Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

Shifting Routes, Shifting Attitudes

Oguz Keles

korkut.keles@upf.edu

Pompeu Fabra University: Universitat Pompeu Fabra

Article

Keywords:

Posted Date: March 4th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-6530618/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License

Additional Declarations: No competing interests reported.

Shifting Routes, Shifting Attitudes

Anonymized

April 2025

Abstract

This study examines how historical cross-cultural interactions under market conditions are associated with the formation of pre-industrial values and with contemporary democratic attitudes, revealing how shifts in trade routes reconfigured cultural dynamics over time. By focusing on proximity to choke points—namely the Bosphorus, Suez, Gibraltar, Bab-el-Mandeb, Strait of Hormuz, and the Strait of Malacca—I capture pre-1500 CE cross-cultural exchanges driven by historical trade. Additionally, I assess whether proximity to the closest natural harbor—a proxy for 19th-century seafaring advancements that shifted trade toward ports—is associated with contemporary democratic attitudes. The findings reveal a "cultural reversal" effect: regions historically characterized by high levels of cross-cultural interaction and associated democratic values now exhibit diminished support for democratic institutions. This shift coincides with major geopolitical and trade-route reconfigurations, including the decline in cross-cultural exchange in previously diverse regions following the rounding of the Cape of Good Hope and the rise of Atlantic trade. Crucially, contemporary democratic support is more strongly associated with distance from respondents' ancestral ethnolinguistic homelands than with distance from their current locations, highlighting the persistence of cultural imprints linked to historical trade-driven interactions. While natural harbors had no measurable impact on the pre-industrial roots of democratic values, they have played a key role in fostering democratic support through 19th-century seafaring innovations.

1 Introduction

The political and cultural landscape we see today is the result of centuries of historical developments. Contemporary political attitudes, including support for democracy, the spread of Islam, interethnic conflicts, and economic growth, are deeply shaped by these enduring forces [1, 2, 3, 4, 5]. Yet existing frameworks leave two issues unresolved: first, they rarely measure the pre-industrial formation of pro-democratic values directly; second, they offer limited guidance on how the legacy of cross-cultural exchange changes when the geography of exchange itself shifts. This study advances the literature by (i) constructing a systematic measure of the pre-industrial roots of democratic values from folklore evidence, (ii) linking trade-driven cross-cultural interaction to both these pre-industrial value orientations and contemporary support for democracy across the Old World (Europe–Asia–Africa), and (iii) using major route reconfigurations to examine the mechanisms through which historical cross-cultural interactions fostered these pre-industrial democratic roots, and to assess whether this legacy persists or reverses as previously prominent hubs of exchange lose exposure over time, and (iv) leveraging GPT-4o to classify folklore-based motifs in a cost-effective and scalable manner that yields patterns comparable to established folklore-based measurement approaches (e.g., [6]). In doing so, the paper complements work that emphasizes particular settings or outcomes—such as conflict in geographically constrained trade networks [4] or co-

operation in specific pre-industrial contexts[7]—by providing an integrated account of value formation, persistence, and the shifting spatial incidence of cross-cultural exchange at a broader comparative scale.

Across the Old World, trade concentrated in a small number of strategic choke points, fostering cosmopolitan social environments that were later unevenly affected by major reconfigurations of global trade routes. Choke points helped create cosmopolitan, multicultural environments that were open to difference [8, 9]. Istanbul itself exemplified this cosmopolitanism: as a Bosporus gateway, it hosted dense commercial communities of Genoese, Florentine, Greek, and Jewish merchants operating within an international trading milieu [10]. Similarly, Baghdad rose as a major entrepôt connected to Indian Ocean trade via the Persian Gulf and the Strait of Hormuz; in this commercially strategic setting, translation and scholarly exchange flourished—most famously the transmission of Ancient Greek texts and the prominent role of Jewish and other minority scholars in medicine and astronomy—contributing to the intellectual efflorescence often described as an Islamic "renaissance" [11].

