

Politics and Social Media

Nov 6, 2012

Why is it interesting?

Why are politics interesting?

LiveJournal lets you express yourself, share your life, and connect with friends online. You can use LiveJournal in many different ways: as a private journal, a blog, a discussion forum, a social network, and more.

Create a Journal

Joining LiveJournal is completely free.



True Community



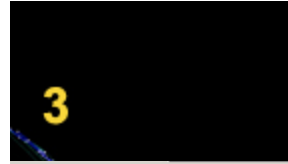
Content You Care About



Staying in Touch



Your Personal Journal



1. DailyKos

2. BoingBoing

5

The screenshot shows a Mozilla Firefox browser window with the address bar at <http://michellemalkin.com/>. The main content area features a large image of a Pittsburgh Steelers player in a black and yellow uniform, holding a football. The player's name, "MALKIN", is displayed in large white letters. Below the image, there is a sidebar with a "PET SOPHIST" logo and a "Lead S" section. The main text area contains several short news snippets, including one about a "cross-dressing jihadist caught" and another about a "Herald writer threatens". At the bottom, there is a "SUPER 8 MOTEL" sign graphic.

The screenshot shows a sidebar menu for a website. At the top, there is a "Waiting Room" section with a photo of a man and a dog. Below that is a navigation menu with the following items: Home, Diaries, dKosopedia, Search, Create account, Login, Lose Your Password?, wide (checked), narrow, About, About, Advertising, Contact Us, Daily Kos Store, and FAQ. At the bottom, there is a "Recommended Diaries" section with a link to "The Strange Destiny and Sudden Death of Atlanta, Georgia" by Jacob Freeze, which has 123 comments.

4

Why are politics interesting?



PAPER VIDEO MOST POPULAR TIMES TOPICS

Media & Advertising

BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION

BUSINESS SMALL BUSINESS YOUR MONEY DEALBOOK MARKETS

Plus+
FINANCIAL CENTER

Basik Exam Rollover

ADVERTISING More Readers Trading Newspapers for Web Sites

By **RICHARD PÉREZ-PEÑA**
Published: November 6, 2007

THE circulation declines of American newspapers continued over the spring and summer, as sales across the industry fell almost 3 percent compared with the year before, according to figures released yesterday.

[Enlarge This Image](#)

Paid Newspaper Circulation Falls

Paid circulation for most of the country's top 25 newspapers is down since last year. The average drop was 2.4 percent.



The drop, reported by the [Audit Bureau of Circulations](#), reflects the growing

shift of readers to the Internet, where newspaper readership has climbed, and also a strategy by many major papers to

- E-MAIL
- PRINT
- REPRINTS
- SAVE
- SHARE

ARTICLE TOOLS
SPONSORED BY



Knowledge Levels by News Source

	Knowledge level		
	High %	Mod %	Low %
Nationwide	35	31	34=100
<i>Among the regular audience of...</i>			
Daily Show/Colbert Report	54	25	21=100
Major newspaper websites	54	26	20=100
NewsHour with Jim Lehrer	53	19	28=100
O'Reilly Factor	51	32	17=100
National Public Radio	51	27	22=100
Rush Limbaugh's radio show	50	29	21=100
News magazines	48	27	25=100
TV news websites	44	33	23=100
Daily newspaper	43	31	26=100
CNN	41	30	29=100
News from Google, Yahoo, etc.	41	35	24=100
Network evening news	38	33	29=100
Online news discussion blogs	37	26	37=100
Local TV news	35	33	32=100
Fox News Channel	35	30	35=100
Network morning shows	34	36	30=100

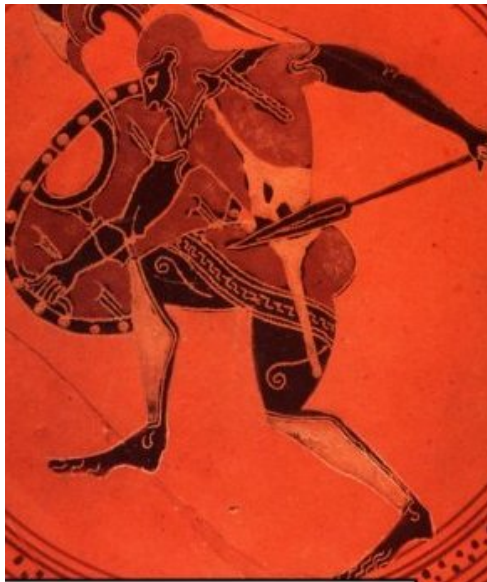
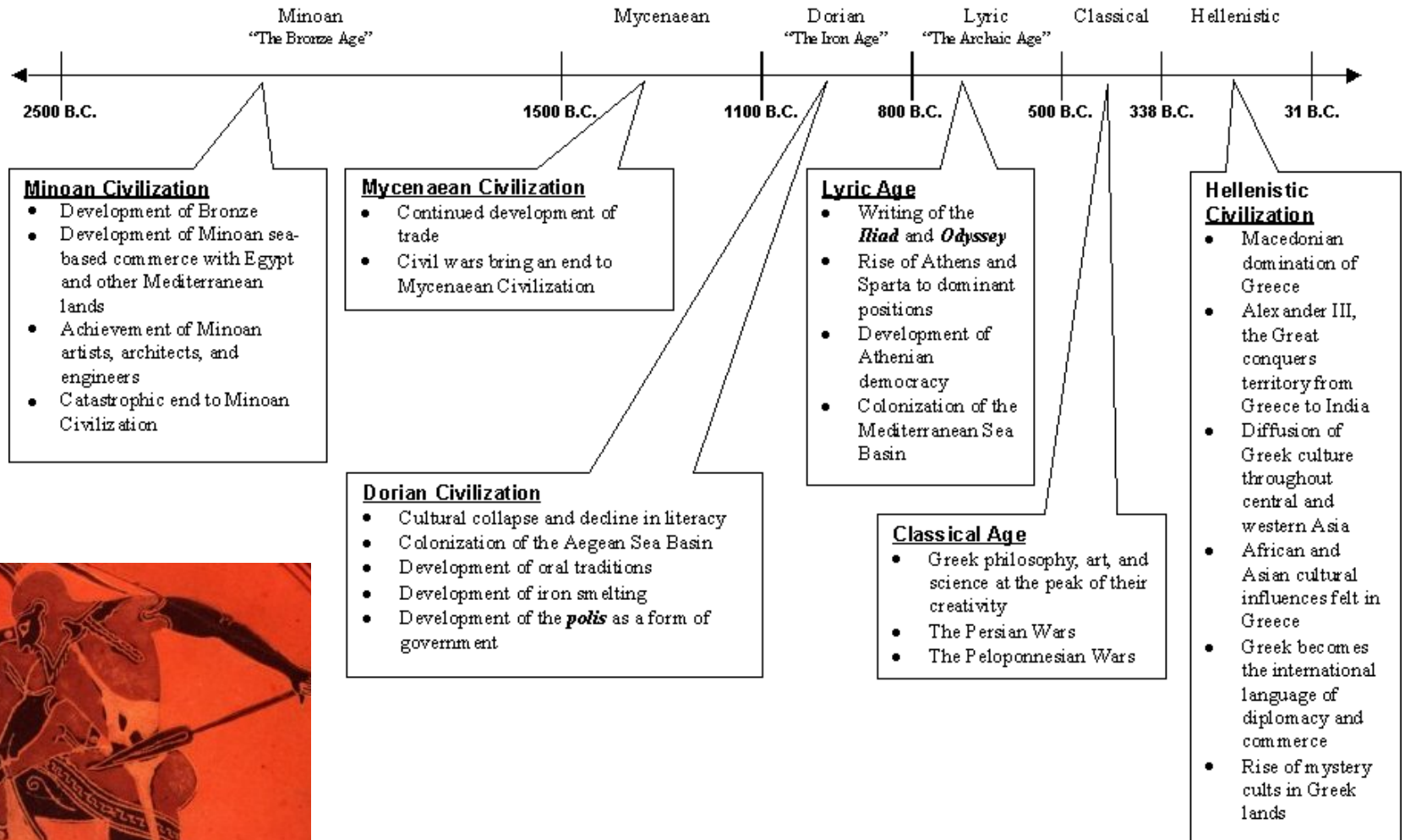
How to read this table:

Nationwide, 35% of Americans score in the high knowledge category (answering at least 15 of 23 questions correctly.) Among regular viewers of the Daily Show and Colbert Report, 54% scored in the high knowledge category.

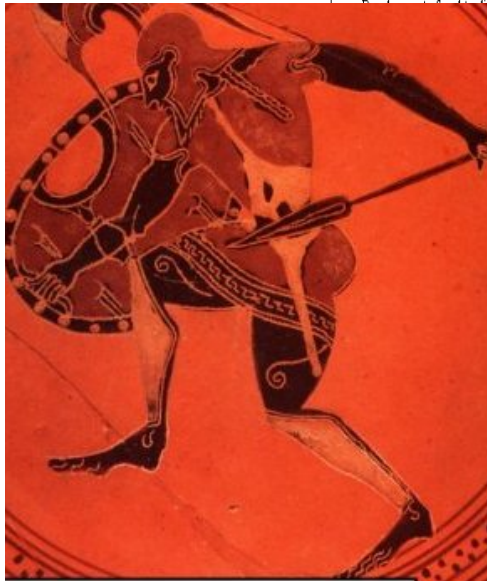
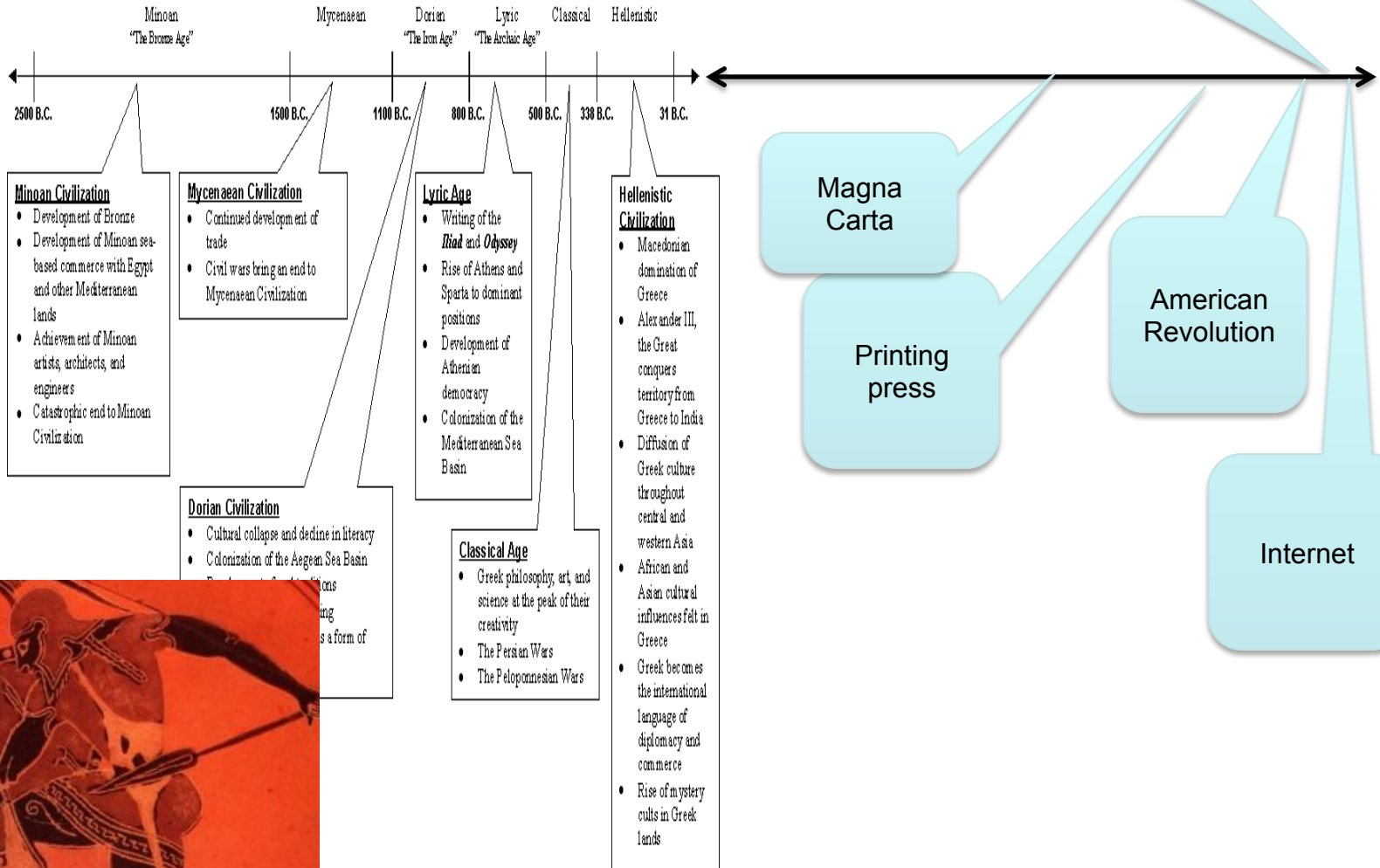
Why is it interesting?

