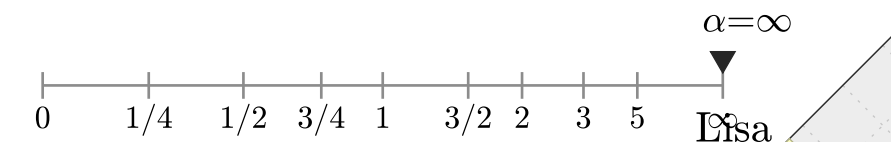


Ω_1 : Baby girl names in 1968, top $10^{1.5}$

Ω_2 : Baby girl names on 2018, top $10^{1.5}$

Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

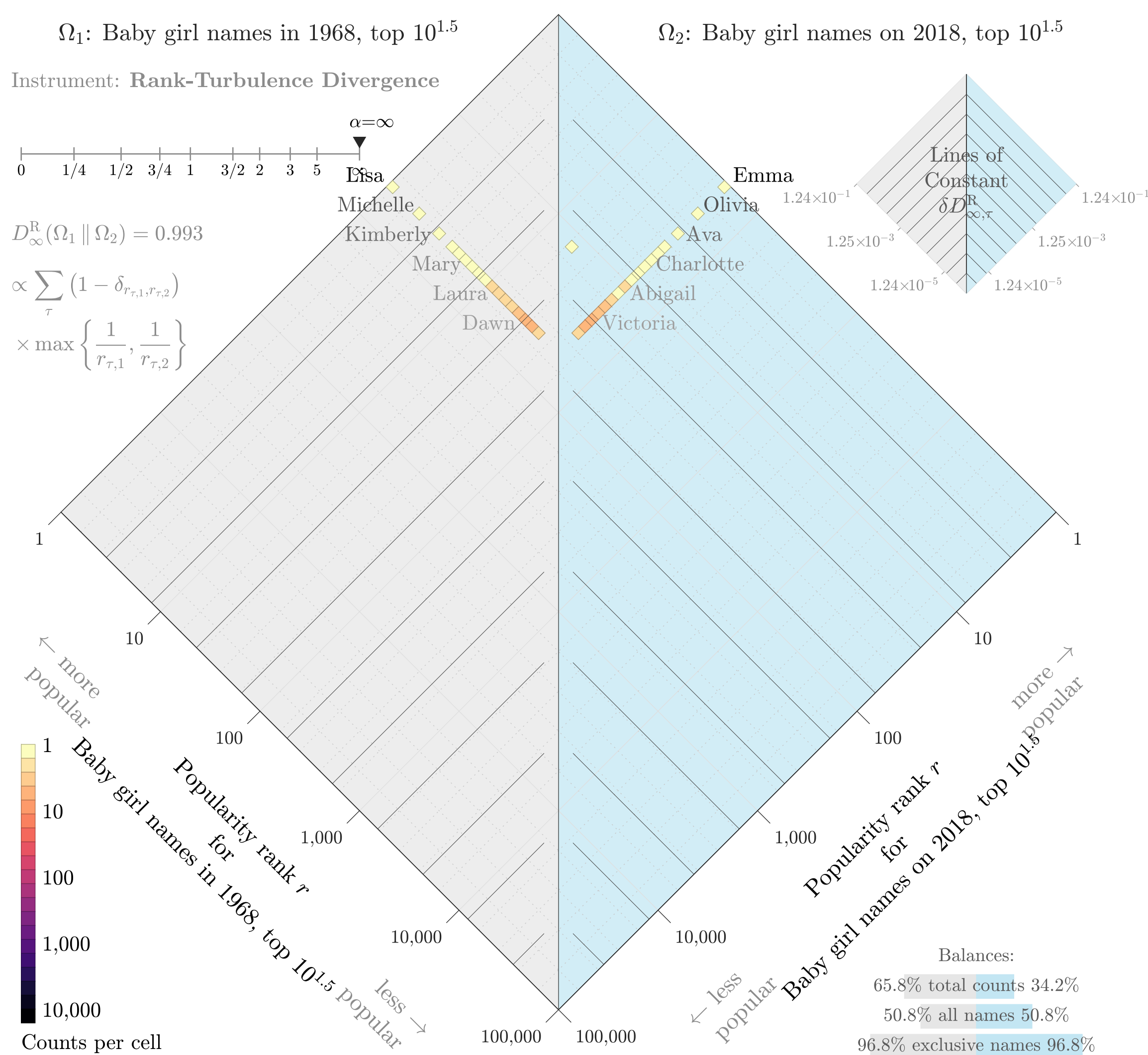
Instrument: Rank-Turbulence Divergence



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.993$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}})$$

