# Appendix A. Initial BERTopic results.

Topic	Count	Name	Representation	KeyBERT	MMR	GPT
-1	25699	-1_thats_dont_like_people	['thats', 'dont', 'like', 'people', 'just', 'im', 'youre', 'think', 'hes', 'know']	['bad', 'trump', 'really', 'trumps', 'hate', 'president trump', 'actually', 'people', 'comment', 'time']	['like', 'just', 'lol', 'trumps', 'time', 'vote', 'said', 'love', 'better', 'didnt']	['Political opinions and debates about Donald Trump and US politics']
			['bryson', 'brysons', 'trump bryson', 'video bryson', 'bryson trump', 'bryson	['bryson playing', 'golf bryson', 'great video', 'golfer', 'golf', 'video	['trump bryson', 'video bryson', 'thank', 'president trump', 'bryson	['Bryson
0	4189	0_bryson_brysons_trump bryson_video bryson	bryson', 'bryson president', 'thank bryson', 'bryson just', 'thank']	bryson', 'thanks bryson', 'bryson said', 'awesome bryson', 'thank bryson'] ['golf video', 'golf	great', 'great', 'dechambeau', 'video', 'game', 'bryson love'] ['golf video', 'best	DeChambeau and Donald Trump Golf Collaboration']
1	2861	1_golf video_old_golf_best golf	['golf video', 'old', 'golf', 'best golf', 'youtube golf', 'stroke', 'watched', 'putting', 'youtube', 'putting stroke']	videos', 'youtube golf', 'watching golf', 'best golf', 'greatest golf', 'watch golf', 'playing golf', 'golfing', 'play golf']	golf', 'youtube', 'putting stroke', 'swing', 'hes', 'years old', 'video time', 'greatest', 'ive watched']	['Golf videos and discussions about older players']
			['golfer', 'golf', 'golf trump', 'good golfer', 'play golf', 'good golf', 'golf	['trump golf', 'golfer trump', 'golf trump', 'trumps golf', 'playing golf', 'play golf', 'golfer president', 'golfing',	['golf trump', 'good golfer', 'golf game', 'game', 'course', 'president', 'trump	['Donald Trump's golf
2	2493	2_golfer_golf_golf trump_good golfer	game', 'good', 'trump golf', 'play'] ['lost', 'media', 'people', 'election',	'golf game', 'good golfer'] ['trump', 'democracy', 'president trump',	play', 'trump great', 'really', 'watch'] ['lost', 'people', 'border',	skills and reputation'] ['Debates on Donald
3	1639	3_lost_media_people_election	'border', 'democracy',	'donald trump', 'president', 'video	'democracy', 'wars', 'inflation', 'years',	Trump's Presidency

			'economy', 'country', 'wars', 'convicted']	trump', 'democrats', 'obama', 'nice', 'good']  ['great video',	'ukraine', 'hate', 'video trump']	and U.S. Political Polarization']
4	1502	4_best video_fun watch_video_fun	['best video', 'fun watch', 'video', 'fun', 'youtube video', 'best', 'watch', 'youtube', 'watched', 'entertaining'] ['biden', 'joe biden', 'joe', 'beat',	'awesome video', 'amazing video', 'good video', 'video awesome', 'video amazing', 'youtube video', 'video youtube', 'best videos', 'best youtube'] ['biden chance', 'chance biden', 'biden golf',	['fun watch', 'youtube video', 'watched', 'thanks', 'ive', 'content', 'loved', 'awesome video', 'guys', 'best youtube'] ['joe', 'handicap', 'biden said', 'golf	['Positive reactions to YouTube videos']
5	1446	5_biden_joe biden_joe_beat	'biden golf', 'beat trump', 'bidens', 'biden biden', 'think biden', 'handicap']	'biden better', 'golf biden', 'golfer biden', 'better biden', 'think biden', 'sure biden', 'vs biden'] ['youre brainwashed',	biden', 'debate', 'strokes', 'said beat', 'carry', 'biden strokes', 'imagine biden']	['Debate over Biden vs. Trump golf abilities']
6	1101	6_imagine imagine_imagine_media_brainwashe d	['imagine imagine', 'imagine', 'media', 'brainwashed', 'youre', 'sad', 'stupid', 'pathetic', 'loser', 'hate']	'feel sorry', 'youre embarrassing', 'embarrassing', 'lying', 'media lies', 'like brainwashed', 'like sad', 'sad person', 'people hate']	['imagine imagine', 'brainwashed', 'loser', 'cnn', 'crying', 'msm', 'mainstream media', 'shut', 'troll', 'people hate'] ['secret', 'golf carts',	['Hostile online discourse and distrust of mainstream media']
7	856	7_cart_carts_tee_boxes	['cart', 'carts', 'tee', 'boxes', 'tee boxes', 'driving', 'secret service', 'secret', 'golf carts', 'greens']	['trump drives', 'trump driving', 'trump drive', 'drives tee', 'driving tee', 'driving golf', 'driving greens', 'just drives', 'drives greens', 'trump just']	'tee box', 'green', 'driving tee', 'drives', 'trump driving', 'following', 'owns course', 'carts following']	["Trump's behavior driving golf carts on his golf courses"]

