Values of China: Toward a Cultural Map*

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Abstract

This paper constructs a cultural map of China by analyzing over 20,000 folktales collected in the 1980s, providing insights into the cultural traits that shape regional differences in economic outcomes. The folktales, deeply rooted in oral traditions, are used to quantify cultural themes such as trust, honesty, reciprocity, and effort. Using machine learning techniques, including BERT-based embeddings and Large Language Models (LLM) for thematic classification, this study develops a robust methodology for analyzing the content of historical narratives. These cultural traits are then correlated with contemporary attitudes and beliefs, as measured by the Chinese General Social Survey (CGSS), linking historical narratives to modern social and economic behaviors. The findings reveal that values like honesty and effort are positively associated with GDP per capita, while ancestor worship shows a negative correlation. The paper highlights the enduring relevance of cultural values embedded in historical folktales, demonstrating how these long-standing cultural traits continue to influence economic performance in modern China. This approach offers a replicable framework for analyzing cultural narratives and their impact on economic development, with implications for both China and other regions with rich cultural narratives.

Keywords: Culture, History, Growth, China

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I Introduction

Understanding the historical roots and regional variations of cultural values is vital for analyzing their influence on contemporary economic and political outcomes. Culture significantly shapes decision-making processes and societal structures, influencing economic performance, governance, and institutional development (Boyd and Richerson, 1985; Putnam, 1993; Boyd and Richerson, 2005; Nunn, 2012). Research has shown that cultural values—such as trust, social capital, individualism, and reciprocal norms—are particularly important in promoting economic growth and political stability, as demonstrated in historical contexts like the Industrial Revolution and in modern development (Tabellini, 2008; Gorodnichenko and Roland, 2017; Besley, 2020).

Comparative analyses of cultural and institutional evolution in Europe and China have also provided critical perspectives on divergent developmental pathways (Greif and Tabellini, 2017; Mokyr and Tabellini, 2024). For instance, Greif and Tabellini (2017) analyze how China's clan-based social structures fostered collective decision-making and hierarchical organization, contrasting with Europe's individualistic frameworks that supported the emergence of democratic governance and market-based economies. Similarly, Mokyr and Tabellini (2024) analyze how differences in social organization shaped technological innovation and economic progress, highlighting the role of culture in driving development.

Despite substantial advancements, systematically measuring cultural traits across time and space remains a significant challenge. This is especially true in the context of China, where the vast geographic and temporal scale, combined with limited data on localized cultural practices, creates a gap in understanding how these traits are distributed and how they relate to modern outcomes. Although a nascent literature has started to examine cultural narratives as a means of capturing enduring beliefs and practices (Michalopoulos and Xue, 2021), efforts to systematically quantify these traits at the local level, particularly within China, remain scarce.

China offers favorable conditions for studying historical cultural values, including extensive written records, diverse local traditions, and relatively recent urbanization. However, much of this potential remains unrealized due to historical barriers to anthropological research during the socialist period and the lack of systematic efforts to measure cultural traits across regions. Modern datasets, such as the CGSS, provide only limited geographic coverage and offer an incomplete picture of the country's historical cultural

traits and their regional variation. As a result, much of China's historical and regional variation in cultural traits remains underexamined.

These gaps are particularly striking given the historical continuity of cultural traits in China. Despite rapid modernization, much of the country's traditional social fabric remains intact due to relatively recent urbanization. Scholars such as Perkins et al. (1975) and Richardson (1999) have highlighted the importance of these enduring cultural traits in shaping local governance, economic behavior, and social interactions. Historical narratives, captured in folktales and other cultural artifacts, provide a crucial lens for understanding these continuities and their modern relevance.

To address these challenges, this study analyzes a dataset of over 20,000 folktales collected in the 1980s. These narratives were digitized and standardized, creating a structured dataset suitable for systematic analysis. Using this dataset, the study employs a methodological framework to quantify cultural themes embedded in the folktales. Synthetic archetypes representing key cultural topics—such as honesty, trust, charity, Confucianism, and gift exchange—serve as benchmarks for evaluating thematic similarity.

The thematic analysis leverages BERT embeddings to calculate similarity scores between the collected folktales and these synthetic benchmarks. Additionally, a large language model (LLM) classifies the thematic content of each tale into predefined cultural categories, offering a scalable and efficient alternative method for analyzing and categorizing thematic content. Together, these approaches provide complementary insights into how historical narratives reflect cultural values across regions.

By aggregating the similarity scores at the county level, the study links historical cultural traits to modern attitudes and behaviors using datasets such as the CGSS. Furthermore, it examines the relationship between these cultural traits and regional economic performance, specifically exploring whether historical narratives align with contemporary differences in GDP per capita.

This study makes several contributions. First, it provides a systematic cultural map of China, offering quantified measures of cultural traits across regions using historical narratives. By aggregating cultural themes derived from over 20,000 folktales, this research creates a geographically and thematically detailed representation of China's cultural characteristics. This cultural map fills a significant gap in the literature, where within-country analyses of cultural variation often lack systematic and consistent measures across multiple dimensions of culture. The framework established here enables future studies to explore local cultural traits and their relationships to economic and political phenomena.

