

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

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					


46.2%—53.8%

Ω_2 : Twitter on 2020/05/30

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▷	

46.7%—53.3%

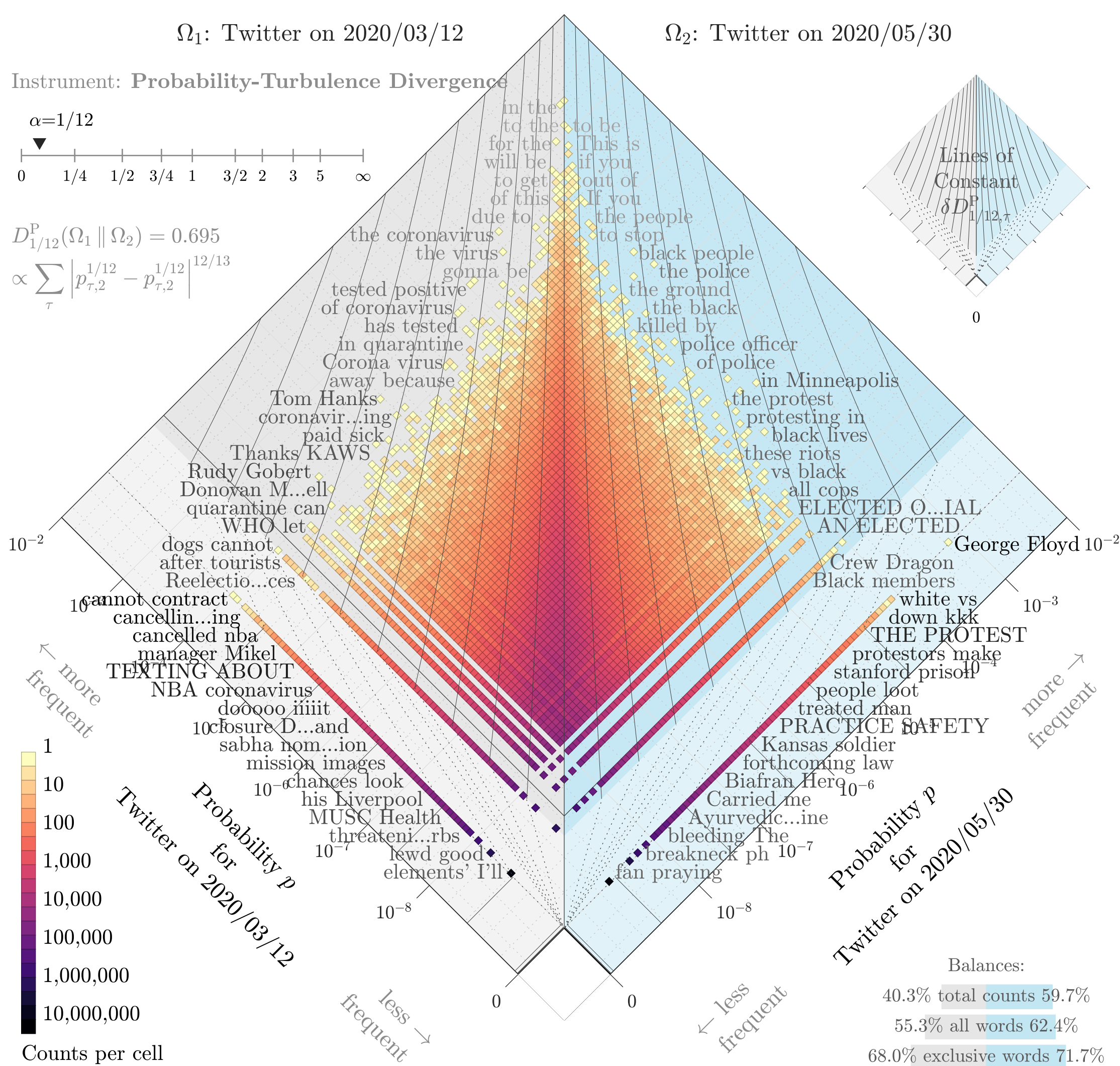
$\alpha=1/12$

