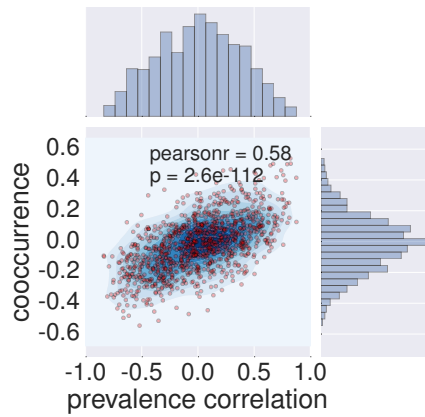


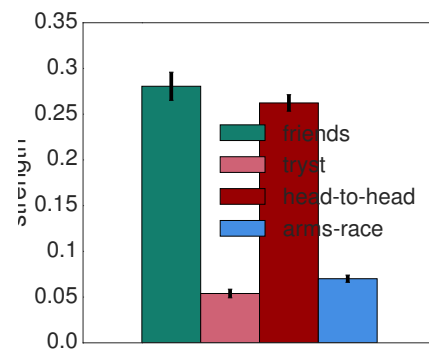
# Idea relations

March 19, 2017

## 1 Overall distributions



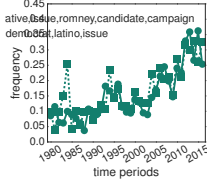
(a) Joint distribution between PMI and prevalence correlation.



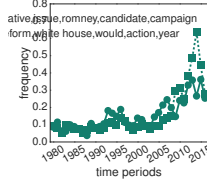
(b) Strength of the top 25 pairs in each category.

## 2 Top relation plots

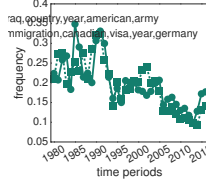
## Friendship



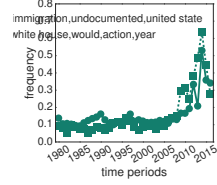
(a) Friendship (#1).



(b) Friendship (#2).

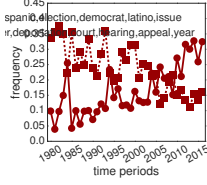


(c) Friendship (#3).

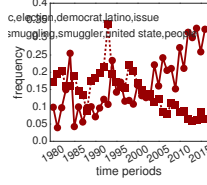


(d) Friendship (#4).

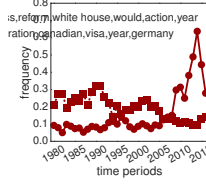
## Head-to-head



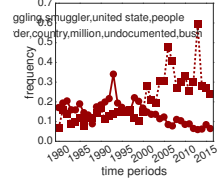
(e) Head-to-head (#1).



(f) Head-to-head (#2).

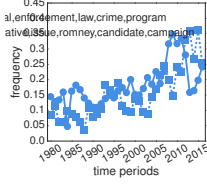


(g) Head-to-head (#3).

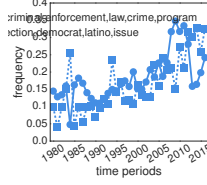


(h) Head-to-head (#4).

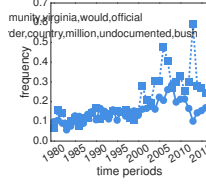
## Arms-race



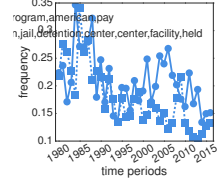
(i) Arms-race (#1).



(j) Arms-race (#2).

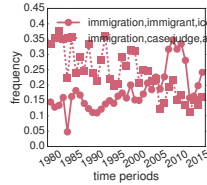


(k) Arms-race (#3).

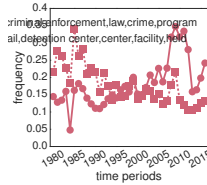


(l) Arms-race (#4).

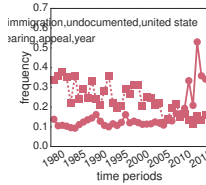
## Tryst



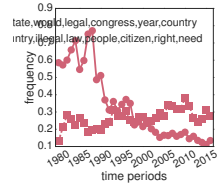
(m) Tryst (#1).



