**Platform effects on alternative influencer content: Understanding how features and affordances shape misinformation online**

**Supplementary Material**

Table S1: Accounts List

|  |  |  |  |
| --- | --- | --- | --- |
| Influencer | YouTube Account | Facebook Account | Twitter Account |
| Daily Wire (Andrew Klavan & Ben Shapiro) | The Daily Wire | DailyWire | @realDailyWire |
| Andrew Klavan (personal) | Andrew Klavan | aklavan | @andrewklavan |
| Andy Warski |  |  | @Andywarski |
| Annand Virk | Bunty King |  | @annandvirk |
| Antonia Okafur | Antonia Okafor | nene.okafor.3 | @antonia\_okafor |
| Ayla Stewart | Ayla Wife |  |  |
| Ben Shapiro (personal) | Ben Shapiro | officialbenshapiro | @benshapiro |
| Black Pigeon Speaks | Black Pigeon Speaks | blackpigeonspeaks | @navyhato |
| Blaire White | Blaire White |  | @MsBlaireWhite |
| Blonde in the Belly of the Beast | Blonde in the Belly of the Beast |  |  |
| Bre Faucheux | Bre Faucheux |  | @Bre\_Faucheux |
| Brittany Sellner | Brittany Sellner | BrittPettibone | @BrittPettibone |
| Brooks Heatherly | No B.S. |  | @BrooksHeatherly |
| Candace Owens | Candace Owens | realcandaceowens | @RealCandaceO |
| Caolan Robertson | Caolan Robertson |  | @CaolanRob |
| Carl Benjamin | Sargon of Akkad Live | sargonofakkad100 |  |
| Chris Maldonado | Chris Ray Gun | ChrisRayMaldonado | @ChrisRGun |
| Coach Red Pill | Coach Red Pill |  |  |
| Dave Cullen | Computing Forever |  |  |
| Dave Rubin | The Rubin Report | rubinreport & daverubin | @RubinReport |
| Dennis Prager | PragerU | prageru | @prageru |
| Derrick Blackman | SomeBlackGuy |  |  |
| Faith J Goldy | Faith J Goldy |  | @FaithGoldy |
| Gavin McInnes | Gavin McInnes | realbakedalaska |  |
| Henrik Palmgren |  |  | @Henrik\_Palmgren |
| Table S1: List of Accounts from which Data was Collected (continued) | | | |
| Influencer | **YouTube Account** | **Facebook Account** | **Twitter Account** |
| James Damore |  |  | @JamesADamore |
| James O’Keefe | Project Veritas Action | JamesOKeefeAuthor |  |
| Jared Taylor | American Renaissance |  |  |
| Jean-François Gariépy | JFG Tonight |  | @JFGariepy |
| Jeff Holiday | HOLIDAY |  |  |
| Joe Rogan | PowerfulJRE | JOEROGAN | @joerogan |
| Jordan Peterson | Jordan Peterson | drjordanpeterson | @jordanbpeterson |
| Kraut and Tea | Kraut |  |  |
| Lana Lokteff |  |  | @lanalokteff |
| Larry Elder | The Larry Elder Show | TakeBackThisCountry |  |
| Lauren Southern | Lauren Southern | LaurenCSouthern | @lauren\_Southern |
| Marcus Follin | The Golden One | TheGloriousLion | @TheGloriousLion |
| Mark Collett | Mark Collett |  |  |
| Matt Jarbo | Matt Jarbo |  | @mjarbo |
| Michael Knowles | Michael Knowles | michaelknowlesshow | @michaeljknowles |
| Mike Cernovich | Mike Cernovich | MikeCernovich | @Cernovich |
| Millennial Woes | Millennial Woes |  | @ColRobertson18 |
| Milo Yiannopolous | MILO |  |  |
| Mister Metokur |  | MisterMetokur |  |
| Mouthy Buddha |  |  | @MouthyBuddha |
| Nicholas J Fuentes |  |  | @NickJFuentes |
| Paul Joseph Watson | Paul Joseph Watson |  | @PrisonPlanet |
| Richard Spencer | AltRight.com |  | @RichardBSpencer |
| Lauren Chen | Lauren Chen | LaurenChenBlazeTV & thelaurenchen | @TheLaurenChen |
| Sam Harris | Sam Harris | Samharrisorg | @SamHarrisOrg |
| Stefan Molyneux | Stefan Molyneux |  |  |
| Stephen Christopher Yaxley-Lennon (Tommy Robinson) | Tommy Robinson |  | @BringTommyback |
| Steven Bonnell II | Destiny |  |  |
| Steven Crowder | StevenCrowder | stevencrowderofficial | @scrowder |
| Styxhexenhammer666 | Styxhexenhammer666 | styxhexenhammer666Official | @Styx666Official |
| Table S1: List of Accounts from which Data was Collected (continued) | | | |
| Influencer | **YouTube Account** | **Facebook Account** | **Twitter Account** |
| Taleed Brown |  |  | @ThatGuy\_T\_ |
| Tim Pool | Tim Pool | timcastnews |  |
| Tree of Logic | Tree of Logic |  |  |
| Vee | Vee Live Stream |  |  |
| Number of Accounts | **51** | **28** | **39** |