- People are interested
- The *technology* is interesting
 - democracy is an information technology
 - it's not obvious how it works

Timeline of Ancient Greek Civilizations



Timeline of Ancient Greek Civilizations



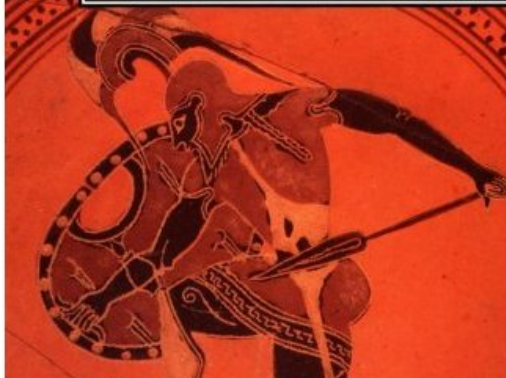


The **Sicilian Expedition** was an [Athenian](#) expedition to [Sicily](#) from [415 BC](#) to [413 BC](#), during the [Peloponnesian War](#). The expedition was hampered from the outset by uncertainty in its purpose and command structure—political maneuvering in Athens swelled a lightweight force of twenty ships into a massive armada... [Syracuse](#), the most powerful state on Sicily, responded exceptionally slowly ... a [Spartan](#) general, [Gylippus](#), galvanized its inhabitants into action.

... the Athenians were eventually forced to attempt a desperate overland escape from the city they had hoped to conquer... nearly the entire expedition surrendered or was destroyed in the Sicilian interior.

The impact of the defeat on Athens was immense. Two hundred ships and thousands of soldiers—an appreciable fraction of the city's total manpower—were lost in a single stroke. Athens' enemies on the mainland and in Persia were encouraged to take action, and rebellions broke out in the Aegean. The defeat proved to be the crucial turning point in the Peloponnesian War, though Athens struggled on for another decade. [Thucydides](#) observed that contemporary Greeks were shocked not that Athens eventually fell after the defeat, but rather that it fought on for as long as it did, so devastating were the losses suffered.

H . D . F . K I T T O



A NEW YORK TIMES BUSINESS BESTSELLER

"As entertaining and thought-provoking as *The Tipping Point* by Malcolm Gladwell. . . . *The Wisdom of Crowds* ranges far and wide."
—*The Boston Globe*

THE WISDOM OF CROWDS

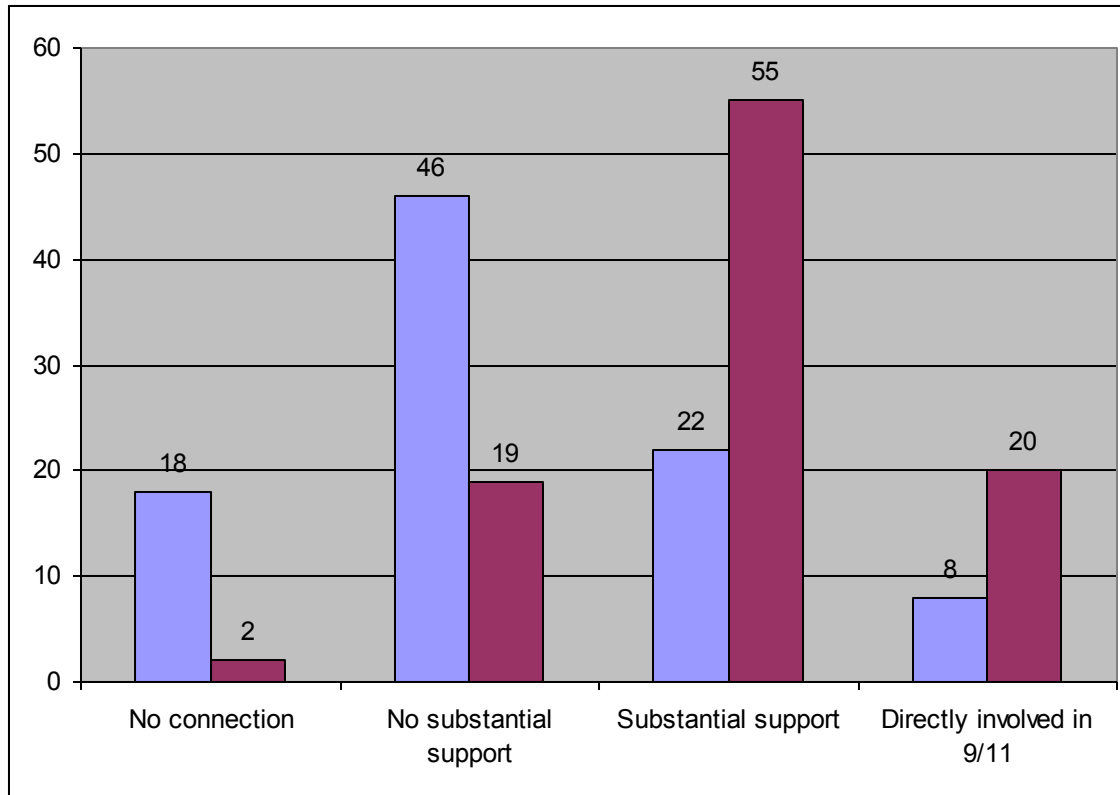
JAMES
SUROWIECKI

WITH A NEW AFTERWORD BY THE AUTHOR



In considering efficiency of the grosser sort, two points must be borne in mind. One is the small scale of the state. This Athenian district-meeting, the Assembly, like a vigorous local council today, was for the most part dealing with problems of which many of its members at least had direct personal knowledge. Further, the complexity of things was much less than it is today – not indeed the intellectual or moral complexity of things, which is always the same, but the complexity of organization. If war was declared, it was not a matter of ‘mobilizing the entire resources of the nation’ with endless committees and an enormous consumption of paper: it was a matter simply of every man going home for his shield, his spear and his rations, and reporting for orders. The Assembly made its worst mistakes in making decisions on matters out- its personal knowledge. Thus, in the middle of the war it made the disastrous resolution to **invade** Sicily, though (as Thucydides remarks) very few knew where Sicily was, nor how big it was.

Why are politics interesting?



Q16. Please select what you think is the best description of the relationship between the Iraqi government under Saddam Hussein and the terrorist group al-Qaeda.

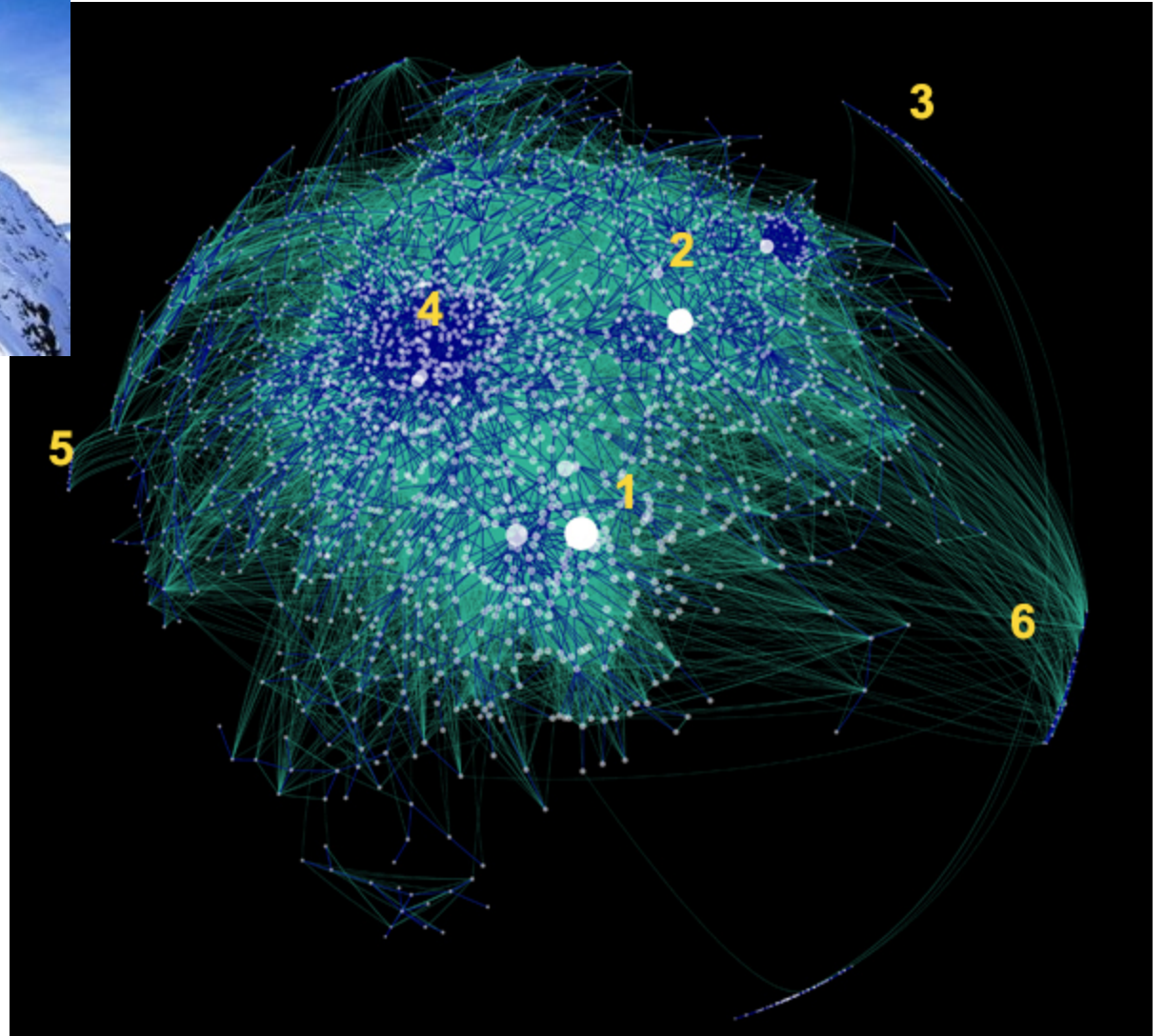
THE PIPA/KNOWLEDGE NETWORKS POLL

THE AMERICAN PUBLIC ON INTERNATIONAL ISSUES

**Study Finds Widespread Misperceptions on Iraq
Highly Related to Support for War**

Misperceptions Vary Widely Depending on News Source

	FOX	CBS	ABC	NBC	CNN	Print Sources	NPR/ PBS
None of the 3	20%	30%	39%	45%	45%	53%	77%
1 or more misperceptions	80	71	61	55	55	47	23



Bibliography and Links

- [Map: Welcome to the Blogosphere](#) – Discover Magazine
- [NY Times Headline Says It All: “More Readers Trading Newspapers for Web Sites](#) – Webware.com blog and NYT
- [Public Knowledge of Current Affairs Little Changed by News and Information Revolutions What Americans Know: 1989-2007](#) –
- [Study Finds Widespread Misperceptions on Iraq](#) – PPA at UMD
- [Separate Realities of Bush and Kerry Supporters](#) – PPA at UMD
- The Greeks (Penguin History) by H. D. F. Kitto

More to talk about

- christokanis and fowler “connected” chapter
- democratic dilemma
- weld google search article

Why do people talk about politics?

