

Oct. 24, 2024

The Political Economy of Data Protection Laws

Edward R. McNicholas
Ropes & Gray LLP

Christopher Crum
Oxford Internet Institute

Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

1. Rule texts are getting statistically more similar over time as a simplified EU-style template is adopted domestically in an increasing number of jurisdictions.
 - A. More rules are almost direct copies of rules in other jurisdictions than at any point in the history of data protection law.
 - B. Regional grouping appears to be more prevalent than continued convergence on or direct copying of the DPD or GDPR
2. Emulation, rather than “learning,” appears to drive many new adoptions.

Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

Tversky Index

$$S(X, Y) = \frac{|X \cap Y|}{|X \cap Y| + \alpha |X \setminus Y| + \beta |Y \setminus X|}$$

Jaro-Winkler

$$sim_j = \begin{cases} 0 & \text{if } m = 0 \\ \frac{1}{3} \left(\frac{m}{|s_1|} + \frac{m}{|s_2|} + \frac{m-t}{m} \right) & \text{otherwise} \end{cases}$$

Monge-Elkan Token Comparison

$$ME(x, y) = \frac{1}{|x|} \sum_{i=1}^{|x|} \max_j \text{sim}(x_i, y_j)$$

Levenshtein

$$\text{lev}(a, b) = \begin{cases} |a| & \text{if } |b| = 0, \\ |b| & \text{if } |a| = 0, \\ \text{lev}(\text{tail}(a), \text{tail}(b)) & \text{if } \text{head}(a) = \text{head}(b), \\ 1 + \min \begin{cases} \text{lev}(\text{tail}(a), b) \\ \text{lev}(a, \text{tail}(b)) \\ \text{lev}(\text{tail}(a), \text{tail}(b)) \end{cases} & \text{otherwise} \end{cases}$$

Cosine & Jaccard Distance

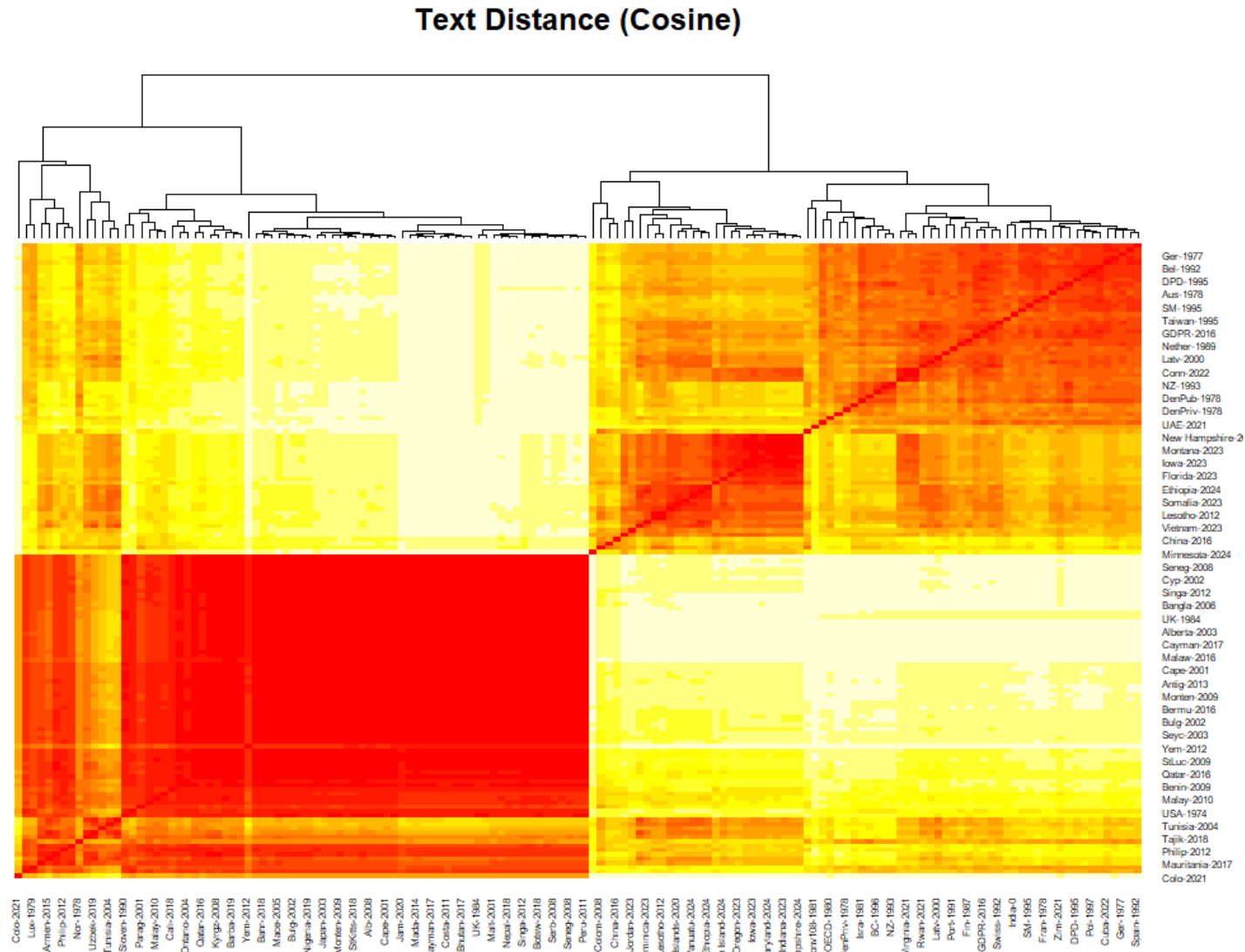
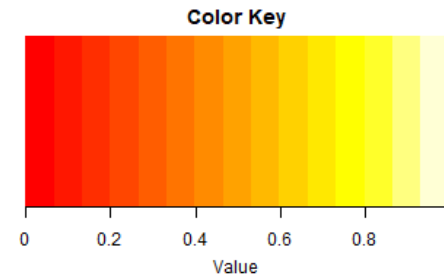
$$\text{Jaccard Distance} = 1 - \frac{|X \cap Y|}{|X \cup Y|}$$

$$\text{Cosine Distance} = 1 - \frac{(|A||B| \cos(\theta))}{|A||B|}$$

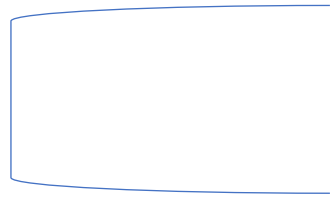
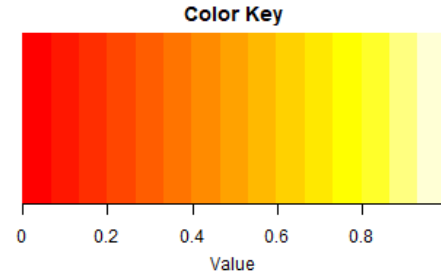
Measuring Convergence