Second, the research introduces historical cultural traits as an explanatory factor for regional economic disparities in China. While much of the existing literature attributes these disparities to institutional reforms, infrastructure development, and human capital investment (Lin, 1995; Brandt and Rawski, 2008; Zhu, 2012), this study demonstrates that cultural traits—such as trust, reciprocity, and effort—are also closely associated with contemporary governance practices and economic performance. By incorporating cultural factors into the analysis, the study broadens the scope of explanations for China's uneven growth and highlights the long-term impact of historical narratives on modern outcomes.

Third, the methodological framework used in this research contributes to the growing field of cultural quantification. While survey-based measures of cultural traits, such as trust or reciprocity, are well-documented, this study demonstrates how qualitative data from historical narratives can be systematically analyzed to quantify cultural themes. By combining machine learning methods—such as BERT embeddings and LLM-based classification—with large-scale historical datasets, the research offers a replicable approach for analyzing qualitative cultural data. This methodology can be applied to other regions, enabling comparative studies of cultural persistence and its economic implications.

Finally, the study contributes to debates on the relationship between historical narratives and institutional development. Comparative research has examined how cultural and institutional evolution diverged between Europe and China (Greif and Tabellini, 2017; Mokyr and Tabellini, 2024), shaping distinct developmental trajectories. This study shifts the focus to China's regional variation, exploring how historical cultural traits intersect with governance and economic outcomes. By offering a within-country perspective, it complements existing cross-country analyses and highlights the relationship between cultural legacies and contemporary economic development.

The remainder of this paper is organized as follows. Section 2 describes the data and methodologies employed in this study. Section 3 analyzes the values embedded in historical folktales and their connections to contemporary societal attitudes and behaviors. Section 4 explores the relationship between these cultural traits and economic growth. Section 5 concludes by summarizing the findings, discussing their contributions to the literature, and outlining directions for future research. Additional methodological details and supporting materials are included in the Appendix.

II Data and Methodology

This study analyzes cultural traits across regions in China using historical narratives, specifically folktales. Folktales offer insights into long-standing cultural values and norms that may not be fully captured through modern surveys, which tend to reflect contemporary attitudes influenced by recent societal changes. By contrast, folktales, shaped and transmitted through oral traditions over centuries, preserve the cultural beliefs and practices of earlier periods. They serve as a record of how communities articulated their values, moral frameworks, and social norms in the absence of formal written histories.

Unlike printed historical sources, which often reflect elite perspectives or state ideologies, folktales emerge from local communities, capturing the perspectives and experiences of ordinary people. This makes them particularly valuable for examining grassroots cultural traits that have persisted over time. Furthermore, the regional specificity of the collected folktales allows for a geographically granular analysis, linking historical narratives to local variations in cultural traits and contemporary outcomes.

The use of folktales in this study addresses the need for data that can illuminate the historical underpinnings of cultural traits while enabling cross-regional comparisons. By quantifying the thematic content of folktales, this approach provides a foundation for understanding the relationship between historical cultural values and modern economic and social outcomes.

II.A Background of the Folktale Collection Project

In the 1980s, China launched a large-scale initiative to systematically document folktales that had been orally transmitted for generations. This project, part of the "Three Collections of Chinese Folk Literature" initiative launched in 1984. It involved extensive fieldwork and collaboration among local storytellers, scholars, and recorders, resulting in a rich archive of narratives that were at risk of being lost amidst rapid modernization.

This period was particularly well-suited for such an effort: China was predominantly rural, with a GDP per capita of less than 350 USD, and much of its population still lived in close connection with traditional lifestyles and practices. The limited urbanization at the time meant that many local customs, belief systems, and oral traditions remained relatively intact. This provided an ideal setting for capturing these stories before the rapid modernization and urbanization of subsequent decades risked eroding these cultural traditions.

The project was driven by a top-down directive and relied on a collaboration between local storytellers, who shared the narratives, and recorders, who transcribed them. This collaboration ensured both authenticity and standardization in the documentation process. The consistent use of a uniform writing system throughout Chinese history further facilitated the task of transcription and analysis.

Despite the richness and scale of this archive, it has remained largely untapped in academic research. To date, no systematic effort has been made to examine these folktales on a national scale or to explore their potential for understanding historical cultural values, belief systems, or their connections to contemporary societal patterns.

Tales Recorded The folktale collection project spanned all provinces in China, documenting over 20,000 narratives that reflect the country's rich and diverse cultural heritage. Each province contributed a dedicated volume to this larger initiative, resulting in a geographically organized archive that enables detailed regional analysis of cultural variations. The folktales are linked to specific counties, allowing for granular tracing of narratives to almost all counties across China. This comprehensive coverage ensures that the dataset captures the full geographic diversity of the country.

