

Hate Speech, Polarization and Online Data

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Nov 26, 2018

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Goal of This Talk



eierlegende Wollmilchsau
egg-laying wool-milk sow

Cover lots of ground to have a conversation

By G. Mittenecker, CC BY-SA 2.5

<http://kamelopedia.mormo.org/index.php/Datei:Wollmilchsau.jpg>

NOT IN THIS TALK

Come Talk to Me About ...

- Monitoring international migration
- Monitoring digital gender gaps
- Work experience with UN agencies
- Digital demography
- Data for development
- Inferring BMI from profile pictures

CONTENT WARNING

The rest of the presentation contains occasional examples of highly offensive, racist, bigoted, misogynist and just generally awful content from the web.

And now, finally:

HATE SPEECH

What is Hate Speech?

Req 1: Attacking a person or group on the basis of protected attributes such as religion, race, ...

Req 2: Inciting violence towards that person/group.

“Christians are scum!” vs. “Professors are scum!”

“Kill politicians!” vs. “Protest against politicians!”

What about insults against Christian professors?

Case Study: Facebook's Rule Book

- Content moderation largely done by humans
 - Exceptions: some graphic content (images are easier!)
- Humans have 3-5 seconds to make a judgment
- Should be universal, irrespective of context
 - What about Japanese in the US vs. China? Or goats?
- Leads to a if-then rule book for moderators
 - Public version: facebook.com/communitystandards/
- Real example: white men vs. black children
- Boundary between offensive and hate speech is hard!

“Post No Evil” Radiolab episode

<https://www.wnycstudios.org/story/post-no-evil>

Is it a Hopeless Task?

- Not clear cut, overlaps with profanities
- Groups owning the terms (f*g, n*gga, b*tch)
 - “n*ggers annoy me” said by white man vs. black woman
- Internet lingo, jargon, and disleksya
- Irony and sarcasm
- Non-verbal cues such as (((echo)))
- “Let’s all use ‘hug’ instead of ‘kill’, ok?”
“Got it. So now let’s go and hug some Muslims!”
- Reference resolution, e.g. “they” in comments
- Threaded conversations and “I agree!”
- Let alone cross-lingual, international, ...

How to Label Training Data?

- Use legal experts
 - Very expensive, hard to get thousands of labels
- Well-trained individuals
 - Should be done (c.f. FB moderators) but is rarely done
- Crowd-sourced “I know it when I see it”
 - Random turkers/crowd workers
 - <https://github.com/t-davidson/hate-speech-and-offensive-language>
- Whatever is predictive of violence
 - Has not really been explored
 - Great if there's enough violent incidence data

Beyond Linguistic Features

- User information
 - self-description
 - profile image
 - past content
 - social network
 - cross-site linkage
- User reaction
 - down-/Up-votes
 - ratioed (example)
 - sentiment
 - domains of sites linked to

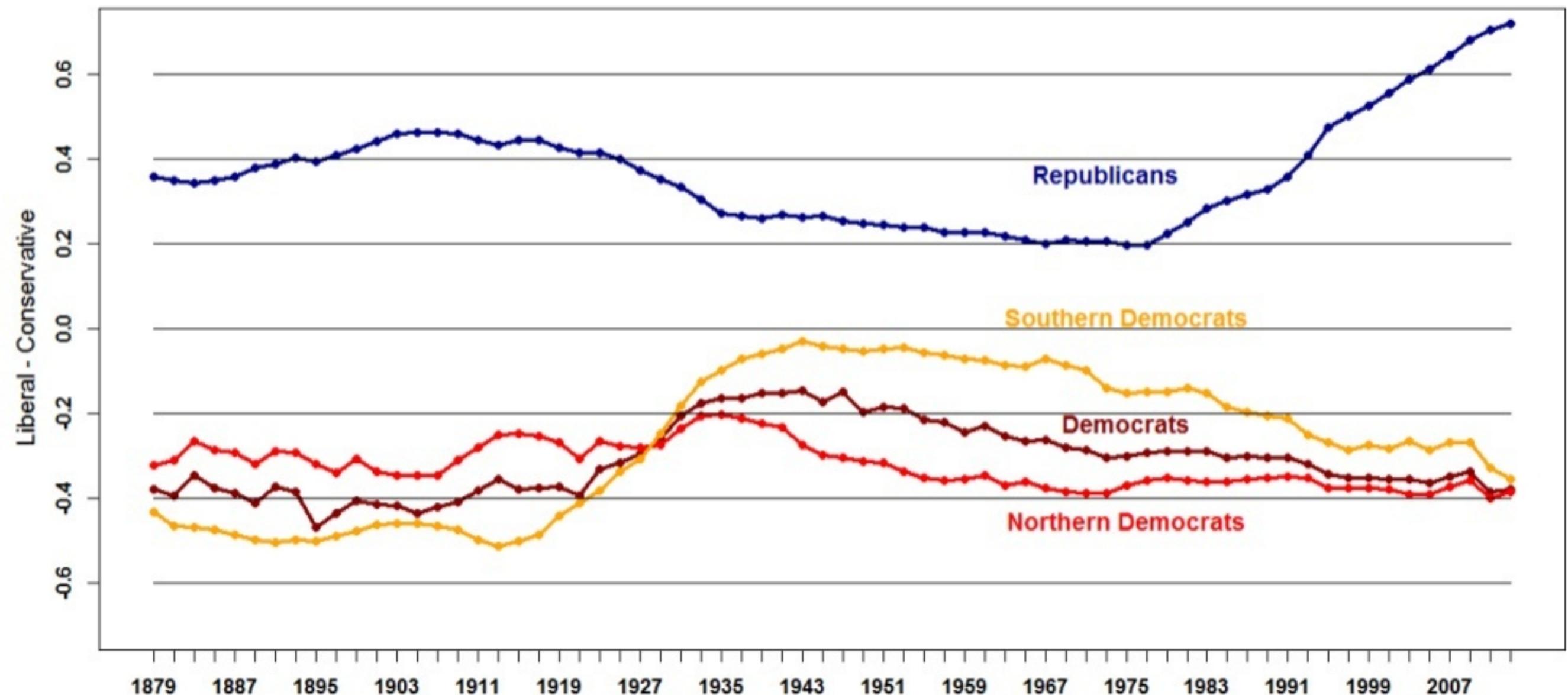
Take-Home Questions

- Do you understand the local and historic context?
- Do you need hate speech detection or general antagonism and tension monitoring?
- What rates of false positive and false negatives are acceptable for the application?
- What are non-linguistic elements you can incorporate?

