SOUNDSYSTEM @ PIXIES — SYLVAN ESSO — SHOVELS & ROPE — WARPAINT — RUN RIVER NORTH @ FAMILY AND FRIENDS — PINEGROVE — LO MOON — MARGARET GLASPY — ZIPPER CLUB @ CON BRIO @ AMYTHYST KIAH	5/19, AL HANGOUT — THE HEAD AND THE HEART — CHARLI XCX — WARPAINT — THE STRUMBELLAS — PVRIS — ARIZONA — NORA EN PURE @ LP @ FRANCES — THE SUFFERS — TKAY MAIDZA	5/26, MA BOSCALLING — THE XX — SOLANGE — TEGAN AND SARA @ BRANDI CARLILE — SYLVAN ESSO — OH WONDER — MITSKI @ DEERHOOF — LUCY DACUS — TKAY MAIDZA — ALEXANDRA SAVIOR	5/26, WA SASQUATCH — THE HEAD AND THE HEART — PHANTOGRAM — KIIARA — BOMBA ESTEREO — THREE OH SEES — THE STRUMBELLAS @ WHITE LUNG — JULY TALK @ SALES — FLINT EASTWOOD — COURTNEY MARIE ANDREWS @ GAZEBO	5/26, CA BOTTLEROCK @ SILVERSUN PICKUPS @ FITZ & THE TANTRUMS — THE NAKED AND FAMOUS — THE DEVIL MAKES THREE — THE STRUMBELLAS — ALUNAGEORGE @ ANDRA DAY — MAVIS STAPLES @ ANI DI FRANCO @ ELEPHANT REVIVAL @ THE STAVES @ THE BARR BROTHERS @ JESSICA HERNANDEZ & THE DELTAS @ PRINZE GEORGE — CON BRIO @ LA SANTA CECILIA — RUN RIVER NORTH @ HIRIE @ BASKERY — ARIZONA — PARADE OF LIGHTS — LITTLE HURRICANE @ MARTY O'REILLY & THE OLD SOUL ORCHESTRA @ JESSICA CHILDRESS @ WILD @ THE REDWOODS REVUE @ TROUBADOUR 77 @ TRACKSUIT WEDDING @ NAPA YOUTH SYMPHONY	6/2, OH BUNBURY @ FLOGGING MOLLY @ HAYLEY KIIYOKO — SAN FERMIN — JULY TALK @ LIBERTY DEEP DOWN	6/2, NY GOVBALL — LORDE @ BEACH HOUSE — THE HEAD AND THE HEART — TOVE LO — PHANTOGRAM — BANKS — CHARLI XCX — KEHLANI — WARPAINT — THE STRUMBELLAS — DUA LIPA — MUNA — ARIZONA @ JESSIE REYEZ — LO MOON — WELLES — TKAY MAIDZA	6/8, TN BONNAROO — LORDE — THE XX — THE HEAD AND THE HEART — TOVE LO — CRYSTAL CASTLES — TEGAN AND SARA — THE STRUMBELLAS — DUA LIPA — SNAILS — MARGO PRICE @ CAM — MANDOLIN ORANGE — NONAME — LEON @ REZZ @ ANGELIQUE KIDJO @ DEAP VALLY @ VANIC — JULY TALK @ TURKUUAZ — LUCY DACUS — KHURUANGBIN — THE LEMON TWIGS @ TWIN LIMB @ RIVER WHYLESS — ALEXANDRA SAVIOR — WELLES	6/15, DE FIREFLY @ KESHA — PHANTO — THE NAK — BANKS — MISTERY — THE STRL @ NAHKO , FOR THE PE — DAYA — MUNA — MAGGIE — SOFI TUK — ANNA LL @ MEG MA — SUNFLO — ARIZON/ — ELOHIM @ FICKLE FI @ SHAED @ ROZES — SAVOIR J @ SALT CAT @ WALKER @ OWEL @ THE STEP @ THE LAW @ REPEAT R @ LOUIE LC @ VITA ANI @ SHORT S @ DUDE RA AT THE ROC @ JOIE KAT @ ANNA SI
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ARTICLE LINK
WORDS: ROB MITCHUM
VIZ: DIEGO GARCIA-OLANO
BAND CENTRIC VIZ

Glasstire: Marfa

ABOUT



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 **ALL**

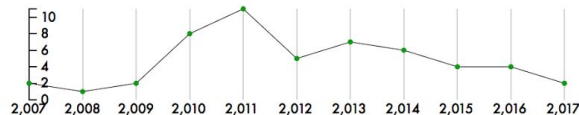
Showing ALL Results

venue

Chinati Foundation

#events

52



<http://glasstire.com/venues/chinati-foundation>

September 2017	Chinati Weekend
May 2017	L.A. Dance Project at The Chinati Foundation
September 2016	Chinati Weekend 2016
July 2016	Robert Irwin Opening Event
April 2016	Jen Rosenblit: Clap Hands
January 2016	Sunset at Chinati
September 2015	Chinati Weekend 2015
September 2015	Charlotte Posenenske and Peter Roehr
August 2015	Sunrise at Chinati
July 2015	Andrew May: Unset
November 2014	Sunset at Chinati
October 2014	Chinati Weekend 2014
August 2014	Neighbor Notes: Modern Chamber Music by Mexican Composers
May 2014	Zoe Leonard: 100 North Nevill Street
April 2014	Marfa Community Day
March 2014	Chinati Presents: The xx
October 2013	Albrecht Dürer: Five Woodcuts and Five Etchings
October 2013	Chinati Weekend - Donald Judd: Prints
August 2013	Jered Sprecher at the Locker Plant