The collected tales are categorized into themes such as myths, legends, and local stories. For example, myths like "Pangu Separates Heaven and Earth" delve into cosmological beliefs, while legendary love stories such as "The Butterfly Lovers" reflect moral and emotional ideals. Local stories often center around unique regional histories or practices. These narratives collectively showcase the thematic richness of China's folk traditions, capturing values and beliefs such as trust, kinship, and ancestor worship.

Storytellers and Collectors The collection of folktales relied on contributions from local storytellers, many of whom were peasants living in rural China. Among them, 2,166 were illiterate, and 2,931 had only elementary education. Peasants accounted for a significant portion, contributing 4,149 tales. The average age of the storytellers was 59.5 years.[1] Their predominantly rural backgrounds and illiteracy suggest that the narratives they shared were deeply rooted in oral traditions and largely uninfluenced by modern societal changes or written texts, preserving stories passed down through generations.

In contrast, the recorders of these tales were generally younger and more educated. Of the recorders, 5,412 had attained at least secondary education, with an average age of

[1] According to the 1982 census, over 70% of individuals aged 59 were illiterate. This high illiteracy rate makes the limited formal education of most storytellers unsurprising.

36.9 years. This combination of traditional oral storytelling and systematic transcription ensured the preservation of these narratives during a period of rapid modernization.

II.B From Tales to Values: Mapping China's Cultural Map

The process of analyzing cultural traits embedded in Chinese folktales begins with the digitization and preprocessing of the collected texts. Scanned folktales were converted into machine-readable formats using OCR technology, followed by a rigorous cleaning process to standardize terms, resolve inconsistencies, and ensure uniformity in linguistic structures across the dataset. These steps were essential for enabling systematic and scalable analysis.

Addressing the challenges of studying Chinese folklore requires innovative approaches. Unlike Western folklore studies, which benefit from standardized indices such as the Aarne-Thompson-Uther (ATU) system (Uther, 2004) or the Berezkin Catalogue (Berezkin, 2015), Chinese folklore lacks comparable resources. While Michalopoulos and Xue (2021) utilized the Berezkin Catalogue alongside ConceptNet (Speer, Chin, and Havasi, 2018) to analyze cross-cultural patterns in folktales,[2] its scope is insufficient for large-scale, regionally specific analysis. Moreover, the scale and complexity of the dataset require methods that can consistently classify and quantify cultural traits across thousands of narratives.

A methodological framework was developed to address these challenges, combining natural language processing (NLP) tools and machine learning techniques. This framework enables the systematic classification of thematic content while supporting robust regional comparisons.

At the core of this framework is the Synthetic Archetype approach. Synthetic Archetypes were designed to represent predefined cultural themes, such as honesty, Confucianism, and charity, while reflecting the linguistic and structural characteristics of traditional Chinese narratives. These archetypes act as benchmarks for evaluating the thematic content of folktales. Using the SentenceTransformer BERT model (`DMetaSoul/sbert-chinese-general-v2`), semantic similarity scores were calculated between each folktale and the Synthetic Archetypes. These scores quantify the degree of alignment between individual narratives and specific cultural themes.

For a county-level analysis, the similarity scores were aggregated at the county level,

[2]The Berezkin Catalogue can attribute motifs to regions within China but does so at a very coarse level, with only around 10 traditions for the Han Chinese. This limits its utility for more granular, within-country analyses.

enabling regional comparisons and providing insights into the spatial distribution of values such as trust, charity, and respect for tradition.

To ensure robustness, an alternative approach based on Large Language Models (LLMs) was incorporated. LLMs were used to classify the thematic content of folktales into predefined cultural categories, operating independently of the Synthetic Archetypes. The classification results from both methods were aggregated at the county level, and their alignment provided an additional layer of validation for the findings. This dual-method approach strengthens confidence in the results by minimizing reliance on a single methodological choice.

Validation To ensure the reliability and interpretability of the cultural measures derived from folktales, I validate the dataset through two key assessments: the consistency of measurements across different synthetic story versions and the alignment between independent analysis methods. These validation steps provide confidence that the observed patterns reflect meaningful cultural constructs rather than methodological artifacts.

1. At the county level, Pearson correlation coefficients are calculated to compare similarity scores generated from different synthetic story versions for the same cultural theme. High correlation coefficients indicate that the scoring process yields robust and consistent results, irrespective of the specific version of the synthetic story used. This step confirms that the measures are stable and reliable.

2. I compare the results from the two analytical approaches employed in this study: the Synthetic Archetype—BERT similarity method and the LLM-based classification method. By examining the degree to which these independent methods yield similar patterns in identifying cultural themes, this analysis ensures that the findings are not unduly influenced by a single methodological approach.

II.C Folktales of Ethnic Minorities

The original dataset includes folktales from China's 56 officially recognized ethnicities, but this study focuses exclusively on narratives from Han Chinese regions. Although material from ethnic minority groups was digitized as part of the broader project, it is not analyzed here. This decision reflects the study's objective of constructing a cultural map based on Han Chinese traditions, which align with the scope and methodological framework employed.