Table S2: FREX Word List

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | freedomain | stefan | philosophi | daughter | mother | mom | steph |
| 2 | barrett | coney | suprem | ginsburg | ami | ruth | court |
| 3 | larri | tripl | elder | uncl | sebastian | trend | relief |
| 4 | coronavirus | pandem | covid | travel | februari | downplay | panic |
| 5 | larri | tripl | trend | mfgear | hewitt | elder | hugh |
| 6 | gun | weapon | properti | defens | firearm | threat | train |
| 7 | question | answer | ask | debat | never | treat | sorri |
| 8 | test | antibodi | swab | fda | fema | alexa | asymptomat |
| 9 | black | white | racism | racist | racial | race | color |
| 10 | berni | sander | bloomberg | deleg | warren | elizabeth | hampshir |
| 11 | christian | bibl | church | testament | christ | religion | secular |
| 12 | psychedel | mushroom | psilocybin | lsd | dmt | eugen | mycelium |
| 13 | ireland | pub | irish | mandatori | covert | passport | dublin |
| 14 | climat | carbon | wildfir | forest | emiss | environment | fossil |
| 15 | fuck | tock | arrow | deer | tick | wildlif | archeri |
| 16 | tim | poll | donald | smear | segment | democrat | approv |
| 17 | prageru | taylor | prager | scout | chipotl | praeger | butter |
| 18 | compani | product | citi | industri | york | work | new |
| 19 | make | can | fire | word | hope | everyon | buy |
| 20 | comedi | comedian | comic | joey | jami | vitamin | diaz |
| 21 | knowl | michael | rockauto | wire | wles | jeremi | amico |
| 22 | walsh | matt | cancel | godspe | hampton | headlin | cuti |
| 23 | chines | china | wuhan | taiwan | hong | kong | beij |
| 24 | amaz | readi | prepar | wise | help | chang | food |
| 25 | fairway | limbaugh | raycon | earbud | heartland | pork | castro |
| 26 | pilgrim | carton | indian | tribe | bradford | mayflow | payson |
| 27 | biden | joe | campaign | trump | debat | donald | presidenti |
| 28 | mask | wear | karen | mandat | dog | signal | cloth |
| 29 | uptick | weiss | literati | arizona | chart | surg | florida |
| 30 | crimin | crime | jail | prison | convict | arrest | innoc |
| 31 | abort | stacey | abram | fetus | pregnanc | womb | pro |
| 32 | psycholog | sam | polar | genet | intuit | convers | trait |
| 33 | hunter | giuliani | laptop | disinform | rudi | email | barisma |
| 34 | kamala | harri | penc | kamal | susan | mansplain | frack |
| 35 | tax | immigr | incom | wage | rich | billionair | chariti |
| 36 | ufc | mma | fighter | jiu | jitsu | tyson | leg |
| 37 | rubin | reuben | dave | clyde | lefti | jordan | essenc |
| 38 | tran | feminist | lauren | tara | femin | women | gender |
| 39 | nurs | death | sweden | lockdown | kovat | die | hospit |
| 40 | barr | fbi | woodward | investig | fisa | russian | comey |
| 41 | presid | obama | administr | vice | barack | tonight | donald |
| 42 | toki | lenni | lantern | halfl | potion | insulin | adjourn |
| 43 | million | dollar | thousand | hundr | billion | save | cost |
| 44 | say | peopl | point | thing | talk | agre | idea |
| 45 | press | cnn | journalist | fox | fake | media | news |
| 46 | shortag | vermont | variant | netherland | asymptomat | epicent | incub |
| 47 | rushmor | jefferson | slaveri | mount | slave | historian | statu |
| 48 | societi | perpetu | breakdown | societ | brave | suppress | disagre |
| 49 | moos | coyot | yeah | comic | rat | allig | manson |
| 50 | know | right | mean | realli | just | yeah | want |
| 51 | nthe | nthat | nto | nof | nyou | nin | nis |
| 52 | flynn | unmask | lyac | kremlin | yate | whittl | logan |
| 53 | fragil | entropi | bitcoin | upb | phenotyp | prefer | jeff |
| 54 | loan | economi | unemploy | market | debt | stimulus | bank |
| 55 | ralph | ethan | vicker | boogi | boulder | discord | keemstar |
| 56 | bolton | mose | wit | aaron | impeach | quid | acquit |
| 57 | kneel | inequ | disintegr | sharpton | kaepernick | dissoci | racism |
| 58 | blake | jacob | kenosha | brianna | warrant | cop | taylor |
| 59 | teacher | school | parent | educ | teach | kid | student |
| 60 | gonna | mayb | get | tri | cuz | happen | probabl |
| 61 | currenc | monetari | deficit | fiat | bitcoin | print | coin |
| 62 | platform | facebook | censor | censorship | youtub | tech | googl |
| 63 | vpn | comm | insur | expressvpn | reopen | genius | shapiro |
| 64 | movi | film | hollywood | actor | marvel | actress | ghostbust |
| 65 | think | thank | appreci | differ | opinion | haven | pleas |
| 66 | ventil | icu | model | itali | beard | bed | peak |
| 67 | lazar | tesla | robot | chimp | porsch | whale | yellowston |
| 68 | immun | vaccin | flu | virus | symptom | distanc | healthcar |
| 69 | like | destini | yeah | blah | guess | twitch | curious |
| 70 | leaflet | laura | britain | migrant | bori | baskin | nhs |
| 71 | soviet | communism | british | european | refuge | germani | war |
| 72 | aggreg | neoliber | dem | hillari | dnc | clinton | legaci |
| 73 | restaur | cook | park | pasta | bar | drive | car |
| 74 | ballot | fraud | mail | voter | pennsylvania | vote | elector |
| 75 | riot | portland | protest | loot | rioter | antifa | violenc |
| 76 | ufo | graviti | alien | craft | technolog | earth | planet |
| 77 | diet | ldl | cholesterol | sugar | nutrient | fat | calori |
| 78 | went | day | year | didn | rememb | watch | hour |
| 79 | palestinian | israel | arab | isra | uae | beethoven | east |
| 80 | gamerg | gamer | battlefront | game | xbox | gameplay | skate |
| 81 | reopen | salon | newsom | cuomo | governor | beach | blasio |
| 82 | dailywir | ziprecruit | pcmatic | barack | expressvpn | dnc | covet |
| 83 | ebola | mutat | congo | mosquito | africa | malaria | polio |
| 84 | hydroxychloroquin | musk | elon | zinc | cleaner | tesla | prescrib |
| 85 | statu | columbus | invoic | blink | autonom | chop | chaz |
| 86 | twitch | streamer | romania | sub | romanian | destini | mod |
| 87 | clavin | clayvin | spell | mailbag | andrew | angulo | cynthia |
| 88 | applaus | blexit | bless | proud | honor | convent | hero |
| 89 | guy | hate | man | real | crazi | stupid | video |
| 90 | mug | crowder | gerald | reg | club | coffe | overlay |
| 91 | cigar | knowl | conserv | wadowski | ident | squishi | liber |
| 92 | jewish | jew | roger | semit | holocaust | conspiraci | milo |

Table S3: Regression Tables on Emotion Use from Platforms

Model 1: Comparing Emotion Use between Twitter and Facebook

|  |  |  |
| --- | --- | --- |
|  | Fear | Anger |
| platformTwitter | 0.0564  (0.1178) | -0.0126  (0.0926) |
| account | 0.0097  (0.0026) | 0.0027  (0.0021) |
| observations | 3802 | 3802 |

Note: the baseline category of the variable platform is Facebook. \*p<0.1; \*\*p<0.05 \*\*\*p<0.01. The standard error is reported in parenthesis.

Model 2: Comparing Emotion Use between Facebook and YouTube

|  |  |  |
| --- | --- | --- |
|  | Fear | Anger |
| platformYouTube | -0.7220\*\*\*  (0.0719) | -0.2159\*\*\*  (0.0574) |
| account | 0.0031  (0.0015) | -0.0011  (0.0012) |
| observations | 3821 | 3821 |

Note: the baseline category of the variable platform is Twitter. \*p<0.1; \*\*p<0.05 \*\*\*p<0.01

Model 3: Comparing Emotion Use between Twitter and YouTube

|  |  |  |
| --- | --- | --- |
|  | Fear | Anger |
| platformYouTube | -0.9523\*\*\*  (0.0817) | -0.2839\*\*\*  (0.0618) |
| account | -0.0065  (0.0019) | -0.0010  (0.0001) |
| observations | 4768 | 4768 |

Note: the baseline category of the variable platform is Facebook. \*p<0.1; \*\*p<0.05 \*\*\*p<0.01

