

Quantitative Analysis of Traditional Cultural Policy Texts Based on the LDA Topic Model — With the Thirteenth Five-Year Period as an Example

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In this paper, the traditional cultural policy documents promulgated by China during the “13th Five-Year Plan” period were collected, and an analysis was conducted to trace the evolution of traditional cultural policy. This was done by means of Latent Dirichlet Allocation (LDA), one of the most popular topic modeling methods. The results of the analysis led to the following conclusions. 1) Spatial dimension: during the 13th Five-Year Plan period, the policies of Eastern China focus on the cultural inheritance of university bases and the protection of historical and cultural inheritance; the policies of the central China are concentrated on cultural research, arts and culture education; the policies in Western China focus on supporting ethnic-cultural talents and bringing opera into campuses. 2) Time dimension: the intensity of the policy theme “cultural inheritance of university bases” in Eastern China exhibits a trend marked by first rising, then falling, and finally rising; the Central China policy emphasizes cultural research, while the last year of the Plan focuses on the protection and inheritance of cultural heritage; the policy for Western China aims to cultivate talents for the promotion of national culture in the first four years and integrate opera into campus activities in the fifth year. The results of the analysis provide a decision-making reference for the formulation of future government policies.

Keywords: LDA Topic Model; Quantitative Analysis; Policy Text; Traditional Culture; Evolutionary Trend.

1. INTRODUCTION

Traditional Chinese culture has a long history spanning five thousand years. It is the rock on which the great country stands in the forest of the world. Since the country’s painful modern history seems to present an outdated traditional culture, Western culture is sought after. However, Western culture is not suited to China’s national conditions, and there are significant differences between Chinese and Western cultures. In order to preserve traditional culture, the Communist Party has redefined it, promoted the core of national culture, and

has attempted to rejuvenate traditional culture by giving it new vitality. The excellent traditional Chinese culture in the new era is an essential means of cultivating the core values of socialism. Since the 18th National Congress of the Communist Party of China, the CPC Central Committee has always viewed the culture as the most profound spiritual pursuit of the Chinese nation, so as to perpetuate and promote the excellent traditional Chinese culture.

Traditional culture is the cornerstone of cultural self-confidence, and building a socialist cultural power is inseparable from the Chinese culture. General Secretary

Xi Jinping clearly stated the correct attitude that is required to carry forward traditional culture, and provided the direction for us to treat Chinese traditional culture appropriately. In 2017, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the “Opinions on Implementing the Project of Inheriting and Developing Chinese Excellent Traditional Culture”, which made specific requirements for promoting Chinese traditional culture. This reveals that the Chinese government attaches great importance to traditional culture.

The protection, inheritance, and promotion of traditional culture as a unique social resource are inseparable from policy support. The importance of traditional culture at the national level cannot be overemphasized. However, the role of each province and city in guiding and promoting traditional culture, especially concerning policy subjects, policy targets, and focus points, remains unclear. Additionally, there is a certain degree of difference in the formulation of policies due to the different economic and cultural levels and social backgrounds of different regions. Therefore, analyzing the characteristics of policies related to traditional culture in different regions contributes to recognizing the different forms of traditional culture and enhancing the country’s soft power, providing critical practical significance for the formulation and implementation of policies that will support China’s traditional culture.

2. LITERATURE REVIEW

Traditional culture is extensive and complex and is the unique spiritual lifeline of the Chinese nation [1]. It comprises not only the accumulation of thousands of years of culture but also the external manifestation of the Chinese nation’s way of thinking. The manifestations of traditional culture include religious philosophy, folk crafts, Chinese martial arts, traditional music, and many other categories. People’s understanding of traditional culture is generally associated only with famous sayings and aphorisms. Due to the decline of masters since modern times, there has been a fault in the passing on of traditional culture, making it difficult to reach the deep spiritual implications of Chinese culture [2]. Concurrently, the continuous influx of Western culture into China has made a huge impact on the development of our traditional culture, and thus some people’s adherence to traditional culture has been shaken. Although Western culture certainly has some worthwhile elements, the unique national conditions are also doomed that only by eliminating the dross of the traditional culture can it be suitable for China’s national conditions. Scholars need to strengthen their confidence in traditional culture and revitalize the national spirit so as to improve cultural literacy and build a socialist cultural power.

(1) Research progress on traditional culture policy

With the comprehensive attempts being made to revive traditional culture, research on traditional culture is increasing. The existing literature suggests that there are two streams of research in this area: the characteristics of policy texts and traditional culture inheritance. Regarding the characteristics of policy texts, Zhang [3] examined the major changes in policy texts pertaining to Chinese traditional culture from the

perspective of “three advancements”; Gao et al. [4] explored the content and methods of passing on traditional culture in kindergarten education; Li and Le [5] analyzed the evolution of China’s policy on traditional culture from a philosophical perspective; Hur [6] adopted a machine learning model to classify policy texts of Korean traditional culture; Shin and Jo [7] developed an intelligent traditional culture retrieval system based on a three-dimensional timeline. Concerning traditional culture inheritance, Wu [8] proposed a new path for traditional culture to be introduced in of Xingtai University; Fan [9] believed that the system of inheritance and development of Chinese traditional culture should be improved.

(2) The quantification of policy texts

With the continuous maturity of text mining technology and the growing demand for the analysis of policy texts, many researchers have applied text mining technology to the quantification of policy texts. The related research on policy text quantification focuses on three aspects: policy tools, social network analysis, and topic mining.