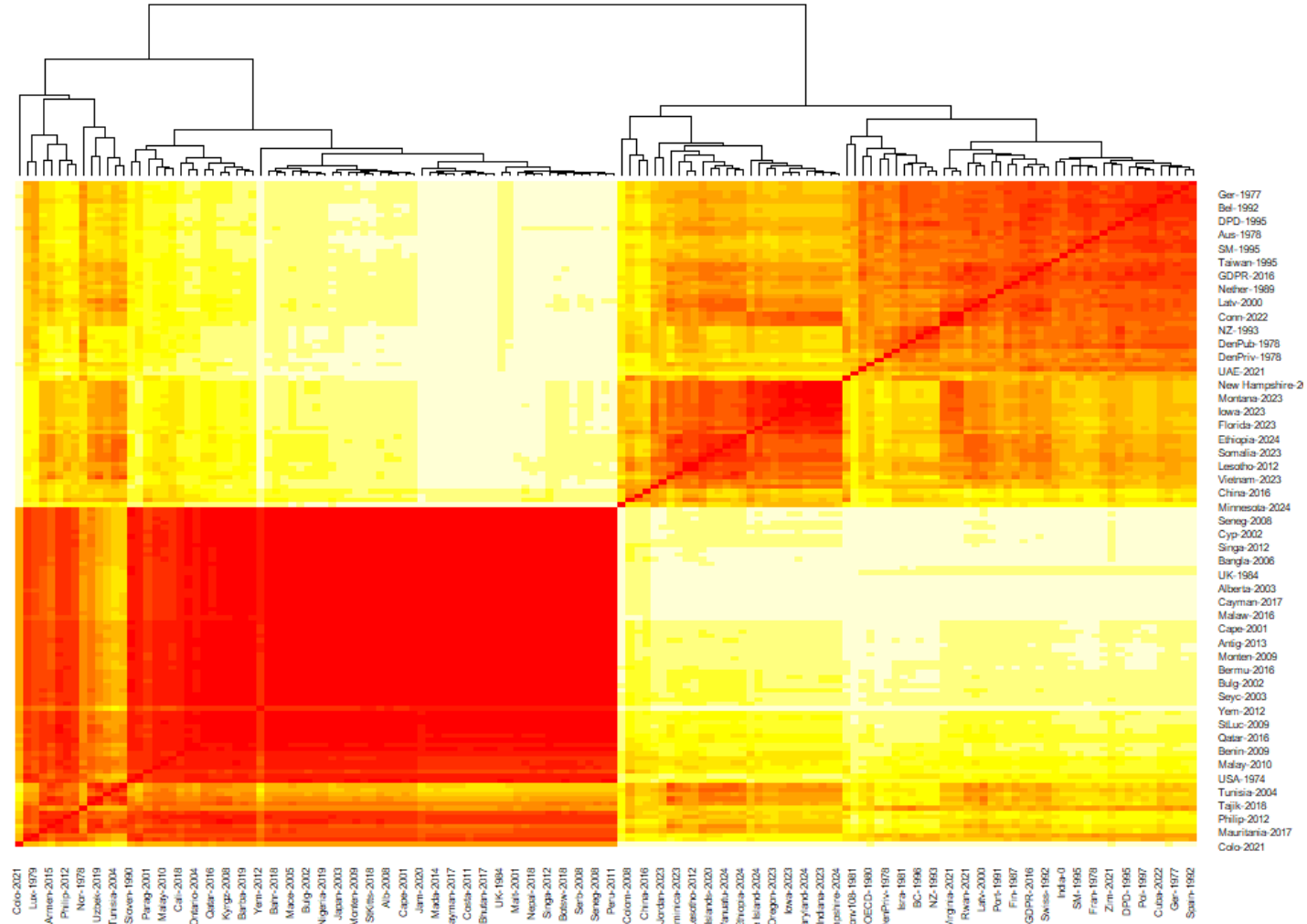
Measuring Convergence



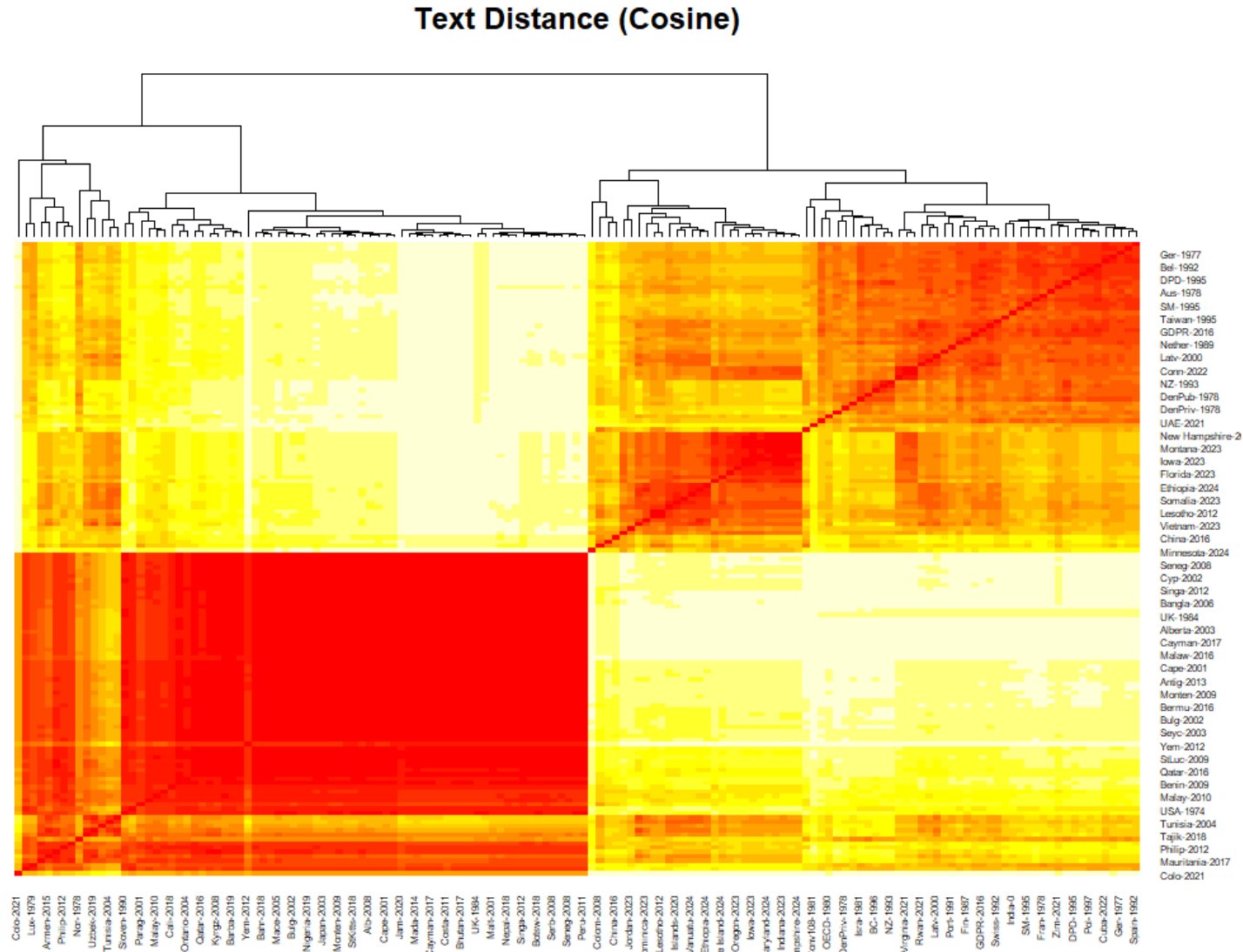
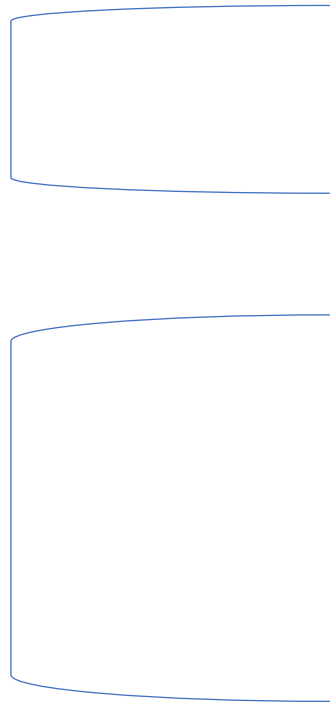
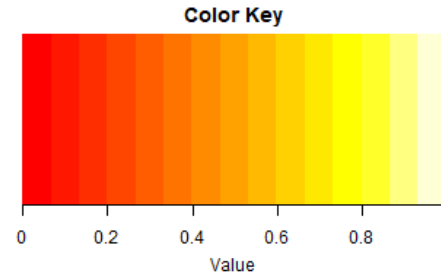
Measuring Convergence