These cross-cultural, trade-based social orders, however, were not historically fixed. The rounding of the Cape of Good Hope triggered a geographic "idling" of many traditional nodes: as trade shifted toward the Atlantic, once-central hubs such as Baghdad and Hormuz lost their locational centrality [12].[1] This economic marginalization often eroded democracy-adjacent values; the demand for cross-cultural brokers weakened, and societies could revert toward more insular, kin-based communal structures [8]. With steam technology, port cities became key agents of globalization [13], and Indian port settings provide concrete evidence of interethnic tolerance and accommodation under market conditions, alongside lower interethnic conflict (in contrast to higher conflict farther from port-city environments): in the Malabari ports, rulers refrained from oppressing Muslim merchants and accommodated their customs; Calicut hosted substantial resident Muslim trading communities; and in western India, Hindu authorities even granted land to a Muslim trader to found a colony at the adjacent port of Veraval[4].

Identifying the imprint of these historical trade-based interactions on pre-industrial values is difficult due to limited data capturing cultural norms prior to the Industrial Revolution—a challenge that has long constrained empirical analyses of the historical roots of democratic values. To address this, I draw on the Folklore Catalogue—originally compiled by Yuri Berezkin and introduced into social science by Stelios Michalopoulos and Melanie Meng Xue [14, 6]—which documents thousands of motifs from pre-industrial ethnolinguistic groups. However, higher-order concepts such as tolerance, justice, and fairness are rarely referenced explicitly in these motifs, highlighting the limitations of traditional keyword-based identification strategies. To overcome this challenge, I use a ChatGPT-4o–based classification step that leverages textual cues in motif descriptions to identify implicit expressions of democratic values. This approach not only enhances analytical precision but also offers a more nuanced and cost-efficient measure of the cultural foundations of democracy.

This study makes two core empirical contributions. First, it shows that proximity to major choke points—such as the Bosphorus, Suez, and the Strait of Malacca—is systematically associated with a higher prevalence of tolerant and democratic values in pre-industrial societies (Fig. 1). These choke points reflect pre-1500 exposure to cross-cultural trade under market conditions. However, this historical legacy does not uniformly persist: in regions where trade activity declined after the 16th-century rise of Atlantic seafaring and the rounding of the Cape of Good Hope, democratic values have eroded—a process I refer to as "cultural reversal." Second, the study uses proximity to the closest natural harbor—which captures 19th-century trade dynamics driven by steam-based

[1] Controlling for Mongol-era shocks, proximity to Islamic trade routes remains positively correlated with urbanization[12].

(a)

maritime advancements—to explain contemporary democratic attitudes. As expected, these natural harbors had no measurable impact on pre-industrial values, but they are significantly associated with increased democratic support in the modern era. Crucially, both effects—whether from choke points or natural harbors—emerge only when distances are measured from respondents' ancestral ethnolinguistic homelands rather than their current locations. This finding underscores that enduring cultural norms stem not from present-day geography, but from deep-rooted historical exposure to market-based cross-cultural interaction.

Underpinning values of democracy. Support for democracy can be traced even in societies that predate modern democratic regimes, through the presence of cultural norms aligned with democratic principles. Tolerance is a crucial mechanism by which democracies accommodate diversity. As Gibson notes, "a reasonable hypothesis is that as political tolerance increases, the likelihood of successful democracy increases" [15, p. 25]. Tolerance enables societies to resolve disputes among diverse groups [16]. Beyond tolerance, other values—such as personal autonomy, openness to diversity, and interpersonal trust— also help sustain democratic institutions [17].

Cross-cultural interaction under market conditions. While distance to inland trade routes is a valuable proxy for historical market exposure, it may not fully capture the cosmopolitan aspect of trade-driven cultural exchange. Travel between hubs was often unsafe—disrupted by nomadic incursions inland and threatened by piracy at sea—which limited sustained interaction along the routes themselves [8]. Instead, international trade tended to concentrate in strategic hubs, where luxury goods were exchanged among diverse communities and where trade diasporas—comprised of merchants from various ethnic backgrounds—settled due to the security and economic opportunity these locations offered [8].

