



Knowledge Design, Data Visualization – Part 2

Compiled by:

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2023-06-06

GEM Camp

#MeToo Anti-Network

Analysis

For qualitative analysis, our research focused on a random sample of one million tweets in the timespan from 2017 to 2020.

Diagrams

About

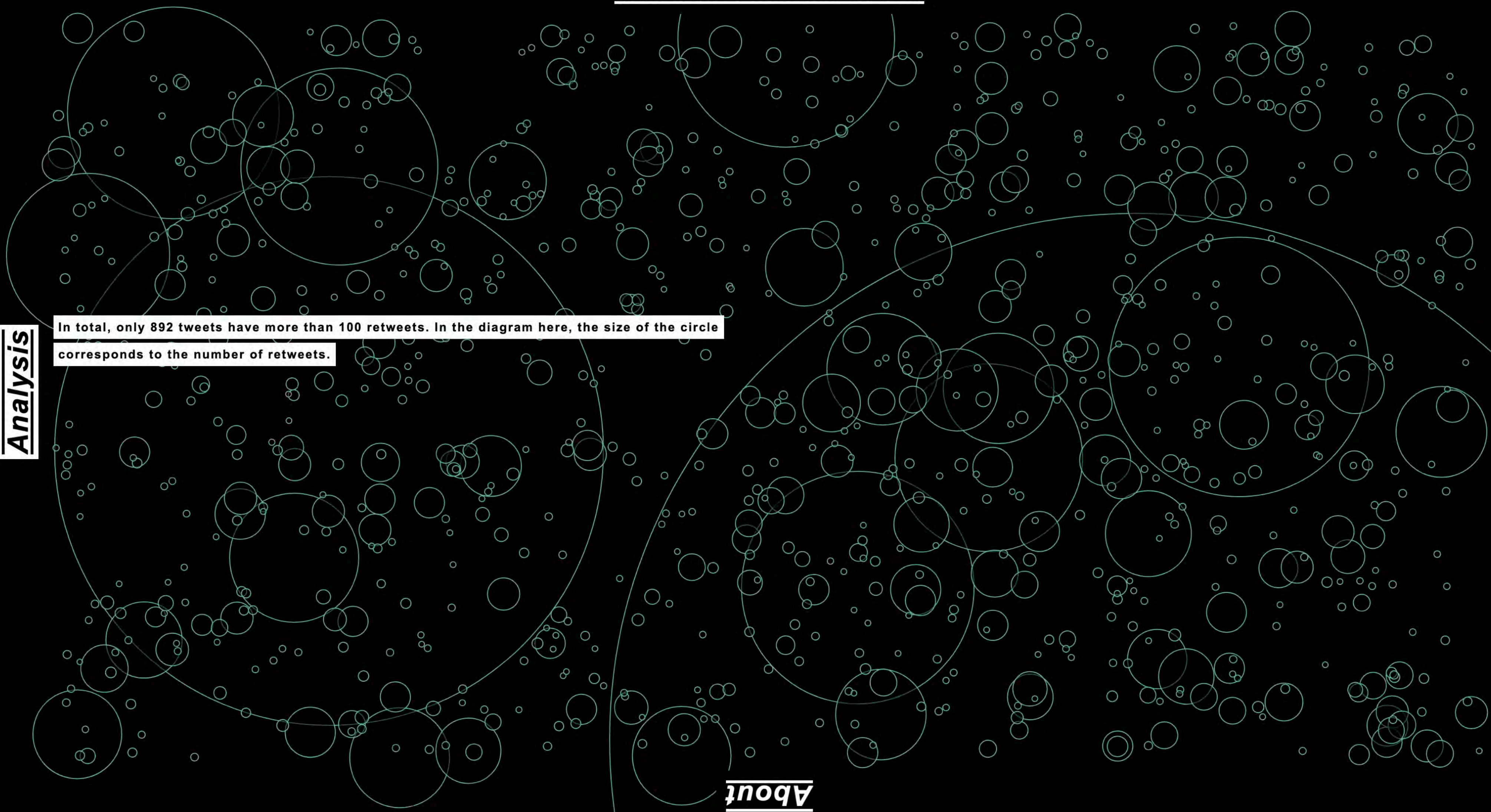
#MeToo Anti-Network

Analysis

In total, only 892 tweets have more than 100 retweets. In the diagram here, the size of the circle corresponds to the number of retweets.

Diagrams

About



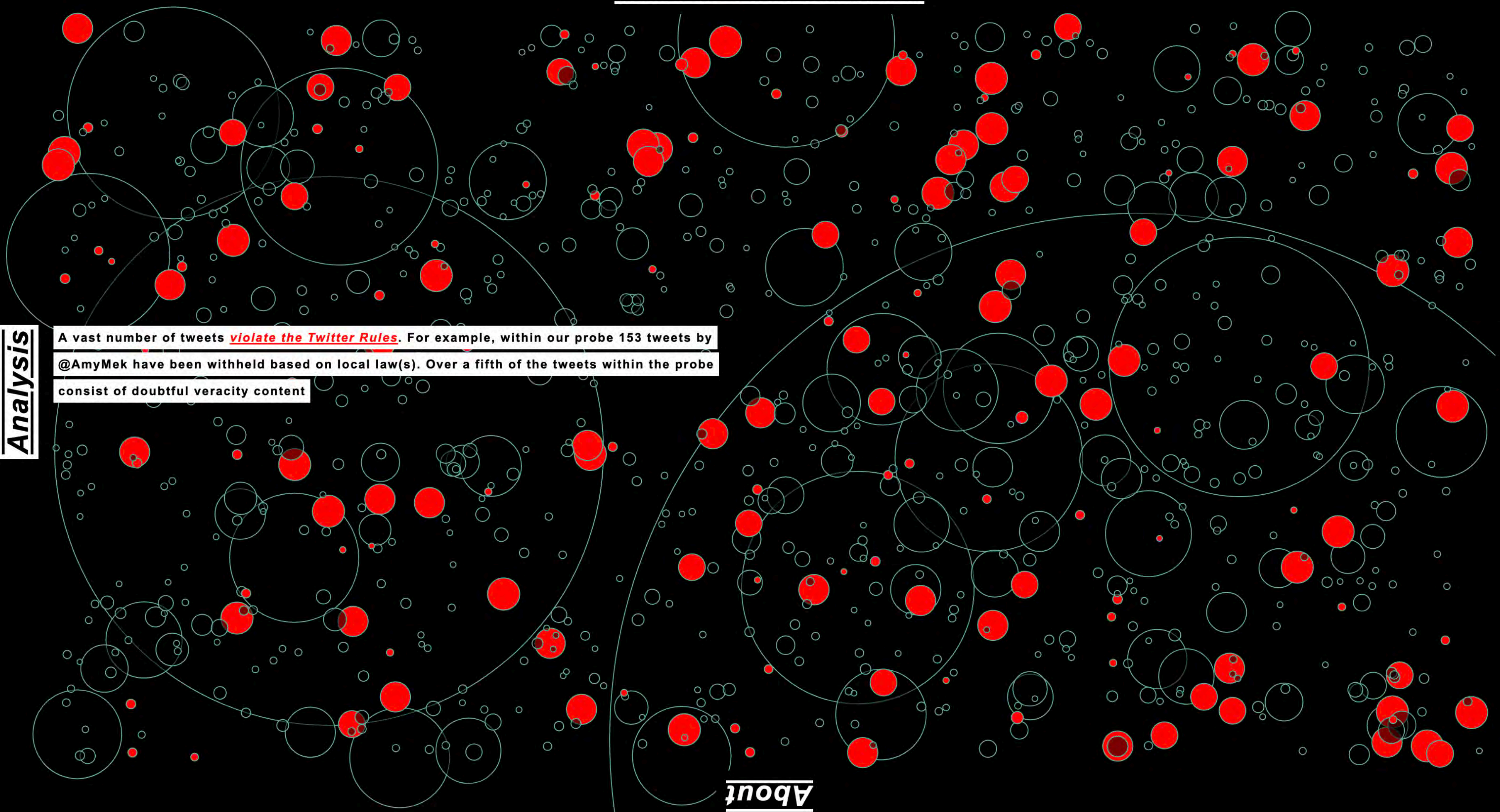
#MeToo Anti-Network

Analysis

A vast number of tweets **violate the Twitter Rules**. For example, within our probe 153 tweets by @AmyMek have been withheld based on local law(s). Over a fifth of the tweets within the probe consist of doubtful veracity content