Texas Art Events by city/venue for the last 10 years

<http://www.glasstire.com/infographics/events/>



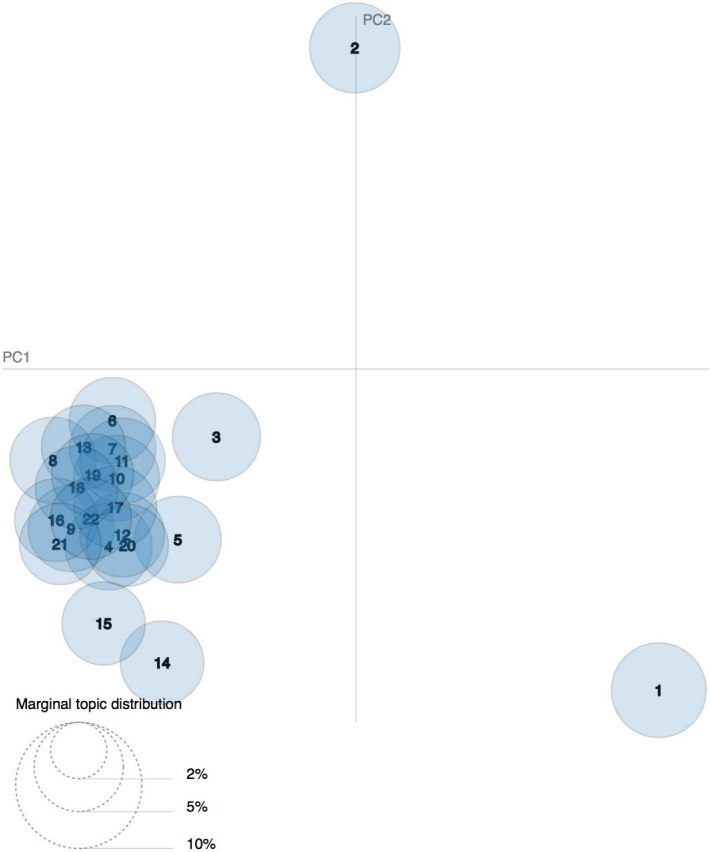
WHERE	VENUES [676]		
ALL CITIES	ALL VENUES		
	NAME	EV ▲	AR CITY
HOUSTON	MUSEUM OF FINE ARTS, HOUSTON - MFAH	235	320 HOUSTON
DALLAS	LAWDALE ART CENTER	222	346 HOUSTON
AUSTIN	500X GALLERY	182	270 DALLAS
SAN ANTONIO	CONDUIT GALLERY	169	179 DALLAS
FORT WORTH	ART LEAGUE HOUSTON	161	249 HOUSTON
MARFA	MENIL COLLECTION	157	232 HOUSTON
EL PASO	CO-LAB PROJECTS	152	254 AUSTIN
GALVESTON	MCKINNEY AVENUE CONTEMPORARY (THE MAC)	151	294 DALLAS
DENTON	BLUE STAR CONTEMPORARY ART MUSEUM	150	361 SAN ANTONIO
LUBBOCK	MODERN ART MUSEUM OF FORT WORTH	146	195 FORT WORTH
ABILENE	BOX 13 ARTSPACE	146	275 HOUSTON
ADDISON	GALVESTON ARTS CENTER	142	196 GALVESTON
ALBANY	CONTEMPORARY ARTS MUSEUM HOUSTON - CAMH	135	276 HOUSTON
ALLEN	MCNAY ART MUSEUM	134	220 SAN ANTONIO
ALVIN	CENTRALTRAK	134	254 DALLAS
AMARILLO	ARTPACE	125	194 SAN ANTONIO
ARLINGTON	DALLAS MUSEUM OF ART	120	180 DALLAS
ARP	HOUSTON CENTER FOR CONTEMPORARY CRAFT	117	178 HOUSTON
BAYTOWN	BLANTON MUSEUM OF ART	115	235 AUSTIN
BEAUMONT	UT VISUAL ARTS CENTER (VAC)	114	207 AUSTIN
BEEVILLE	WALLY WORKMAN GALLERY	110	70 AUSTIN
BELLAIRE	HOUSTON CENTER FOR PHOTOGRAPHY	106	192 HOUSTON
BLANCO	CENTER FOR CONTEMPORARY ARTS - ABILENE	105	128 ABILENE
BOERNE	REDBUD GALLERY	104	128 HOUSTON
BRECKENRIDGE	BLAFFER ART MUSEUM	104	212 HOUSTON
BRENNHAM	HIRAM BUTLER GALLERY	103	92 HOUSTON
BROWNSVILLE	HOOKS-EPSTEIN GALLERIES	102	81 HOUSTON
BRYAN	EL PASO MUSEUM OF ART	102	190 EL PASO
CANTON	ART PALACE	101	92 HOUSTON
CANYONVILLE	PHOTOGRAPHS DO NOT BEND GALLERY	100	137 DALLAS
CECILIA	MOODY GALLERY	100	65 HOUSTON
CECILIA	GALLERY	100	199 HOUSTON
CECILIA	INMAN GALLERY	99	45 HOUSTON

ARTISTS [5991]	
ALL ARTISTS	
NAME	EV ▲
EMILY SLOAN	45
ANDY WARHOL	42
RYDER RICHARDS	38
PATRICK RENNER	38
BILL DAVENPORT	38
BENITO HUERTA	38
MARGARET MEEHAN	32
EMILY PEACOCK	32
CODY LEDVINA	32
ORNA FEINSTEIN	31
LANCE LETSCHER	31
AUTUMN KNIGHT	31
ADELA ANDEA	31
SHARON KOPRIVA	30
NOAH SIMBLIST	30
NATHAN GREEN	30
STEPHEN LAPHISOPHON	29
BILLY HASSELL	29
AARON PARAZETTE	28
ELAINE BRADFORD	27
ARIANE ROESCH	27
ROBERT PRUITT	26
KEN LITTLE	26
JEFF GIBBONS	26
TOM ORR	25
TOBY KAMPS	25
LUDWIG SCHWARZ	25
KATIE MARATTA	25
JULES BUCK-JONES	25
HEYD FONTENOT	25
RENE CRUZ	24
JUSTIN BOYD	24
JOHN POMARA	24
JOEY FAUERSO	24
VINCENT FALSETTA	23
RUSTY SCRUBY	23
ROBERT RAUSCHENBERG	23
RAUL GONZALEZ	23
MARI OMORI	23
JULIE SPEED	23