Policy tools are the means used to accomplish policy goals. They can be divided into different categories according to different classification criteria. Rothwell and Zegveld [10] divided policies into three categories: supply-type, demand-type, and environmental-type. Feng et al. [11] used the PMC index to quantitatively evaluate the general contracting policy. Yu et al. [12] employed a two-dimensional analysis framework of policy tools and policy strength to quantitatively evaluate the evolution of China’s forestry policy with 2495 forestry policy documents as the research object. Michael et al. [13] conducted quantitative evaluation research on China’s pension financial policy and the corresponding policy tools.

On the other hand, Shi et al. [14] adopted social network analysis and other methods to conduct quantitative research on the policy texts of tourism enterprises for the resumption of work and production. Yang and Shen [15] divided the historical events into four stages and employed the social network spectrum analysis method to analyze the changes in the theme of science and technology finance policy. Wang et al. [16] conducted social network analysis to explore the evolution of local government big data governance in terms of time, space, and the collaborative network of various departments. Lin and Li [17] investigated the characteristics of the spatial correlation network using the network analysis method. Using social network analysis, Weng [18] discussed the establishment of private hospitals to spread China’s medical and health system reform policies.

In terms of policy theme mining, Li and Li [19] used the LDA big data model to measure the topic intensity, field, and structure of governance policies in the Liaoning Free Trade Zone. Yuan et al. [20] analyzed the evolution of the theme content of the urban village renovation policy in Shenzhen using the theme analysis method, and divided the renovation policy into the breakthrough stage of the renovation method and the guiding stage of renovation innovation. Guo et al. [21] conducted topic mining and quantitative analysis of the innovation policies of the photovoltaic industry at different levels with the R language topic model. Zhang and Ma [22] performed thematic mining of technological innovation policy texts in China, Beijing, and Zhongguancun Park, and compared the topic intensity and theme change trends.

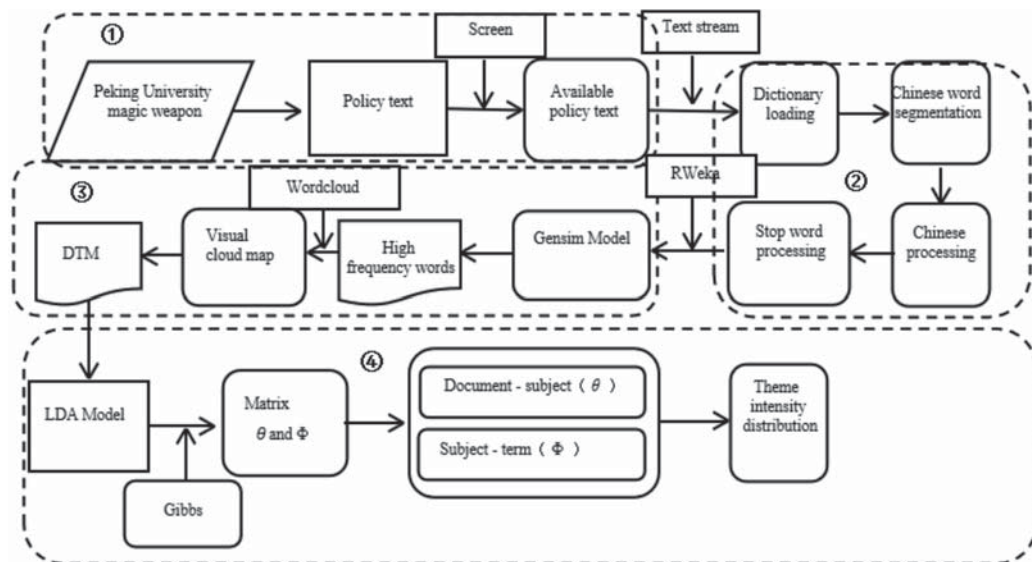


Figure 1 The topic model of traditional cultural policy text analysis.

(3) Research question

Following the above analysis of the research on traditional culture and policy texts, the research question of this paper is whether it is possible to use machine learning algorithms to mine traditional cultural policy texts in the current era of big data. The current literature on traditional cultural policy focuses on the characteristics and cultural-promulgation methods of policy texts and qualitatively analyzes the evolution of traditional cultural policy. Very few studies have used big data analysis methods to analyze traditional cultural policies. Additionally, there is little research on horizontal and vertical comparisons of policy subjects. Regarding the characteristics of the many regions in China's vast territory, it is more practical to investigate the policies horizontally and vertically over time. Therefore, this paper takes the traditional cultural policy during the 13th Five-Year Plan period as the research object and adopts the LDA topic model to mine topics and topic strengths. Also, the spatial and temporal dimensions are introduced to determine any changes in theme intensity, so as to explore the evolution law and effect of traditional cultural themes.

3. RESEARCH DESIGN

With the new era of cultural development, big data mining methods are employed in this paper to analyze traditional cultural issues at the policy and system levels. First, traditional culture-related policy texts issued by provinces and cities are collected and organized according to three regions. Second, Python language is used for word segmentation, keyword mining, topic model, and visualization, so as to obtain word frequency and proportion, topic intensity, and evolution trend. Finally, the governance of traditional culture in the three regions is compared, the differences between the three are discussed, and then countermeasures are proposed and suggestions are offered.

Text mining technology covers machine learning, statistical data analysis, graph theory, and other technologies, involving computers, statistics, and other disciplines. It is the process of extracting information from text, retrieving information, natural language processing, and data mining. Its research objects are mainly comprised of unstructured texts such as documents, web pages, and emails. Policy text mining technology emerged in the 1990s and is a technology used to obtain implicit information and policy topics from policy texts. In recent years, increasing attention has been paid to the orientation of policy texts, and policy text mining analysis has been significantly applied and developed in various fields.