Diagrams

About



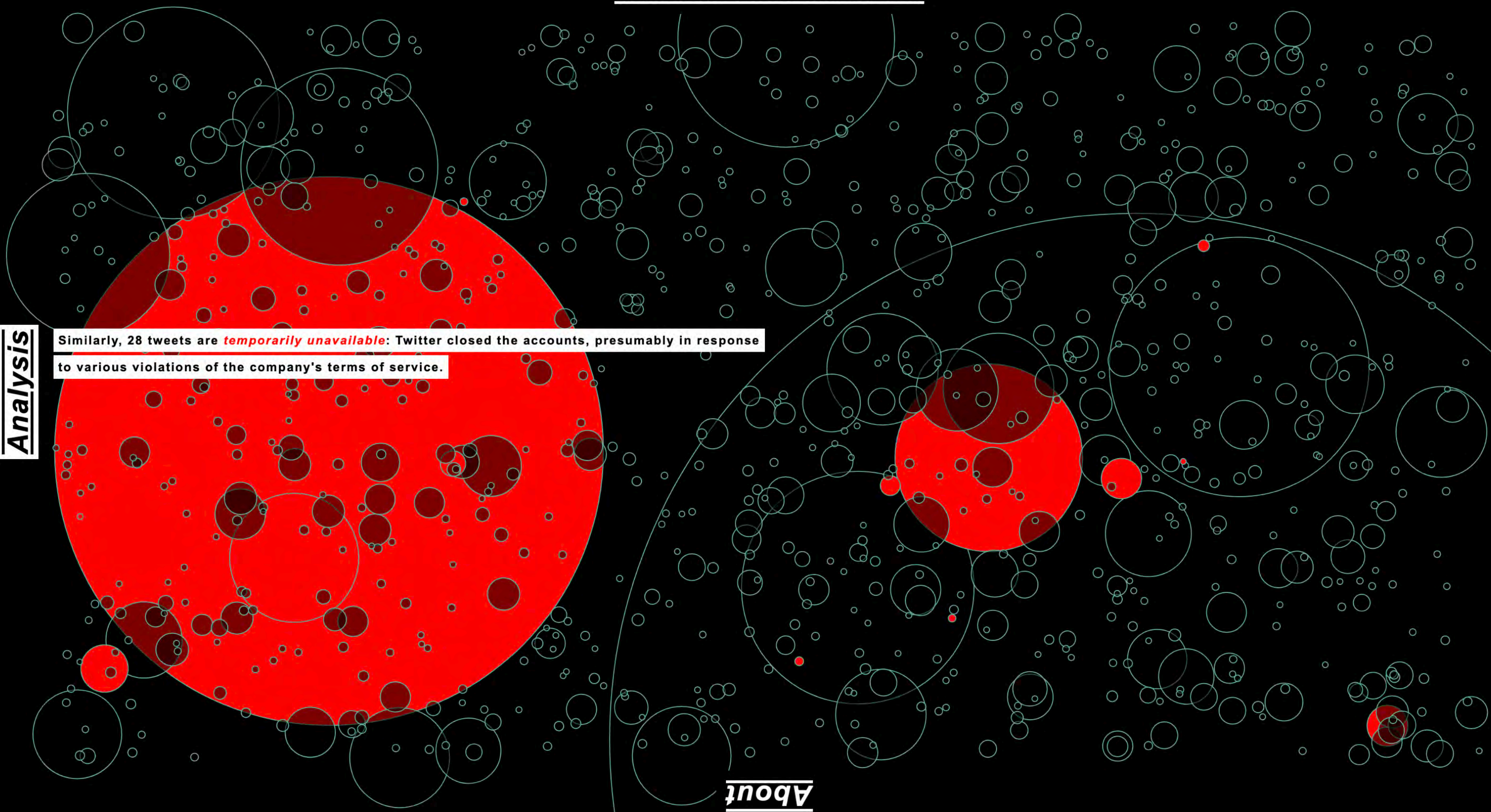
#MeToo Anti-Network

Analysis

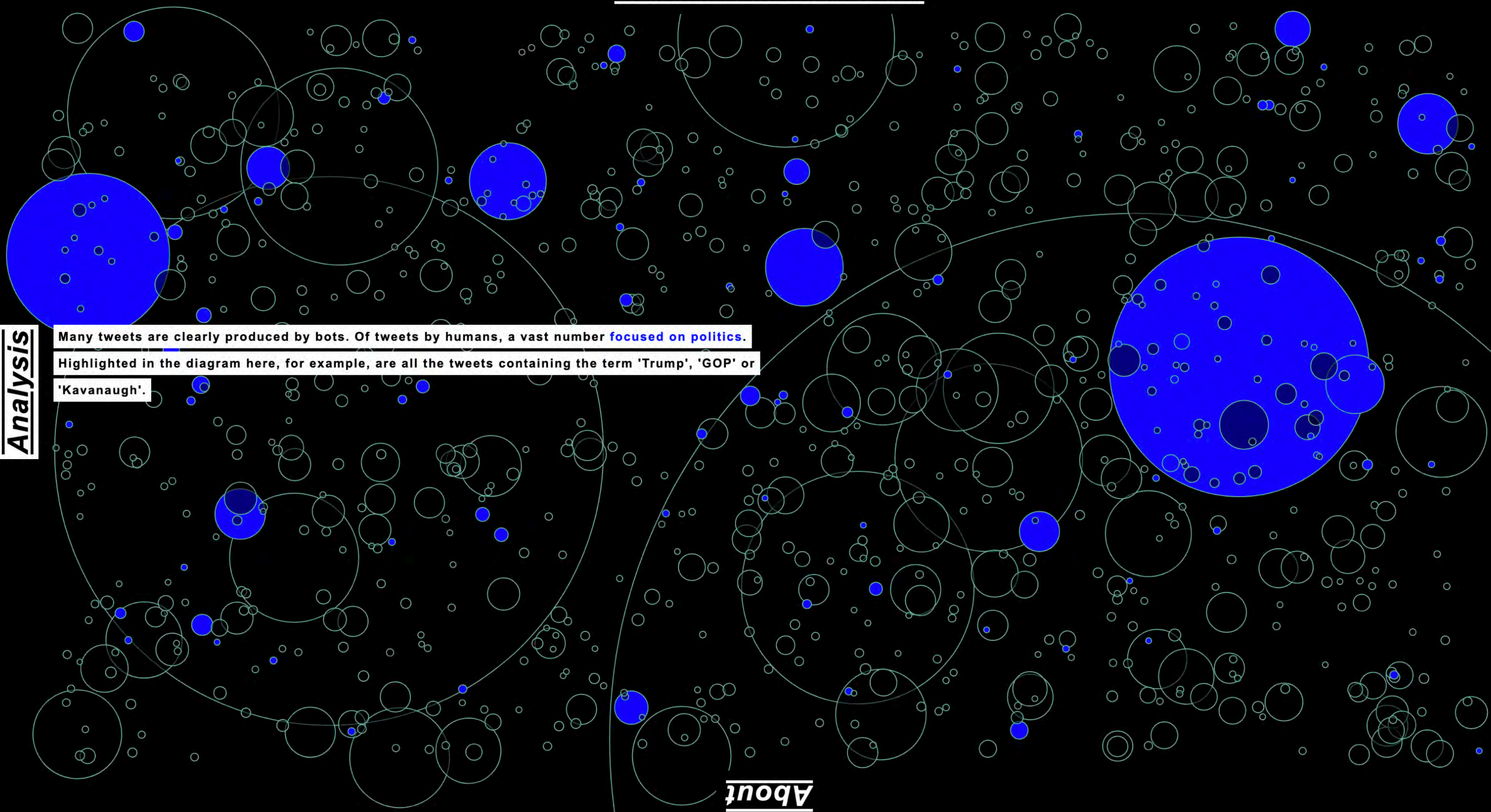
Similarly, 28 tweets are *temporarily unavailable*: Twitter closed the accounts, presumably in response to various violations of the company's terms of service.

Diagrams

About



#MeToo Anti-Network



Analysis

Many tweets are clearly produced by bots. Of tweets by humans, a vast number **focused on politics**. Highlighted in the diagram here, for example, are all the tweets containing the term 'Trump', 'GOP' or 'Kavanaugh'.

Diagrams

About

#MeToo Anti-Network

Analysis

The #MeToo movement has been understood as a social movement against sexual harassment and violence, activated by people making public allegations. But within the most shared tweets, **only nine** wrote about personal experiences of abuse or harm.

Diagrams

About



Add your Name or Initials This is tweet of 5973



[View on Twitter](#)

Likes: 0

Retweets: 0

Hashtags: [TheHandmaidsTale](#) [Resist](#) [IBelieveChristineBlaseyFord](#) [BelieveSurvivors](#)

Date: 2018-09-28 15:49:00+00:00

@MargaretAtwood Is this what you envisioned "The Time Before" looking like when #TheHandmaidsTale was published way back in 1984? Thank you for being a brilliant author. I've read your masterpiece three times. #Resist #IBelieveChristineBlaseyFord #BelieveSurvivors

Collect per Keyboard:
Left Arrow to collect: *allegations to visualize*
Right arrow to dismiss: *excluded tweets*
Up or Down to flag: *to discuss or not*

Collect Tweet

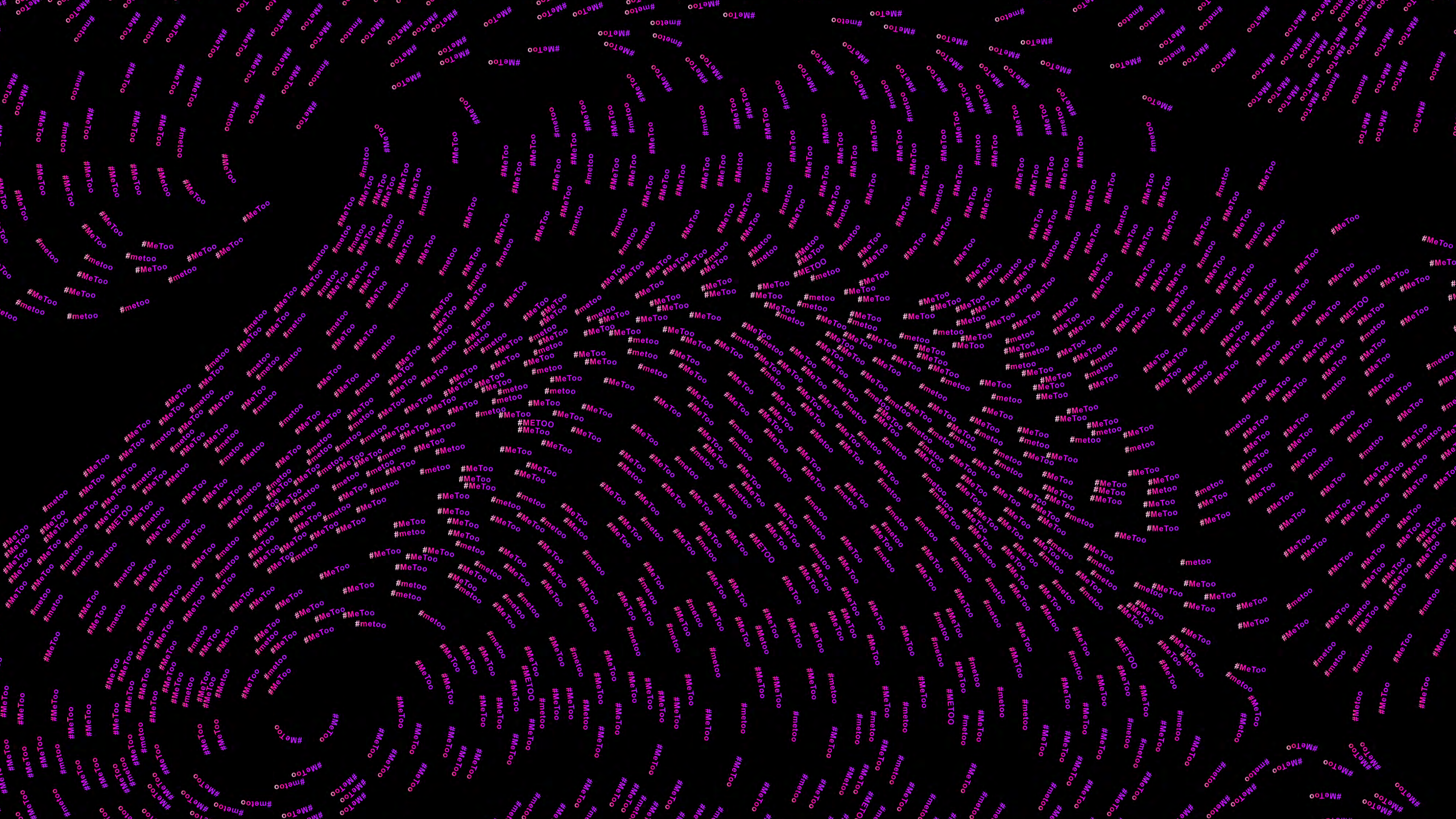
Dismiss Tweet

Flag Tweet

Comment

Save Dataset

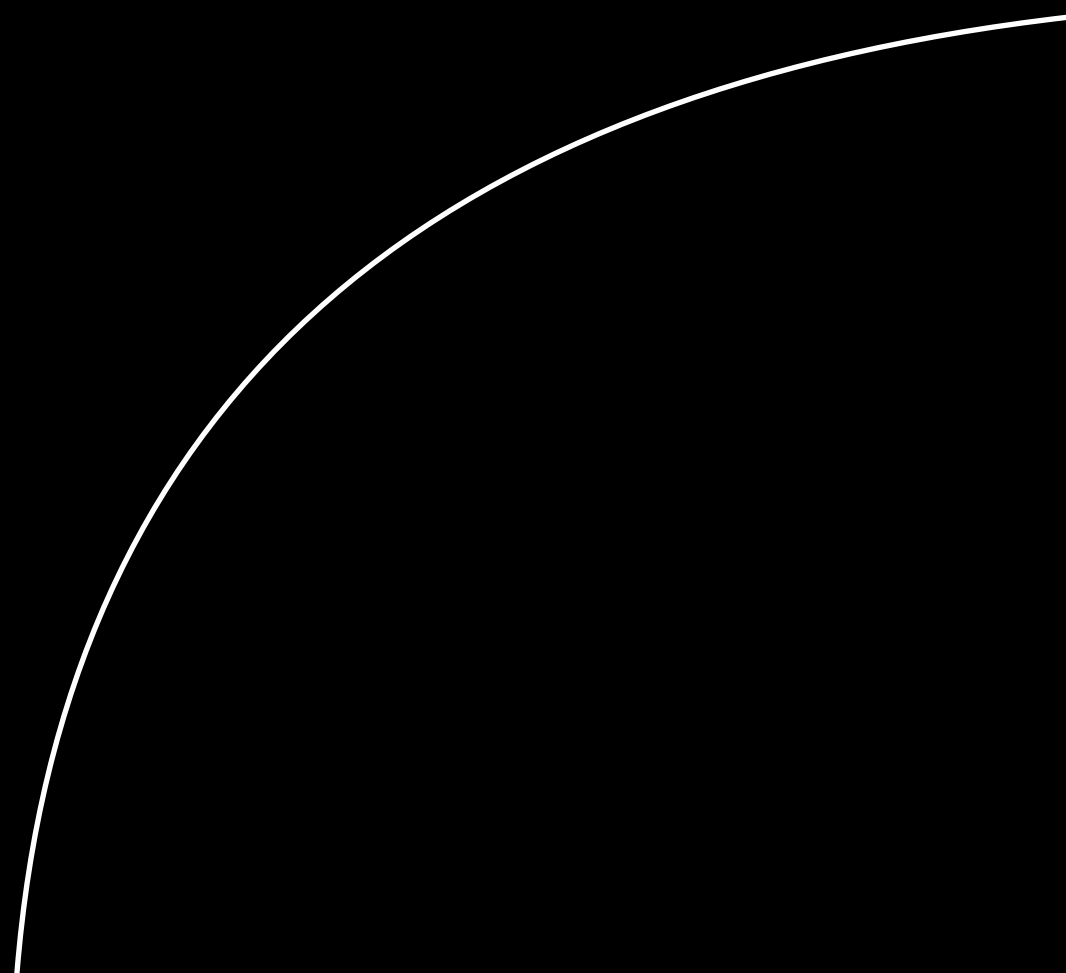
Datasets are automatically saved every 100 submissions and once all tweets are marked