8	572	8_million_views_subs_million views	['million', 'views', 'subs', 'million views', 'hours', 'mil', 'congrats', 'subscribers', 'congrats million', 'views hours']	['million views', 'views million', 'million subs', 'million congratulations', 'million congrats', 'congrats million', 'million subscribers', 'congratulations million', 'mil congrats', 'video million'] ['game impressive', 'awesome game',	['subs', 'million views', 'views hours', 'hours million', 'million congrats', 'hit', 'trending', 'youtube', 'gained subscribers', 'later']	['YouTube subscriber milestones and viral video growth']
9	426	9_game_trumps game_player_trump game	['game', 'trumps game', 'player', 'trump game', 'got game', 'impressed', 'trump player', 'play', 'trump player'] ['hes president', 'president	'impressive trump', 'great video', 'player awesome', 'trumps game', 'game awesome', 'trump plays', 'really impressed', 'impressed president']	['trumps game', 'got game', 'trump player', 'great player', 'trump got', 'impressed president', 'wow', 'really play', 'play president', 'ball']	['Praise for Donald Trump's Golf Skills']
10	419	10_hes president_president president_referred_presidents	president', 'referred', 'presidents', 'obama', 'president hes', 'referred president', 'president obama', 'president', 'addressed'] ['filmed', 'attempt', 'assassination',	['presidents leave', 'presidents presidents', 'saying president', 'called president', 'presidents president', 'presidents mr', 'president title', 'mean president', 'presidents', 'president anymore'] ['filmed prior', 'filmed happened', 'video	['referred', 'president hes', 'president obama', 'potus', 'ex', 'title', 'leave office', 'isnt president', 'called president', 'president anymore'] ['assassination', 'comthis', 'pinned	['How to address former presidents and officials']
11	299	11_filmed_attempt_assassination_july	'july', 'assassination attempt', 'pinned',	filmed', 'filmed incident', 'filmed trump', 'shooting	comment', 'week july', 'recorded', 'filmed week',	timing of Trump event video versus

			'comthis', 'pinned comment', 'week july', 'recorded']	filmed', 'trump filmed', 'filmed shooting', 'shot filmed', 'filmed attempt']	'comment filmed', 'butler', 'brysons pinned', 'filmed attempt'] ['need break',	assassination attempt']
12	269	12_tiger_scottie_break_need break	['tiger', 'scottie', 'break', 'need break', 'brooks', 'lets', 'break tiger', 'try', 'alice', 'alice cooper'] ['neville', 'neville	['need break', 'need tiger', 'try tiger', 'tiger lets', 'need run', 'lets break', 'really need', 'lets play', 'lets try', 'break lets']	'brooks', 'break tiger', 'alice cooper', 'scottie scheffler', 'volunteer', 'try phil', 'dallas lets', 'break scottie', 'tiger charlie']	['Requests and suggestions for celebrity collaborations and appearances in a golf context']
13	247	13_neville_neville neville_neville needs_shout neville	neville', 'neville needs', 'shout neville', 'nevel', 'goat neville', 'cabinet', 'need neville', 'rooftop', 'nevil']	['neville', 'think neville', 'need neville', 'want neville', 'neville knows', 'nevilles', 'neville needs', 'episode neville', 'neville neville', 'neville reads']	['neville needs', 'rooftop', 'shout', 'secretary', 'caddy', 'head secret', 'mvp', 'shoutout neville', 'neville trumps', 'star']	['Neville the Caddy: Praise and Jokes']
14	240	14_solo_eagle_solo eagle_solo birdie	['solo', 'eagle', 'solo eagle', 'solo birdie', 'birdie', 'trump solo', 'birdies', 'solo birdies', 'birdies solo', 'eagle solo']	['birdies solo', 'birds solo', 'solo birdies', 'solo birds', 'solo bird', 'solo birdie', 'birdie solo', 'eagle solo', 'solo birdied', 'solo eagle'] ['trump strokes',	['birdies', 'eagle solo', 'eagle trump', 'eagle playing', 'eagles', 'trumps solo', 'playing best', 'eagle crazy', 'insane', 'trump getting']	['Donald Trump's golf achievements (birdies and eagles)']
15	225	15_stroke_putting stroke_putting_putt	['stroke', 'putting stroke', 'putting', 'putt', 'trumps putting', 'putter', 'stroke trumps', 'trump putts', 'trumps', 'putts']	'trumps putting', 'trump putts', 'trump putting', 'trump putting', 'trumps putts', 'stroke trumps', 'stroke trumps', 'stroke trump', 'putting stroke', 'interesting stroke', 'trump putt']	['stroke', 'trump putts', 'wrist', 'gives anxiety', 'donalds putting', 'putts like', 'terrible putting', 'interesting', 'style', 'putts glove']	["Donald Trump's golf putting technique"]