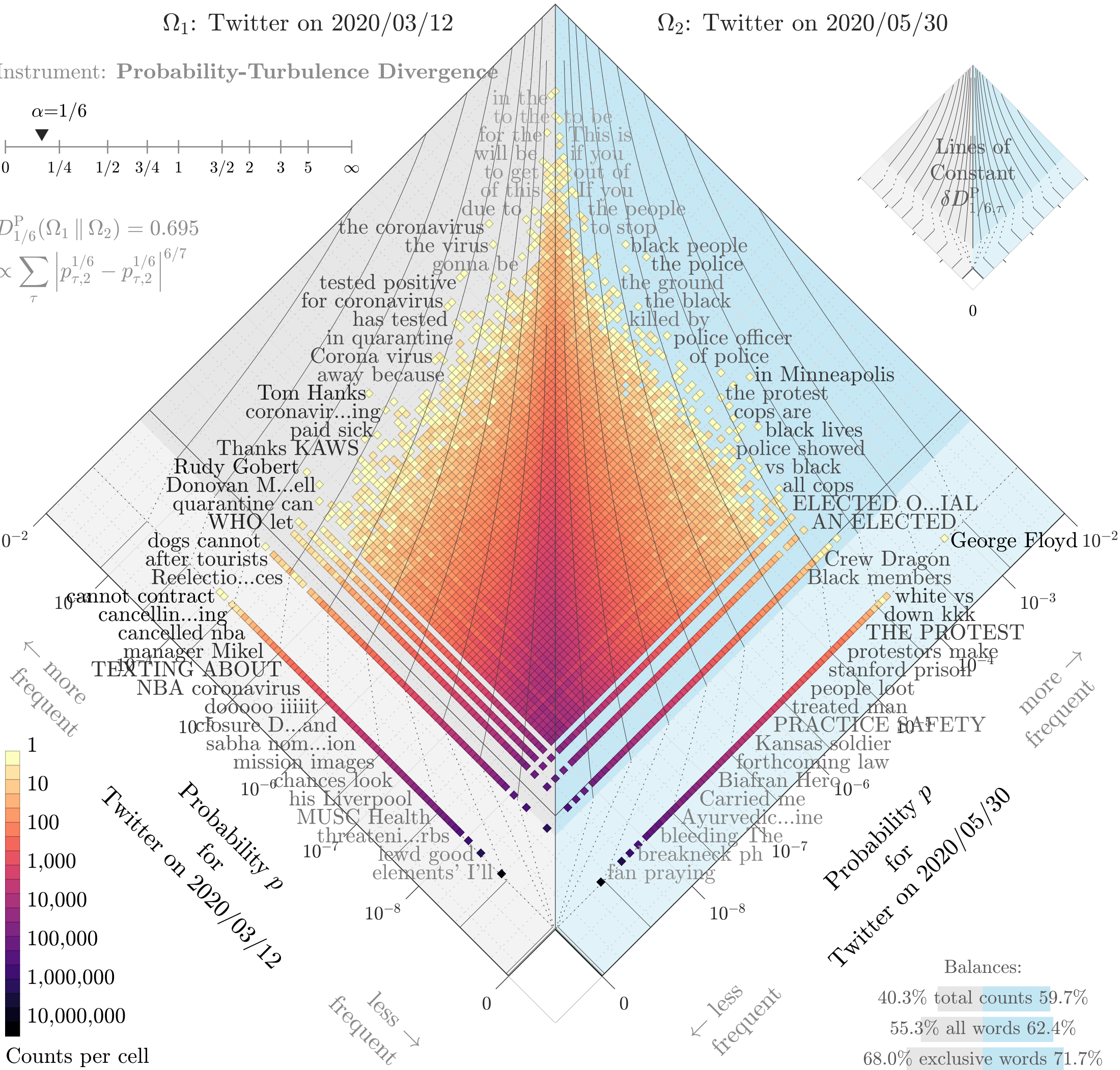


0 $1/4$ $1/2$ $3/4$ 1 $3/2$ 2 3 5 ∞

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

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

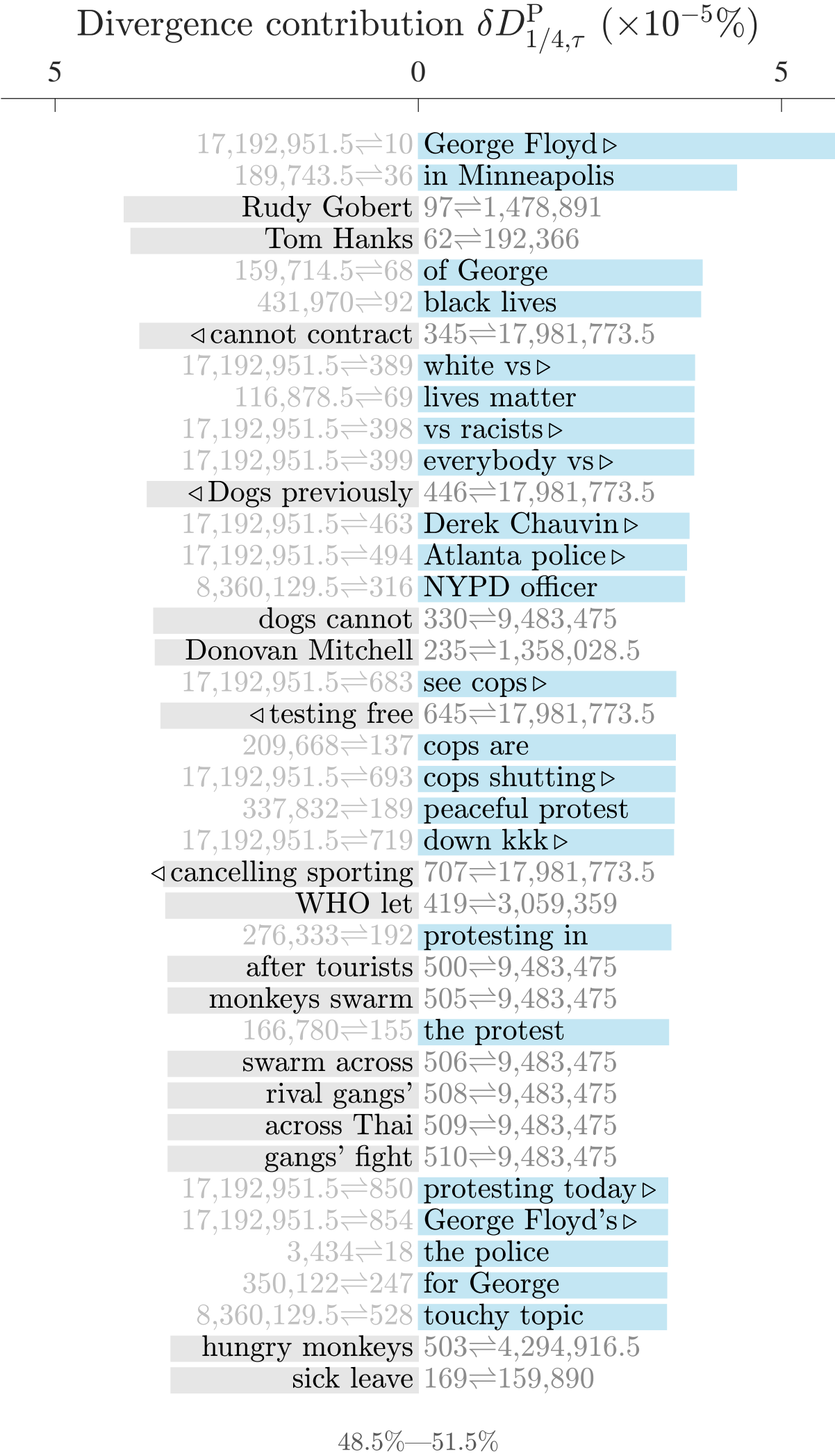
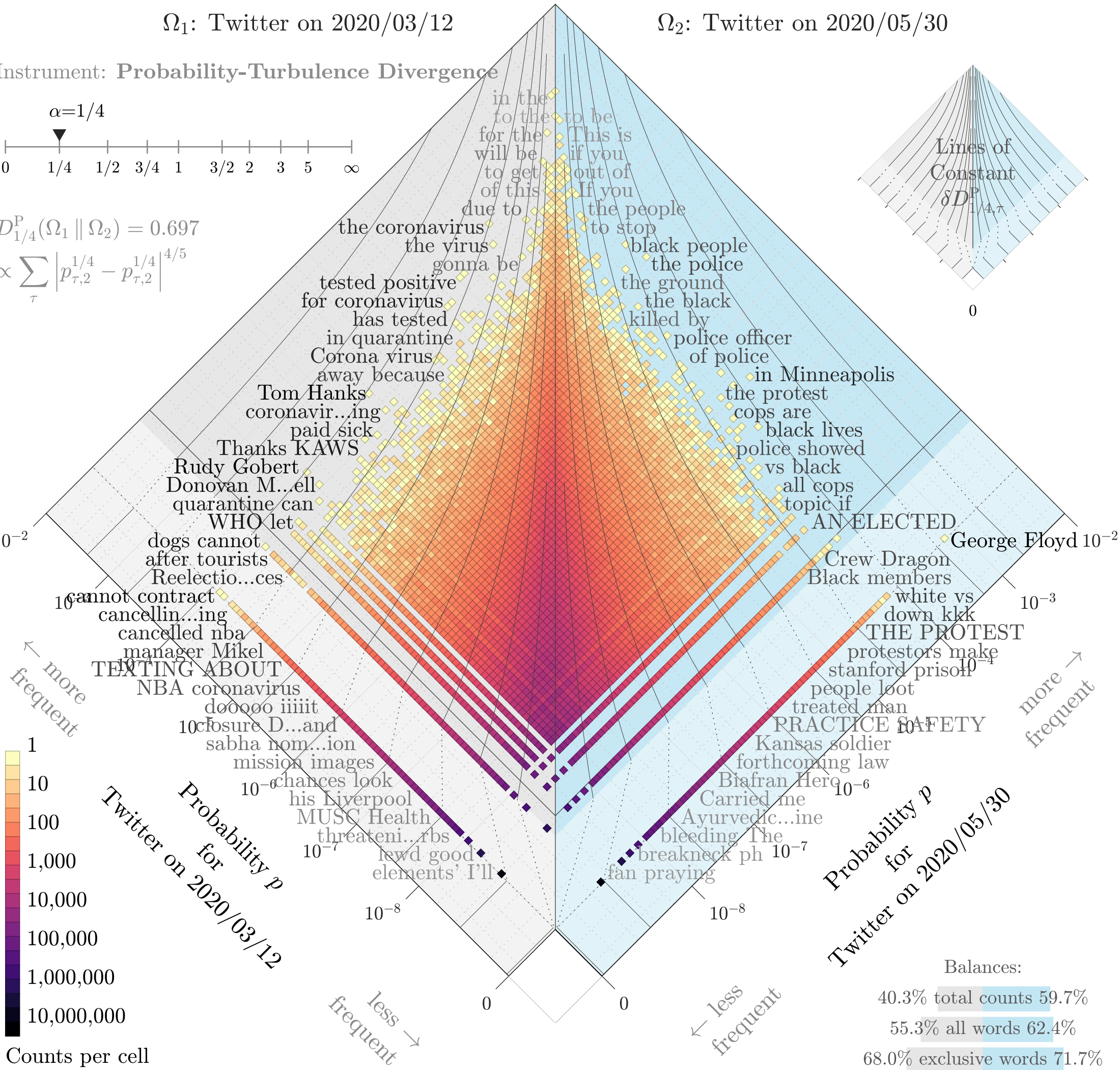