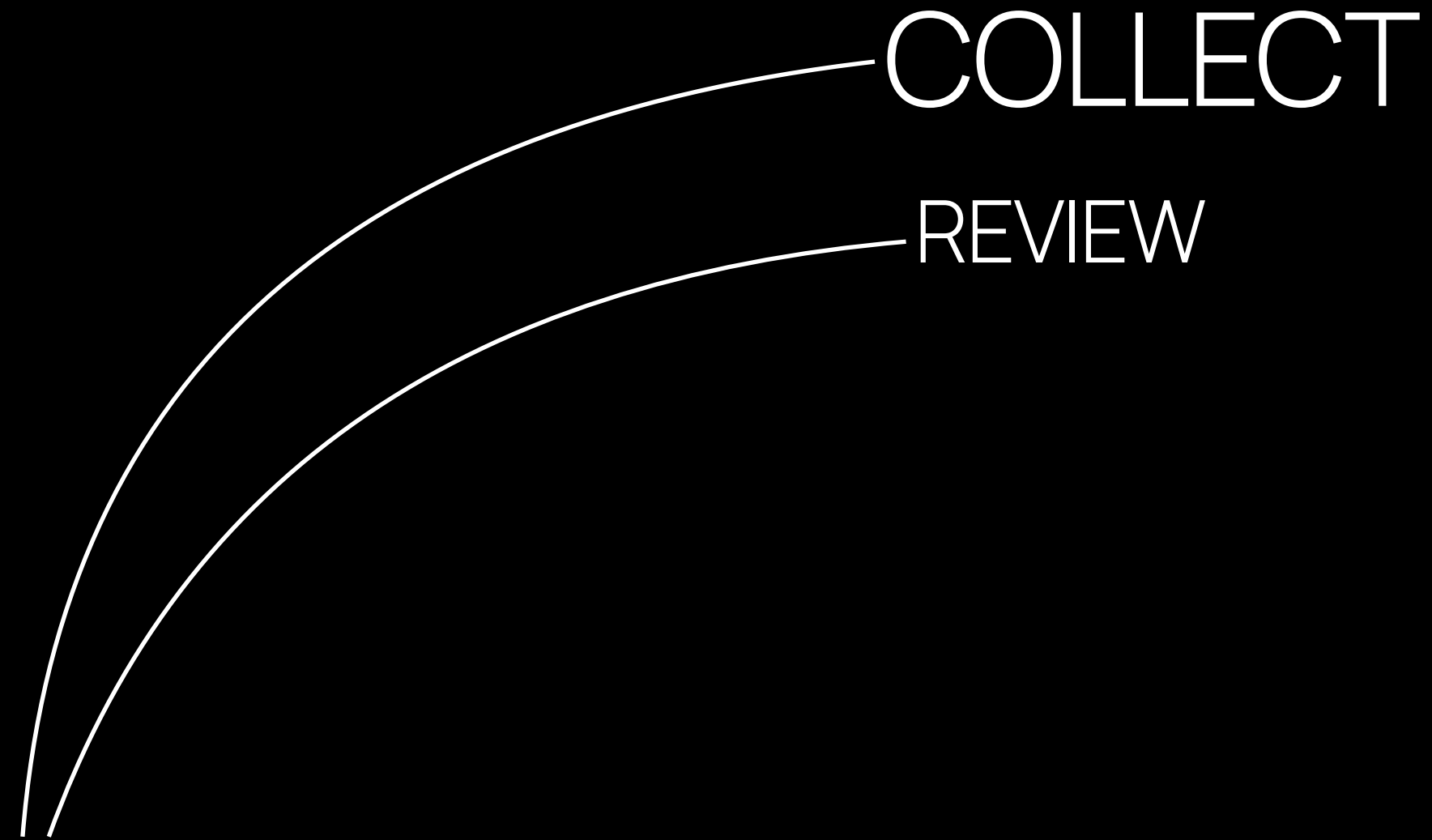
DATA ANALYSIS

COLLECT

DATA ANALYSIS



DATA ANALYSIS

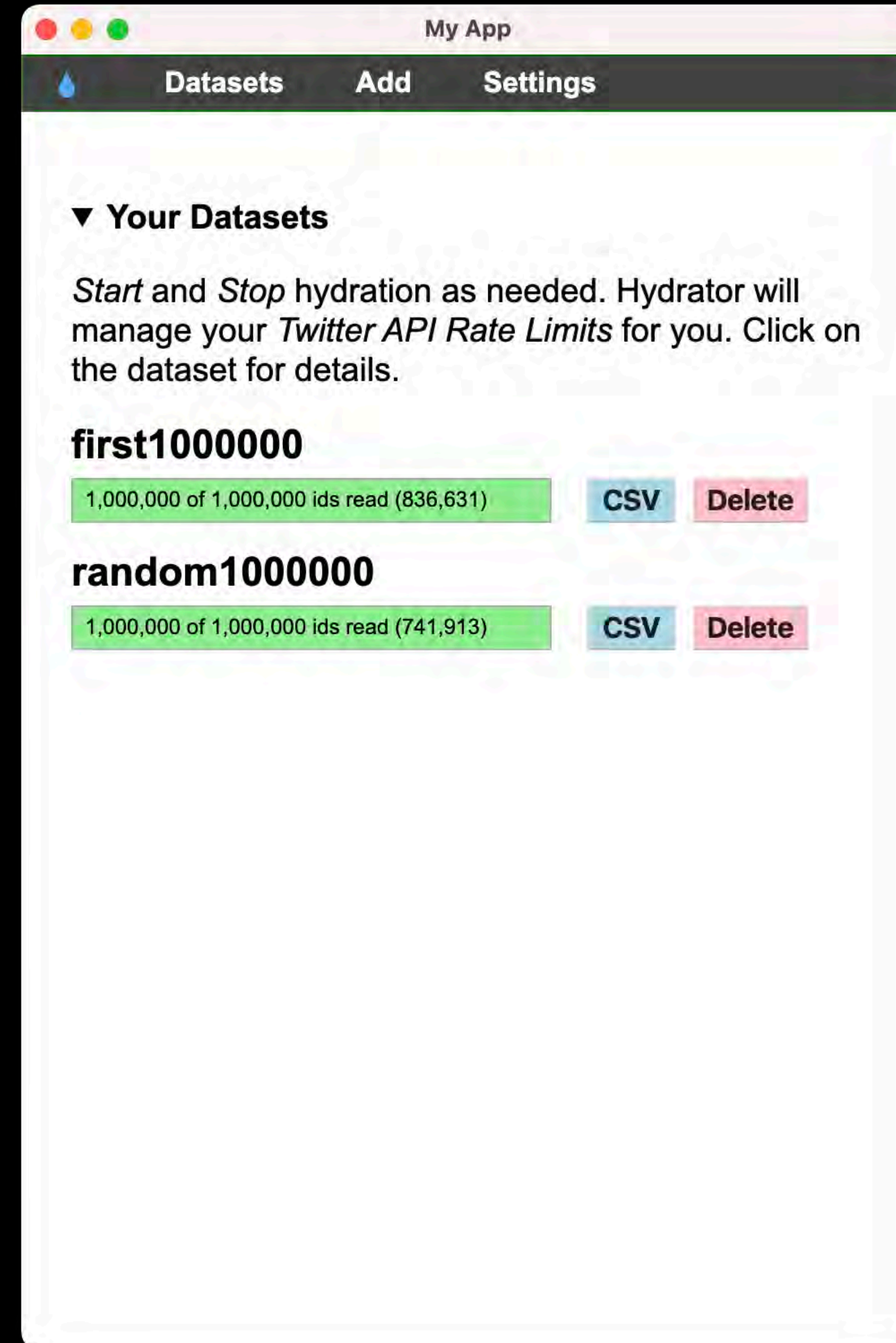


EXAMPLE COLLECT

metoo_project_full_dataset_01.txt Open with TextEdit

```
1074730892743069701
1074729303495995392
1074729194402254849
1074728730952642567
1074728729396592641
1074728714041208833
1074728619417710593
1074727805118750726
1074726201909014528
1074724533691695106
1074724337171787776
1074724134742040577
1074723904688668672
1074723877190856706
1074723743245713411
1074722830527295488
1074722263432396800
1074720113616666624
1074716543668371456
1074712411553366016
1074711785930964992
1074710959707455489
1074709763181678600
1074707845201977344
1074707472814882816
1074705906405765121
1074704682004738049
1074704441117274112
1074704110769897472
1074702770102517767
1074702753274912768
1074701931719901189
1074700952513536000
1074700727899979778
1074699807585918978
1074699388843409408
1074699255850430464
1074698774365257729
1074698585361371136
1074698127981072385
1074697594704683008
1074694219619553287
1074694156231036929
1074694050740002818
1074693696887631872
1074693400899792896
1074693096833671169
1074692240373661696
1074691630798524417
1074690248439939072
1074689495755300864
1074689467515133953
1074688259849158656
1074687117312356353
1074686176978706432
1074685712002367489
1074685548512636929
1074685519345446912
1074685225370832896
1074684840614580224
1074684086919131137
1074682871808446465
```