POLARIZATION

DW-NOMINATE

House 1879-2014
Party Means on Liberal-Conservative Dimension



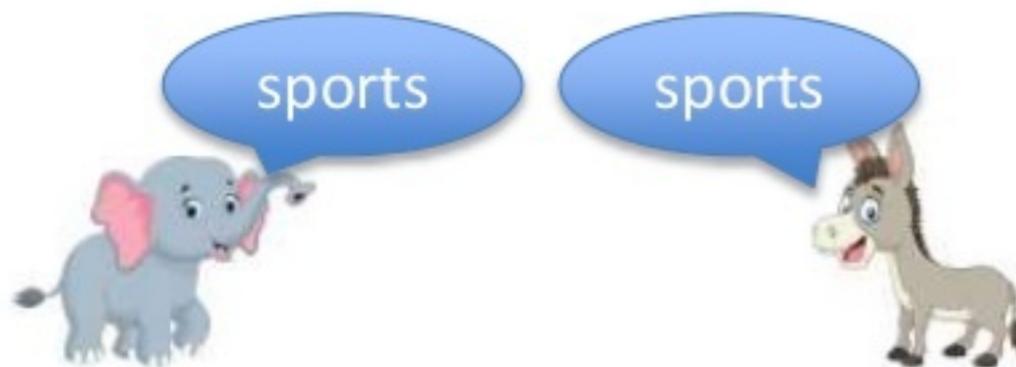
Polarized America / voteweb.com

جامعة قطر لبحوث الحاسوب
Qatar Computing Research Institute

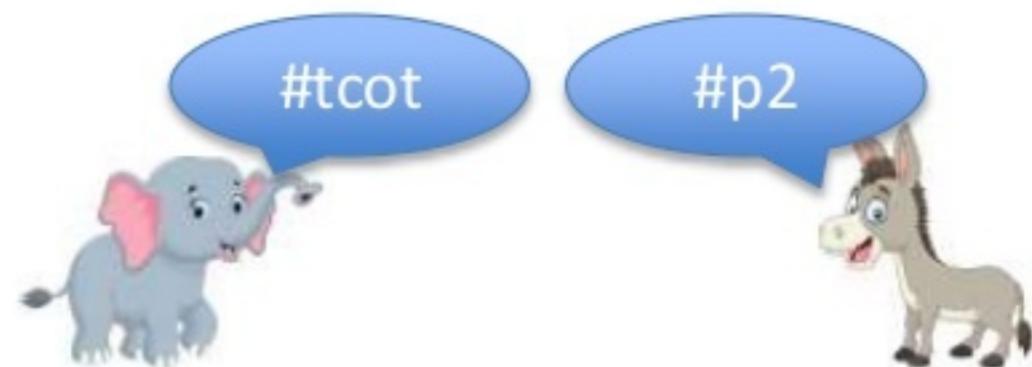
جامعة حمد بن خليفة
HAMAD BIN KHALIFA UNIVERSITY



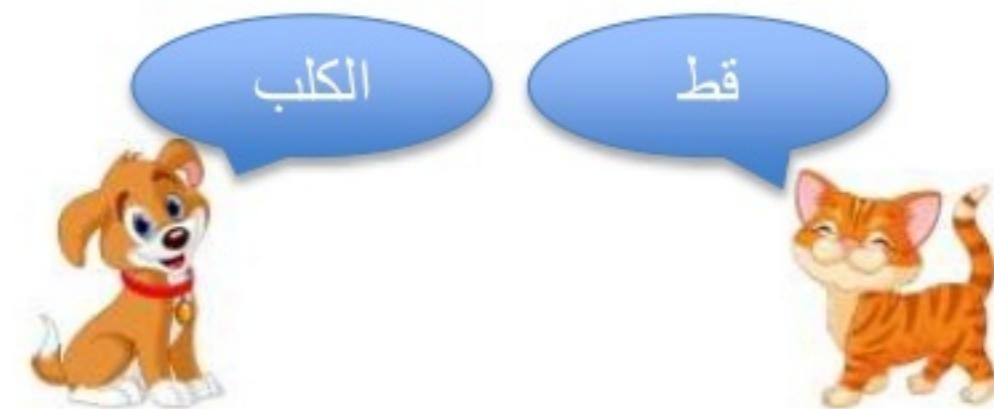
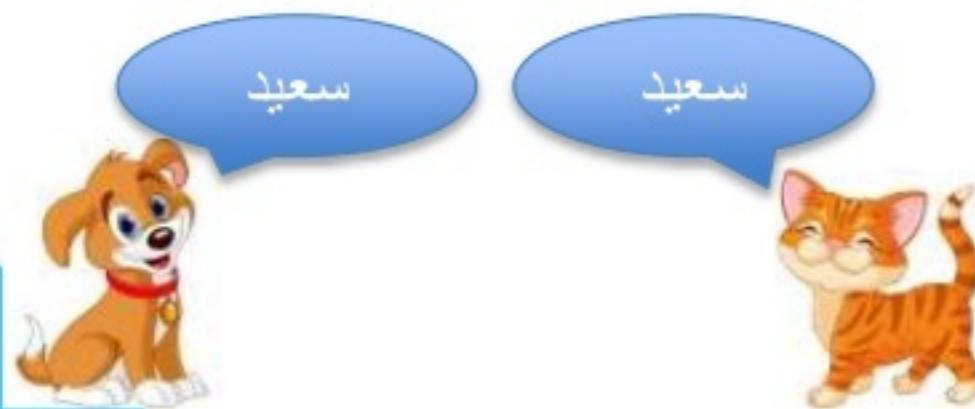
Talking Different Languages



Not polarized.
Both use the same words.



Polarized.
Both use different words.



If pre-existing “poles” are known no need for NLP!

Starting Point: Seed Users

Secularists		Islamists	
Twitter Name	Screen_Name	Twitter Name	Screen_Name
Mohamed ElBaradei Alaa Al Aswany	@ElBaradei @alaawasawy	Muhammad Morsi Fadel Soliman	@MuhammadMorsi @FadelSoliman
 Mohamed ElBaradei  @ElBaradei iaea.org/About/dg/elbar... Cairo, Egypt · taghyeer.net	 د. محمد مرسي @MuhammadMorsi الحساب الرسمي لرئيس مصر الدكتور محمد مرسي - مكتب الرئيس يدير الحساب وتزيل تغريدات الرئيس بكلمة #الرئيس Morsi tweets tagged with #Morsi Egypt		

“Secular vs. Islamist Polarization in Egypt on Twitter”

Get Retweeting Users

Moha @ElBar د. محمد مرسي @MuhammadMorsi Follow

Back to sq1 constituent unconstitutional constitution

Egypt witnessed yesterday # Magdy Rady numbers can not be ignored called to renounce violence performed to confirm awareness of the civilized Egyptians and their adherence to the path of peaceful revolution # President

190 RETWEETS 63 FAVO 443 RETWEETS 169 FAVORITES

Shahid li al-Bimsa

Get ~7,000 users retweeting a seed users at least once
Label users fractionally according to retweeted camp

Retweeting = Endorsement?

Asked two judges to label 100 users

Judges labeled 38% as “unknown” – not easy!

For the non-“unknown” labels ...

77% agreement of inferred label with judges

80% inter-judge agreement

Noisy at individual level

Strong signal at aggregate level

More cross-ideological retweets than for the US

Who Are They?