Unlike other texts, policy texts are scientific, normative, oriented, directional, and forward-looking. In this paper, policy text topics are analyzed from the perspectives of word vectors and semantics, and temporal trends are added to topic strengths. Given the problem to be solved, an LDA topic model based on Python language is constructed. The specific process is illustrated in Figure 1, divided into five modules: policy text collection, policy text preprocessing, Gensim model, topic strength determined by LDA topic model, and topic strength transfer.

(1) Policy text collection

In this paper, policy texts on the theme of "traditional culture" with the time span of the 13th Five-Year Plan period from 2016 to 2020 are collected in order to mine traditional cultural resources. During the 13th Five-Year Plan period, more emphasis was placed on cultural connotations than previously. The magic weapon website of Peking University has a good collection and arrangement of legal materials, covering various fields. Therefore, it makes sense to collect policy texts on this platform.

(2) Policy text preprocessing

After obtaining the policy text, the data needs to be processed for further analysis. Since the policy texts are all in Chinese, the Jieba Chinese word segmentation package is used for word segmentation, and the

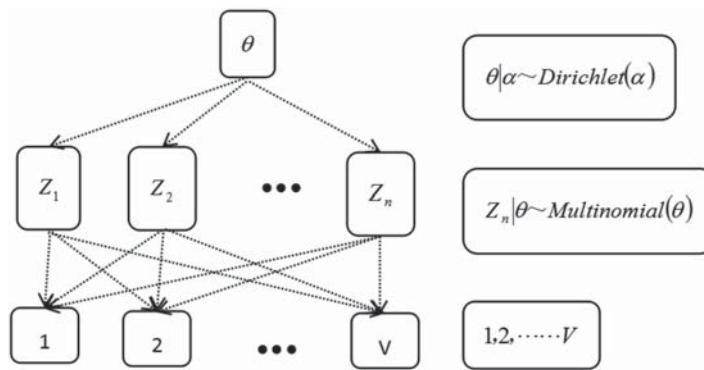


Figure 2 Bayesian probabilistic model.

Chinese stop word table is adopted to eliminate stop words.

(3) Gensim model

The topic vector representation of the text’s hidden layer is learned unsupervised from the preprocessed text under the Gensim library. Its core is the transformation of text vectors. The TF-IDF algorithm is applied to convert sentences into vectors. The main idea is that the word has a good discriminative ability if it appears frequently in a certain document and appears infrequently in other documents. TF represents the frequency with which a word appears in the document, indicating its level of importance; IDF indicates the importance of a word in a document. The calculation formula is:

$$TF_{i,j} = \frac{n_{i,j}}{\sum_k n_{k,j}} \tag{1}$$

$$IDF_i = \lg \frac{|D|}{|\{j:t_i \in d_j\}|} \tag{2}$$

$$TF - IDF_{i,j} = TF_{i,j} \cdot IDF_i \tag{3}$$

In Formulas (1) to (3), n denotes the number of documents containing words; the smaller the n value, the larger the TF value; D represents the number of documents, and the denominator indicates how many words appear in the documents.

(4) Topic strength determined by the LDA topic model and topic strength transfer

The LDA topic model combines Bayesian theory and other achievements and is a three-layer Bayesian probability model extended with a probabilistic implicit semantic index. The model is divided into a three-layer structure of words, topics, and documents, as depicted in Figure 2. The document generation process is: 1) A document d_i is selected according to the prior probability $P(d_i)$; 2) Topic distribution θ_i of document d_i is generated by sampling from Dirichlet distribution α , and topic distribution θ_i is generated by Dirichlet distribution with hyperparameter α ; 3) Topic $z_{i,j}$ of the j -th word of document d_i is generated by sampling from the multinomial distribution θ_i of topics; 4) Topic $z_{i,j}$ is generated by sampling from the Dirichlet distribution β , and the word distribution $\varphi_{z_{i,j}}$ is generated by the Dirichlet distribution with parameter β ; 5) The final word $\omega_{i,j}$ is generated by sampling from the multinomial distribution of the language.

4. POLICY ANALYSIS RESULTS

(1) Distribution of policy texts

By means of the search method above, a total of 119 policy texts related to traditional culture were obtained and divided into three types: Eastern, Central, and Western Chinas, as illustrated in Figure 3. The figure demonstrates that the policy texts related to traditional culture are mainly concentrated in the East, followed by the West and then Central China.

(2) High frequency lexical

The policy text is preprocessed by Chinese stop words. The word frequency statistics are determined using the words obtained from the word segmentation. Keywords, high-frequency words, word frequency, and proportion are listed in Table 1. Due to space limitations, only the top 20 high-frequency words are displayed. The higher the word frequency, the higher the frequency of the word in the text, and the more likely it is to become a core word.

The word cloud map is a visual display of the “keywords” that appear frequently in the text. It is paired with color for an impactful visual effect. The larger the font, the closer it is to the center, and the higher the frequency of the word. Specifically, 50 words were selected for a word cloud graph to display the keywords more intuitively. The resultant word cloud is shown in Figure 4. Tradition, culture, excellence, and inheritance are the common characteristics of the Eastern, Central, and Western parts of China. This suggests that the each region takes the same position in regard to traditional culture, and there is a strong sense of cultural heritage. Eastern China has a high frequency of words such as “base”, “organization”, “university”, and “characteristic”, indicating that this region values the construction of traditional cultural bases in colleges and universities. Fifty-five bases including the Peking University Kunqu Opera Inheritance Base are the first batch of national colleges and universities to promote Chinese traditional culture. Eastern China has the most bases, implying that it attaches great importance to the inheritance of culture. This is consistent with the guiding spirit of further promoting the all-round integration of Chinese traditional culture into the higher education sector. The high-frequency keywords, “strengthening”, “protection”, and “cultural heritage”, in Central China indicate the attention paid to the cultural heritage and its preservation. Central China has the most abundant historical and cultural heritage projects and resources of the Chinese nation. It pioneered a