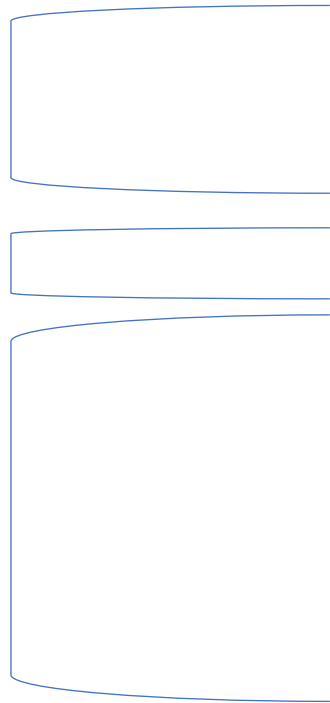
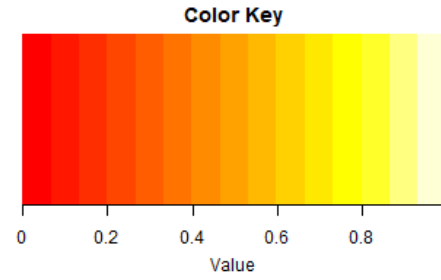
Text Distance (Cosine)



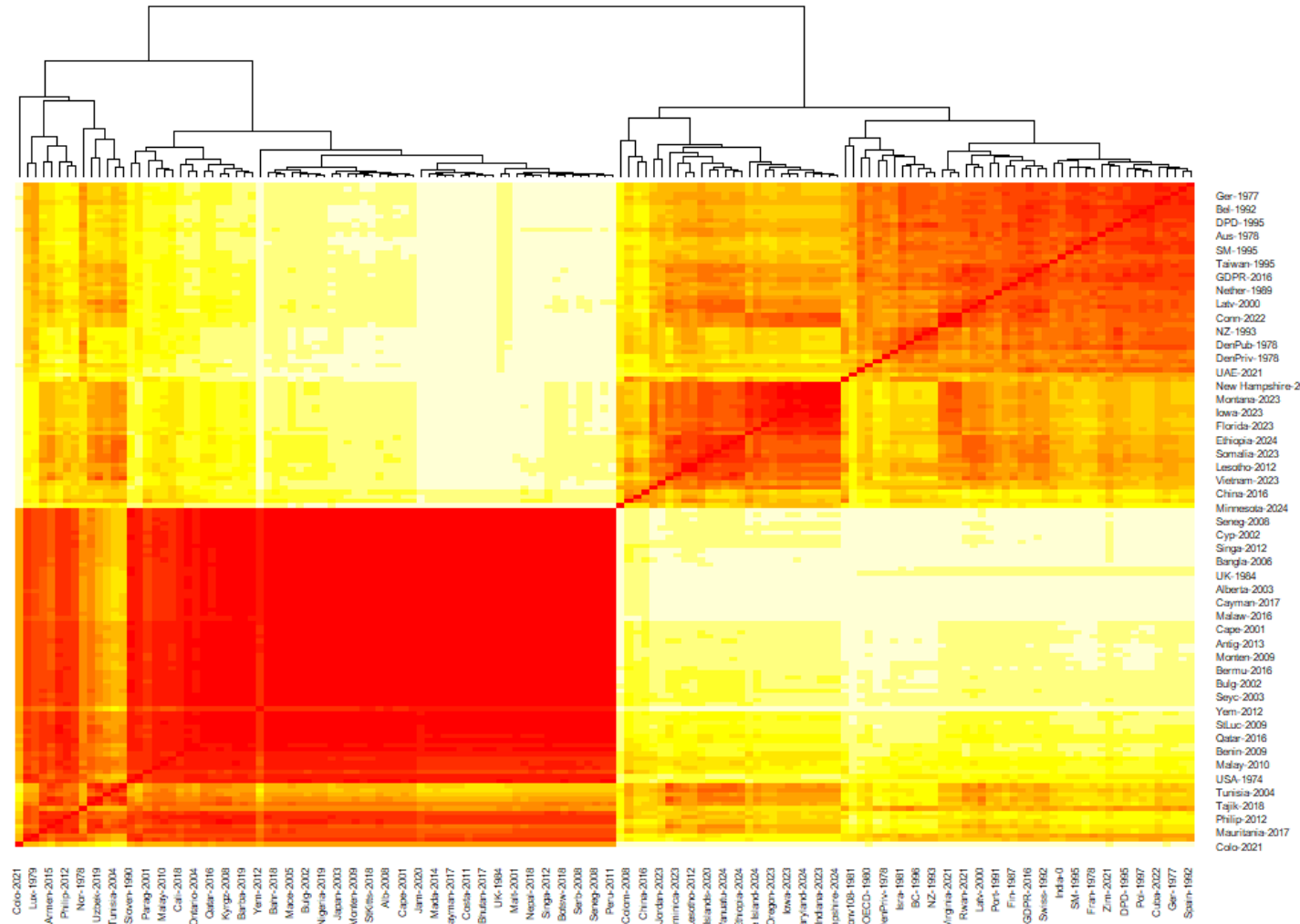
Measuring Convergence



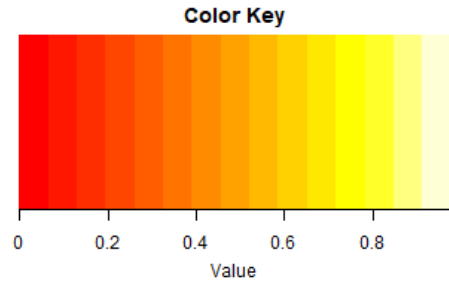