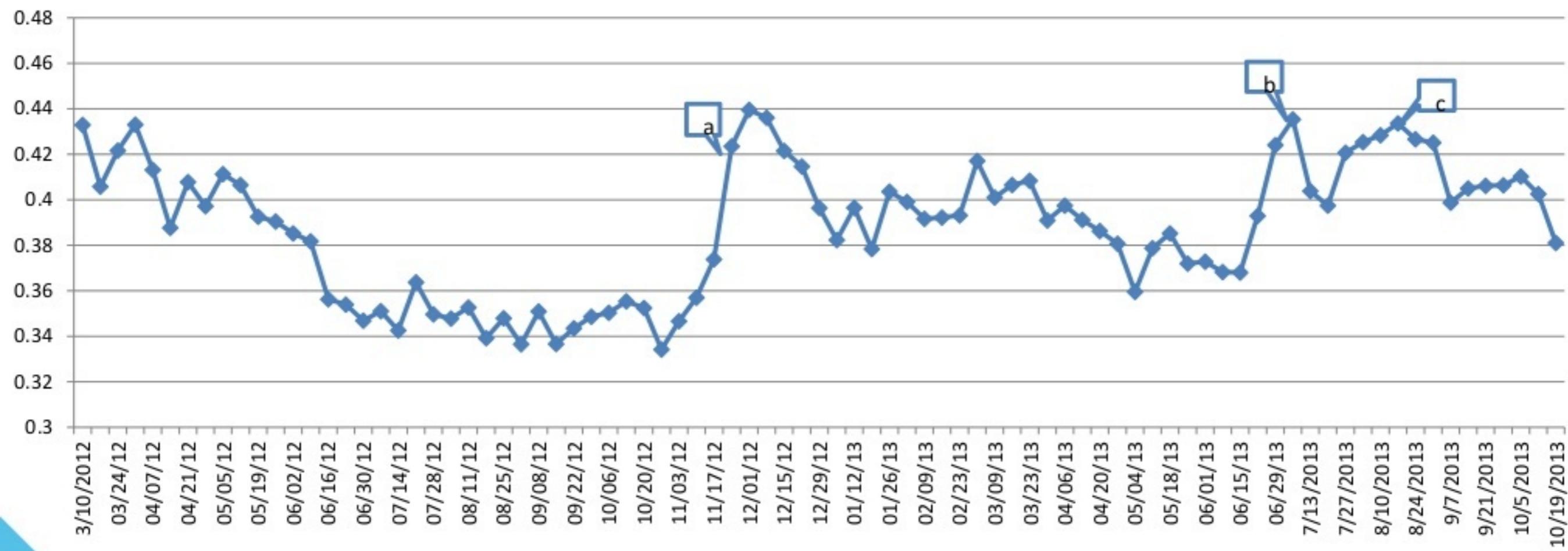
	Secularists	Islamists
# tweeps	5,215	1,719
Av. followers	1,468	884
Av. friends	457	501
Av. tweets	7,587	7,830
# men	2,382	786
# women	556	201
% English	16.9	16.2
% Arabic	71.3	72.7

From Users to Hashtags

Hashtag (Islamist)	Leaning	Hashtag (Secular)	Leaning
مؤتمر_نصرة_الأحواز (Al-Ahwaz_Support_Conference)	0.948i	مرسي_كذاب_قوي (Morsy_is_a_big_liar)	0.982s
جبهة_الخراب (destruction_front)	0.947i	feb10	0.982s
جرائم_المعارضة_السلمية (crimes_of_the_peaceful_opposition)	0.943i	عازين_البوب_رئيس_وزراء (we_want_the_Bob_(El-Baradei)_as_prime_minister)	0.981s
بسـمـ_عـودـةـ (Basem_Ouda)	0.941i	حسن_البانـداـ_فيـ_التـارـيخـ (Hassan_Al-Panda_in_history)	0.981s
يحيـيـ_عيـاشـ (Yahya_Ayyash)	0.940i	عليـ_قـنـدـيلـ (Ali_Qandeel)	0.979s



Hashtag Barometer

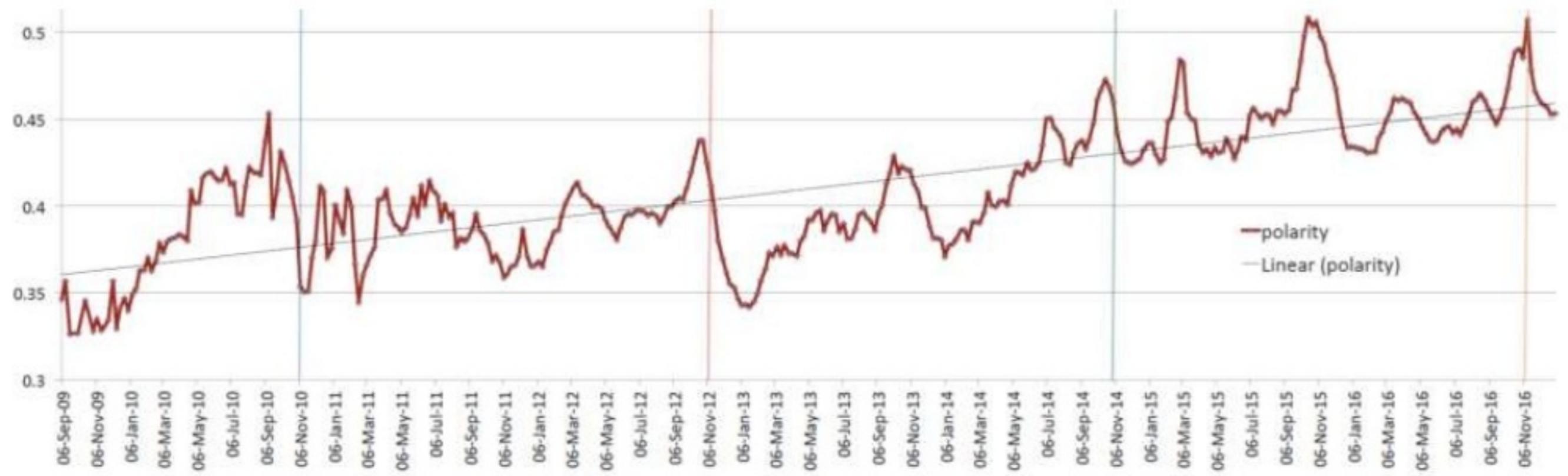


a - Violent protests after president Morsi declares more powers for himself

b - Military ousts president Morsi

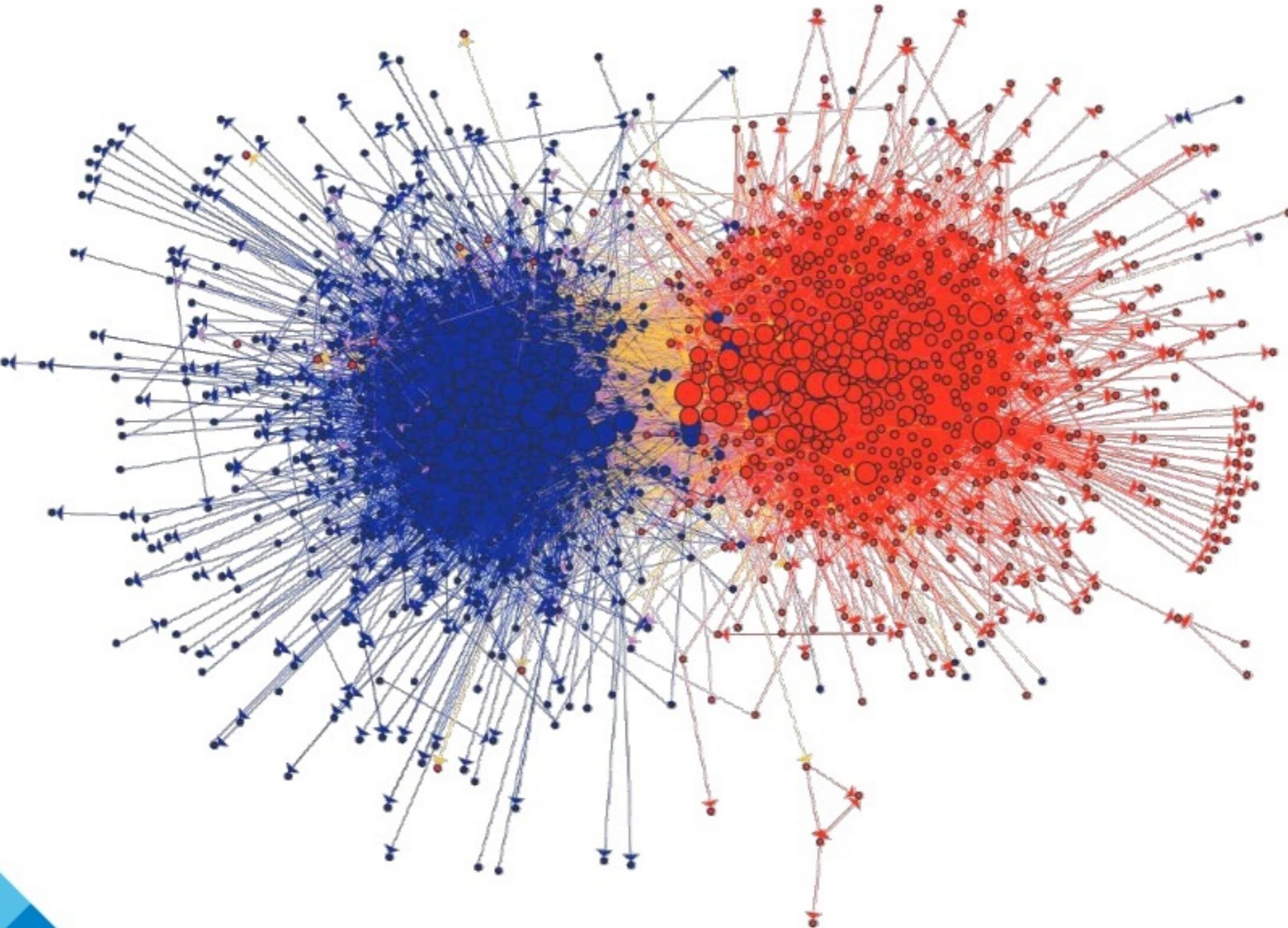
c - Military crackdown on the streets killing at least 150 people