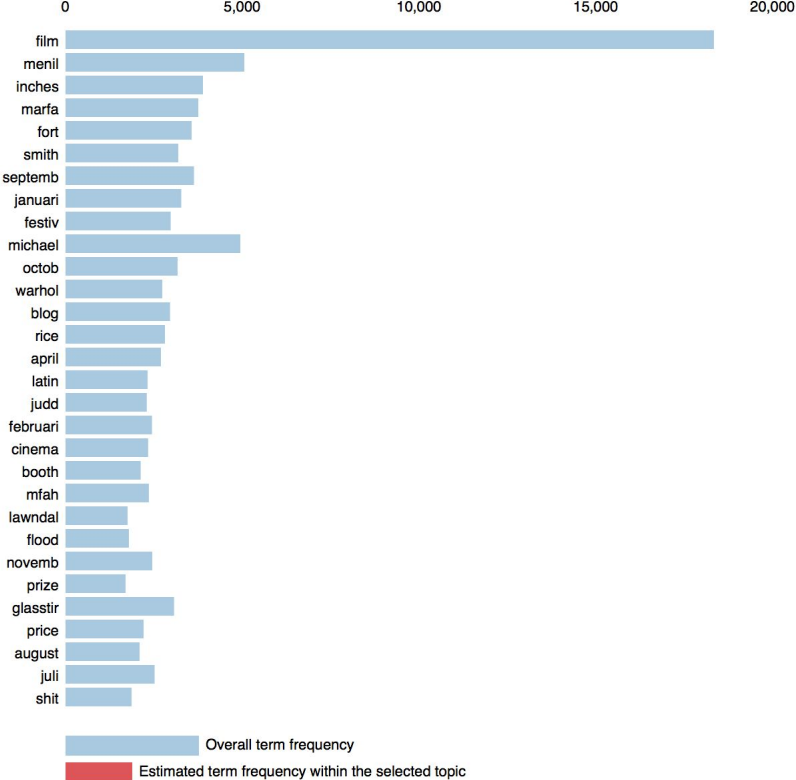
LANCE LETSCHER [VISIT ARTIST'S GLASSTIRE PAGE](#)[SHAREABLE LINK TO THIS PAGE](#)

DATE ▲	EVENT	VENUE	CITY
SEP 2017	LANCE LETSCHER: COLLAGE AND DRAWING	THE LOUISE HOPKINS UNDERWOOD CENTER FOR THE ARTS- LHUCA	LUBBOCK
FEB 2017	LANCE LETSCHER: NEW WORK FROM THE LATE MIDDLE AGES	STEPHEN L. CLARK GALLERY	AUSTIN
OCT 2015	LANCE LETSCHER: BE MY LIFE'S COMPANION	CONDUIT GALLERY	DALLAS
SEP 2015	LANCE LETSCHER: NEW WORK	STEPHEN L. CLARK GALLERY	AUSTIN
MAR 2015	LANCE LETSCHER: PARALLEL UNIVERSE	MCMURTREY GALLERY	HOUSTON
JUN 2014	LONGITUDE/LATITUDE: PART I	CONDUIT GALLERY	DALLAS
OCT 2013	LANCE LETSCHER: PREGUNTA NUMERO UNO	CONDUIT GALLERY	DALLAS
JAN 2013	MAJORITY RULES: A DECADE OF CONTEMPORARY ART ACQUISITIONS	MCNAY ART MUSEUM	SAN ANTONIO
OCT 2012	LANCE LETSCHER: WOODPECKER MONOLOGUE	MCMURTREY GALLERY	HOUSTON
DEC 2011	LANCE LETSCHER: WORK FROM THE MIDDLE AGES	D BERMAN GALLERY	WIMBERLEY
OCT 2011	LANCE LETSCHER: THE NEEDLE IN THE HAY	CONDUIT GALLERY	DALLAS
MAY 2011	COLLAGE	KINZELMAN ART CONSULTING	HOUSTON
APR 2011	TED LARSEN, LANCE LETSCHER, AND RUSTY SCRUBY: PIECE BY PIECE	MCMURTREY GALLERY	HOUSTON
APR 2011	BEEVILLE ART MUSEUM: CELEBRATING 10 YEARS OF ART AND...	BEEVILLE ART MUSEUM	BEEVILLE
MAR 2011	GRAND RELOCATION CELEBRATION	D BERMAN GALLERY	WIMBERLEY
MAR 2011	THE GUN & KNIFE SHOW	CENTRALTRAK	DALLAS
JAN 2011	10TH ANNIVERSARY GROUP SHOW	D BERMAN GALLERY	WIMBERLEY
NOV 2010	LANCE LETSCHER: RECENT WORK FROM THE MIDDLE AGES	MCMURTREY GALLERY	HOUSTON
SEP 2010	88, ORGANIZED BY ANDY COOLQUITT	DOMY BOOKS AUSTIN	AUSTIN
MAY 2010	LANCE LETSCHER: THE PERFECT MACHINE	D BERMAN GALLERY	WIMBERLEY
JAN 2010		CONDUIT GALLERY	DALLAS
DEC 2009	BACK IN RED	MCMURTREY GALLERY	HOUSTON
AUG 2009	ARTHOUSTON 2009: JANE EIFLER & JON VON LETSCHER	MCMURTREY GALLERY	HOUSTON
JUN 2009	LETSCHER, LAPHISOPHON, AND OTTINGER	CONDUIT GALLERY	DALLAS
JAN 2009	WHAT'S MY LINE?	MCMURTREY GALLERY	HOUSTON
NOV 2008	COLLAGE: MORE AND LESS	WILLIAMS TOWER GALLERY	HOUSTON
NOV 2008	LANCE LETSCHER: MACHINES, BUILDINGS, AND BOOKS	MCMURTREY GALLERY	HOUSTON
JUN 2008	LANCE LETSCHER: INDUSTRY AND DESIGN	D BERMAN GALLERY	WIMBERLEY
MAY 2007	LANCE LETSCHER	CONDUIT GALLERY	DALLAS
APR 2007	WORD PLAY	NANCY WILSON SCANLAN GALLERY- ST. STEPHEN'S EPISCOPAL SCHOOL	AUSTIN
MAR 2007	BOOK WORKS	GALVESTON ARTS CENTER	GALVESTON

