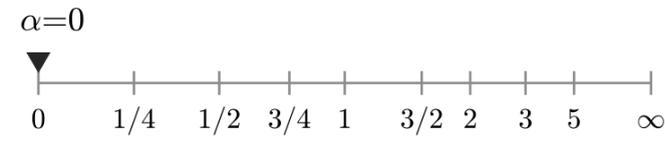


$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

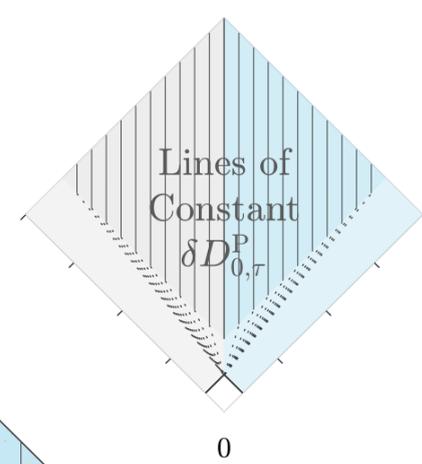
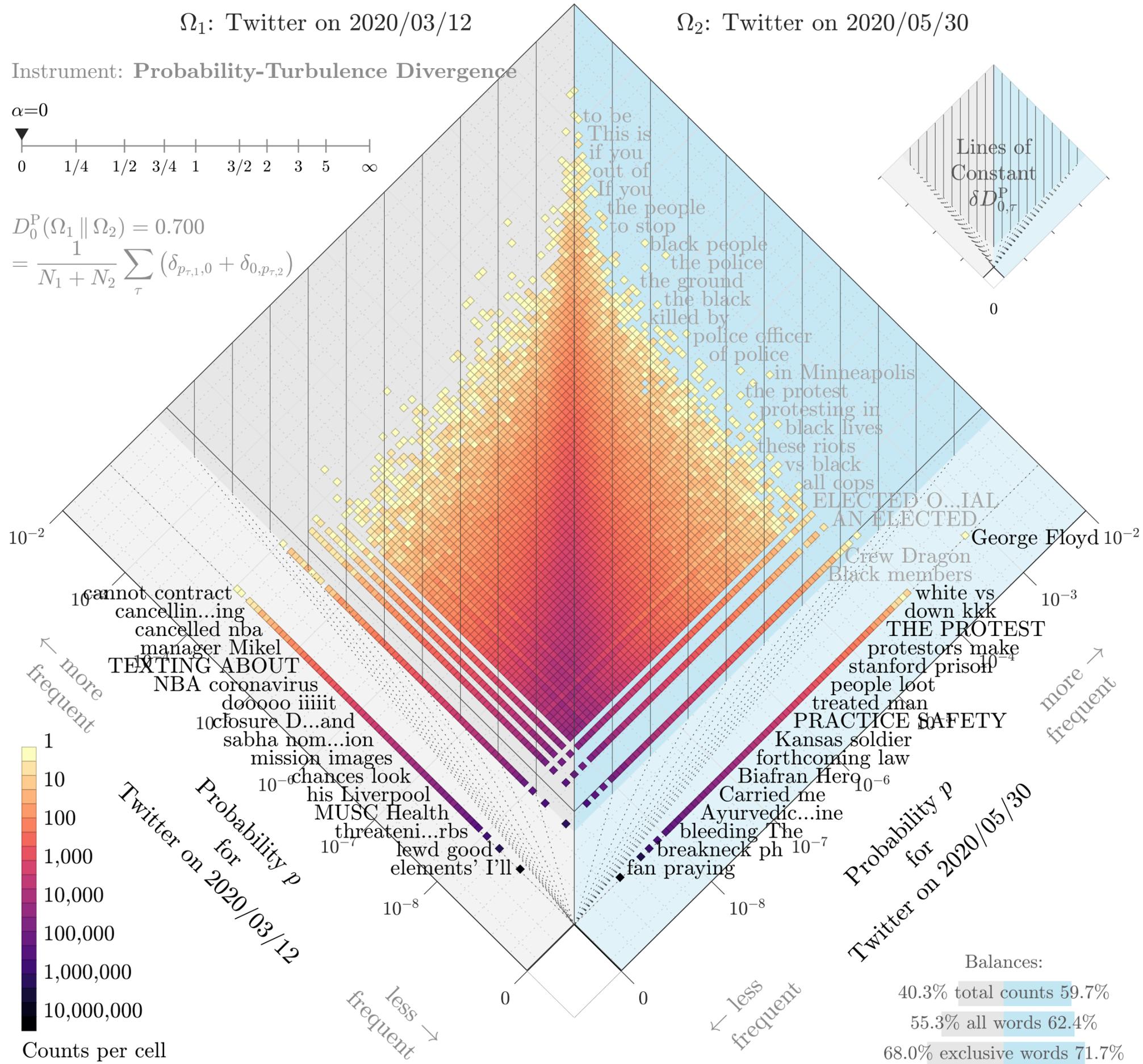
Divergence contribution  $\delta D_{0,\tau}^P (\times 10^{-6}\%)$

Instrument: Probability-Turbulence Divergence



$$D_0^P(\Omega_1 \parallel \Omega_2) = 0.700$$

$$= \frac{1}{N_1 + N_2} \sum_{\tau} (\delta_{p_{\tau,1,0}} + \delta_{0,p_{\tau,2}})$$



5	0	5
17,192,951.5 $\Rightarrow$ 10	George Floyd $\triangleright$	
$\triangleleft$ cannot contract	345 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 389	white vs $\triangleright$	
17,192,951.5 $\Rightarrow$ 398	vs racists $\triangleright$	
17,192,951.5 $\Rightarrow$ 399	everybody vs $\triangleright$	
$\triangleleft$ Dogs previously	446 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 463	Derek Chauvin $\triangleright$	
17,192,951.5 $\Rightarrow$ 494	Atlanta police $\triangleright$	
17,192,951.5 $\Rightarrow$ 683	see cops $\triangleright$	
$\triangleleft$ testing free	645 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 693	cops shutting $\triangleright$	
17,192,951.5 $\Rightarrow$ 719	down kkk $\triangleright$	
$\triangleleft$ cancelling sporting	707 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 850	protesting today $\triangleright$	
17,192,951.5 $\Rightarrow$ 854	George Floyd's $\triangleright$	
17,192,951.5 $\Rightarrow$ 921	female protester $\triangleright$	
$\triangleleft$ high-level Trump	885 $\Rightarrow$ 17,981,773.5	
$\triangleleft$ American TODAY	920 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 998	to Killer $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,016	verbalizing what $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,028	riot shields $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,043	cyrus sittin $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,046	Astronauts that $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,111	child militia $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,135	LA PROTESTS $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,142	white officer $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,156	militia at $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,160	Target wrote $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,166	Mall fitted $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,178	outnumbered about $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,182	Minneapolis police $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,190.5	protest She $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,193	GEORGE FLOYD $\triangleright$	
$\triangleleft$ sharper economic	1,094 $\Rightarrow$ 17,981,773.5	
$\triangleleft$ MAJOR intervention	1,099 $\Rightarrow$ 17,981,773.5	
$\triangleleft$ contraction than	1,100 $\Rightarrow$ 17,981,773.5	
17,192,951.5 $\Rightarrow$ 1,217	george floyd $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,262.5	possible leg $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,265	officer taken $\triangleright$	
17,192,951.5 $\Rightarrow$ 1,281	PEPPER SPRAYED $\triangleright$	

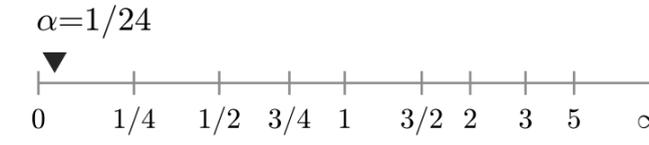
45.7%—54.3%

$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

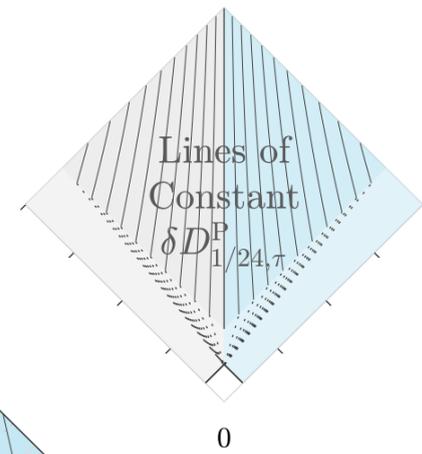
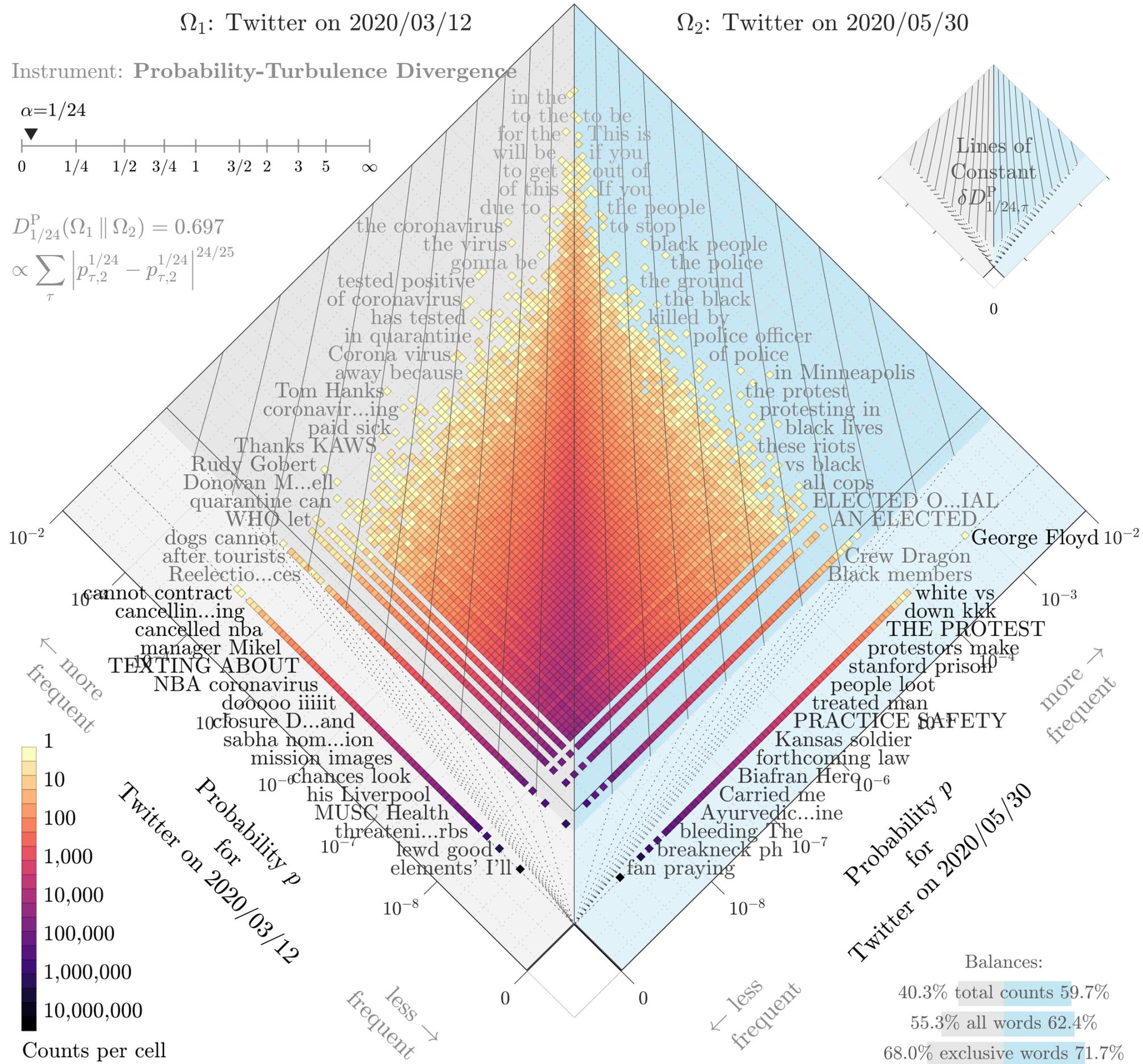
Divergence contribution  $\delta D_{1/24,\tau}^P (\times 10^{-6}\%)$

Instrument: Probability-Turbulence Divergence



$$D_{1/24}^P(\Omega_1 \parallel \Omega_2) = 0.697$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{1/24} - p_{\tau,2} \right|^{24/25}$$



8	6	4	2	0	2	4	6	8
17,192,951.5	$\Rightarrow$ 10	George Floyd	$\triangleright$					
$\triangleleft$ cannot contract	345	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 389	white vs	$\triangleright$					
17,192,951.5	$\Rightarrow$ 398	vs racists	$\triangleright$					
17,192,951.5	$\Rightarrow$ 399	everybody vs	$\triangleright$					
$\triangleleft$ Dogs previously	446	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 463	Derek Chauvin	$\triangleright$					
17,192,951.5	$\Rightarrow$ 494	Atlanta police	$\triangleright$					
17,192,951.5	$\Rightarrow$ 683	see cops	$\triangleright$					
$\triangleleft$ testing free	645	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 693	cops shutting	$\triangleright$					
17,192,951.5	$\Rightarrow$ 719	down kkk	$\triangleright$					
$\triangleleft$ cancelling sporting	707	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 850	protesting today	$\triangleright$					
17,192,951.5	$\Rightarrow$ 854	George Floyd's	$\triangleright$					
17,192,951.5	$\Rightarrow$ 921	female protester	$\triangleright$					
$\triangleleft$ high-level Trump	885	$\Rightarrow$ 17,981,773.5						
$\triangleleft$ American TODAY	920	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 998	to Killer	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,016	verbalizing what	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,028	riot shields	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,043	cyrus sittin	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,046	Astronauts that	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,111	child militia	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,135	LA PROTESTS	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,142	white officer	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,156	militia at	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,160	Target wrote	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,166	Mall fitted	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,178	outnumbered about	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,182	Minneapolis police	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,190.5	protest She	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,193	GEORGE FLOYD	$\triangleright$					
$\triangleleft$ sharper economic	1,094	$\Rightarrow$ 17,981,773.5						
$\triangleleft$ MAJOR intervention	1,099	$\Rightarrow$ 17,981,773.5						
$\triangleleft$ contraction than	1,100	$\Rightarrow$ 17,981,773.5						
17,192,951.5	$\Rightarrow$ 1,217	george floyd	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,262.5	possible leg	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,265	officer taken	$\triangleright$					
17,192,951.5	$\Rightarrow$ 1,281	PEPPER SPRAYED	$\triangleright$					

Balances:

40.3% total counts 59.7%

55.3% all words 62.4%

68.0% exclusive words 71.7%

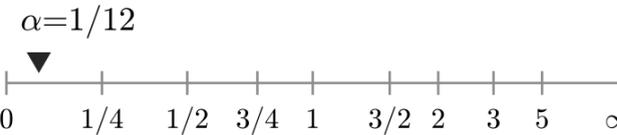
46.2%—53.8%

$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

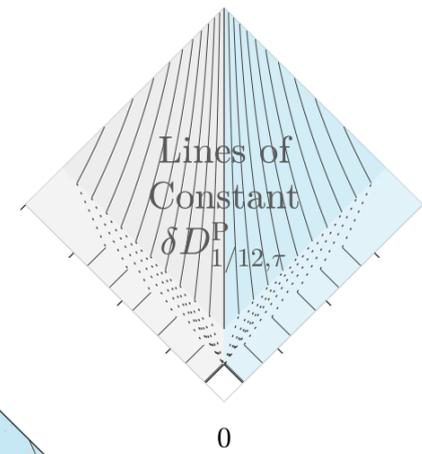
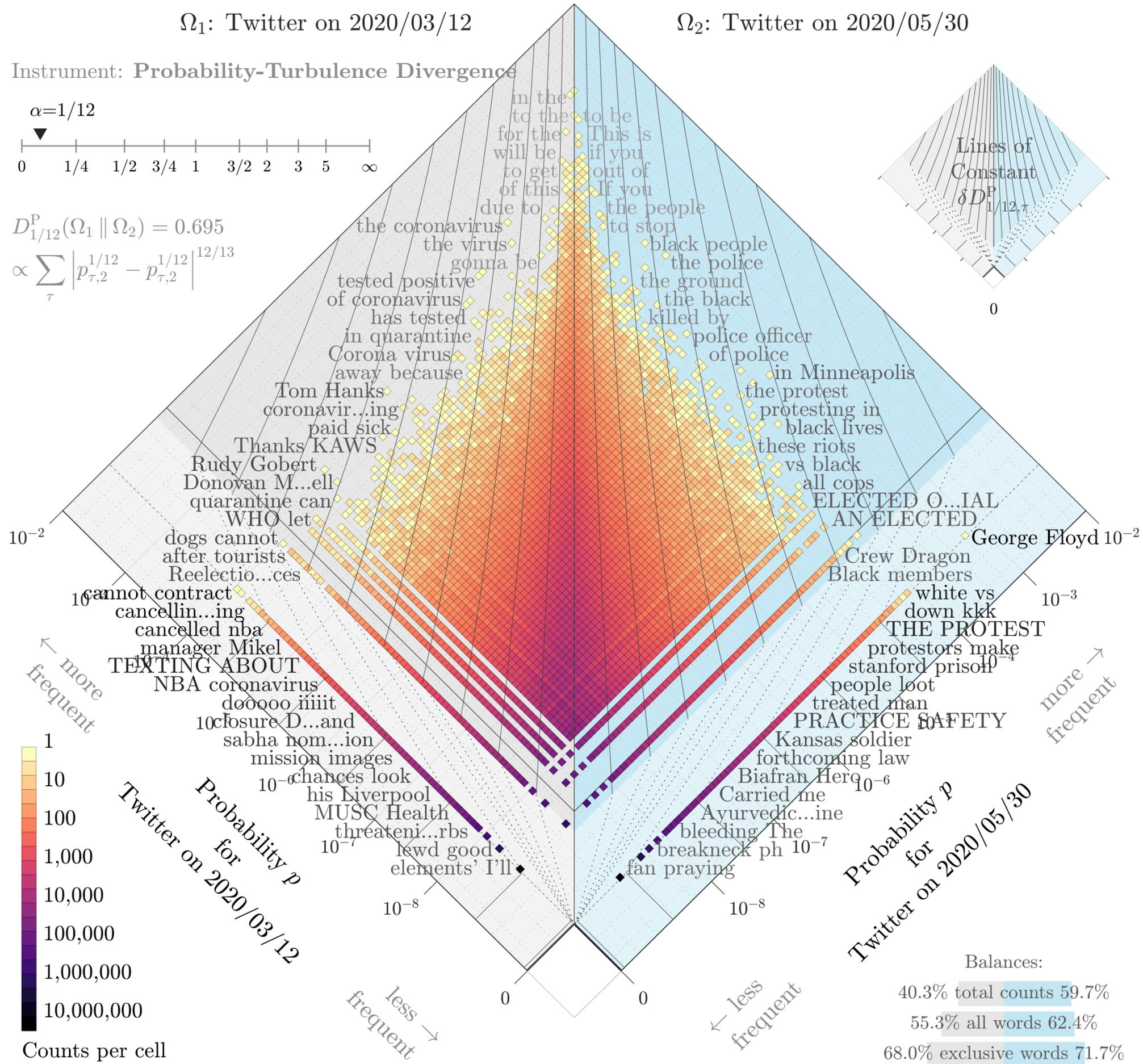
Divergence contribution  $\delta D_{1/12,\tau}^P (\times 10^{-5}\%)$

Instrument: Probability-Turbulence Divergence



$$D_{1/12}^P(\Omega_1 \parallel \Omega_2) = 0.695$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{1/12} - p_{\tau,2}^{1/12} \right|^{12/13}$$



1	0.5	0	0.5	1
17,192,951.5	10			George Floyd
<cannot contract	345	17,981,773.5		
17,192,951.5	389			white vs
17,192,951.5	398			vs racists
17,192,951.5	399			everybody vs
<Dogs previously	446	17,981,773.5		
17,192,951.5	463			Derek Chauvin
17,192,951.5	494			Atlanta police
17,192,951.5	683			see cops
<testing free	645	17,981,773.5		
17,192,951.5	693			cops shutting
17,192,951.5	719			down kkk
<cancelling sporting	707	17,981,773.5		
17,192,951.5	850			protesting today
17,192,951.5	854			George Floyd's
17,192,951.5	921			female protester
<high-level Trump	885	17,981,773.5		
<American TODAY	920	17,981,773.5		
17,192,951.5	998			to Killer
17,192,951.5	1,016			verbalizing what
17,192,951.5	1,028			riot shields
17,192,951.5	1,043			cyrus sittin
17,192,951.5	1,046			Astronauts that
17,192,951.5	1,111			child militia
17,192,951.5	1,135			LA PROTESTS
17,192,951.5	1,142			white officer
17,192,951.5	1,156			militia at
17,192,951.5	1,160			Target wrote
17,192,951.5	1,166			Mall fitted
17,192,951.5	1,178			outnumbered about
17,192,951.5	1,182			Minneapolis police
17,192,951.5	1,190.5			protest She
17,192,951.5	1,193			GEORGE FLOYD
<sharper economic	1,094	17,981,773.5		
<MAJOR intervention	1,099	17,981,773.5		
<contraction than	1,100	17,981,773.5		
17,192,951.5	1,217			george floyd
17,192,951.5	1,262.5			possible leg
17,192,951.5	1,265			officer taken
17,192,951.5	1,281			PEPPER SPRAYED

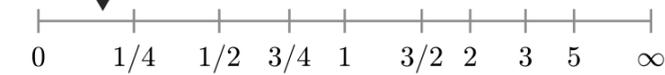
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{1/6,\tau}^P (\times 10^{-5}\%)$

Instrument: Probability-Turbulence Divergence

$\alpha=1/6$



$D_{1/6}^P(\Omega_1 \parallel \Omega_2) = 0.695$

$\propto \sum_{\tau} |p_{\tau,2}^{1/6} - p_{\tau,1}^{1/6}|^{6/7}$

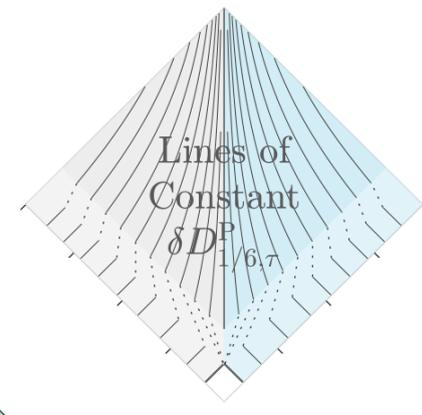
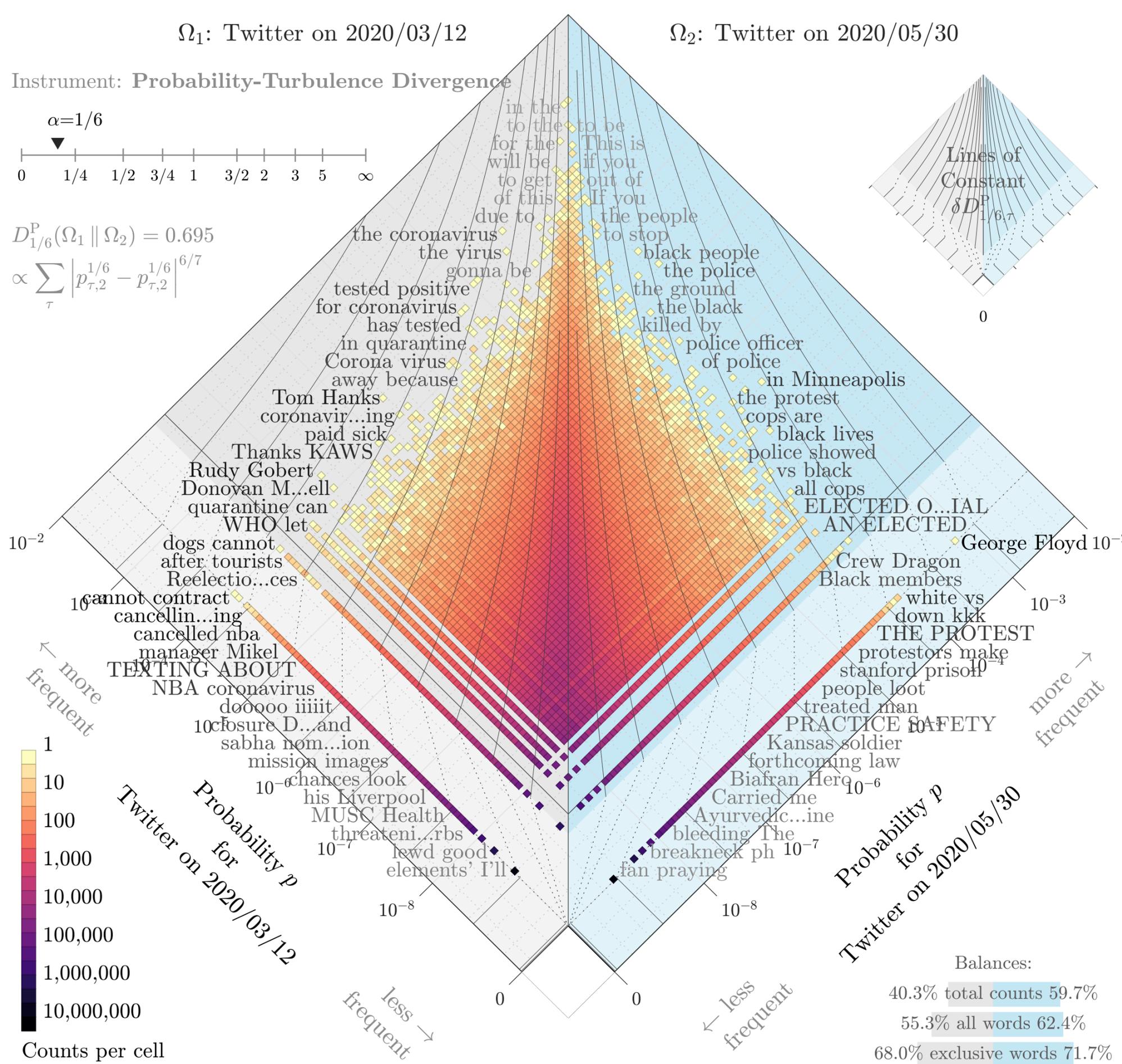


Table with 2 columns: Divergence contribution and Word. Lists top words and their divergence contributions, such as 'George Floyd' and 'white vs'.

Balances: 40.3% total counts 59.7%, 55.3% all words 62.4%, 68.0% exclusive words 71.7%

47.7%—52.3%

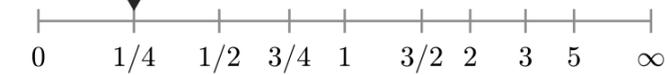
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{1/4,\tau}^P (\times 10^{-5}\%)$

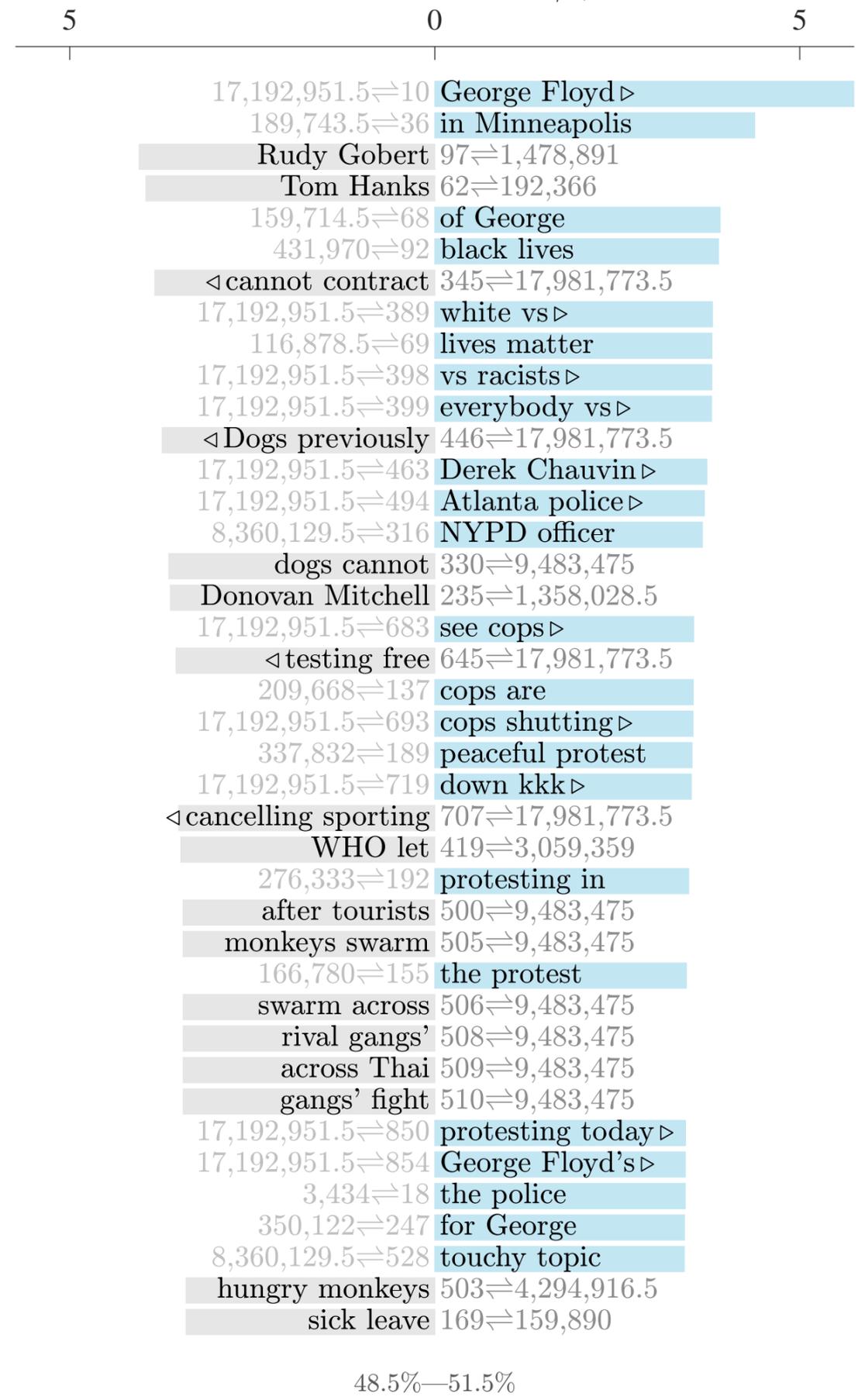
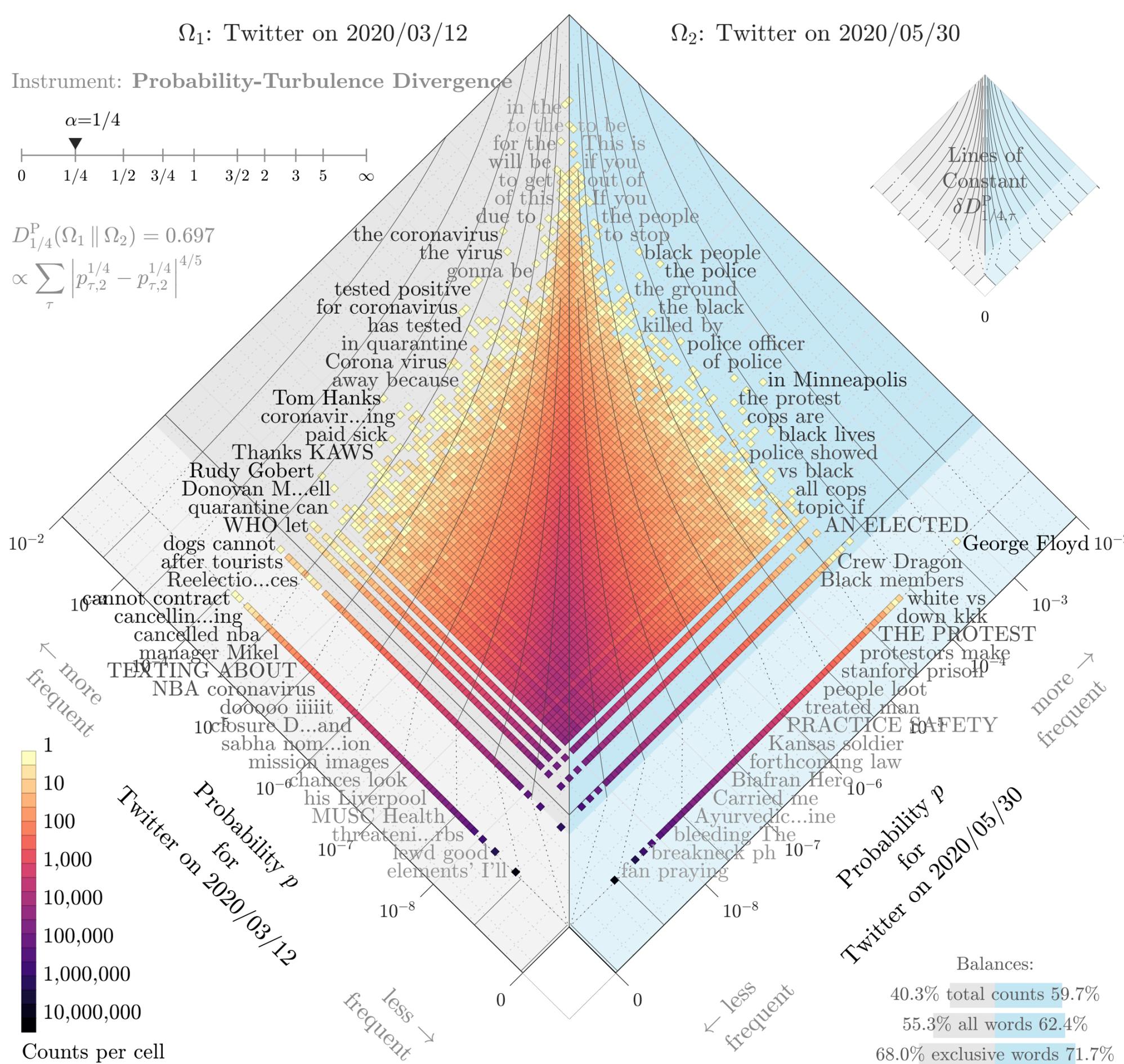
Instrument: Probability-Turbulence Divergence