US Long-Term Hashtag Polarization

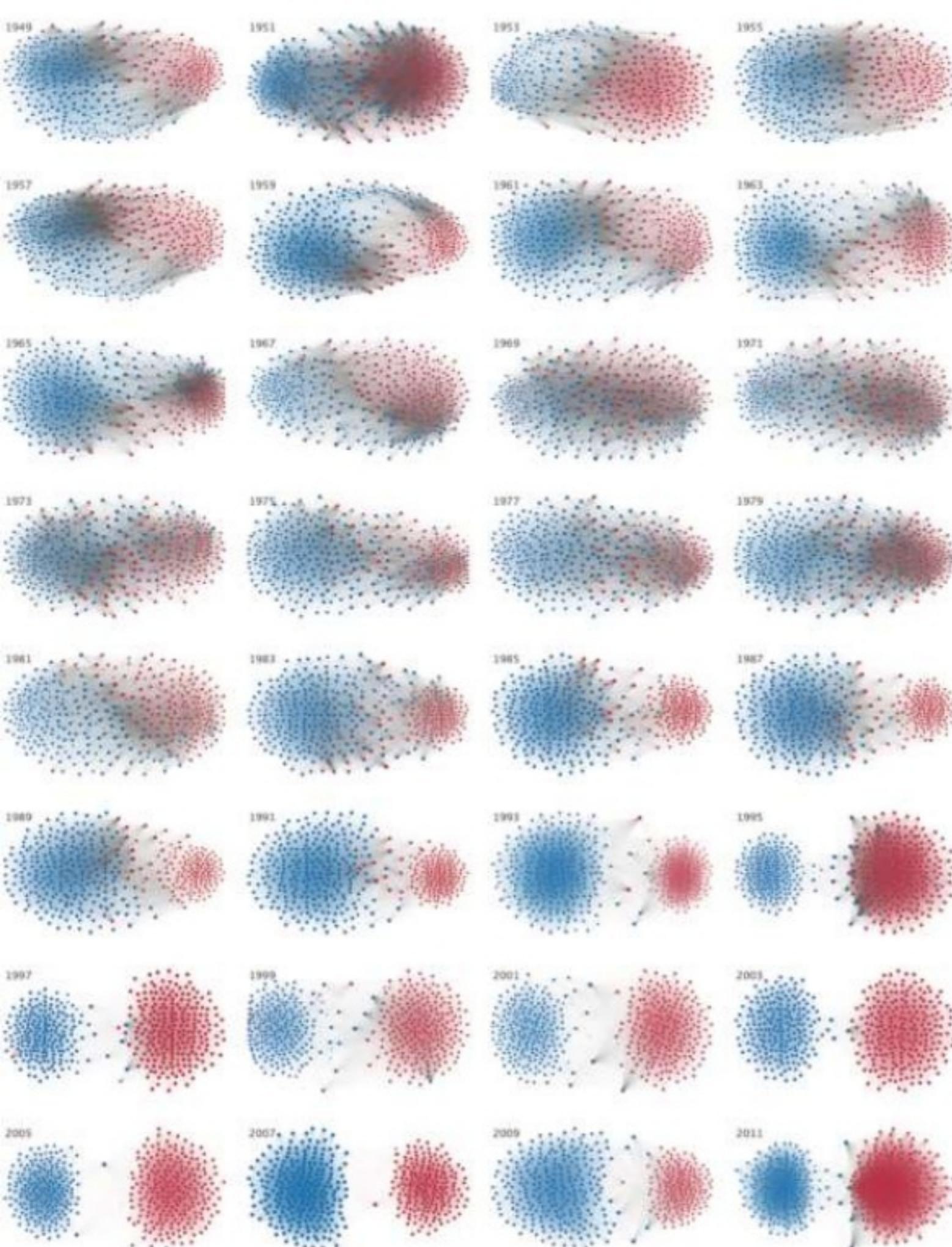


"A Long-Term Analysis of Polarisation on Twitter"

Network Polarization



“The political blogosphere and the 2004 U.S. election: divided they blog”



“The Rise of Partisanship and Super- Cooperators in the U.S. House of Representatives”

Twitter Networks Across Time

- Follow/Friend links are returned in reverse chronological order
- A profile's creation date is public
- You cannot follow someone before profile is created
- Establishes bounds, fairly tight