Specifically, I exploit proximity to major historical trade hubs—known as choke points, such as the Bosphorus, Suez, Gibraltar, Bab-el-Mandeb, the

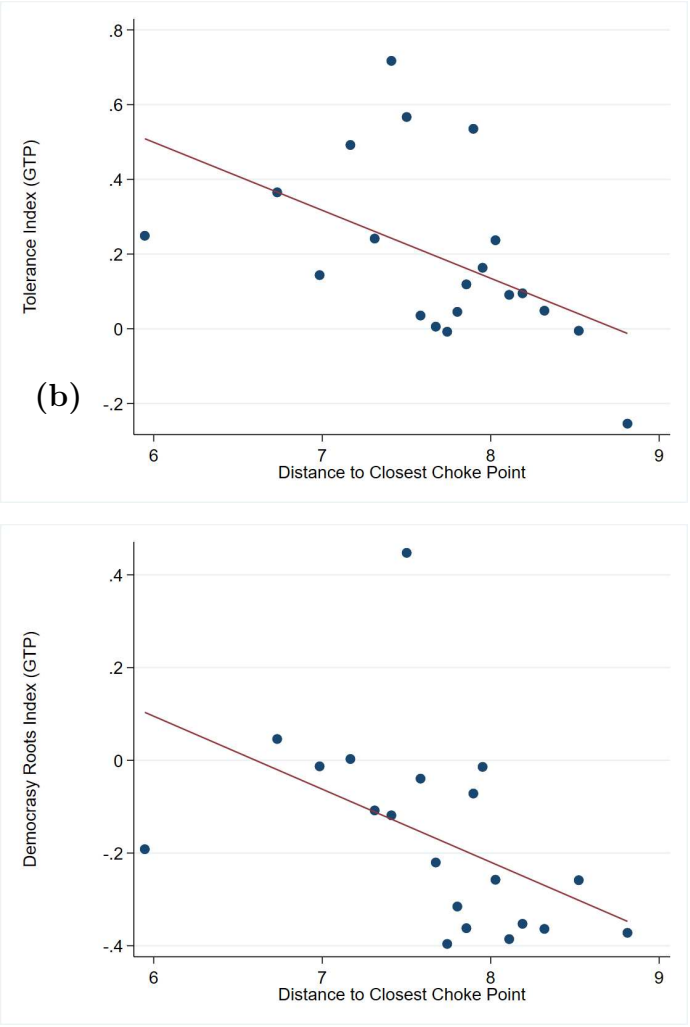


Figure 1: **Fig. 2 — Binscatter partial correlation plots for pre-industrial values and cross-cultural interaction under market conditions.** Each panel shows a partial correlation between the standardized Tolerance Index and the logarithm of distance to the nearest historical choke point. Observations represent ethnolinguistic groups from the Old World ($N = 477$), with at least five documented motifs. Control variables include the logarithm of the year of first publication and the number of publications; all specifications include continent fixed effects. **(a)** Partial correlation $\rho = -0.182$, $p = 0.007$. **(b)** Partial correlation $\rho = -0.157$, $p = 0.018$. Axes denote standardized (z-score) values and fitted lines are derived from residualized values.

Strait of Hormuz, and the Strait of Malacca—to capture cross-cultural market exposure prior to the 16th-century geographical realignments triggered by the rounding of the Cape of Good Hope and the rise of Atlantic trade (Fig. 2) [12, 8]. By contrast, the English Channel did not become a key hub of Eurasian commerce until European exploration and colonization transformed it into a maritime corridor for trade with the Americas and Africa, often under monopolistic or coercive arrangements [8].

