

Predicting Supreme Court Votes Using Text Networks

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(Joint work with Maya Sen, Harvard Kennedy School)

Abstract

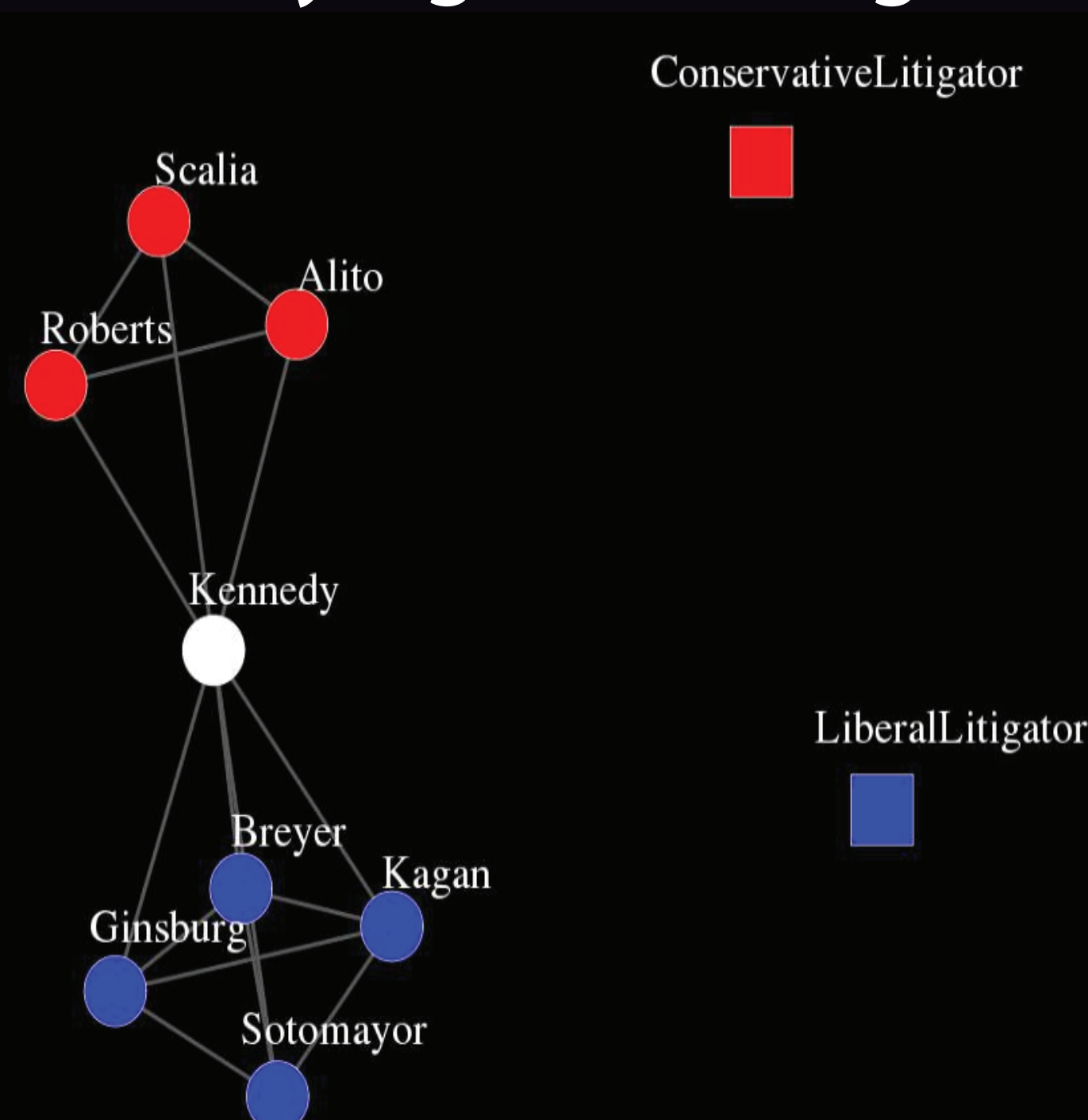
How do oral argument transcripts help us predict how Supreme Court Justices will vote? Using networks of justice speaking during oral arguments, we test hypotheses of lobbying, position-taking, and attacking, and find that Justices primarily use oral argument time to stake out ideological positions.