- To entertain
- To inform and persuade
- Technology of representative democracy:
 - Delegation: principle-agent problem
 - Crowdsourced choice: ...
 - are voters informed and motivated enough?

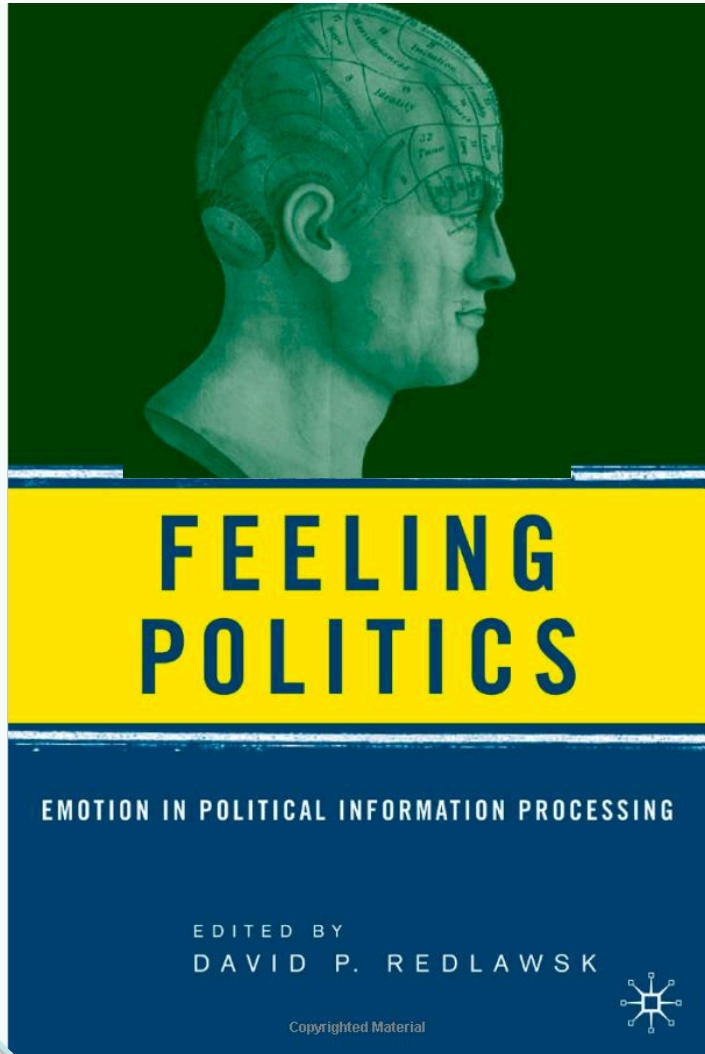
Persuasion: The basics

- Can representative democracy work?
- Can citizens learn what they need to know?
 - Surveys suggest many voters don't know much about issues, candidates, ...
 - Studies of mock elections suggest people don't always behave rationally:
 - e.g., negative information about a favored candidate can **improve** a voter's view of him/her

The basics

- Can representative democracy work?
- Can citizens learn what they need to know to make necessary choices?
 - Surveys suggest many voters don't know much about issues, candidates, ...
 - Studies of mock elections suggest people don't always behave rationally:
 - “emotional” reactions come **first**, then “reasoned” reactions

Background - political decision making



How do people make decisions when there's too much information to absorb?

What heuristics are used to respond to information overload?

When is decision-making rational and when is it emotional?

→ Political psychology, and “hot cognition” or “motivated reasoning”

One tool - human studies in the lab

Stage III
II



Larry Sauer's Position on Gun Control

Larry Sauer does not believe that there should be any restrictions whatsoever on guns. "Our Founding Fathers singled out gun ownership as an important right of the people. They thought it was so important they made it the Second Amendment." Sauer declares. For this reason, he opposes any form of regulation or limitations on gun ownership.

One tool - human studies in the lab

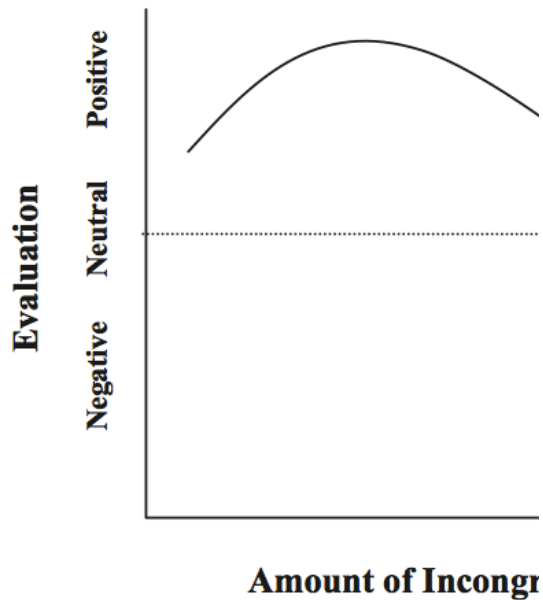


Figure 1. Expected Effects of the Amount of Incongruence on Evaluation of Preferred Candidate

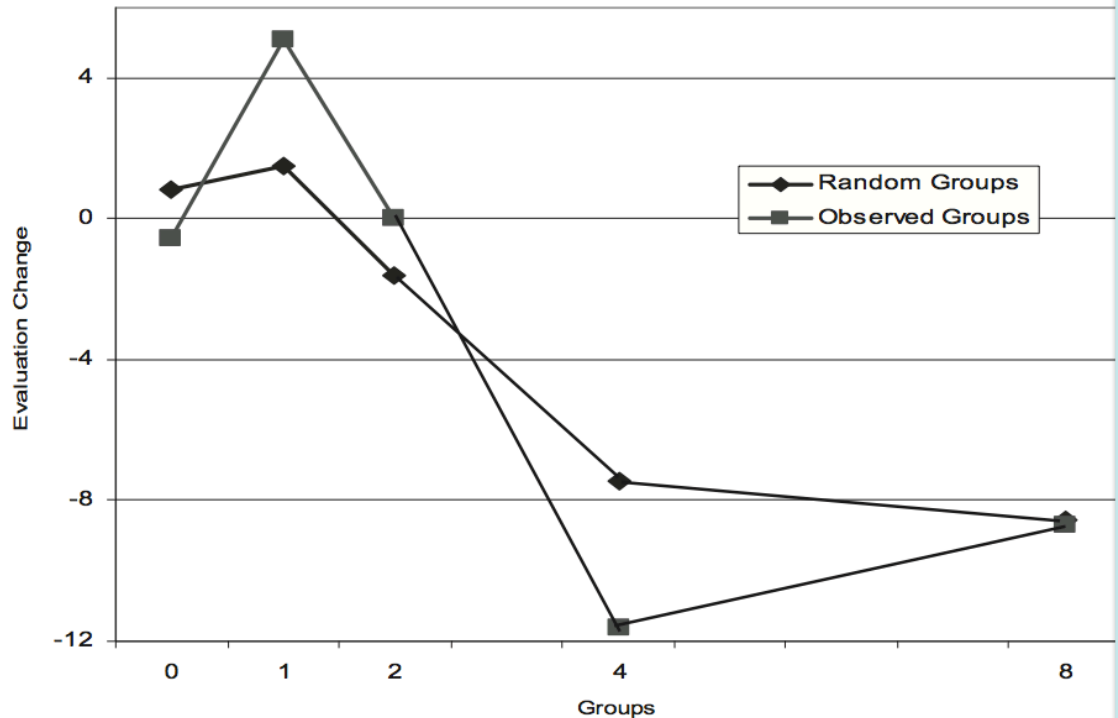
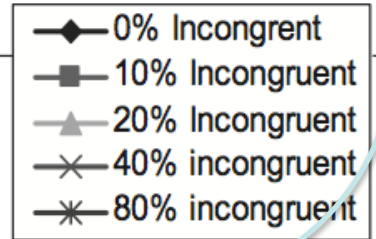


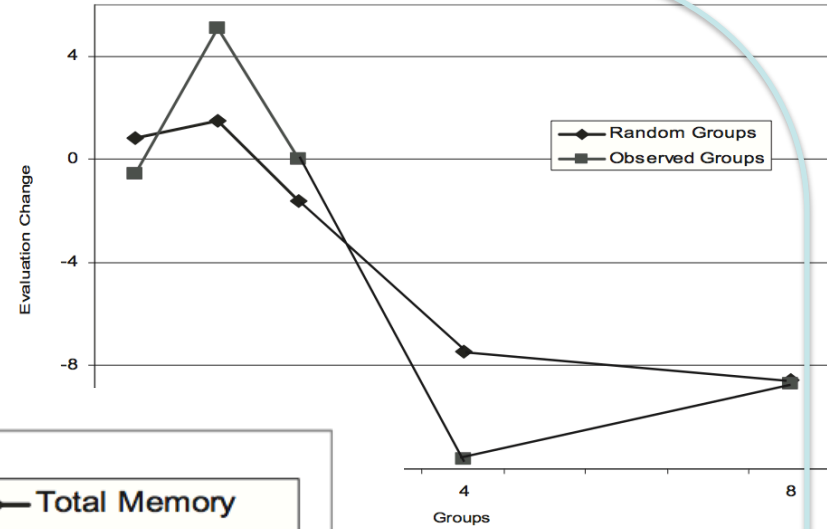
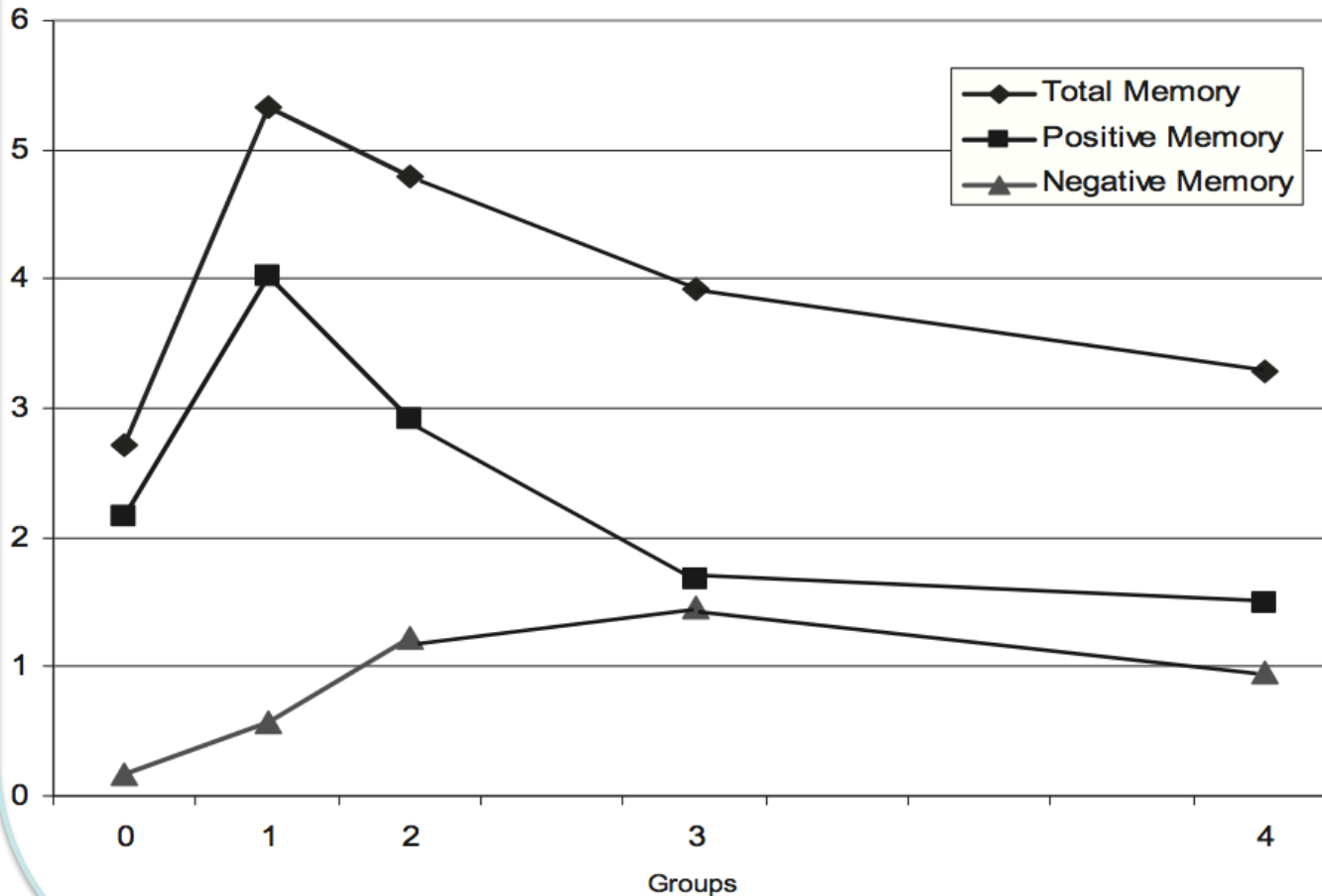
Figure 4. Mean Evaluation Change from First Poll to the Vote.