Measuring Convergence



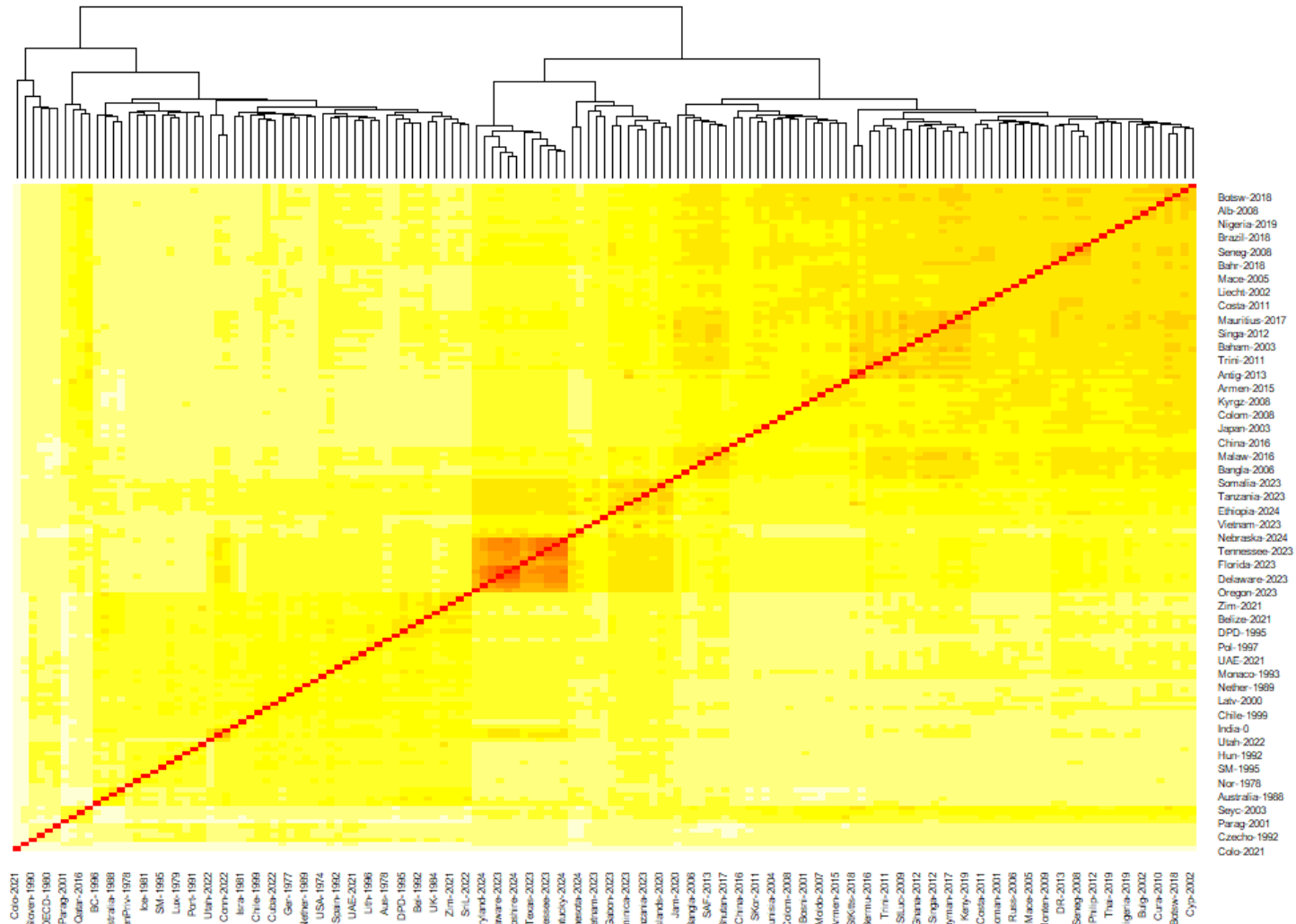
Text Distance (Cosine)



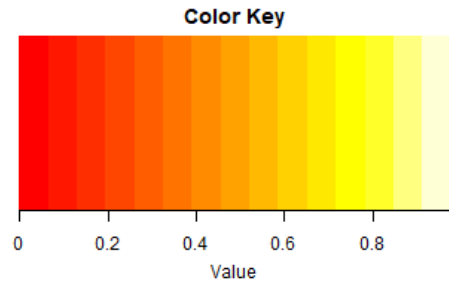
Measuring Convergence



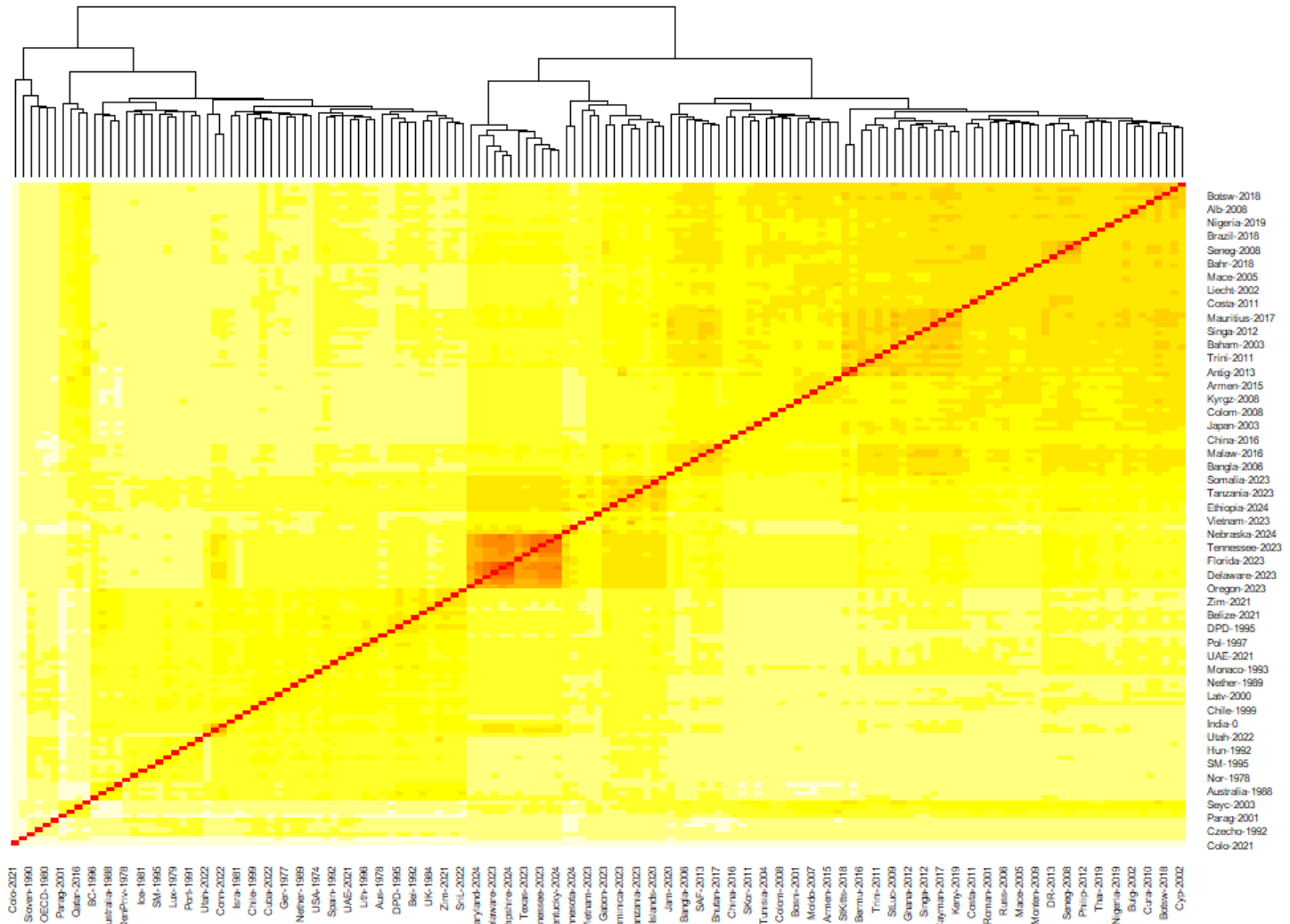
Text Distance (Jaccard)



