

Gab, Does it Ever Change?

Milestone 2

Reid McIlroy-Young

March 21, 2019

Gab



Gab is a Twitter alternative

Launched August 2016

Nominally has 850 000 users

Popular with right wing extremists

Notably, the Pittsburgh synagogue shooting was perpetrated by a Gab user. This caused the site to be shutdown for 2 weeks

Questions

- Did the site shutdown measurably effect the site's speech?
- Are there other underlying trends in the site?
- Can we find trends in the hate speech?

Methods

- Already done: ngram counts, single Word2Vec, LDA
- Dynamic Topic Models, maybe SCAN
- Procrustes Alignment of Word2Vec
- Would like a neural model too

Data

Number of users	835,695
Registered Before	712,093
Registered After	123,602
Users not seen after	213,939

Number of posts	31,645,441
Created Before	22,567,328
Created After	9,078,113
Mean posts per user before	16.8
Mean posts per user after	18.4
Median posts per user, both	3

Usage, Before and After

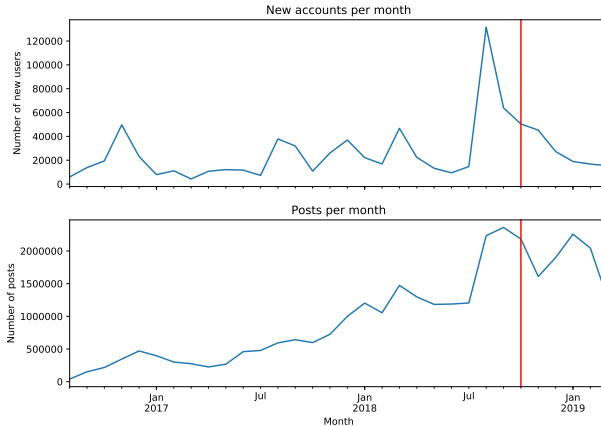


Figure: Site usage, with the shooting indicated with the red line

Posting frequency

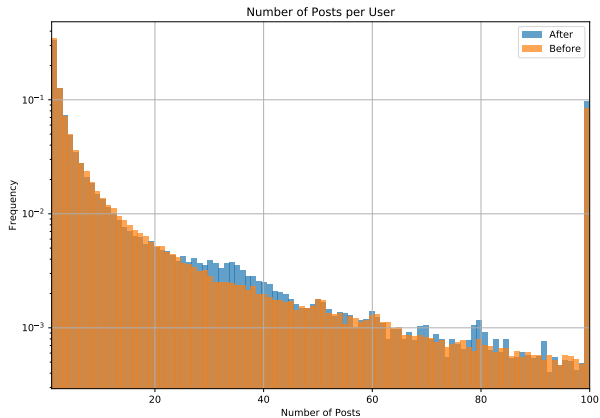


Figure: Number of posts per user, before and after

Top Words

Before words	count	After words	count
...	1271135	people	580629
trump	1058556	...	560491
people	1013808	trump	500128
like	877740	one	418280
one	779699	like	407019
de	773607	would	328609
get	675354	get	324559
would	578425	new	322381
new	554498	white	302805
white	552487	time	285550
time	550308	know	267684
que	536773	nthe	258006
know	517259	president	240682

Top Bigrams

Before words	count	After words	count
president,trump	127889	president,trump	80251
free,speech	110362	free,speech	49249
social,media	81846	year,old	46178
donald,trump	80240	er,cad	38211
year,old	79833	social,media	36631
fake,news	78894	fake,news	34506
deep,state	77728	white,people	34458
white,people	68035	good,morning	33011
looks,like	67517	deep,state	32454
hillary,clinton	58005	white,house	32409
white,house	57810	donald,trump	32097
alex,jones	55230	border,wall	31796
years,ago	50740	new,york	30731

Top Trigrams

Before words	count	After words	count
new,york,times	18135	alexandria,ocasio,cortez	11910
president,donald,trump	14103	president,donald,trump	9906
year,old,girl	11378	_____,pagans,_____	8357
ha,ha,ha	11124	pagans,_____,pagans	8318
alex,jones,infowars	9547	green,new,deal	8152
please,let,know	8298	fake,news,media	6339
christine,blasey,ford	8073	year,old,girl	5811
make,america,great	7669	believe,see,hear	5784
new,world,order	7422	reply,let,know	5777
saucy,notables,breaking	7057	look,believe,see	5761
notables,breaking,news	7057	see,hear,fathers	5761
black,lives,matter	6524	hear,fathers,voice	5761

Top trigrams from Before, by Month

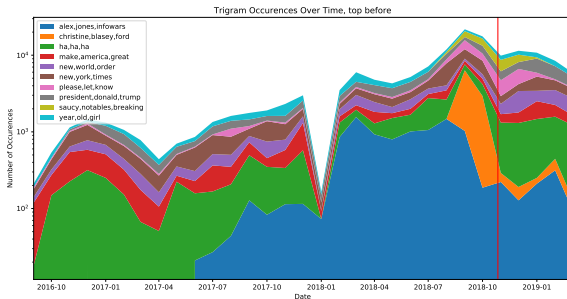


Figure: By month usage occurrence of the top 10 before trigrams, with the shooting indicated with the red line

Top trigrams from After, by Month

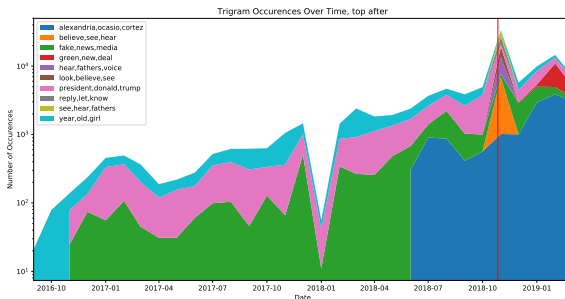


Figure: By month usage occurrence of the top 10 after trigrams, with the shooting indicated with the red line

Top Trigrams containing "jew"

Before words	count	After words	count
jew,world,order	582	jewish,conservative,journalist	2701
anti,white,jewish	531	speaking,jew,hatred	1349
white,jewish,activist	493	jew,hatred,sharia	1349
already,taken,jewtube	331	simply,american,jewish	1348
serious,question,jewish	322	american,jewish,conservative	1348
question,jewish,groups	322	genetic,jewesses,jews	487
six,million,jews	252	nit,jew,islamist	426
000,000,jews	239	jew,haters,gab	402
jews,support,country	236	majority,jews,support	395
jew,jew,jew	234	vast,majority,jews	367
genetic,jews,jewesses	214	jew,world,order	339
false,system,jews	211	jews,rape,kids	273