The Affective Tipping Point: Do Motivated Reasoners Ever “Get It”? *Political Psychology, Vol. 31, No. 4, 2010*



One tool - hur

Why? one proximate cause...



Change from First Poll to the Vote.

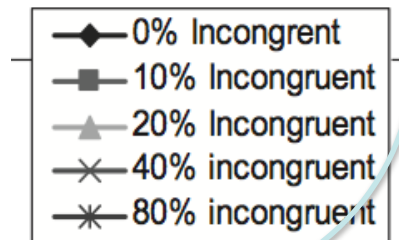
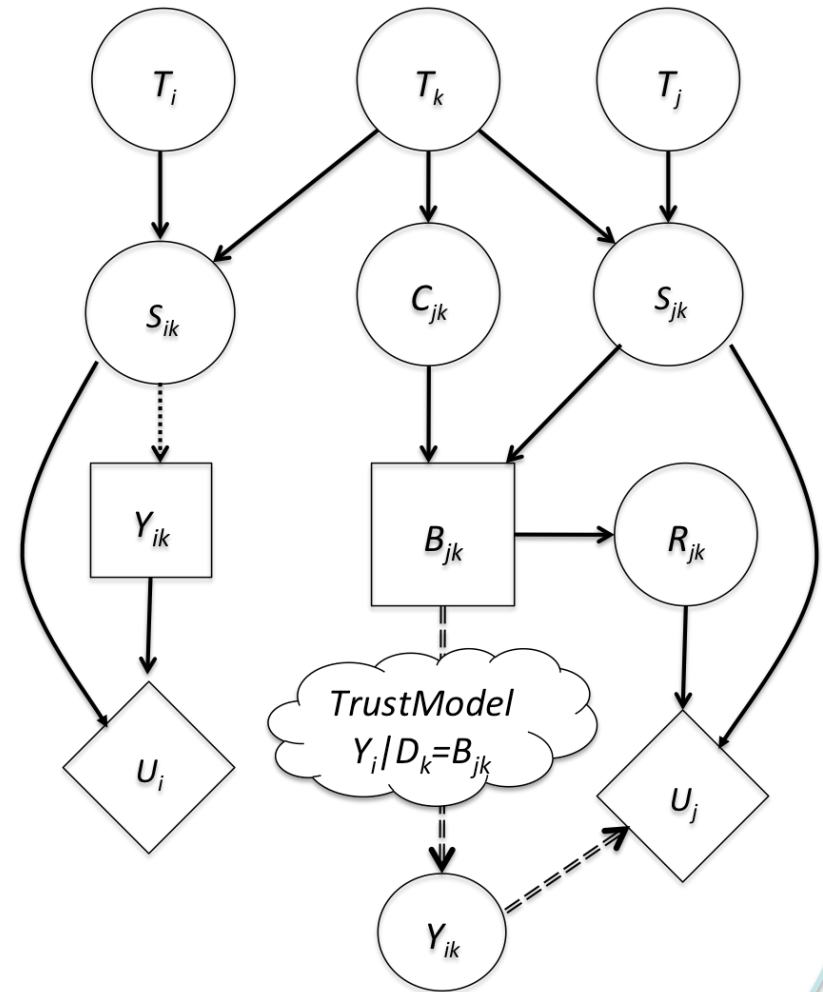


Figure 5. Incongruity and Memory for a Preferred Candidate.

Another tool - formal models

Rational-actor explanation of tipping point behavior

- Pundit Jim learns something (C_{jk}) about candidate Kay
- He could tell Irene directly....
- ...or spin C_{jk} as B_{jk}
- ...based on his beliefs about Irene's probably reaction
- ...to maximize his own (Jim's) utility U_j
- If Irene has worked this all out how does she react to B_{jk} ?



The basics

Can Citizens Learn What They Need
to Know?

Democratic Dilemma © 1998 Arthur Lupia and Mathew D. McCubbins

The basics

- Can representative democracy work?
- Can citizens learn what they need to know to make necessary choices?
 - Surveys suggest many voters don't know much about issues, candidates, ...
 - Studies of mock elections suggest people don't always behave rationally:
 - e.g., negative information about a favored candidate can **improve** a voter's view of him/her

The basics

- Can representative democracy work?
- Can citizens learn what they need to know?
 - Can citizens competently how to vote based on limited time and data?
 - Maybe simple information (party affiliation, endorsements) is enough
 - How can you trust endorsements?

Endorsements as Game Theory

- Two players: speaker and receiver.
- The receiver chooses x or y .
 - Her choice affects both players' utility.
- Sources of uncertainty.
 - Is x or y better for the receiver?
 - “better” prior: $b \in [0, 1]$.
 - Do the speaker and receiver have common interests?
 - “common” prior: $c \in [0, 1]$
 - Does the speaker have private information about x ?
 - “knows” prior: $k \in [0, 1]$

Endorsements as Game Theory

- Penalties for Lying
 - The speaker pays a penalty for making false statements.
- Verification
 - A fourth source of uncertainty emerges. With probability $v \in [0, 1]$, Nature replaces the speaker's signal with the true signal.
- Costly effort
 - The speaker must pay a positive cost to say anything.
- Each exogenous force's impact on communication strategies and outcomes is determined endogenously.

Implications

This suggests political speech is:

- partisan: you listen to people with perceived common interests
- driven by recent news (private knowledge)
- repetitive and emotional
 - more likely to diffuse/go viral

How do people talk about
politics?