EXAMPLE TRANSFORM



```

1 coordinates,created_at,hashtags,media,urls,favorite_count,id,in_reply_to_screen_name,in_reply_to_status_id,in_reply_to_user_id,lang,place,possibly_sensitive,retweet_count,retweet_id,retweet_screen_name,source,text,tweet_url,user_created_at,user_screen_name,user_default_profile_image,user_description,user_favourites_count,user_followers_count,user_friends_count,user_listed_count,user_location,user_name,user_screen_name,user_statuses_count,user_time_zone,user_urls,user_verified
2 ,Mon Dec 17 16:46:43 +0000 2018,,0,1074707472814882816,,en,,32,1074488421811437568,ColorOfChange,"<a href='\"http://twitter.com/download/iphone\"' rel='\"nofollow\"'>Twitter for iPhone</a>","RT @ColorOfChange: .@rkelly's physical and psychological abuse of Black women and girls is indefensible. Sign the petition to demand one of...,https://twitter.com/JoanneNSmith/status/1074707472814882816,Thu Jan 26 04:38:27 +0000 2017,JoanneNSmith,false,"Healer who generates abundance, love & joy. She/her, my assignment Founder @GGENYC, co-founder @BlkGrfFreedom views & typos mine #BlackGirls2020 #WeGotUs 🍷",7284,1324,1106,32,"Brooklyn, NY",Joanne N. Smith,JoanneNSmith,1755,http://www.ggenyc.org,false
3 ,Mon Dec 17 16:11:24 +0000 2018,KatrinaKaif,,0,1074698585361371136,,en,,7,1074697594704683008,SpotboyE,"<a href='\"http://twitter.com\"' rel='\"nofollow\"'>Twitter Web Client</a>","RT @SpotboyE: Does anybody have an answer to #KatrinaKaif's pertinent question: Why are heroines ignored on stage platforms in comparison t...,https://twitter.com/skg_mne/status/1074698585361371136,Sat Nov 28 00:42:14 +0000 2015,skg_mne,false,"Sole Owner & Founder Chairman
4 7 Companies - 164 Divisions
5 SKG - 57 Div
6 SFZ - 13 Div
7 MBT - 57 Div
8 RFS - 2 Div
9 LMN - 16 Div
10 SKG 4 U - 14 Div
11 LCM - 5 Div",30691,949,4907,79,India,Kaushal Kamdar (( 7 Companies - 164 Divisions )),skg_mne,44999,https://www.facebook.com/kaushal.kamdar.skg.mbt.lmn.rfs.lcm,false
12 ,Mon Dec 17 16:34:40 +0000 2018,KatrinaKaif,,0,1074704441117274112,,en,,7,1074697594704683008,SpotboyE,"<a href='\"http://twitter.com/download/android\"' rel='\"nofollow\"'>Twitter for Android</a>","RT @SpotboyE: Does anybody have an answer to #KatrinaKaif's pertinent question: Why are heroines ignored on stage platforms in comparison t...,https://twitter.com/Sagarik66458431/status/1074704441117274112,Sun Jul 15 17:44:51 +0000 2018,Sagarik66458431,false,♥️Biggest fan girl of Katrina kaif♥️🥰🥰🥰 i love katrina kaif more than my self♥️,24368,648,115,0,"Assam,India ",Sagarika🌸🌸🌸,Sagarik66458431,18952,,false
13 ,Mon Dec 17 17:47:44 +0000 2018,Jesuits priests children churchtoo MeTooMovement MeToo Christians,,https://www.washingtonpost.com/religion/2018/12/17/jesuits-name-priests-credibly-accused-sexually-abusing-children-including-dc-area/,0,1074722830527295488,,en,,false,0,,,"<a href='\"http://twitter.com/download/android\"' rel='\"nofollow\"'>Twitter for Android</a>","#Jesuits name #priests credibly accused of sexually abusing children including in D.C. area
14 Sick of this crap. 🤢🤮
15
16 #children under attack for decades. 🙄🙄🙄🙄
17
18 #churchtoo
19 #MeTooMovement
20 #MeToo
21 #Christians
22
23 https://t.co/m36CGD4Znw",https://twitter.com/HillarySi2016/status/1074722830527295488,Sat May 28 05:44:54 +0000 2016,HillarySi2016,false,"#AmericaIsBack🇺🇸
24
25
26
27
28 2022 Democratic 🇺🇸 wave in D.C. and State Houses. #BuildBackBetter",52020,3295,4353,0,"California, USA",#POTUS46,HillarySi2016,86773,,false
29 ,Mon Dec 17 12:59:50 +0000 2018,metoomovement,,https://pushviews.com/blog/me-too-movement-in-a-recent-interview-with-the-new-york-times/,https://www.youtube.com/watch?v=-8fLZCEq3kU,0,1074650375863586817,,en,,false,1,1074385625028194304,PushViews,"<a href='\"http://twitter.com\"' rel='\"nofollow\"'>Twitter Web Client</a>","RT @PushViews: https://t.co/@paKky12VA
30 In a recent interview with The New York Times #metoomovement
31 https://t.co/mBIJI4Sfki",https://twitter.com/jasmine_clark2/status/1074650375863586817,Sat Oct 20 23:56:30 +0000 2018,jasmine_clark2,false,Support Humanity Fight against sexual harassment & abuse in our Workplace. Support #MeToo,3312,306,670,1,,Jasmine Clark,jasmine_clark2,2094,,false
32 ,Mon Dec 17 14:30:15 +0000 2018,MuteRKelly SurvivingRKelly,,0,1074673131825049600,,en,,33,1074396593305067520,OffMuteRKelly,"<a href='\"http://twitter.com/download/android\"' rel='\"nofollow\"'>Twitter for Android</a>","RT @OffMuteRKelly: #MuteRKelly - these brave survivors will not be silenced, and this movement will not be stopped.
33
34 #SurvivingRKelly http...",https://twitter.com/SuiteLadyOro/status/1074673131825049600,Sat Sep 17 01:51:03 +0000 2011,SuiteLadyOro,false,She/Her. Sister. Daughter. Lover. Friend. National co-founder of #MuteRKelly. WokeAsFk,37341,4075,410,18,"Atlanta, GA USA",Oronike Odeleye,SuiteLadyOro,9906,http://www.muterkelly.org,false
35 ,Mon Dec 17 16:07:28 +0000 2018,KatrinaKaif MeTooMovement MeToo,,https://www.spotboyE.com/bollywood/Bollywood-interviews/katrina-kaif-calls-out-why-are-female-actors-ignored-and-only-male-actors-given-importance-on-stage/5c17b636fed05320d6f24b25_53,1074697594704683008,,en,,false,7,,,"<a href='\"http://twitter.com\"' rel='\"nofollow\"'>Twitter Web Client</a>","Does anybody have an answer to #KatrinaKaif's pertinent question: Why are heroines ignored on stage platforms in comparison to their male counterparts? 🙄🔥
36
37 @iamvickeyleaks | @KatrinaKaifFB | @KatKaifDaily | @KatrinaKaifFanz | #MeTooMovement | #MeToo
38
39 https://t.co/RWzZ1F0v0H",https://twitter.com/SpotboyE/status/1074697594704683008,Tue Jul 01 06:53:24 +0000 2014,SpotboyE,false,"Hungry for Bollywood news? SpotboyE is your go-to guy for Sab Kuch Bollywood!
40
41 Facebook : https://t.co/XZQyuyBMvA
42 Instagram : https://t.co/Niv9zcarG9",5212,576043,678,129,Mumbai,SpotboyE,SpotboyE,82708,,https://www.spotboyE.com/,true
43 ,Mon Dec 17 15:38:16 +0000 2018,MissUniverse MissUniverse2018 Top5 MissUniverseTop5 MissUniverse2018Top5 MissUniverse2018Top5 MissUniverse2018Top5 MissVietnam,,0,1074690248439939072,,en,,1,1074491433929732096,ylwknitsweater,"<a href='\"http://twitter.com\"' rel='\"nofollow\"'>Twitter Web Client</a>","RT @ylwknitsweater: #MissUniverse #MissUniverse2018 #Top5 #MissUniverseTop5 #MissUniverse2018Top5 #MissUniverse2018Top5 #MissVietnam ""Do you think the #MeTooMove...",https://twitter.com/jasmine_clark2/status/1074690248439939072,Sat Oct 20 23:56:30 +0000 2018,jasmine_clark2,false,Support Humanity Fight against sexual harassment & abuse in our Workplace. Support #MeToo,3312,306,670,1,,Jasmine Clark,jasmine_clark2,2094,,false
44 ,Mon Dec 17 13:56:55 +0000 2018,enough nomore,,http://www.mindfultshirt.com,0,1074664742021664773,,en,,false,2,1074549186962575360,MindfulTShirt,"<a href='\"http://twitter.com/download/iphone\"' rel='\"nofollow\"'>Twitter for iPhone</a>","RT @MindfulTShirt: In like a Lioness 🦁 out like a Lamb. The Women's March..Get ready 🙌🙌🙌🙌 https://t.co/yWqeu2fi20 #enough #nomore #nomore... https://twitter.com/nicochase/status/1074664742021664773,Sun Oct 03 19:36:29 +0000 2010,nicochase,true,981,13,178,0,,C.R.E.B.,nicochase,1011,,false
45 ,Mon Dec 17 16:16:15 +0000 2018,,0,1074699807585918978,,en,,46,1073062900334379008,barkhatrehan16,"<a href='\"https://mobile.twitter.com\"' rel='\"nofollow\"'>Twitter Web App</a>","RT @trehan_barkha: Request all men to understand one thing clearly as long they will keep supporting false allegations the problem will on...,https://twitter.com/subhrat7/status/1074699807585918978,Tue Oct 09 14:51:36 +0000 2018,subhrat7,false,,1601,12,13,0,India,subhrat,subhrat7,2060,,false
46 ,Mon Dec 17 15:43:46 +0000 2018,MeToo MeTooIndia MeTooLiars MeToo4Publicity Feminazis,,0,1074691630798524417,,en,,24,1070744122795806720,Misandry_Kills,"<a href='\"http://twitter.com/download/android\"' rel='\"nofollow\"'>Twitter for Android</a>","RT @Misandry_Kills: #MeToo
47
48 #MeTooIndia
49
50 #MeTooLiars
51
52 #MeToo4Publicity
53
54

```


DATA ANALYSIS



COLLECT

REVIEW

CLEAN

FILTER

TRANSFORM

EXAMPLE CLEAN FILTER

The screenshot shows a Jupyter Notebook interface with the following content:

```
In [1]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [2]: df = pd.read_csv("/Users/kimalbrecht/Documents/Projects/metalab/18-metoo/01-data-collection/
```

```
In [3]: data_top = df.head()

data_top
```

Out[3]:

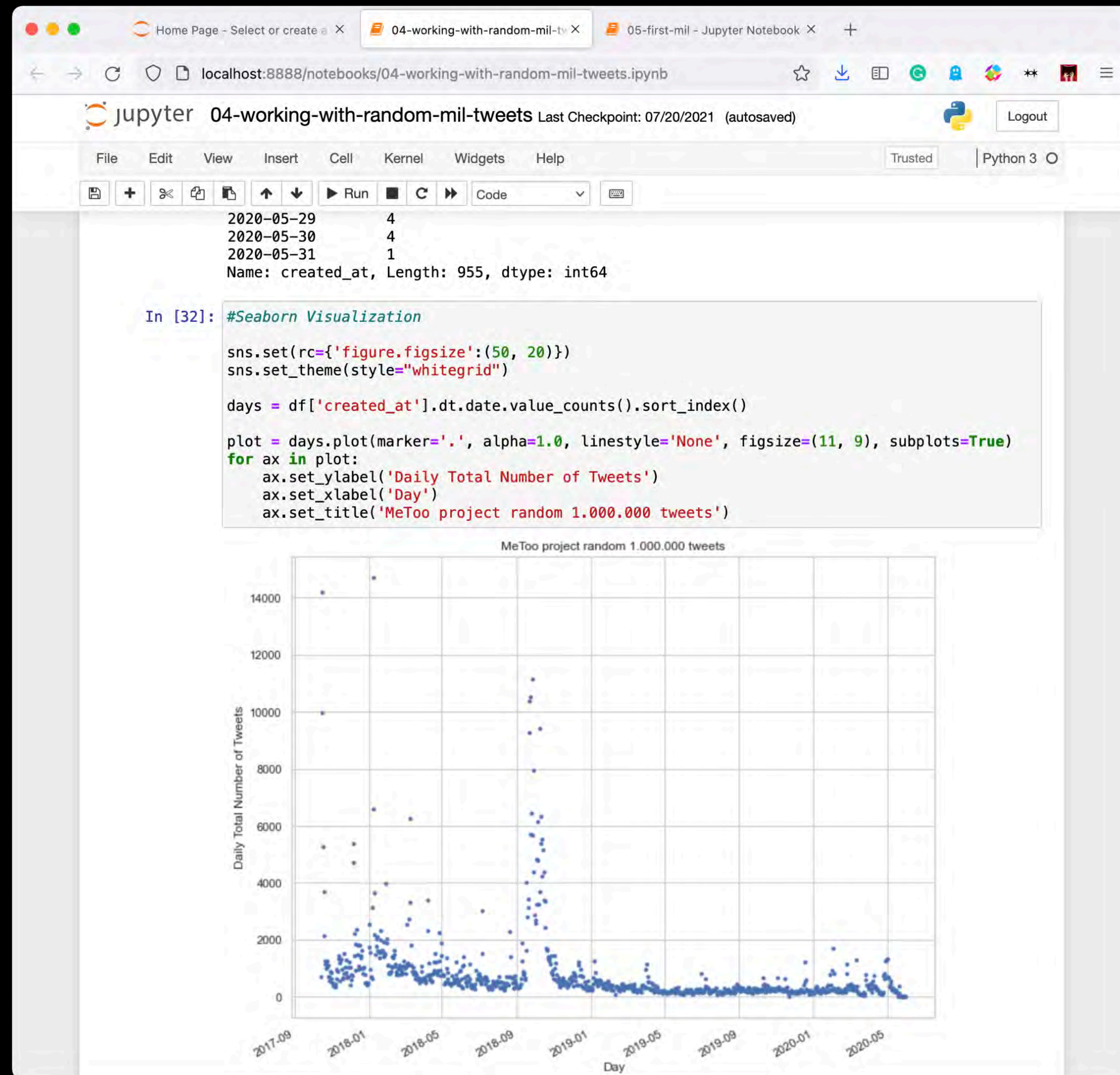
	coordinates	created_at	hashtags	media	urls	favorite_count	id	in_reply_to_screen_na
0	NaN	Sun Oct 15 01:51:41 +0000 2017	keephammering IWILL	NaN	NaN	0	919380224042659840	NaN
1	NaN	Sun Oct 15 03:20:59 +0000 2017	MidnightRunners Metoo reuped	https://twitter.com /ohudushi/status /9193309253...	NaN	0	919402699078160384	NaN
2	NaN	Sun Oct 15 03:14:59 +0000 2017	MidnightRunners Metoo reuped	https://twitter.com /ohudushi/status /9193309253...	NaN	0	919401189061533696	NaN
3	NaN	Sun Oct 15 01:38:20 +0000 2017	NaN	NaN	NaN	0	919376864627515392	NaN
4	NaN	Sun Oct 15 02:31:20 +0000 2017	NaN	NaN	NaN	0	919390204066172929	NaN