16	214	16_ear_ear looks_healed_trumps ear	['ear', 'ear looks', 'healed', 'trumps ear', 'fine', 'bandage', 'scar', 'looks fine', 'intact', 'ear healed'] ['trump inside',	['got shot', 'wasnt shot', 'ear looks', 'didnt shot', 'assassination attempt', 'trumps ear', 'closeups ear', 'happen ear', 'looks fine', 'ears bullet']	['trumps ear', 'bandage', 'scar', 'ear healed', 'shot ear', 'fine ear', 'looks', 'wheres', 'assassination attempt', 'perfectly fine']	["Speculation about Trump's ear injury after assassination attempt"]
			'inside', 'like president', 'inside	['trump inside', 'trumps inside', 'president	['trump inside', 'like president', 'inside	
			president', 'inside looks', 'trumps inside', 'president	inside', 'inside president', 'inside trump', 'presidents	lol', 'think presidents', 'pause', 'head butt', 'inside	['Jokes and
			inside', 'inside	inside', 'inside looks',	comment', 'crazy	commentary
17	196	17_trump inside_inside_like president inside president	think', 'looks like', 'think president']	'inside', 'got inside', 'trump acting']	looks', 'mir', 'phrasing']	about Donald Trump']
1,	170	president_inside president	['partner', 'partner	. 03	. 03	Trump J
			partner', 'say partner', 'drinking	['partner drinking', 'partner say', 'drinking	['shot time', 'partner counter', 'counter',	
			game', 'shot time',	game', 'partner shot',	'drinking', 'partner	
			'calling partner',	'says partner', 'say	lol', 'partner said',	['Humorous
			'partner count', 'said partner',	partner', 'eachother partner', 'people	'kleenex', 'love calling', 'times	repetition of the word
10	100	18_partner_partner partner_say	'partner counter',	partner', 'shot partner',	partner', 'times	"partner" in
18	182	partner_drinking game	'counter']	'partner lets']	said'] ['kamala harris', 'kamala ads',	videos']
			['ad', 'kamala', 'kamala harris',	['video ad', 'campaign ad', 'ads playing',	'getting kamala', 'ads video',	
			'harris', 'ads',	'trump ads', 'getting	'begging money',	
			'harris ad', 'kamala ad', 'ad video',	ads', 'ads video', 'commercials video',	'middle video', 'youtube kamala',	['YouTube ads for Kamala
10	164	10 ad tramala tramala hamis tramis	'kamala ads',	'ad video', 'kamala ads',	'got ad', 'harris	Harris
19	164	19_ad_kamala_kamala harris_harris	'getting kamala']	'advertisement']	campaign', 'adds']	campaign']

20	150	20_tees_red_red tees_ladies	['tees', 'red', 'red tees', 'ladies', 'reds', 'ladies tees', 'playing ladies', 'playing red', 'tees playing', 'playing reds']	['playing tees', 'playing reds', 'playing red', 'reds playing', 'tees playing', 'played reds', 'play red', 'played red', 'tees played', 'play reds']	['red tees', 'playing ladies', 'tees playing', 'womens', 'reds playing', 'sergio', 'tees ladies', 'tees challenge', 'challenge break', 'theyre playing'] ['old', 'trump old', 'oldest presidential',	["Debate over playing from red or women's tees in golf"]
21	146	21_old_trump looks_looks old_trump old	looks', 'looks old', 'trump old', 'looks', 'oldest', 'old trump', 'oldest presidential', 'old president', 'looking old'] ['trump love', 'love	['looks older', 'looking old', 'looks old', 'look old', 'trump senile', 'really old', 'hes old', 'trump old', 'lookin old', 'biden old']	'old presidential', 'senile', 'presidential nominee', 'trump lookin', 'looks frail', 'candidate history', 'looks older']	["Concerns about Donald Trump's age and fitness for presidency"]
22	146	22_trump love_love trump_love president_love	trump', 'love president', 'love', 'love mr', 'love love', 'gotta love', 'president love', 'love man', 'uk love']	['loves trump', 'loved trump', 'love trumps', 'trump love', 'love president', 'trumpy likes', 'trump trump', 'trump gotta', 'mr trump'] ['excited wait', 'wait	['uk love', 'yorker', 'remember loved', 'trump remember', 'maga love', 'loves trump', 'great man', 'gotta', 'choo', 'trump way']	['Pro-Trump admiration and support']
23	115	23_wait_waiting_ive waiting_wait watch	['wait', 'waiting', 'ive waiting', 'wait watch', 'going awesome', 'gonna huge', 'wait wait', 'weve waiting', 'going good', 'awesome wait']	excited', 'waiting awesome', 'waiting unbelievable', 'awesome wait', 'waiting happen', 'episode waiting', 'looking forward', 'waiting wait', 'yesssss wait']	['ive waiting', 'going awesome', 'gonna huge', 'awesome wait', 'yesssss', 'looking forward', 'watch going', 'oh man', 'waiting lfg', 'advertised going']	['Excitement and anticipation for an upcoming event']