$$\times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$

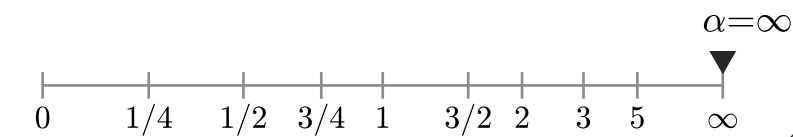


Ω_1 : Baby girl names in 1968, top $10^{2.0}$

Ω_2 : Baby girl names on 2018, top $10^{2.0}$

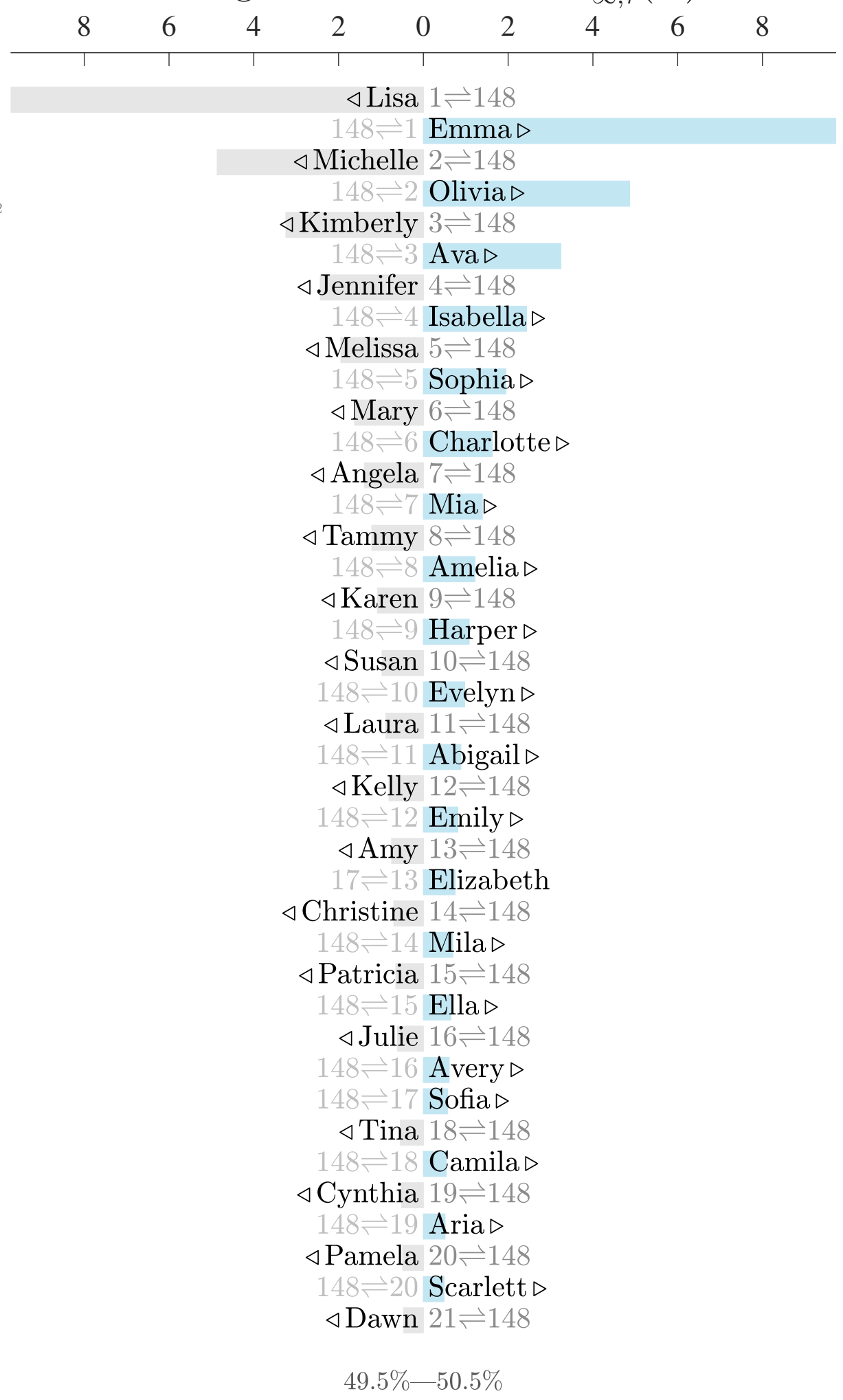
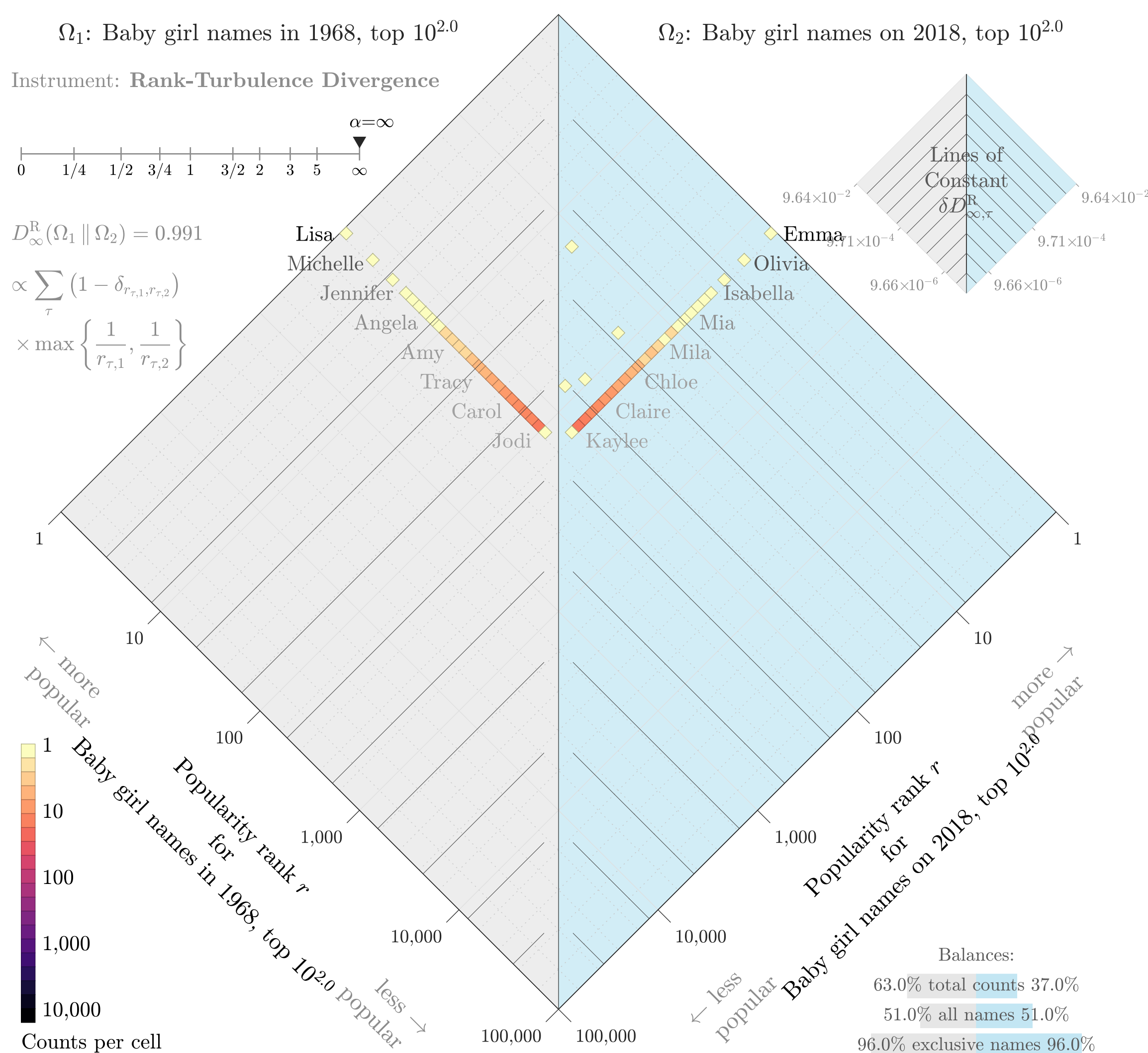
Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