5 rows x 34 columns

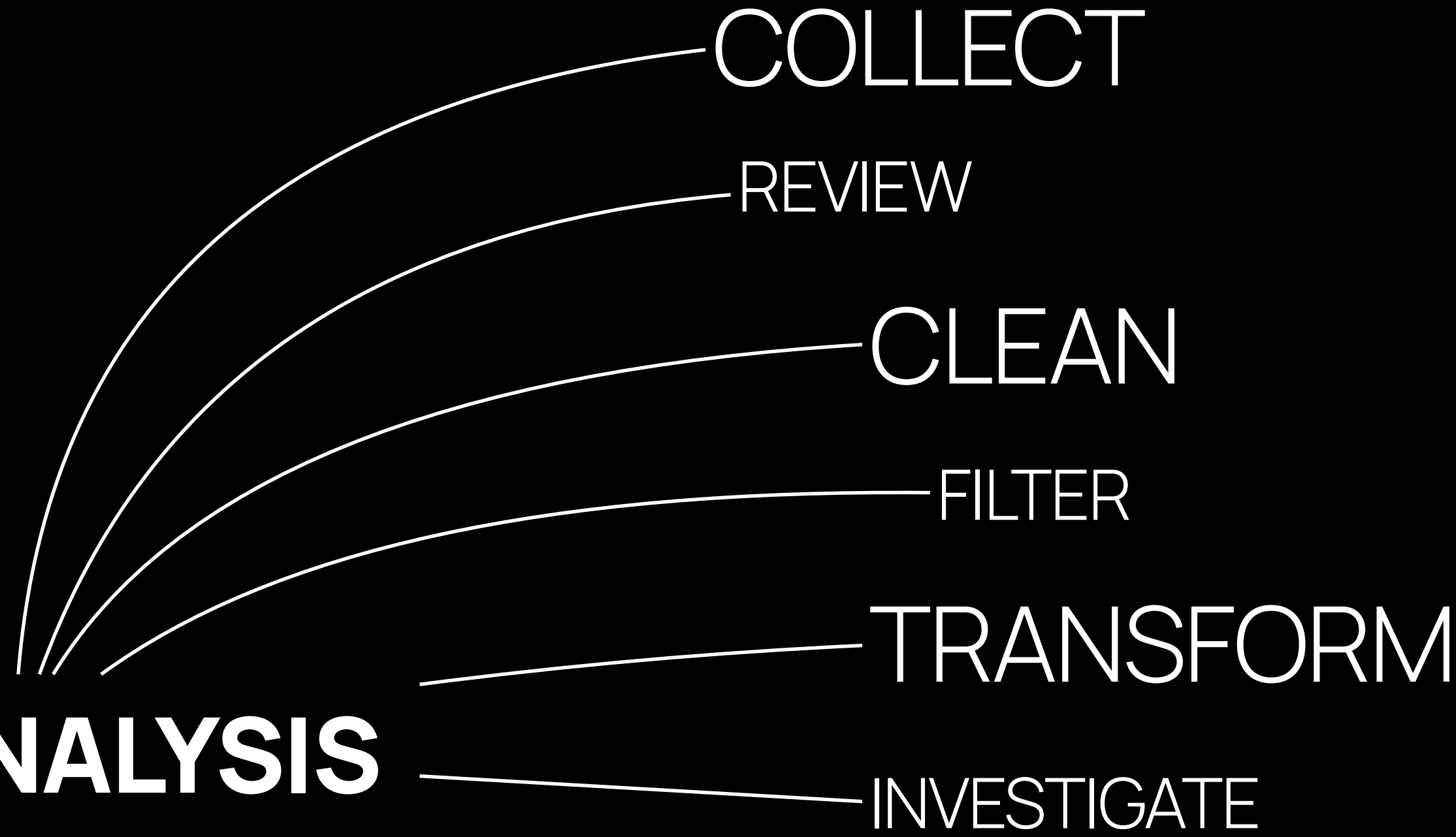
```
In [40]: for col in df.columns:
print(col)

coordinates
created_at
hashtags
media
urls
```

EXAMPLE TRANSFORM INVESTIGATE



DATA ANALYSIS



EXAMPLE ANALYSIS INTERACTION

metalab.kimalbrecht.com/18-metoo X +

← → ↻ 🔒 https://metalab.kimalbrecht.com/18-metoo/05-tweet-analysis-tool/ ☆ ⬇ 📄 🌐 🗺️ 🌈 ** 📺 ☰

Add your Name or Initials This is tweet of 5973

[View on Twitter](#)

Likes: 0

Retweets: 0

Hashtags: TheHandmaidsTale Resist IBelieveChristineBlaseyFord BelieveSurvivors

Date: 2018-09-28 15:49:00+00:00

@MargaretAtwood Is this what you envisioned "The Time Before" looking like when #TheHandmaidsTale was published way back in 1984? Thank you for being a brilliant author. I've read your masterpiece three times. #Resist #IBelieveChristineBlaseyFord #BelieveSurvivors

Collect per Keyboard:
Left Arrow to collect: *allegations to visualize*
Right arrow to dismiss: *excluded tweets*
Up or Down to flag: *to discuss or not*

Collect Tweet

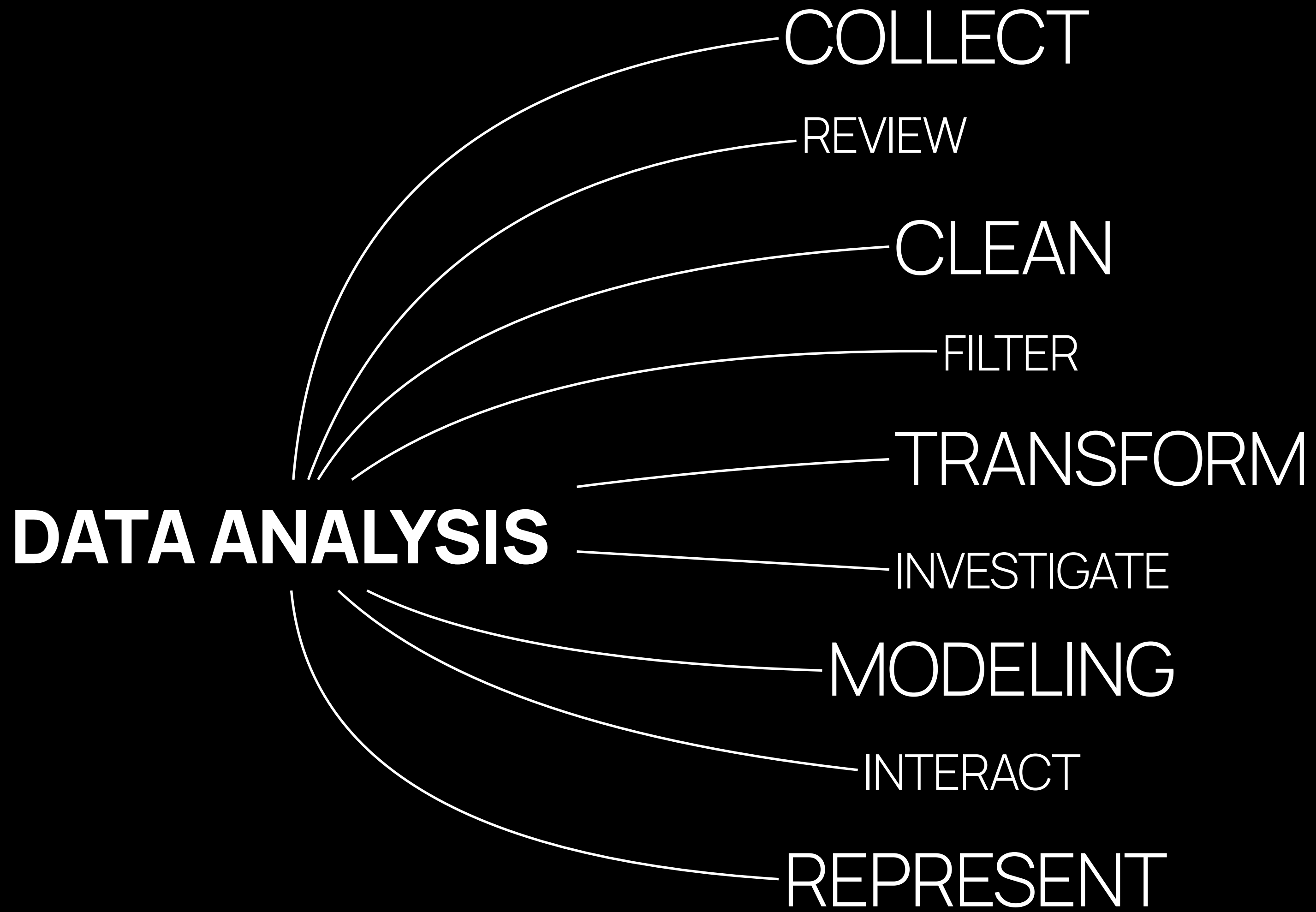
Dismiss Tweet

Flag Tweet

Comment

Save Dataset

Datasets are automatically saved every 100 submissions and once all tweets are marked



