

Chen and Ash

Final Version of Figures

Nov 12th 2018

This markdown is for Chen and Ash figures.

Chen and Ash 1

K-means clustering with outlier detection

Beginning k-means-- clustering

.....

Clustering complete in 18 iterations.

k = 13 l = 200 Cluster sizes: 116 74 65 83 84 75 25 56 65 25 46 1
(between cluster sum sqr / total sum sqr = 96.39815 %)

Centroids:

	x	y
[1,]	-5.392229	-23.39272926
[2,]	-17.972369	-4.18367393
[3,]	20.382796	-0.69052886
[4,]	4.367242	-0.68602732
[5,]	-27.217497	0.07446835
[6,]	-3.059969	16.56454400
[7,]	29.261944	-10.07319936
[8,]	13.003296	10.55716803
[9,]	13.919939	-13.28698944
[10,]	-30.140300	38.27273608
[11,]	21.416270	-23.49129263
[12,]	4.467816	27.42963501
[13,]	12.384998	-25.99616046

Outliers:

A tibble: 200 x 2

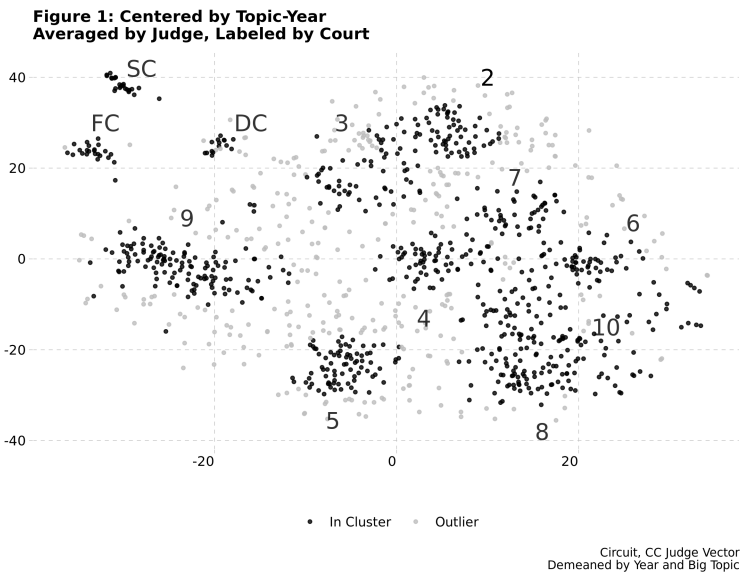
	x	y
	<dbl>	<dbl>
1	-20.3	22.8
2	-23.4	-24.0
3	-20.2	23.4
4	-19.4	24.3
5	-19.8	24.0
6	-30.9	17.3
7	-20.8	23.3
8	-20.3	23.7
9	-18.7	25.0
10	-21.0	23.3

```
# ... with 190 more rows
```

```
Available components:
```

[1]	"k"	"l"	"C"
[4]	"C_sizes"	"C_ss"	"L"
[7]	"L_dist_sqr"	"L_index"	"XC_dist_sqr_assign"
[10]	"within_ss"	"between_ss"	"tot_ss"
[13]	"iterations"		

finished computing clusters (ignore R output)

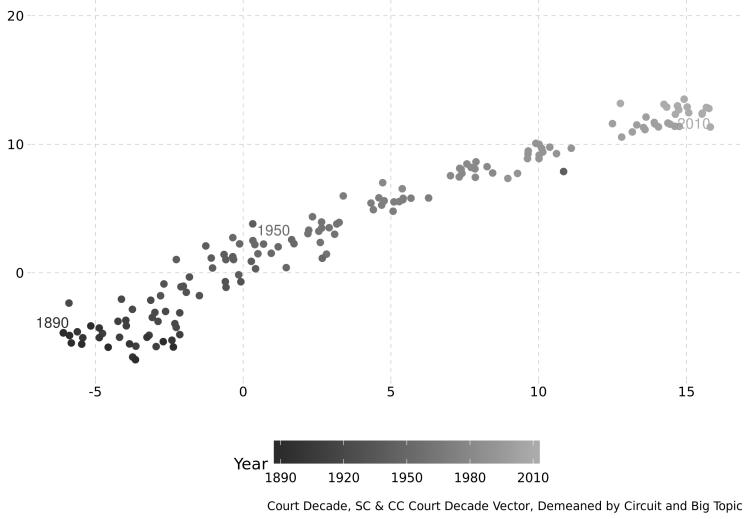


Chen and Ash 2

- [1] 1980
- [1] 1990
- [1] 2000
- [1] 1970
- [1] 2010
- [1] 1960
- [1] 1920
- [1] 1910
- [1] 1930
- [1] 1900
- [1] 1950
- [1] 1940
- [1] 1890

Figure 2.

Centered by Court Topic, Averaged by Court-Year, Labeled by Decade



Chen and Ash 3

Figure 3.

Centered by Judge-Year, Averaged by Topic-Year, Labeled by Topic