24	97	24_goat_goats_trump goat_goat goat	['goat', 'goats', 'trump goat', 'goat goat', 'goat trump', 'goat goats', 'goats trump', 'goats goats', 'goat maga', 'goats goat'] ['internet', 'break	['trump goat', 'trumps goat', 'goat trumps', 'goats trump', 'goats trump', 'trump goated', 'trump goats', 'freaking goat', 'goat', 'goat goat'] ['breaking internet',	'goats video', 'thé', 'fraud election', 'fight subscribed', 'circle twats', 'course goats', 'confirmed goats', 'yall ryder', '_xd_goat action']	['Trump as "GOAT" (Greatest of All Time) and goat-themed memes']
		25_internet_break internet_internet	internet', 'internet break', 'gonna break', 'break', 'internet gonna', 'breaking internet', 'internet internet', 'broke internet',	'internet gonna', 'break internet', 'gonna break', 'internet breaking', 'internet break', 'internet broke', 'broke internet', 'going internet', 'internet	['internet gonna', 'internet internet', 'gonna', 'internet officially', 'fourty', 'internet breaking', 'ready break', 'shut', 'incoming', 'break	["Breaking the Internet"
25	90	break_gonna break	'going break'] ['kamala', 'kamala kamala', 'break kamala', 'lets kamala', 'kamala doing', 'imagine kamala', 'voting kamala', 'fair	l'kamala doesnt', 'voting kamala', 'kamala doing', 'kamala having', 'vote kamala', 'kamala like', 'kamala	['voting kamala', 'kamala lets', 'play kamala', 'kamala harris', 'harris', 'female', 'kamala like', 'hey invite',	Reactions'] ['Online discussions
26	88	26_kamala_kamala kamala_break kamala_lets kamala	kamala', 'kamala lets', 'kamalas game'] ['great incredible', 'incredible', 'incredible thats', 'great awesome', 'awesome',	lets', 'lets kamala', 'kamala kicks', 'kamala lol']  ['awesome', 'incredible thats', 'just awesome', 'awesome honestly', 'incredible amazing',	'kamala marmalade', 'kamala kicks'] ['wow wow', 'aura wow', 'brainrot', 'blast wydr', 'brilliant wow', 'cheered rooted',	and opinions about Kamala Harris']
27	84	27_great incredible_incredible_incredible thats_great awesome	'impressive great', 'wow wow', 'awesome wow',	'amazing youre', 'remarkable awesome', 'incredible', 'positive	'badass unsubscribed', 'awesome word',	['Reactions of amazement and positivity']