DATA ANALYSIS

COLLECT

REVIEW

CLEAN

FILTER

TRANSFORM

INVESTIGATE

MODELING

INTERACT

REPRESENT

"DIGITAL" HUMANITIES

NATURAL SCIENCES

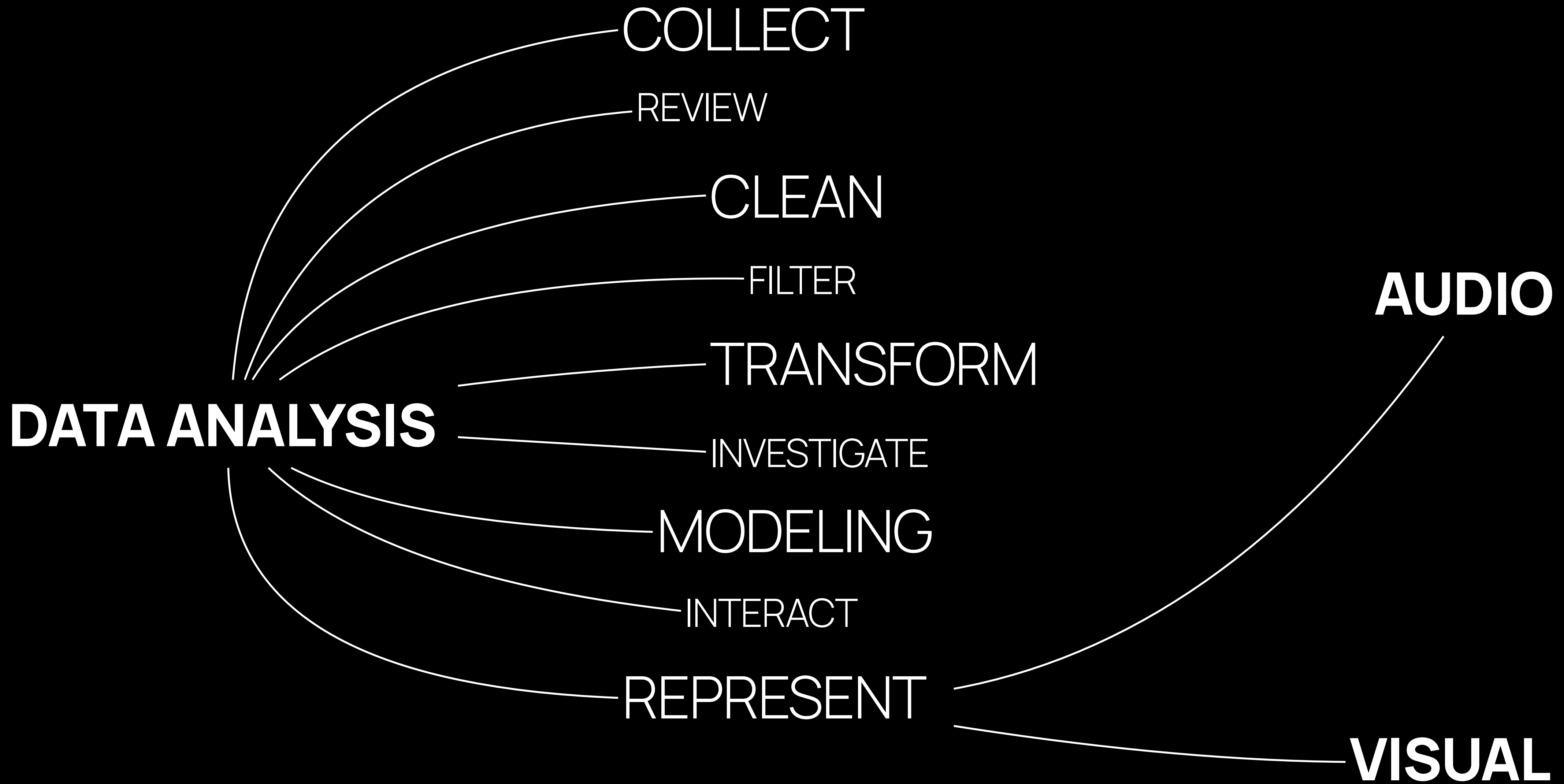
SOCIAL SCIENCE

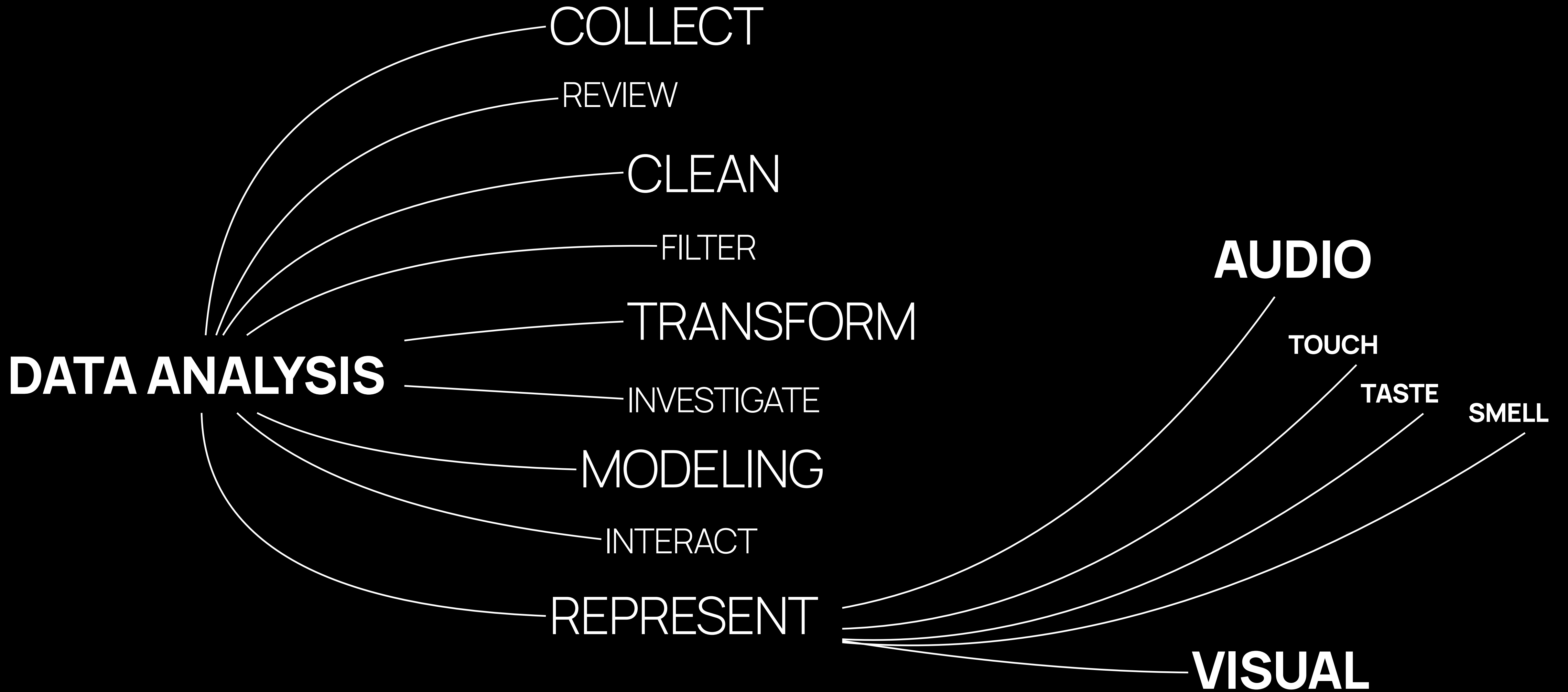
ECONOMY

JOURNALISM

DESIGN

ART







- FOLDERS
- 18-metoo
 - 01-data-collection
 - 02-readings
 - 03-perlin-text-vis
 - 04-perlin-layout-explorations
 - 05-tweet-analysis-tool
 - 06-selected-tweets
 - 07-tweet-analysis-outcomes
 - 08-text-on-canvas
 - 09-text-on-svg
 - 10-project-outcome-collection
 - 11-website
 - 12-data-analysis
 - 13-vis-remake
 - 14-layout-variations
 - 15-website
 - 16-zoom-site
 - 17-analysis-integration
 - 18-loading-gif
 - 19-social-media-content
 - 20-page-fin
 - css
 - data
 - img
 - js
 - analysis.js
 - d3.v6.min.js
 - interface.js
 - noframework.waypoints.min.js
 - vis.js
 - .index.html.icloud
 - 21-media-files
 - 22-video-export
 - 23-print-export
 - 24-offline-version

```
119
120 let enterCanvasSVGCircles = () =>{
121
122     var circles = svg.selectAll(".tweet")
123         .data(data);
124
125     circles.exit().remove();
126
127     circles.transition()
128         .delay( (d,i) => 10*i )
129         .duration(10)
130         .attr("r", function (d) { return 2; } )
131         .attr("cx", function (d) { return xScale(d.x); } )
132         .attr("cy", function (d) { return yScale(d.y); } )
133         .style("fill", "none")
134         .style("stroke", "#69b3a2");
135
136     circles
137         .enter()
138         .append("circle")
139         .attr("class", "tweet")
140         .attr("cx", function (d) { return xScale(d.x); } )
141         .attr("cy", function (d) { return yScale(d.y); } )
142         .style("fill", "rgba(0,0,0,.5)")
143         .style("stroke", "#69b3a2")
144         .attr("r", 0)
145         .on("mouseover", function(d) {
146             mouseoverEvent(d)
147         })
148         .on("mouseout", function(d) {
149             mouseoutEvent(d)
150         })
151         .on("click", function(d) {
152             mouseClickedEvent(d)
153         });
154
155     circles
156         .transition()
157         .delay( (d,i) => 10*i )
158         .duration(10)
159         .attr("r", function (d) { return 2; } );
160
161     context.clearRect(0, 0, width, height);
162     context.fillStyle = 'none';
163     context.lineWidth = 1;
164     context.strokeStyle = '#69b3a2';
165
166     var circleCount = 0;
167
168     drawCanvasCircles = setInterval(function(){
169
170         for (var i = 50 - 1; i >= 0; i--) {
171             context.beginPath();
172             context.arc(Math.random()*width, Math.random()*height, Math.round(Math.random()*2), 0, 2 * Math.PI);
173             context.closePath();
174             context.fill();
175             context.stroke();
176         }
177
178         circleCount += 1;
179
180         if (circleCount > 500) {
181             clearInterval(drawCanvasCircles);
182         }
183     }, 0);
184
185 }
186
187 function mouseoverEvent(data) {
188     data.explicitOriginalTarget.style.stroke = "#ffffff";
189 }
190
191 function mouseoutEvent(data) {
192     svg.selectAll(".tweet").style("stroke", "#69b3a2")
193 }
```