The exclusion of ethnic minority narratives stems from both practical and methodological considerations. The diversity and complexity of these groups would require tailored approaches to effectively analyze their distinct traditions and narratives. Furthermore, the scarcity of supplementary data, such as survey responses, constrains the ability to rigorously connect these narratives to other variables. For instance, the Chinese General Social Surveys (CGSS) provide information for only six ethnic groups, limiting the feasibility of robust analyses involving ethnic minority folktales.

III Cultural Narratives in Folktales and Their Contemporary Relevance

The folktales collected during the 1980s, many of which originated centuries ago, provide a unique lens through which to examine the cultural values and beliefs of historical Chinese society. These narratives reflect a broad spectrum of themes, ranging from values that are widely recognized across societies, such as honesty, prosociality, effort, and equality, to those that have been particularly prominent in China's historical and philosophical traditions, including Confucianism, Buddhism, ancestor worship, and gift exchange.

This section investigates how historical cultural narratives relate to contemporary values and attitudes, using responses from the Chinese General Social Survey (CGSS) to measure modern beliefs and behaviors. By linking historical narratives to modern survey responses, the analysis sheds light on the persistence and evolution of cultural traits across time and space.

To examine these connections, the following equation is estimated:

$$\text{Belief}_{i,c} = \alpha + \beta \text{Folklore Trait}_c + \mathbf{X}_c^H \Omega + \mathbf{X}_c^G \Lambda + \mathbf{X}_c^C \Pi + \mathbf{X}_i \Gamma + \epsilon_{i,c}, \tag{1}$$

where c denotes a county, and $\text{Belief}_{i,c}$ represents individual beliefs or values from the CGSS. Folklore Trait_c is the average similarity of folktales in county c to a particular cultural theme (e.g., trust, honesty, charity), as calculated through semantic analysis.

$\mathbf{X}_c^H$ and $\mathbf{X}_c^G$ are vectors of historical and geographic controls, while $\mathbf{X}_c^C$ represents contemporary controls, such as economic and institutional variables. Individual characteristics like age and gender are included in $\mathbf{X}_i$.

Historical and geographical controls include factors such as agricultural suitability, trade networks, population density, terrain ruggedness, proximity to Confucius's birthplace, and treaty port status, along with fixed effects for historical macroregions. Con-

temporary controls incorporate variables like GDP per capita, urbanization, sectoral composition, education levels, ethnic composition, provincial capital status, and fixed effects for modern macroregions.

III.A Honesty, Prosociality, Equality and Effort

This subsection examines the relationship between folktale narratives and modern attitudes toward honesty, prosociality, equality, and effort, exploring how cultural themes in historical folktales relate to contemporary beliefs and behaviors in these areas.

Honesty Honesty is a foundational cultural value that underpins trust, reduces transaction costs, and fosters cooperation. Scholars such as Algan and Cahuc (2010) highlight its role in enhancing social capital, while Cohn, Fehr, and Maréchal (2014) emphasize its importance in reducing enforcement costs and promoting reliability in social interactions. This analysis explores whether counties where folktales emphasize honesty exhibit stronger attitudes of vigilance against exploitation, as measured in the CGSS through the question, "Do you agree that people will take advantage of you if you're not careful?"

As shown in Columns 1 and 2 of Table I, counties where folktales align more closely with honesty exhibit stronger agreement with the need for vigilance against exploitation. These findings suggest a correspondence between narratives emphasizing honesty and contemporary attitudes toward interpersonal trust and reliability.

Charity and Prosocial Behavior Prosocial behaviors, such as altruism and community engagement, are vital for maintaining social cohesion and resilience. Andreoni (1990) discuss the motivations behind altruistic behaviors, including the "warm-glow" effect of giving, while Hamilton (1964) frame prosociality within evolutionary contexts, emphasizing its role in fostering cooperation and reciprocal support. I explore the connection between prosocial themes in folktales and survey questions such as, "Would you intervene if children were damaging public property?" and "Can you borrow tools easily from your neighbors?".

As shown in Columns 3 and 4 of Table I, counties where folktales align more closely with prosociality exhibit a higher likelihood of intervening in public misbehavior and greater ease in borrowing tools from neighbors. These findings reflect the alignment between prosocial narratives and modern communal behaviors.