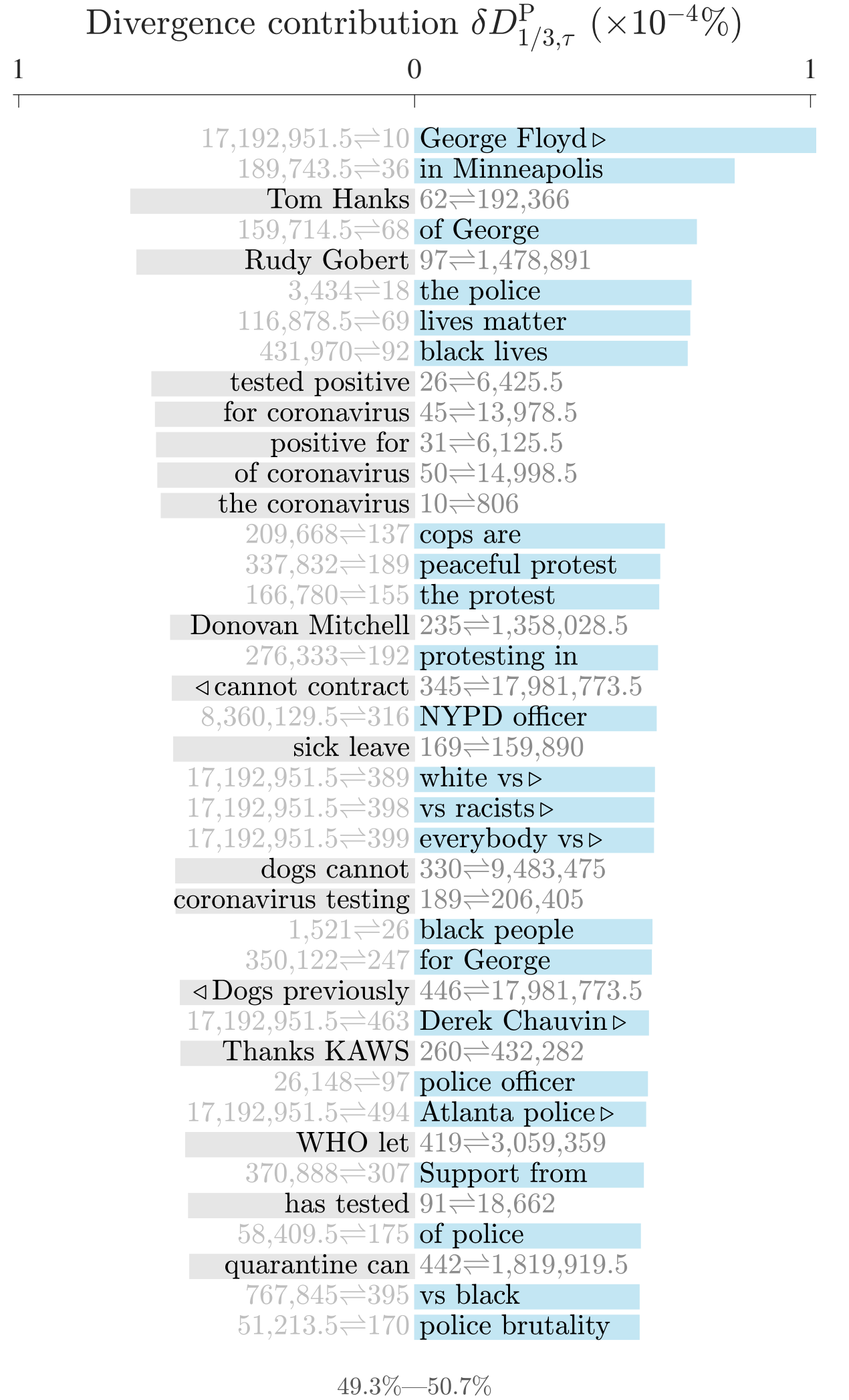
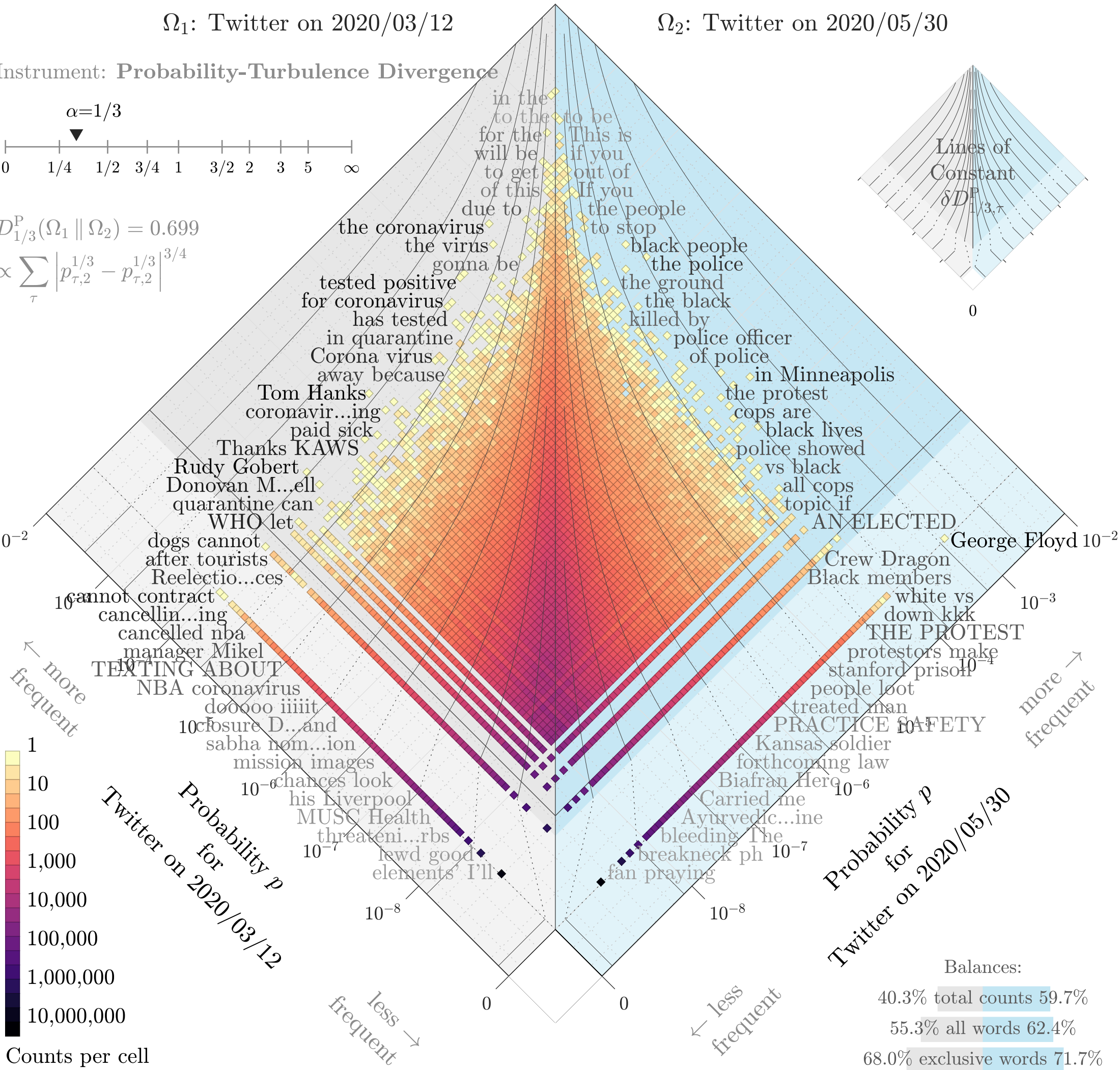