Hypotheses

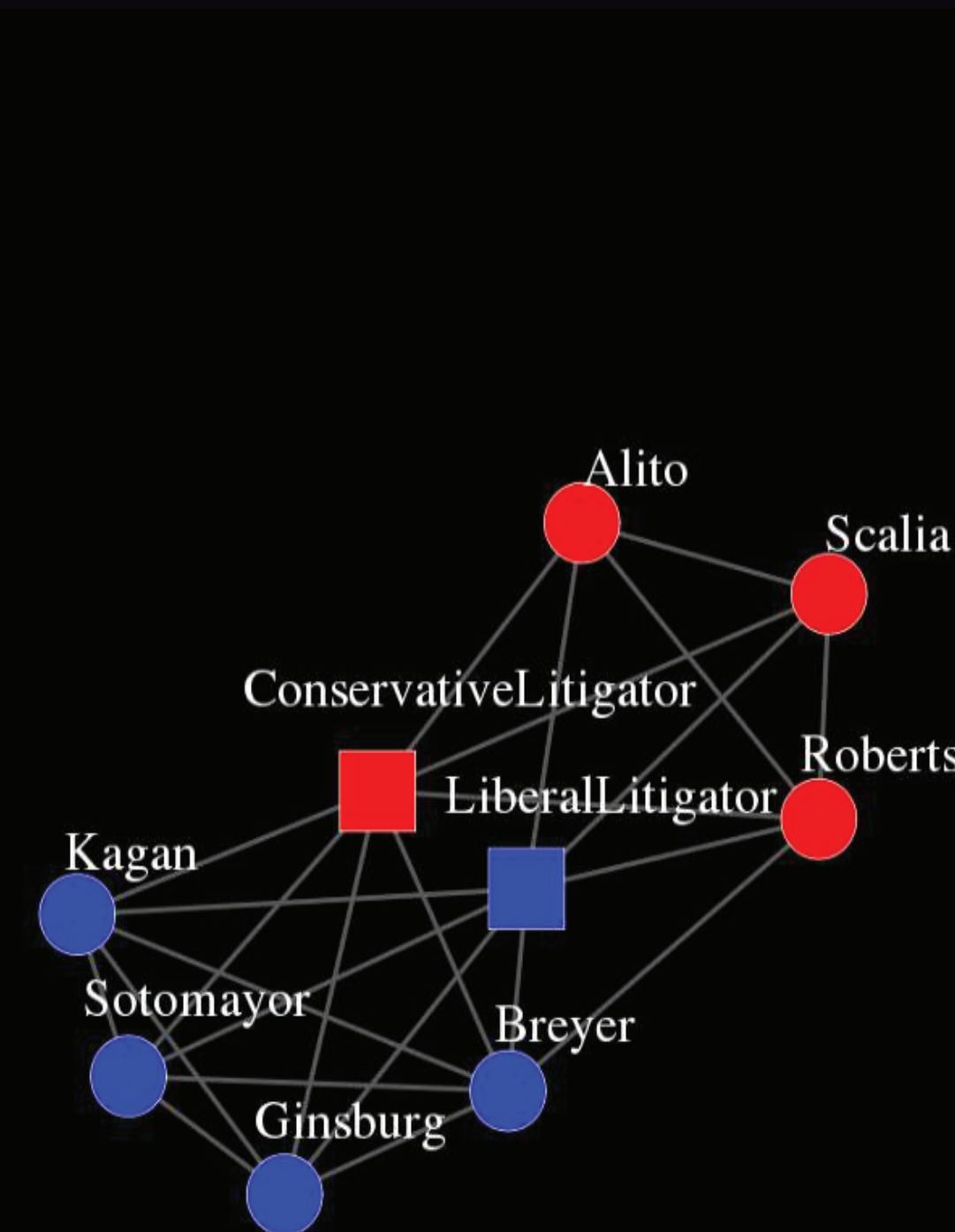
Hypothetical networks which depict how justices behave under three major theories

- Liberal Justice
- Liberal Litigator
- Conservative Justice
- Conservative Litigator
- Swing Justice