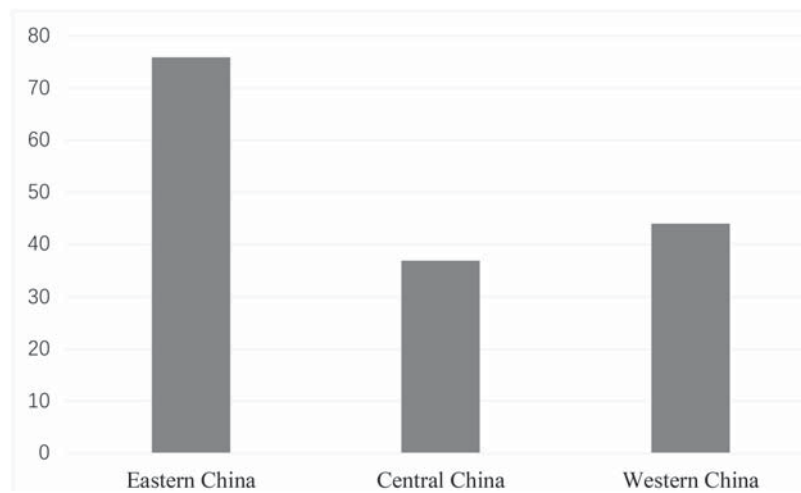


Figure 3 Regional distribution of policy texts.

linkage mechanism for intangible cultural heritage protection to promote cultural heritage. The population of Western China comprises the greatest number of ethnic minorities. This regional characteristic is reflected in high-frequency words such as “ethnicity”, “characteristics”, and “protection” in the policy texts of Western China.

(3) Thematic intensity analysis of policy texts

The topic model is an essential tool for exploring the implicit semantics of text. The theme intensity reflects the extent of focus on the theme in the policy and is calculated by the intensity of the policy texts in Eastern, Central, and Western China. The results are provided in Table 2. The five themes in the Eastern, Central, and Western China are visualized with LDAvis, as displayed in Figures 5–7. In the figure, the five circles in the left half represent five topics, the size of the circles denotes the importance of the topics, and the distance between the two circles indicates the similarity of the two topics. The right side of the figure shows the top number of words in the topic, which are 30 by default. The light-colored terms suggest the frequency of the word in the entire document, and the dark-colored terms indicate the weight of the word in the topic. Figure 5 presents the LDAvis visualization of Eastern China. Topic 3 and Topic 4 are weakly related.

1) Policy Analysis of Eastern China

The feature words and correlations of popular policy topics in Eastern China are listed in Table 3. It can be observed that the theme intensity of traditional cultural policy texts in Eastern China is theme 1 (cultural inheritance of university bases), theme 5 (cultural activities), theme 4 (historical and cultural inheritance and protection), theme 2 (protection of opera art), and theme 3 (artistic and humanistic characteristics) in sequence. Concerning Theme 1, the cultural inheritance promoted by university bases, several such bases have been established in Eastern China according to General Secretary Xi Jinping’s important exposition on education and the important instructions to integrate Chinese traditional culture into college education. Regarding theme 5, Shandong Province has held several events based on the theme of “Everybody Performing the Story of Chinese Excellent Traditional Culture” to promote cultural heritage

and rejuvenate it via the education sector. With respect to theme 4, it is pointed out in the “Qingdao City’s Work Plan for Inheriting and Developing Chinese Excellent Traditional Culture” promulgated by the General Office of the Qingdao Municipal Committee of the Communist Party of China and the General Office of the Qingdao Municipal People’s Government that efforts should be made to establish a historical and cultural city protection zone, the Laoshan famous mountain cultural exhibition area, the Qingdao coastal historical and cultural belt, the Dagu River basin historical and cultural belt, and the Langyantai cultural belt of the Great Wall of Qi. Theme 2 is intended to preserve the declining Peking Opera and other operas. For example, the “Development of the Construction of Shandong Province’s Excellent Traditional Culture Inheritance Base” issued by the Shandong Provincial Department of Education clarified that it is necessary to strengthen the heritage and protection of local operas. The characteristic words “music”, “art”, “chorus”, and “art” in Theme 3 indicate that Eastern China value education that includes music and art, emphasizing the humanistic aspects of culture.

2) Policy characteristics in the central China

The feature words and correlations of popular policy topics in Central China are shown in Table 4. As evident, the theme intensity of traditional cultural policy texts in Central China from high to low is: cultural research (theme 1), art and cultural education (theme 2), protection of cultural characteristic resources (theme 4), protection and inheritance of cultural heritage (theme 5), and cultural education in primary and secondary schools (theme 3). In theme 1, Central China focuses on the content of humanities and arts, takes students as the center, and pays attention to the connotation of traditional cultural education. Regarding theme 2, Central China treats art and cultural education equally and promotes the coordinated development of art education. The characteristic words “features”, “resources”, and “protection” of theme 4 indicate the way that culture is protected in Central China, highlighting its strengths, integration of resources, and regional characteristics. In terms of theme 5, there are many cultural heritage sites in Central China. In 2016, the General Office of the

Table 1 Keyword distribution.