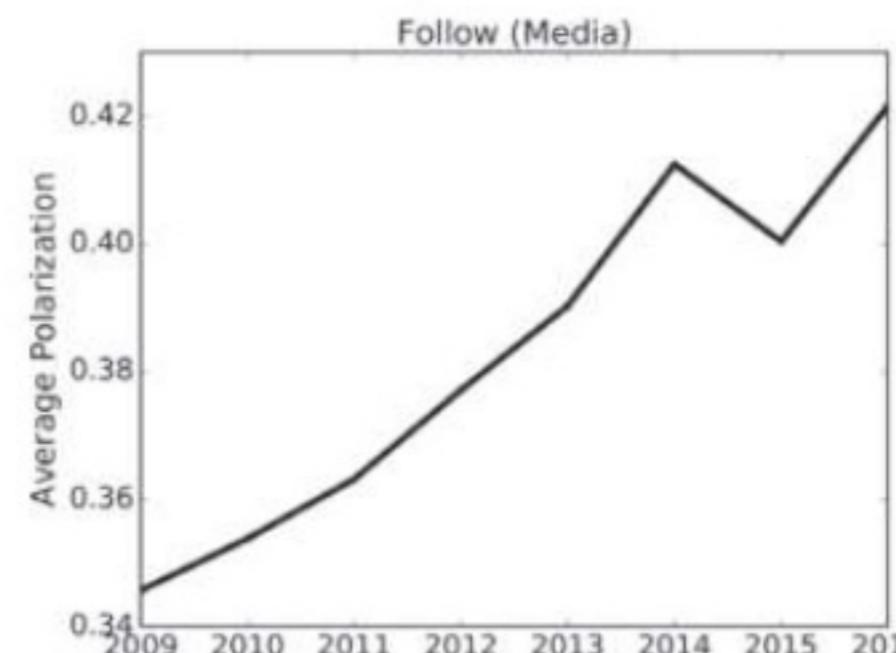
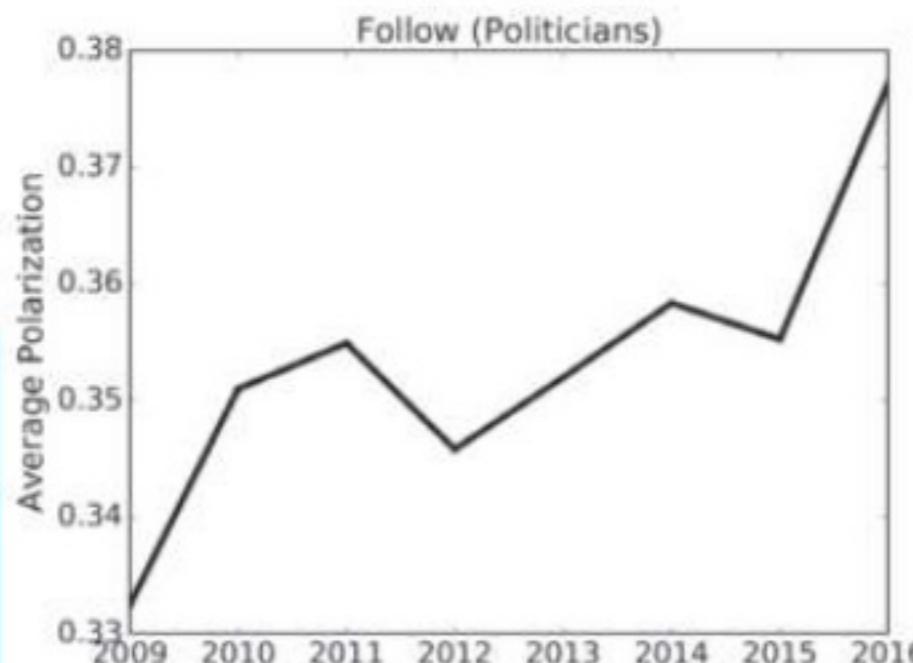
“We know who you followed last summer: inferring social link creation times in twitter”

WWW'11, <https://dl.acm.org/citation.cfm?id=1963479>

Network Polarization Across Time

Political accounts	Side
barackobama,joebiden,timkaine,hillaryclinton, thedemocrats	left
realdonaldtrump,mike_pence,mittromney,gop, speakerryan,senjohnmccain,sarahpalinusa	right

- Leaning = $L = \alpha / (\alpha + \beta)$
- Beta distribution with prior $\alpha=\beta=1$
- Polarization = $2 * | 0.5 - L |$



ONLINE DATA

Facebook Ad Audience Estimates

Languages i

Enter a language...

INCLUDE people who match at least ONE of the following i

Interests > Additional interests

The Daily Caller

TheBlaze

Add demographics, interests or behaviours

Suggestions | Browse

FOX & FRIENDS

Judge Jeanine Pirro

Interests

Size: 9,720,220

Fox News Live

Interests

Interests > Additional interests > Illuminati

US politics (very conservative)

Demographics

Description: People who have expressed an interest in or like Pages related to Illuminati

Glenn Beck Program

Interests

Illuminati

Interests

American Enterprise Institute

Interests

Audience size

Specific

Broad

Your audience selection is broad. This requires a large budget.

Potential Reach: 5,700,000 people i

Estimated daily results

Reach

870-5,400

i

on factors
udget
numbers are
ormance
ites and



Twitter Ad Audience Estimates

Details > ▲ Creatives > Targeting > Review & Complete

Next

Select gender

Any gender Male Female

Select age

- All ages
 Age range

Select location, language, technology

Target people by location, language, platform, device, carrier, or OS version.

All Q

Import multiple zip codes

Locations ?

United States X

Target people who first used Twitter on a new device or carrier NEW

Audience features

Further refine your audience by selecting features to include or exclude in addition to demographics. ?

All > Follower look-alikes @RichardBSpencer Q

Import multiple keywords and follower look-alikes

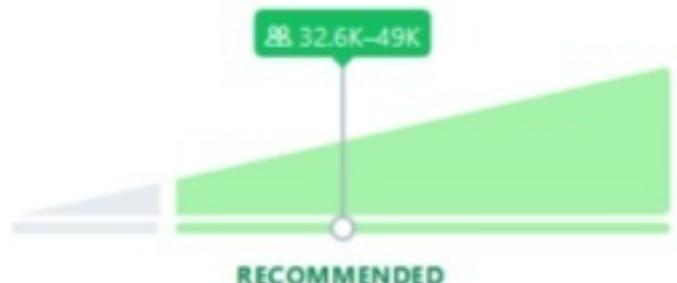
Recommendations ?

Off

Follower look-alikes ?

@RichardBSpencer X

Audience summary



Defining your own audience is optional. Twitter continuously optimizes your campaign for high performance so providing fewer targeting parameters may improve your results.

[Copy ad group](#)

<https://ads.twitter.com/campaign/>



vKontakte Audience Estimates

▼ Geography

Country, city, location

Geography: Cities and Regions Choose on map

Country: USA

Target audience

230 people [?]

Recommended value

34.69 – 50.61 rubles

► Demography

Sex, age, birthday, relationship status

▼ Interests

Interests, Habits, Communities & Apps

Interests & Habits:

Select a category

Communities:

ARYANS X

Aryan Strikeforce/Combat 18 International X

Ku Klux Klan | Ky Клукс Клан (KKK) X

[KKK] X Combat 18 X

Aryan Terror Brigade/Combat 18 X

Aryan Strikeforce/Combat 18 (USA) X

https://vk.com/ads_edit.php?act=create



Google Correlate

<https://www.google.com/trends/correlate>

Google Correlate

Trump Share by State 2016 x Search correlations Edit this data

Compare US states

- Compare weekly time series
- Compare monthly time series

Documentation

- Comic Book
- FAQ
- Tutorial
- Whitepaper
- Correlate Algorithm

Correlate Labs

- Search by Drawing

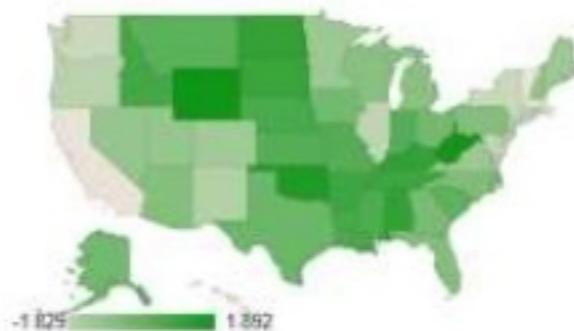
Correlated with Trump Share by State 2016

- 0.9200 obama jokes
- 0.9128 campbell hausfeld air compressor
- 0.9119 hausfeld air compressor
- 0.9094 new dollar coins
- 0.9093 country guitar tabs
- 0.9044 beretta u22
- 0.9041 in god we still trust
- 0.9020 ford emblem
- 0.9018 u22 neos
- 0.9014 judge for sale

Show more Export data as CSV | Share: [Twitter](#) [Facebook](#) [G+](#)

User uploaded activity for Trump Share by State 2016 and United States Web Search activity for obama jokes
(r=0.9200)

 State maps  Scatter plot



<https://www.google.com/trends/correlate/search?e=id:thWTfmu9Tli&t=all>



Google Trends

Kalar (ကူလာ)

(Burmese) derogatory word for its Muslim citizens who are "black-skinned" or "undesirable aliens". https://en.wikipedia.org/wiki/List_of_ethnic_slurs#K

<https://trends.google.com/trends/explore?date=all&geo=MM&q=%E1%80%80%E1%80%AF%E1%80%9C%E1%80%AC%E1%80%B8>

What is the nature of Myanmar's communal violence?