EXAMPLE
REPRESENT

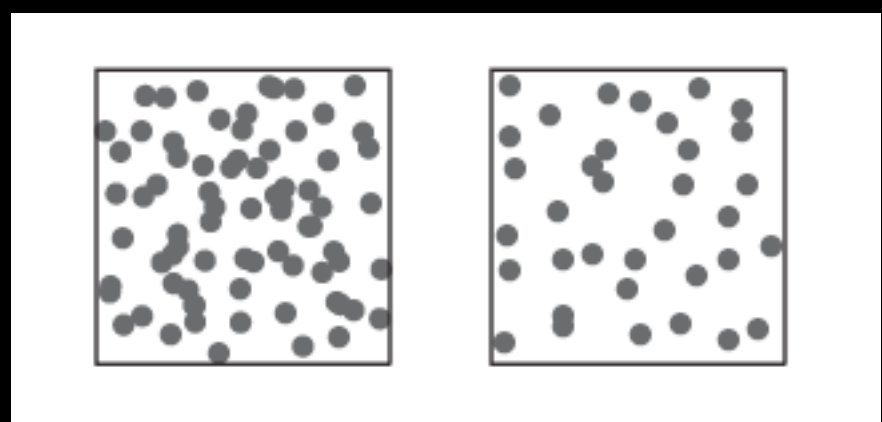
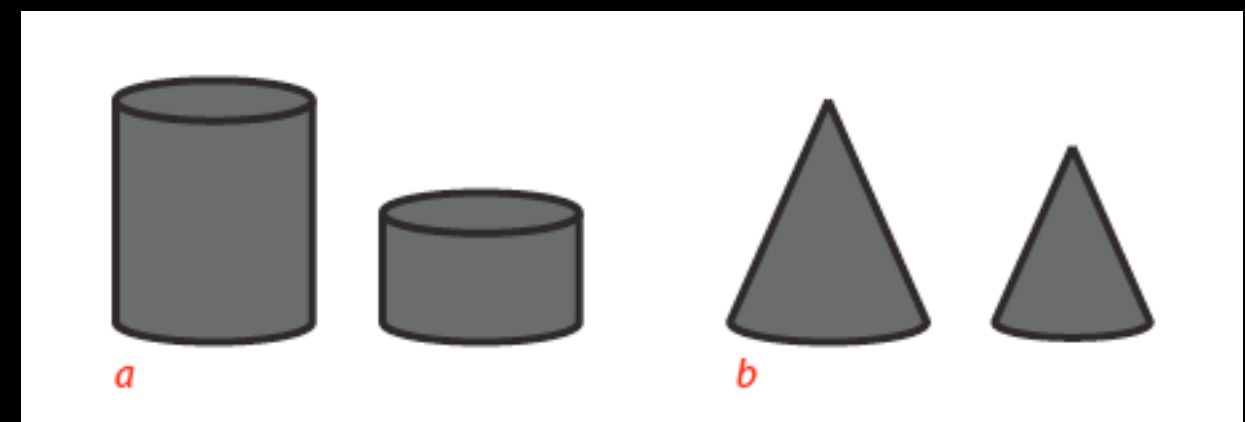
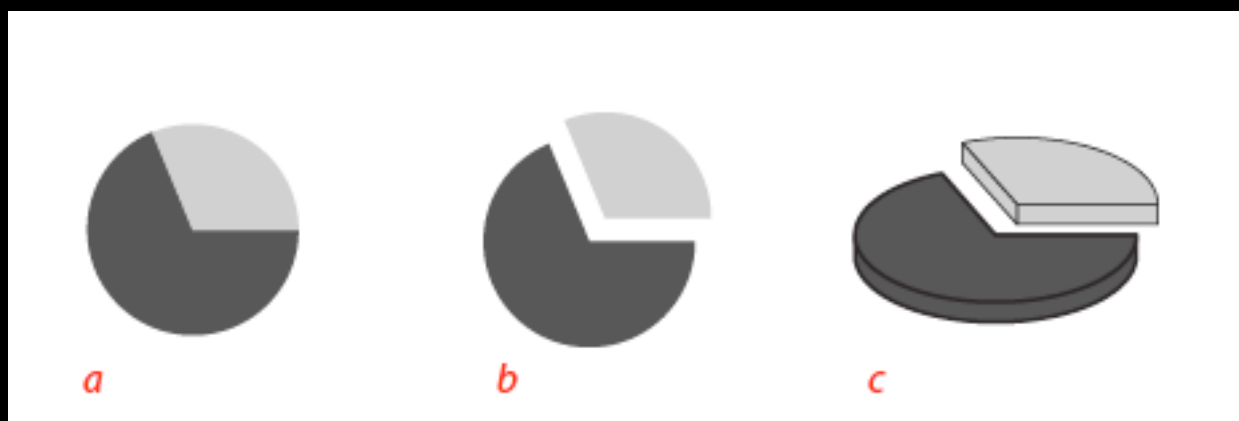
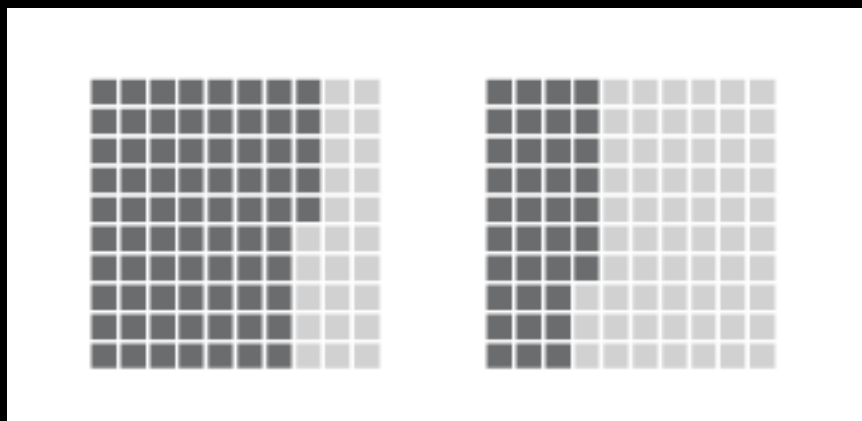
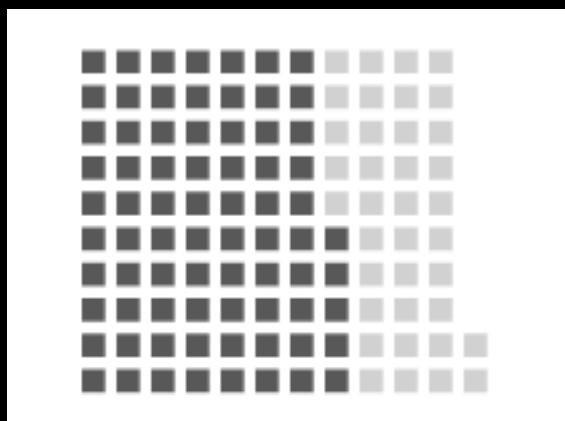
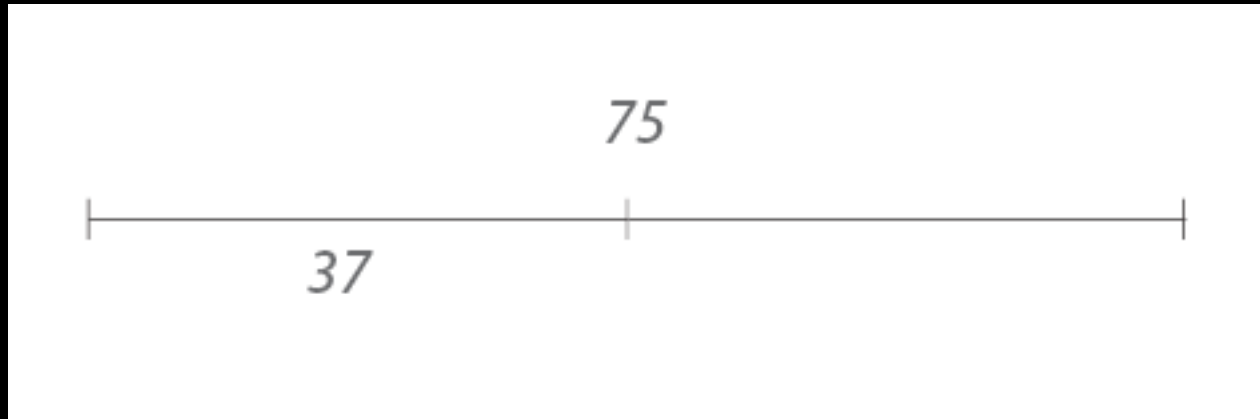
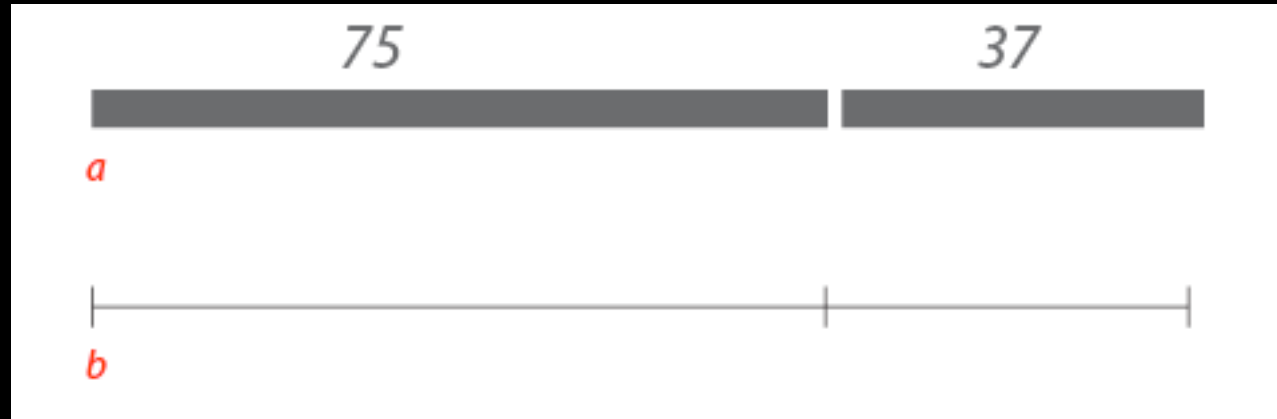
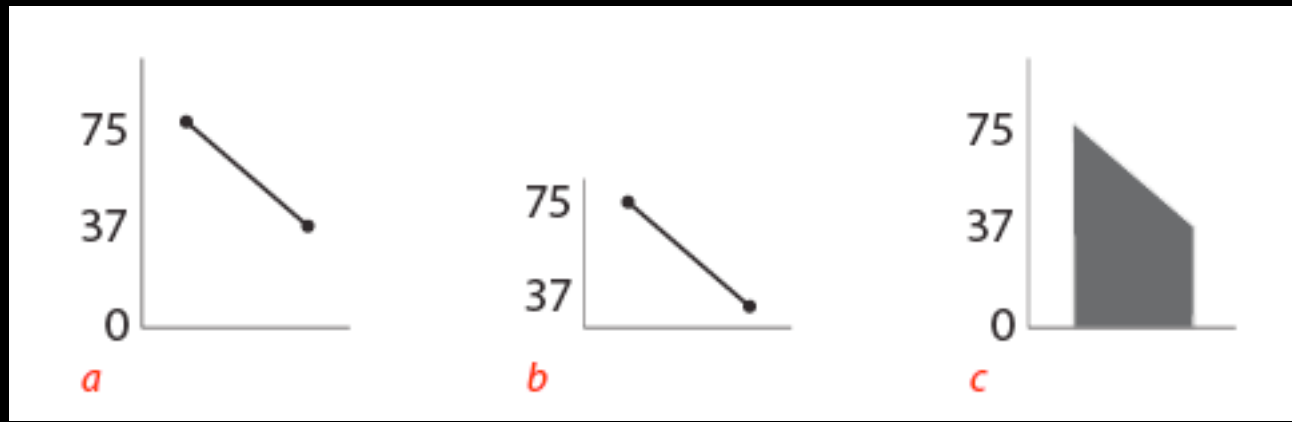
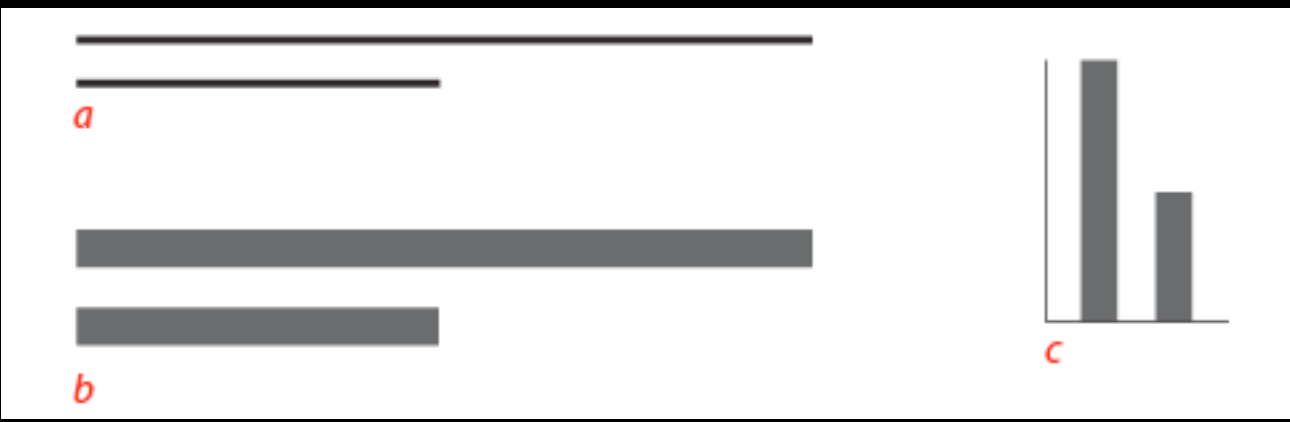
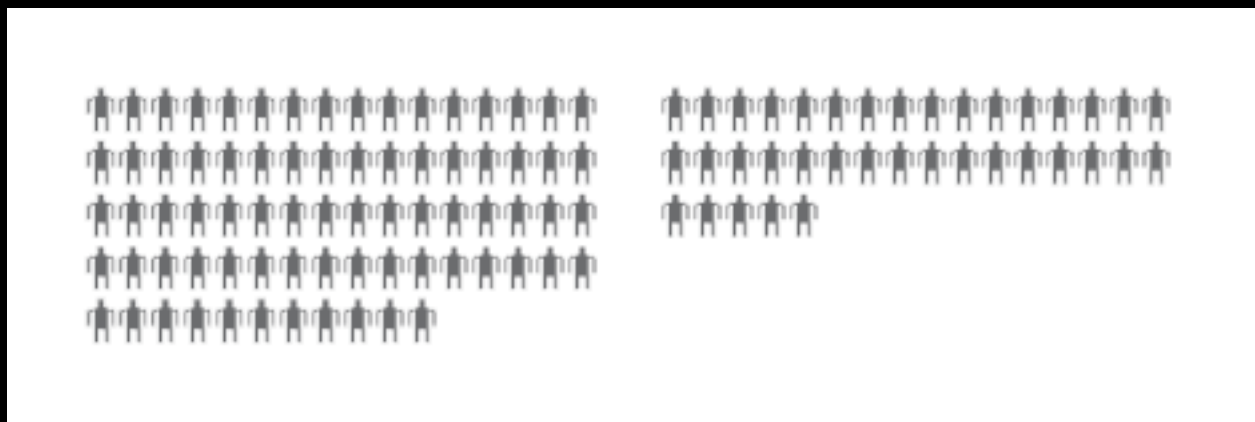
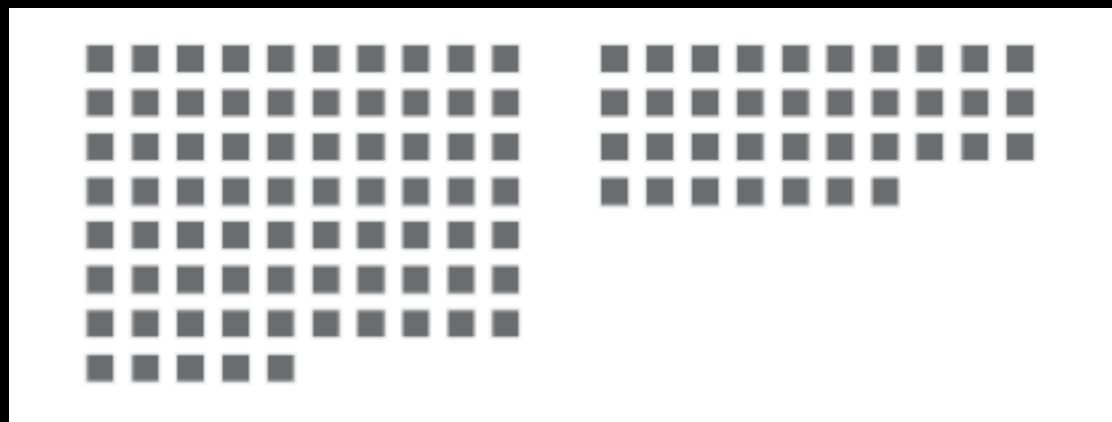
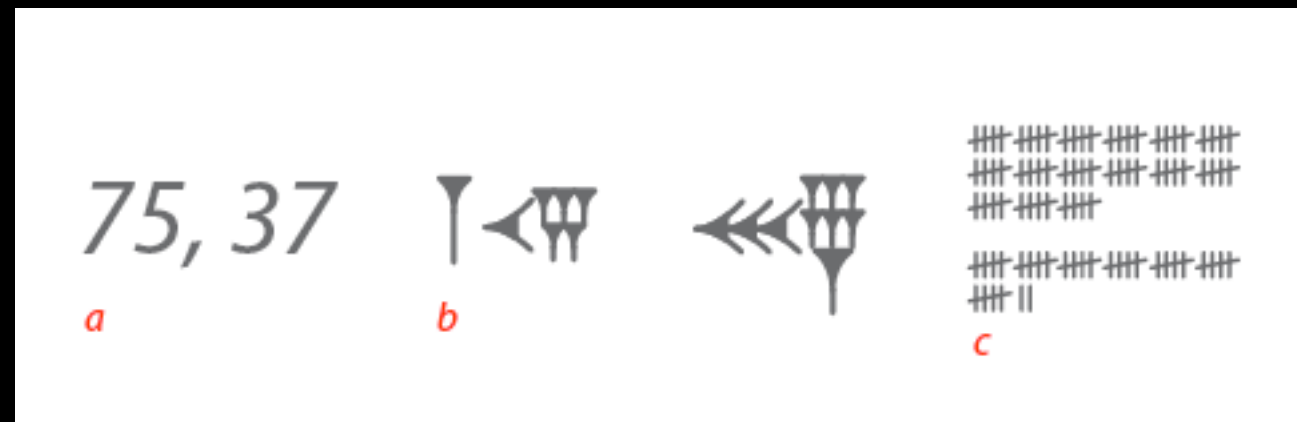