['goats trump',

		'wow', 'incredible great']	awesome', 'great incredible']	'badass incredible', 'absolute fudge'] ['help tds', 'terminal',	
84	28_tds_tds showing_help tds_showing tds	['tds', 'tds showing', 'help tds', 'showing tds', 'case tds', 'tds suck', 'suck tds', 'tds tds', 'advanced', 'seek']	['help tds', 'tds showing', 'seek treatment', 'man tds', 'showing tds', 'tds tds', 'tds need', 'tds suck', 'terminal tds', 'thats tds']	'showing', 'temporary downs', 'downs syndrome', 'mrnurse arent', 'syndrome good', 'sad case', 'psychiatric', 'luck little']	['Trump Derangement Syndrome (TDS) discourse']
80	29_lets trump_trump lets_trump trump_fight	'trump lets', 'trump trump', 'fight', 'lets', 'fight fight', 'choo', 'lets goooo', 'goooo', 'trump hell']	lets', 'goooo trump', 'trump trump', 'trump ohhhh', 'lets goooo', 'trump yo', 'fight trump', 'yeah trump', 'trump thats']	['lets trump', 'fight fight', 'choo', 'trump hell', 'lfg trump', 'usa', 'looky', 'baby lets', 'hell yeah', 'goooo trump']	['Pro-Trump Enthusiasm and Support']
80	30_djt_dt_djt really_game djt	really', 'game djt', 'djt man', 'djt having', 'djt play', 'djt got', 'round djt', 'djt stick']	djt', 'djt game', 'game djt', 'djt play', 'djt really', 'djt got', 'like djt', 'djt having', 'morning djt']	'man great', 'dt really', 'es ist', 'dt walks', 'dt winners', 'dthk ads', 'enjoying djt', 'dts chuckle'] ['reed trump',	['Praise and Commentary on DJT's Golf Performance']
79	31_reed_patrick_patrick reed_likes patrick	['reed', 'patrick', 'patrick reed', 'likes patrick', 'reed trump', 'trump likes', 'likes', 'golfer patrick', 'like patrick', 'loves patrick']	['trump likes', 'patrick reed', 'trump liking', 'thinks reed', 'reed favorite', 'likes patrick', 'liked patrick', 'liking patrick', 'reed favourite', 'pat reed']	patrick', 'liked patrick', 'reed favorite', 'said liked', 'saying loves', 'controversial golfer', 'reed course', 'reed controversial']	['Donald Trump's admiration for golfer Patrick Reed']
	84 80 80	29_lets trump_trump lets_trump 80 trump_fight  80 30_djt_dt_djt really_game djt  31_reed_patrick_patrick reed_likes	['tds', 'tds showing', 'help tds', 'showing tds', 'case tds', 'tds suck', 'suck tds', 'tds tds', 'tds tds', 'tds tds', 'tds tds', 'tds tds', 'advanced', 'seek'] ['lets trump', 'fight', 'trump lets', 'trump trump', 'fight', 'choo', 'lets goooo', 'lets goooo', 'goooo', 'trump hell'] ['djt', 'dt', 'djt really', 'game djt', 'djt man', 'djt having', 'djt play', 'djt got', 'round djt', 'djt stick']  80 30_djt_dt_djt really_game djt ['reed', 'patrick', 'patrick reed', 'likes patrick', 'reed trump', 'trump likes', 'likes', 'golfer patrick', 'like patrick', 'like patrick', 'like patrick', 'loves	['tds', 'tds showing', 'help tds', 'showing tds', 'showing tds', 'showing tds', 'showing tds', 'tds suck', 'suck tds', 'tds suck', 'suck tds', 'tds seek', 'tds tds', suck', 'stemplets, 'trump trump', 'trump lets, 'trump trump', 'fight', 'choo', 'lets goooo', 'trump trump', 'trump trump', 'trump trump', 'goooo', 'trump trump', 'trump trump', 'goooo', 'trump trump', 'yeah trump', 'trump trump', 'goooo', 'trump trump', 'yeah trump', 'trump trump', 'yeah trump', 'trump trump', 'trump thas'] ['djt', 'dj', 'djt pay', 'djt pay', 'djt pay', 'djt got', 'round djt', 'djt stick']  80 30_djt_dt_djt really_game djt  ['reed', 'patrick', 'patrick', 'patrick reed', 'likes patrick', 'reed trump', 'trump likes', 'likes', 'golfer patrick', 'likes', 'golfer patrick', 'likes patrick', 'likes', 'golfer patrick', 'likes', 'golfer', 'likes', 'golfer patrick', 'likes', 'golfer', 'likes', 'golfer', 'likes', 'golfer', 'likes', 'golfer', 'likes', 'golfer', 'gatrick', 'like', 'likes', 'gotfer', 'likes', 'golfer', 'like', '	great'] incredible'] 'absolute fudge'] ('help tds', 'terminal', 'showing', 'tas need', 'tds suck', 'sad case', 'tds suck', 'sad case', 'tas need', 'tds suck', 'sad case', 'tump lets', 'gooo trump', 'trump lets', 'goooo trump', 'trump trump', 'yeah trump

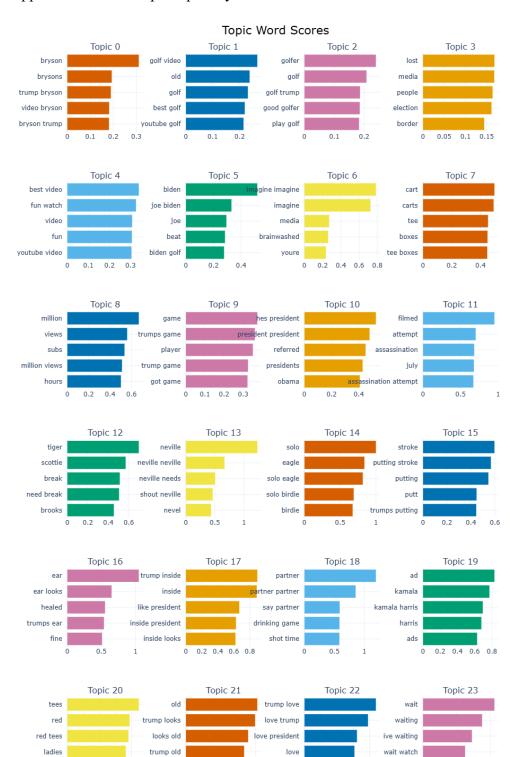
32	76	32_gets inside_trump gets_whats going_inside dont	['gets inside', 'trump gets', 'whats going', 'inside dont', 'know whats', 'gets', 'going president', 'inside', 'whats', 'dont know']  ['rapist', 'felon',	['trump inside', 'inside president', 'going trump', 'dont know', 'going president', 'crazyyyy president', 'gets inside', 'president trump', 'trump gets', 'inside']	['inside dont', 'idk whats', 'pause', 'know going', 'going wild', 'president', 'trump inside', 'going trump', 'video lmaooooooooooooooooooooooooooooooooooo	['Humorous and Irreverent Commentary on President Trump']
			'convicted', 'golf convicted', 'golfing', 'golfing rapist', 'golfing convicted', 'traitor', 'convicted	['golfing rapist', 'felon golfing', 'pedophile golfing', 'golf cheater', 'playing golf', 'golfing convicted', 'golfing traitor', 'play golf',	playing', 'golf known', 'golf traitor', 'convicted criminal', 'golf felon', 'wants destroy', 'sexual	['Criticism of golfing with controversial
33	75	33_rapist_felon_convicted_golf convicted	felon', 'golfing traitor'] ['wounded', 'wounded warrior', 'warrior',	'golfing felon', 'golf convicted'] ['donating wounded', 'donate wounded', 'veterans charity',	predator', 'traitor country'] ['project', 'money wounded', 'vets', 'raising money',	convicted individuals']
		34_wounded_wounded	'warriors', 'wounded warriors', 'warrior project', 'project', 'money wounded',	'money wounded', 'donations', 'donating', 'wounded warriors', 'money veterans', 'warriors good', 'gladly	'donating wounded', 'warriors fought', 'local veterans', 'warrior scam', 'pockets	['Wounded Warrior Project charity controversies and
34	75	warrior_warriors	'money', 'vets'] ['cheats', 'cheating', 'did cheat', 'cheat', 'hes	donated'] ['hes cheating', 'cheating', 'cheats hes', 'cheating durrr', 'cheating video', 'cheats	people', 'losers'] ['cheating video', 'durrr', 'hes notorious', 'pele', 'asking cheated',	fundraising']  ['Accusations
35	73	35_cheats_cheating_did cheat_cheat	cheating', 'cheating video', 'cheated', 'cheater',	ass', 'cheating literally', 'cheat lying', 'cheating did', 'cheating just']	'aint wheelhouse', 'orange caligula', 'careful likes',	of cheating and dishonesty']