$\alpha=1/4$



$$D_{1/4}^P(\Omega_1 \parallel \Omega_2) = 0.697$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{1/4} - p_{\tau,1}^{1/4} \right|^{4/5}$$



48.5%—51.5%

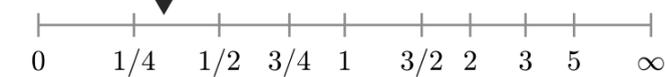
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{1/3,\tau}^P (\times 10^{-4}\%)$

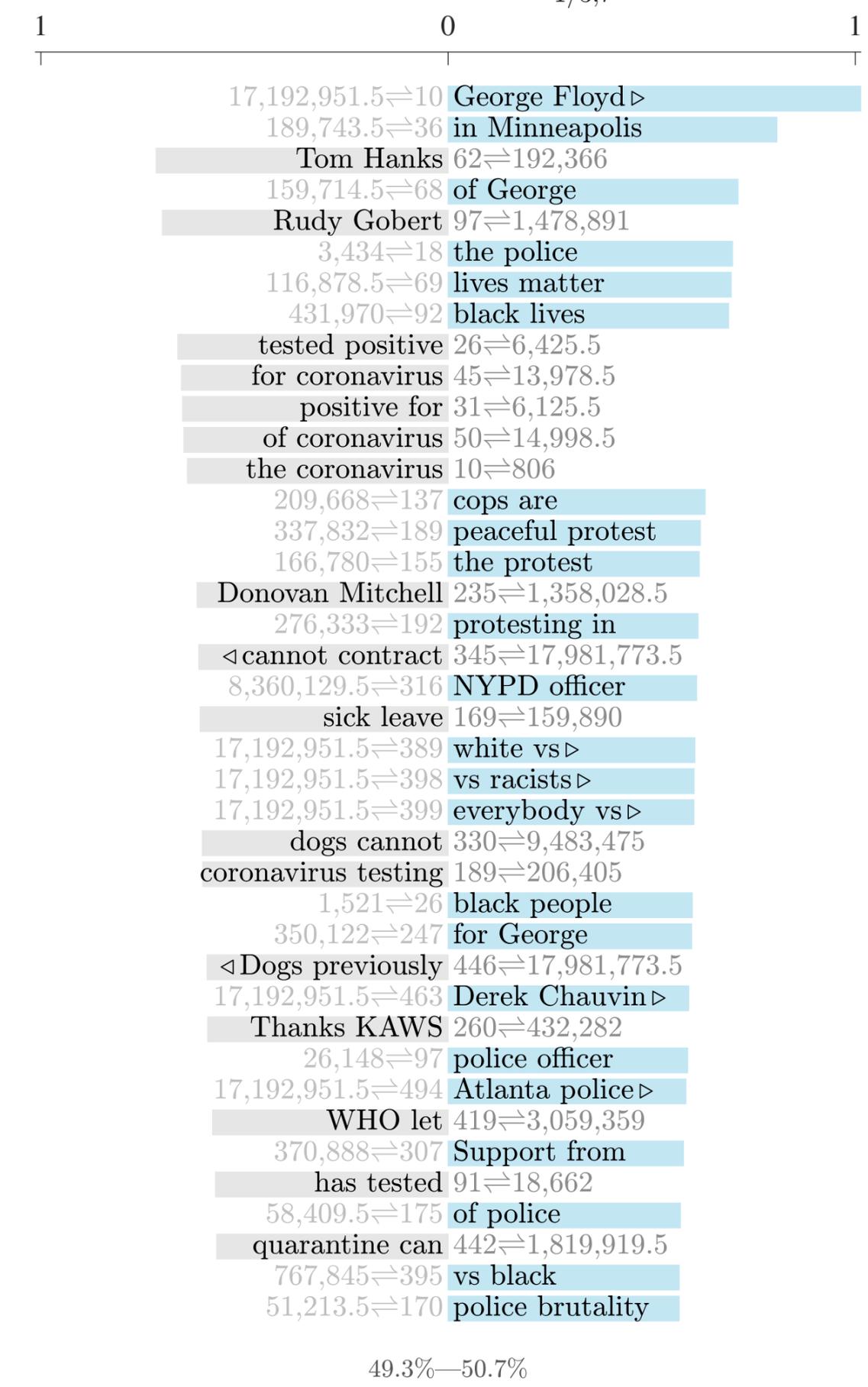
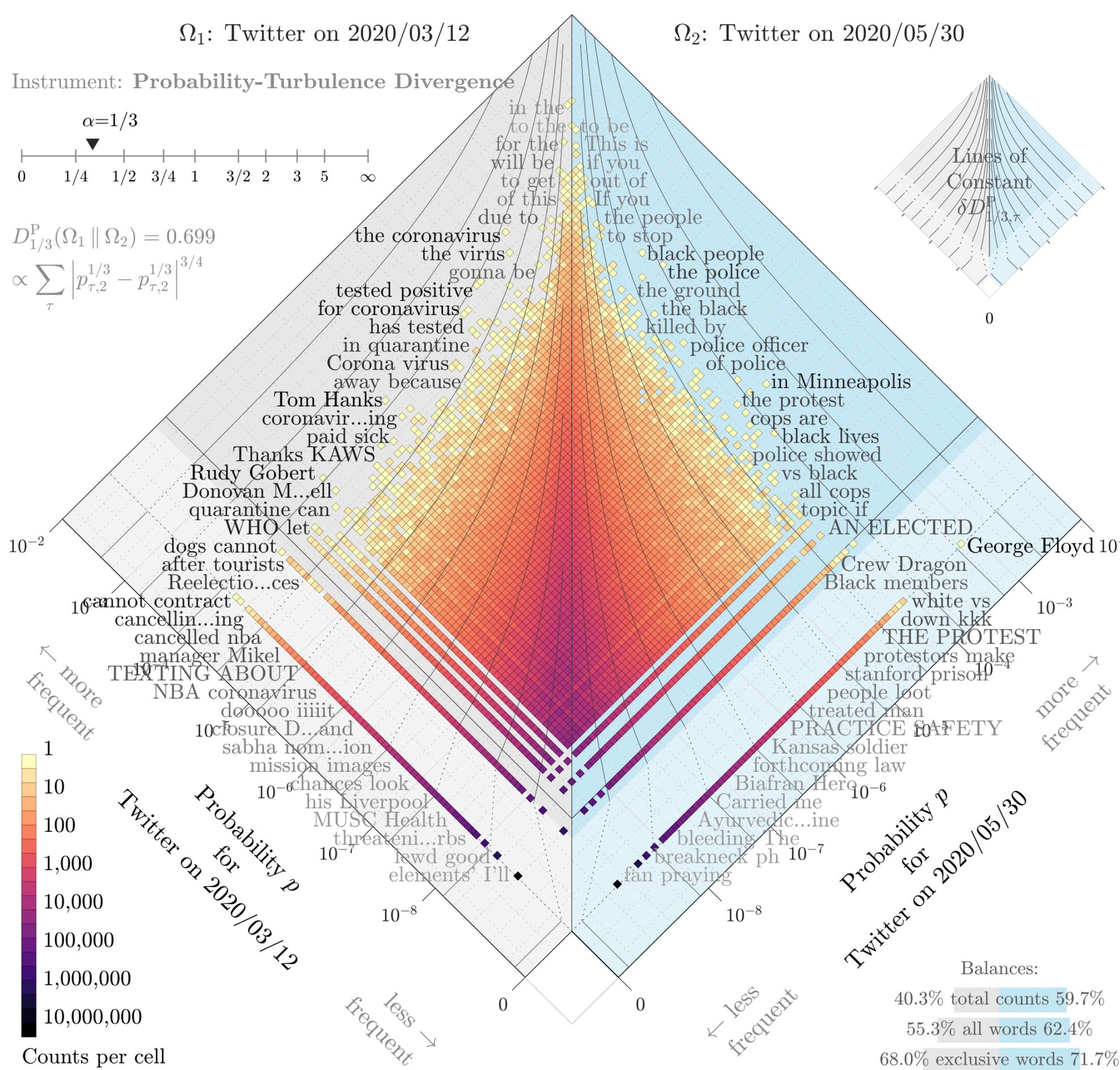
Instrument: Probability-Turbulence Divergence

$\alpha=1/3$



$$D_{1/3}^P(\Omega_1 \parallel \Omega_2) = 0.699$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{1/3} - p_{\tau,1}^{1/3} \right|^{3/4}$$



Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

49.3%—50.7%



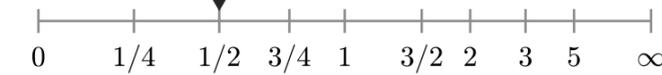
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{1/2,\tau}^P (\times 10^{-4}\%)$

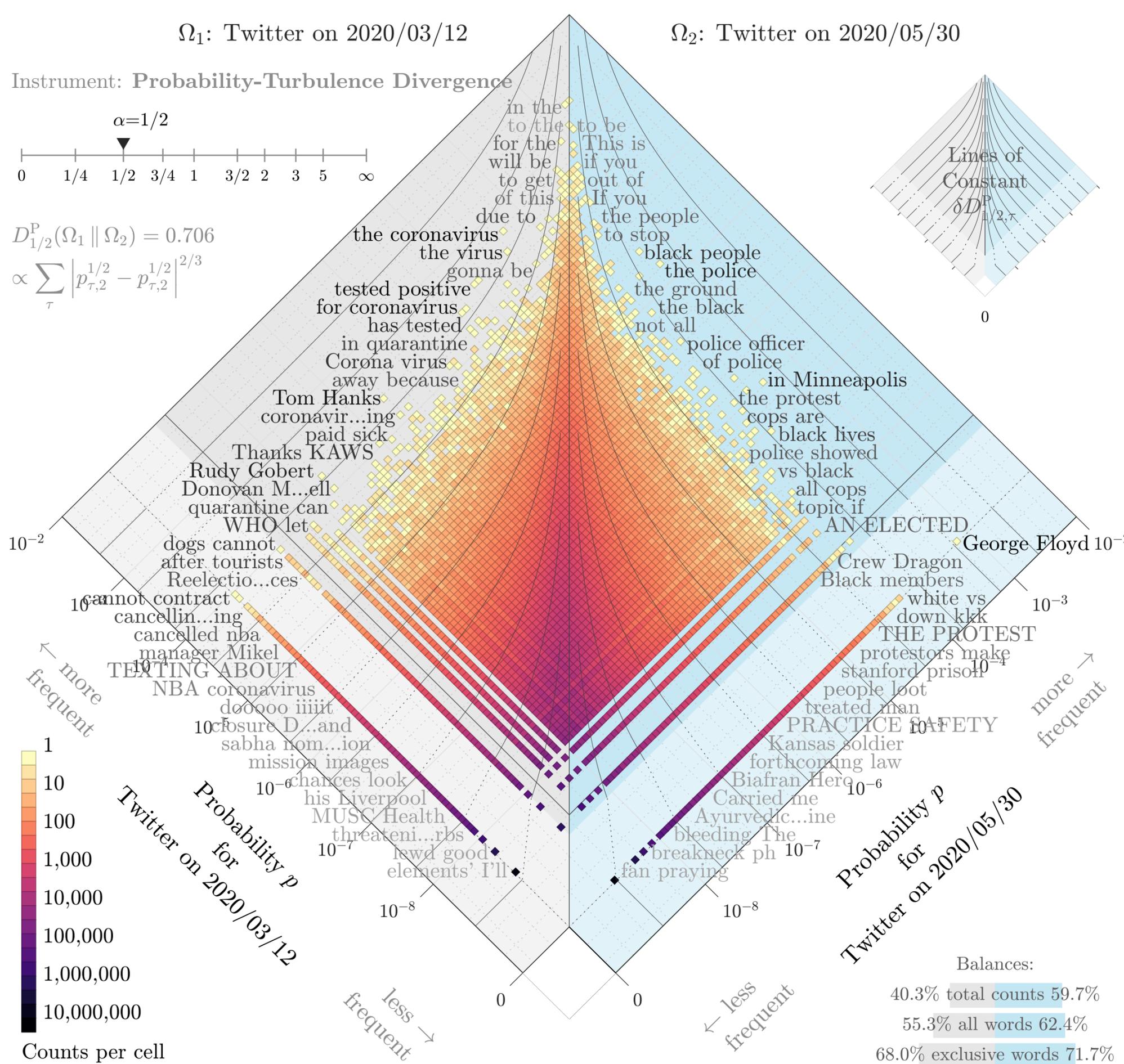
Instrument: Probability-Turbulence Divergence

$\alpha=1/2$



$$D_{1/2}^P(\Omega_1 \parallel \Omega_2) = 0.706$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{1/2} - p_{\tau,1}^{1/2} \right|^{2/3}$$



2	1	0	1	2
17,192,951.5	10	George Floyd		
189,743.5	36	in Minneapolis		
3,434	18	the police		
		the coronavirus	10	806
		tested positive	26	6,425.5
		positive for	31	6,125.5
		1,521	26	black people
		for coronavirus	45	13,978.5
		Tom Hanks	62	192,366
		159,714.5	68	of George
		of coronavirus	50	14,998.5
		116,878.5	69	lives matter
		431,970	92	black lives
		Rudy Gobert	97	1,478,891
		the virus	28	1,404
		26,148	97	police officer
		209,668	137	cops are
		2,944	57	white people
		has tested	91	18,662
		166,780	155	the protest
		sick leave	169	159,890
		337,832	189	peaceful protest
		276,333	192	protesting in
		coronavirus testing	189	206,405
		8,350	94	the black
		58,409.5	175	of police
		51,213.5	170	police brutality
		Corona virus	158	39,796
		the Coronavirus	117	13,204.5
		Donovan Mitchell	235	1,358,028.5
		350,122	247	for George
		toilet paper	132	17,650.5
		the NBA	176	40,332.5
		to cancel	128	13,725.5
		spread of	119	10,611
		corona virus	73	3,111
		Thanks KAWS	260	432,282
		108,448	250	white supremacists
		86,575.5	240	the protests
		8,360,129.5	316	NYPD officer

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

50.4%—49.6%

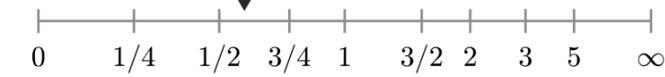
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{7/12,\tau}^P (\times 10^{-4}\%)$