Table S4. Human Validation Result on the Fear and Anger NRC Dictionary

|  |  |  |
| --- | --- | --- |
| Platform | Anger | Fear |
| Twitter (n=113) | Precision (69%)  Recall (65%) | Precision (80%)  Recall (95%) |
| Facebook (n=102) | Precision (83%)  Recall (64%) | Precision (60%)  Recall (88%) |
| YouTube (n=101) | Precision (53%)  Recall (95%) | Precision (70%)  Recall (98%) |

Table S5. FREX Word List (K = 80, alpha = 0.01)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | allig | tiger | comedi | comic | comanch | coyot |
| 2 | dave | rubin | king | fight | cocain | scott | audibl |
| 3 | larri | elder | uncl | tripl | slave | sebastian | dna |
| 4 | clavin | virtuous | mari | hitler | incarn | liberti | brett |
| 5 | curv | lockdown | flatten | unemploy | lock | vulner | industri |
| 6 | philosophi | mob | determin | abus | blah | parent | forgiv |
| 7 | ohio | ensur | district | campaign | lake | farm | cool |
| 8 | secretari | press | acosta | brief | sarah | jim | presid |
| 9 | lapd | undercov | wrap | investig | neighbor | suspect | trash |
| 10 | larri | tripl | trend | unarm | hugh | ryan | vaccin |
| 11 | know | think | want | thing | don | gonna | just |
| 12 | accid | sam | handshak | foster | julia | contagion | zealand |
| 13 | small | billion | busi | worker | american | origin | prepar |
| 14 | portland | riot | seattl | protest | courthous | violenc | properti |
| 15 | suffer | anim | cow | japan | fish | aesthet | vegan |
| 16 | nashvill | wisdom | kentucki | destini | pennsylvania | indiana | australia |
| 17 | racist | ideolog | liber | cultur | admit | woman | wrong |
| 18 | home | stay | distanc | social | communiti | avoid | sick |
| 19 | gaff | thailand | condemn | chris | rock | supremacist | michell |
| 20 | coronavirus | pandem | task | latest | updat | exclus | april |
| 21 | greta | chariti | activist | earth | berg | environmentalist | urgenc |
| 22 | pcmatic | nurs | council | crime | seattl | detroit | chicago |
| 23 | wendi | jewish | covid | orthodox | nyc | donat | brooklyn |
| 24 | censor | tech | googl | youtub | search | facebook | account |
| 25 | conservat | libertarian | loan | helix | mattress | conserv | felix |
| 26 | concern | roll | mail | absente | nervous | tech | peak |
| 27 | lewi | memori | filibust | herman | cain | cart | barack |
| 28 | tax | penc | cent | jimmi | rich | rapper | billionair |
| 29 | lili | jean | nthat | kinda | nthe | nof | nand |
| 30 | pack | court | barrett | suprem | judici | judg | constitut |
| 31 | founder | uptick | wallac | hero | stamp | valu | villain |
| 32 | documentari | film | cernovich | mike | filmmak | taylor | renew |
| 33 | file | llc | phil | expens | citibank | debt | bankruptci |
| 34 | china | chines | taiwan | travel | wuhan | communist | rice |
| 35 | knowl | blake | convent | michael | rnc | buttercloth | blm |
| 36 | kneel | black | marxist | educ | mcenani | valley | movement |
| 37 | immigr | taiwan | nhs | mortgag | european | agre | blah |
| 38 | mask | wear | salon | ford | pelosi | hair | third |
| 39 | borat | movi | award | cohen | film | academi | hollywood |
| 40 | flu | itali | diseas | infect | model | hospit | death |
| 41 | clavin | wallac | andrew | democraci | elit | vandal | lifelock |
| 42 | stock | zip | market | recruit | netsuit | swift | boomer |
| 43 | game | columbus | nativ | gamer | footbal | leak | butter |
| 44 | larri | tripl | trend | seven | elder | nine | pepperdin |
| 45 | state | unit | govern | nation | york | new | governor |
| 46 | trump | biden | elect | donald | presid | joe | vote |
| 47 | inclus | heat | militari | obamacar | mortal | bet | fauci |
| 48 | sniper | conflict | iceberg | wife | repetit | beard | clayvin |
| 49 | bolton | barr | wit | sander | kobe | william | ukrain |
| 50 | toni | rope | dude | ufc | howard | rattlesnak | stern |
| 51 | taylor | brianna | warrant | racism | louisvill | brutal | polic |
| 52 | sander | berni | deleg | debat | warren | nomine | dem |
| 53 | nikki | prageru | millenni | sir | price | beauti | ami |
| 54 | wildfir | climat | lawn | forest | scienc | homeless | solut |
| 55 | fda | ireland | covert | antibodi | kovat | test | phase |
| 56 | bitcoin | patreon | certif | currenc | regret | salman | dick |
| 57 | christma | cake | gdp | nashvill | tabl | grave | sat |
| 58 | matrix | swat | inject | disinfect | quip | fahim | fake |
| 59 | surgeri | dad | follow | scan | canada | canadian | cancer |
| 60 | dope | deer | dude | pong | boulder | ping | mar |
| 61 | liberti | beard | beach | frenzi | ufo | kim | jong |
| 62 | vaccin | ireland | dave | app | mandatori | arrest | pub |
| 63 | rig | harass | pennsylvania | voter | mattress | entranc | fda |
| 64 | ballot | flynn | voter | fraud | count | jefferson | mail |
| 65 | ebola | mutat | asymptomat | africa | diseas | strain | variant |
| 66 | georgia | bright | hydroxychloroquin | aclu | stamp | reopen | kemp |
| 67 | khabib | ufc | murphi | punch | lauren | fighter | kick |
| 68 | boundari | sabbath | micro | appropri | pad | firearm | shall |
| 69 | train | psychologist | pie | lsd | yeah | ultra | mental |
| 70 | empir | allevi | benham | addict | omaha | chines | grind |
| 71 | stacey | abram | sex | beard | male | marriag | tran |
| 72 | nthe | nand | nto | nthat | adel | divorc | men |
| 73 | forum | revolut | fourth | swedish | item | sweden | covet |
| 74 | command | berni | bloomberg | sander | south | stone | socialist |
| 75 | cia | comedi | gig | yeah | room | louie | boston |
| 76 | rent | easter | blink | statu | invoic | wilson | stimulus |
| 77 | impeach | critic | brief | approv | donald | pelosi | hoax |
| 78 | endors | berni | booker | dnc | bloomberg | cori | hoax |
| 79 | chromosom | censorship | jack | dorsey | censor | zuckerberg | male |
| 80 | pasta | cook | restaur | chef | evan | felix | toronto |