Over the last two years accusations of sexual assault and local disputes have created a flashpoint for violence that has quickly escalated into widespread communal clashes.

- The first and most deadly incident began in June 2012 when widespread rioting and clashes between Rakhine Buddhists and Muslims, largely thought to be Rohingya Muslims, left 200 dead and displaced thousands. It was the rape and murder of a young Buddhist woman which sparked off that deadly chain of events
- In March 2013 an argument in a gold shop in Meiktila in central Myanmar led to violence between Buddhists and Muslims which left more than 40 people dead and entire neighbourhoods razed
- In August 2013 rioters burnt Muslim-owned houses and shops in the central town of Kanbalu after police refused to hand over a Muslim man accused of raping a Buddhist woman
- In January 2014, the UN said that more than 40 Rohingya men, women and children were killed in Rakhine state in violence that flared after accusations that Rohingyas killed a Rakhine policeman.
- In June 2014, two people were killed and five hurt in Mandalay, Myanmar's second city, following a rumour that spread on social media that a Buddhist woman had been raped by one or more Muslim men

<https://trends.google.com/trends/explore?date=2013-03-01%202013-03-31&geo=MM&q=%E1%80%80%E1%80%AF%E1%80%9C%E1%80%AC%E1%80%B8>

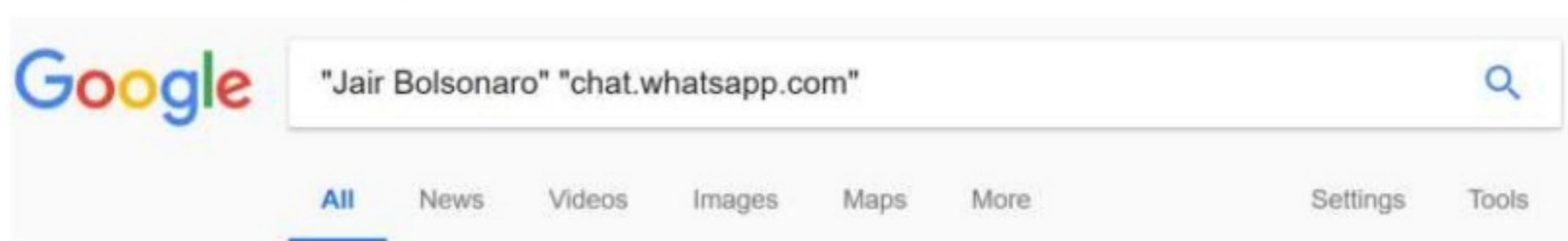
<https://www.bbc.com/news/world-asia-18395788>

Public Whatsapp Groups

WhatsApp Doc? A First Look at WhatsApp Public Group Data

<https://www.aaai.org/ocs/index.php/ICWSM/ICWSM18/paper/view/17865>

<https://github.com/gvrkiran/whatsapp-public-groups>



A screenshot of a Google search results page. The search query in the bar is "Jair Bolsonaro" "chat.whatsapp.com". The "All" tab is selected. Below the search bar, there are links for news, videos, images, maps, more, settings, and tools. The text "About 70 results (0.42 seconds)" is displayed. The first result is a link to a WhatsApp group chat.

<https://chat.whatsapp.com/8r3GKLqoohg1jhJ...> - Glauco ... - Facebook

<https://www.facebook.com/.../httpschatwhatsappcom8r3gklqoohg1jhjagib2dz/80056351...>

<https://chat.whatsapp.com/8r3GKLqoohg1jhJagib2Dz...> Political Organization. Jair Bolsonaro Presidente do Brasil em 2018. Public Figure. Jair Bolsonaro.

<https://chat.whatsapp.com/ETBkUoiEkby4a8D...> - Junior ... - Facebook

<https://www.facebook.com/.../httpschatwhatsappcometbkuoiekby4a8djh7zwd/7943201...>

<https://chat.whatsapp.com/ETBkUoiEkby4a8DjHu7Zwd...> Political Organization. Jair Bolsonaro Presidente do Brasil em 2018. Public Figure. Jair Bolsonaro.

Twitter Profile Search

followerwonk >

Help | Features & Pricing | Log In | Sign Up, It's Free

Search Bios Compare Users Analyze Track Followers Sort Followers

Who are you looking for? Whether it's new talent, customers, or just friends, we help find whom you're after.

Login with Twitter and we'll overlay your follow status. Want precise tracking of new/lost followers?

aryan strikeforce search Twitter profiles **Do It** Examples: oldest accounts, comedians, football, most influence, strategy, geniuses?, mad scientists, producers

more options

Twitter users with "aryan strikeforce" in their profiles

Showing 1 - 3 of 3 results (order by relevance)

No filters	tweets	following	followers	account age	Social Authority
follow 	Hatchet @Hatchet318	New Jersey, USA	915	1,182	871
follow 	Robert Gregor @Fuckukikes	British Columbia, Canada	71	21	3
follow 	Eobard Thawn @AdamFor318	Under your bed	17	14	3

<https://followerwonk.com/bio/?q=aryan%20strikeforce>



Reddit Comments

The screenshot shows the homepage of the [r/The_Donald](#) subreddit on Reddit. The main banner features a collage of images related to Donald Trump, including him signing a document, the Statue of Liberty, and a campaign rally. The title of the post is "Soros is such a scum that even other jews want nothing to do with him." The post has 178 upvotes and is from a user named [BAD HOMBRE](#). It includes options to "Join the discussion" or "BECOME A REDDITOR". On the right side, there's a sidebar titled "COMMUNITY DETAILS" which shows the community has 683k members, is associated with the group "Patriots", and has 10.0k winners online. It also describes the community as a "never-ending rally dedicated to the 45th President of the United States, Donald J. Trump." Below the sidebar are "SUBSCRIBE" and "CREATE POST" buttons.

reddit r/The_Donald

Search r/The_Donald

LOG IN SIGN UP

Posts Wiki

Join the discussion BECOME A REDDITOR

Posted by [u/r2depor2](#) 27 days ago

178 [Soros is such a scum that even other jews want nothing to do with him.](#)

BAD HOMBRE

12 Comments Share Save ...

89% Upvoted

What are your thoughts? Log in or Sign up

SORT BY BEST

LOG IN SIGN UP

COMMUNITY DETAILS

r/The_Donald

683k 10.0k

Patriots Winners Online

The_Donald is a never-ending rally dedicated to the 45th President of the United States, Donald J. Trump.