Divergence contribution $\delta D_{1/6,\tau}^P (\times 10^{-5}\%)$

2	1	0	1	2
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		
Rudy Gobert	97	1,478,891		
17,192,951.5	1,217	george floyd		
189,743.5	36	in Minneapolis		
17,192,951.5	1,262.5	possible leg		

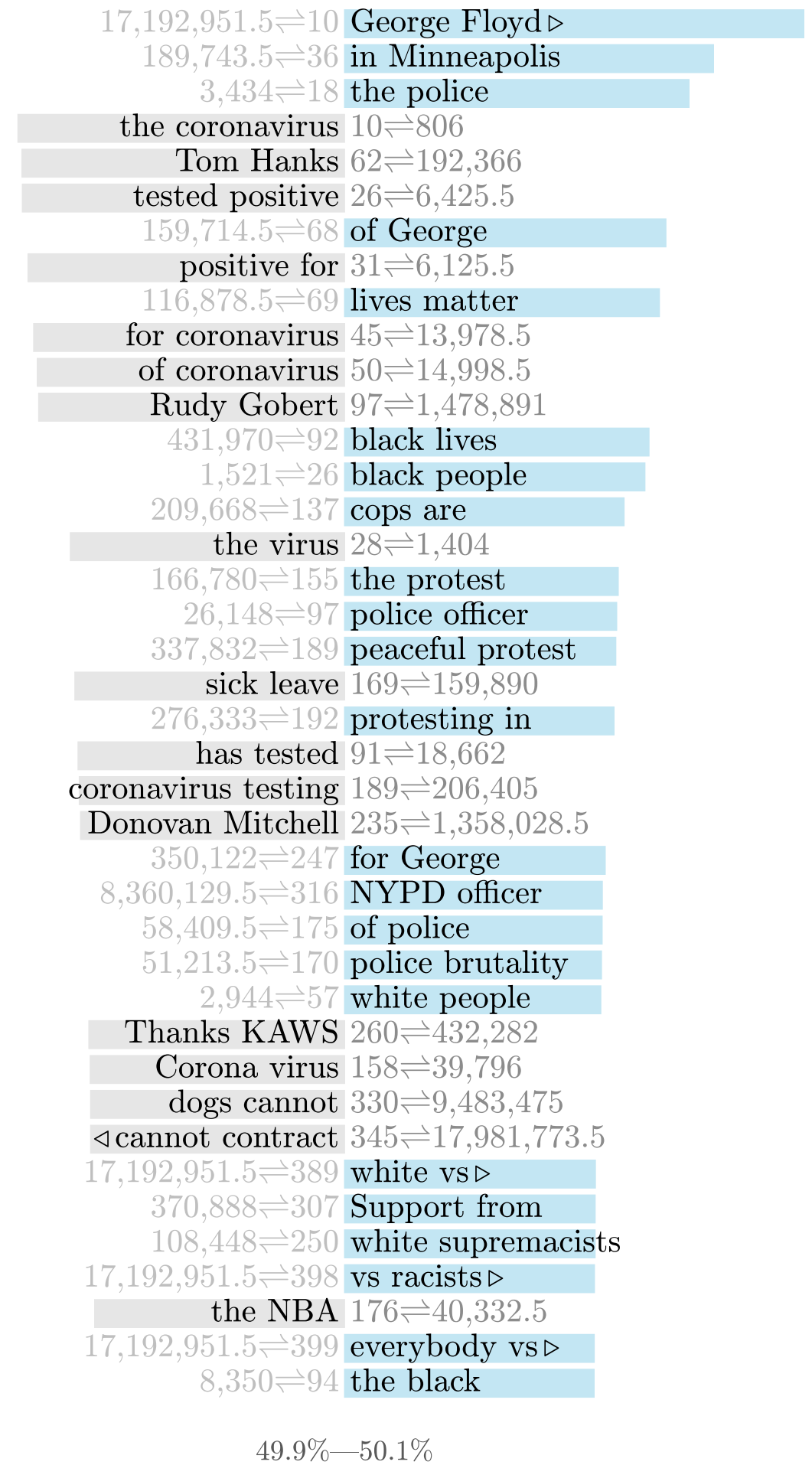
47.7%—52.3%

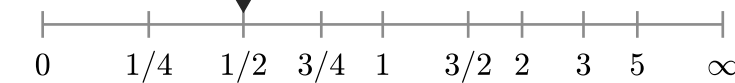




Divergence contribution $\delta D_{5/12,\tau}^{\text{P}}$ ($\times 10^{-4}\%$)

A horizontal number line with tick marks at 1.5, 1, 0.5, 0, 0.5, 1, and 1.5.



Ω_1 : Twitter on 2020/03/12 Ω_2 : Twitter on 2020/05/30Divergence contribution $\delta D_{1/2,\tau}^{\text{P}}$ ($\times 10^{-4}\%$)Instrument: ~~Probability-Turbulence Divergence~~ $\alpha=1/2$ 

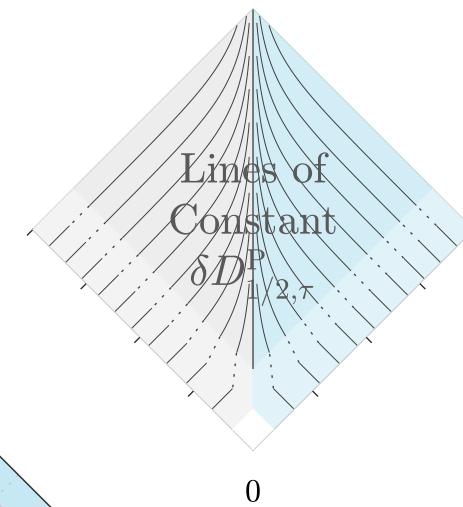
$$D_{1/2}^{\text{P}}(\Omega_1 \parallel \Omega_2) = 0.706$$