(n) Tryst (#2).



(o) Tryst (#3).



(p) Tryst (#4).

Figure 2: Top four figures in each category, more careful investigation is required to interpret these results. Also explore further down the list (e.g., top 50) to get a better understanding.

### **3 Relation tables**

Table 1: Relation between ideas. This table shows top pairs. In the table/ directory, there is another file with top 50 pairs, which is worth further investigation.

combined	pmi	correlation	first	second
friends				
0.444	0.540	0.822	republican, immigration, bush, rubio, president, conservative, issue, romney, candidate, campaign	republican, percent, vote, voter, party, hispanic, election, democrat, latino, issue
0.417	0.505	0.826	republican, immigration, bush, rubio, president, conservative, issue, romney, candidate, campaign	obama, president, immigration, republican, congress, reform, white house, would, action, year
0.399	0.502	0.794	war, military, israel, government, united state, iraq, country, year, american, army	country, united state, canada, airport, official, immigration, canadian, visa, year, germany
0.362	0.414	0.875	child, immigrant, deportation, country, family, program, parent, immigration, undocumented, united state	obama, president, immigration, republican, congress, reform, white house, would, action, year
0.342	0.462	0.741	detainee, church, detention, prison, immigration, jail, detention center, center, facility, held	immigration, case, judge, asylum, lawyer, deportation, court, hearing, appeal, year
tryst				
-0.133	0.300	-0.443	immigration, immigrant, ice, deportation, federal, criminal, enforcement, law, crime, program	immigration, case, judge, asylum, lawyer, deportation, court, hearing, appeal, year
-0.101	0.337	-0.299	immigration, immigrant, ice, deportation, federal, criminal, enforcement, law, crime, program	detainee, church, detention, prison, immigration, jail, detention center, center, facility, held
-0.087	0.173	-0.504	child, immigrant, deportation, country, family, program, parent, immigration, undocumented, united state	immigration, case, judge, asylum, lawyer, deportation, court, hearing, appeal, year
-0.079	0.125	-0.632	immigration, alien, law, illegal, united state, would, legal, congress, year, country	american, immigrant, immigration, country, illegal, law, people, citizen, right, need
-0.065	0.237	-0.275	money, tax, million, year, business, company, cost, pay, billion, would	worker, job, labor, work, farm, wage, employer, program, american, pay
head-to-head				
0.389	-0.497	-0.784	republican, percent, vote, voter, party, hispanic, election, democrat, latino, issue	immigration, case, judge, asylum, lawyer, deportation, court, hearing, appeal, year
0.329	-0.495	-0.663	republican, percent, vote, voter, party, hispanic, election, democrat, latino, issue	chinese, immigrant, china, official, ship, boat, smuggling, smuggler, united state, people
0.311	-0.434	-0.717	obama, president, immigration, republican, congress, reform, white house, would, action, year	country, united state, canada, airport, official, immigration, canadian, visa, year, germany
0.301	-0.458	-0.658	chinese, immigrant, china, official, ship, boat, smuggling, smuggler, united state, people	immigrant, immigration, illegal, would, reform, border, country, million, undocumented, bush
0.301	-0.452	-0.665	obama, president, immigration, republican, congress, reform, white house, would, action, year	charge, federal, case, attorney, prosecutor, charged, court, immigration, arrested, two
arms-race				
-0.126	-0.275	0.459	immigration, immigrant, ice, deportation, federal, criminal, enforcement, law, crime, program	republican, immigration, bush, rubio, president, conservative, issue, romney, candidate, campaign
-0.108	-0.278	0.388	immigration, immigrant, ice, deportation, federal, criminal, enforcement, law, crime, program	republican, percent, vote, voter, party, hispanic, election, democrat, latino, issue
-0.106	-0.210	0.503	country, immigrant, illegal, city, local, resident, community, virginia, would, official	immigrant, immigration, illegal, would, reform, border, country, million, undocumented, bush
-0.085	-0.207	0.413	worker, job, labor, work, farm, wage, employer, program, american, pay	detainee, church, detention, prison, immigration, jail, detention center, center, facility, held
-0.084	-0.200	0.421	immigrant, state, illegal, california, federal, benefit, would, legal, welfare, service	one, day, like, two, home, time, back, work, house, food