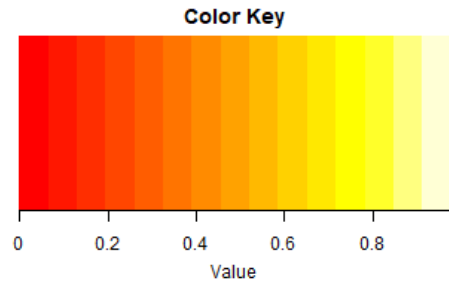
Measuring Convergence



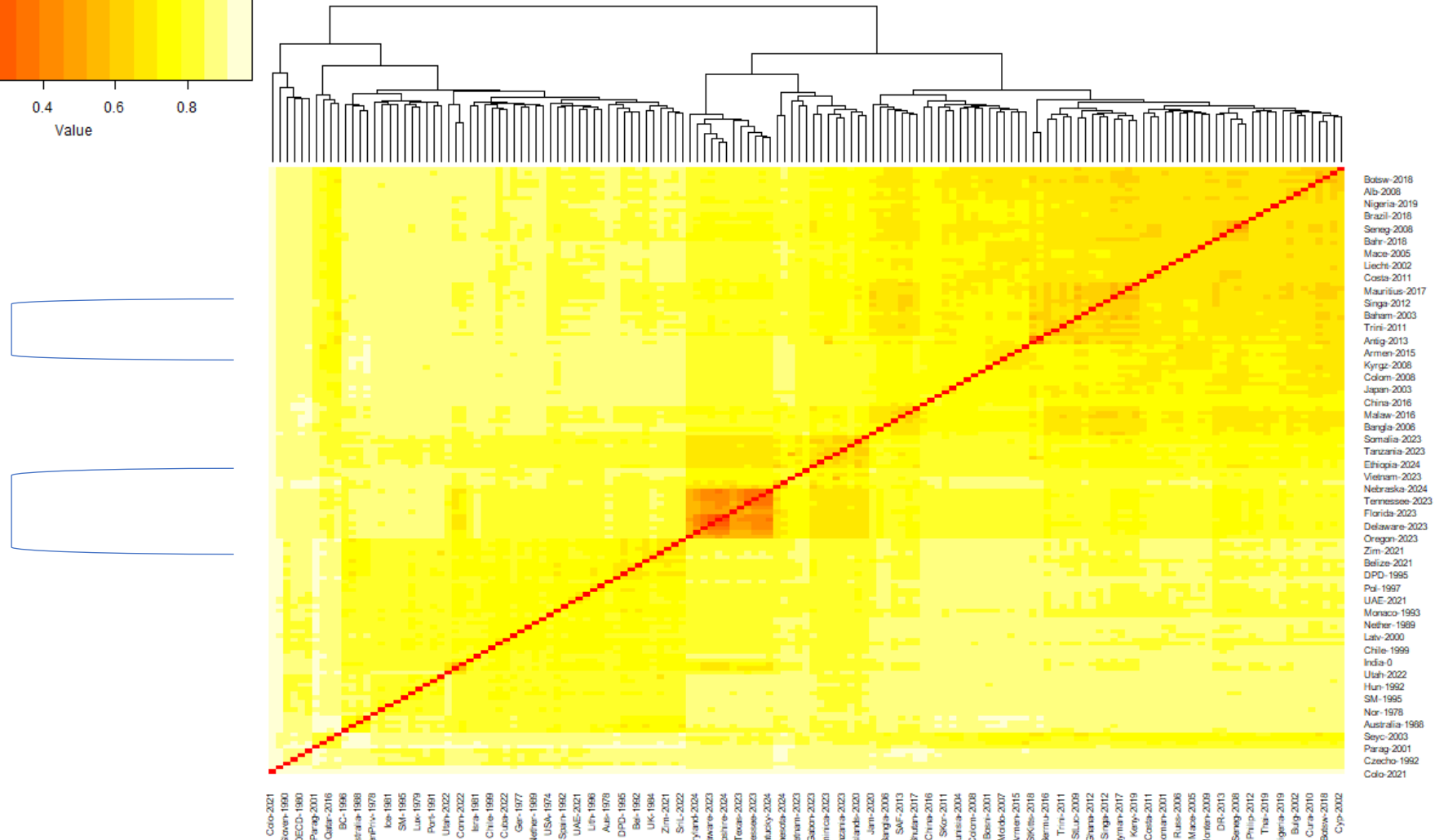
Text Distance (Jaccard)