Example: Analysis of News Media

Meme-tracking and the Dynamics of the News Cycle

Jure Leskovec^{*†}

Lars Backstrom^{*}

Jon Kleinberg^{*}

^{*}Cornell University

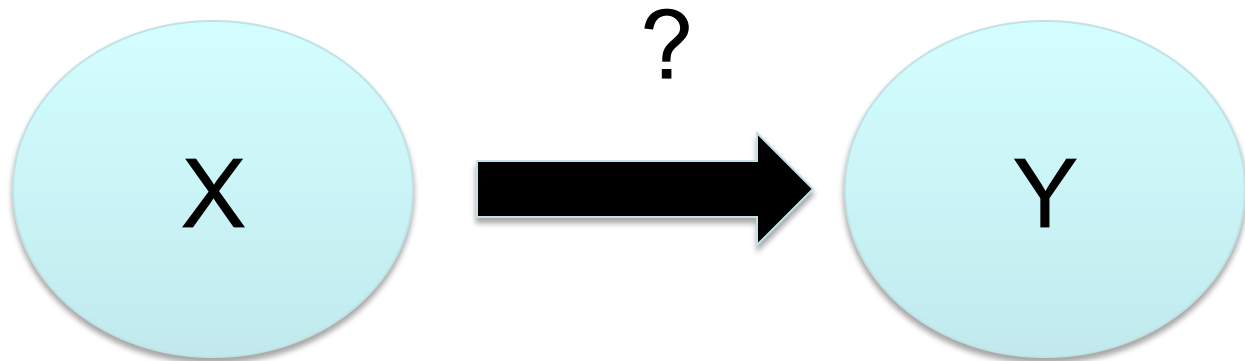
[†]Stanford University

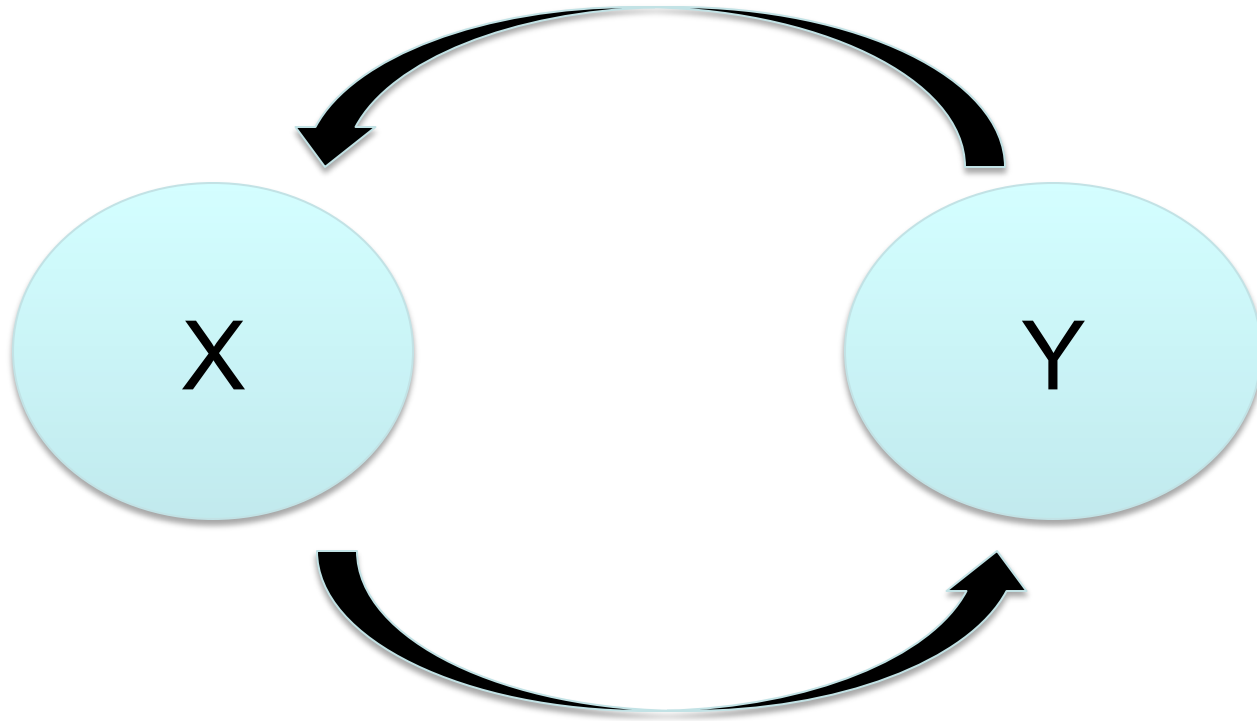
jure@cs.stanford.edu

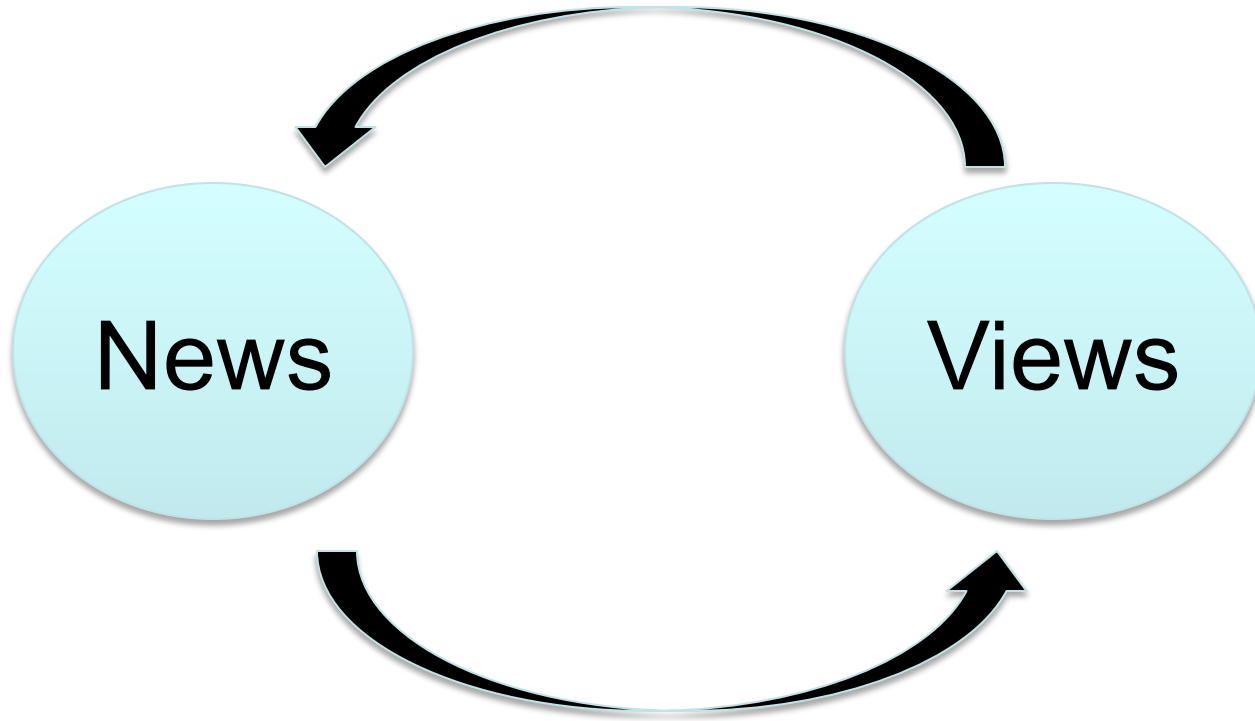
lars@cs.cornell.edu

kleinber@cs.cornell.edu

KDD'09, June 28–July 1, 2009, Paris, France.







Example: Analysis of News Media

- Key ideas:
 - meme definition:
 - biological ecosystem:info space::gene:meme
 - identify current “memes”
 - clusters of quoted strings appearing in the news
 - visualize popularity, spread etc of “memes”

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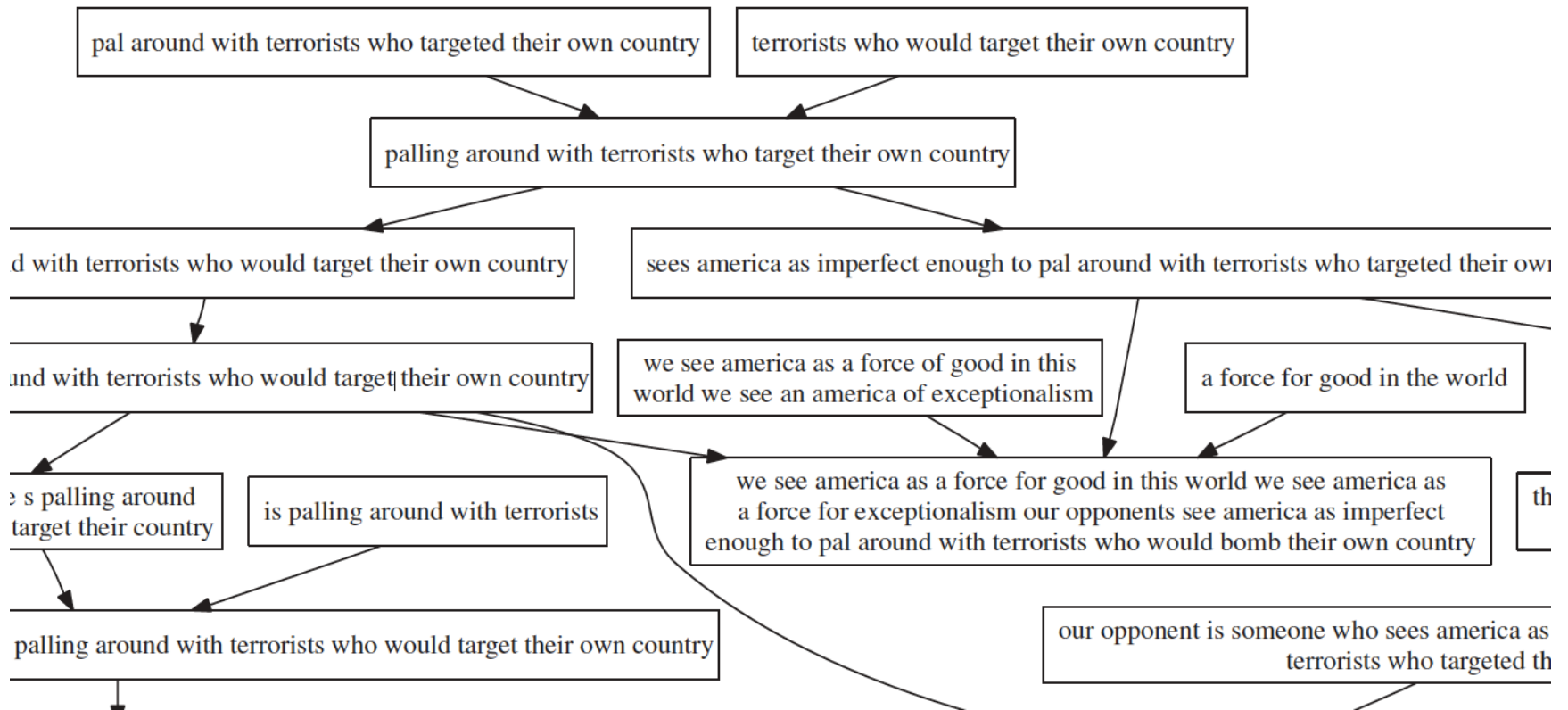
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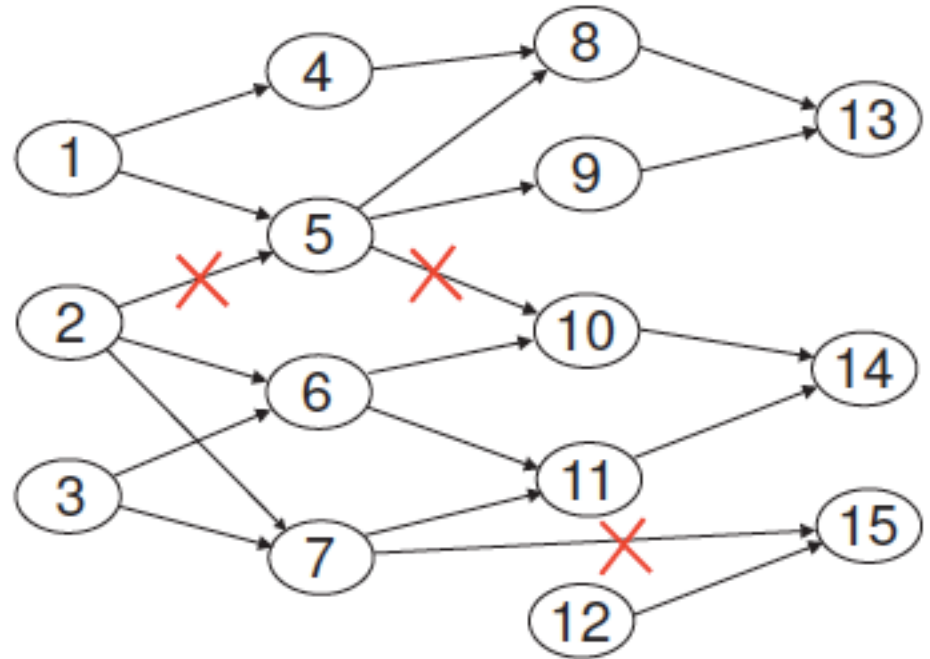
- identify current “memes”
 - quoted strings appearing in the news
 - minimum frequency and length
 - minimum “diversity” (can’t have >25% from one domain)
 - $p \rightarrow q$ if
 - $|p| < |q|$ and
 - 10-word overlap or very small edit distance between p, q