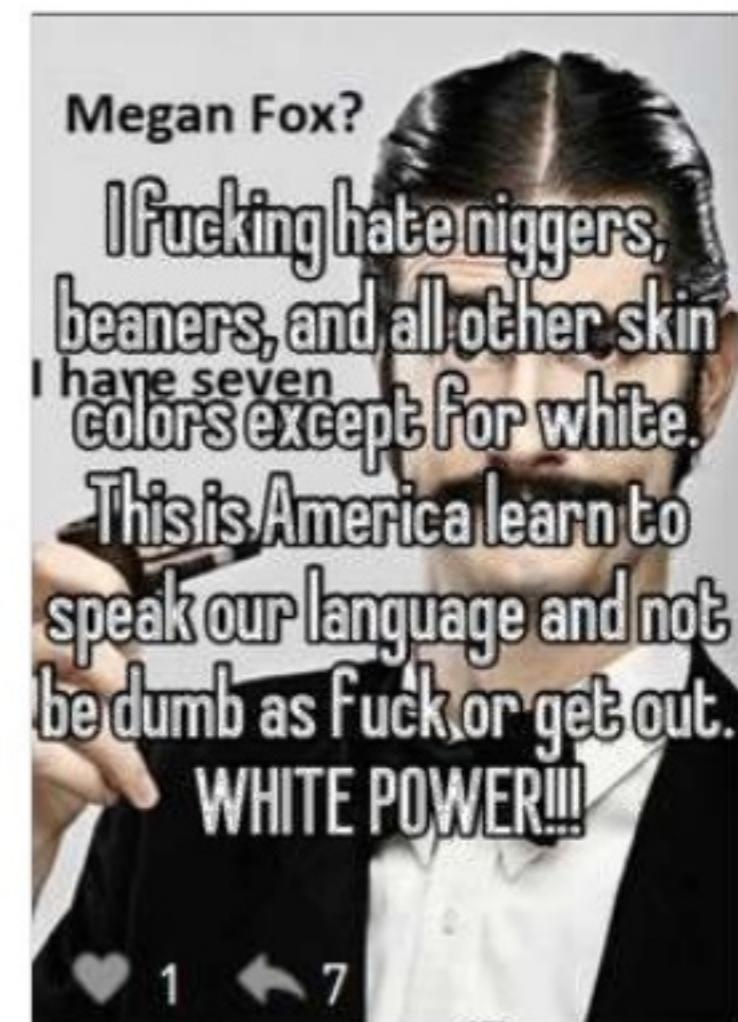
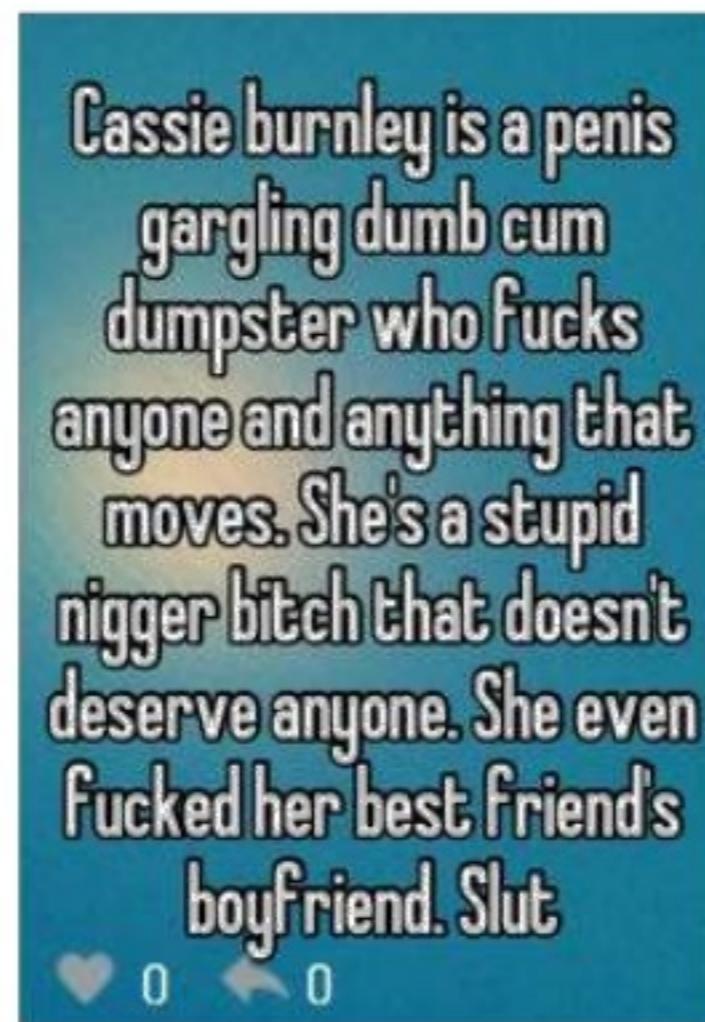
SUBSCRIBE

CREATE POST

https://www.reddit.com/r/The_Donald/comments/9s8nvj/soros_is_such_a_scum_that_even_other_jews_want/

Whisper

WHISPERS WITH "dumb niggers"



<http://whisper.sh/search?q=dumb+niggers>

Hatebase

- <https://hatebase.org/>

ABOUT PRICING API IN THE MEDIA SIGN IN

HATEBASE

All terms

All ethnicities

All religions

All languages

Pertains to gender

Pertains to sexual orientation

Pertains to disability

Pertains to class

Search Clear

Recent Sightings

MAP TABLE

Showing 1 - 100 of 658,992 sightings

Radio and Television Transcripts

Rwanda radio transcripts

The Role of Radio

During the 1994 Rwandan Genocide, radio broadcasts played an important role in inciting ordinary citizens to take part in the massacres of their Tutsi, and moderate Hutu, neighbours. Two major radio stations transmitted hate propaganda to the illiterate masses—[Radio Rwanda](#), and [Radio Télévision des Milles Collines \(RTLM\)](#). Radio Rwanda was the official government owned radio station. Under the second Arusha Accord it was barred from continuing to disseminate hate propaganda. This led the Hutu Power circle around President Habyarimana and his wife to found RTLM as a private radio station. RTLM became immensely popular as a young, hip alternative to the official voice of the government. It played popular music, and encouraged the public to phone in and participate in radio broadcasts. Amongst its listeners, RTLM attracted the unemployed youth and Interhamwe militia.

<https://www.concordia.ca/research/migs/resources/rwanda-radio-transcripts.html>

TV & Radio News Transcripts Help | Clear

Use of this service is subject to Terms and Conditions

Search For: in Everywhere

And in Everywhere
And in Everywhere

Add Row

Specify Date:

Select Source(s):

<input checked="" type="checkbox"/> All Transcripts	<input type="checkbox"/> CNN
<input type="checkbox"/> ABC News	<input type="checkbox"/> CTV Television
<input type="checkbox"/> American Public Media	<input type="checkbox"/> Fox News Network
<input type="checkbox"/> CBS News	<input type="checkbox"/> MSNBC
<input type="checkbox"/> CNBC News	<input type="checkbox"/> National Public Radio (NPR)

Tip: For more options try Edit in Power Search.