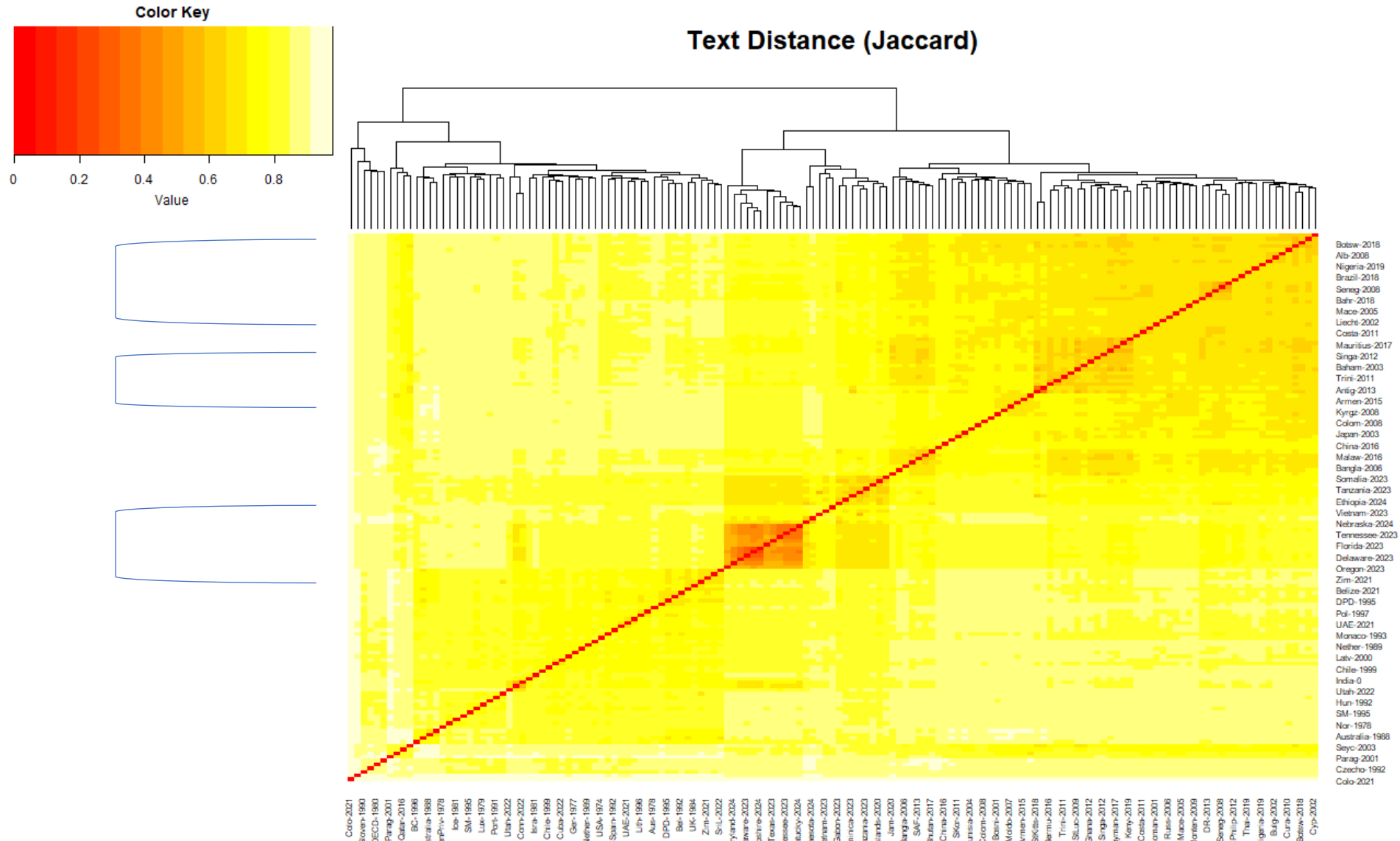
Measuring Convergence



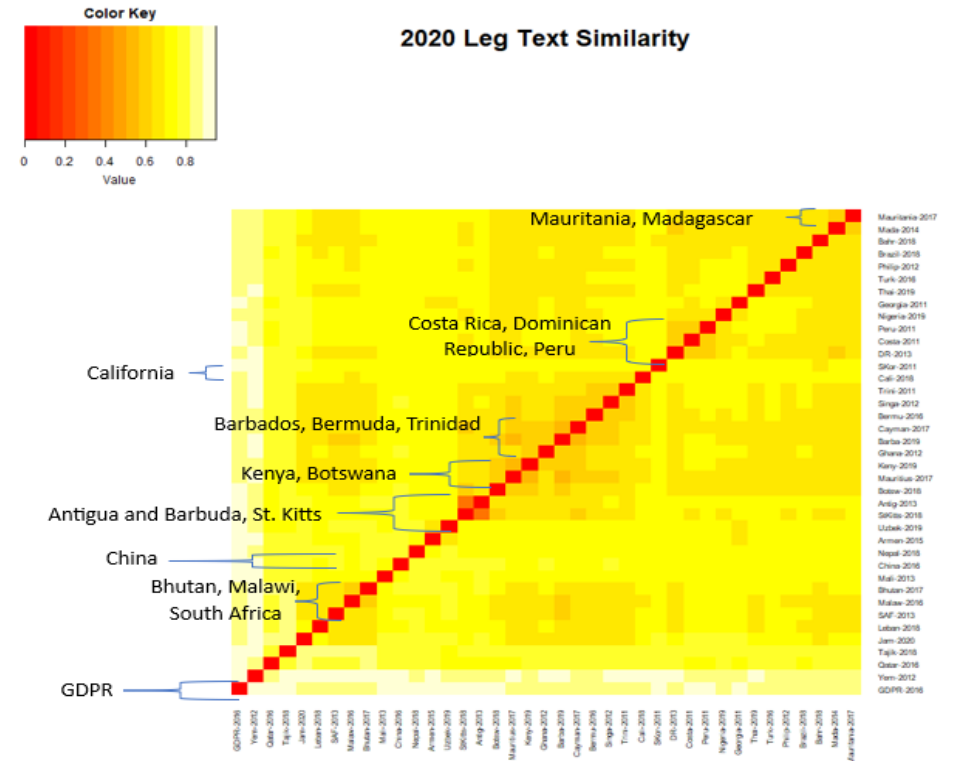
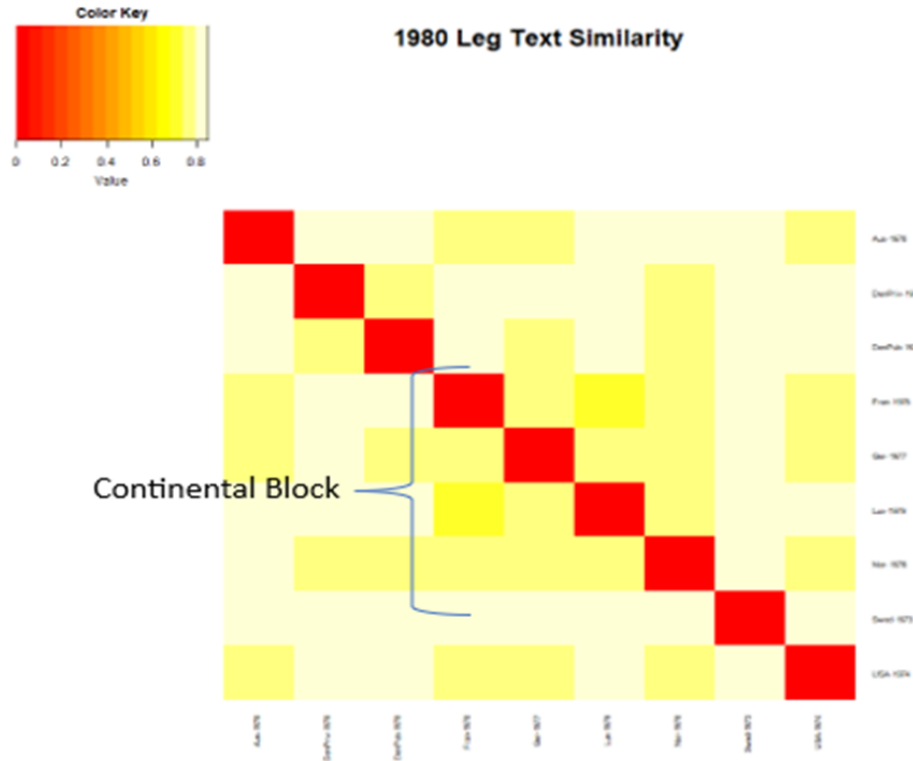
Text Distance (Jaccard)



Measuring Convergence



Measuring Convergence



Measuring Convergence

Benchmark	Rules	Jaccard Distance	Cosine Distance
Identical Rules	Statute of Anne 1710 UK	0	0
	Statute of Anne 1710 UK		
Known Copying	India 1956 Companies Act	.541	.147
	UK 1948 Companies Act		
Known Influence Range	Singapore Code of Corporate Governance 2001	.632	.162
	U.K. Code of Corporate Governance 2000		
	Copyright Act of 1790 US	.768	.420
	Statute of Anne 1710 UK		
	Art. 195 Codice di procedura penale 1988	.921	.710
	Federal Rules of Evidence Rules 801-804 (1988 version)		
Theoretically Distinct and Unrelated	IRC §501(c)(3) U.S.	.926	.795
	Sections 52-54 of the Fiscal Code Germany (<i>Abgabenordnung</i>)		
Completely Distinct Rules (no shared n-grams)	String “abc”	1	1
	String “def”		

Measuring Convergence

EU Key Idea	Island Group Equivalents	Southern Africa Equivalents
<p>Lawful Bases for Processing</p>	<p>Antigua and Barbuda:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person by law <p>Barbados:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person or public body by law (7) Legitimate interests of controller 	<p>Zambia:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of the data processor <p>Zimbabwe:</p> <ol style="list-style-type: none"> (1) Consent (2) Implied Consent (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of controller
<p>Data Protection Impact Assessments Required When</p>	<p>Barbados:</p> <ol style="list-style-type: none"> (1) A new technology is likely to result in “high risk to the rights and freedoms of an individual” <p>Trinidad and Tobago:</p> <ol style="list-style-type: none"> (1) A public body project would “substantially or materially impact personal information” 	<p>Zambia:</p> <ol style="list-style-type: none"> (1) Automated processing with legal effect (2) Large scale sensitive personal data processing (3) Systematic monitoring of a public area <p>Zimbabwe: none</p>