36	68	36_lets_lets fucking_lets lets_goooo	'durrr', 'stories cheating']  ['lets', 'lets fucking', 'lets lets', 'goooo', 'lets freaking', 'lets goooo', 'yeah lets', 'gooooooo', 'baby lets', 'fucking lets']  ['thats holes', 'gotten inside', 'holes president', 'gotten', 'president gotten', 'holes',	['lets fucking', 'lets goooo', 'fucking lets', 'letssss gooooo', 'lets gooooooo', 'gooooo lets', 'goooooooooooo lets', 'goooooooooo lets', 'gooooooo lets', 'gooooooo lets'] ['president inside', 'presidents inside', 'holes president', 'president got', 'got inside', 'presidents	'believe idk', 'beat stinks'] ['lets freaking', 'baby lets', 'lets mil', 'goooo lets', 'shit lets', 'gooooo', 'fucking', 'freakin wayyyy', 'freaking kidding', 'freaking kidding', 'freaking boys'] ['gotten inside', 'holes president', 'presidents gotten', 'heh', 'inside holes', 'holes thats',	['Expressions of Excitement and Enthusiasm']
37	68	37_thats holes_gotten inside_holes president_gotten	'inside', 'inside thats', 'holes presidents', 'presidents gotten'] ['collab', 'needed', 'know needed',	gotten', 'gotten inside', 'presidents getting', 'inside holes', 'presidents got']  ['unexpected collab',	'president inside', 'inside metrump', 'inside pause', 'crazy thats']  ['needed collab',	['Sexual innuendos and jokes about Trump']
38	63	38_collab_needed_know needed_needed collab	'needed collab', 'best collab', 'duo didnt', 'collab didnt', 'collab needed', 'greatest collab', 'collab best']	'needed collab', 'collab needed', 'need collab', 'collab didnt', 'collab wanted', 'legendary collab', 'collab actually', 'coolest collab', 'wanted collab']	'duo didnt', 'needed best', 'collab knew', 'collab trump', 'collab year', 'collab wait', 'combo duo', 'collab greatest', 'best pairing'] ['steph', 'john daly',	['Excitement about iconic collaborations']
39	60	39_jordan_curry_michael jordan_michael	['jordan', 'curry', 'michael jordan', 'michael', 'steph', 'steph curry', 'daly', 'john daly', 'john', 'curry tony']	['tony romo', 'definitely michael', 'curry sombody', 'gotta steph', 'steph curry', 'jordan steph', 'tony', 'michael jordan', 'jordan gotta', 'curry tony']	'tony romo', 'lee trevino', 'mj', 'barkley', 'jordan gotta', 'play michael', 'curry michael', 'break john']	['Celebrity athletes and entertainers in sports events']