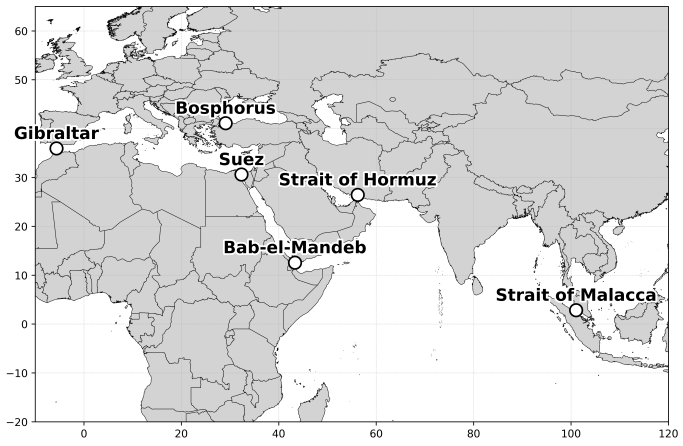


Figure 2: Primary historical trade choke points.

Market-based cooperation in those trade hubs relies on geographical and cultural diversity, yet it also elevates the costs associated with trust and cooperation [8]. Early trade networks faced considerable risks due to underdeveloped institutional settings that lacked effective mechanisms to enforce rules and protect transactions [9, 18, 8]. To mitigate these risks, different ethnic groups established trade diasporas in strategic hubs, reducing the costs associated with linguistic, religious, and cultural differences [9, 8] and those trade diasporas developed mechanisms such as maintaining a good reputation, honest signaling, and punishment of cheating [19, 20, 7]. These mechanisms sustain individually costly prosocial behaviors by rewarding cooperation and discouraging dishonesty, thereby establishing norms of trust and fairness that enable sustained impersonal cooperation [21].

As exposure to cross-cutting groups fosters more moderate attitudes [22], cross-cultural interaction under market conditions can increase tolerance.[2] According to contact theory, cooperative interactions reduce prejudice and improve intergroup attitudes [23]. A notable example of trade fostering tolerance is pre-Islamic Mecca, a major trading center in the Arabian Peninsula. The Quraysh, whose primary occupation was trade, were particularly known for their *hilm*—a term denoting tolerance and restraint—in which they avoided retaliation even when capable [24].

Changes in the Old Trade Routes. Historically, trade centers evolved in response to major geopolitical and technological changes. Two key transformations reshaped global trade: first, the 15th–16th century expansion following the rounding of the Cape of Good Hope, the discovery of the Americas, and the rise of Atlantic trade [8, 25]; and second, the 19th-century transition driven by advancements in seafaring and the adoption of steam technology [26]. At the same time, modern trade reduced reliance on diasporas to build trust, rendering earlier institutions—such as the Hanseatic League's London outpost and the Merchant Adventurers' base in Antwerp—obsolete as European merchants turned to local networks [8]. These shifts altered both the nature and geography of cross-cultural exchange. While proximity to choke points captures exposure to pre-16th-century trade, it does not reflect later dynamics.

Trade diasporas historically followed wealth and opportunity [27, 12, 8], but the redirection of trade routes diminished the relevance of once-prosperous regions. This economic decline often led to scapegoating and persecution of minorities, particularly merchant communities [28, 29]. The consequences of these changes depend on whether contemporary conditions are strong enough to override cultural values accumulated over time [1, 30, 31], or if these cultural values persist despite significant transformations [32, 22, 33, 17]. These significant changes in the geography of cultural exchange may have si-

[2] 'Moderate attitudes' is not synonymous with 'tolerance,' yet both align in the sense that tolerance helps protect society from extremists [16].

multaneously influenced societal values, potentially leading to what can be described as a 'cultural reversal' in these regions. Economic and institutional shifts can substantially reshape political attitudes, even over relatively short periods, independently from longstanding cultural traditions [1].

To clarify this mechanism more precisely, the term "cultural reversal" is used to denote a directional shift in the equilibrium content of culturally transmitted norms: from the more universalist, impersonal-cooperation-friendly values sustained by repeated cross-group exchange in trade hubs toward more parochial, locally enforced, kin-based/communal orientations once those exchanges contract. This is not "cultural decay" in a normative sense, but an adaptive transformation under a new incentive and institutional environment: as trade diasporas and their reputation-based mechanisms become less central, the returns to generalized trust and tolerance fall, while the incentives for within-group insurance, boundary maintenance, and scapegoating can rise [8, 28, 29].