Instrument: Rank-Turbulence Divergence



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.991$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}}) \times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$



Balances:
 63.0% total counts 37.0%
 51.0% all names 51.0%
 96.0% exclusive names 96.0%

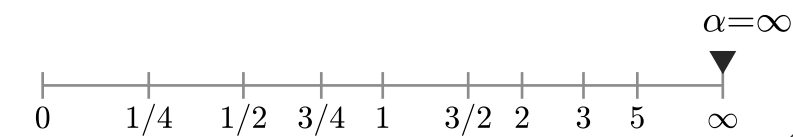
49.5%—50.5%

Ω_1 : Baby girl names in 1968, top $10^{2.5}$

Ω_2 : Baby girl names on 2018, top $10^{2.5}$

Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

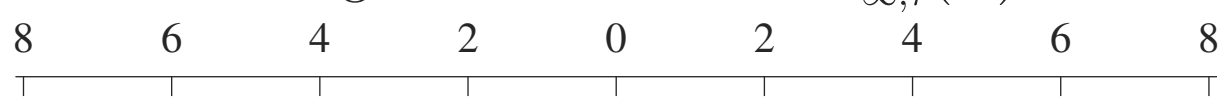
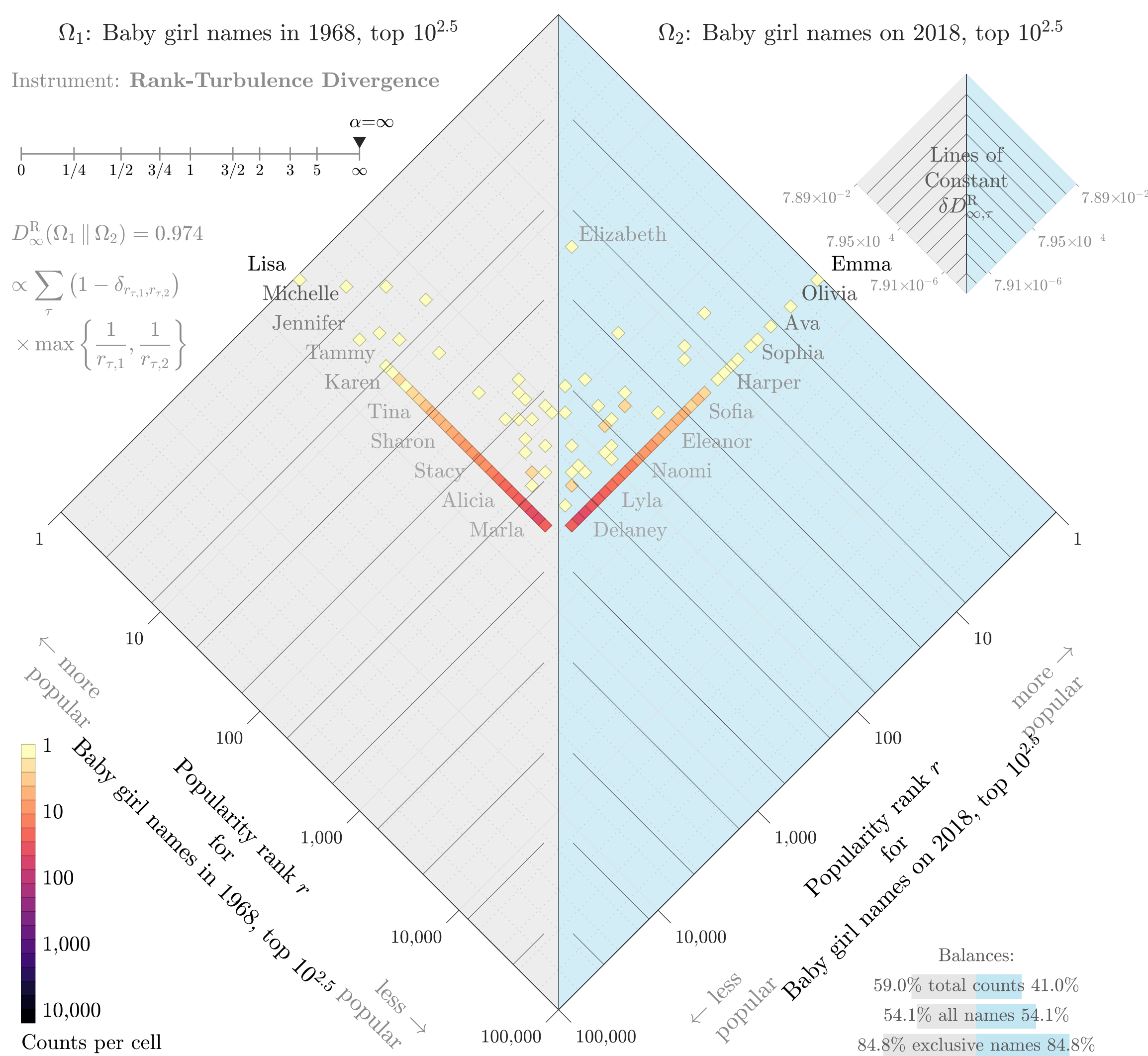
Instrument: Rank-Turbulence Divergence