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



← more frequent

Counts per cell



C

more \nearrow
frequent

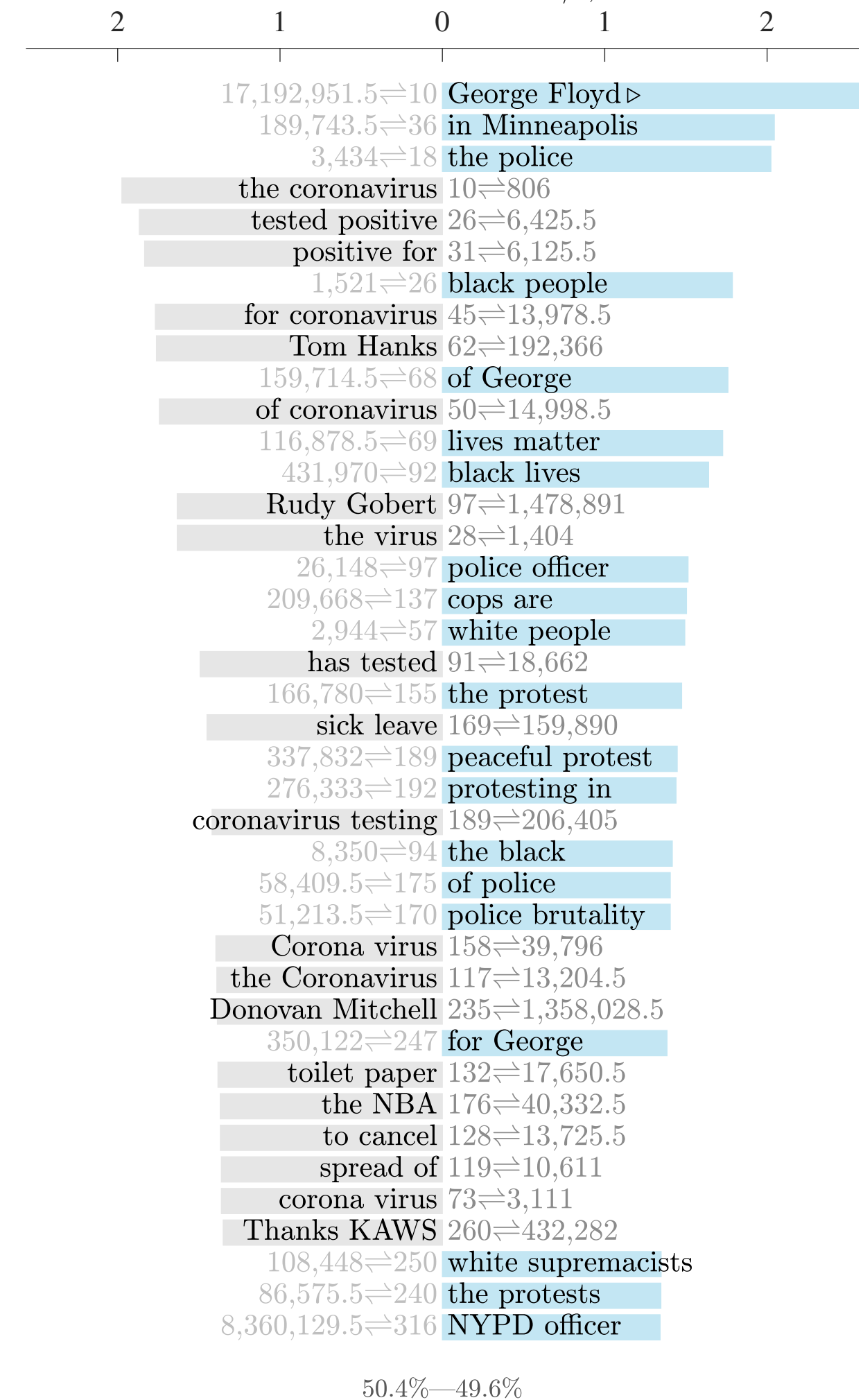
Probability p
for
Twitter on 2020/05/30

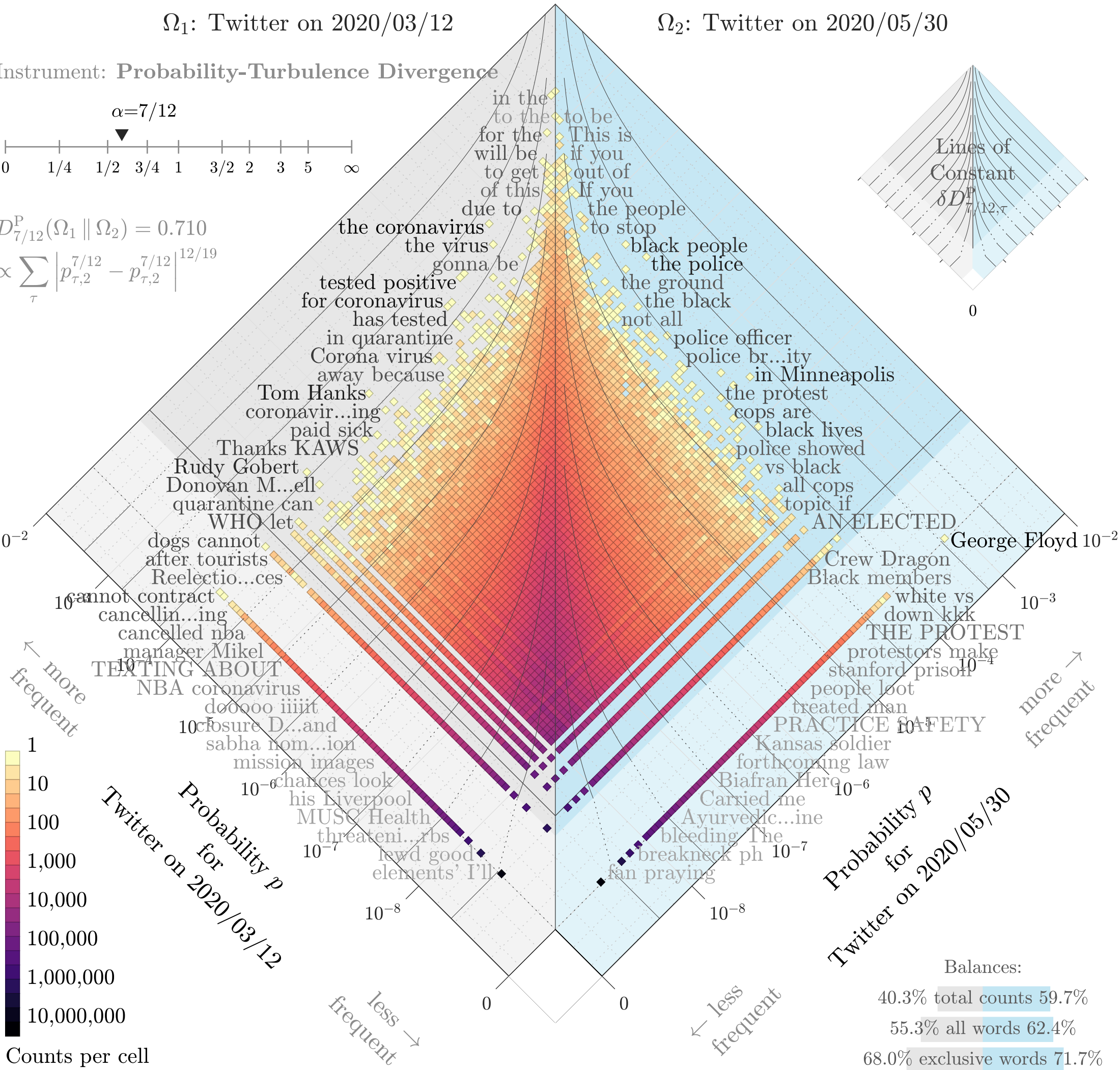
Balances:

40.3% total counts 59.7%

55.3% all words 62.4%

68.0% exclusive words 71.7%

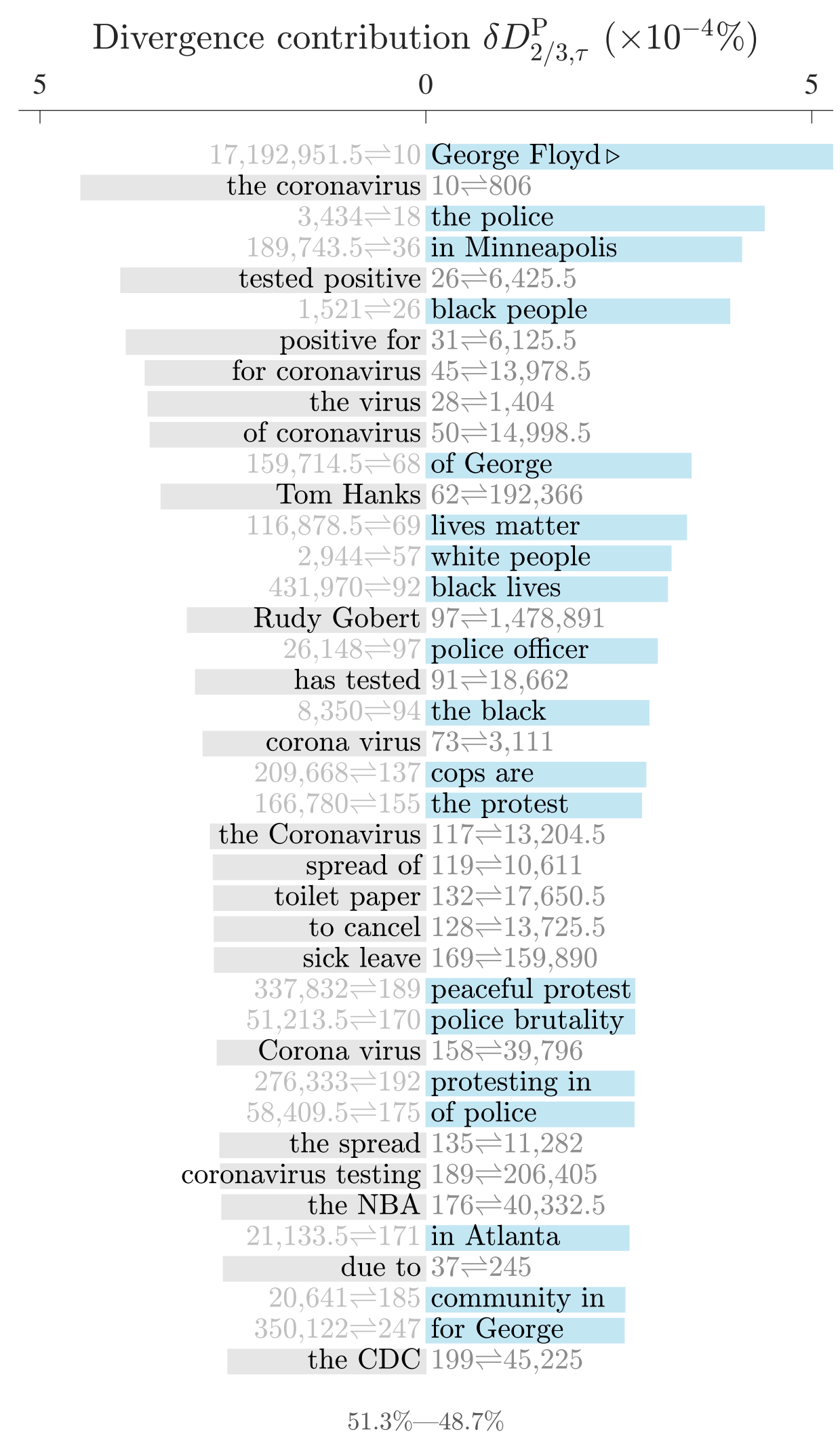
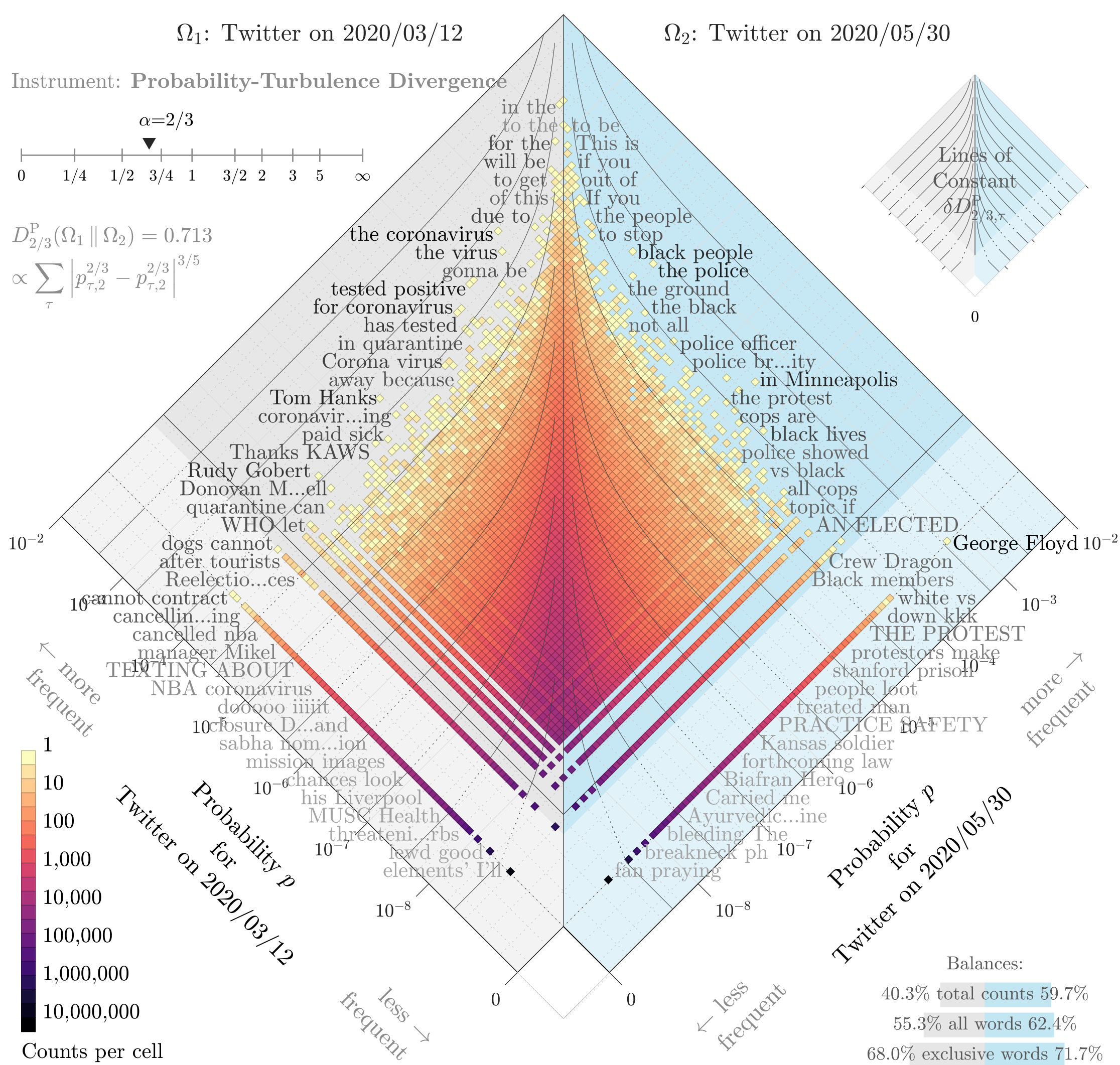