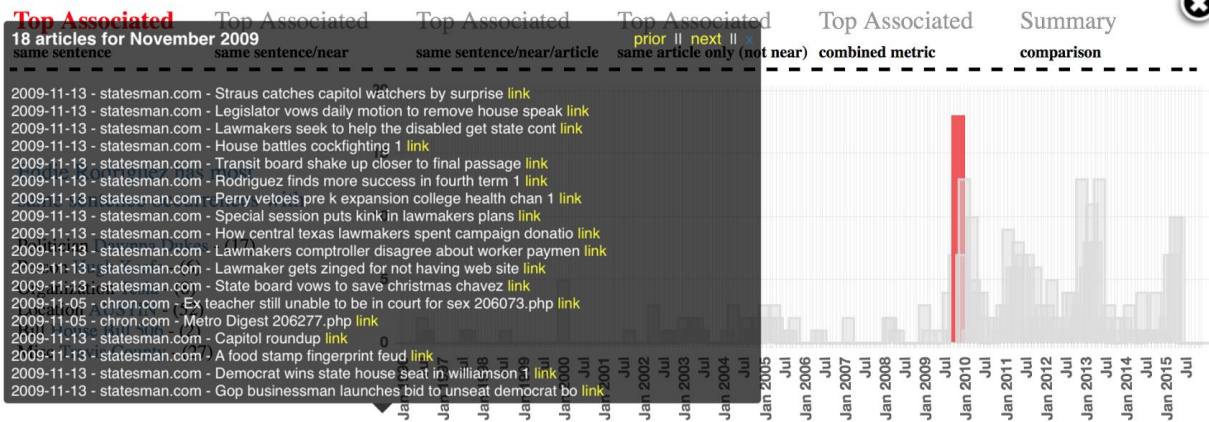
Intertopic Distance Map (via multidimensional scaling)



Top-30 Most Salient Terms¹



1. saliency(term w) = frequency(w) * [sum_t p(t | w) * log(p(t | w)/p(t))]] for topics t; see Chuang et. al (2012)
2. relevance(term w | topic t) = $\lambda * p(w | t) + (1 - \lambda) * p(w | t)/p(w)$; see Sievert & Shirley (2014)



Politicians:	Organizations:	Persons:	Locations:	Bills:	Misc:
Dawnna Dukes - 17	Tesla - 8	Ciro Rodriguez - 6	AUSTIN - 52	House Bill	Travis County - 27
Elliott Naishtat - 16	Milford Superior Court - 7	Hugh Keefe - 6	East Austin - 10	3301 - 2	Austin Democrat
Mark Strama - 14	Farm to Table Caucus - 5	Richard Raymond - 5	San Antonio - 8	House Bill	506 - 2 - 9
Tom Craddick - 14	Calendars Committee - 3	Lulu Flores - 4	Milford - 6	House Bill	urban - 8
Lon Burnam - 12	Edgewood - 3	Gene Meyer - 4	Texas House - 6	3033 - 1	Austin
Donna Howard - 12	Mexican American Legislative	Democrats Eddie Lucio III - 4	Springdale Farm - 4	Senate Bill	Democratic - 4
Kirk Watson - 12	Caucus - 3	Terri Hodge - 4	Nautica - 3	1715 - 1	American-owned
Craig Eiland - 9	University of Texas - 3	Lee Leffingwell - 4	Central Texas - 3	House Bill	- 2
Jessica Farrar - 9	Houston - 3	Paul Moreno - 4	Dallas - 3	House Bill	1677 - 1
Lois Kolkhorst - 9	Edwards Aquifer Authority District - 2	Terry Wilke - 3	Fort Worth - 2	HB 213 - 1	Mexican-American - 2
Patrick Rose - 8	San Antonio City Council - 2	James Kroner - 3	Wichita - 2	House Bill	Dulin's - 2
Valinda Bolton - 8	Wilke-Rodriguez - 2	Nenad Kostic - 3	Chicon Street - 2	970 - 1	Election Day - 2
Senfronia Thompson - 8	Democratic House - 2	David Chu - 3	Fort - 2	House Bill	Moncrease - 2
Garnet Coleman - 8	HPD - 2	Kevin Russo - 3	San - 2	294 - 1	A House - 1
David Simpson - 8	CNN - 2	Steven Slowik - 3	Newtown - 2	HB 970 - 1	Hispanics - 1
Mark Homer - 7	Workers Defense Project - 2	Doc " Anderson - 3	Dripping Springs - 2	HB 296 - 1	Democrats
Joe Deshotel - 7	Mando - 2	Rick Noriega - 3	El Paso - 2	SB 376 - 1	Dawnna Dukes - 1
Abel Herrero - 6	University of Connecticut - 2	Thomas Bavedas - 3	Vail Pass - 1	House Bill	3810 - 1
Helen Giddings - 6	TCEQ - 2	Joseph Guerra - 3	Beaver Creek - 1	HB 2 - 1	Mexican
Ruth Jones McClendon - 6	Latino - 2	Robert Dulin - 3	Austin state	House Bill	American - 1
Rene Oliveira - 6	Talons Challenge - 1	Rick Perry - 3	Representatives - 1	1053 - 1	State-level - 1
Pete Gallego - 6	Toyota - 1	George Rodriguez - 2	Austin-area state	Senate Bill	Libertarian
Scott Hochberg - 6	Arthur - 1	Marilyn Jackson - 2	Representatives - 1		
Ryan Guillen - 6	Texas House Farm-to-Table Caucus - 2	Laura Stromberg - 2	Chavez - 1		