Table S6. FREX Word List (K = 90, alpha = 0.01)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | comanch | golf | coyot | pig | comic | comedi |
| 2 | borat | award | movi | cohen | academi | film | hollywood |
| 3 | cart | blake | nun | funer | brave | unarm | jacob |
| 4 | clavin | mari | hitler | discrimin | scout | invent | liberti |
| 5 | bitcoin | certif | patreon | regret | currenc | salman | dick |
| 6 | suffer | japan | philosophi | rose | parent | japanes | fish |
| 7 | ohio | ensur | district | farm | lake | flip | cool |
| 8 | secretari | press | jim | acosta | sarah | phone | teleprompt |
| 9 | flynn | fbi | durham | guilti | lapd | probe | investig |
| 10 | test | covet | covid | posit | health | negat | virus |
| 11 | boat | hawaiian | insurg | crow | train | helicopt | cat |
| 12 | sam | accid | handshak | contagion | yale | comparison | lectur |
| 13 | men | women | default | mar | male | fat | space |
| 14 | recess | legaci | recoveri | riot | chicago | vermont | pickl |
| 15 | cow | anim | vegan | aesthet | ethic | farm | meat |
| 16 | wisdom | prager | scientist | angel | los | california | percentag |
| 17 | media | post | news | lie | trust | account | twitter |
| 18 | curv | distanc | flatten | lockdown | quarantin | stay | social |
| 19 | gaff | thailand | equal | condemn | pennsylvania | supremacist | australia |
| 20 | coronavirus | task | pandem | global | latest | updat | forc |
| 21 | surgeon | politic | panic | tapper | crisi | cancel | orang |
| 22 | pcmatic | council | seattl | crime | detroit | nurs | chicago |
| 23 | gather | restrict | flu | transmiss | household | market | impact |
| 24 | greta | search | tech | googl | bias | activist | panel |
| 25 | forum | revolut | ireland | fourth | dave | agenda | mandatori |
| 26 | concern | taken | far | worri | hous | sort | pull |
| 27 | filibust | herman | cain | lewi | barack | samaritan | purs |
| 28 | tax | penc | cent | rich | kamala | endors | rapper |
| 29 | dolphin | mma | stephen | audiobook | awesom | audibl | book |
| 30 | court | pack | suprem | barrett | judici | judg | ami |
| 31 | wallac | founder | uptick | hero | stamp | villain | valu |
| 32 | film | documentari | mike | cernovich | filmmak | taylor | renew |
| 33 | file | phil | llc | expens | citibank | bankruptci | debt |
| 34 | portland | protest | mayor | courthous | feder | demonstr | seattl |
| 35 | blm | knowl | radic | holster | abolish | convent | michael |
| 36 | clavin | andrew | mailbag | elit | democraci | backstag | afraid |
| 37 | train | mental | psychologist | cop | immigr | depart | communiti |
| 38 | mask | wear | salon | nurs | hair | pelosi | bar |
| 39 | invoic | harvard | blink | mcenani | con | elector | colin |
| 40 | ebola | mutat | africa | strain | contain | spanish | airborn |
| 41 | lsd | ultra | cat | manson | tock | yeah | dog |
| 42 | stock | market | zip | recruit | netsuit | swift | boomer |
| 43 | footbal | nfl | sport | game | tran | karen | gender |
| 44 | sander | berni | deleg | warren | nomine | drop | debat |
| 45 | china | chines | wuhan | taiwan | travel | communist | unit |
| 46 | trump | donald | presid | elect | american | win | biden |
| 47 | black | kneel | nikki | matter | portland | movement | brutal |
| 48 | sniper | conflict | iceberg | repetit | wife | clavin | beard |
| 49 | bolton | barr | wit | kobe | william | iowa | ukrain |
| 50 | toni | rope | dude | howard | ufc | rattlesnak | stern |
| 51 | taylor | brianna | racism | warrant | louisvill | polic | offic |
| 52 | debat | hillari | biden | mail | joe | cheat | marco |
| 53 | sir | otto | billion | beauti | greatest | ramp | masculin |
| 54 | wildfir | lawn | climat | forest | scienc | gorsuch | homeless |
| 55 | ireland | fda | antibodi | covert | phase | laboratori | valid |
| 56 | israel | packag | earth | stamp | insur | genius | semit |
| 57 | cake | christma | gdp | grave | mass | sat | tabl |
| 58 | swat | matrix | inject | disinfect | quip | fake | fahim |
| 59 | dad | surgeri | scan | canada | canadian | bodi | cancer |
| 60 | dope | allig | deer | bro | dude | boulder | pong |
| 61 | liberti | beard | frenzi | beach | ufo | kim | jong |
| 62 | know | think | don | just | thing | want | look |
| 63 | rig | pennsylvania | invis | suppress | voter | mattress | harass |
| 64 | ballot | voter | fraud | jefferson | pennsylvania | sean | count |
| 65 | asymptomat | variant | case | diseas | symptom | hydroxychloroquin | medic |
| 66 | aclu | obamacar | unemploy | cuomo | wisconsin | pay | educ |
| 67 | khabib | ufc | murphi | lauren | punch | fighter | kick |
| 68 | christian | jewish | jesus | sabbath | christ | law | sin |
| 69 | gamer | dave | rubin | pie | crowder | chat | sanit |
| 70 | empir | allevi | benham | bambi | grind | addict | omaha |
| 71 | stacey | abram | georgia | bright | cuomo | kemp | paycheck |
| 72 | nthe | nthat | nand | nto | nof | nyou | nis |
| 73 | sweden | loan | swedish | felix | model | data | constitut |
| 74 | columbus | command | south | bloomberg | stone | socialist | attorney |
| 75 | cia | gig | comedi | yeah | room | louie | cathol |
| 76 | rent | easter | packag | stimulus | drug | phase | ideolog |
| 77 | impeach | pelosi | hoax | rock | chris | donald | approv |
| 78 | endors | berni | marriag | booker | bloomberg | knowl | hoax |
| 79 | censor | censorship | dorsey | chromosom | amend | ceo | jack |
| 80 | pasta | restaur | cook | chef | evan | felix | toronto |
| 81 | libertarian | lefti | conserv | sort | populist | conservat | karen |
| 82 | nashvill | lili | wendi | nativ | jean | leak | butter |
| 83 | care | give | help | put | togeth | hey | best |
| 84 | boundari | slaveri | valley | marxist | micro | pad | shall |
| 85 | facebook | podcast | appl | knowl | websit | promo | subscrib |
| 86 | hospit | model | death | predict | patient | kovat | rate |
| 87 | larri | trend | tripl | seven | hugh | relief | elder |
| 88 | larri | elder | uncl | tripl | slave | sebastian | trend |
| 89 | communist | communism | lesbian | romania | edgi | conspiraci | soviet |
| 90 | larri | tripl | clue | jay | salon | trend | seven |