Example: Analysis of News Media

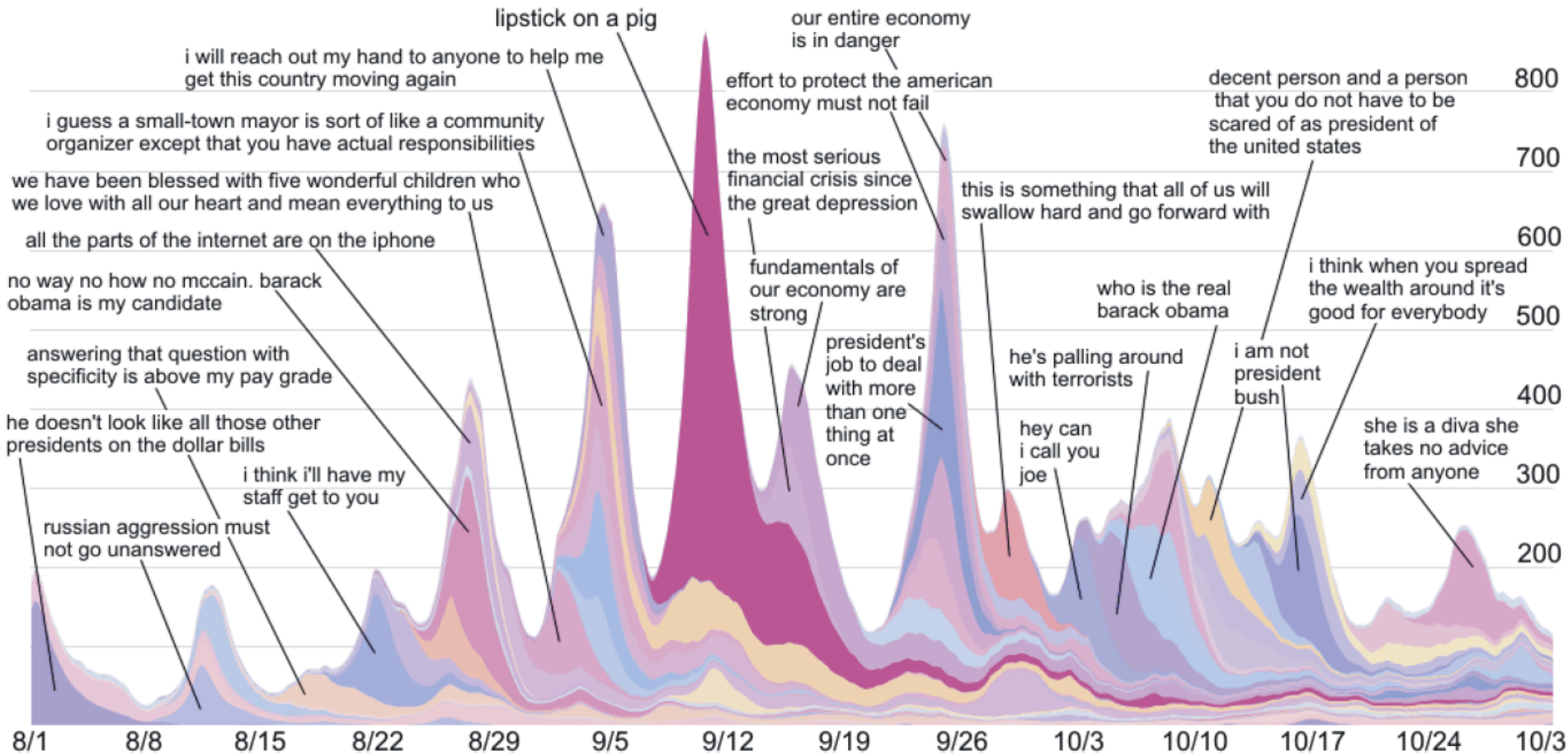


Example: Analysis of News Media

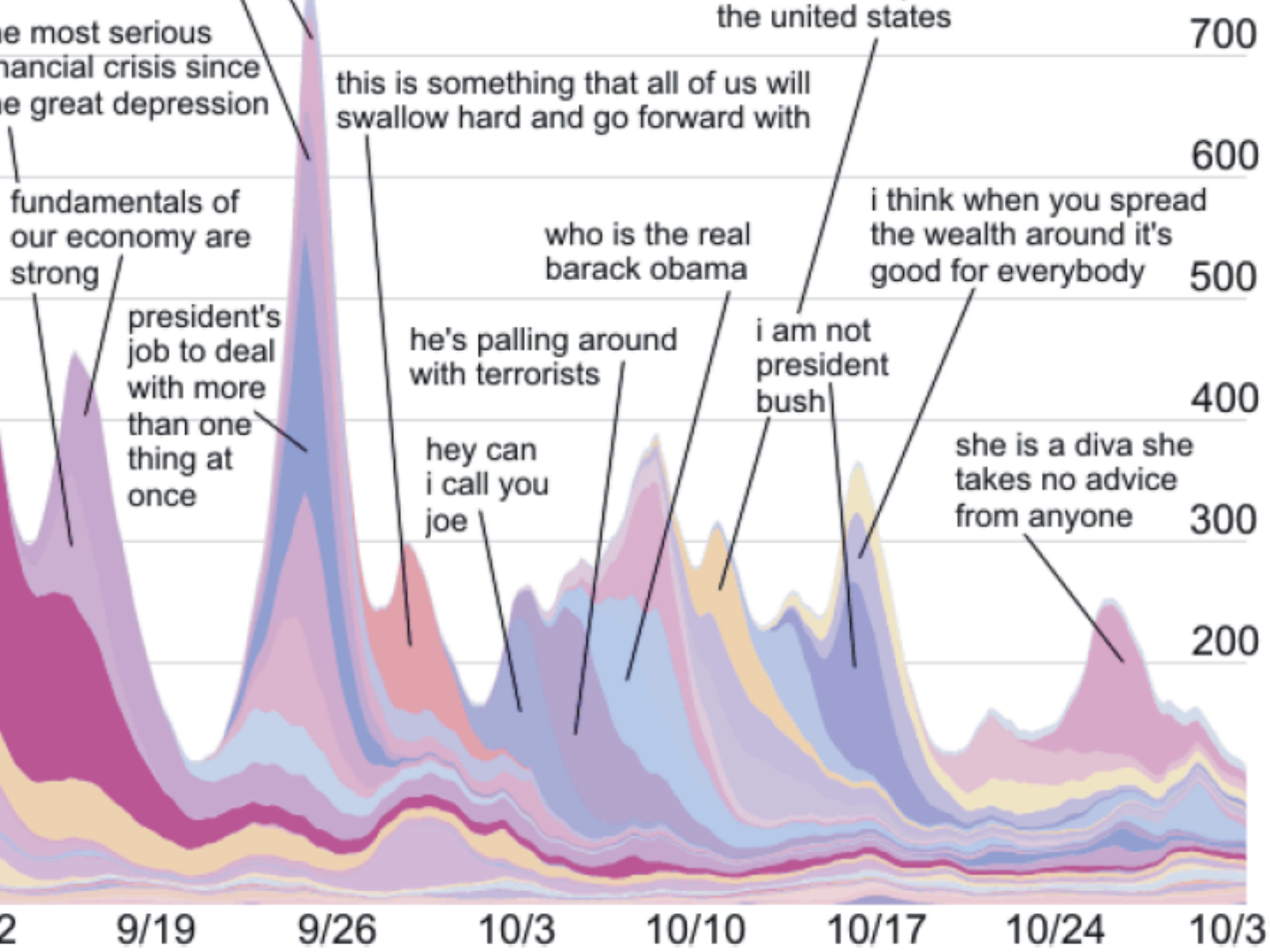
- look for “roots” (no outlinks)
- want one “root” per cluster
- greedily select subset of edges to form components



Example: Analysis of News Media



1.6M sites, 20k "news" generates 30% of the documents



the most serious financial crisis since the great depression

fundamentals of our economy are strong

president's job to deal with more than one thing at once

this is something that all of us will swallow hard and go forward with

the united states

who is the real barack obama

he's palling around with terrorists

i am not president bush

i think when you spread the wealth around it's good for everybody

hey can i call you joe

she is a diva she takes no advice from anyone

2 9/19 9/26 10/3 10/10 10/17 10/24 10/3

700
600
500
400
300
200

Example: Analysis of News Media

- Key ideas:
 - meme definition:
 - biological ecosystem:info space::gene:meme
 - identify current “memes”
 - clusters of quoted strings appearing in the news
 - visualize popularity, spread etc of “memes”
 - is there a “news cycle” and can you measure it?
 - do memes appear in news or blogs first?
 - how quickly do they spread?

How do politicians talk to
people?

Example: Analysis of Politicians

The Party is Over Here: Structure and Content in the 2010 Election

Avishay Livne¹, Matthew P. Simmons², Eytan Adar^{1,2}, Lada A. Adamic^{1,2}

¹Computer Science and Engineering, ²School of Information,

University of Michigan, Ann Arbor

Ann Arbor, MI, USA, 48109

{avishay, mpsimmon, eadar, ladamic}@umich.edu

ICWSM 2011

Example: Analysis of Politicians

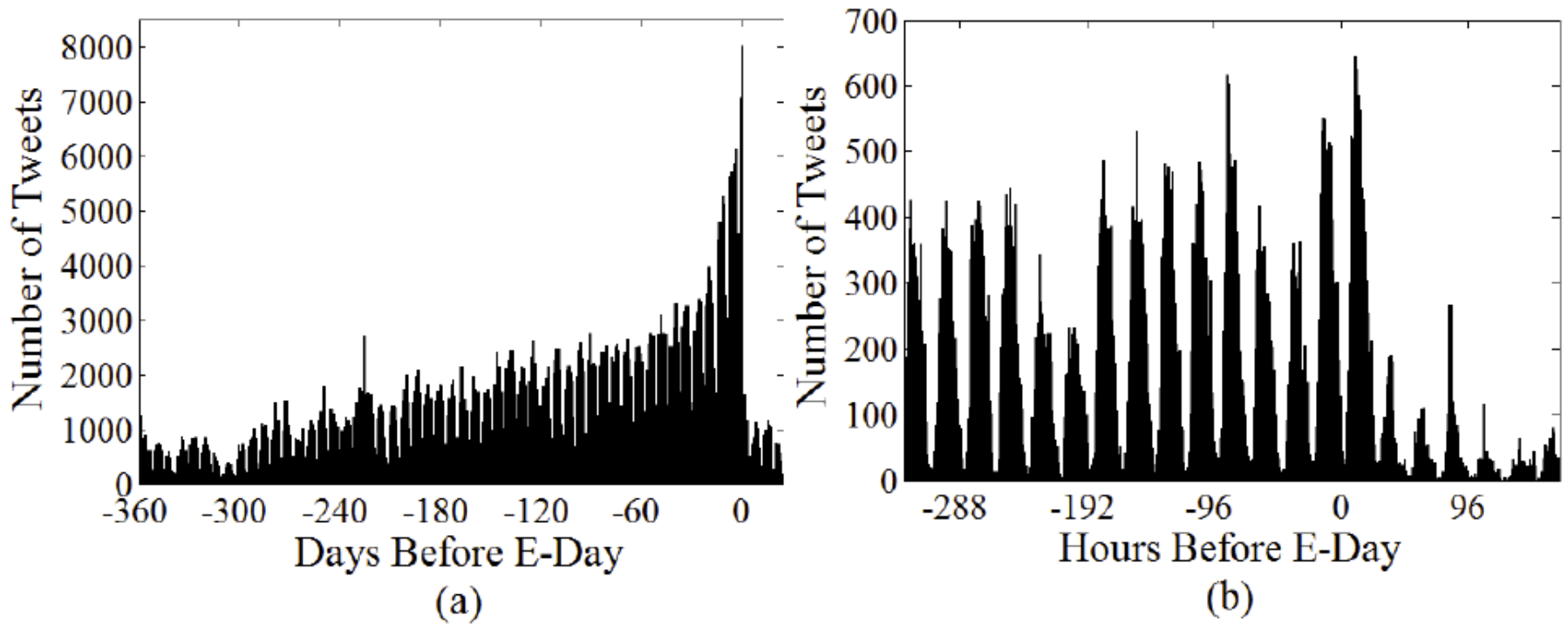
- Collected Tweets from 687 candidates
 - 339 Democrats, 348 Republicans (R' s include 95 “Tea Party” candidates)
 - All running for national congress or governor
 - Collected manually

Example: Analysis of Politicians

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Example: Analysis of Politicians

- When do they tweet?



Example: Analysis of Politicians

Table 1. Subgraph Density by Group

	Democrat	Rep-TP	Rep+TP	Tea Party
Density	0.007	0.032	0.025	0.020
In-degree	2.55	8.37	8.97	1.82

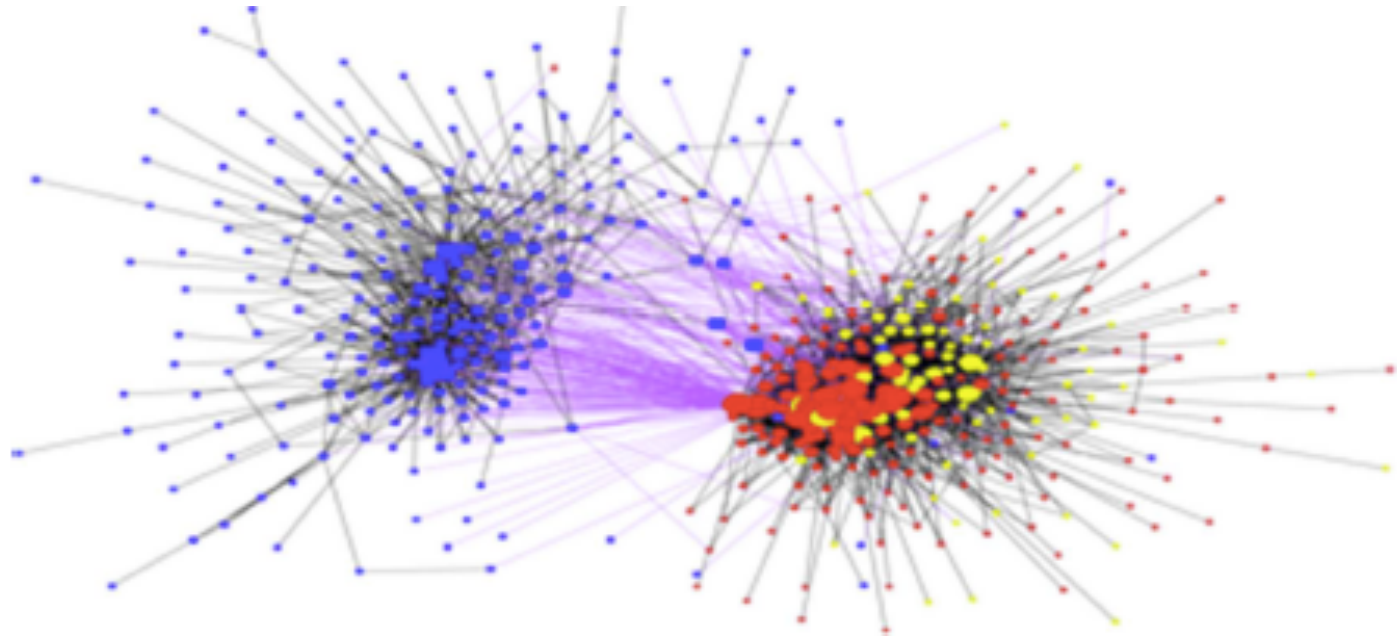


Figure 2. Plot of the candidate network (force-directed graph embedding layout modified to emphasize separation, nodes size proportional to indegree)

Example: Analysis of Politicians

- What do they say?
- Built a language model for each candidate
 - tweets
 - text of URLs included in tweets
 - text of home pages
- “They all sound the same”
 - Looked at symmetric variant of KL-divergence between pairs w/in the same party