Serial no.	Eastern China			Central China			Western China		
	High frequency words	word frequency	Proportion	High frequency words	word frequency	Proportion	High frequency words	word frequency	Proportion
1	Culture	1441	5.65	Culture	855	5.49	Culture	861	5.93
2	Tradition	1049	4.29	Tradition	626	4.26	Tradition	540	3.95
3	Excellent	810	3.43	Excellent	475	3.37	Excellent	348	2.65
4	Inherit	440	1.90	Inherit	218	1.60	Inherit	319	2.50
5	Base	312	1.36	School	215	1.61	Project	152	1.22
6	School	261	1.15	Primary School	195	1.48	Project	139	1.13
7	Organization	232	1.04	Protect	162	1.25	Department	105	0.86
8	Colleges and Universities	222	1.00	Strengthen	111	0.87	Notice	100	0.83
9	Project	186	0.85	Cultural Heritage	110	0.87	Organization	97	0.81
10	Notice	183	0.84	Company	109	0.87	Implementation	92	0.78
11	Art	170	0.79	Project	109	0.87	Strengthen	88	0.75
12	Strengthen	168	0.78	Organization	102	0.82	Base	86	0.74
13	Primary School	156	0.73	Notice	97	0.79	Nation	83	0.72
14	Company	154	0.73	Middle School	76	0.62	Characteristic	83	0.72
15	Protect	141	0.67	Material	75	0.62	Spirit	74	0.65
16	Advance	127	0.61	Teaching	74	0.62	School	73	0.64
17	Curriculum	127	0.61	Implementation	74	0.62	Cultural Heritage	72	0.64
18	Department of Education	126	0.61	Art	71	0.60	Company	69	0.62
19	Characteristic	124	0.61	History	70	0.59	Cultural Relic	67	0.60
20	Student	118	0.58	Sociology	69	0.59	Museum	64	0.58



Figure 4 Word cloud of keywords in traditional cultural policy texts.

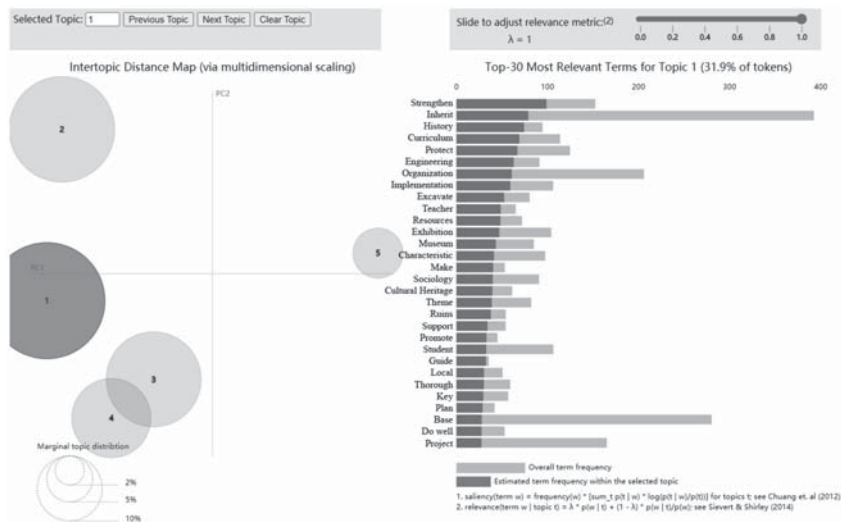


Figure 5 Distribution of traditional cultural themes in Eastern China.

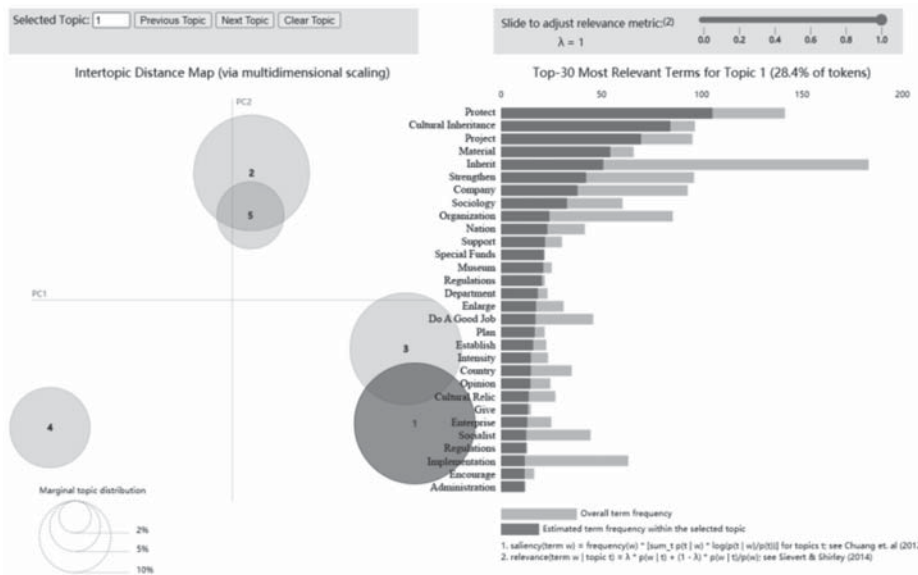


Figure 6 Distribution of traditional cultural themes in Central China.