Table S7. FREX Word List (K = 100, alpha = 0.01)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | comic | pig | comedi | coyot | comanch | deer |
| 2 | toni | rope | howard | dude | rattlesnak | stern | ufc |
| 3 | larri | uncl | heather | slave | father | rushmor | elder |
| 4 | clavin | mari | hitler | virtuous | byron | expressvpn | liberti |
| 5 | empathi | covid | dnc | despic | empathet | backstag | witt |
| 6 | suffer | japan | rose | parent | philosophi | japanes | fish |
| 7 | ohio | ensur | district | lake | flip | farm | cool |
| 8 | blink | cognit | ralli | invoic | defund | chop | rushmor |
| 9 | lapd | fbi | suspect | plead | investig | incid | sex |
| 10 | famili | posit | record | found | day | guess | oper |
| 11 | want | think | know | littl | don | mean | bit |
| 12 | jean | lili | car | accid | account | ashford | comparison |
| 13 | borat | cohen | sequel | film | movi | woke | baron |
| 14 | monkey | recess | chicago | riot | citizen | small | recoveri |
| 15 | aesthet | bullet | verbal | interrog | taliban | afghanistan | isi |
| 16 | billion | loan | antibodi | felix | jim | disast | border |
| 17 | liber | sort | conserv | libertarian | cultur | societi | polici |
| 18 | bed | bond | distanc | summer | stay | curv | simul |
| 19 | gaff | thailand | condemn | supremacist | nra | divers | michell |
| 20 | uniqu | central | vermont | legaci | multin | bunch | authoritarian |
| 21 | solv | cancel | crisi | surgeon | politic | express | serious |
| 22 | boundari | train | psychologist | mental | firearm | psycholog | micro |
| 23 | die | save | live | product | peopl | worth | cuz |
| 24 | cnn | inform | report | news | media | blame | januari |
| 25 | lesbian | communism | romania | communist | combat | taiwan | green |
| 26 | concern | music | far | biggest | may | clear | negat |
| 27 | lewi | filibust | cain | herman | cart | memori | barack |
| 28 | tax | penc | candid | billionair | bush | cent | cruz |
| 29 | dolphin | mma | book | audiobook | awesom | stephen | fiction |
| 30 | suprem | court | pack | judg | barrett | judici | constitut |
| 31 | founder | uptick | wallac | hero | valu | villain | stamp |
| 32 | film | documentari | taylor | mike | cernovich | filmmak | renew |
| 33 | file | llc | expens | citibank | phil | debt | credit |
| 34 | nashvill | bar | mayor | restaur | demonstr | trust | chicago |
| 35 | scout | cannib | leisur | abolish | brook | foul | domino |
| 36 | kneel | radic | gorsuch | mcenani | atlanta | harvard | honey |
| 37 | taiwan | immigr | nhs | mortgag | european | handshak | utilitarian |
| 38 | mask | wear | salon | pelosi | face | hair | ford |
| 39 | movi | award | academi | oscar | sanit | film | borat |
| 40 | data | mortal | ventil | heart | itali | doctor | infect |
| 41 | bitcoin | patreon | currenc | cat | certif | regret | salman |
| 42 | tech | search | googl | facebook | websit | algorithm | hitman |
| 43 | game | footbal | sport | nfl | athlet | team | season |
| 44 | sander | berni | deleg | warren | endors | nomin | nomine |
| 45 | govern | china | state | unit | chines | nation | control |
| 46 | trump | donald | presid | countri | support | american | bad |
| 47 | nikki | portland | prageru | millenni | black | ami | movement |
| 48 | sniper | grave | conflict | iceberg | repetit | wife | beard |
| 49 | impeach | pelosi | rock | progress | schiff | accus | chris |
| 50 | clavin | netsuit | boomer | jenna | honey | mailbag | lefti |
| 51 | taylor | brianna | warrant | racism | louisvill | system | violenc |
| 52 | debat | biden | virtual | kamala | commiss | vice | hillari |
| 53 | men | karen | male | women | dog | otto | prager |
| 54 | wildfir | climat | lawn | forest | scienc | solut | homeless |
| 55 | ireland | fda | covert | kovat | fatal | hospit | measur |
| 56 | stock | market | auto | israel | swift | chain | outbreak |
| 57 | christma | cake | gdp | revolut | forum | wisdom | fourth |
| 58 | swat | matrix | inject | disinfect | quip | fahim | fake |
| 59 | canada | canadian | dad | surgeri | scan | liver | appoint |
| 60 | deer | dope | boulder | cia | yeah | mar | discord |
| 61 | beard | frenzi | liberti | beach | ufo | chair | desir |
| 62 | dave | ireland | vaccin | app | mandatori | pub | cashless |
| 63 | rig | suppress | mattress | harass | entranc | voter | pennsylvania |
| 64 | flynn | jefferson | durham | probe | marco | guilti | indict |
| 65 | easter | stimulus | site | packag | jong | oil | kim |
| 66 | rent | obamacar | aclu | unemploy | medicaid | afford | agenda |
| 67 | khabib | ufc | murphi | punch | lauren | fighter | kick |
| 68 | christian | pray | sin | jesus | prayer | christ | church |
| 69 | gamer | dave | pie | rubin | chat | conspir | glenn |
| 70 | courthous | portland | seattl | violenc | feder | protest | nadler |
| 71 | georgia | bright | kemp | hydroxychloroquin | model | reopen | stacey |
| 72 | nthe | nthat | nand | nto | nof | nyou | nis |
| 73 | sweden | swedish | destini | flatten | curv | kentucki | australia |
| 74 | ebola | mutat | africa | strain | villag | airborn | spanish |
| 75 | secretari | stacey | press | abram | marriag | vpn | sleep |
| 76 | larri | tripl | sir | clue | jay | salon | trend |
| 77 | hoax | storm | fox | mississippi | michigan | slaveri | slate |
| 78 | endors | sexual | ideolog | prefer | barrett | redefin | booker |
| 79 | chromosom | censorship | censor | jack | dorsey | amend | male |
| 80 | pasta | restaur | cook | chef | evan | felix | toronto |
| 81 | pcmatic | council | seattl | crime | nurs | detroit | prosecut |
| 82 | wendi | columbus | nativ | greta | butter | leak | logo |
| 83 | argument | anim | cow | moral | prefer | meat | eat |
| 84 | wallac | valley | marxist | foster | inequ | slaveri | peak |
| 85 | walsh | appl | podcast | facebook | knowl | episod | exclus |
| 86 | governor | economi | gonna | bill | reopen | number | month |
| 87 | larri | trend | tripl | unarm | research | ryan | hugh |
| 88 | dna | larri | democraci | elder | seven | richard | tripl |
| 89 | ballot | voter | mail | vote | fraud | elect | count |
| 90 | clavin | lifelock | andrew | conneri | invis | elit | stelter |
| 91 | death | flu | cuomo | hospit | york | nurs | home |
| 92 | trend | homeadvisor | larri | tripl | seven | dad | elder |
| 93 | empir | chines | benham | addict | flu | grind | green |
| 94 | asymptomat | variant | diseas | symptom | case | infect | transmiss |
| 95 | coronavirus | pandem | task | latest | updat | global | wuhan |
| 96 | wilson | statu | woodrow | censor | democraci | halloween | chick |
| 97 | barr | bolton | william | attorney | stone | command | sander |
| 98 | allig | smell | bro | pong | iphon | ping | pigeon |
| 99 | blake | nun | jacob | unarm | abort | womb | rnc |
| 100 | none | motiv | captain | drug | forward | stood | led |