SEARCH RESULTS:
FOR "EDDIE RODRIGUEZ" FOUND:
362 ARTICLES FROM
6 DIFFERENT SOURCES AND
6226 ENTITIES DISCOVERED
[LOCATION: 882, PERSON: 2632, MISC: 411, ORGANIZATION: 1945, POLITICIAN:
269, BILL: 87]
OF WHICH 57 ARE CURRENTLY SHOWING

FILTER BY DATE:

FROM TO APPLY DATE FILTER

FILTER BY SOURCE:

☒ AUSTIN AUSTIN STATESMAN (133)
☒ DALLAS MORNING NEWS (22)
☒ HOUSTON CHRONICLE (136)
☒ NEW YORK TIMES (4)
☒ TEXAS OBSERVER (6)
☒ TEXAS TRIBUNE (60)

APPLY NEW SOURCE FILTER

Showing nodes with more than 20 associations and hiding full details.

Show More Nodes Show Less Nodes Show Full Details

Eddie Rodriguez extended view
generated from 362 articles
Before Filtering V: 6226 , E: 572965
& After Filtering V: 952 , E: 1869
25 communities detected [louvain]
threshold for edge weights: 15
modularity: 0.468147

COMMUNITIES AREA+/-
COMMUNITY 0 [24 nodes]
COMMUNITY 1 [52 nodes]
COMMUNITY 2 [415 nodes]
COMMUNITY 3 [20 nodes]
COMMUNITY 4 [7 nodes]
COMMUNITY 5 [23 nodes]
COMMUNITY 6 [24 nodes]
COMMUNITY 7 [53 nodes]
COMMUNITY 8 [11 nodes]
COMMUNITY 9 [22 nodes]
COMMUNITY 10 [20 nodes]
COMMUNITY 11 [58 nodes]
COMMUNITY 12 [11 nodes]
COMMUNITY 13 [32 nodes]
COMMUNITY 14 [9 nodes]
COMMUNITY 15 [73 nodes]
COMMUNITY 16 [11 nodes]
COMMUNITY 17 [15 nodes]
COMMUNITY 18 [19 nodes]
COMMUNITY 19 [4 nodes]
COMMUNITY 20 [12 nodes]
COMMUNITY 21 [16 nodes]
COMMUNITY 22 [9 nodes]
COMMUNITY 23 [10 nodes]
COMMUNITY 24 [2 nodes]

STATS AREA
COMMUNITY ANALYSIS
ARTICLE APPEARANCES+/-
CLUSTERING COEFFICIENT+/-
DEGREE CENTRALITY+/-
NODE STRENGTH+/-
PAGE RANK+/-



Eddie Rodriguez (POL,DEM,district: 51, id951) - 86 edges		
WEIGHT	COMMUNITY	NAME
Robert Dulin (W: 248.4, PER, id8)		
AUSTIN (W: 205, LOC, id0)		
urban (W: 114.3, MISC, id51) - 8 edges - 8 edges		
- Springdale Farm (W: 2337.5, LOC, id85) - East Austin (W: 144, LOC, id39) - David Simpson (W: 18, POL, id20) - Lois Kolkhorst (W: 15.2, POL, id24)		
Austin Democrat (W: 114.3, MISC, id53) - 8 edges		
Dawnna Dukes (W: 110.5, POL, id22) - 16 edges		
Tesla (W: 89.6, ORG, id11)		
Elliott Naishtat (W: 88.8, POL, id21)		
Travis County (W: 88.4, MISC, id2)		
Ciro Rodriguez (W: 80, PER, id164)		
David Simpson (W: 72.8, POL, id20)		
Milford Superior Court (W: 72.5, ORG, id29)		
Farm to Table Caucus (W: 71, ORG, id171)		
Tom Craddock (W: 69.4, POL, id5)		
Mark Strama (W: 67.8, POL, id14)		
Donna Howard (W: 50.7, POL, id25)		
Lon Burnam (W: 47.4, POL, id32)		
John Morales (W: 40, PER, id208)		
Hugh Keefe (W: 39.9, PER, id27)		
Kirk Watson (W: 39, POL, id16)		
East Austin (W: 38.1, LOC, id39)		
Priscilla Ledesma (W: 36.8, PER, id206)		
Sharon Ledesma (W: 36.8, PER, id207)		
Milford (W: 35.4, LOC, id12)		
Senfronia Thompson (W: 33, POL, id56)		
Lloyd Doggett (W: 31.2, POL, id15)		
Joseph Guerra (W: 31, PER, id137)		
Lois Kolkhorst (W: 30, POL, id24)		
Austin Democratic (W: 30, MISC, id270)		
Joe Straus (W: 29.8, POL, id13)		
Moncrease (W: 28.7, MISC, id231)		
Valinda Bolton (W: 28.5, POL, id89)		
Doc " Anderson (W: 28.5, PER, id161)		
Joe Deshotel (W: 28.2, POL, id92)		
Rick Perry (W: 27.9, PER, id1)		
John Cronan (W: 26, PER, id157)		
Bridgeport (W: 25.8, LOC, id18)		
San Antonio (W: 24.8, LOC, id3)		

