

Supporting Information

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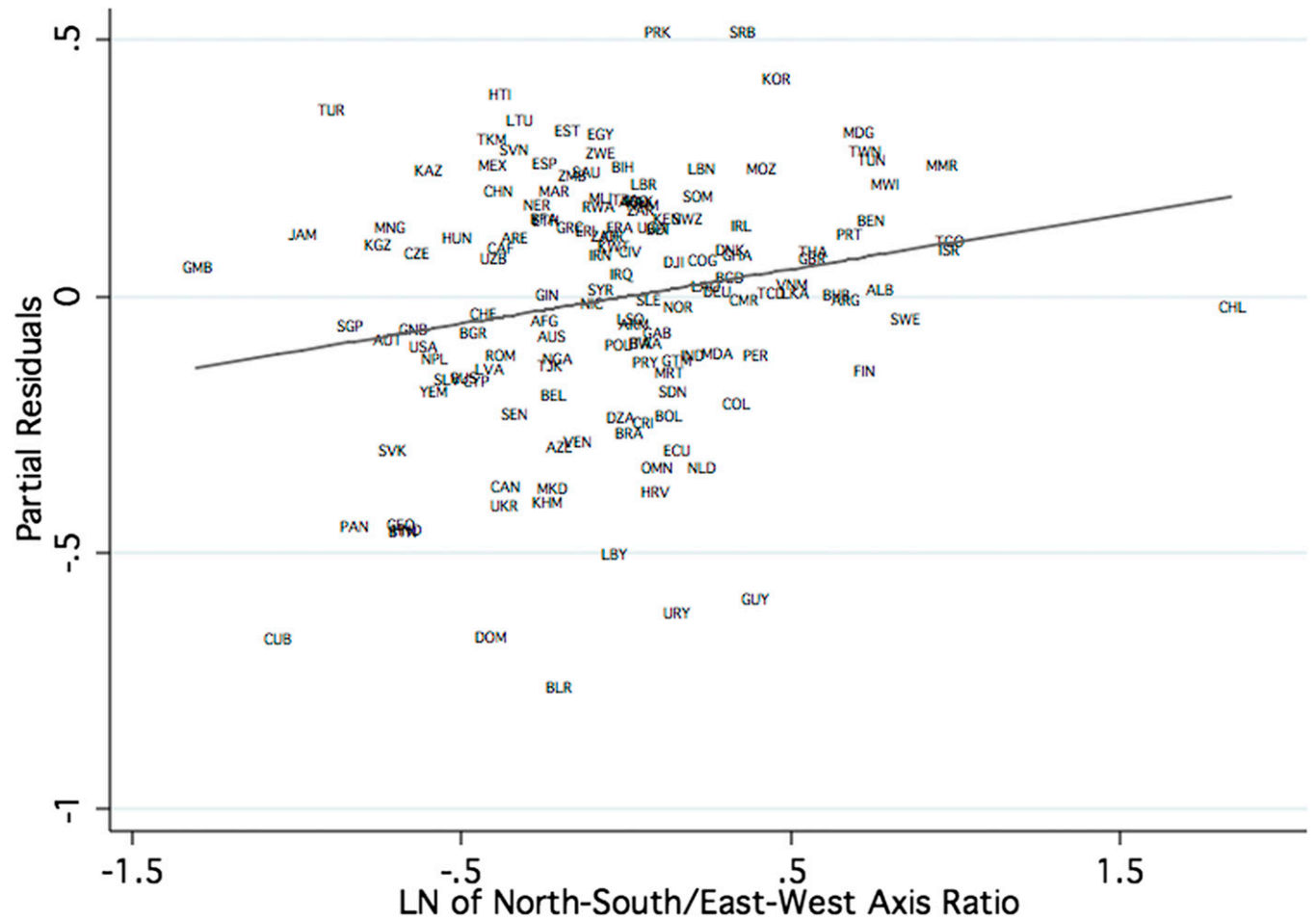


Fig. S1. Partial residuals plot showing the effect of axis ratio on the persistence of linguistic diversity, conditional on control variables (total number of historically spoken languages, distance from the equator, range in land quality, size of the country, elevation difference, and age of the country). Country code labels can be accessed in [Dataset S1](#).