2 Results

Data

This study integrates multiple datasets to investigate whether historical cross-cultural interactions shaped both pre-industrial and contemporary cultural values. Pre-industrial norms are proxied by the Folklore Catalogue, which includes 2,564 recurring motifs from 958 ethnolinguistic groups—551 of which are located in the Old World [14, 6]. Contemporary political attitudes come from the Integrated Values Survey (IVS; 1981–2022; 118 countries; 658,725 respondents). Since IVS does not record respondents' ethnic geolocation and only recent waves include contemporary coordinates, I merge the data with the Glottolog language catalogue using the IVS "language spoken at home" variable to assign ancestral homelands. Coordinates for major choke points (Bosphorus, Suez, Gibraltar, Bab-el-Mandeb, Strait of Hormuz, and the Strait of Malacca) are gathered using the Geopy library in Python, and distances to the closest choke point or natural harbor are calculated in kilometers using QGIS. Data on natural harbors are sourced from the National Geospatial-Intelligence Agency. This spatial linkage allows precise estimation of how proximity to historical trade hubs correlates with democratic values.

To empirically measure pre-industrial democratic norms, I construct two indices— the Tolerance Index and the Democratic Roots Index—based on motifs in the Folklore Catalogue. Each index is built using two distinct but complementary methods (detailed in Supplementary Section 1). First, I adopt the keyword-based approach developed by Michalopoulos and Xue [6], which identifies motifs containing explicit references to a seed set of 50 democracy-related keywords. However, such explicit references are rare for high-order concepts: tolerance appears in just 0.12% of motifs, justice in 0.47%, equality in 0.43%, and fairness in 0.31%. To address this limitation, I implement a second, context-sensitive approach using ChatGPT-4o to classify motifs by detecting implicit references to democratic values—such as tolerance, trust, fairness, emancipation from authority, and prosocial behavior—based on narrative events and behavioral cues. Contemporary democratic support is derived from IVS survey responses [3]

Empirical Methods

The empirical strategy employs Ordinary Least Squares (OLS) regressions to examine the impact of historical cross-cultural interactions—proxied by geographic proximity to pre-16th-century trade hubs (choke points)—on pre-industrial cultural values. The analysis utilizes the Folklore Catalogue from 477 ethnolinguistic groups in Europe, Asia, and Africa, constructing two indices: the "Tolerance Index" and "Democratic Roots Index." Each index is computed using both the default keyword-based classification [6] and a novel, context-sensitive classification implemented using ChatGPT-4o in an API environment. To account for potential omitted-variable bias, regressions include continent and country fixed effects, control-

[3] See Supplementary Section 4 for details.

ling for heterogeneity across societies. Additionally, the models control for the number of documented folklore titles and the earliest year of folklore publication to mitigate biases from documentation intensity and changes in collection methods over time. Standard errors are clustered at the language level to address Galton's problem of spatial correlation, acknowledging non-independence among related ethnolinguistic groups. Robustness checks also include controlling for historical conflicts (see Supplementary Table 2).

Contemporary democratic attitudes are analyzed using the Integrated Values Surveys (IVS), matching respondents' reported ethnicity to ancestral homelands using Glottolog geolocations. The baseline specification includes country fixed effects, survey-wave fixed effects, and individual controls for age, gender, marital status, and employment, with standard errors clustered at the country level. To ensure that respondents experience comparable institutional environments, the main sample excludes immigrants. A set of robustness checks further adds religion dummies, town-size controls, and origin macro-region fixed effects. To address concerns about geographic confounding and long-run mobility (and the potential attenuation from intergroup mixing over centuries), additional specifications control for predetermined ancestral-homeland characteristics: the Human Mobility Index (HMI) [34, 35], which proxies terrain- and travel-friction-based isolation and may partially capture differences in historical intergroup mixing by proxying long-run geographic isolation; and pre-1500 caloric suitability [36], a well-established geographic determinant of long-run development (see Supplementary Table 8).