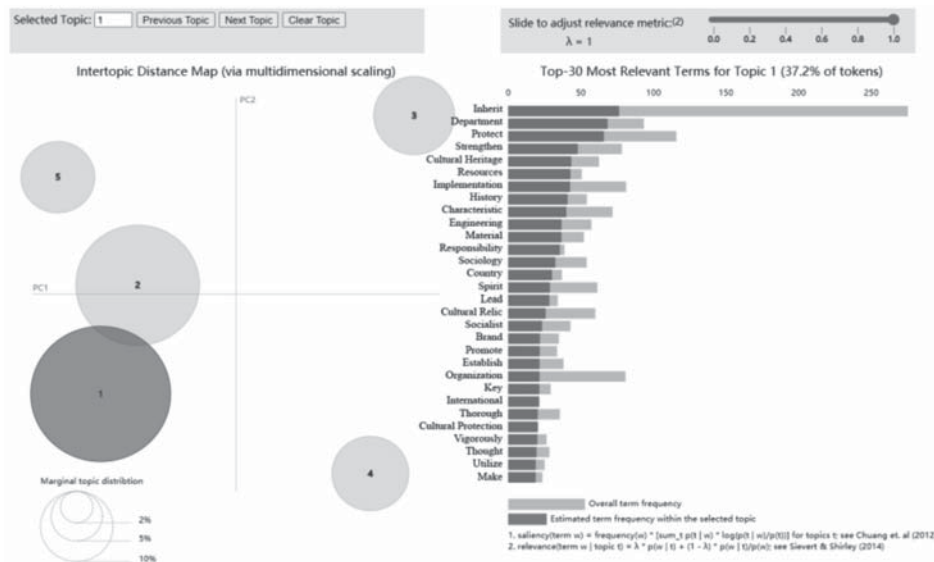


Figure 7 Feature words and correlations of popular policy topics in Western China.

Table 2 Main body intensity distribution in each region.

Serial number	Eastern China	Central China	Western China
1	0.4015013	0.4651892	0.0863118
2	0.1286404	0.2014680	0.0757265
3	0.0295734	0.0660896	0.2337007
4	0.1972882	0.1039522	0.2226492
5	0.2429968	0.1633010	0.3816118

Taiyuan Municipal People’s Government issued the “Guiding Opinions on Strengthening the Reform of the Protection and Inheritance of Traditional Cultural Intangible Cultural Heritage”. It provides specific guidelines for the protection and promotion of intangible cultural heritage and has detailed regulations on talent team building and financial security. The characteristic words “teaching”, “primary school”, and “middle school” in Theme 3 demonstrate that it is currently in a period of cultural transformation, and the lack of traditional

cultural education in primary and secondary schools is an issue that requires urgent attention.

3) The policy characteristics of Western China

The feature words and correlations of popular policy topics in Western China are presented in Table 5. The theme intensity of traditional cultural policy texts in Western China from high to low is: supporting national cultural talents (theme 5), respect for characteristic culture (theme 3), tradition entering campus (theme 4), (cultural heritage protection and

Table 3 Feature words and correlations of popular policy topics in Eastern China.

Theme 1 Cultural inheritance of university bases	Theme 2 Protection of opera art	Theme 3 Artistic and humanistic characteristics	Theme 4 Historical and cultural inheritance and protection	Theme 5 Cultural activities					
Inherit	0.05214	Company	0.02033	Primary School	0.06952	Strengthen	0.01527	Exhibition	0.01407
Base	0.04528	Protect	0.01707	Middle School	0.04993	Inherit	0.01218	Works	0.01383
Colleges and Universities	0.03656	Organization	0.01275	Calligraphy	0.03283	History	0.01145	Story-Telling Session	0.01263
School	0.02754	Art	0.01253	Fine Arts	0.02385	Curriculum	0.01066	Company	0.01251
Department of Education	0.01723	Sociology	0.00972	Music	0.02169	Protect	0.01033	Organization	0.01251
Project	0.01521	Experimental Area	0.00952	Chorus	0.02138	Engineering	0.00971	Translator	0.01163
Art	0.01191	Traditional Opera	0.00924	Dance	0.02106	Organization	0.00938	Project	0.01058
Program	0.0108	Cultural Center	0.00913	School	0.01843	Implementation	0.00913	Classic	0.00858
College	0.01032	Responsibility	0.00896	Art	0.01812	Excavate	0.00809	Solicitation	0.00792
Organization	0.00994	Cause	0.00811	Characteristic	0.01193	Teacher	0.0075	Education Bureau	0.00695

Table 4 Feature words and correlations of popular policy topics in Central China.

Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
Cultural research	Art and cultural education	Cultural education in primary and secondary schools	Protection of cultural characteristic resources	Protection and inheritance of cultural heritage
School	Teaching Material	Primary School	Inherit	Protect
Inherit	School	Middle School	History	Cultural Heritage
Department of Education	Art	Language	Implementation	Project
Ministry of Education	Program	Be Responsible For	Engineering	Material
Organization	Leading Group	Case	Strengthen	Inherit
Competition	Inherit	Teaching	Protect	Strengthen
Student	Education Bureau	School	Company	Company
Teaching	Exhibition	Theme	Responsibility	Sociology
Bureau	Submitted	Class Meeting	Characteristic	Organization
Case	Office	Integrate Into	Resources	Nation
0.00802	0.01367	0.00811	0.0081	0.00672

inheritance (theme 1), and national cultural heritage (theme 2). Words such as “support”, “talent”, and “nation” in theme 5 demonstrate that the government has made moves to tackle the issue of harnessing talents for the survival and construction of a national culture. Concerning theme 3, Shaanxi, Inner Mongolia, Guizhou, and other places have launched a series of activities to honor the excellent traditional Chinese culture, so as to alter the understanding of traditional culture from the ideological concept. For theme 4, ethnic minority operas in Western China have unique cultural value, although many types of operas are endangered. Therefore, Western China has strongly promoted opera culture. Guizhou Province strives to become a major opera province in Western China by 2020. In theme 1, the re-travel of the Silk Road triggered the protection and inheritance of intangible cultural heritage in Western China and established a system for the inheritance, protection, and development of intangible cultural heritage along the Silk Road. With respect to theme 2, the protection of intangible cultural heritage in the west started relatively late compared with other regions. Western China has not made sufficient efforts to protect national cultural heritage. Hence, the Standing Committee of the Sichuan Provincial People’s Congress promulgated the “Regulations on Intangible Cultural Heritage of Sichuan Province” to strengthen the protection and preservation of intangible cultural heritage.