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.974$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}})$$

$$\times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$



◁ Lisa	1 ⇒ 450
450 ⇒ 1	Emma ▷
Michelle	2 ⇒ 263
450 ⇒ 2	Olivia ▷
Kimberly	3 ⇒ 170
450 ⇒ 3	Ava ▷
◁ Jennifer	4 ⇒ 450
450 ⇒ 4	Isabella ▷
Melissa	5 ⇒ 296
450 ⇒ 5	Sophia ▷
Mary	6 ⇒ 126
163 ⇒ 6	Charlotte
Angela	7 ⇒ 264
450 ⇒ 7	Mia ▷
◁ Tammy	8 ⇒ 450
450 ⇒ 8	Amelia ▷
◁ Karen	9 ⇒ 450
450 ⇒ 9	Harper ▷
◁ Susan	10 ⇒ 450
192 ⇒ 10	Evelyn
◁ Laura	11 ⇒ 450
450 ⇒ 11	Abigail ▷
◁ Kelly	12 ⇒ 450
225 ⇒ 12	Emily
Amy	13 ⇒ 205
17 ⇒ 13	Elizabeth
◁ Christine	14 ⇒ 450
450 ⇒ 14	Mila ▷
◁ Patricia	15 ⇒ 450
450 ⇒ 15	Ella ▷
◁ Julie	16 ⇒ 450
450 ⇒ 16	Avery ▷
450 ⇒ 17	Sofia ▷
◁ Tina	18 ⇒ 450
450 ⇒ 18	Camila ▷
◁ Cynthia	19 ⇒ 450
450 ⇒ 19	Aria ▷
◁ Pamela	20 ⇒ 450
450 ⇒ 20	Scarlett ▷
◁ Dawn	21 ⇒ 450

Balances:
59.0% total counts 41.0%
54.1% all names 54.1%
84.8% exclusive names 84.8%

49.7%—50.3%

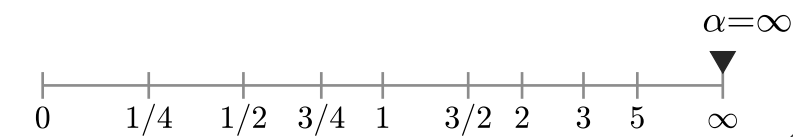
Counts per cell

Ω_1 : Baby girl names in 1968, top $10^{3.0}$

Ω_2 : Baby girl names on 2018, top $10^{3.0}$

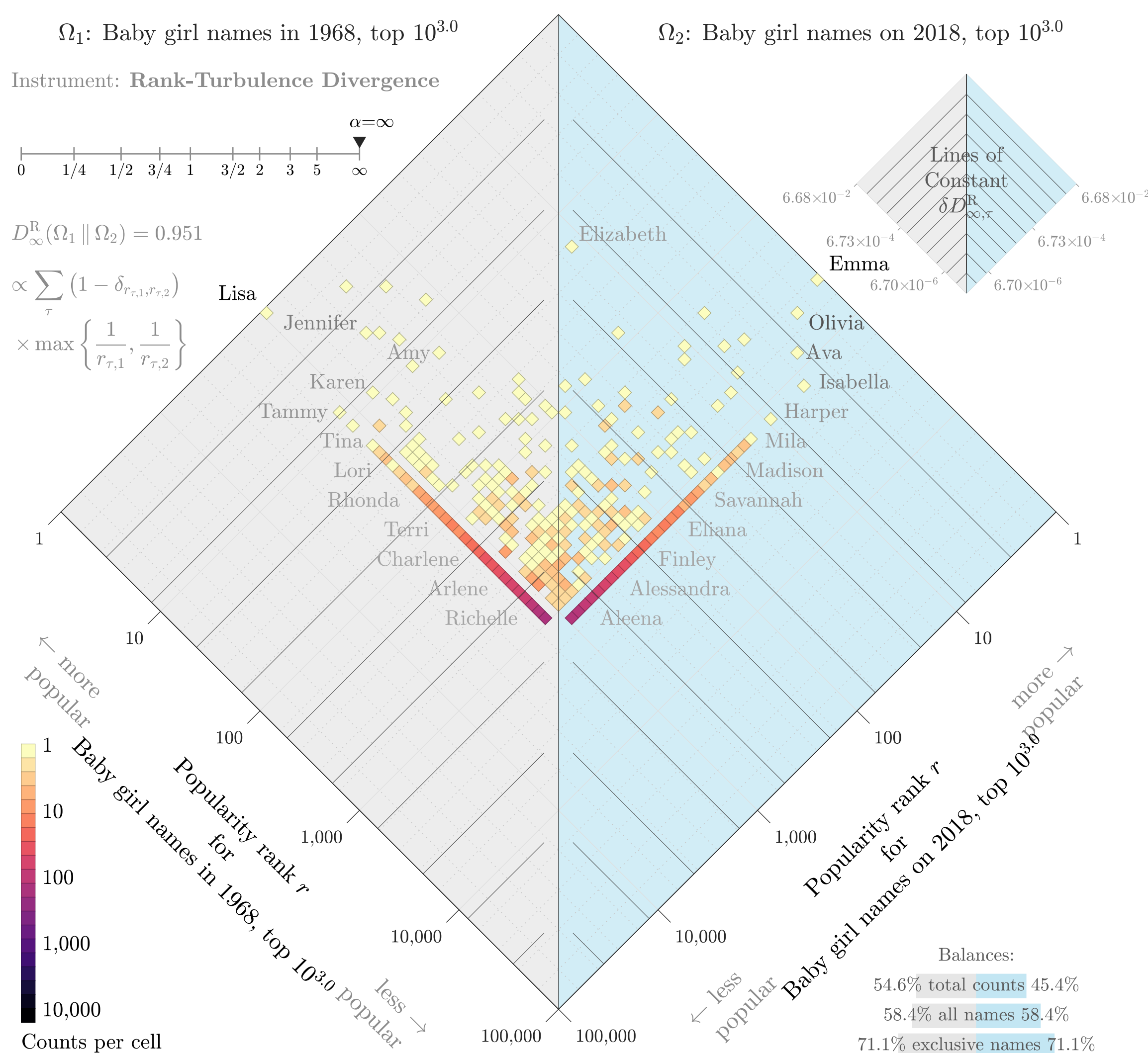
Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