Example: Analysis of Politicians

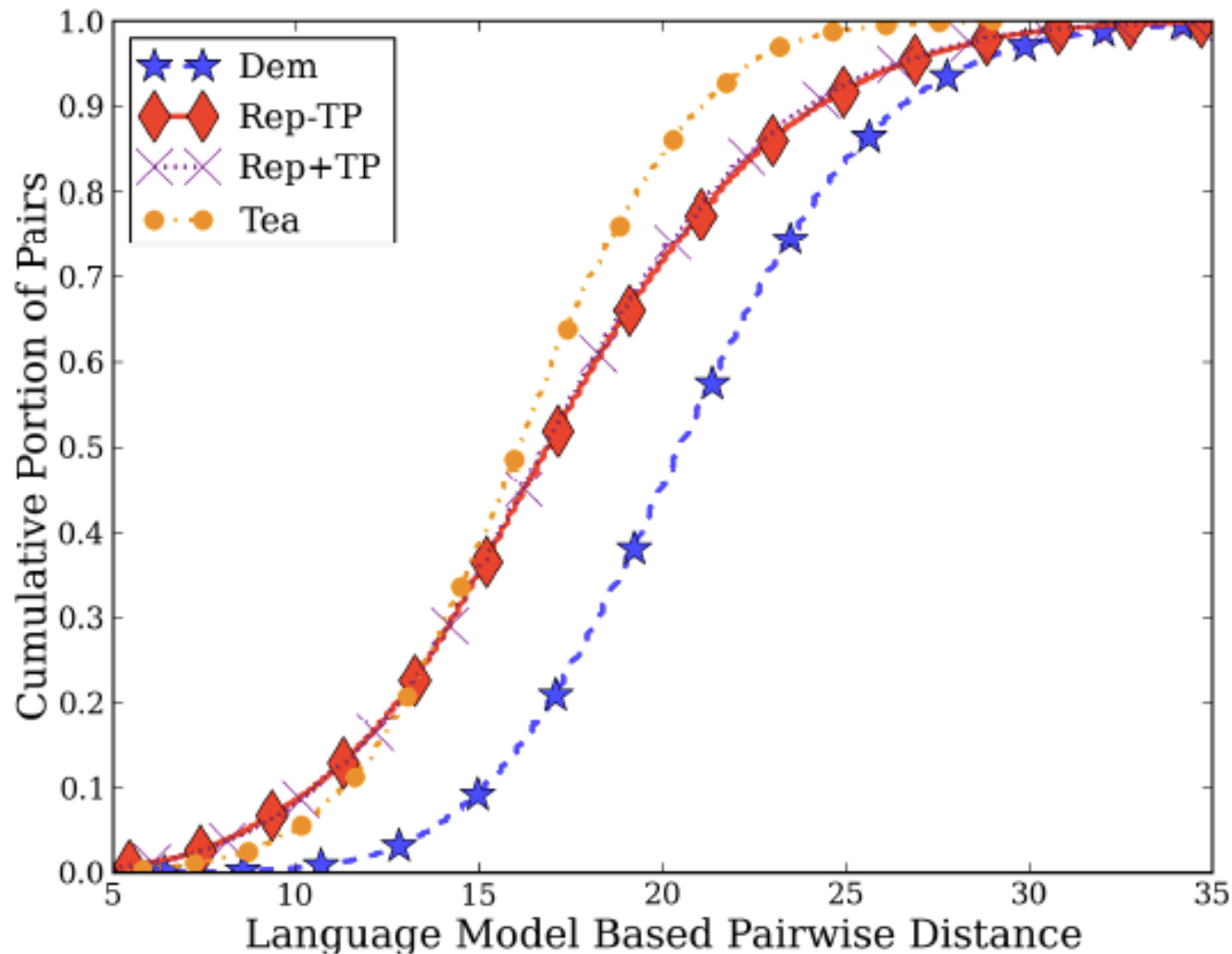


Figure 4. Pairwise KL divergence

Example: Analysis of Politicians

- Who will win?
 - features:
 - party (of candidate)
 - same-party (as held seat before); incumbent
 - in-degree (#followers); closeness (centrality); PageRank, HITS authority, ...
 - KL-party: linguistic similarity between candidate LM and his party' s LM
 - KL-corpus: same for whole corpus
 - Number of tweets, hashtags, ...

Variable	Estimate	Prob(> z)	Accuracy
same_party	2.67	<0.0001	78.9%
incumbent	3.163	<0.0001	76.9%
indegree	0.252	<0.0001	74.6%
closeness_all	486.7	<0.0001	73.5%
kl-corpus	-0.281	<0.0001	66.7%
pagerank	486.7	<0.0001	66.4%
closeness_in	1017.2	<0.0001	64.7%
authority	0.442	<0.001	63.8%
republican	0.976	<0.0001	61.0%
teaparty	-0.277	0.38	61.0%
retweets	-0.00113	0.15	58.4%
hashtags	-0.00016	0.11	58.1%
tweets	-0.00022	0.08	57.8%
replies	-0.00026	0.08	57.5%
closeness_out	-20.9682	0.1	57.5%
kl-party	-0.047	<0.05	55.9%

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closeness_out	-20.9682	0.1	57.5%
outdegree	0.023	<0.01	57.5%
kl-party	-0.047	<0.05	55.9%

“An interesting finding is that KL-corpus is significantly more predictive than KL-party. The negative coefficient of these variables suggests that the more similar the LM of a user to the LM of the party/corpus, the more likely she is to be elected. We interpret this as meaning that focusing on centrist issues correlates more highly with winning than merely conforming to the agenda of one’s own party (though both matter).”

Name	Variables	Accuracy
All	tweets, kl-corporus, incumbent, party, closeness_all, closeness_out, same_party	88.0%
All but kl-corporus	tweets, corporus, incumbent, same_party party, closeness_all, closeness_out	85.5%
No content	incumbent, party, same_party, closeness_all, closeness_out	84.0%
No graph	tweets, kl-corporus, incumbent, party, same_party	83.8%
No graph & content	incumbent, party, same_party	81.5%

How do people talk about
politicians?

THE TWITTER POLITICAL INDEX

NOVEMBER 2, 2012: OBAMA +20 [LEARN MORE](#)

 [Tweet](#)

 [Follow @gov](#)