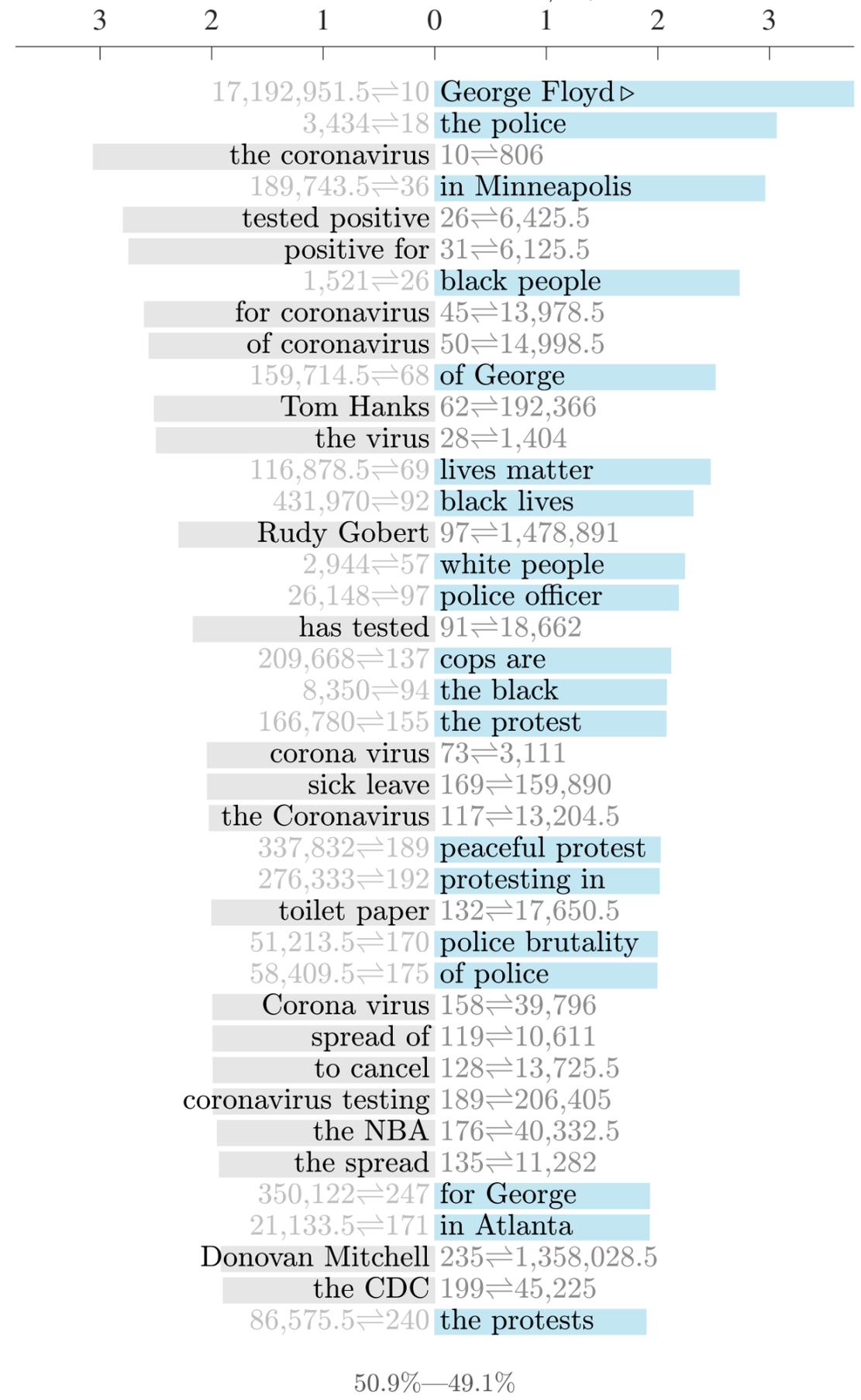
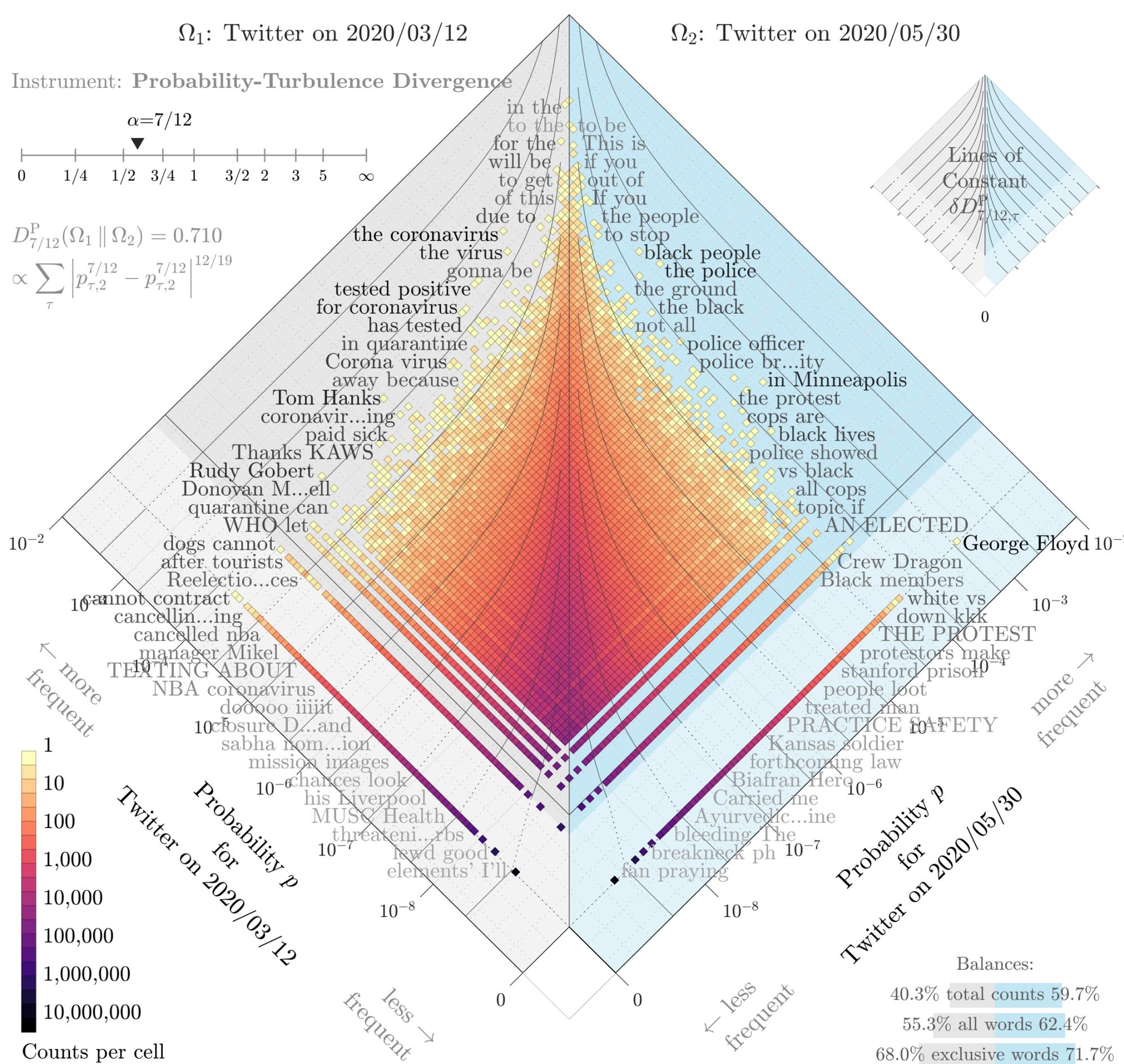
Instrument: Probability-Turbulence Divergence

$\alpha=7/12$



$$D_{7/12}^P(\Omega_1 \parallel \Omega_2) = 0.710$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{7/12} - p_{\tau,2}^{12/19} \right|^{12/19}$$



Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

50.9%—49.1%

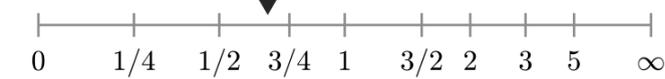
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{2/3,\tau}^P (\times 10^{-4}\%)$

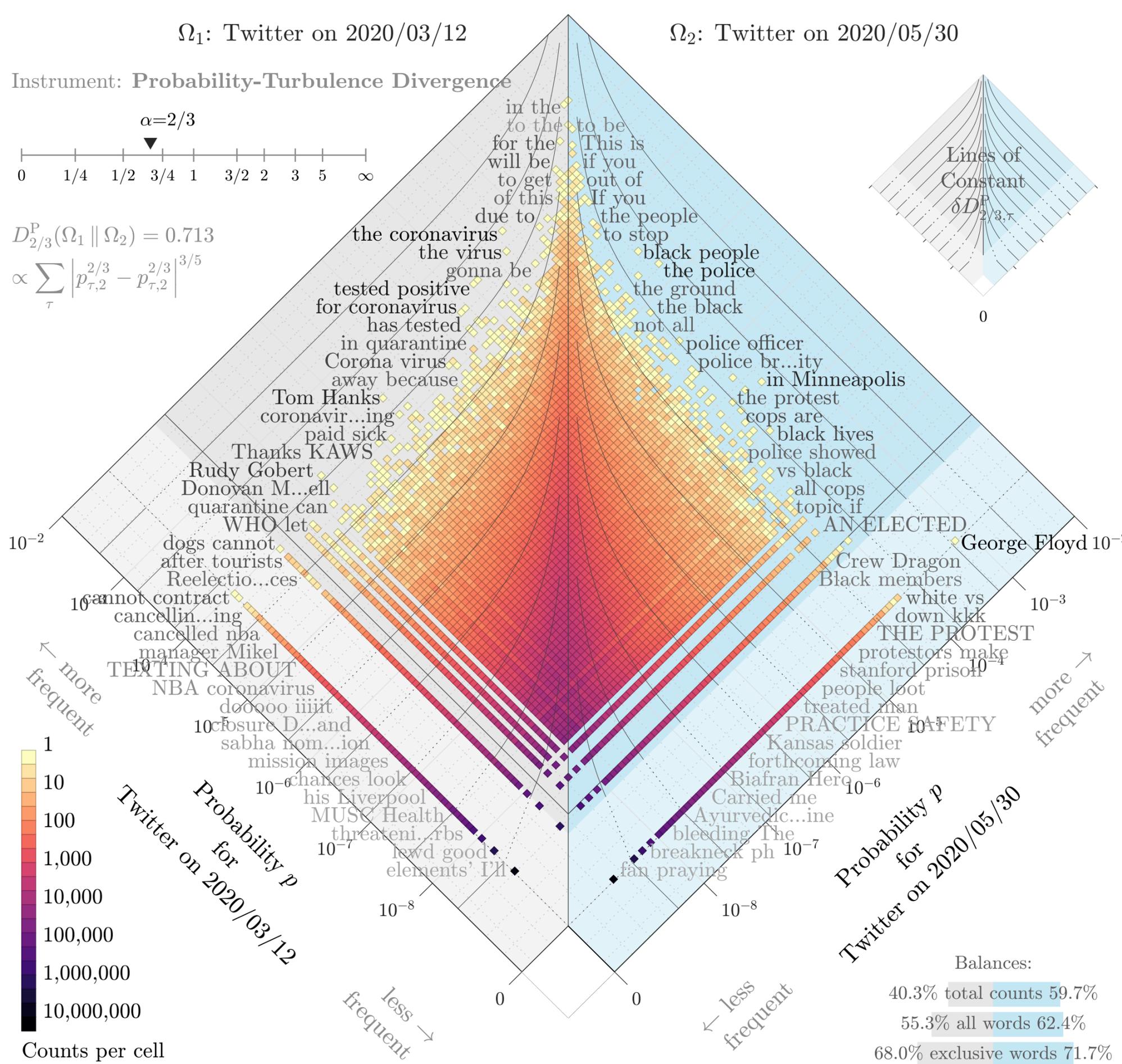
Instrument: Probability-Turbulence Divergence

$\alpha=2/3$



$D_{2/3}^P(\Omega_1 || \Omega_2) = 0.713$

$\propto \sum_{\tau} |p_{\tau,2}^{2/3} - p_{\tau,1}^{2/3}|^{3/5}$



Count	Word	Count	Word
17,192,951.5	George Floyd	10	George Floyd
3,434	the coronavirus	18	the police
189,743.5	tested positive	36	in Minneapolis
1,521	black people	26	black people
6,125.5	positive for	31	positive for
13,978.5	for coronavirus	45	for coronavirus
1,404	the virus	28	the virus
14,998.5	of coronavirus	50	of coronavirus
159,714.5	of George	68	of George
192,366	Tom Hanks	62	Tom Hanks
116,878.5	lives matter	69	lives matter
2,944	white people	57	white people
431,970	black lives	92	black lives
1,478,891	Rudy Gobert	97	Rudy Gobert
18,662	has tested	91	has tested
3,111	corona virus	73	corona virus
13,204.5	the Coronavirus	117	the Coronavirus
10,611	spread of	119	spread of
17,650.5	toilet paper	132	toilet paper
13,725.5	to cancel	128	to cancel
159,890	sick leave	169	sick leave
39,796	Corona virus	158	Corona virus
39,796	protesting in	158	protesting in
40,332.5	the NBA	176	the NBA
245	due to	37	due to
45,225	the CDC	199	the CDC

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

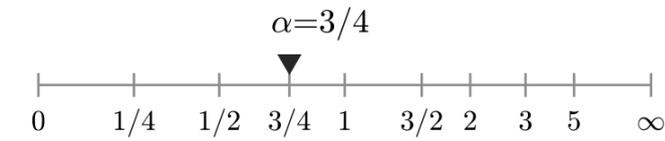
51.3%—48.7%

$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

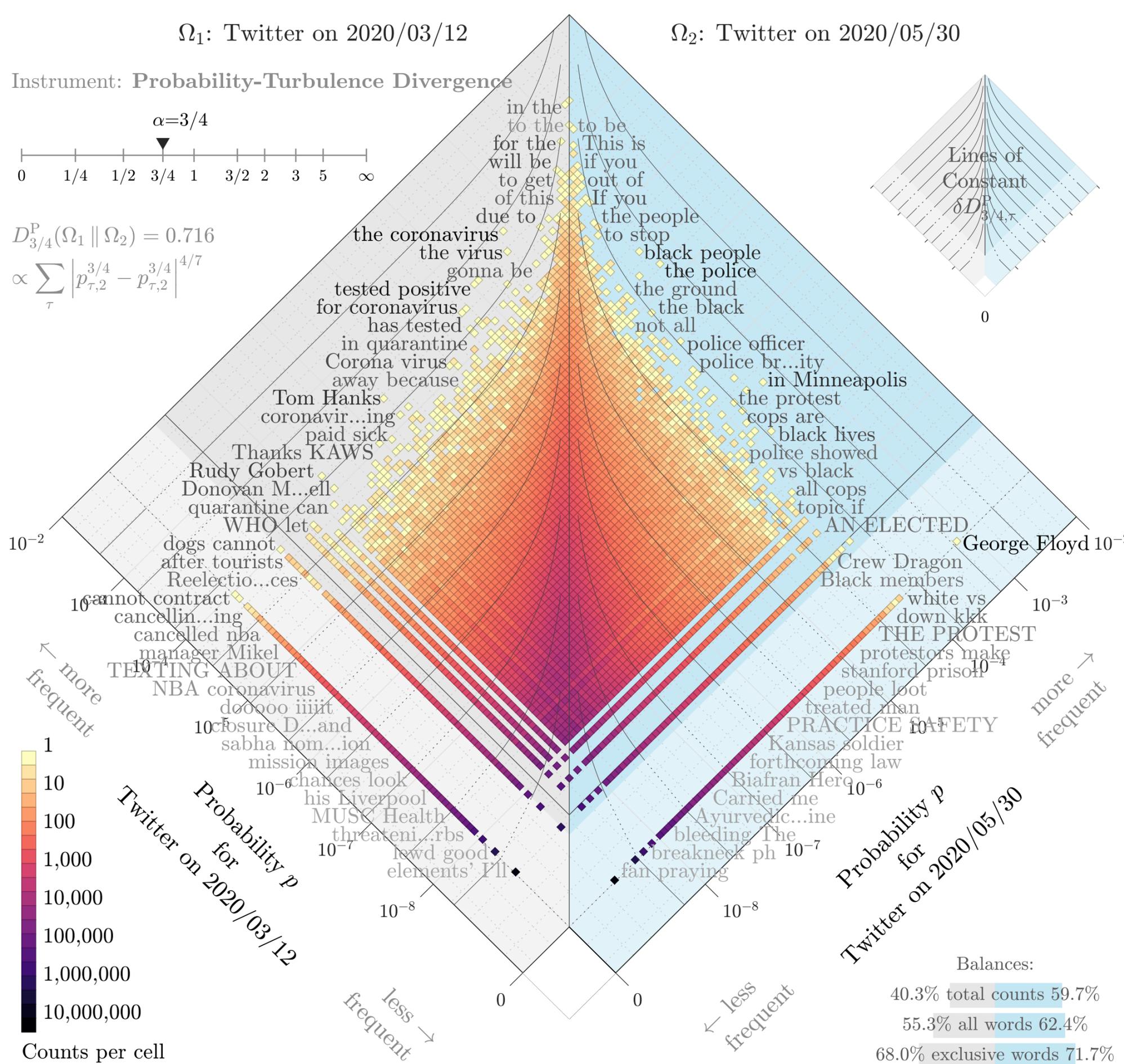
Divergence contribution  $\delta D_{3/4,\tau}^P (\times 10^{-4}\%)$

Instrument: Probability-Turbulence Divergence



$D_{3/4}^P(\Omega_1 \parallel \Omega_2) = 0.716$

$\propto \sum_{\tau} \left| p_{\tau,2}^{3/4} - p_{\tau,1}^{3/4} \right|^{4/7}$



$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{5/6,\tau}^P (\times 10^{-4}\%)$