SHOW NODES OF TYPE: POLITICIAN (REPUBLICAN | DEMOCRAT) | ORGANIZATION | PERSON | LOCATION | BILL | MISC | ALL

1957: AFTERNOON OF THE BULLS ([SPAIN](#))

1958: TORERO! ([MEXICO](#))

1958: HIGH STREET ([SPAIN](#))

1959: LA VENGANZA ([SPAIN](#)) *

1960: NAZARÍN ([MEXICO](#))

1961: MACARIO ([MEXICO](#)) *

1961: AT FIVE O'CLOCK IN THE AFTERNOON ([SPAIN](#))

1962: SUMMER SKIN ([ARGENTINA](#))

1962: THE IMPORTANT MAN ([MEXICO](#)) *

1962: PLÁCIDO ([SPAIN](#)) *

1963: THE SAD YOUNG MEN ([ARGENTINA](#))

1963: TLAYUCAN ([MEXICO](#)) *

1963: DULCINEA ([SPAIN](#))

1964: THE PAPER MAN ([MEXICO](#))

1964: LOS TARANTOS ([SPAIN](#)) *

1965: THE GIRL IN MOURNING ([SPAIN](#))

1966: PAJARITO GÓMEZ ([ARGENTINA](#))

1966: ALWAYS FARTHER AWAY ([MEXICO](#))

1966: LA TÍA TULA ([SPAIN](#))

1967: BLACK WIND ([MEXICO](#))

1968: THE ADOLESCENTS ([MEXICO](#))

1968: NO STARS IN THE JUNGLE ([PERU](#))

1968: EL AMOR BRUJO ([SPAIN](#)) *

1969: SPAIN AGAIN ([SPAIN](#))

1970: THE GREEN WALL ([PERU](#))

1970: LA CELESTINA ([SPAIN](#))

1971: TRISTANA ([SPAIN](#)) *

1972: EL TOPO ([MEXICO](#))

1972: MARTA ([SPAIN](#))

1973: THE DISCREET CHARM OF THE
BOURGEOISIE ([FRANCE](#)) *

1973: MIRAGE ([PERU](#))

1973: MY DEAREST SENORITA ([SPAIN](#)) *

1974: REED: INSURGENT MEXICO ([MEXICO](#))

1974: HABLA MUDITA ([SPAIN](#))

1975: THE TRUCE ([ARGENTINA](#)) *

1975: CALZONZIN INSPECTOR ([MEXICO](#))

1975: LA PRIMA ANGELICA ([SPAIN](#))

1976: NAZARENO CRUZ AND THE WOLF ([ARGENTINA](#))

1976: LETTERS FROM MARUSIA ([MEXICO](#)) *

1976: POACHERS ([SPAIN](#))

1991: THE MOON IN THE MIRROR ([CHILE](#))

1991: THE BEAUTY OF THE ALHAMBRA ([CUBA](#))

1991: CABEZA DE VACA ([MEXICO](#))

1991: FALLEN FROM HEAVEN ([PERU](#))

1991: ¡AY CARMELAI ([SPAIN](#))

1992: THE TOMBS ([ARGENTINA](#))

1992: LA FRONTERA ([CHILE](#))

1992: CONFESSING TO LAURA ([COLOMBIA](#))

1992: HELLO HEMINGWAY ([CUBA](#))

1992: HOMEWORK ([MEXICO](#))

1992: ALIAS 'LA GRINGA' ([PERU](#))

1992: HIGH HEELS ([SPAIN](#))

1992: JERICHO ([VENEZUELA](#))

1993: THE DARK SIDE OF THE HEART ([ARGENTINA](#))

1993: ADORABLE LIES ([CUBA](#))

1993: LIKE WATER FOR CHOCOLATE ([MEXICO](#))

1993: THE FENCING MASTER ([SPAIN](#))

1993: A PLACE IN THE WORLD ([URUGUAY](#))

1994: GATICA EL MONO ([ARGENTINA](#))

1994: JOHNNY 100 PESOS ([CHILE](#))

1994: CRONOS ([MEXICO](#))

1994: REPORT ON DEATH ([PERU](#))

1994: BELLE EPOQUE ([SPAIN](#)) *

1995: A SHADOW YOU SOON WILL BE ([ARGENTINA](#))

1995: AMNESIA ([CHILE](#))

1995: THE STRATEGY OF THE SNAIL ([COLOMBIA](#))

1995: STRAWBERRY AND CHOCOLATE ([CUBA](#)) *

1995: THE SILENCE OF NETO ([GUATEMALA](#))

1995: THE BEGINNING AND THE END ([MEXICO](#))

1995: WITHOUT COMPASSION ([PERU](#))

1995: LINDA SARA ([PUERTO RICO](#))

1995: CRADLE SONG ([SPAIN](#))

1995: KNOCKS AT MY DOOR ([VENEZUELA](#))

1996: WILD HORSES ([ARGENTINA](#))

1996: JONAH AND THE PINK WHALE ([BOLIVIA](#))

1996: NUEBA YOL ([DOMINICAN REPUBLIC](#))

1996: MIDAQ ALLEY ([MEXICO](#))

1996: THE FLOWER OF MY SECRET ([SPAIN](#))

1996: SICARIO ([VENEZUELA](#))

1997: EVA PERON ([ARGENTINA](#))

1997: OEDIPUS MAYOR ([COLOMBIA](#))

1997: THINK OF ME ([CUBA](#))

1997: BETWEEN PANTO VILLA AND A NAKED
WOMAN ([MEXICO](#))

1997: BWANA ([SPAIN](#))

1998: ASHES OF PARADISE ([ARGENTINA](#))

1998: THE DEBT ([COLOMBIA](#))

1998: VERTICAL LOVE ([CUBA](#))

1998: DEEP CRIMSON ([MEXICO](#))