https://www.lexisnexis.com/ap/academic/form_news_tv.asp

ACLED

- Armed Conflict Location & Event Data Project
- <https://www.acleddata.com/>

Z220	B	C	D	G	H	I	J	K	P	Q	T	X	Y	Z	AA
1	EVENT_ID	CF_ID	NO	EVENT_DATE	EVENT_TYPE	ACTOR1	ACTOR2	TYPE	COUNTRY	ADMIN1	LOCATION	SOURCE	SOURCE_SCALE	NOTES	FATALITIES
214	BHR535	535	22-June-2016	Riots/Protests	Rioters (Bahrain)	Shiit	5	Police Forces of Bahrain	Northern	As Sahlah	Shiite News	Regional	On 22nd June, demonstrators clashed with Bahraini police forces in As Sahlah, Northern Bahrain.	0	
215	BHR536	536	22-June-2016	Riots/Protests	Protesters (Bahrain)	Shiit	6	Police Forces of Bahrain	Capital	Manama-Bilad al Manama	Shiite News	Regional	On 22nd June, demonstrators marched through the streets of Manama, Bahrain.	0	
216	BHR537	537	23-June-2016	Riots/Protests	Rioters (Bahrain)	Shiit	5	Police Forces of Bahrain	Northern	Ad Diraz	Shiite News	Regional	On 23rd June, demonstrators marched through Ad Diraz, Bahrain.	0	
217	BHR538	538	23-June-2016	Strategic development	Police Forces of Bahrain	1	Protesters (Bahrain)	Bahrain	Capital	Manama	Bahrain Mirror	National	Arrests: On 23 Jun, Bahraini government security forces arrested several protesters in Manama.	0	
218	BHR539	539	26-June-2016	Riots/Protests	Protesters (Bahrain)	Shiit	6		Bahrain	Northern	Ad Diraz	Lualua TV	National	On 26th June, demonstrations were held in Ad Diraz, Bahrain.	0
219	BHR540	540	28-June-2016	Riots/Protests	Protesters (Bahrain)	Shiit	6		Bahrain	Northern	Ad Diraz	Shiite News	Regional	On 28th June, demonstrations were held in Ad Diraz, Bahrain.	0
220	BHR541	541	30-June-2016	Remote violence	Shiite Muslim Militia (Bahrain)	4	Police Forces of Bahrain	Capital	Al Akr	Agence France Presse International				On June 30, an unidentified armed group carried out a car bombing against a police patrol in the eastern village Al Akr, Capital governorate. 1 civilian woman was killed and 3 others were injured.	1
221	BHR542	542	01-July-2016	Riots/Protests	Protesters (Bahrain)	6		Bahrain	Capital	Manama	Bahrain Mirror	National	On Friday (1st July), hundreds of people demonstrated in Manama, Bahrain.	0	
222	BHR543	543	01-July-2016	Riots/Protests	Protesters (Bahrain)	6	Police Forces of Bahrain	Capital	Sitrah	Bahrain Mirror	National	On Friday (1st July), demonstrations were held in Sitrah, Bahrain.	0		
223	BHR544	544	01-July-2016	Riots/Protests	Protesters (Bahrain)	6	Police Forces of Bahrain	Central	Nuwaidrat	Bahrain Mirror	National	On Friday (1st July), demonstrations were held in Nuwaidrat, Bahrain.	0		
224	BHR545	545	02-July-2016	Riots/Protests	Protesters (Bahrain)	6		Bahrain	Capital	Al Akr	Bahrain Mirror	National	On 2nd July, thousands of Bahrainis marched through the streets of Al Akr, Bahrain.	0	

GDELT

- Global Database of Events, Language, and Tone
- <https://www.gdeltpoint.org/>



Satellite Data



THE SENTINEL PROJECT

WHO WE ARE

WHAT WE DO

GET INVOLVED

DONATE

NEWS PROJECTS IN THE MEDIA CONTACT

Satellite Imagery for Humanitarian Purposes

October 14, 2014 | [Drew Boyd](#)

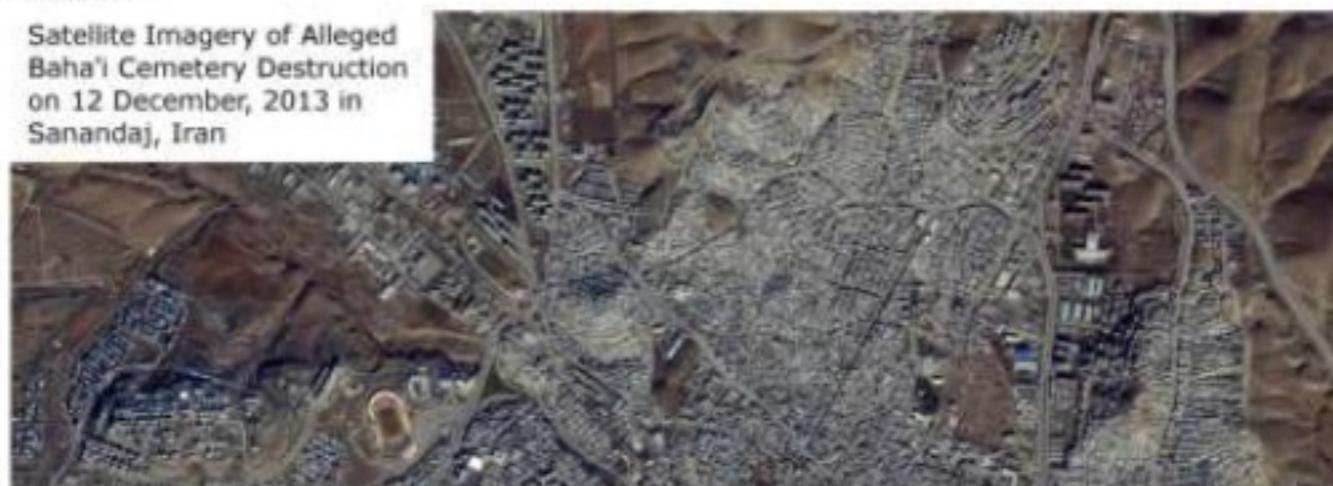
Sentinel Project partners with Colorado-based non-profit [Space United](#), allows supporters to directly contribute to 'humanitarian aerospace' goals.

The public perception of satellite imagery often conjures up visions of high-tech military hardware or the cloak and dagger world of espionage and international intrigue. But satellite imagery is a burgeoning field whose increasing economic accessibility offers unique opportunities to put commercial imaging satellites to use in humanitarian pursuits.

The Sentinel Project has partnered with Colorado-based non-profit Space United to produce satellite imagery which will be used to further our goals of developing a viable 'humanitarian aerospace' sector. Space United has already produced satellite imagery of refugee camps in Jordan and agriculture conditions in Kenya with other partnered organizations.

Satellite Imagery produced from the partnership between the Sentinel Project and Space United has provided strong evidence which allegedly shows the destruction of a Baha'i cemetery in Sanandaj, Iran. The damage occurred on 16 December, 2013 and had previously been reported only through unnamed reports and photographs which the Sentinel Project was unable to verify as authentic. The satellite imagery provides some indication of a serious disturbance though we are quick to note that the images do not indicate which party was responsible for the destruction.

Satellite Imagery of Alleged
Baha'i Cemetery Destruction
on 12 December, 2013 in
Sanandaj, Iran



<https://thesentinelproject.org/2014/10/14/satellite-imagery-for-humanitarian-purposes/>



WHERE TO NEXT

Thoughts on Monitoring System

- Combine several data sources
 - Online better for short-term predictions
 - Offline better for long-term predictions
- No one-size-fits-all solutions
 - Usage of online services differs by country
 - Language specific adaptations
- Beware internet usage changes
 - Baby interest vs. fertility rates
 - Remember MySpace
- If it every worked, will it continue working?
 - Can it be hacked/spoofed by foreign states?
 - Who would benefit from false predictions?



Research Opportunities

- Study the radicalization process
 - First Twitter follow @X, later @Y
 - First post in sub-reddit /r/X, later in /r/Y ([example](#))
- Causal inference
 - Natural experiments? Delayed broadband?
 - See “Fanning the Flames of Hate: Social Media and Hate Crime”
- Run interventions
 - Do they work? Only radicalize further?
 - See “Tweetment Effects on the Tweeted: Experimentally Reducing Racist Harassment”

Thanks!

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