Table S1. Summary statistics

Variable	Mean	SD	Minimum	Maximum	<i>n</i>
Axis ratio	1.09	0.65	0.27	6.26	147
Axis ratio, with S. America reversed	1.02	0.49	0.16	2.67	147
Proportion of language persistence	0.64	0.31	0	1	147
No. of self-perpetuating indigenous languages	27.65	59.87	0	493	147
No. of nonself-perpetuating indigenous languages	13.69	29.02	0	169	147
Total no. of indigenous languages	41.34	77.77	0	521	147
Distance from equator (degree latitude)	27.01	16.78	0	64	147
Range in land quality	0.71	0.29	0	1	147
Area (in 1,000s of km ²)	856	2,100	0.49	16,650	147
Elevation difference (1,000 m)	3.07	2.05	0.05	9.00	147
Age, decades since independence	8.83	5.62	1.9	19.6	147
Postcolonial state	0.43	0.50	0	1	147
Artificiality of state borders	-0.01	1.06	-2.10	3.47	110

Table S2. Geographic axes and the persistence of linguistic diversity, sensitivity to excluding control variables one at a time, ordinary least-squares regressions

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Axis ratio (natural log)	0.16**	0.18***	0.15**	0.16**	0.18***	0.12
	0.10 (0.04)	0.12 (0.04)	0.10 (0.04)	0.10 (0.04)	0.12 (0.05)	0.07 (0.05)
Total no. of languages		0.22***	0.16**	0.15***	0.15**	0.18***
		0.09 (0.02)	0.06 (0.02)	0.06 (0.02)	0.06 (0.02)	0.07 (0.02)
Equator distance	-0.22***		-0.20**	-0.17**	-0.16*	-0.27***
	-0.40 (0.14)		-0.37 (0.15)	-0.31 (0.15)	-0.29 (0.15)	-0.50 (0.14)
Land quality range	-0.10	-0.17*		-0.15*	-0.19**	-0.16*
	-0.11 (0.10)	-0.19 (0.10)		-0.16 (0.09)	-0.20 (0.10)	-0.17 (0.09)
Area in 1,000s km ² (natural log)	-0.03	-0.08	-0.13*		-0.13	-0.15*
	-0.01 (0.01)	-0.01 (0.01)	-0.02 (0.01)		-0.02 (0.01)	-0.03 (0.01)
Elevation difference in 1,000s m	-0.17**	-0.17**	-0.23***	-0.20***		-0.22**
	-0.03 (0.01)	-0.03 (0.01)	-0.03 (0.01)	-0.03 (0.01)		-0.03 (0.01)
Age of country in decades	-0.39***	-0.43***	-0.39***	-0.40***	-0.40***	
	-0.02 (0.00)	-0.02 (0.00)	-0.02 (0.00)	-0.02 (0.00)	-0.02 (0.00)	
Constant	1.12 (0.07)	1.10 (0.06)	1.13 (0.06)	1.11 (0.05)	1.16 (0.06)	1.12 (0.07)
Observations	147	147	147	147	147	147
Adjusted <i>r</i> ²	0.38	0.38	0.39	0.40	0.37	0.27

Standardized coefficients, ****P* < 0.01, ***P* < 0.05, **P* < 0.1; nonstandardized coefficients (robust SEs).

Table S3. Geographic axes and the persistence of linguistic diversity, South American axis ratio reversed, ordinary least-squares regression

Variable	Model
Axis ratio (natural log)	0.23***
	0.15 (0.04)
Total number of indigenous languages	0.15**
	0.06 (0.02)
Distance from equator	-0.18**
	-0.34 (0.14)
Land quality range	-0.13
	-0.14 (0.10)
Area in 1,000s km ² (natural log)	-0.09
	-0.02 (0.01)
Elevation difference in 1,000s m	-0.14*
	-0.02 (0.01)
Age of country in decades	-0.36***
	-0.02 (0.00)
Constant	1.14 (0.07)
Continent fixed effects?	No
Observations	147
Adjusted <i>r</i> ²	0.42

Standardized Coefficients, ****P* < 0.01, ***P* < 0.05, **P* < 0.1; nonstandardized coefficients (robust SEs).

Other Supporting Information Files

[Dataset S1 \(XLSX\)](#)

[Dataset S2 \(XLSX\)](#)

[Dataset S3 \(XLSX\)](#)

[Dataset S4 \(XLSX\)](#)