Measuring Convergence

EU Key Idea	Island Group Equivalents	Southern Africa Equivalents
<p>Lawful Bases for Processing</p>	<p>Antigua and Barbuda:</p> <ul style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person by law <p>Barbados:</p> <ul style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person or public body by law (7) Legitimate interests of controller 	<p>Zambia:</p> <ul style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of the data processor <p>Zimbabwe:</p> <ul style="list-style-type: none"> (1) Consent (2) Implied Consent (3) To comply with legal a obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of controller
<p>Data Protection Impact Assessments Required When</p>	<p>Barbados:</p> <ul style="list-style-type: none"> (1) A new technology is likely to result in “high risk to the rights and freedoms of an individual” <p>Trinidad and Tobago:</p> <ul style="list-style-type: none"> (1) A public body project would “substantially or materially impact personal information” 	<p>Zambia:</p> <ul style="list-style-type: none"> (1) Automated processing with legal effect (2) Large scale sensitive personal data processing (3) Systematic monitoring of a public area <p>Zimbabwe: none</p>

Measuring Convergence

EU Key Idea	Island Group Equivalents	Southern Africa Equivalents
<p>Lawful Bases for Processing</p>	<p>Antigua and Barbuda:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person by law <p>Barbados:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) To administer justice (6) To exercise a function conferred on a person or public body by law (7) Legitimate interests of controller 	<p>Zambia:</p> <ol style="list-style-type: none"> (1) Consent (2) To perform a contract (3) To comply with a legal obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of the data processor <p>Zimbabwe:</p> <ol style="list-style-type: none"> (1) Consent (2) Implied Consent (3) To comply with legal a obligation (4) To protect vital interests of the data subject (5) Public interest (6) Legitimate interests of controller
<p>Data Protection Impact Assessments Required When</p>	<p>Barbados:</p> <ol style="list-style-type: none"> (1) A new technology is likely to result in “high risk to the rights and freedoms of an individual” <p>Trinidad and Tobago:</p> <ol style="list-style-type: none"> (1) A public body project would “substantially or materially impact personal information” 	<p>Zambia:</p> <ol style="list-style-type: none"> (1) Automated processing with legal effect (2) Large scale sensitive personal data processing (3) Systematic monitoring of a public area <p>Zimbabwe: none</p>

Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

Why Convergence?

	Mechanism of Convergence	Primary Reason for Adoption in Third Country	Predicted Degree of Convergence	Efficacy of Global Data Protection Project
Realism	Domestic Interest Group Politics/Adequacy Decisions/Coercion	Economic Pressure	Highest	Low
Idealism	Cooperation/Bilateral Negotiation	Best Practice	Second Highest	High
Incrementalism	Path Dependence/Policy Learning	Mixed	Lowest	Mixed

Why Convergence?

	Mechanism of Convergence	Primary Reason for Adoption in Third Country	Predicted Degree of Convergence	Efficacy of Global Data Protection Project
Realism	Domestic Interest Group Politics/Adequacy Decisions/Coercion	Economic Pressure	Highest	Low
Idealism	Cooperation/Bilateral Negotiation	Best Practice	Second Highest	High
Incrementalism	Path Dependence/ Policy Learning	Mixed	Lowest	Mixed

Why Convergence?

Learning, to learn, v.

Legislative actors taking outcomes from other jurisdictions' legislation, including cost, economic effect, political effect, and effect on personal privacy into account when designing a domestic data protection regime

Why Convergence?

Imitating, to imitate, v.

Legislative actors copying legislation from other jurisdictions without waiting to observe outcomes

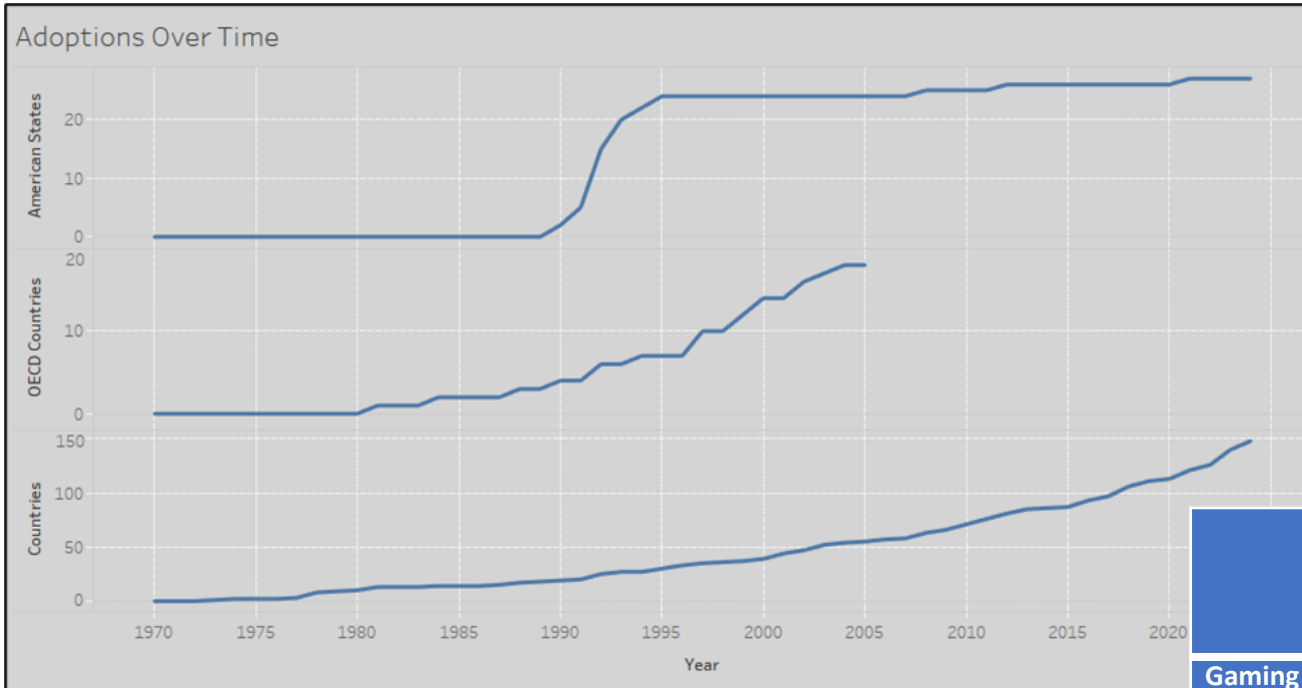
Why Convergence?

	Avg. Distance (Cosine) (Jaccard)	Similar Dyads (%) (Cosine < .2) (Jaccard < .69)	Avg. Years Between Top 4 Most Similar Dyads (Cosine) (Jaccard)
Gaming Compacts (n = 20)	.422 .824	7.4% 12.6%	8.75 8.5
Bills of Rights – Shared Legal Origin (n = 10)	.604 .840	0% 0%	28 38.5
Data Protection	.386 .752	1.39% 14.06%	3.5 3.5

Why Convergence?