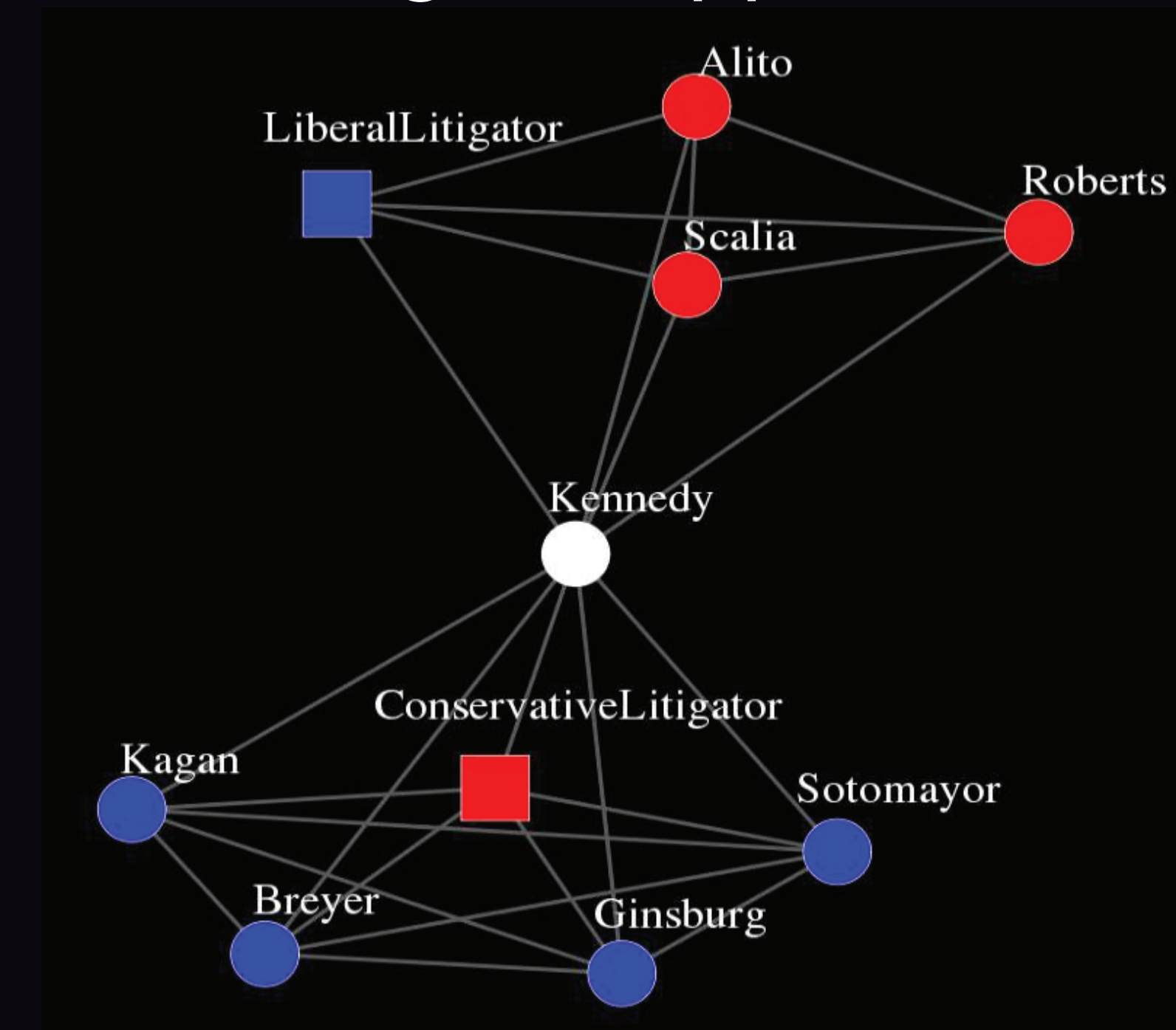
Lobbying the Swing



Position-Taking



Attacking the Opposition



Data & Measurement

6,173 parsed oral argument transcripts, 1960 to 2014



6,173 co-speaking matrices, indicating the median number of utterances from the speaker in the row to the speaker in the column



Missouri v. McNeely 2013

	Roberts	Sotomayor	Ginsburg	Scalia	Kennedy	Kagan	Breyer	Alito
Roberts	-	1	5	9	13	39	21	33
Sotomayor	1	-	6	10	14	40	22	34
Ginsburg	2	6	-	4	8	34	16	28
Scalia	6	10	2	-	4	30	12	24
Kennedy	10	14	4	2	-	26	8	20
Kagan	6	2	20	28	24	-	14	2
Breyer	6	20	2	10	6	18	-	12
Alito	2	8	14	22	18	6	8	-