(4) The evolution theme

The topic strength reflects the cumulative probability value of the topic in the entire policy text but cannot indicate topic changes over the years. Therefore, the evolution trend of each theme and its intensity year by year are analyzed in this paper, as illustrated in Figures 8–10, respectively. As revealed by comparative analysis, theme 1 in Eastern China peaked in 2017 and then exhibited a downward trend. In 2017, Fujian Province announced the list of 15 Chinese traditional culture inheritance bases in colleges and universities, triggering a wave of Chinese traditional cultural inheritance bases being established in colleges and universities. Theme 5 has a fluctuation pattern, peaking in 2016 and 2020. In 2016, Jiangsu, Shanghai, Zhejiang, Shandong, Fujian, Hainan, and other provinces and cities took the opportunity to hold traditional festivals to actively promote cultural activities. In 2020, Shanghai, Guangdong, Hebei, and other provinces and cities launched tourism, education, and cultural integration activities. The overall trend of theme 2 is flat, implying that Eastern China has fewer policy changes in regard to the protection of opera art.

Figure 9 demonstrates that the changing trend of theme 5 in Central China is the most significant, and the theme intensity increased sharply in 2020. There are two main reasons for this. First, in 2020, General Secretary Xi Jinping pointed out at the symposium on comprehensively promoting the development of the Yangtze River Economic Belt that it is necessary to protect and carry forward the culture of the Yangtze River and to protect cultural relics and cultural heritage. Second, there were relatively few policies on traditional culture in Central China in 2020, and other themes have been impacted. Theme 1 was always the focus of the central government’s attention from 2016 to 2019, exhibiting an overall trend of first rising and then falling. In 2017, Hubei Province stressed the

implementation of the strategy of promoting Jingchu culture to go global, contributing to the high theme intensity.

As indicated in Figure 10, theme 5 in Western China has an inverted V-shaped trend, and the theme intensity is the strongest in the first four years. In 2020, the government’s attention is less than that for theme 2 and theme 4, revealing the determination and strength of the government in Western China to support ethnic-cultural talents. In the same year, Western China began to attach importance to the introduction of opera into the campus, and how to pass on traditional national culture also became a key concern of the government.

(5) Comparative analysis

China’s traditional culture has a long history, is a rare and precious resource, and plays an essential role in the governance of the country. Traditional cultural resources are rich and varied. The protection and handing down of China’s excellent traditional culture has become a hot research topic in academia. It is a culture that has been forged by a combination of history, geography, economy, society, and politics. Different backgrounds breed different precious cultural heritages. Therefore, there are large differences in traditional culture between regions. With policy texts as the quantitative research object, the governance attitudes in regard to traditional cultures in different regions are analyzed through the mining of themes in the cultural policies of Eastern, Central, and Western China. The relevant government departments of the three regions have made great contributions to the protection and inheritance of traditional culture, with the same overall goals. However, there are slight differences in the process of formulating policies, laws, and regulations, detailed as follows. 1) The high-frequency words in Eastern China are “universities”, “features”, and “bases”, which are distributed in a ladder shape. It pays more attention to the construction of college bases and is inclined to the inheritance of history and culture regarding the content, highlighting the characteristics of art and humanities. 2) The high-frequency words in Central China policies are “cultural heritage” and “protection”. The policy content emphasizes cultural research activities concerning the form and focuses on the protection and inheritance of cultural heritage, highlighting the importance of starting from childhood. 3) The high-frequency words in Western China policy indicate a focus on “ethnicity” and “characteristics”. In terms of form, it stresses the importance of introducing opera in universities; in terms of content, policy focuses on national cultural heritage, and prioritizes the cultivation of national cultural talents.

5. DISCUSSION AND CONCLUSIONS

Carrying forward traditional culture and strengthening cultural self-confidence significantly strengthens the prosperity of a nation. In this paper, a Python-based LDA topic model is established. The policy texts pertaining to traditional culture in Eastern, Central, and Western China during the 13th Five-Year Plan period are quantitatively analyzed to avoid subjective interpretation. By supplementing the analysis methods such as word frequency and word cloud map, China’s Eastern, Central, and Western traditional culture policies and regulations are investigated from the perspective of theme

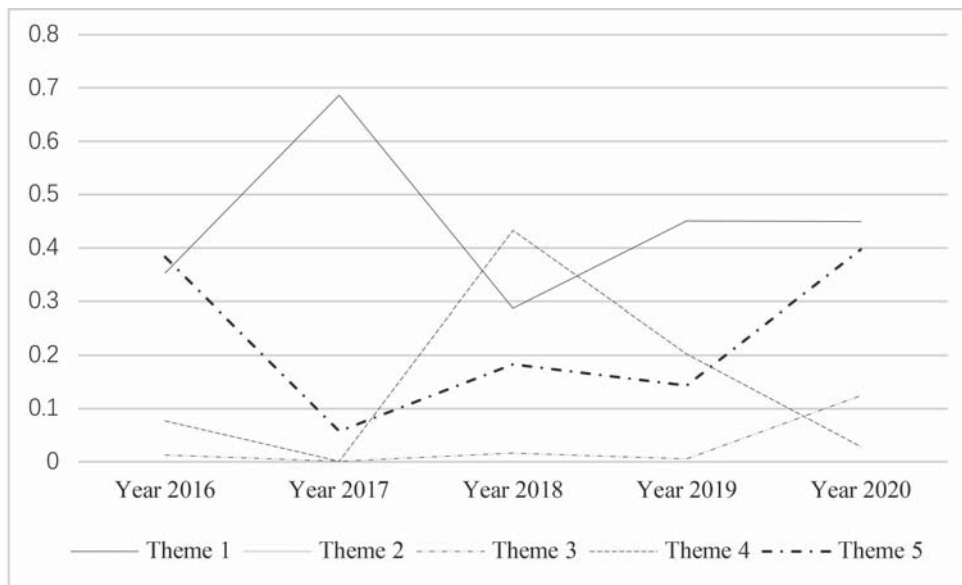


Figure 8 Theme evolution trend of Eastern China.