D



BARACK OBAMA

52

↑ +9 SINCE YESTERDAY

 [Follow @BarackObama](#) 10M+ followers


R



MITT ROMNEY

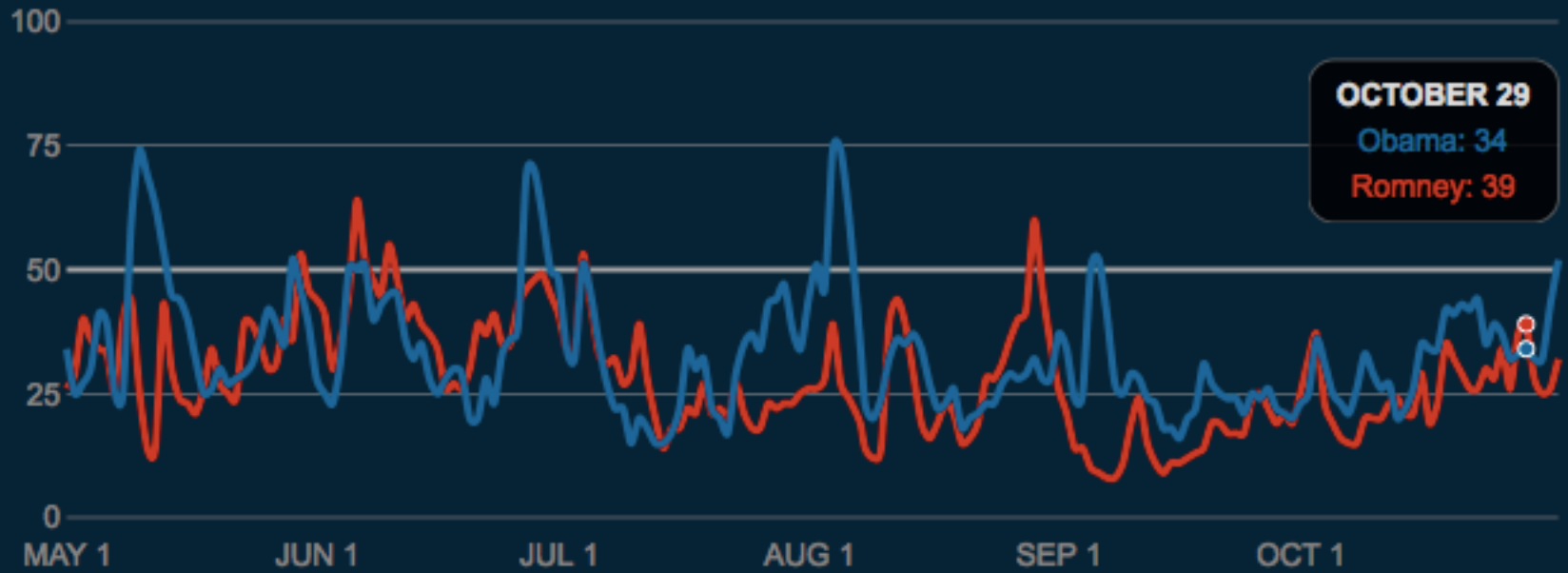
32

↑ +6 SINCE YESTERDAY

 [Follow @MittRomney](#) 1.6M followers

#TWINDEX

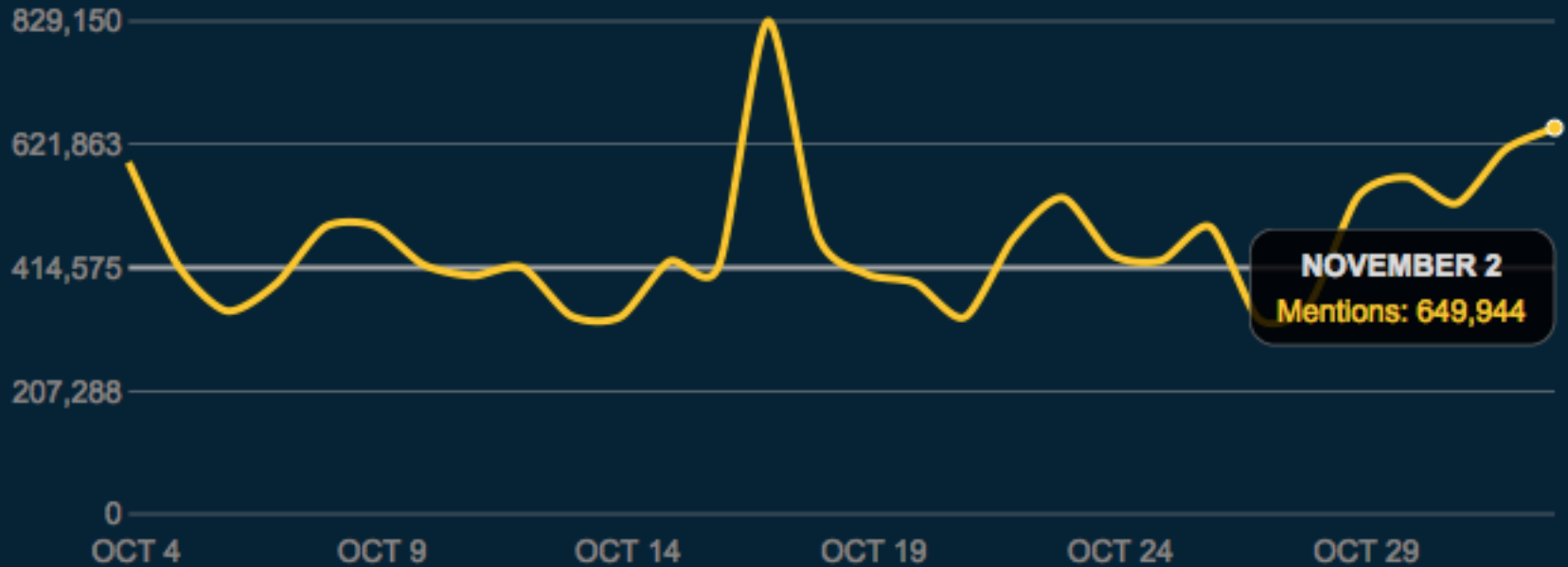
HISTORY



ENERGY AND THE ENVIRONMENT

MENTIONS

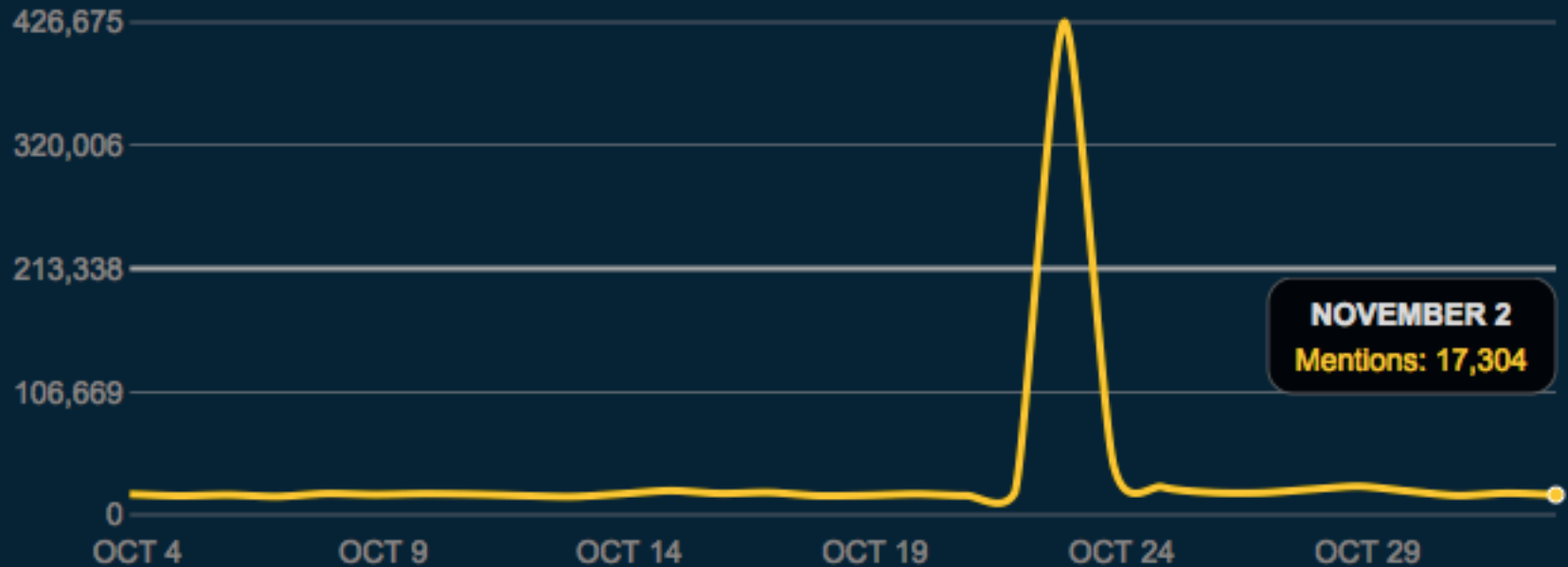
🕒 Last 30 days ▾



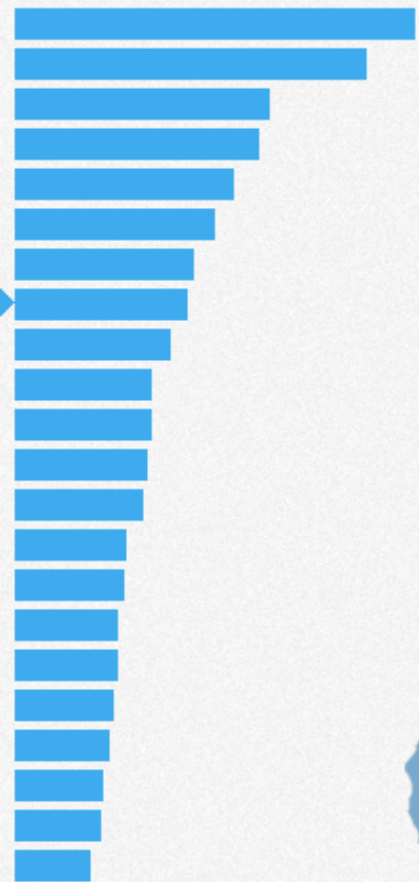
HORSES AND BAYONETS

MENTIONS

🕒 Last 30 days ▾



@BarackObama Tweets



education


@MittRomney Tweets

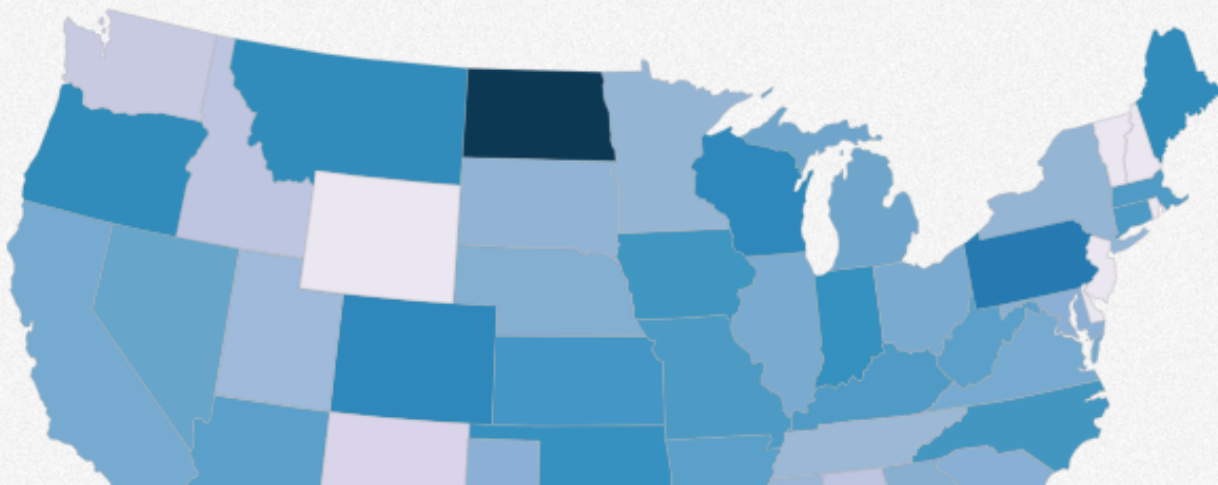


Sort Tweets by relevance on St [dropdown] Reset


Barack Obama  

Education should not be a Democratic or Republican issue. It's an American issue.
pic.twitter.com/OD7BHGJR

23 Aug 12   



What else can be learned?

- Can we find out what people are interested in?
- Can we find out what they plan to do?



Explore trends

Hot searches

Search terms ?

where to vote

+ Add term

▸ Other comparisons

Limit to

Web Search ▸

United States ▸

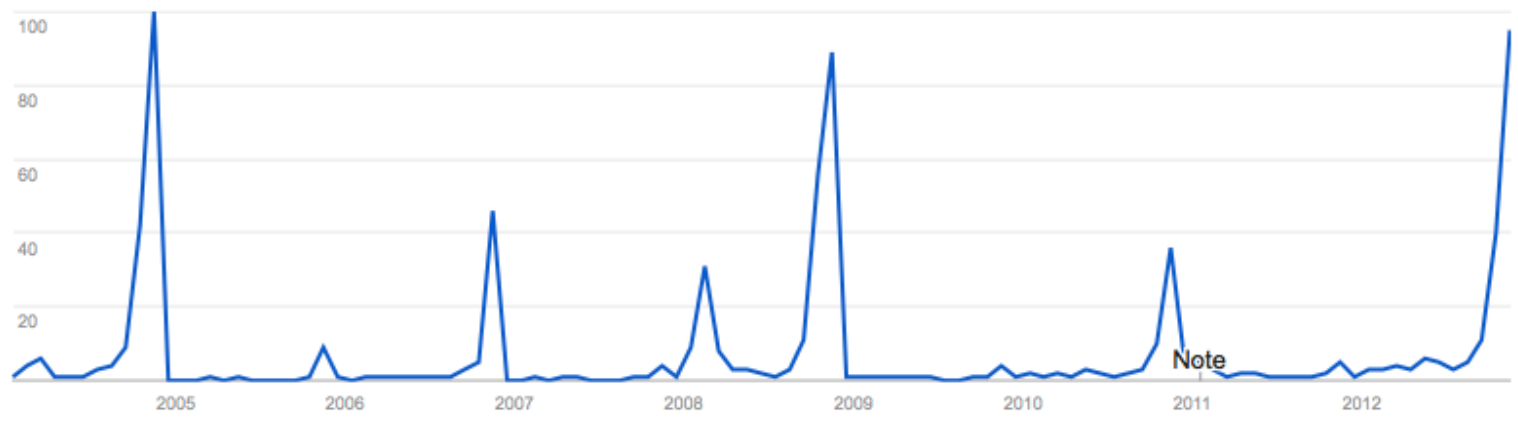
2004 - present ▸

All Categories ▸

Interest over time ?

The number 100 represents the peak search volume

News headlines Forecast ?



Embed

Regional interest ?

Worldwide > United States



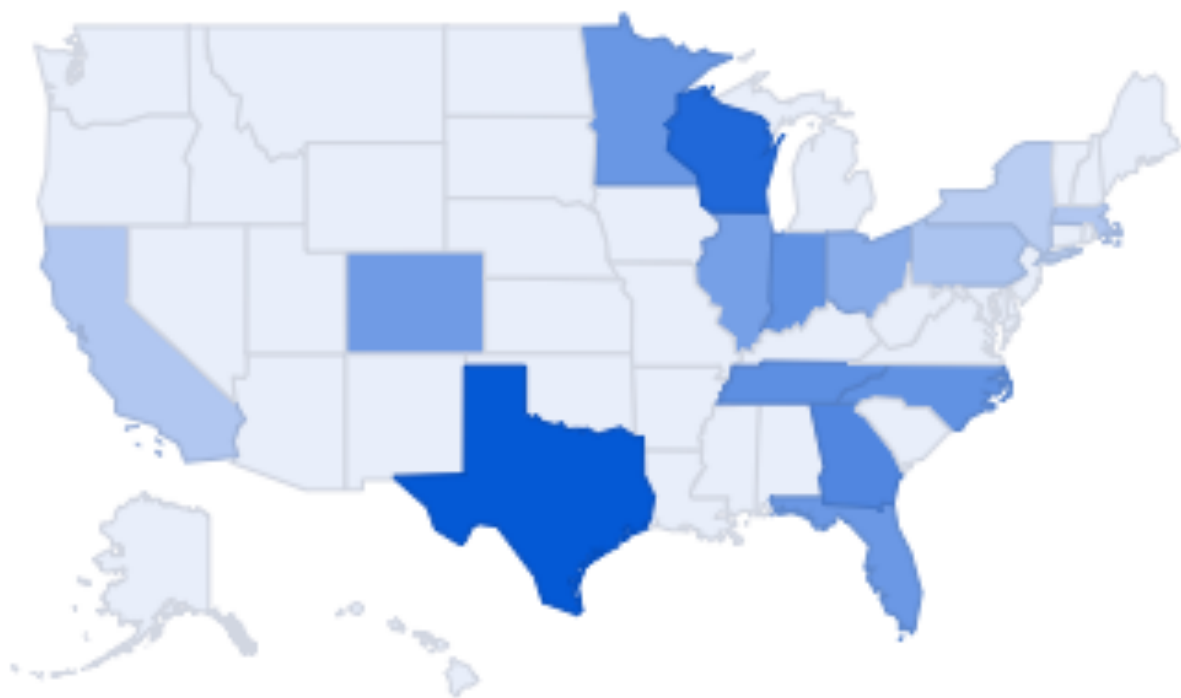
Related terms ?

Top Rising

Regional interest ?




Worldwide > United States



▶ [View change over time](#) ?

[Subregion](#) | [Metro](#) | [City](#)

Other examples

CAMPAIGN STOPS | October 20, 2012, 3:52 PM |  67 Comments

Google's Crystal Ball

By SETH STEPHENS-DAVIDOWITZ

- “how to vote”, “where to vote”
- “Paul Ryan shirtless” vs “Paul Ryan budget”
- “Obama jokes” w/in state – predicts vote share in 2008
- “McCain life expectancy” peaks after Sarah Palin VP pick