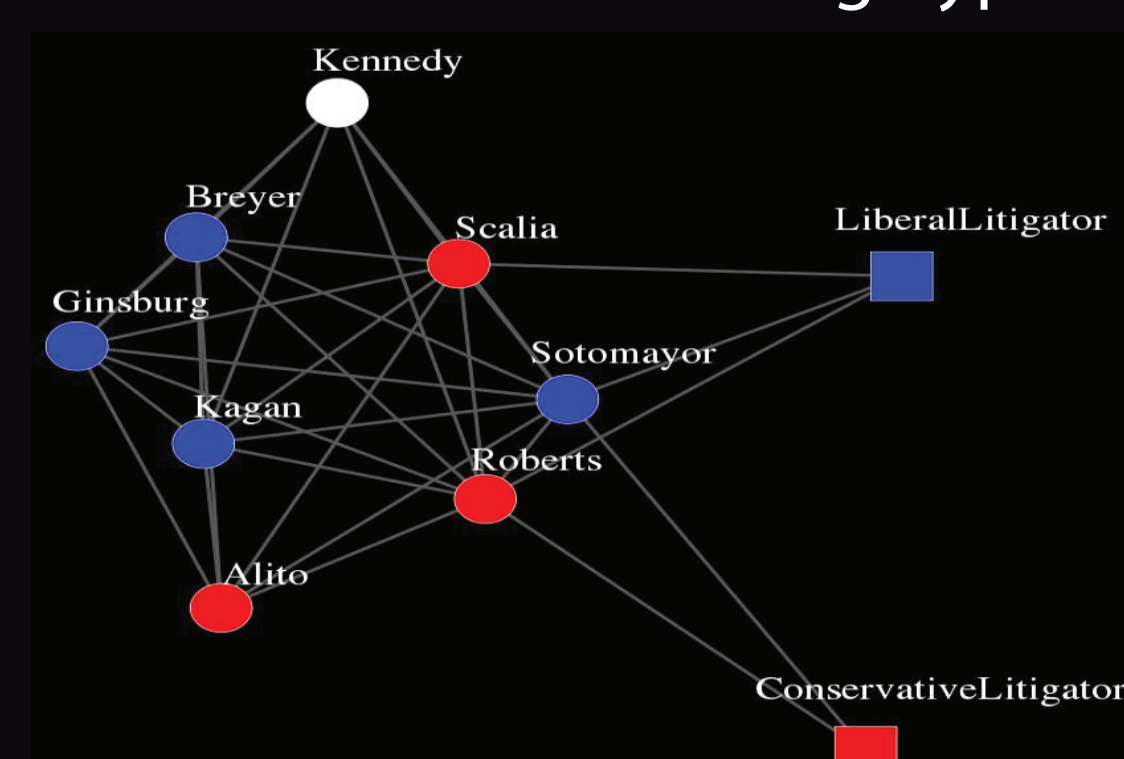
Empirical Networks

Test: Do observed cospeaking networks resemble any of the hypothetical networks?