	Avg. Distance (Cosine) (Jaccard)	Similar Dyads (%) (Cosine < .2) (Jaccard < .69)	Avg. Years Between Top 4 Most Similar Dyads (Cosine) (Jaccard)
Gaming Compacts (n = 20)	.422 .824	7.4% 12.6%	8.75 8.5
Bills of Rights – Shared Legal Origin (n = 10)	.604 .840	0% 0%	28 38.5
Data Protection	.386 .752	1.39% 14.06%	3.5 3.5

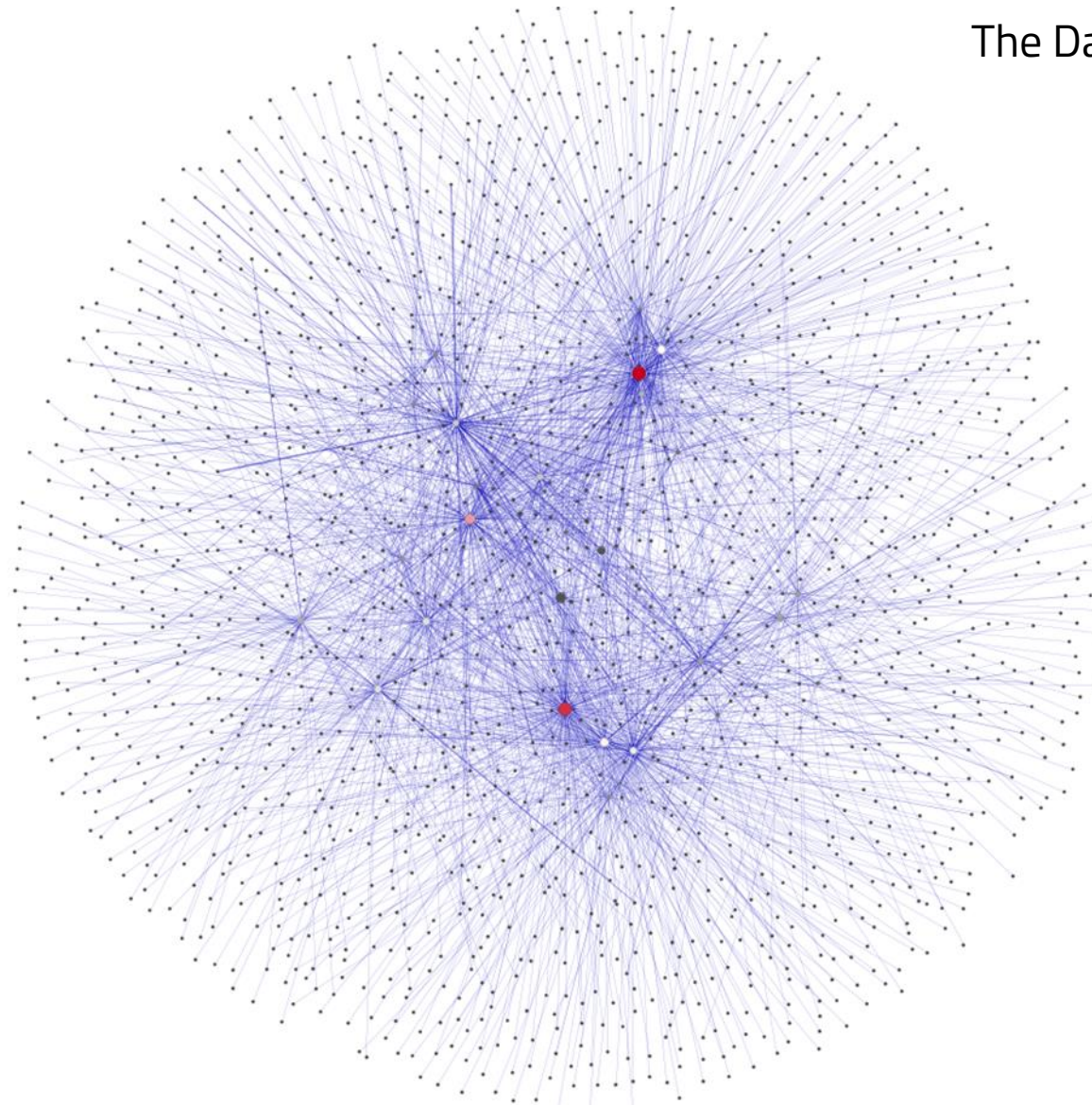
Why Convergence?



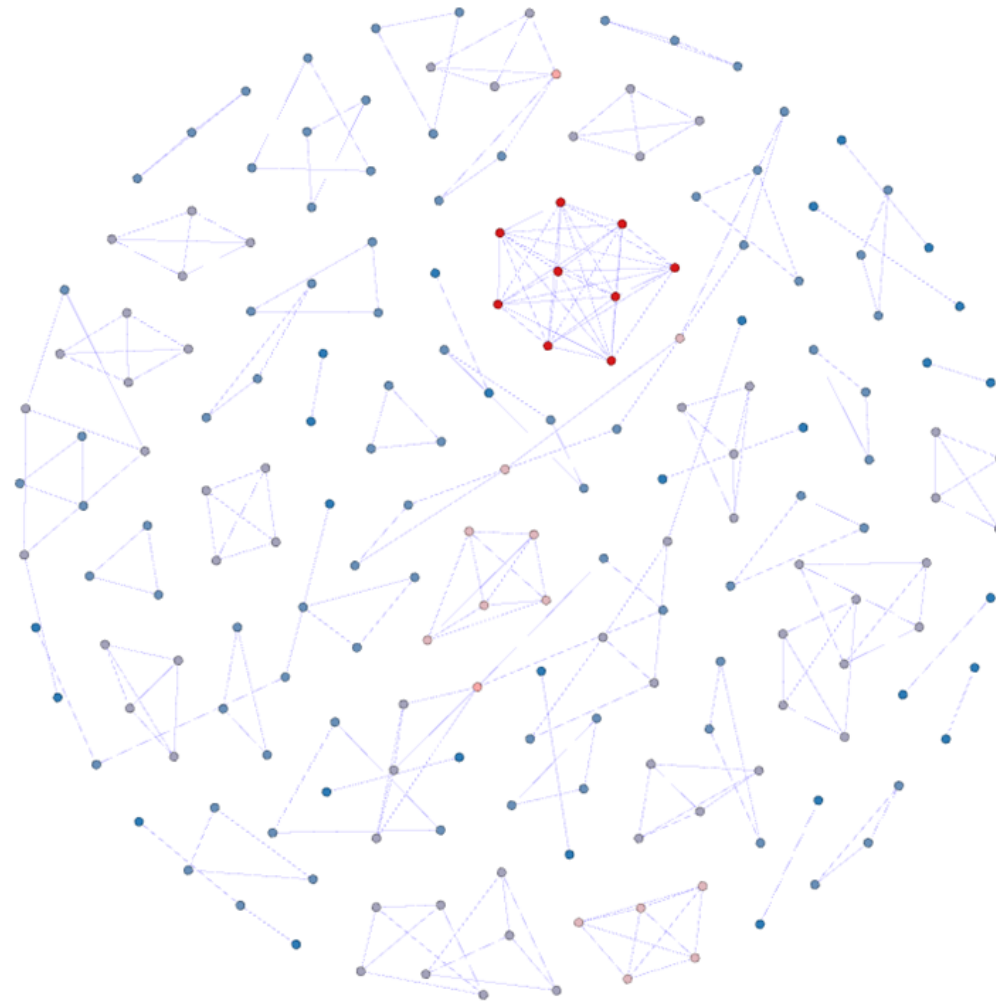
	# of Stasis Periods (Weighted by Total Years of Possible Adoption)	Time in Stasis Period (%)
Gaming Compacts (N = 1169)	4 (.108)	75.7%
Patient-Classification Systems (N = 19)	9 (.360)	52.0%
Data Protection (N = 148)	4 (.077)	13.5%

Why Convergence?

The Data Protection Epistemic Community



Why Convergence?



Is global convergence on EU-style data protection rules occurring?

If so, what factors contribute to it?

What are the normative and practical implications of convergence?

Questions and Contacts



**Edward R.
McNicholas**

Ropes & Gray LLP

Edward.McNicholas@ropesgray
.com



**Christopher
Crum**

Oxford University Internet Institute

christopher.crum@oii.ox.ac.uk