Empirical findings support the hypothesis that historical cross-cultural interactions—proxied by distance to the closest choke point—are systematically associated with pre-industrial cultural values conducive to democracy. In baseline regressions with country-fixed effects and standard errors clustered by language family, the coefficient on the logarithm of distance to choke points is consistently negative and statistically significant (see Supplementary Table 1). This indicates that ethnolinguistic groups located farther from historical choke points exhibit fewer motifs associated with democratic values. For the Tolerance Index, the estimated coefficient on ln(distance to the closest choke point) is approximately -0.267 (standard error 0.112, $p = 0.026$) using the default approach and -0.349 (standard error 0.092, $p = 0.001$) under the GPT approach. For the Democracy Roots Index, the respective coefficients are about -0.226 (standard error 0.091, $p = 0.021$) and -0.208 (standard error 0.085, $p = 0.023$). Moreover, Supplementary Table 1 shows that substituting continent fixed effects for country fixed effects yields substantively similar results, and Supplementary Table 2 demonstrates that including historical conflict controls (e.g., the logarithm of conflicts from 1000 to 1500) does not diminish the effect of choke-point distance. [4] Adding the English Channel leaves the coefficient stable in sign and broadly similar in magnitude, but slightly reduces precision—so in Specification (6) it becomes marginally non-significant ($p = 0.107$) (see Supplementary Table 4).

By contrast, regressions that replace distance to the closest choke point with distance to the closest natural harbor do not yield similarly robust results (see Supplementary, Table 3). In Model 1, the baseline specification with country-fixed effects and standard errors clustered at the language level, the coefficient for the Tolerance Index under the default approach is -0.187 (standard error 0.058, $p = 0.004$). However, under the GPT approach (Model 3), the estimate decreases in magnitude and is no longer significant (-0.068, standard error 0.068, $p = 0.330$). For the Democracy Roots Index, the coefficients are small and remain statistically insignificant under both the default approach (0.091, standard error 0.061, $p = 0.150$) and the GPT approach (-0.074, standard error 0.061, $p = 0.241$). These patterns underscore that prox-

[4] Also Supplementary Table 11 reports the natural logarithm of the number of conflict occurrences and the distance to the closest choke point for Berezkin ethnolinguistic groups.

imity to natural harbors—reflecting 19th-century maritime innovations—fails to account for the enduring democratic norms captured in pre-industrial folklore as expected.

Cross-Cultural Interaction & Contemporary Support for Democracy

In the baseline OLS specification with country and year fixed effects, individual-level controls (age, gender, marital status, employment), and standard errors clustered by country ($N = 100{,}894$ observations), the coefficient on the logarithm of distance to the closest choke point is positive and significant (0.175, standard error 0.098, $p = 0.077$), while the corresponding estimate for distance to the closest natural harbor is negative and significant (-0.101, standard error 0.048, $p = 0.037$) (Supplementary Table 5). These patterns remain unchanged after controlling for additional factors—such as religion, town size, and origin macro-region fixed effects—in the subsequent specifications reported in the same table. Moreover, controlling for conflicts within a 100 km radius around respondents' ethnic locations or respondent's contemporary location does not alter the results (Supplementary Table 7). [5]

More importantly, using contemporary locations rather than historical ethnic homelands to compute distances results in small, statistically insignificant coefficients (see Supplementary Table 6). This indicates that the critical cultural imprint stems from where an ethnic group originally developed, rather than where its members currently reside. In other words, the norms and attitudes shaped by early cross-cultural trade persist through historical lineages and ancestral homelands, even if present-day populations have dispersed or migrated. Consequently, measuring distance from respondents' current residences fails to capture those deeper legacies of exposure to market-based interactions, underscoring that it is the historical rather than the contemporary environment that continues to inform modern democratic attitudes.

[5]Supplementary Table 11 documents that conflict exposure is correlated with distance to the closest choke point in country-level analyses across different historical periods; however, conflict measures are not significantly associated with democratic attitudes.