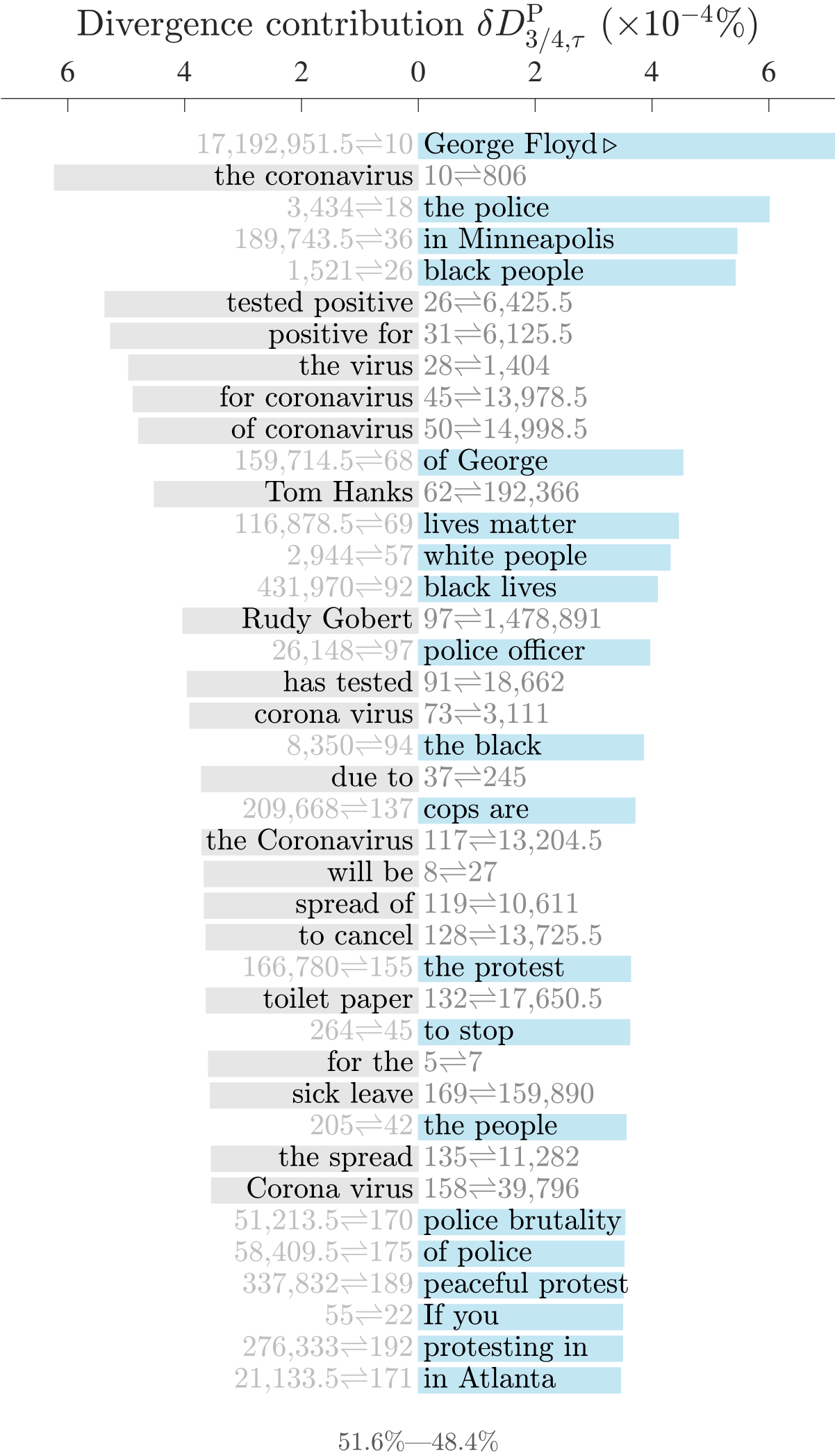
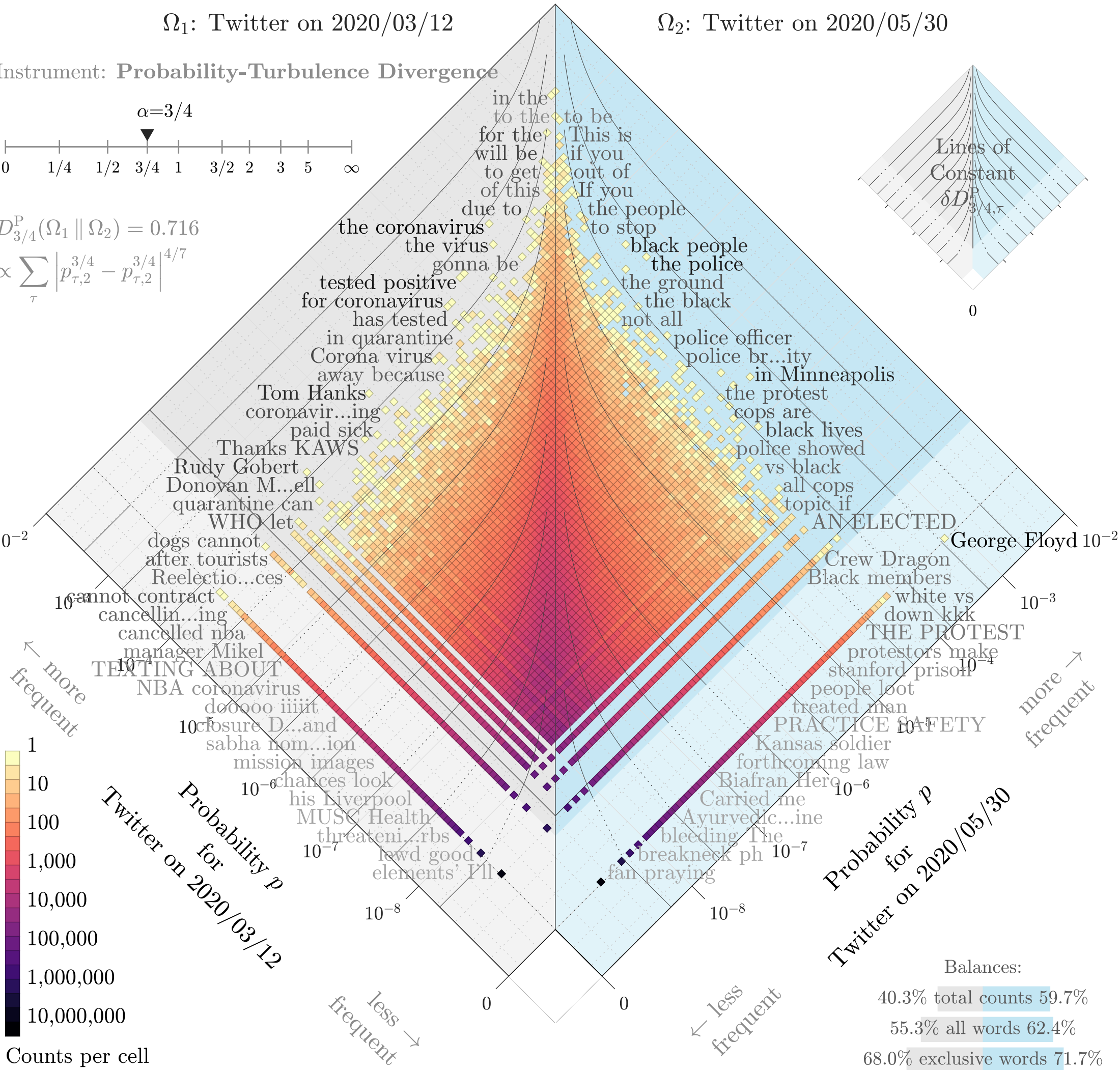