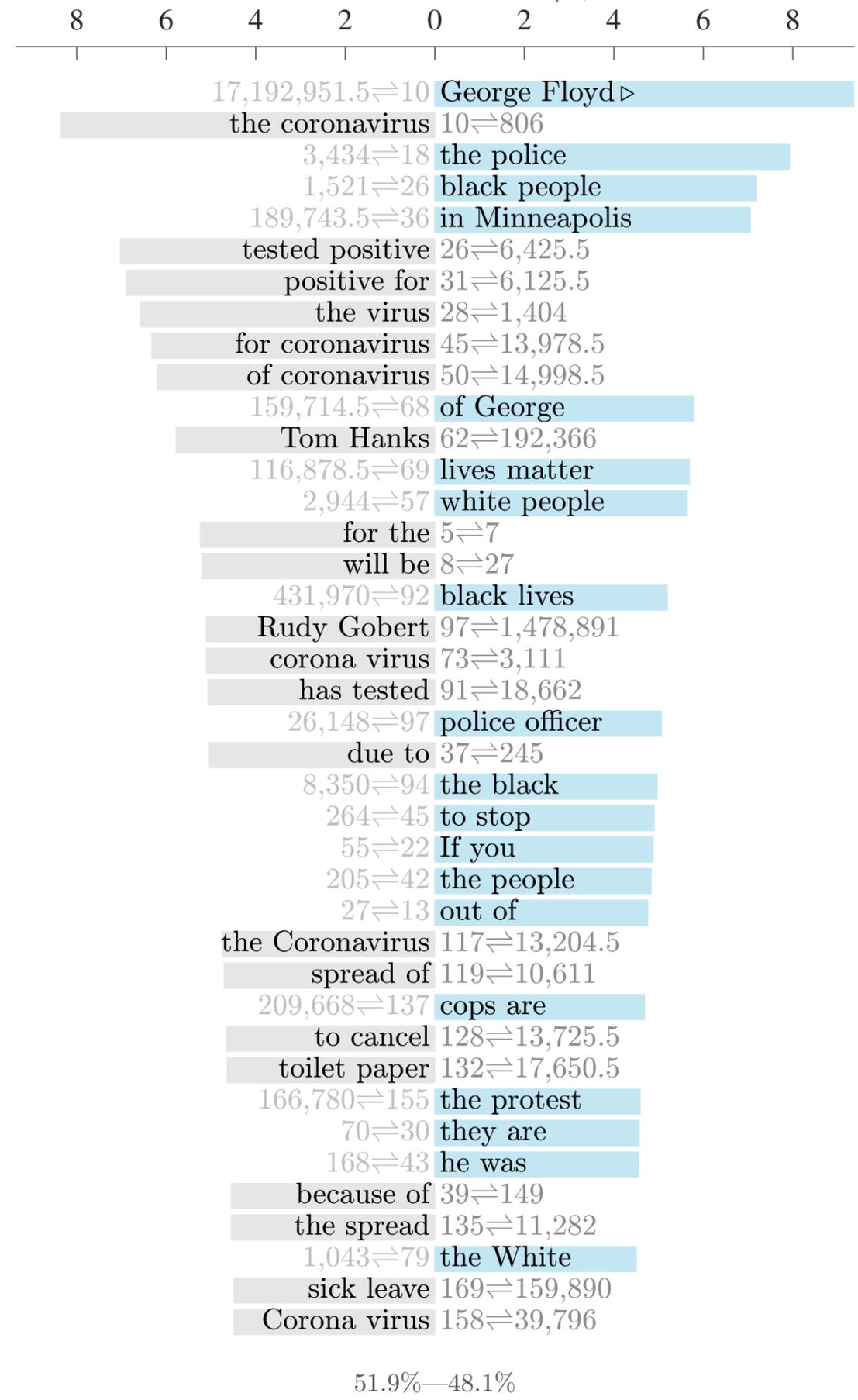
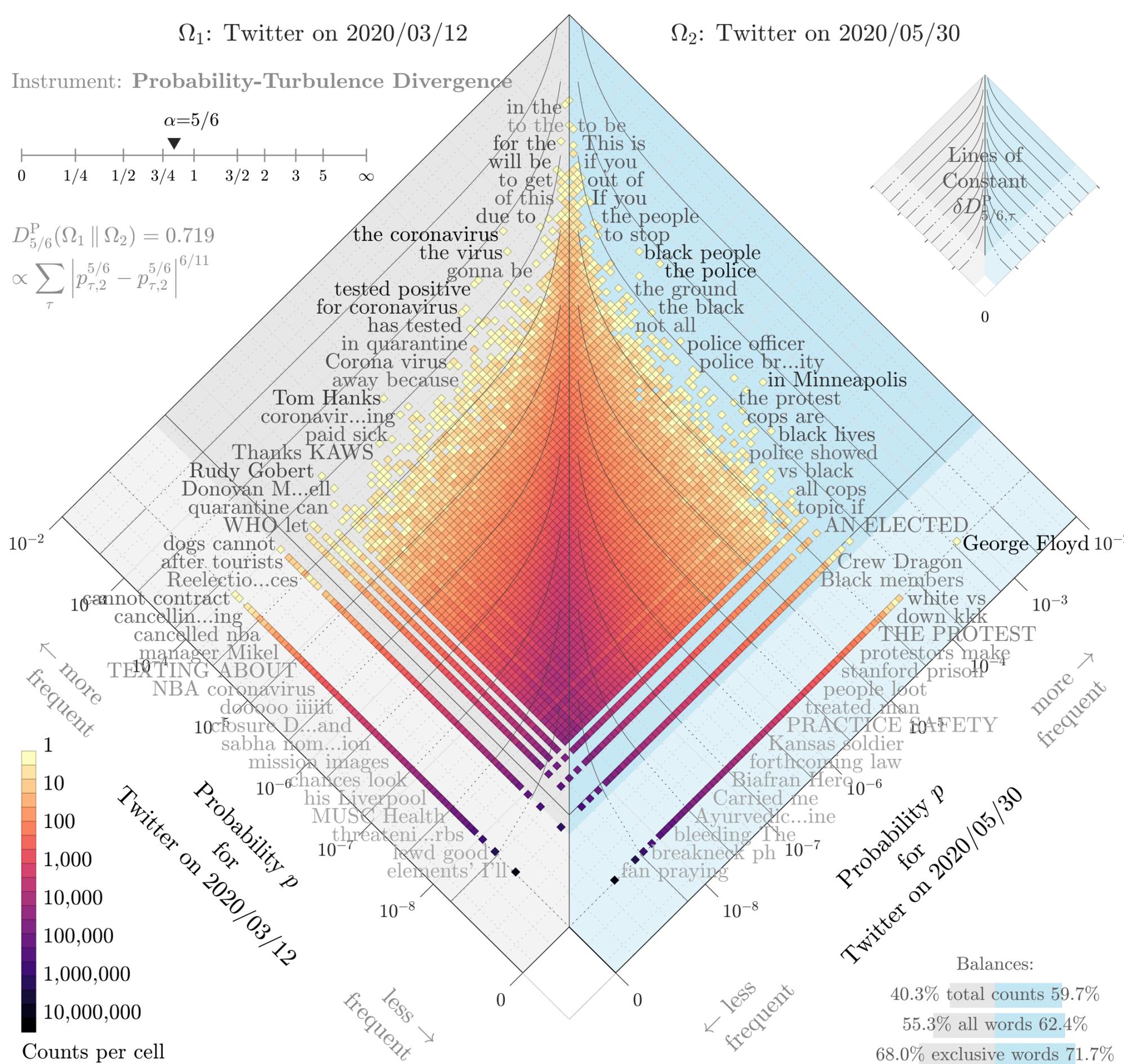
Instrument: Probability-Turbulence Divergence

$\alpha=5/6$



$$D_{5/6}^P(\Omega_1 \parallel \Omega_2) = 0.719$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{5/6} - p_{\tau,2} \right|^{6/11}$$



51.9%—48.1%

$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{11/12,\tau}^P (\times 10^{-3}\%)$

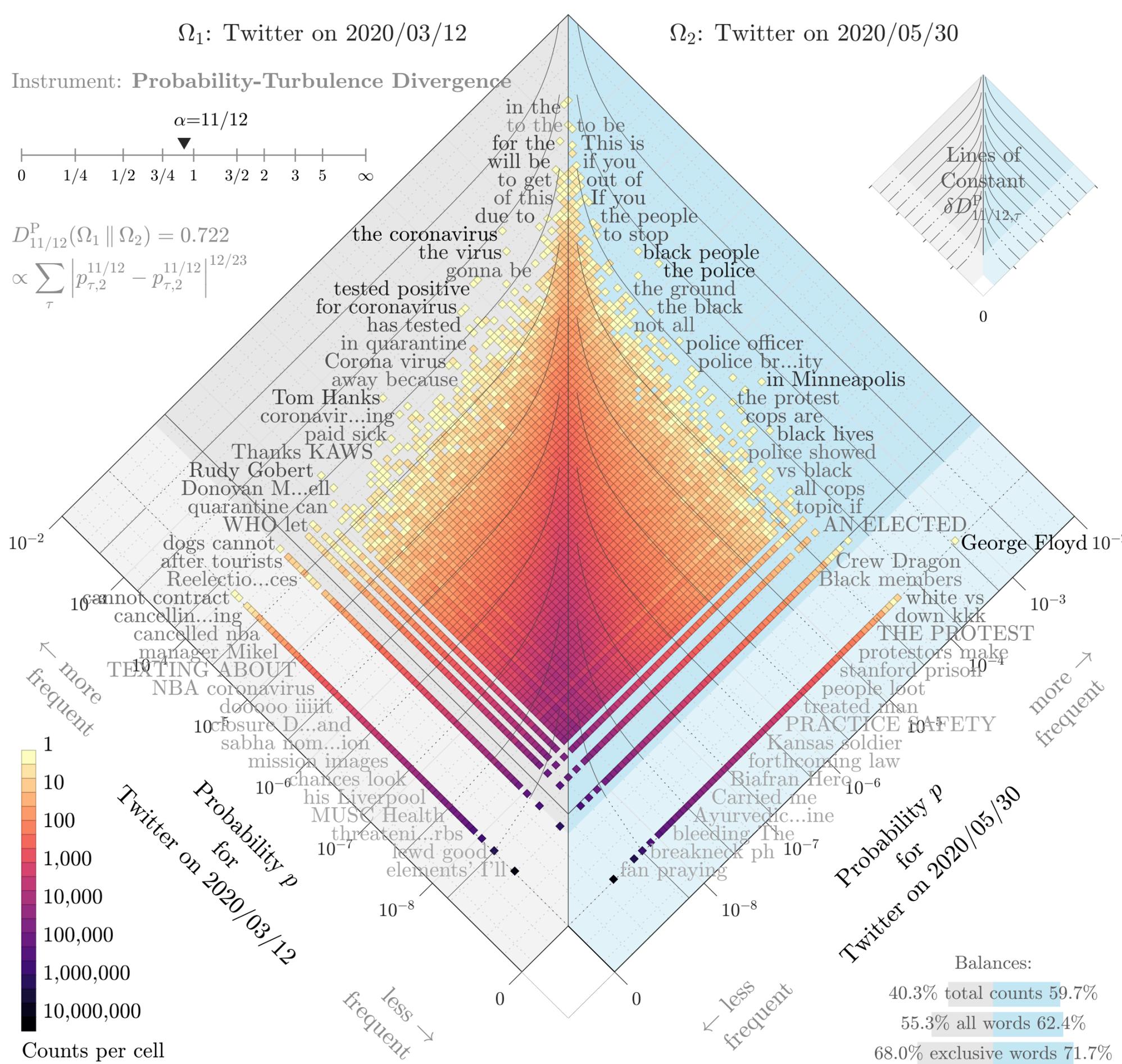
Instrument: **Probability-Turbulence Divergence**

$\alpha=11/12$



$$D_{11/12}^P(\Omega_1 \parallel \Omega_2) = 0.722$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{11/12} - p_{\tau,2}^{11/12} \right|^{12/23}$$



1	0.5	0	0.5	1
17,192,951.5	10			George Floyd
the coronavirus	10	806		
3,434	18			the police
1,521	26			black people
tested positive	26	6,425.5		
189,743.5	36			in Minneapolis
positive for	31	6,125.5		
the virus	28	1,404		
for coronavirus	45	13,978.5		
of coronavirus	50	14,998.5		
for the	5	7		
159,714.5	68			of George
Tom Hanks	62	192,366		
2,944	57			white people
will be	8	27		
116,878.5	69			lives matter
due to	37	245		
55	22			If you
27	13			out of
corona virus	73	3,111		
431,970	92			black lives
264	45			to stop
205	42			the people
has tested	91	18,662		
Rudy Gobert	97	1,478,891		
26,148	97			police officer
8,350	94			the black
70	30			they are
168	43			he was
because of	39	149		
the Coronavirus	117	13,204.5		
spread of	119	10,611		
9	6			This is
to cancel	128	13,725.5		
209,668	137			cops are
20	11			if you
toilet paper	132	17,650.5		
1,043	79			the White
to get	15	38		
the spread	135	11,282		

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

52.1%—47.9%

$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{1,\tau}^P (\times 10^{-3}\%)$

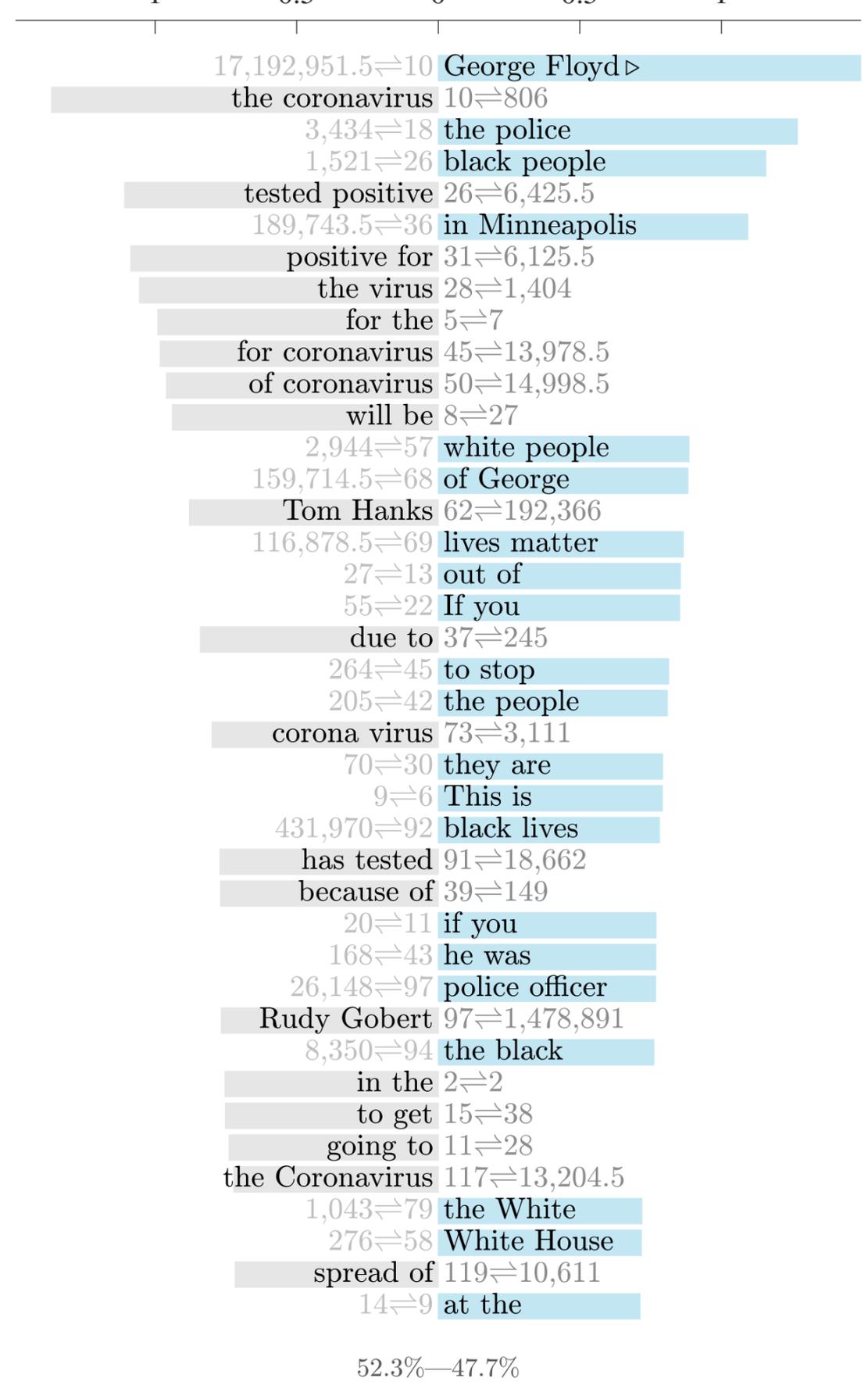
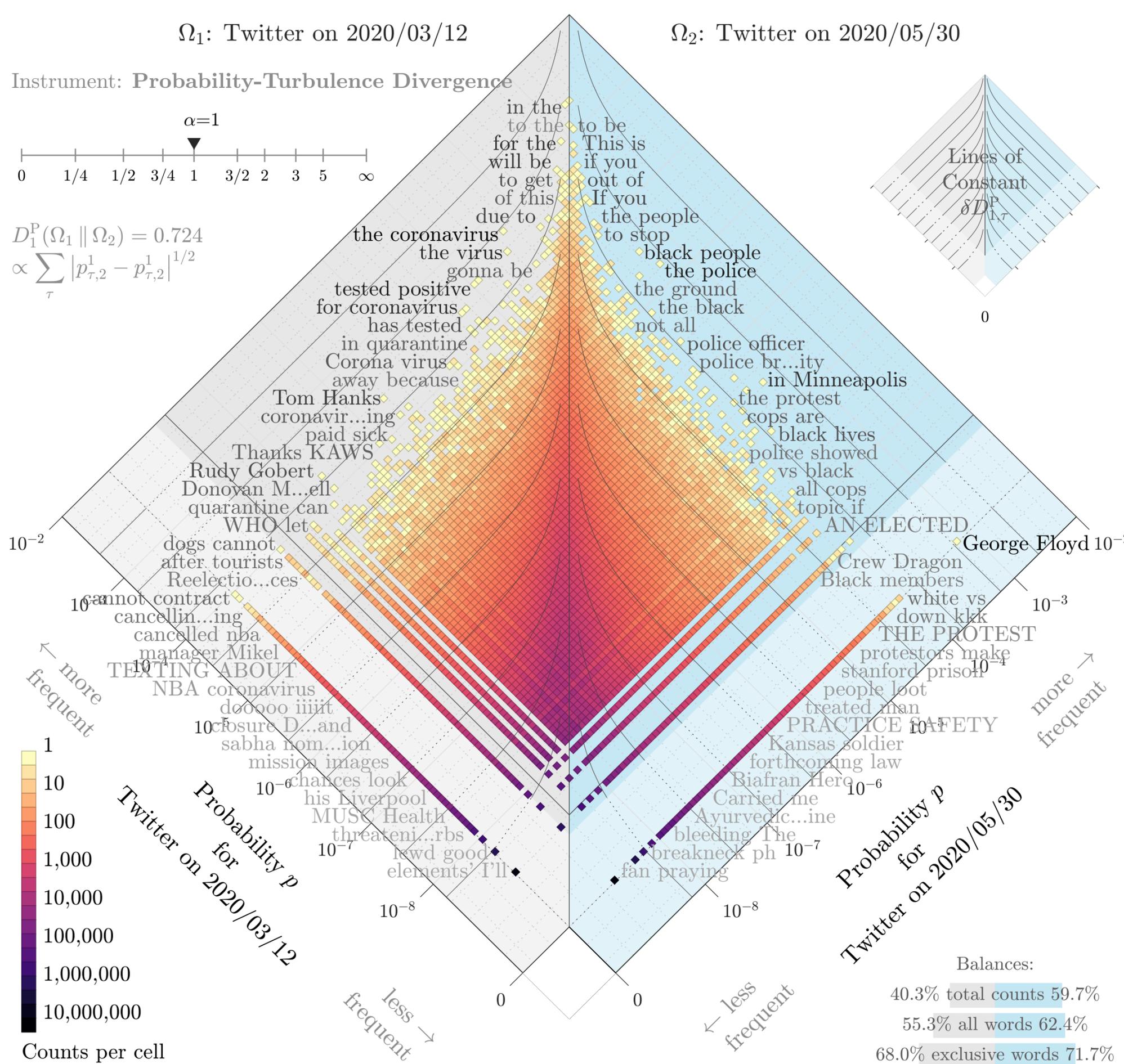
Instrument: Probability-Turbulence Divergence