Table S8. FREX Word List (K = 92, alpha = 0.01)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | pig | comic | comanch | coyot | golf | comedi |
| 2 | fight | fox | war | forward | center | idea | slaveri |
| 3 | larri | uncl | heather | slave | rushmor | father | tripl |
| 4 | clavin | hitler | mari | scout | discrimin | wilson | byron |
| 5 | portland | wendi | riot | protest | demonstr | feder | courthous |
| 6 | cow | abus | philosophi | vegan | ethic | aesthet | parent |
| 7 | ohio | ensur | district | lake | farm | campaign | extrem |
| 8 | secretari | press | sarah | acosta | phone | dad | teleprompt |
| 9 | flynn | fbi | durham | guilti | blake | investig | probe |
| 10 | test | posit | famili | celebr | question | ask | fine |
| 11 | boat | hawaiian | insurg | train | crow | isi | cat |
| 12 | accid | handshak | contagion | yale | car | comparison | experi |
| 13 | los | angel | lapd | trash | citi | street | neighbor |
| 14 | second | first | third | bar | number | offici | trust |
| 15 | cat | interrog | bullet | yeah | lsd | cia | ultra |
| 16 | covid | coronavirus | witt | nyc | mortal | quarantin | elder |
| 17 | lili | jean | lauren | alleg | husband | account | ashford |
| 18 | japan | suffer | men | rose | women | japanes | fish |
| 19 | gaff | thailand | equal | condemn | pennsylvania | supremacist | australia |
| 20 | pandem | task | latest | updat | global | forc | april |
| 21 | crisi | recruit | zip | critic | market | surgeon | corona |
| 22 | boundari | train | psychologist | firearm | conneri | mental | psycholog |
| 23 | jewish | grave | swine | buri | headlin | gather | restrict |
| 24 | racist | greta | karen | search | dog | ruin | behav |
| 25 | dave | app | ireland | vaccin | climat | pollut | pub |
| 26 | concern | worri | taken | normal | far | issu | prepar |
| 27 | lewi | filibust | herman | cain | cart | barack | samaritan |
| 28 | tax | penc | cent | rich | kamala | endors | rapper |
| 29 | mma | dolphin | book | stephen | fiction | audiobook | awesom |
| 30 | pack | suprem | court | barrett | constitut | judg | judici |
| 31 | uptick | wallac | founder | villain | hero | valu | stamp |
| 32 | film | documentari | mike | taylor | filmmak | cernovich | renew |
| 33 | file | expens | llc | credit | citibank | debt | phil |
| 34 | libertarian | conserv | sort | conservat | populist | market | ross |
| 35 | knowl | blm | convent | scientist | cannib | abolish | polit |
| 36 | kneel | dnc | mcenani | colin | harvard | holster | elector |
| 37 | immigr | taiwan | nhs | mortgag | european | blah | union |
| 38 | mask | wear | hair | teacher | ford | studi | nurs |
| 39 | borat | movi | award | film | cohen | academi | hollywood |
| 40 | ebola | mutat | africa | strain | diseas | contain | spanish |
| 41 | censor | halloween | dorsey | gold | commentari | disinform | cruz |
| 42 | bitcoin | stock | patreon | currenc | regret | certif | salman |
| 43 | footbal | game | nfl | sport | team | athlet | coach |
| 44 | berni | sander | deleg | nomine | warren | hillari | drop |
| 45 | china | chines | communist | taiwan | govern | rice | blame |
| 46 | trump | donald | presid | elect | biden | democrat | joe |
| 47 | yeah | think | don | want | guy | know | like |
| 48 | sniper | conflict | iceberg | repetit | beard | wife | manifest |
| 49 | barr | bolton | wit | ukrain | sander | william | kobe |
| 50 | toni | rope | dude | howard | ufc | rattlesnak | stern |
| 51 | taylor | brianna | violenc | black | racism | warrant | brutal |
| 52 | debat | biden | hillari | cheat | accus | joe | hide |
| 53 | sir | otto | prager | wisdom | firesid | billion | beauti |
| 54 | wildfir | lawn | climat | forest | scienc | gorsuch | solut |
| 55 | fda | ireland | antibodi | music | phase | valid | laboratori |
| 56 | stock | loan | auto | israel | flu | model | packag |
| 57 | christma | cake | gdp | tabl | sat | ramp | distanc |
| 58 | swat | matrix | inject | disinfect | quip | fahim | fake |
| 59 | canada | dad | surgeri | canadian | scan | cancer | appoint |
| 60 | dope | allig | deer | bro | dude | boulder | iphon |
| 61 | beard | liberti | beach | frenzi | ufo | kim | jong |
| 62 | virus | death | quarantin | work | die | think | home |
| 63 | rig | invis | pennsylvania | harass | suppress | mattress | voter |
| 64 | ballot | fraud | voter | mail | jefferson | pennsylvania | coalit |
| 65 | asymptomat | variant | symptom | infect | diseas | case | transmiss |
| 66 | rent | obamacar | aclu | jimmi | afford | medicaid | agenda |
| 67 | khabib | ufc | murphi | punch | fighter | kick | leg |
| 68 | christian | jesus | sabbath | violat | prayer | pray | law |
| 69 | gamer | dave | rubin | pie | mar | default | crowder |
| 70 | empir | allevi | benham | omaha | grind | bambi | starbuck |
| 71 | georgia | bright | kemp | hydroxychloroquin | sex | paycheck | model |
| 72 | nthe | nthat | nand | nto | nof | nyou | nis |
| 73 | swedish | forum | revolut | sweden | fourth | schwab | item |
| 74 | command | bloomberg | stone | south | socialist | roger | nefari |
| 75 | cia | gig | laugh | comedi | yeah | room | louie |
| 76 | easter | ideolog | blink | stimulus | invoic | cognit | packag |
| 77 | impeach | pelosi | donald | hoax | rock | approv | critic |
| 78 | endors | berni | bloomberg | hoax | stutter | leisur | marriag |
| 79 | censorship | censor | algorithm | chromosom | tech | misinform | jack |
| 80 | pasta | restaur | cook | chef | felix | evan | wine |
| 81 | pcmatic | council | crime | detroit | nurs | seattl | chicago |
| 82 | columbus | nashvill | nativ | butter | leak | logo | lake |
| 83 | argument | anim | moral | prefer | meat | eat | strong |
| 84 | wallac | valley | foster | marxist | garrett | democraci | antifa |
| 85 | appl | podcast | facebook | knowl | leadership | walsh | episod |
| 86 | curv | lockdown | economi | unemploy | recess | flatten | lock |
| 87 | larri | tripl | trend | mfgear | seven | relief | manufactur |
| 88 | larri | dna | democraci | tripl | elder | trend | seven |
| 89 | communist | communism | lesbian | soviet | romania | conspiraci | combat |
| 90 | clavin | andrew | mailbag | lifelock | spell | rockauto | jenna |
| 91 | kovat | model | hospit | patient | fatal | covert | predict |
| 92 | lefti | cardio | grandpar | scienc | nashvill | submit | lab |