Instrument: Rank-Turbulence Divergence



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.951$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}}) \times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$



Balances:
 54.6% total counts 45.4%
 58.4% all names 58.4%
 71.1% exclusive names 71.1%

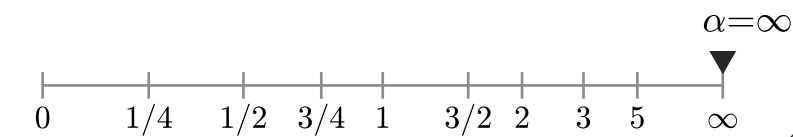
49.9%—50.1%

Ω_1 : Baby girl names in 1968, top $10^{3.5}$

Ω_2 : Baby girl names on 2018, top $10^{3.5}$

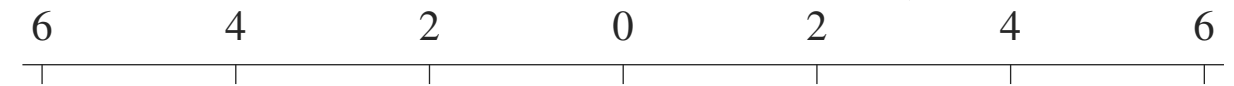
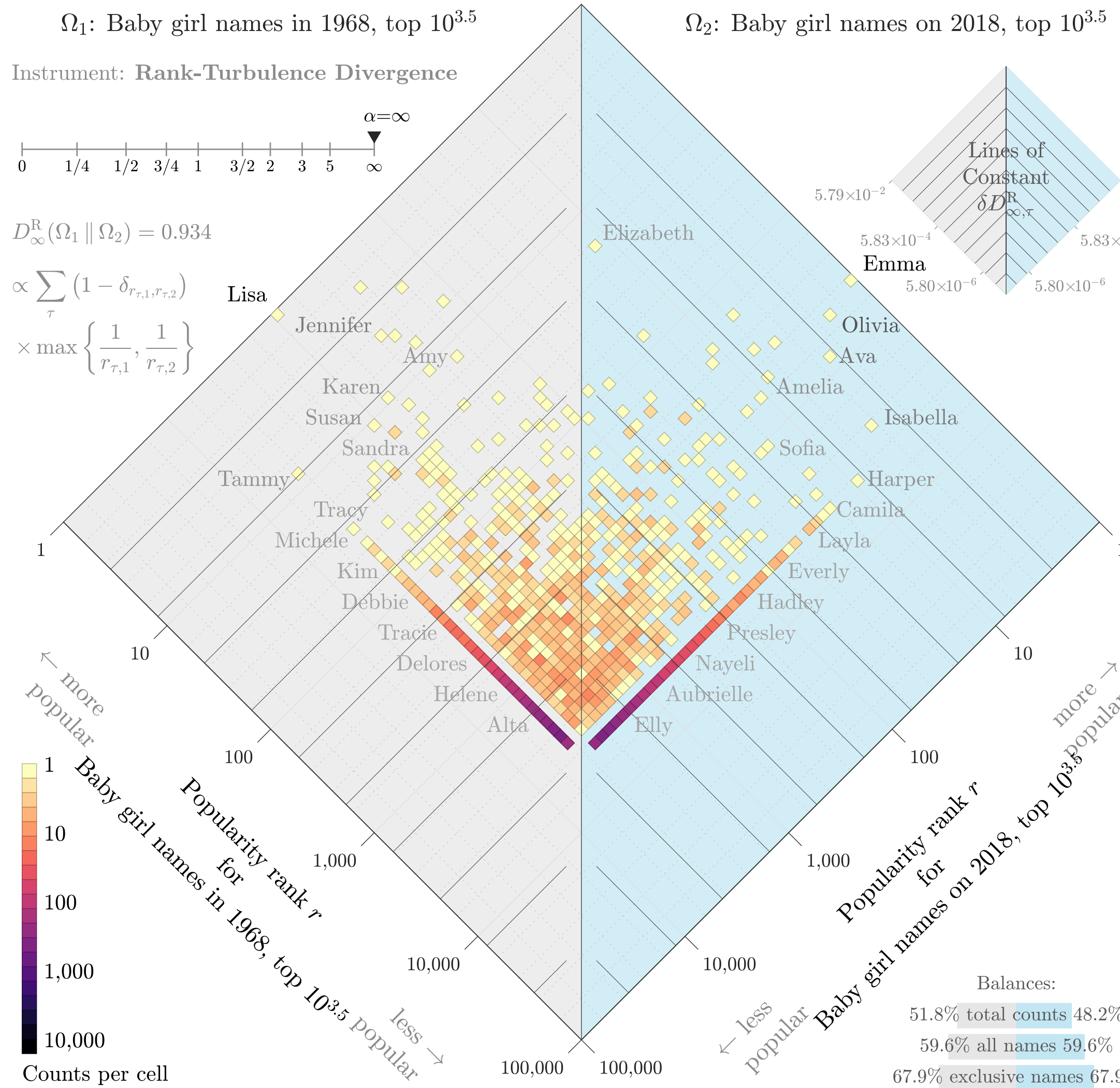
Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