Average Cospeaking Matrix, Current Court

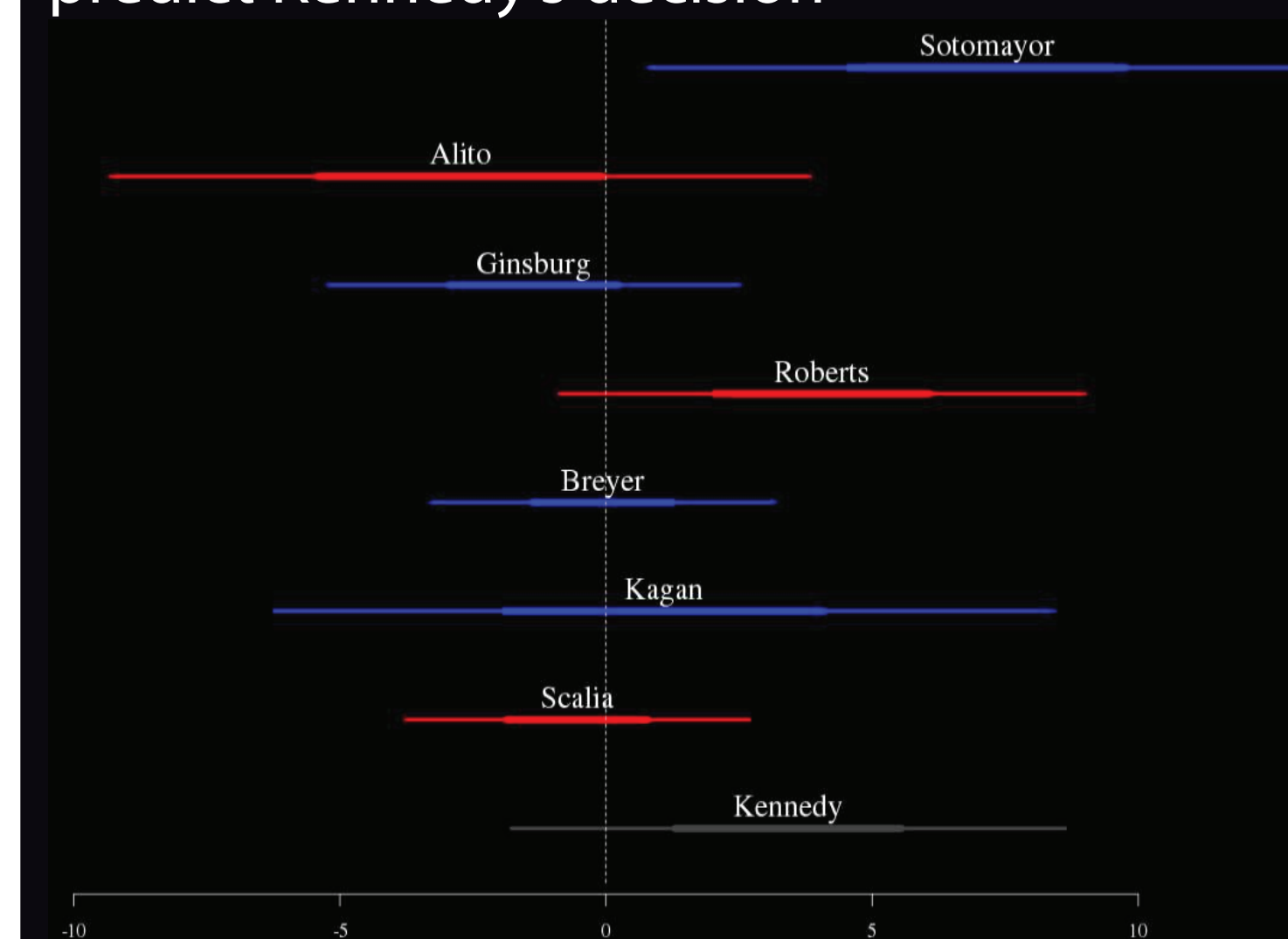
	Alito	Breyer	Ginsburg	Kagan	Kennedy	Roberts	Scalia	Sotomayor	Liberal	Conservative
Alito	-	20.02	21.80	21.23	33.73	7.13	18.86	16.57	71.34	75.64
Breyer	34.87	-	26.17	22.82	38.58	7.08	18.72	16.72	77.19	83.91
Ginsburg	32.86	21.05	-	21.45	34.77	6.60	18.12	17.28	77.35	82.49
Kagan	34.85	20.56	24.23	-	38.98	6.35	18.42	16.15	78.13	79.24
Kennedy	28.36	20.05	20.06	21.63	-	7.69	17.41	17.18	71.84	76.65
Roberts	45.28	28.05	33.46	28.89	50.12	-	26.12	20.96	87.85	87.31
Scalia	35.29	20.57	24.61	22.31	37.74	5.55	-	17.36	77.84	81.06
Sotomayor	36.91	20.39	26.14	22.41	40.85	5.37	20.47	-	74.74	79.05
Liberal	38.31	28.97	25.21	32.51	39.53	1.76	20.47	19.40	-	48.99
Conservative	45.99	35.13	26.97	31.88	41.83	1.75	25.10	21.56	43.17	-

Average cospeaking network of the current court resembles Position-Taking hypothesis