Effort and Perseverance Effort and perseverance are widely recognized as critical for overcoming adversity and achieving success. Becker (1964) discuss effort as a critical

Table I: Honesty, Prosociality, Equality and Effort

	Honesty		Charity		Effort		Equality
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Honesty	-1.11***						
	(0.34)						
Trust		-1.17***					
		(0.36)					
Charity			1.03***	0.76**			
			(0.37)	(0.29)			
Effort					1.22***	-2.73**	
					(0.44)	(1.02)	
Equality							1.95*
							(1.13)
Age and Gender	Y	Y	Y	Y	Y	Y	Y
Contemporary Controls	Y	Y	Y	Y	Y	Y	Y
Historical Controls	Y	Y	Y	Y	Y	Y	Y
Geographical Controls	Y	Y	Y	Y	Y	Y	Y
Adjusted R^2	0.018	0.018	0.057	0.059	0.041	0.063	0.072
Observations	19672	19672	4368	4368	4383	4380	2165
Mean of Dep. Var.	3.04	3.04	2.75	2.78	4.37	2.85	3.87

Notes: The table shows the associations between folklore traits and measures of contemporary attitudes from surveys. The dependent variables are based on responses to specific questions reflecting themes of trust and honesty, charity, effort, and equality. Columns 1 and 2 assess trust and honesty through responses to the statement, "In this society, if you're not careful, others will take advantage of you," with honesty- and trust-related folklore as key predictors. Columns 3 and 4 examine charity, focusing on responses to the question, "If children in your community or village were damaging flowers or public property, would you stop them?" and the ease of borrowing tools like a wrench or screwdriver from neighbors. Columns 5 and 6 explore beliefs about personal success, asking whether it is "largely due to effort" or "largely due to luck." Column 7 evaluates agreement with the statement, "Social wealth distribution is unfair, with excessive disparity," reflecting attitudes toward equality. The independent variables are the average similarity of folktales in a county to traits of honesty, trust, charity, effort, and equality. Controls include contemporary, historical, and geographic factors. Standard errors are clustered at the county level and are shown in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

component of human capital development, while Kaplan, Lancaster, and Robson (2000) highlight its adaptive significance in resource acquisition and planning. The relationship between effort-focused narratives and modern beliefs about hard work is assessed using CGSS questions such as, "Do you agree that success is primarily due to hard work rather than luck?" and "Would you keep trying even if a task requires long-term commitment?".

Columns 5 and 6 of Table I reveal that individuals in counties where folktales align more closely with effort themes report stronger agreement with the importance of hard

work and persistence in long-term tasks. These results reflect the emphasis on perseverance found in folktales.

Equality Equality is a key value for promoting fairness and societal stability. Alesina and Rodrik (1994) connect perceptions of equality to sustainable economic growth and political stability, while Boehm (1999) discuss its role in reducing dominance hierarchies and fostering group cohesion. The relationship between equality-focused narratives and modern beliefs about fairness is assessed using CGSS responses to the question, "How severe do you think the wealth gap is in your region?"

Column 7 of Table I shows that individuals in counties where folktales align more closely with equality themes report heightened awareness of wealth disparities and stronger support for redistributive policies. These findings suggest a relationship between equality-related narratives and modern attitudes toward fairness.

Summary The analysis shows significant relationships between folktale themes related to honesty, prosociality, equality, and effort and corresponding attitudes in modern survey responses. Counties with honesty-focused narratives are associated with heightened caution against exploitation, while prosocial narratives correspond to stronger engagement in communal behaviors, such as intervening in public misbehavior or borrowing tools from neighbors. Equality-focused narratives are linked to heightened awareness of wealth disparities and stronger preferences for redistributive policies. Finally, effort-focused narratives correspond to stronger beliefs in hard work and perseverance as drivers of success. These findings highlight how historical narratives correspond with regional variations in contemporary beliefs and behaviors.

III.B Traditional Values, Beliefs, and Customs

This subsection examines the correspondence between cultural narratives tied to Confucianism, Buddhism, ancestor worship, and gift exchange and contemporary attitudes and practices.

Confucianism Confucian values, such as filial piety and trust within families, are widely recognized as central to East Asian societies. Weber (1964) discuss how Confucian ethics influence interpersonal relationships and governance, while Rozman (1991) highlight their importance in sustaining familial and intergenerational bonds. I identify narratives aligned with Confucian themes in folktales and examine their relationship with attitudes captured in the CGSS.

Trust within families is measured through the question, "How much do you trust your family members?" Filial piety is captured through responses to, "Who do you think should be primarily responsible for the care of elderly parents who have children?" As shown in Table II, Column 1, individuals in counties with higher similarity scores for Confucian narratives report significantly higher levels of trust within families. Column 2 reveals a positive association between Confucian narratives and agreement with the idea that children should take primary responsibility for caring for elderly parents. These findings highlight the connection between Confucian themes in folktales and contemporary attitudes toward family cohesion and intergenerational obligations.

Buddhism Buddhist beliefs, particularly ideals like nirvana, have shaped moral and spiritual frameworks across many regions. Keown (1992) emphasize the role of Buddhist teachings in ethical reasoning, while Gombrich (2006) explore their influence on spiritual practices. I identify Buddhist narratives in folktales and assess their association with belief in nirvana, measured in the CGSS through the question, "Do you agree with the idea of nirvana?" (Responses: 1 = Agree, 2 = Neutral, 3 = Disagree).