40	57	40_don_donny_donnie_don don	['don', 'donny', 'donnie', 'don don', 'dons', 'don got', 'uncle donnie', 'don jr', 'donnys', 'uncle']	['don looking', 'smashes don', 'curious don', 'don mentally', 'people don', 'uncle donnie', 'video donny', 'boy donnie', 'don don', 'donny']	['don got', 'wearin', 'weekly uncle', 'video donny', 'thinking lol', 'cash eagles', 'bulletproof donny', 'big donnie', 'bars safest', 'ball donkey'] ['fist bumps',	['Humorous commentary about Don/Donny and his activities']
41	56	41_fist_bump_fist bump_bump high	['fist', 'bump', 'fist bump', 'bump high', 'high', 'bumps', 'high fist', 'awkward', 'fist bumps', 'fist pump']	['fist bumps', 'fist bump', 'high fist', 'high fives', 'awkward fistbump', 'bump fist', 'got fist', 'nice fist', 'awkward fist', 'bump fistbump']	'pump', 'handshake', 'holes awkward', 'high bump', 'high fives', 'awkward fistbump', 'tee painful', 'talk fist', 'actions end'] ['cooked', 'race mil',	['Awkward social greetings (fist bumps, high fives, handshakes)']
42		42_grant_race_lost race_grant cooked	['grant', 'race', 'lost race', 'grant cooked', 'grant grant', 'beat grant', 'cooked', 'grant race', 'race mil', 'grant wins']	['poor grant', 'sorry grant', 'grant doesnt', 'lost grant', 'grant lost', 'grant wins', 'nooooooooo chance', 'beating grant', 'race million', 'lost race']	'grant wins', 'afraid lost', 'nooooooooo chance', 'million nooooooooo', 'sorry grant', 'wins race', 'chance race', 'grant lol'] ['look like', 'know	['Grant losing the race to a million subscribers']
43		43_look like_doesnt look_know potus_gluck	['look like', 'doesnt look', 'know potus', 'gluck', 'impersonator', 'thumbnail', 'trump doesnt', 'trump losing', 'prob', 'trump didnt']	['trumps nasty', 'trumps farts', 'trump thrilled', 'trump doesnt', 'trump didnt', 'phony trump', 'poison trump', 'trump losing', 'trump poison', 'trump fast']	potus', 'gluck', 'impersonator', 'bad thumbnail', 'trump tekky', 'trump lines', 'biblical descriptions', 'triggered does', 'trump hitmanler']	['Negative perceptions and media portrayals of Donald Trump']

					['vote felon', 'voting	
					guy', 'youll light',	
					'clueless dreams',	
			['vote', 'got vote',		'wont ukraine',	
			'voting', 'hes got',	['voting guy', 'vote	'work cleaning',	
			'vote man', 'voting	hopefully', 'voting	'western free',	
			vote', 'vote	come', 'vote man', 'vote	'bypassing oh',	['Support for a
			hopefully', 'vote	hes', 'voting vote',	'called common',	Political
			felon', 'vote vote',	'voting', 'vote fir', 'got	'votes	Candidate in
44	52	44 vote got vote voting hes got	'vote hes']	vote', 'voting called']	internationalthis']	Elections']

## Appendix B1. BERTopic topic keywords and scores.



love mr

0 0.2 0.4 0.6 0.8

0.5

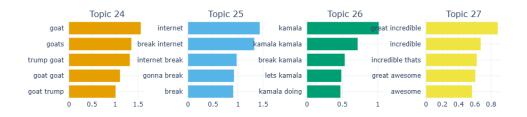
reds

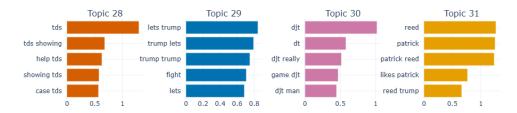
0 0.2 0.4 0.6 0.8

0

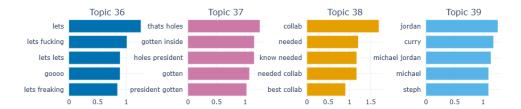
0.4 0.6

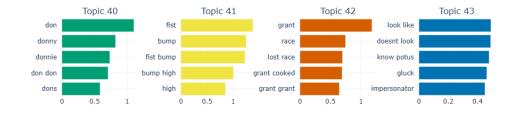
## Appendix B2. BERTopic topic keywords and scores (continued).