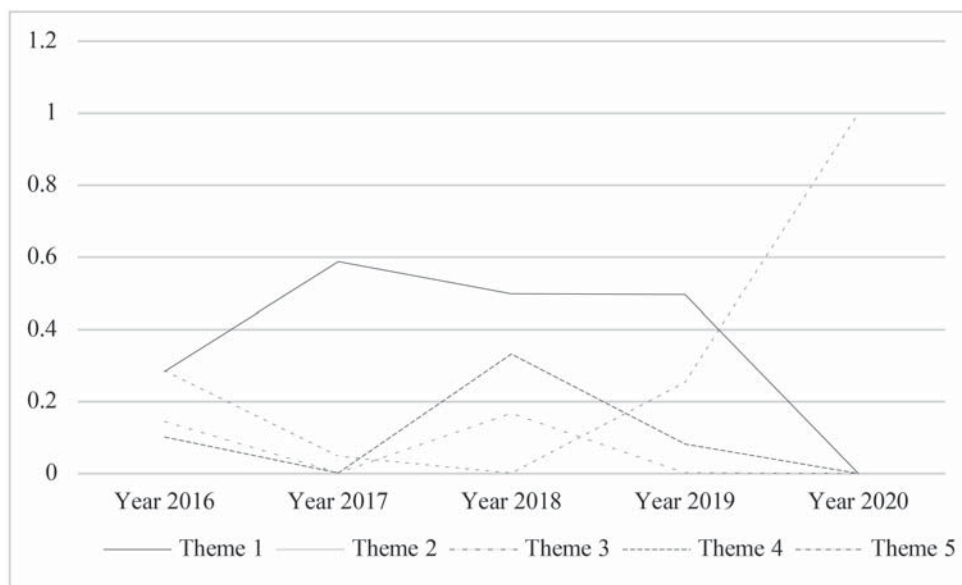


Figure 9 Theme evolution trend of Central China.

content, theme intensity, and theme evolution. The results are summarized as follows. (1) During the 13th Five-Year Plan period, the policy texts of the Eastern China are divided into five themes according to the intensity of the theme: cultural inheritance activities of university bases, protection of historical and cultural heritage, protection of opera art, and artistic and humanistic features. Policies in Central China relate mainly to cultural research, art and culture education, and the protection of cultural resources. The traditional cultural policies in Western China emphasize support for national cultural talent, respect for traditional culture, opera being introduced in universities, cultural heritage protection and inheritance, and national cultural heritage. (2) During the 13th Five-Year Plan period, the policy theme “cultural inheritance of university bases” in Eastern China exhibited a trend of rising first, then falling, and finally rising; the theme “cultural activities” presented a fluctuating state. During

the first four years of the 13th Five-Year Plan period, the policy of Central China focused on cultural research, and the last year stressed the protection and inheritance of cultural heritage. During the first four years of the 13th Five-Year Plan period, the policy of Western China emphasized the cultivation of talents for the passing down of national culture. In the fifth year, it supported the activities of opera on campus and promoted traditional Chinese culture by means of a unique Chinese aesthetic pedagogy.

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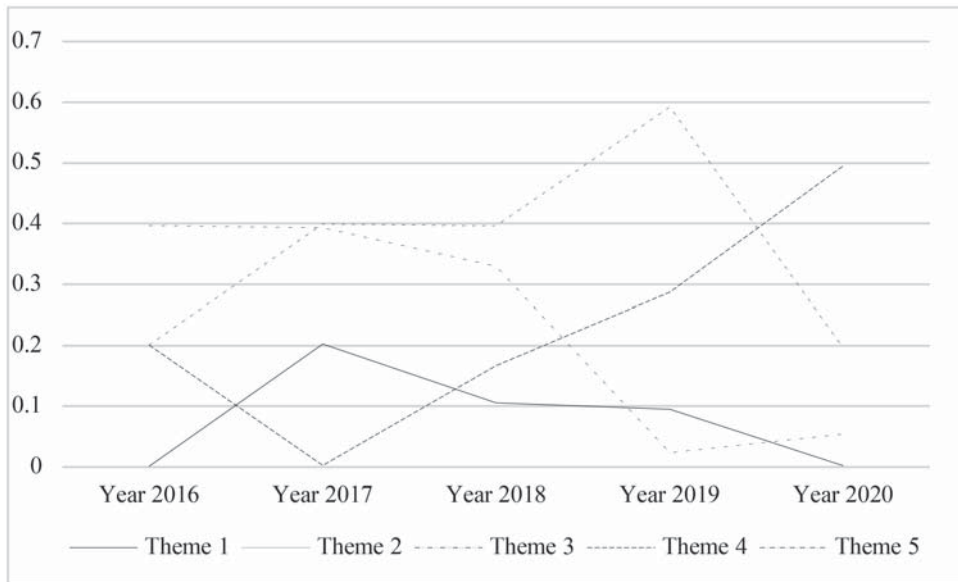


Figure 10 Theme evolution trend of Western China.

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