As shown in Table II, Column 3, there is a significant negative association between Buddhist narratives and disagreement with the concept of nirvana. This result suggests that individuals in counties with stronger Buddhist narratives are less likely to reject belief in nirvana, reflecting the continued influence of Buddhist spiritual traditions.

Ancestor Worship Ancestor worship emphasizes the supernatural influence of ancestors and their role in familial continuity. Watson (1988) highlight its significance in Chinese cultural practices, while Freedman (1979) discuss its centrality to family structures and rituals. Narratives related to ancestor worship are evaluated against belief in ancestral supernatural powers, measured in the CGSS through the question, "Do you agree that ancestors have supernatural powers?" (Responses: 1 = Agree, 2 = Neutral, 3 = Disagree).

Column 4 of Table II shows a negative association between ancestor worship narratives and disagreement with ancestral supernatural powers. This suggests that individuals in counties with stronger ancestor worship narratives are more likely to maintain belief in the supernatural influence of ancestors, underscoring the persistence of these cultural values.

Gift Exchange Gift exchange practices, rooted in themes of reciprocity and social ties, are central to maintaining community bonds, particularly in traditional and rural societies. Mauss (1954) describe gifting as a mechanism for fostering mutual obligations,

while Yang (1994) emphasize its role in Chinese social networks. While gift exchange involving significant sums is more prevalent and important in traditional contexts, the underlying principle of reciprocity is universal and remains a critical aspect of social and economic interactions. Besley (2020) highlight that reciprocity plays a foundational role in enabling trust and cooperation, which are essential for the social contract and the effective functioning of states.

To examine gift exchange, I derive a measure of the proportion of household income allocated to gifting practices by combining responses from CGSS variables on household spending and gift-related expenditures. As shown in Table II, column 5, there is a significant positive association between gifting narratives in folktales and the proportion of household income spent on gifts. This finding highlights the alignment between historical narratives emphasizing reciprocity and contemporary gifting customs.

Summary The findings demonstrate associations between folktale narratives tied to Confucianism, Buddhism, ancestor worship, and gift exchange and contemporary beliefs and practices. Confucian narratives are associated with higher levels of trust within families and stronger support for filial piety. Ancestor worship narratives correspond to higher likelihoods of belief in ancestral supernatural powers. Regions with Buddhist narratives are less likely to exhibit disagreement with the concept of nirvana, reflecting a connection between these narratives and spiritual beliefs. Finally, gifting narratives are positively associated with modern gifting practices, as measured by the proportion of household income spent on gifts. These results underscore the correspondence between historical narratives and contemporary attitudes.

III.C Trust in State Institutions

The focus now shifts to political values, specifically trust in state institutions, which is critical for governance and political stability. Institutional trust shapes public compliance with policies, cooperation in state-led initiatives, and perceptions of governmental legitimacy. Scholars like Levi (1998) and Rothstein (2011) emphasize its importance in reducing transaction costs and fostering collective action,

I examine how historical narratives about the emperor, a symbol of centralized authority in Chinese history, correspond to regional differences in trust in state institutions. The cultural theme in question, the "imperial state," reflects the hierarchical and centralized governance structure associated with the emperor in Imperial China. This theme emphasizes loyalty to the central authority, often embodied by the emperor, as the ulti-

Table II: Traditional Beliefs, Values and Customs

	Confucianism		Buddhism	Ancestor Worship	Gift Exchange
	(1)	(2)	(3)	(4)	(5)
Confucian Narrative	1.06***	0.65*			
	(0.37)	(0.34)			
Buddhist Narrative			-2.28***		
			(0.77)		
Ancestor Narrative				-0.91*	
				(0.51)	
Gifting Narrative					0.34**
					(0.15)
Age and Gender	Y	Y	Y	Y	Y
Contemporary Controls	Y	Y	Y	Y	Y
Historical Controls	Y	Y	Y	Y	Y
Geographical Controls	Y	Y	Y	Y	Y
Adjusted R^2	0.030	0.072	0.060	0.086	0.064
Observations	4197	17344	996	1335	3454
Mean of Dep. Var.	4.80	0.54	3.81	3.65	0.092

Note: This table analyzes the associations between traditional narratives and contemporary beliefs and practices based on survey responses. The dependent variables reflect attitudes toward family trust, care for aging parents, beliefs in Buddhist nirvana, beliefs in ancestral supernatural powers, and gift exchange customs. Column 1 assesses intra-family trust through the question, "How much do you trust your family members?". Column 2 evaluates beliefs in filial piety using the question, "Do you agree that children should care for their aging parents?". Column 3 explores Buddhist beliefs through the question, "Do you agree with the concept of nirvana?". Column 4 examines beliefs in ancestral supernatural powers through the question, "Do you agree that ancestors have supernatural powers?". Column 5 investigates attitudes toward gift-giving customs, measured as the proportion of household income spent on gifting practices. The independent variables are the average similarity of folktales in a county to Confucian, Buddhist, ancestor worship, and gift-giving narratives. Control variables include demographic factors (e.g., age and gender), contemporary factors, historical factors, and geographic factors. Standard errors are clustered at the county level and are shown in parentheses $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

mate source of order, stability, and justice. Folktales aligning with this theme typically portray the emperor as a benevolent ruler and guardian of the realm, reinforcing trust in the central authority while downplaying the role of local or intermediary powers.