$\alpha=1$



$$D_1^P(\Omega_1 \parallel \Omega_2) = 0.724$$

$$\propto \sum_{\tau} |p_{\tau,2}^1 - p_{\tau,2}^2|^{1/2}$$



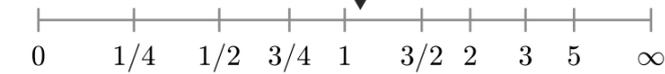
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{13/12,\tau}^P (\times 10^{-3}\%)$

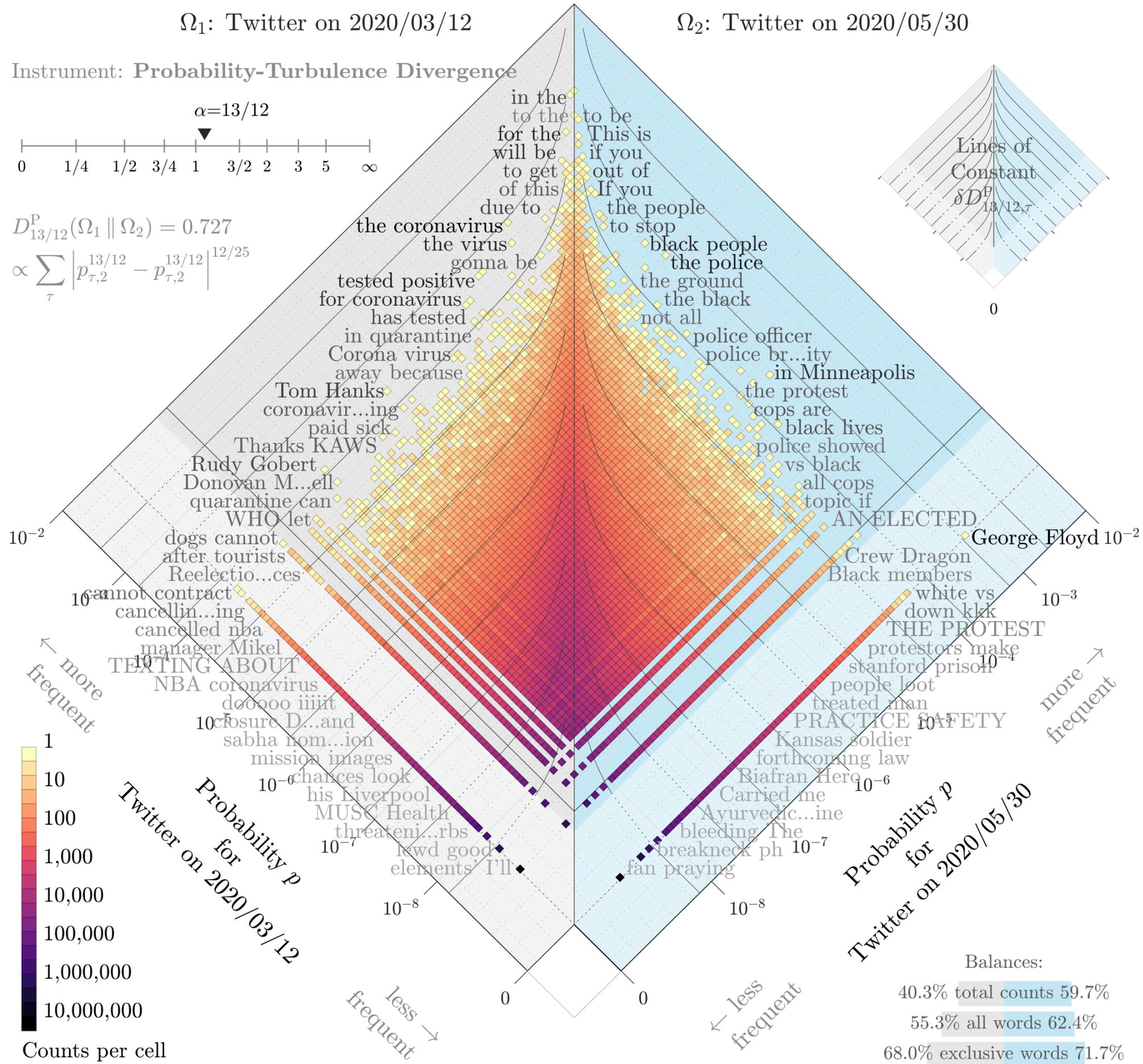
Instrument: Probability-Turbulence Divergence

$\alpha=13/12$



$$D_{13/12}^P(\Omega_1 \parallel \Omega_2) = 0.727$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{13/12} - p_{\tau,2}^{13/12} \right|^{12/25}$$



1.5	1	0.5	0	0.5	1	1.5
17,192,951.5	10	George Floyd	▷			
the coronavirus	10	806				
3,434	18	the police				
1,521	26	black people				
tested positive	26	6,425.5				
189,743.5	36	in Minneapolis				
positive for	31	6,125.5				
for the	5	7				
the virus	28	1,404				
will be	8	27				
for coronavirus	45	13,978.5				
of coronavirus	50	14,998.5				
27	13	out of				
55	22	If you				
2,944	57	white people				
159,714.5	68	of George				
Tom Hanks	62	192,366				
due to	37	245				
9	6	This is				
116,878.5	69	lives matter				
in the	2	2				
264	45	to stop				
205	42	the people				
70	30	they are				
20	11	if you				
corona virus	73	3,111				
to get	15	38				
because of	39	149				
168	43	he was				
going to	11	28				
of the	1	1				
431,970	92	black lives				
14	9	at the				
has tested	91	18,662				
26,148	97	police officer				
8,350	94	the black				
Rudy Gobert	97	1,478,891				
43	23	the same				
276	58	White House				
36	20	is not				
Balances:						
40.3% total counts			59.7%			
55.3% all words			62.4%			
68.0% exclusive words			71.7%			
52.5%			47.5%			

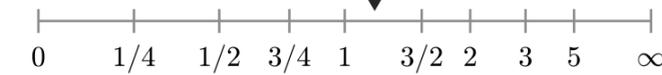
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{7/6,\tau}^P (\times 10^{-3}\%)$

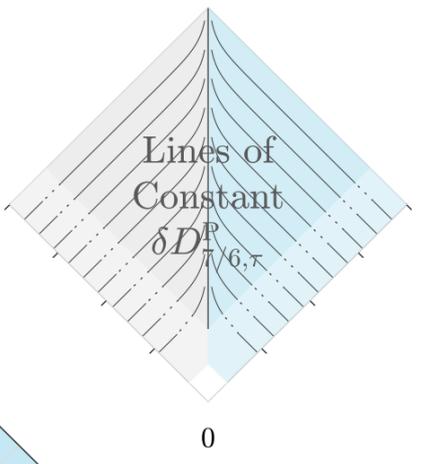
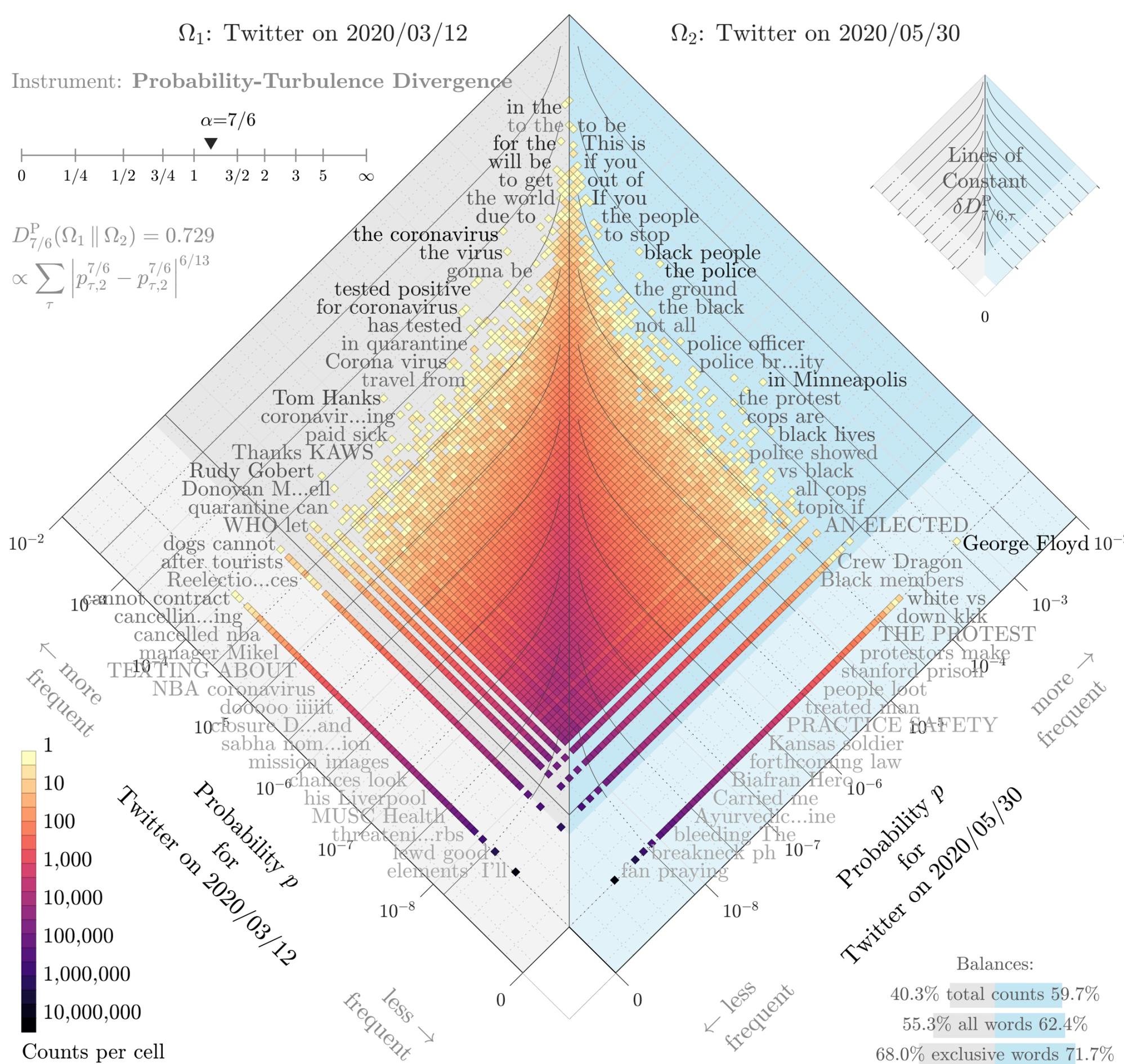
Instrument: Probability-Turbulence Divergence

$\alpha=7/6$



$$D_{7/6}^P(\Omega_1 \parallel \Omega_2) = 0.729$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{7/6} - p_{\tau,2}^{7/6} \right|^{6/13}$$



Word	Count	Contribution
George Floyd	10	17,192,951.5
the coronavirus	806	10
the police	18	3,434
black people	26	1,521
for the	7	5
tested positive	6,425.5	26
positive for	6,125.5	31
in Minneapolis	36	189,743.5
the virus	1,404	28
will be	27	8
for coronavirus	13,978.5	45
out of	13	27
of coronavirus	14,998.5	50
in the	2	2
If you	22	55
This is	6	9
white people	57	2,944
due to	245	37
if you	11	20
of the	1	1
of George	68	159,714.5
Tom Hanks	192,366	62
they are	30	70
the people	42	205
to stop	45	264
lives matter	69	116,878.5
to get	38	15
going to	28	11
at the	9	14
because of	149	39
he was	43	168
corona virus	3,111	73
the same	23	43
is not	20	36
black lives	92	431,970
has tested	18,662	91
White House	58	276
to be	3	4
police officer	97	26,148
the black	94	8,350

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

52.6%—47.4%

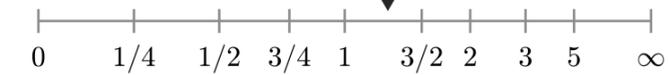
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{5/4,\tau}^P (\times 10^{-3}\%)$