3 Discussion

Trade has long been central to debates in economic and political history, yet its broader cultural and democratic implications have often been overlooked. By examining a wide array of Old World societies, this study reconceptualizes trade as a social phenomenon that facilitates cross-cultural interactions, which over generations embed democratic norms in ethnic groups—even as political and economic contexts change. Our findings indicate that contemporary democratic support is best predicted not by respondents' present-day locations but by the geographic position of their ancestral homelands, particularly their proximity to historical trade hubs such as choke points or natural harbors.

The evidence suggests that pre-industrial cross-cultural exchanges fostered a suite of pro-democratic values that eventually set some societies on distinct developmental trajectories. As 16th-century trade routes shifted, traditional choke points lost some strategic relevance, and in certain regions, the historical legacy of vibrant trade-driven interactions gave way to what can be termed a "cultural reversal" in democratic support. Meanwhile, 19th-century maritime innovations that accentuated natural harbors contributed to robust contemporary democratic sentiment. Notably, modern geographic measures based on current locations fail to capture the long-run cultural imprint of historical trade networks—implying that enduring democratic values are rooted in past cross-cultural interactions, preserved in ancestral homelands rather than in present-day settlements.

References

[1] Acemoglu, D., Ajzenman, N., Aksoy, C. G., Fiszbein, M. & Molina, C. (successful) democracies breed their own support. *Review of Economic Studies* **92**, 621–655 (2025).

[2] Michalopoulos, S., Naghavi, A. & Prarolo, G. Trade and geography in the spread of islam. *The*

Economic Journal **128**, 3210–3241 (2018).

[3] Ashraf, Q. & Galor, O. The "out of africa" hypothesis, human genetic diversity, and comparative economic development. *American Economic Review* **103**, 1–46 (2013).

[4] Jha, S. Trade, institutions, and ethnic tolerance: Evidence from south asia. *American political Science review* **107**, 806–832 (2013).

[5] Acemoglu, D., Johnson, S. & Robinson, J. A. The colonial origins of comparative development: An empirical investigation. *American economic review* **91**, 1369–1401 (2001).

[6] Michalopoulos, S. & Xue, M. M. Folklore. *The Quarterly Journal of Economics* **136**, 1993–2046 (2021).

[7] Henrich, J. & Boyd, R. Why people punish defectors: Weak conformist transmission can stabilize costly enforcement of norms in cooperative dilemmas. *Journal of theoretical biology* **208**, 79–89 (2001).

[8] Curtin, P. D. *Cross-cultural trade in world history* (Cambridge University Press, 1984).

[9] Blaydes, L. & Paik, C. Old world trade diasporas. *Sociological Science* **11**, 1–41 (2024).

[10] Inalcik, H. & Quataert, D. *An Economic and Social History of the Ottoman Empire, 1300–1914* (Cambridge University Press, 1994).

[11] Goody, J. *Renaissances: the one or the many?* (Cambridge university press, 2009).

[12] Blaydes, L. & Paik, C. Muslim trade and city growth before the nineteenth century: comparative urbanization in europe, the middle east and central asia. *British Journal of Political Science* **51**, 845–868 (2021).

[13] Darwin, J. *Unlocking the world: port cities and globalization in the age of steam, 1830-1930* (Penguin UK, 2020).

[14] Berezkin, Y. E. Folklore and mythology catalogue: its lay-out and potential for research. *The Retrospective Methods Network* 58–70 (2015).

[15] Gibson, J. L. Enigmas of intolerance: Fifty years after stouffer's communism, conformity, and civil liberties. *Perspectives on Politics* **4**, 21–34 (2006).

[16] Lipset, S. M. Some social requisites of democracy: Economic development and political legitimacy1. *American political science review* **53**, 69–105 (1959).

[17] Inglehart, R. *Christian Welzel Modernization, Cultural Change, and Democracy The Human Development Sequence* (Cambridge: Cambridge university press, 2005).

[18] Greif, A. Reputation and coalitions in medieval trade: evidence on the maghribi traders. *The journal of economic history* **49**, 857–882 (1989).

[19] Panchanathan, K. & Boyd, R. Indirect reciprocity can stabilize cooperation without the second-order free rider problem. *Nature* **432**, 499–502 (2004).