Divergence contribution $\delta D_{7/12, \tau}^P (\times 10^{-4} \%)$

3	2	1	0	1	2	3
17,192,951.5	10	George Floyd				
3,434	18	the police				
the coronavirus	10	806				
189,743.5	36	in Minneapolis				
tested positive	26	6,425.5				
positive for	31	6,125.5				
1,521	26	black people				
for coronavirus	45	13,978.5				
of coronavirus	50	14,998.5				
159,714.5	68	of George				
Tom Hanks	62	192,366				
the virus	28	1,404				
116,878.5	69	lives matter				
431,970	92	black lives				
Rudy Gobert	97	1,478,891				
2,944	57	white people				
26,148	97	police officer				
has tested	91	18,662				
209,668	137	cops are				
8,350	94	the black				
166,780	155	the protest				
corona virus	73	3,111				
sick leave	169	159,890				
the Coronavirus	117	13,204.5				
337,832	189	peaceful protest				
276,333	192	protesting in				
toilet paper	132	17,650.5				
51,213.5	170	police brutality				
58,409.5	175	of police				
Corona virus	158	39,796				
spread of	119	10,611				
to cancel	128	13,725.5				
coronavirus testing	189	206,405				
the NBA	176	40,332.5				
the spread	135	11,282				
350,122	247	for George				
21,133.5	171	in Atlanta				
Donovan Mitchell	235	1,358,028.5				
the CDC	199	45,225				
86,575.5	240	the protests				

50.9%—49.1%





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

8 6 4 2 0 2 4 6 8

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

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

DP 5/6 8

C

 10^{-2}

more frequent \nearrow

less frequent \rightarrow

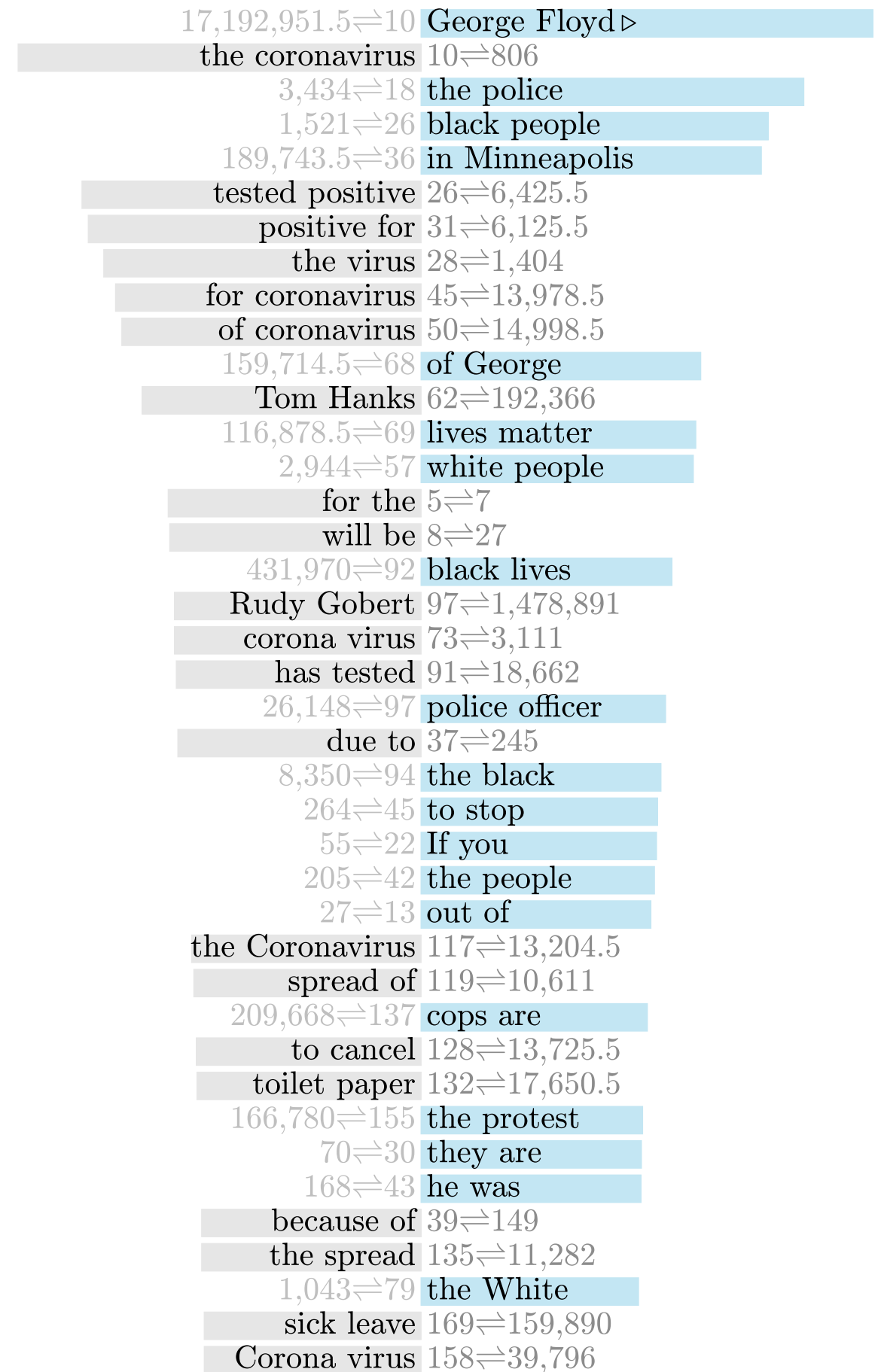
← less frequent

40.3% total counts 59.7%

55.3% all words 62.4%

68.0% exclusive words 71.7%

51.9%—48.1%



51.9%—48.1%