VISUALIZATION ("PICTORIALIZATION")

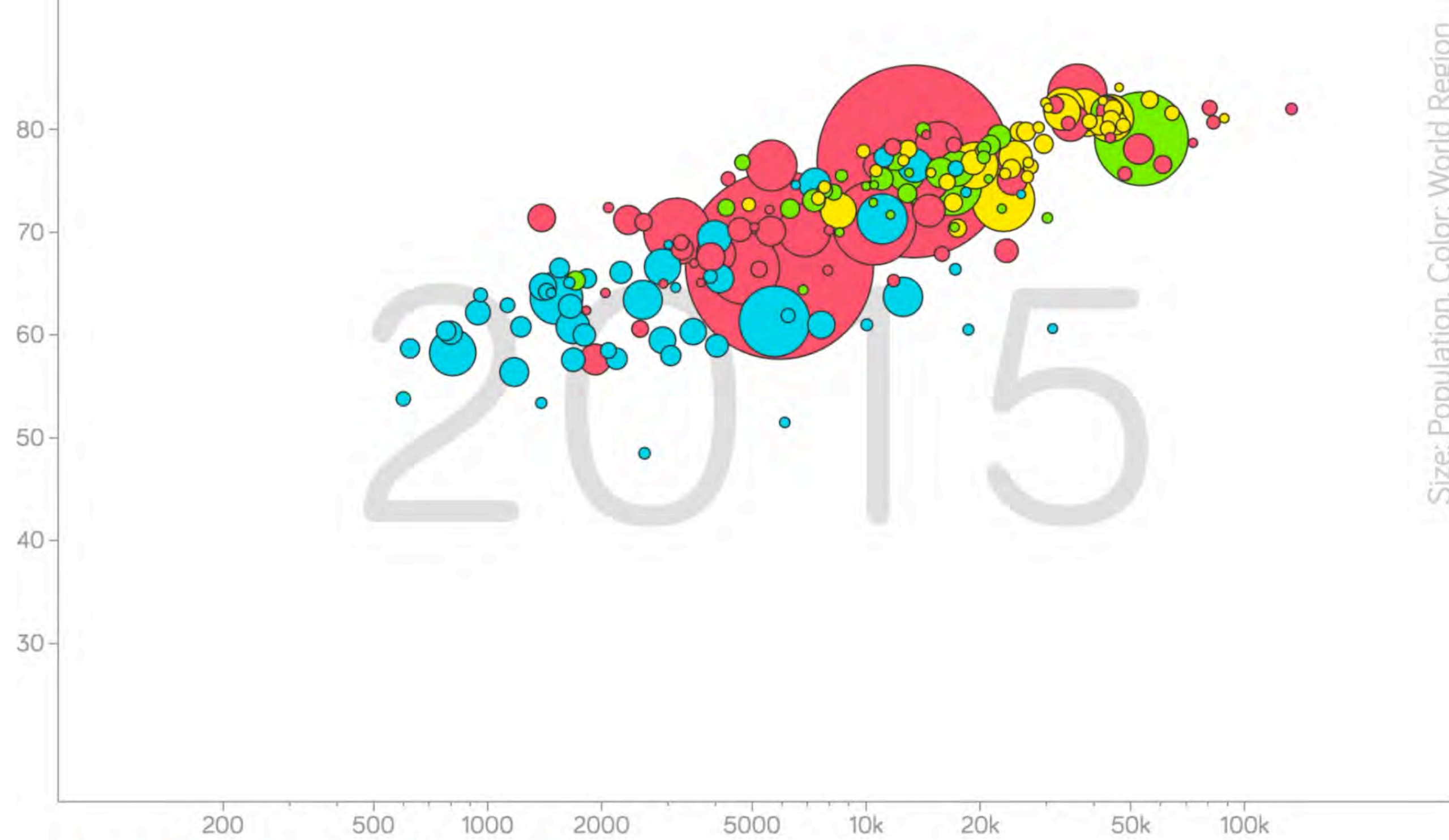
Visualizes two numbers:

75 and 37

VISUALIZATION ("PICTORIALIZATION")



Life expectancy, years ?



Income per person, \$/year (GDP/capita) ?

Size: Population, Color: World Region

TOOLS

Web Apps

- RAW Graphs: [<https://www.rawgraphs.io/>]
- Data Wrapper: [<https://www.datawrapper.de/>]

Software

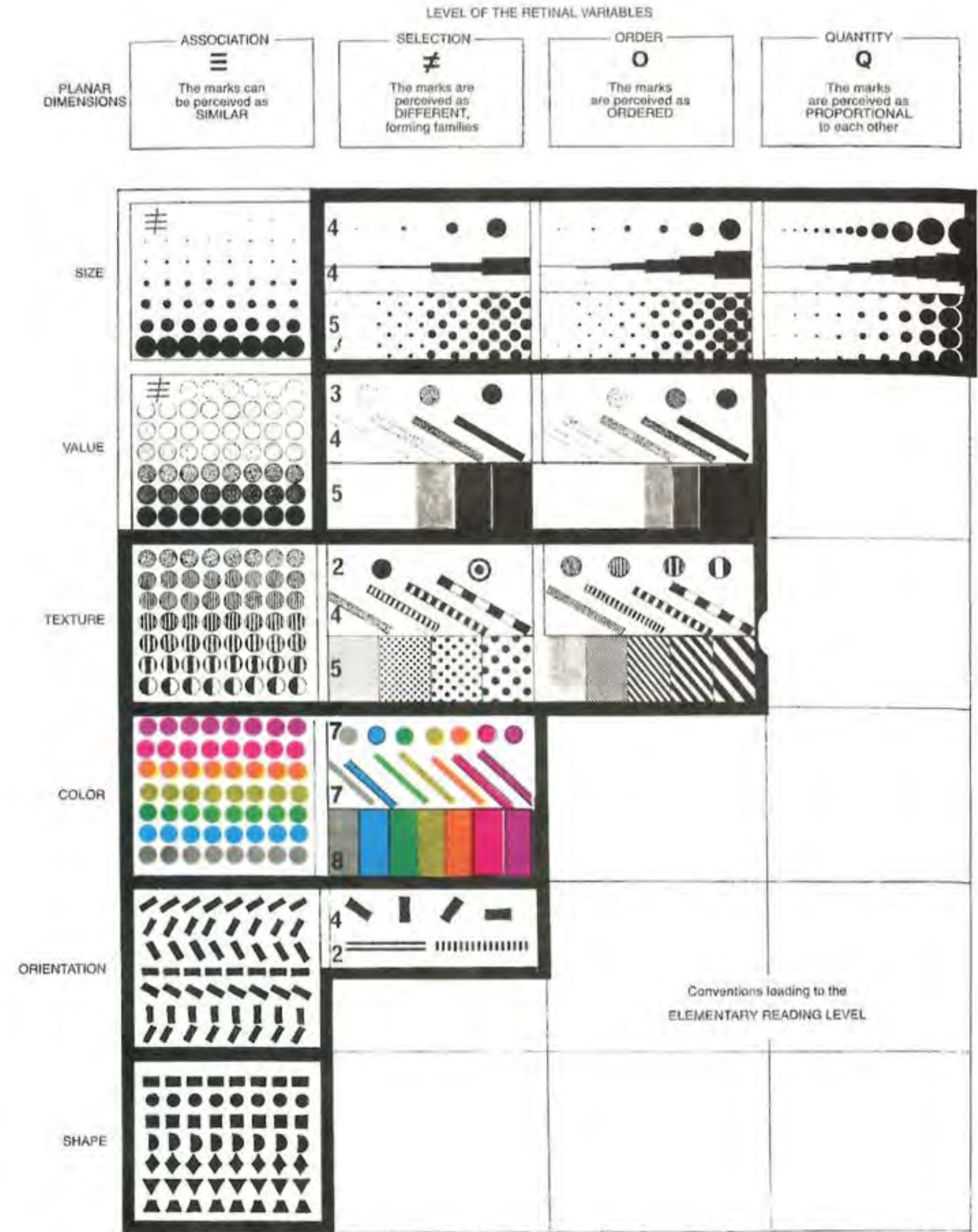
- Tableau: [<https://www.tableau.com/>]
- Gephi: [<https://gephi.org/>]

Code

- D3.js: [<https://d3js.org/>]
- Sigma.js: [<https://www.sigmapjs.org/>]
- Three.js: [<https://threejs.org/>]

Data Processing

- OpenRefine: [<https://openrefine.org/>]
- iPython Notebooks (Pandas etc.): [<https://pandas.pydata.org/>]



Bertin, J. & Berg, W. J.
(2011). *Semiology of Graphics*.
Esri Press.



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