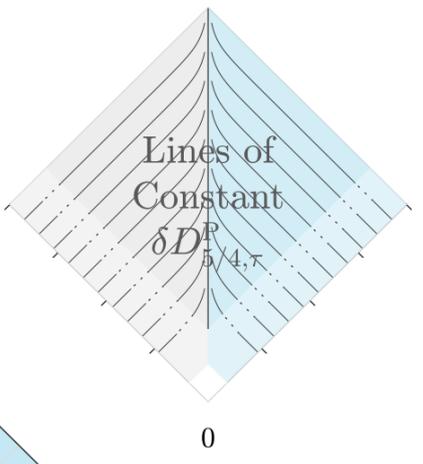
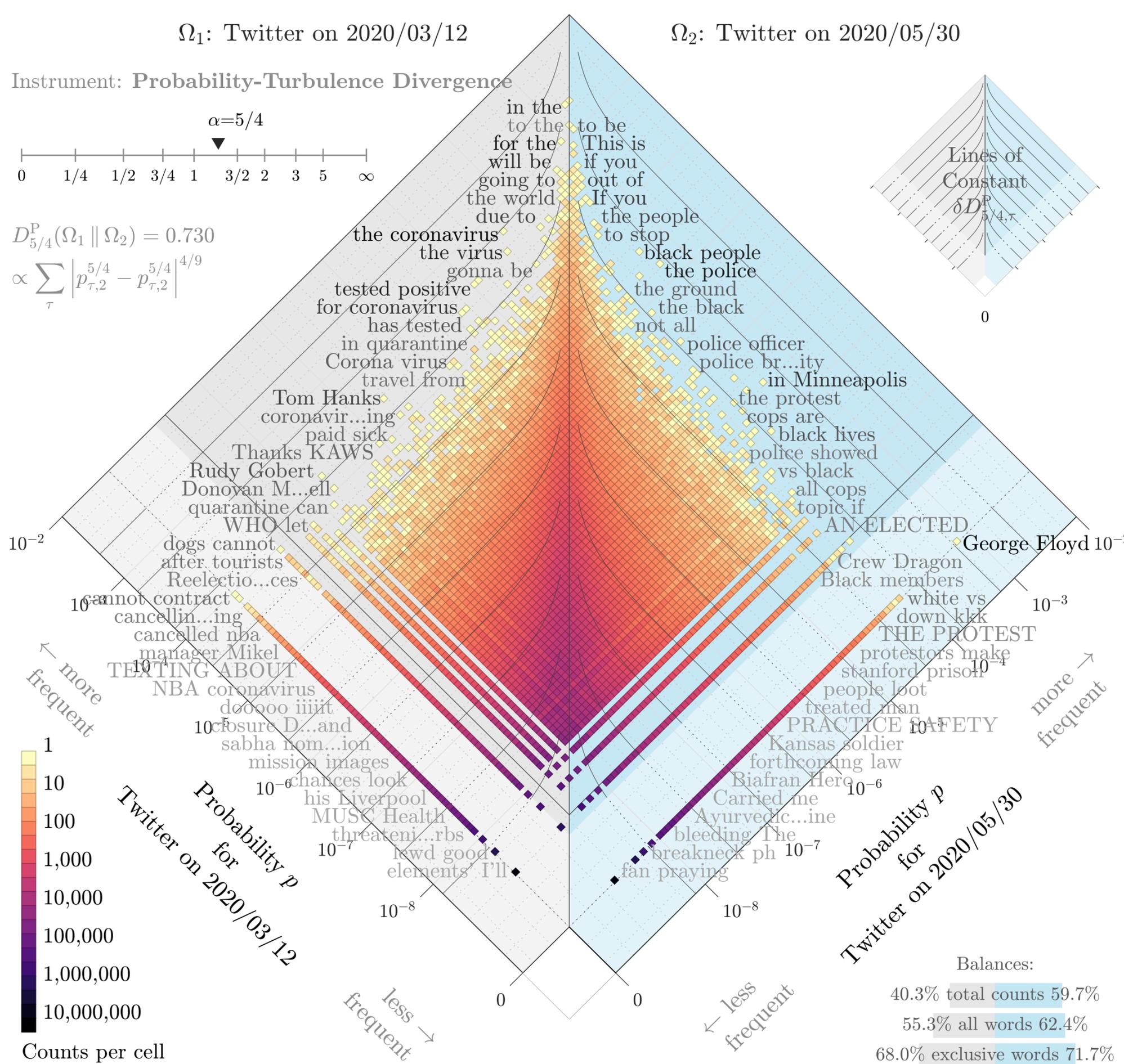
Instrument: Probability-Turbulence Divergence

$\alpha=5/4$



$$D_{5/4}^P(\Omega_1 \parallel \Omega_2) = 0.730$$

$$\propto \sum_{\tau} \left| p_{\tau,2}^{5/4} - p_{\tau,2}^{5/4} \right|^{4/9}$$



2	1	0	1	2
	17,192,951.5	10	George Floyd	
	the coronavirus	10	806	
	3,434	18	the police	
	for the	5	7	
	1,521	26	black people	
	tested positive	26	6,425.5	
	will be	8	27	
	positive for	31	6,125.5	
	189,743.5	36	in Minneapolis	
	the virus	28	1,404	
	in the	2	2	
	27	13	out of	
	9	6	This is	
	for coronavirus	45	13,978.5	
	of the	1	1	
	55	22	If you	
	of coronavirus	50	14,998.5	
	20	11	if you	
	due to	37	245	
	70	30	they are	
	2,944	57	white people	
	going to	11	28	
	to get	15	38	
	14	9	at the	
	205	42	the people	
	264	45	to stop	
	159,714.5	68	of George	
	Tom Hanks	62	192,366	
	116,878.5	69	lives matter	
	because of	39	149	
	168	43	he was	
	43	23	the same	
	4	3	to be	
	36	20	is not	
	corona virus	73	3,111	
	33	19	right now	
	276	58	White House	
	431,970	92	black lives	
	has tested	91	18,662	
	8,350	94	the black	

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

52.7%—47.3%

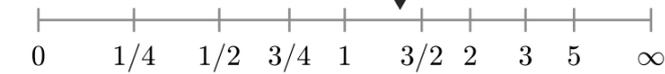
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{4/3,\tau}^P (\times 10^{-3}\%)$

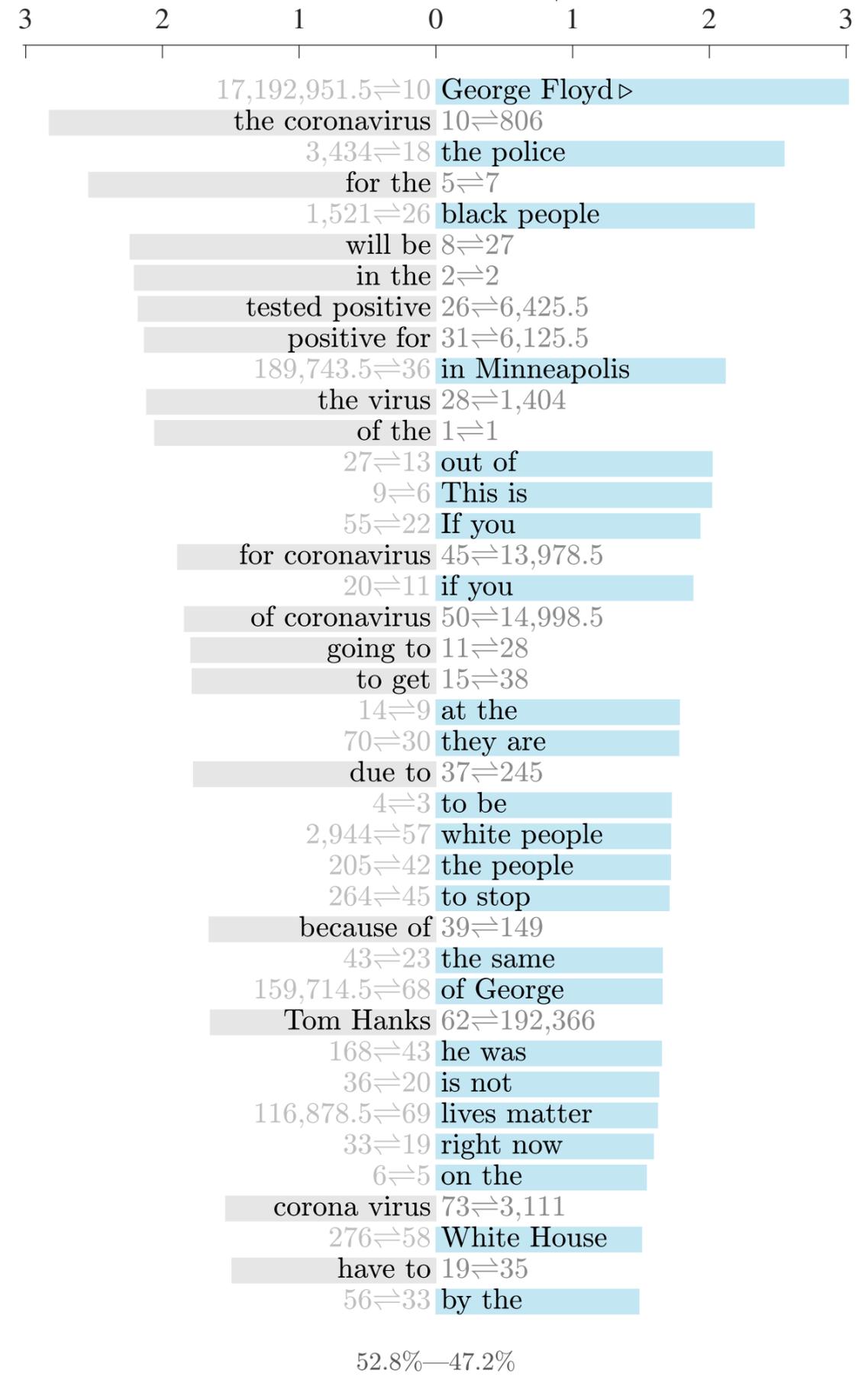
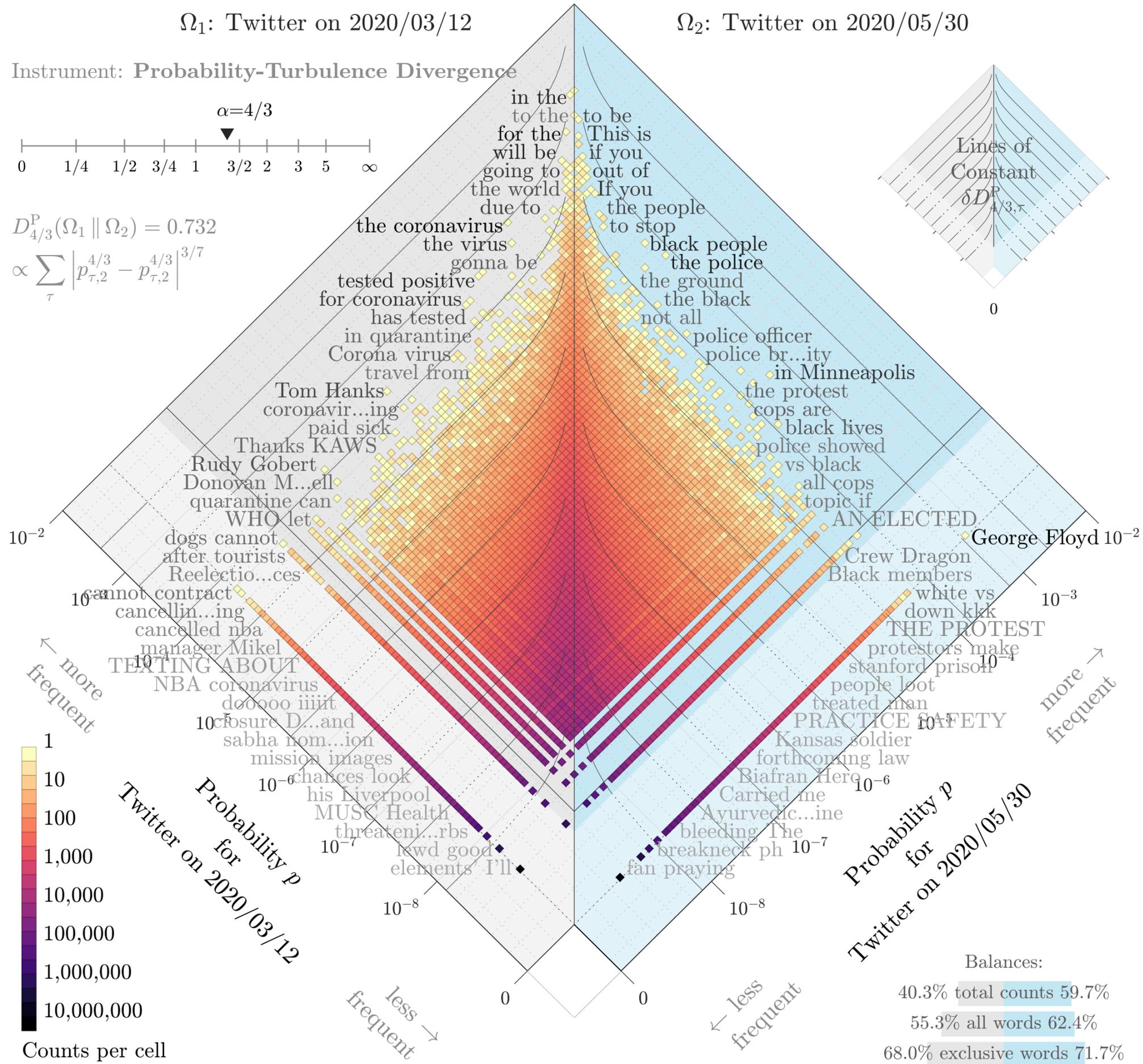
Instrument: Probability-Turbulence Divergence

$\alpha=4/3$



$D_{4/3}^P(\Omega_1 \parallel \Omega_2) = 0.732$

$\propto \sum_{\tau} |p_{\tau,2}^{4/3} - p_{\tau,1}^{4/3}|^{3/7}$



Balances:  
40.3% total counts 59.7%  
55.3% all words 62.4%  
68.0% exclusive words 71.7%





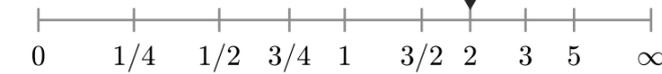
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{2,\tau}^P (\times 10^{-3}\%)$

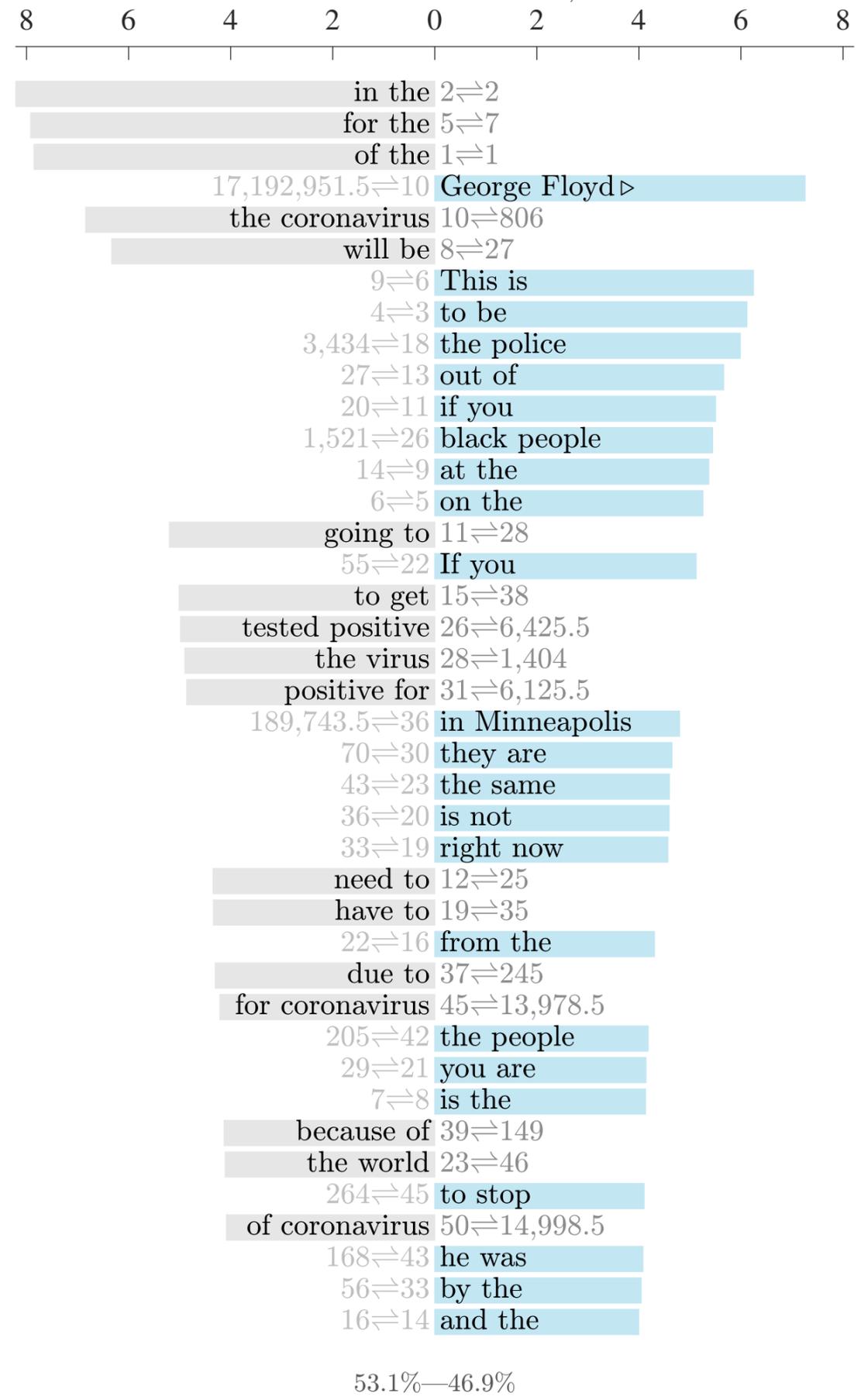
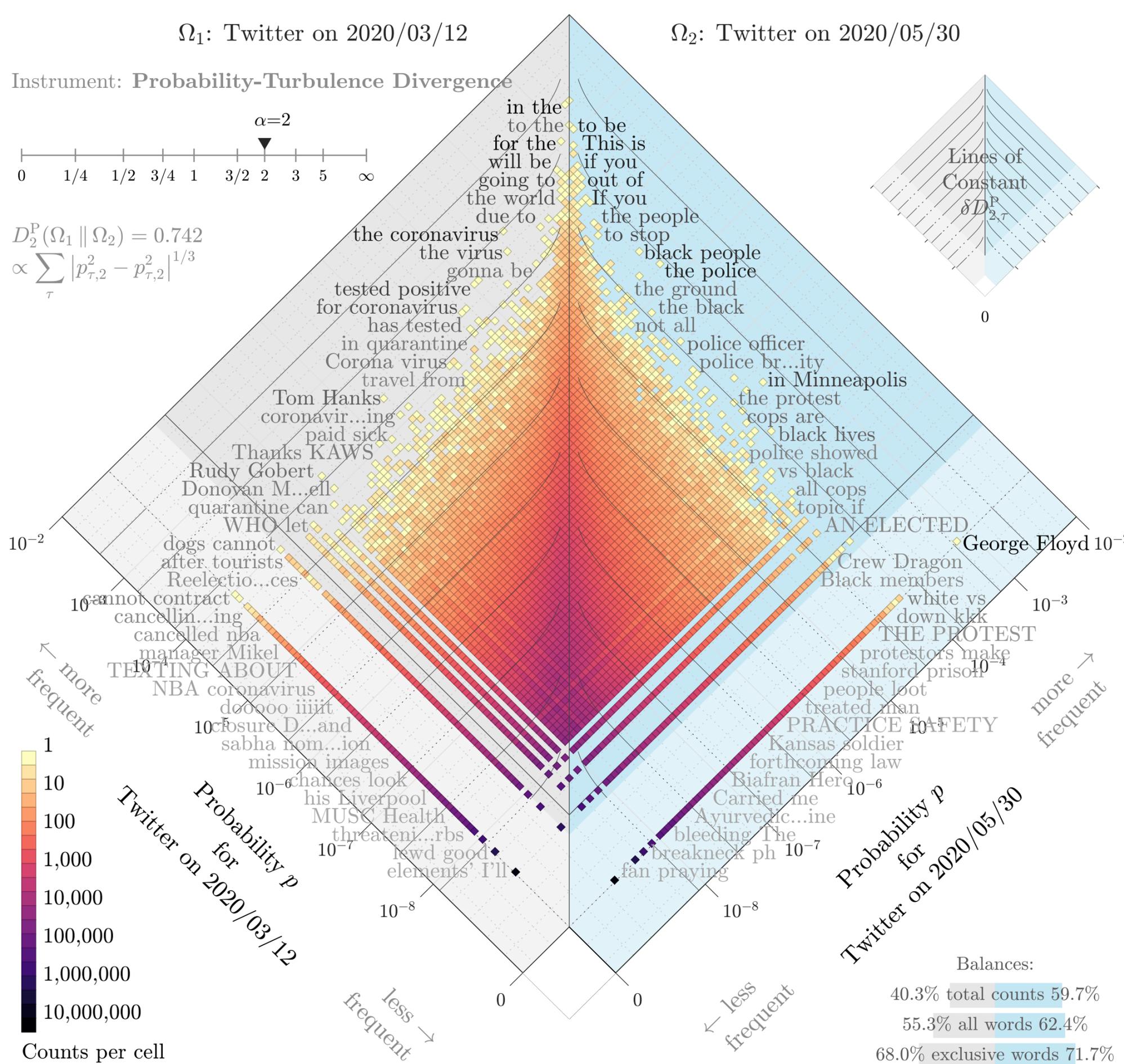
Instrument: **Probability-Turbulence Divergence**