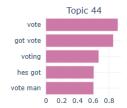




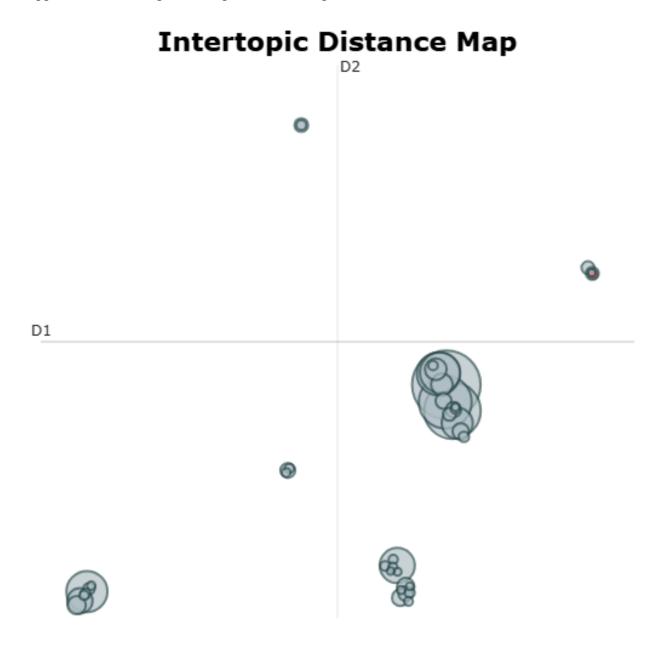








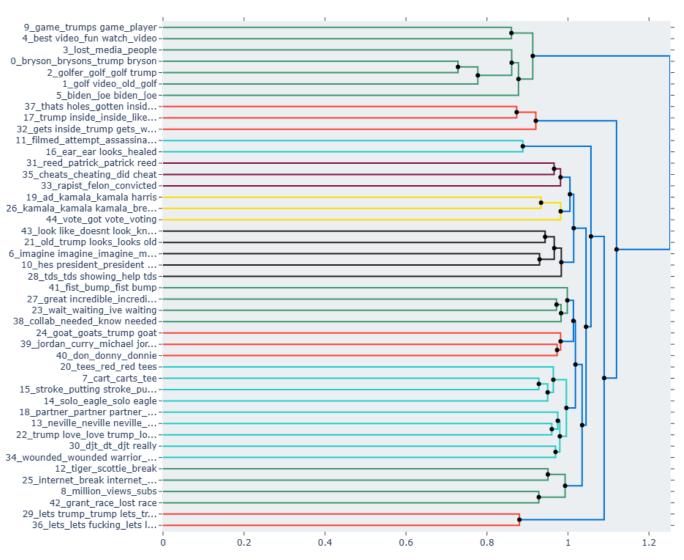
Topic 29



Topic 0 Topic 6 Topic 12 Topic 18 Topic 24 Topic 30 Topic 36 Topic 42

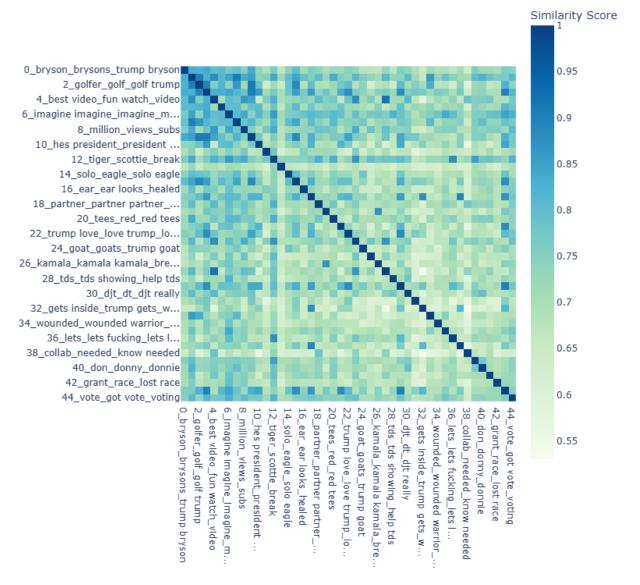
### Appendix D. BERTopic hierarchical clustering.

# **Hierarchical Clustering**

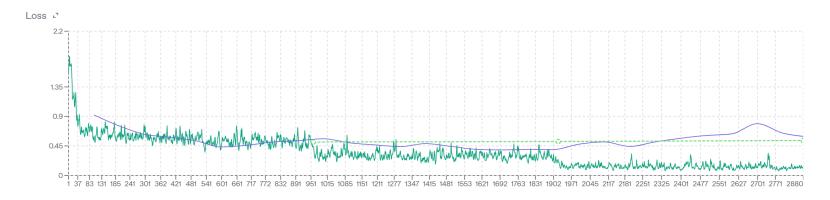


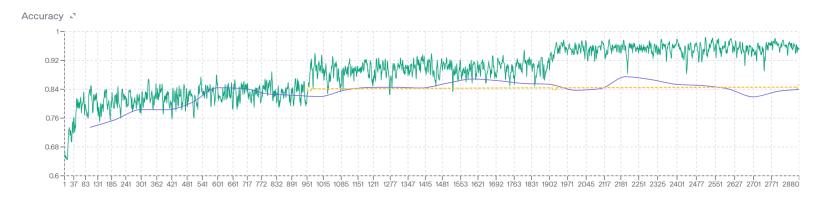
#### Appendix E. BERTopic topic heatmap.

# **Similarity Matrix**



#### Appendix F. GPT-4o-mini fine-tuning performance.





GPT-40-mini was fine-tuned using a supervised learning approach on a dataset containing 3,074,484 tokens derived from the initial BERTopic outputs. The detailed visualization of the training and validation dynamics is presented in the online appendix. Training loss demonstrated a rapid and substantial decline, dropping from an initial value of approximately 2.20 to a stabilized final value of 0.15 by the end of the third epoch. This pattern clearly indicates effective convergence and model optimization. Validation loss similarly followed a positive trajectory, ultimately stabilizing at 0.50. The full validation loss marginally increased to 0.56, indicating minimal overfitting, which is typical and acceptable in large-scale, high-complexity models. The accuracy of the model exhibited substantial improvements during training, beginning around 0.65 and stabilizing between 0.87 and 0.90. Slight fluctuations noted towards the end of training (visible around step 2,700) did not translate into persistent instability, suggesting effective model generalization and robust predictive performance.