1998: SECRETS OF THE HEART ([SPAIN](#)) *

1998: ONE LIFE AND TWO TRAILS ([VENEZUELA](#))

1999: TANGO ([ARGENTINA](#)) *

2007: PAN'S LABYRINTH ([MEXICO](#)) *

2007: MADEINUSA ([PERU](#))

2007: THIEVES AND LIARS ([PUERTO RICO](#))

2007: VOLVER ([SPAIN](#))

2007: MAROA ([VENEZUELA](#))

2008: XXY ([ARGENTINA](#))

2008: LOS ANDES NO CREEN EN DIOS ([BOLIVIA](#))

2008: PADRE NUESTRO ([CHILE](#))

2008: SATANÁS ([COLOMBIA](#))

2008: THE SILLY AGE ([CUBA](#))

2008: CROSSING A SHADOW ([PERU](#))

2008: LOVE SICKNESS ([PUERTO RICO](#))

2008: THE ORPHANAGE ([SPAIN](#))

2008: THE POPE'S TOILET ([URUGUAY](#))

2008: POSTCARDS FROM LENINGRAD ([VENEZUELA](#))

2009: LION'S DEN ([ARGENTINA](#))

2009: TONY MANERO ([CHILE](#))

2009: DOG EAT DOG ([COLOMBIA](#))

2009: TEAR THIS HEART OUT ([MEXICO](#))

2009: THE BLIND SUNFLOWERS ([SPAIN](#))

2009: KILL THEM ALL ([URUGUAY](#))

2009: THE COLOR OF FAME ([VENEZUELA](#))

2010: THE SECRET IN THEIR EYES ([ARGENTINA](#)) *

2010: SOUTHERN ZONE ([BOLIVIA](#))

2010: DAWSON ISLAND 10 ([CHILE](#))

2010: THE WIND JOURNEYS ([COLOMBIA](#))

2010: FALLEN GODS ([CUBA](#))

2010: BACKYARD ([MEXICO](#))

2010: THE MILK OF SORROW ([PERU](#)) *

2010: KABO AND PLATON ([PUERTO RICO](#))

2010: THE DANCER AND THE THIEF ([SPAIN](#))

2010: BAD DAY FOR FISHING ([URUGUAY](#))

2010: LIBERTADOR MORALES EL JUSTICIERO ([VENEZUELA](#))

2011: CARANCHO ([ARGENTINA](#))

2011: THE LIFE OF FISH ([CHILE](#))

2011: CRAB TRAP ([COLOMBIA](#))

2011: OF LOVE AND OTHER DEMONS ([COSTA RICA](#))

2011: BIUTIFUL ([MEXICO](#)) *

2011: LA YUMA ([NICARAGUA](#))

2011: UNDERTOW ([PERU](#))

2011: MIENTE ([PUERTO RICO](#))

2011: EVEN THE RAIN ([SPAIN](#))

2011: A USEFUL LIFE ([URUGUAY](#))

2011: HERMANO ([VENEZUELA](#))

2012: ABALLAY ([ARGENTINA](#))

2012: VIOLETA WENT TO HEAVEN ([CHILE](#))

2012: THE COLORS OF THE MOUNTAIN ([COLOMBIA](#))

2012: HAVANASTATION ([CUBA](#))

2012: SUPERCLÁSICO ([DENMARK](#))

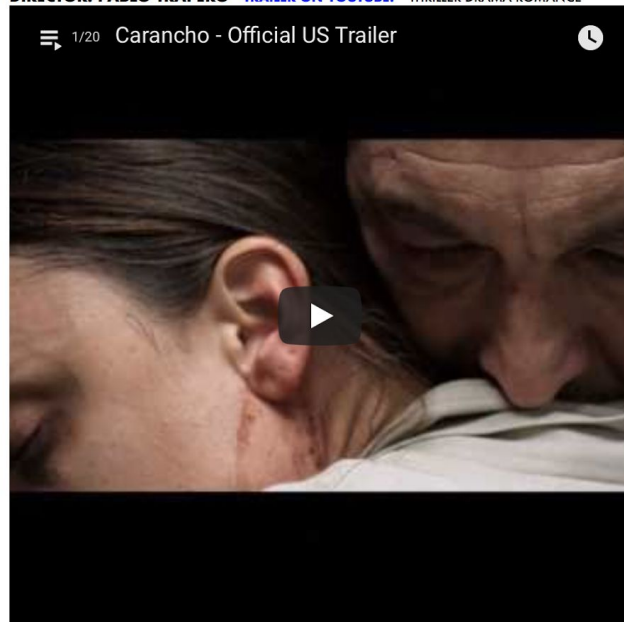
2012: LOVE CHILD ([DOMINICAN REPUBLIC](#))

2012: MISS BALA ([MEXICO](#))

2012: OCTOBER ([PERU](#))