Table S9. FREX Word List (K = 92, alpha = 0.05)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | pig | comic | comanch | coyot | golf | comedi |
| 2 | fight | fox | war | forward | center | idea | slaveri |
| 3 | larri | uncl | heather | slave | rushmor | father | tripl |
| 4 | clavin | hitler | mari | scout | discrimin | wilson | byron |
| 5 | portland | wendi | riot | protest | demonstr | feder | courthous |
| 6 | cow | abus | philosophi | vegan | ethic | aesthet | parent |
| 7 | ohio | ensur | district | lake | farm | campaign | extrem |
| 8 | secretari | press | sarah | acosta | phone | dad | teleprompt |
| 9 | flynn | fbi | durham | guilti | blake | investig | probe |
| 10 | test | posit | famili | celebr | question | ask | fine |
| 11 | boat | hawaiian | insurg | train | crow | isi | cat |
| 12 | accid | handshak | contagion | yale | car | comparison | experi |
| 13 | los | angel | lapd | trash | citi | street | neighbor |
| 14 | second | first | third | bar | number | offici | trust |
| 15 | cat | interrog | bullet | yeah | lsd | cia | ultra |
| 16 | covid | coronavirus | witt | nyc | mortal | quarantin | elder |
| 17 | lili | jean | lauren | alleg | husband | account | ashford |
| 18 | japan | suffer | men | rose | women | japanes | fish |
| 19 | gaff | thailand | equal | condemn | pennsylvania | supremacist | australia |
| 20 | pandem | task | latest | updat | global | forc | april |
| 21 | crisi | recruit | zip | critic | market | surgeon | corona |
| 22 | boundari | train | psychologist | firearm | conneri | mental | psycholog |
| 23 | jewish | grave | swine | buri | headlin | gather | restrict |
| 24 | racist | greta | karen | search | dog | ruin | behav |
| 25 | dave | app | ireland | vaccin | climat | pollut | pub |
| 26 | concern | worri | taken | normal | far | issu | prepar |
| 27 | lewi | filibust | herman | cain | cart | barack | samaritan |
| 28 | tax | penc | cent | rich | kamala | endors | rapper |
| 29 | mma | dolphin | book | stephen | fiction | audiobook | awesom |
| 30 | pack | suprem | court | barrett | constitut | judg | judici |
| 31 | uptick | wallac | founder | villain | hero | valu | stamp |
| 32 | film | documentari | mike | taylor | filmmak | cernovich | renew |
| 33 | file | expens | llc | credit | citibank | debt | phil |
| 34 | libertarian | conserv | sort | conservat | populist | market | ross |
| 35 | knowl | blm | convent | scientist | cannib | abolish | polit |
| 36 | kneel | dnc | mcenani | colin | harvard | holster | elector |
| 37 | immigr | taiwan | nhs | mortgag | european | blah | union |
| 38 | mask | wear | hair | teacher | ford | studi | nurs |
| 39 | borat | movi | award | film | cohen | academi | hollywood |
| 40 | ebola | mutat | africa | strain | diseas | contain | spanish |
| 41 | censor | halloween | dorsey | gold | commentari | disinform | cruz |
| 42 | bitcoin | stock | patreon | currenc | regret | certif | salman |
| 43 | footbal | game | nfl | sport | team | athlet | coach |
| 44 | berni | sander | deleg | nomine | warren | hillari | drop |
| 45 | china | chines | communist | taiwan | govern | rice | blame |
| 46 | trump | donald | presid | elect | biden | democrat | joe |
| 47 | yeah | think | don | want | guy | know | like |
| 48 | sniper | conflict | iceberg | repetit | beard | wife | manifest |
| 49 | barr | bolton | wit | ukrain | sander | william | kobe |
| 50 | toni | rope | dude | howard | ufc | rattlesnak | stern |
| 51 | taylor | brianna | violenc | black | racism | warrant | brutal |
| 52 | debat | biden | hillari | cheat | accus | joe | hide |
| 53 | sir | otto | prager | wisdom | firesid | billion | beauti |
| 54 | wildfir | lawn | climat | forest | scienc | gorsuch | solut |
| 55 | fda | ireland | antibodi | music | phase | valid | laboratori |
| 56 | stock | loan | auto | israel | flu | model | packag |
| 57 | christma | cake | gdp | tabl | sat | ramp | distanc |
| 58 | swat | matrix | inject | disinfect | quip | fahim | fake |
| 59 | canada | dad | surgeri | canadian | scan | cancer | appoint |
| 60 | dope | allig | deer | bro | dude | boulder | iphon |
| 61 | beard | liberti | beach | frenzi | ufo | kim | jong |
| 62 | virus | death | quarantin | work | die | think | home |
| 63 | rig | invis | pennsylvania | harass | suppress | mattress | voter |
| 64 | ballot | fraud | voter | mail | jefferson | pennsylvania | coalit |
| 65 | asymptomat | variant | symptom | infect | diseas | case | transmiss |
| 66 | rent | obamacar | aclu | jimmi | afford | medicaid | agenda |
| 67 | khabib | ufc | murphi | punch | fighter | kick | leg |
| 68 | christian | jesus | sabbath | violat | prayer | pray | law |
| 69 | gamer | dave | rubin | pie | mar | default | crowder |
| 70 | empir | allevi | benham | omaha | grind | bambi | starbuck |
| 71 | georgia | bright | kemp | hydroxychloroquin | sex | paycheck | model |
| 72 | nthe | nthat | nand | nto | nof | nyou | nis |
| 73 | swedish | forum | revolut | sweden | fourth | schwab | item |
| 74 | command | bloomberg | stone | south | socialist | roger | nefari |
| 75 | cia | gig | laugh | comedi | yeah | room | louie |
| 76 | easter | ideolog | blink | stimulus | invoic | cognit | packag |
| 77 | impeach | pelosi | donald | hoax | rock | approv | critic |
| 78 | endors | berni | bloomberg | hoax | stutter | leisur | marriag |
| 79 | censorship | censor | algorithm | chromosom | tech | misinform | jack |
| 80 | pasta | restaur | cook | chef | felix | evan | wine |
| 81 | pcmatic | council | crime | detroit | nurs | seattl | chicago |
| 82 | columbus | nashvill | nativ | butter | leak | logo | lake |
| 83 | argument | anim | moral | prefer | meat | eat | strong |
| 84 | wallac | valley | foster | marxist | garrett | democraci | antifa |
| 85 | appl | podcast | facebook | knowl | leadership | walsh | episod |
| 86 | curv | lockdown | economi | unemploy | recess | flatten | lock |
| 87 | larri | tripl | trend | mfgear | seven | relief | manufactur |
| 88 | larri | dna | democraci | tripl | elder | trend | seven |
| 89 | communist | communism | lesbian | soviet | romania | conspiraci | combat |
| 90 | clavin | andrew | mailbag | lifelock | spell | rockauto | jenna |
| 91 | kovat | model | hospit | patient | fatal | covert | predict |
| 92 | lefti | cardio | grandpar | scienc | nashvill | submit | lab |