Instrument: Rank-Turbulence Divergence



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.934$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}}) \times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$



Name	1968 Rank	2018 Rank	Divergence Contribution (%)
Lisa	1	888	0.0
427	1	Emma	0.0
Michelle	2	263	0.0
530	2	Olivia	0.0
Kimberly	3	170	0.0
743	3	Ava	0.0
Jennifer	4	344	0.0
2,745	4	Isabella	0.0
Melissa	5	296	0.0
393	5	Sophia	0.0
Mary	6	126	0.0
163	6	Charlotte	0.0
Angela	7	264	0.0
335	7	Mia	0.0
4,236	8	Tammy	0.0
489	8	Amelia	0.0
Karen	9	634	0.0
4,236	9	Harper	0.0
Susan	10	1,079	0.0
192	10	Evelyn	0.0
Laura	11	340	0.0
592	11	Abigail	0.0
Kelly	12	618	0.0
225	12	Emily	0.0
Amy	13	205	0.0
17	13	Elizabeth	0.0
Christine	14	926	0.0
2,393	14	Mila	0.0
Patricia	15	911	0.0
544	15	Ella	0.0
Julie	16	588	0.0
3,010	16	Avery	0.0
1,127	17	Sofia	0.0
Tina	18	1,679	0.0
4,236	18	Camila	0.0
Cynthia	19	694	0.0
4,236	19	Aria	0.0
Pamela	20	1,582	0.0
1,037	20	Scarlett	0.0
Dawn	21	1,965	0.0

Balances:
 51.8% total counts 48.2%
 59.6% all names 59.6%
 67.9% exclusive names 67.9%

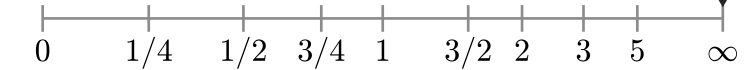
Ω_1 : Baby girl names in 1968, top $10^{4.0}$