2011 ARGENTINA

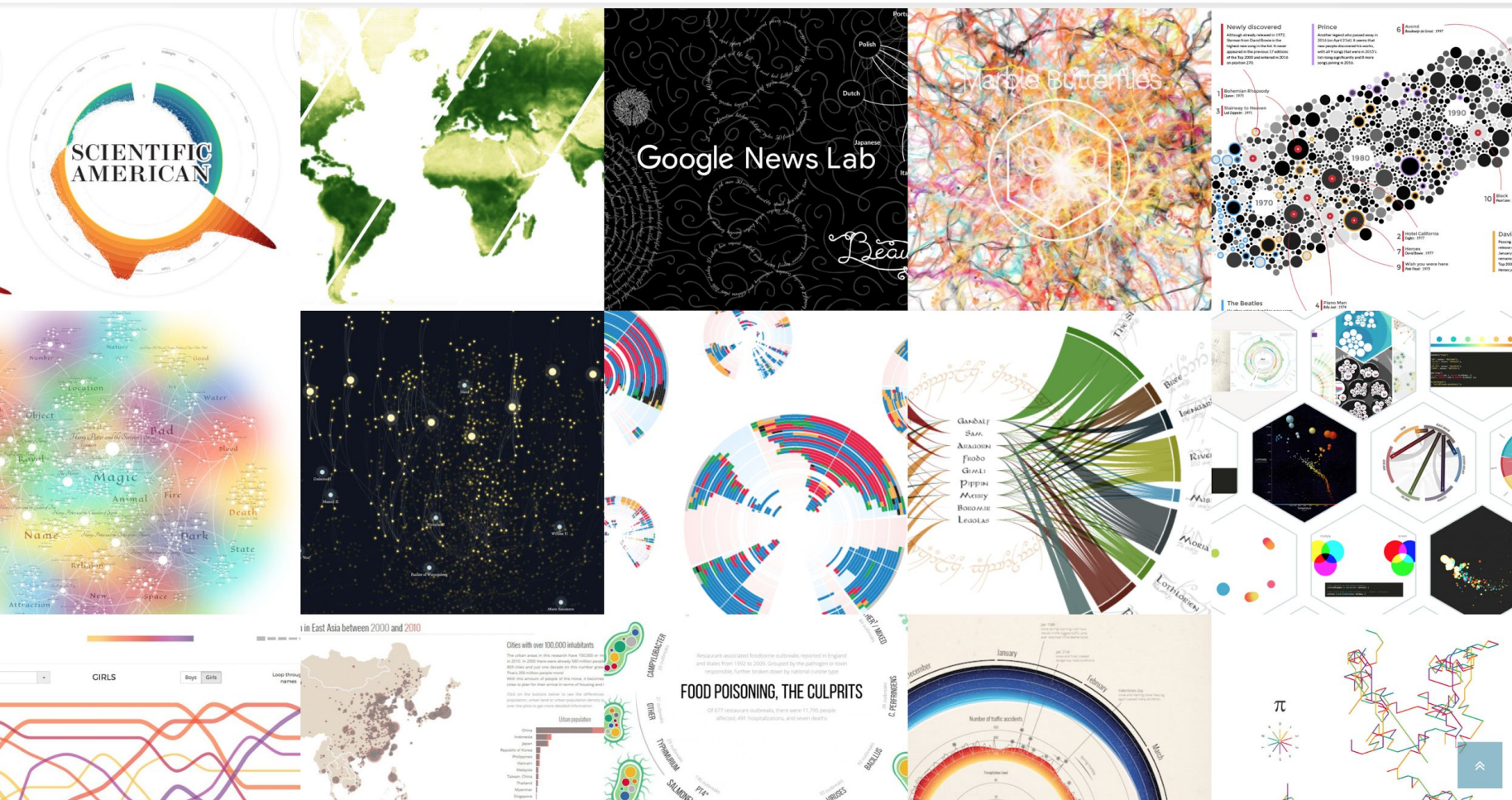
CARANCHO

DIRECTOR: [PABLO TRAPERO](#)
[TRAILER ON YOUTUBE!](#)
 THRILLER DRAMA ROMANCE


OVERVIEW: IN ARGENTINA OVER 8 000 PEOPLE DIE IN TRAFFIC ACCIDENTS EVERY YEAR. BEHIND EACH OF THESE TRAGEDIES IS A FLOURISHING INDUSTRY FOUNDED ON INSURANCE PAYOUTS AND LEGAL LOOPHOLES. SOSA IS A LAWYER WHO TOURS THE A&E DEPARTMENTS OF THE PUBLIC HOSPITALS AND THE POLICE STATIONS IN SEARCH OF POTENTIAL CLIENTS. LUJÁN IS A YOUNG DOCTOR RECENTLY ARRIVED FROM THE PROVINCES. THEIR LOVE STORY KICKS OFF ONE NIGHT WHEN LUJÁN AND SOSA MEET IN THE STREET. SHE'S TRYING TO SAVE A MAN'S LIFE; HE WANTS HIM ON HIS CLIENT PORTFOLIO

FILM WIKI LINK: CARANCHO IS A 2010 ARGENTINE CRIME FILM DIRECTED BY PABLO TRAPERO AND STARRING RICARDO DARÍN AND MARTINA GUSMÁN. IT WAS ENTERED INTO THE UN CERTAIN REGARD SECTION OF THE 2010 CANNES FILM FESTIVAL. THE FILM WAS SELECTED AS THE ARGENTINE ENTRY FOR THE BEST FOREIGN LANGUAGE FILM AT THE 83RD ACADEMY AWARDS, BUT IT DID NOT MAKE THE FINAL SHORTLIST. ...

DIRECTOR WIKI LINK: PABLO TRAPERO (BORN 4 OCTOBER 1971) IS AN ARGENTINE FILM PRODUCER, EDITOR AND DIRECTOR. HE IS CONSIDERED A ONE OF THE BIGGEST CREATIVE FORCES IN LATIN AMERICAN CINEMA. ...



Anaconda / Python Based links



How to solve visualization problems with Python tools

web-based Python tools supported by [Anaconda](#), including [Bokeh](#), [HoloViews](#), [GeoViews](#), [Datashader](#), and [Param](#)
<https://github.com/ContinuumIO/anacondaviz>

HoloViews+Bokeh tutorial for JupyterCon 2017

<https://github.com/ioam/jupytercon2017-holoviews-tutorial>

D3 / Bokeh

D3 is not for quick EDA!



D3 is for web facing, interactivity and complete customization. Learning curve.

Bokeh gets you 80% of what you need right out of the box, the remaining 20% is painful, if doable.

Datashader is better for “big data” (millions of points at once)

In both cases, the trick with visualizing big data is aggregation and only loading what you need when you need it, and pre-caching expensive loads (websockets/queues for D3)