Table S10. FREX Word List (K = 92, alpha = 0.1)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Topic | Word 1 | Word 2 | Word 4 | Word 4 | Word 5 | Word 6 | Word 7 |
| 1 | chicken | pig | comic | comanch | coyot | golf | comedi |
| 2 | fight | fox | war | forward | center | idea | slaveri |
| 3 | larri | uncl | heather | slave | rushmor | father | tripl |
| 4 | clavin | hitler | mari | scout | discrimin | wilson | byron |
| 5 | portland | wendi | riot | protest | demonstr | feder | courthous |
| 6 | cow | abus | philosophi | vegan | ethic | aesthet | parent |
| 7 | ohio | ensur | district | lake | farm | campaign | extrem |
| 8 | secretari | press | sarah | acosta | phone | dad | teleprompt |
| 9 | flynn | fbi | durham | guilti | blake | investig | probe |
| 10 | test | posit | famili | celebr | question | ask | fine |
| 11 | boat | hawaiian | insurg | train | crow | isi | cat |
| 12 | accid | handshak | contagion | yale | car | comparison | experi |
| 13 | los | angel | lapd | trash | citi | street | neighbor |
| 14 | second | first | third | bar | number | offici | trust |
| 15 | cat | interrog | bullet | yeah | lsd | cia | ultra |
| 16 | covid | coronavirus | witt | nyc | mortal | quarantin | elder |
| 17 | lili | jean | lauren | alleg | husband | account | ashford |
| 18 | japan | suffer | men | rose | women | japanes | fish |
| 19 | gaff | thailand | equal | condemn | pennsylvania | supremacist | australia |
| 20 | pandem | task | latest | updat | global | forc | april |
| 21 | crisi | recruit | zip | critic | market | surgeon | corona |
| 22 | boundari | train | psychologist | firearm | conneri | mental | psycholog |
| 23 | jewish | grave | swine | buri | headlin | gather | restrict |
| 24 | racist | greta | karen | search | dog | ruin | behav |
| 25 | dave | app | ireland | vaccin | climat | pollut | pub |
| 26 | concern | worri | taken | normal | far | issu | prepar |
| 27 | lewi | filibust | herman | cain | cart | barack | samaritan |
| 28 | tax | penc | cent | rich | kamala | endors | rapper |
| 29 | mma | dolphin | book | stephen | fiction | audiobook | awesom |
| 30 | pack | suprem | court | barrett | constitut | judg | judici |
| 31 | uptick | wallac | founder | villain | hero | valu | stamp |
| 32 | film | documentari | mike | taylor | filmmak | cernovich | renew |
| 33 | file | expens | llc | credit | citibank | debt | phil |
| 34 | libertarian | conserv | sort | conservat | populist | market | ross |
| 35 | knowl | blm | convent | scientist | cannib | abolish | polit |
| 36 | kneel | dnc | mcenani | colin | harvard | holster | elector |
| 37 | immigr | taiwan | nhs | mortgag | european | blah | union |
| 38 | mask | wear | hair | teacher | ford | studi | nurs |
| 39 | borat | movi | award | film | cohen | academi | hollywood |
| 40 | ebola | mutat | africa | strain | diseas | contain | spanish |
| 41 | censor | halloween | dorsey | gold | commentari | disinform | cruz |
| 42 | bitcoin | stock | patreon | currenc | regret | certif | salman |
| 43 | footbal | game | nfl | sport | team | athlet | coach |
| 44 | berni | sander | deleg | nomine | warren | hillari | drop |
| 45 | china | chines | communist | taiwan | govern | rice | blame |
| 46 | trump | donald | presid | elect | biden | democrat | joe |
| 47 | yeah | think | don | want | guy | know | like |
| 48 | sniper | conflict | iceberg | repetit | beard | wife | manifest |
| 49 | barr | bolton | wit | ukrain | sander | william | kobe |
| 50 | toni | rope | dude | howard | ufc | rattlesnak | stern |
| 51 | taylor | brianna | violenc | black | racism | warrant | brutal |
| 52 | debat | biden | hillari | cheat | accus | joe | hide |
| 53 | sir | otto | prager | wisdom | firesid | billion | beauti |
| 54 | wildfir | lawn | climat | forest | scienc | gorsuch | solut |
| 55 | fda | ireland | antibodi | music | phase | valid | laboratori |
| 56 | stock | loan | auto | israel | flu | model | packag |
| 57 | christma | cake | gdp | tabl | sat | ramp | distanc |
| 58 | swat | matrix | inject | disinfect | quip | fahim | fake |
| 59 | canada | dad | surgeri | canadian | scan | cancer | appoint |
| 60 | dope | allig | deer | bro | dude | boulder | iphon |
| 61 | beard | liberti | beach | frenzi | ufo | kim | jong |
| 62 | virus | death | quarantin | work | die | think | home |
| 63 | rig | invis | pennsylvania | harass | suppress | mattress | voter |
| 64 | ballot | fraud | voter | mail | jefferson | pennsylvania | coalit |
| 65 | asymptomat | variant | symptom | infect | diseas | case | transmiss |
| 66 | rent | obamacar | aclu | jimmi | afford | medicaid | agenda |
| 67 | khabib | ufc | murphi | punch | fighter | kick | leg |
| 68 | christian | jesus | sabbath | violat | prayer | pray | law |
| 69 | gamer | dave | rubin | pie | mar | default | crowder |
| 70 | empir | allevi | benham | omaha | grind | bambi | starbuck |
| 71 | georgia | bright | kemp | hydroxychloroquin | sex | paycheck | model |
| 72 | nthe | nthat | nand | nto | nof | nyou | nis |
| 73 | swedish | forum | revolut | sweden | fourth | schwab | item |
| 74 | command | bloomberg | stone | south | socialist | roger | nefari |
| 75 | cia | gig | laugh | comedi | yeah | room | louie |
| 76 | easter | ideolog | blink | stimulus | invoic | cognit | packag |
| 77 | impeach | pelosi | donald | hoax | rock | approv | critic |
| 78 | endors | berni | bloomberg | hoax | stutter | leisur | marriag |
| 79 | censorship | censor | algorithm | chromosom | tech | misinform | jack |
| 80 | pasta | restaur | cook | chef | felix | evan | wine |
| 81 | pcmatic | council | crime | detroit | nurs | seattl | chicago |
| 82 | columbus | nashvill | nativ | butter | leak | logo | lake |
| 83 | argument | anim | moral | prefer | meat | eat | strong |
| 84 | wallac | valley | foster | marxist | garrett | democraci | antifa |
| 85 | appl | podcast | facebook | knowl | leadership | walsh | episod |
| 86 | curv | lockdown | economi | unemploy | recess | flatten | lock |
| 87 | larri | tripl | trend | mfgear | seven | relief | manufactur |
| 88 | larri | dna | democraci | tripl | elder | trend | seven |
| 89 | communist | communism | lesbian | soviet | romania | conspiraci | combat |
| 90 | clavin | andrew | mailbag | lifelock | spell | rockauto | jenna |
| 91 | kovat | model | hospit | patient | fatal | covert | predict |
| 92 | lefti | cardio | grandpar | scienc | nashvill | submit | lab |

Figure S1. Optimization Results for Facebook - Twitter