Ω_2 : Baby girl names on 2018, top $10^{4.0}$

Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

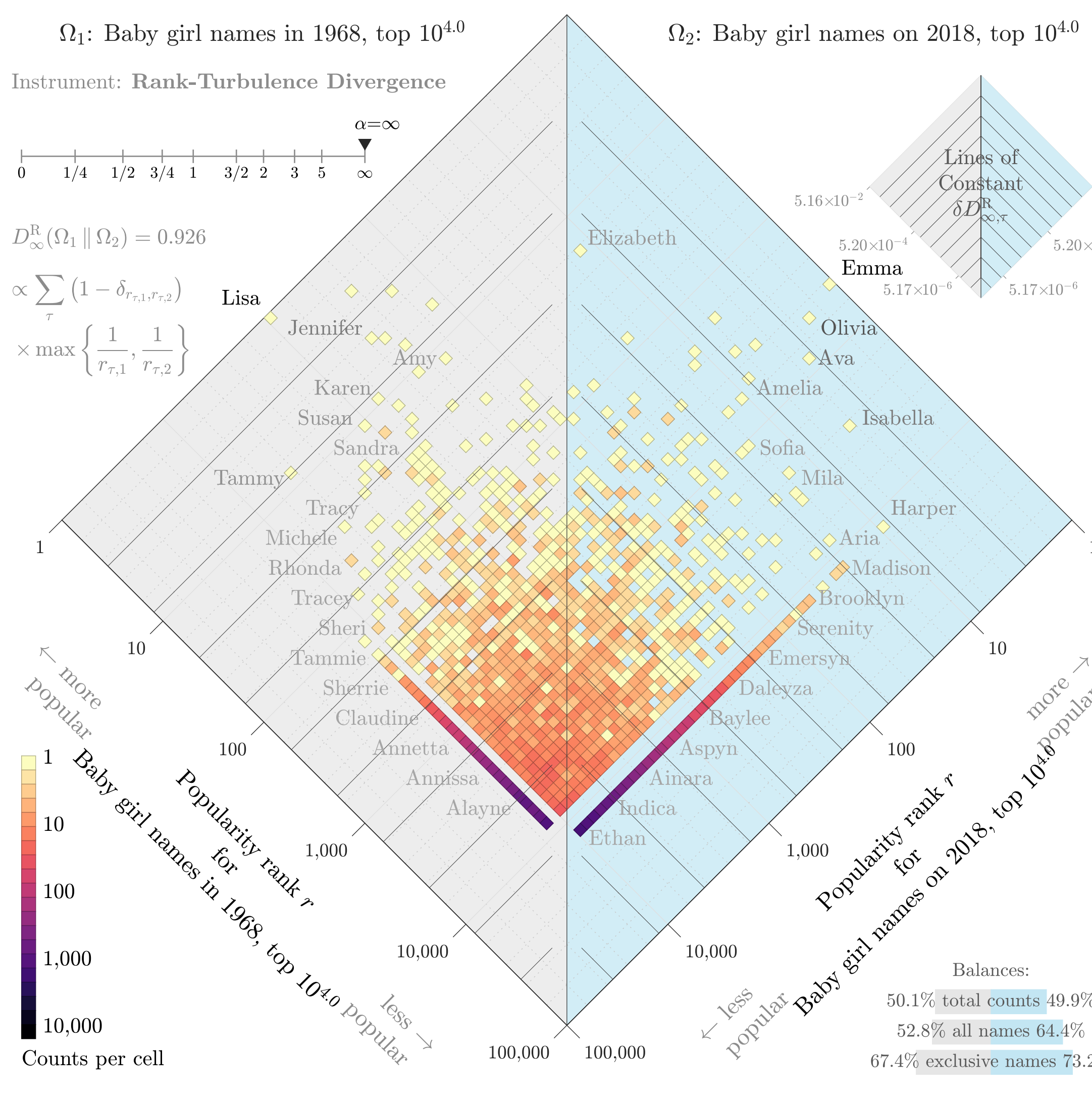
Instrument: Rank-Turbulence Divergence

$\alpha = \infty$



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.926$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}}) \times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$



Balances:
 50.1% total counts 49.9%
 52.8% all names 64.4%
 67.4% exclusive names 73.2%

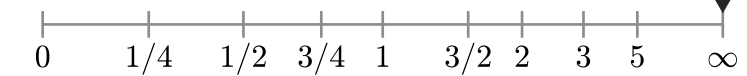
Ω_1 : Baby girl names in 1968, top $10^{4.5}$

Ω_2 : Baby girl names on 2018, top $10^{4.5}$

Divergence contribution $\delta D_{\infty, \tau}^R$ (%)

Instrument: Rank-Turbulence Divergence

$\alpha = \infty$



$$D_{\infty}^R(\Omega_1 \parallel \Omega_2) = 0.926$$

$$\propto \sum_{\tau} (1 - \delta_{r_{\tau,1}, r_{\tau,2}}) \times \max \left\{ \frac{1}{r_{\tau,1}}, \frac{1}{r_{\tau,2}} \right\}$$