This analysis uses CGSS responses measuring trust in the central government, local governments, the military, the judicial system, and the police. As shown in Table III, individuals in counties where folktales align more closely with emperor-related narratives report higher levels of trust in the central government (column 1), the military (column 3), and the police (column 4). However, these individuals exhibit lower levels of trust

in local governments in local governments (column 2), while no significant relationship is observed for trust in the judicial system (column 5).

Table III: Emperor and Trust in State Institutions

	(1)	(2)	(3)	(4)	(5)
	Central Government	Local Government	Military	Police	Judicial System
Emperor Narrative	1.32*	-2.34*	2.65**	2.19+	1.37
	(0.72)	(1.27)	(1.05)	(1.35)	(1.37)
Age and Gender	Y	Y	Y	Y	Y
Contemporary Controls	Y	Y	Y	Y	Y
Historical Controls	Y	Y	Y	Y	Y
Geographical Controls	Y	Y	Y	Y	Y
Adjusted R^2	0.14	0.075	0.14	0.094	0.070
Observations	4188	4180	4178	4185	4178
Mean of Dep. Var.	4.40	3.59	4.37	3.92	3.91

Note: The table examines the associations between beliefs about emperors, as reflected in local folktales, and levels of trust in various institutions, using survey-based measures. The dependent variables reflect trust in the central government (Column 1), local government (Column 2), the military (Column 3), the police (Column 4), and the judicial system (Column 5). The key independent variable is the average similarity of local folktales to narratives about emperors. Control variables include demographic, contemporary, historical, and geographic factors, such as age, gender, GDP per capita, historical population density, and distance to Confucius's birthplace. Standard errors are clustered at the county level and are shown in parentheses $^{+}$ $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The observed patterns suggest that emperor-focused narratives correspond to greater trust in centralized institutions, such as the central government, military, and police, while being negatively associated with trust in local governance. The positive associations align with Weber's theory of traditional authority, where symbolic figures like emperors confer legitimacy on national institutions (Weber, 1978). The negative association with local government trust reflects findings by Tsai (2007), who argue that centralized authority may overshadow the accountability and direct visibility of local governance.

IV Cultural Traits and Economic Performance

This section examines the relationship between cultural traits, as derived from folktales, and regional economic outcomes, with a focus on GDP per capita in 2010. Cultural narratives provide an alternative lens for understanding regional disparities in economic performance, complementing traditional explanations centered on institutional quality,

geographic endowments, and resource availability.

To formally investigate this relationship, I estimate the following equation:

$$\text{GDP}_c = \alpha + \sum_k \beta_k \text{Folklore Trait}_{c,k} + \mathbf{X}_c^C \Gamma + \mathbf{X}_c^G \Lambda + \mathbf{X}_c^H \Omega + \epsilon_c,$$

where GDP_c is the log of GDP per capita in county c, $\text{Folklore Trait}_{c,k}$ represents the set of cultural traits derived from folktales (e.g., honesty, effort, ancestor worship), and $\mathbf{X}_c^C$, $\mathbf{X}_c^G$, and $\mathbf{X}_c^H$ are vectors of contemporary, geographic, and historical control variables, respectively. The set of controls remains consistent with the specification in Section III, ensuring comparability, but GDP per capita is now analyzed as the dependent variable rather than a control. The coefficients β_k capture the marginal effects of cultural traits on GDP per capita, while ϵ_c is the error term.

I implement Lasso regression to identify the subset of cultural traits and control variables most predictive of GDP per capita. This approach allows for penalizing less relevant predictors, improving model interpretability and robustness. The analysis includes both a full sample of counties and a restricted sample of counties with at least five folktales, to ensure sufficient data coverage for the cultural trait measures.

Table IV: Lasso-Selected Cultural Traits Predicting GDP Per Capita (2010)

Cultural Trait	**Full Sample**	**Full Sample**	**Restricted Sample**
Honesty	0.0085	0.0077	0.0247
Charity	-0.0006	Not Selected	-0.0231
Effort	0.0040	0.0034	0.0326
Equality	0.0016	0.0009	-0.0296
Confucianism	Not Selected	Not Selected	Not Selected
Buddhism	Not Selected	Not Selected	0.0135
Ancestor Worship	-0.0396	-0.0384	-0.0009
Gift Exchange	0.0225	0.0224	0.0145
Imperial State	0.0009	Not Selected	-0.0002

Note: The table summarizes standardized coefficients for cultural traits derived from folktales selected through Lasso regression as predictors of GDP per capita in 2010. Results are presented for both the full sample and a restricted sample that includes only counties with at least five folktales. Positive coefficients indicate a positive association with GDP per capita, while negative coefficients suggest an inverse relationship. Traits not selected by the Lasso process are denoted as "Not Selected." Models include controls for contemporary conditions, geographic variables, and historical factors. Columns 2 and 3 also control for the total number of folktales collected in each county. These controls are included to account for potential confounding factors but are not reported, as the focus is on cultural traits.