Descriptive Analyses

Other justices' speech length does not predict Kennedy's decision

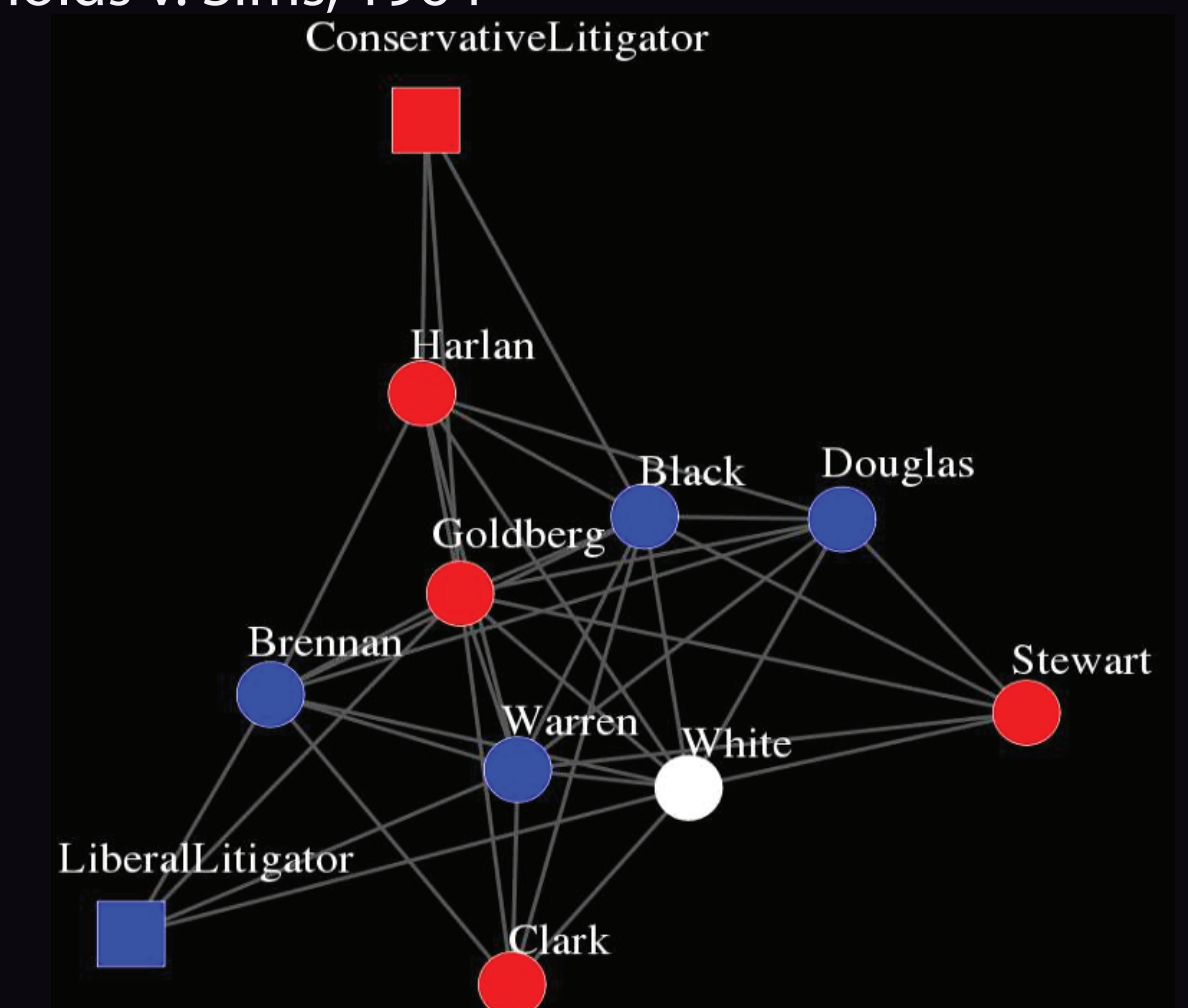


Kennedy and Roberts speak most in close cases; Ginsburg and Sotomayor speak most in landslides

	9-0 L	8-1 L	7-2 L	6-3 L	5-4 L	5-4 C	6-3 C	7-2 C	8-1 C	9-0 C
Kennedy	0.068	0.089	0.085	0.100	0.099	0.087	0.081	0.076	0.075	0.074
Ginsburg	0.134	0.116	0.112	0.117	0.113	0.110	0.115	0.141	0.125	0.132
Scalia	0.160	0.186	0.168	0.197	0.212	0.187	0.193	0.189	0.184	0.158
Breyer	0.166	0.185	0.165	0.173	0.166	0.173	0.188	0.183	0.200	0.175
Sotomayor	0.131	0.104	0.105	0.084	0.086	0.089	0.103	0.081	0.108	0.132
Roberts	0.150	0.144	0.216	0.207	0.182	0.177	0.157	0.190	0.147	0.139
Alito	0.076	0.081	0.072	0.058	0.067	0.072	0.070	0.063	0.064	0.074
Kagan	0.116	0.094	0.077	0.064	0.076	0.105	0.092	0.077	0.096	0.116

Previous Courts

Reynolds v. Sims, 1964



United States v. Nixon, 1974