[20] Gintis, H., Smith, E. A. & Bowles, S. Costly signaling and cooperation. *Journal of theoretical biology* **213**, 103–119 (2001).

[21] Henrich, J. *et al.* Markets, religion, community size, and the evolution of fairness and punishment. *science* **327**, 1480–1484 (2010).

[22] Putnam, R. D. Making democracy work: Civic traditions in modern italy (1994).

[23] Allport, G. W., Clark, K. & Pettigrew, T. The nature of prejudice (1954).

[24] Bosworth, C. E. *Encyclopaedia of Islam, volume 5-volume V (Khe-Mahi)* Vol. 5 (Brill Archive, 1986).

[25] Acemoglu, D., Johnson, S. & Robinson, J. The rise of europe: Atlantic trade, institutional change, and economic growth. *American economic review* **95**, 546–579 (2005).

[26] Pascali, L. The wind of change: Maritime technology, trade, and economic development. *American Economic Review* **107**, 2821–2854 (2017).

[27] Paik, C. & Shahi, K. Ancient nomadic corridors and long-run development in the highlands of asia. *Explorations in Economic History* **89**, 101482 (2023).

[28] Anderson, R. W., Johnson, N. D. & Koyama, M. From the persecuting to the protective state? jewish expulsions and weather shocks from 1100 to 1800. *Working Paper* (2013).

[29] Braudel, F. *Civilization and capitalism, 15th-18th century, vol. II: The wheels of commerce* Vol. 2 (Univ of California Press, 1992).

[30] Mishler, W. & Rose, R. Learning and re-learning regime support: The dynamics of post-communist regimes. *European Journal of Political Research* **41**, 5–36 (2002).

[31] Mishler, W. & Rose, R. Generation, age, and time: The dynamics of political learning during russia's transformation. *American journal of po-*

litical science **51**, 822–834 (2007).
[32] Huntington, S. P. The clash of civilizations? originally published in foreign affairs 72 (3), 1993. *Culture and Politics: A Reader* 99–118 (2000).
[33] Weber, M. *The Protestant ethic and the" spirit" of capitalism: and other writings* (Penguin, 2002).
[34] Özak, Ö. The voyage of homo-economicus: Some economic measures of distance (2010).
[35] Özak, Ö. Distance to the pre-industrial technological frontier and economic development. *Journal of Economic Growth* **23**, 175–221 (2018).
[36] Galor, O. & Özak, Ö. Land productivity and economic development: Caloric suitability vs. agricultural suitability. *Agricultural Suitability (July 12, 2015)* (2015).

Supplementary Information

This research includes supplementary material.

Acknowledgements

Author Contributions

The author designed the research, conducted the analysis, and wrote the manuscript.

Competing Interests

The author declares no competing interests.

Availability of data

Replication materials (data and constructed measures) used in the analyses include: the Integrated Values Surveys (IVS); the Folklore Catalogue; conflict data from the Historical Conflict Event Dataset (HCED, v2) and a geocoded contemporary conflict-event dataset (UCDP GED or ACLED); the World Port Index (WPI); Glottolog language metadata (e.g., language identifiers and coordinates); and geographic controls (ruggedness index, soil fertility/productivity, absolute latitude, and average distance to the nearest ice-free coast) taken from the publicly available replication files for "Ruggedness: The blessing of bad geography in Africa" (Nunn and Puga). The replication package includes the processed versions used in the analysis, the code that reproduces all merges and transformations, and the full set of geospatial distance measures (distance to the nearest pre-1500 choke point and to the nearest natural-harbor/port proxy) used in both the IVS and pre-industrial (Folklore Catalogue) analyses.

Ethical Approval

This article does not contain any studies with human participants performed by any of the authors.

Informed Consent

This article does not contain any studies with human participants performed by any of the authors.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- NatureSupplementary.pdf
- preindustrialanalysis.do
- preindustrialanalysis.dta
- contemporaryattitudes.do
- contemporaryattitudes.dta
- ReadMe.txt