Table IV presents the results. Honesty, effort, and gift exchange narratives exhibit robust positive associations with GDP per capita across both samples. These findings align with established research highlighting the roles of trust and effort in reducing transaction costs and fostering productivity (Putnam, 1993; Tabellini, 2008; Becker, 1964), as well as reciprocity norms in facilitating economic activity in contexts where formal institutions may be weaker (Wedeman, 2012).

By contrast, equality and imperial state narratives yield inconsistent results, with positive associations in the full sample but negative ones in the restricted sample. If we give more weight to the estimates in Column 3, which rely on counties with better data coverage, we conclude that an emphasis on equality is negatively related to growth, as is an obsession with the imperial state. These conclusions find support in existing literature, which highlights the potential downsides of attitudes favoring equality or redistributive policies (Okun, 1975; Alesina and Rodrik, 1994), as well as the economic limitations of centralization and overreliance on the state rather than market mechanisms (Hayek, 1945; Besley and Persson, 2010).

Ancestor worship narratives consistently exhibit negative associations with GDP per capita across both samples. This finding resonates with arguments by Mokyr and Tabellini (2024), who contends that cultural orientations emphasizing ancestor veneration in China contributed to the Great Divergence between China and Europe. Mokyr highlights how these deeply rooted traditions, while fostering social cohesion, may have discouraged the innovation and openness to change that were crucial for Europe's Industrial Revolution. The persistence of such cultural values in some regions may therefore pose constraints on economic adaptability and progress.

Confucianism and Buddhism, meanwhile, show no definitive associations, implying that these traits may not play a significant role in driving economic growth.

Overall, the analysis suggests that certain cultural traits, such as honesty and effort, are positively linked to economic performance, while others, like ancestor worship, may constrain growth. For traits such as equality and imperial state narratives, the evidence is mixed and inconclusive. By incorporating cultural values into the analysis of regional economic performance, this study provides new insights into the factors contributing to China's uneven development.

V Enduring Narratives and Historical Chronicles

This study uses folktales as a key data source to construct a cultural map of China, identifying regional variations in values and beliefs that are linked to economic outcomes. While this approach provides a powerful framework for studying culture through narrative traditions, future research could explore alternative sources, such as local gazetteers and historical poetry, to extract cultural indicators and further develop measures of historical cultural traits.

Local gazetteers, compiled over centuries, provide detailed records of regional practices, customs, and social organization. These documents serve as an alternative data source that could complement the folktales analyzed in this study, offering additional ways to quantify and understand cultural variation across regions and time periods. Similarly, historical poetry, with its rich linguistic and thematic expressions, can reflect cultural values, social norms, and philosophical ideals of different time periods and regions. Analyzing poetry could provide insights into how cultural values were articulated and preserved in literary traditions.

Xue (2024) has utilized both poetry and local gazetteers to extract cultural indicators, specifically examining customs, norms, and attitudes related to women. Although these sources have been applied to a limited set of cultural traits, their broader potential remains underexplored. Expanding their application to a wider range of traits could offer valuable insights into historical cultural variation.

As cultural traits often persist across generations, shaped by historical environmental stability and societal structures, narrative sources like folktales, gazetteers, and poetry provide a unique lens for studying this persistence (Giuliano and Nunn, 2021). Future work incorporating cultural indicators from these sources could expand the range of data available for understanding how historical cultural traits are reflected in and connected to both historical and contemporary economic and political outcomes.

VI Conclusion

This study represents the first systematic effort to construct a cultural map of China by analyzing over 20,000 folktales collected in the 1980s. It uncovers regional variations in values, mindsets, and beliefs, linking historical cultural traits—such as trust, honesty, and reciprocity—to contemporary economic outcomes. The findings provide robust evidence

of culture's role in shaping recent economic growth in China, with traits like honesty, effort, and gift exchange showing strong positive associations with GDP per capita, while ancestor worship exhibits consistently negative correlations.

Beyond contributing to the literature on culture and economics, this study offers fresh insights into the factors underlying China's economic rise. By connecting historical cultural narratives with modern economic performance, it presents a novel perspective on the cultural determinants of growth.

Existing approaches to classifying Chinese folklore have been constrained by incomplete coverage and a lack of regional specificity, limiting their analytical potential. This study addresses these limitations by introducing systematic methods to analyze folktales and their cultural content, creating opportunities for further exploration of historical cultural traits and their effects on economic and social phenomena.

The methodology is adaptable to other regions with rich cultural narratives, providing a valuable framework for analyzing cultural narratives and their influence on economic outcomes.

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