$\alpha=2$



$$D_2^P(\Omega_1 \parallel \Omega_2) = 0.742$$

$$\propto \sum_{\tau} |p_{\tau,2}^2 - p_{\tau,1}^2|^{1/3}$$



Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

53.1%—46.9%

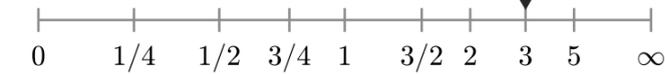
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{3,\tau}^P$  (%)

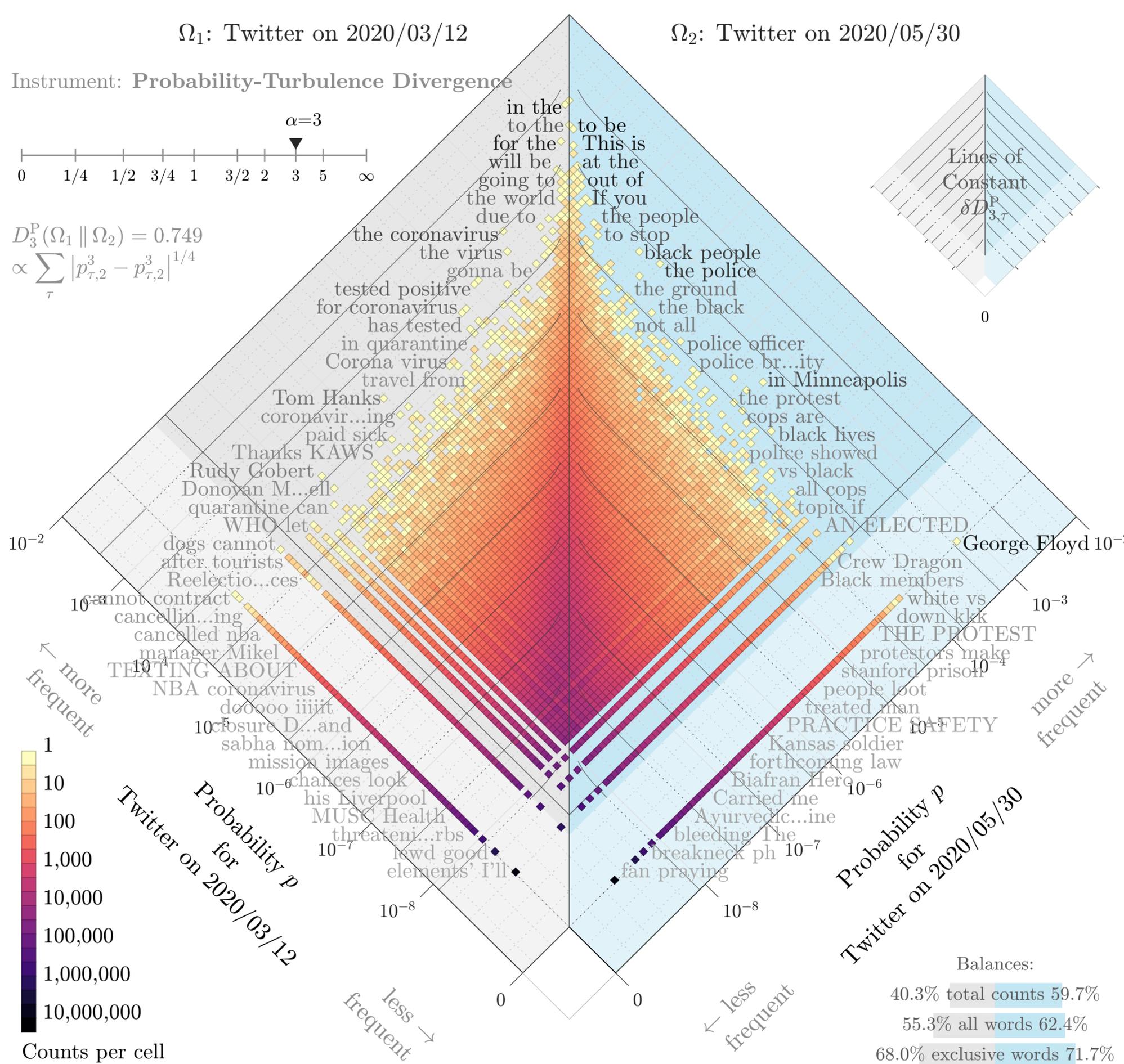
Instrument: Probability-Turbulence Divergence

$\alpha=3$



$$D_3^P(\Omega_1 \parallel \Omega_2) = 0.749$$

$$\propto \sum_{\tau} |p_{\tau,2}^3 - p_{\tau,1}^3|^{1/4}$$



Word	Percentage
in the	2 $\Rightarrow$ 2
of the	1 $\Rightarrow$ 1
for the	5 $\Rightarrow$ 7
4 $\Rightarrow$ 3	to be
9 $\Rightarrow$ 6	This is
17,192,951.5 $\Rightarrow$ 10	George Floyd
will be	8 $\Rightarrow$ 27
the coronavirus	10 $\Rightarrow$ 806
6 $\Rightarrow$ 5	on the
14 $\Rightarrow$ 9	at the
20 $\Rightarrow$ 11	if you
27 $\Rightarrow$ 13	out of
3,434 $\Rightarrow$ 18	the police
going to	11 $\Rightarrow$ 28
to get	15 $\Rightarrow$ 38
to the	3 $\Rightarrow$ 4
7 $\Rightarrow$ 8	is the
55 $\Rightarrow$ 22	If you
1,521 $\Rightarrow$ 26	black people
need to	12 $\Rightarrow$ 25
33 $\Rightarrow$ 19	right now
36 $\Rightarrow$ 20	is not
22 $\Rightarrow$ 16	from the
43 $\Rightarrow$ 23	the same
13 $\Rightarrow$ 12	this is
have to	19 $\Rightarrow$ 35
16 $\Rightarrow$ 14	and the
70 $\Rightarrow$ 30	they are
tested positive	26 $\Rightarrow$ 6,425.5
29 $\Rightarrow$ 21	you are
the virus	28 $\Rightarrow$ 1,404
positive for	31 $\Rightarrow$ 6,125.5
189,743.5 $\Rightarrow$ 36	in Minneapolis
18 $\Rightarrow$ 15	want to
the world	23 $\Rightarrow$ 46
56 $\Rightarrow$ 33	by the
of this	30 $\Rightarrow$ 59
due to	37 $\Rightarrow$ 245
24 $\Rightarrow$ 24	to do
42 $\Rightarrow$ 31	you can

Balances:  
 40.3% total counts 59.7%  
 55.3% all words 62.4%  
 68.0% exclusive words 71.7%

52.9%—47.1%

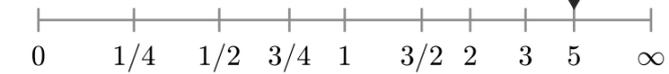
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

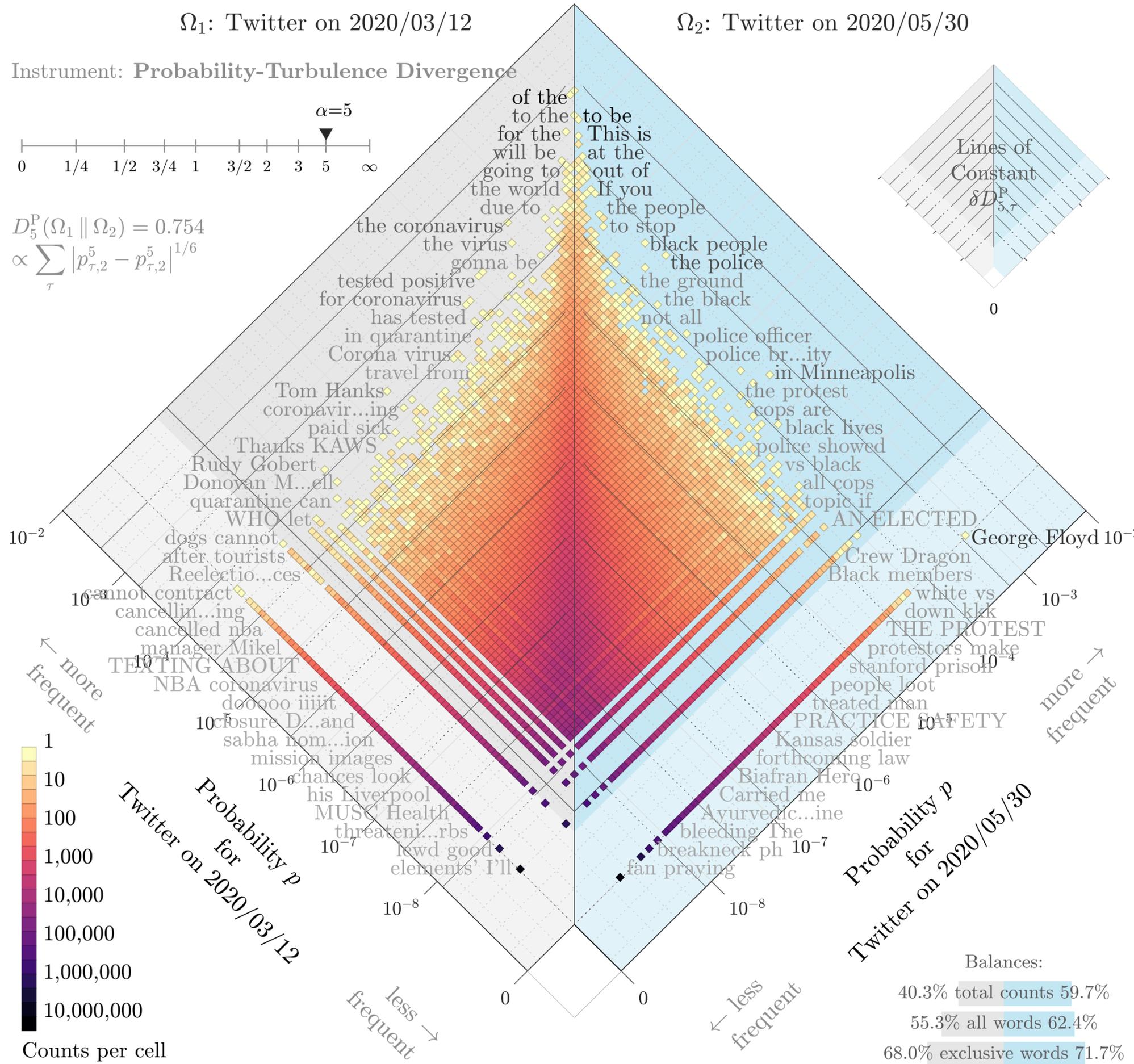
Divergence contribution  $\delta D_{5,\tau}^P(\%)$

Instrument: Probability-Turbulence Divergence

$\alpha=5$



$D_5^P(\Omega_1 || \Omega_2) = 0.754$   
 $\propto \sum_{\tau} |p_{\tau,2}^5 - p_{\tau,1}^5|^{1/6}$



of the	1 $\rightleftharpoons$ 1
in the	2 $\rightleftharpoons$ 2
for the	5 $\rightleftharpoons$ 7
4 $\rightleftharpoons$ 3	to be
9 $\rightleftharpoons$ 6	This is
6 $\rightleftharpoons$ 5	on the
to the	3 $\rightleftharpoons$ 4
will be	8 $\rightleftharpoons$ 27
17,192,951.5 $\rightleftharpoons$ 10	George Floyd
14 $\rightleftharpoons$ 9	at the
the coronavirus	10 $\rightleftharpoons$ 806
7 $\rightleftharpoons$ 8	is the
20 $\rightleftharpoons$ 11	if you
27 $\rightleftharpoons$ 13	out of
going to	11 $\rightleftharpoons$ 28
13 $\rightleftharpoons$ 12	this is
to get	15 $\rightleftharpoons$ 38
3,434 $\rightleftharpoons$ 18	the police
need to	12 $\rightleftharpoons$ 25
16 $\rightleftharpoons$ 14	and the
22 $\rightleftharpoons$ 16	from the
33 $\rightleftharpoons$ 19	right now
55 $\rightleftharpoons$ 22	If you
36 $\rightleftharpoons$ 20	is not
18 $\rightleftharpoons$ 15	want to
have to	19 $\rightleftharpoons$ 35
43 $\rightleftharpoons$ 23	the same
29 $\rightleftharpoons$ 21	you are
1,521 $\rightleftharpoons$ 26	black people
70 $\rightleftharpoons$ 30	they are
the world	23 $\rightleftharpoons$ 46
24 $\rightleftharpoons$ 24	to do
has been	21 $\rightleftharpoons$ 34
tested positive	26 $\rightleftharpoons$ 6,425.5
the virus	28 $\rightleftharpoons$ 1,404
positive for	31 $\rightleftharpoons$ 6,125.5
32 $\rightleftharpoons$ 29	have been
56 $\rightleftharpoons$ 33	by the
42 $\rightleftharpoons$ 31	you can
189,743.5 $\rightleftharpoons$ 36	in Minneapolis

Balances:  
40.3% total counts 59.7%  
55.3% all words 62.4%  
68.0% exclusive words 71.7%

52.4%—47.6%

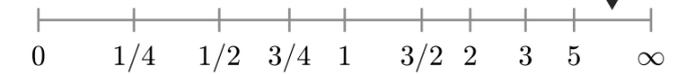
$\Omega_1$ : Twitter on 2020/03/12

$\Omega_2$ : Twitter on 2020/05/30

Divergence contribution  $\delta D_{10,\tau}^P$  (%)

Instrument: Probability-Turbulence Divergence

$\alpha=10$



$$D_{10}^P(\Omega_1 \parallel \Omega_2) = 0.757$$

$$\propto \sum_{\tau} |p_{\tau,2}^{10} - p_{\tau,1}^{10}|^{1/11}$$

