



Analysis of the Dynamic Evolution of the Tang Dynasty Dress Symbol System in Computer Analysis and Cultural Symbols Based on Conceptual History

Peixian Sui¹, Xiangyang Bian^{1,*} and Jinying Mou¹

¹ College of Fashion and Design, Donghua University, Shanghai, 200051, China

SUMMARY: *Tang Dynasty dress culture is a bright pearl in the treasury of ancient Chinese dress culture, reflecting the social style and ideology of that time. Based on the data of index platform, this paper analyzes the change of attention to Tang Dynasty costumes from 2020 to 2025, and then combines the techniques of Word2vec and TF-IDF to explore the relevant elements and overall characteristics of Tang Dynasty costume styles. On this basis, the main ideological concepts of the Tang Dynasty and the evolution of dress cultural symbols are analyzed. The study shows that the attention of Tang Dynasty costumes has increased overall in recent years, with the highest growth rate of 24.23% in 2024. The main descriptive terms for Tang Dynasty clothing are gorgeous, prosperous, free, bold, rich, plump, and spacious, with a weight range of 15 to 25. The dresses of the early Tang Dynasty were becoming more and more simple, reflecting the Taoist philosophy of honoring nature at that time. Under the influence of the concepts of “China and Yi a respect” and “one inside and one outside”, women's clothing in the Shengtang period became more bare and hu clothes were popular. In the Late Tang Dynasty, luxury and simplicity coexisted, and the influence of foreign cultures was more obvious.*

KEYWORDS: *exponential analysis; Word2vec; TF-IDF; Tang Dynasty clothing; dynamic evolution*

1 Introduction

The prosperity and openness of Tang society and the frequent and vigorous cultural exchanges were the main reasons for the aesthetics of Tang dress. The political stability of the Tang Dynasty, especially during the reign of Zhenguan and the Kaiyuan period, the social and economic prosperity, the progress of agricultural production technology, food abundance, population increase, frequent commercial activities, flourishing commodity trade, handicrafts and textile industry, laid a material foundation for the production of costumes, and promoted the production of Tang Dynasty dress aesthetics [1-3]. In addition to the prosperity of the Tang Dynasty itself, the production of Tang Dynasty dress culture was also influenced by foreign cultures. The Tang Dynasty's cultural openness and exchanges with India, Iran (then Persia) and other cultures led to the incorporation of foreign elements in dress design [4]. Tang Dynasty society was relatively tolerant, multiculturalism coexisted, and various schools of thought and religious beliefs were developed, attracting a large number of talents, including foreign scholars, artists, etc., which brought new styles of dress and textile materials and influenced the design and development of Tang Dynasty dress [5-7]. The close cultural

*xianyangbian@163.com

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exchanges between the Tang Dynasty and neighboring countries and regions promoted cultural prosperity and diversity, as well as aesthetic diversity.

The role of clothing as a nonverbal sign system developed over time and in changing social contexts as a part of its basic function, which is to cover the body and shield it against cold. Dress style can also both contain historical data and symbolic meaning, and so costume is not merely a gauge of social development, but also a bearer of cultural importance, which prompts the reconsideration of the cultural heritage and its new interpretation. Garments have an artistic symbolic value as designed products as well [8]. The creation and role of cultural symbols are inherently linked to the manifestation of personal will and they evolve in the long run under the impact of social, cultural, institutional, religious, or other similar factors, each of them playing a complementary role within the overall cultural context [9, 10]. Studying the development of cultural symbols in costumes of the Tang Dynasty is likely to expand the knowledge of people about the history and culture, as well as enhance the perception of the values and lifestyles of the Tang period.

In this paper, we take Tang Dynasty dress as the research object, on the one hand, based on the computer analysis perspective, we analyze the platform index to understand the change of online attention of Tang Dynasty dress from 2020 to 2025. Meanwhile, using NLPIR software, Word2vec and TF-IDF algorithms, keyword extraction and word frequency statistics are performed on Tang Dynasty dress-related text data collected from self-media platforms to discover the influencing factors related to Tang Dynasty dress as well as style characteristics. On the other hand, based on the perspective of cultural symbol analysis, the history of concepts is introduced into the study of the symbol system of Tang Dynasty costumes, combing the core concepts in the field of spiritual thought of the Tang Dynasty and exploring the changes of costume characteristics in the period of the Early Tang Dynasty, the Sheng Tang Dynasty, and the Late Tang Dynasty. The study analyzes and researches with the perspective of concepts, which helps to understand the evolution law of Tang Dynasty costumes and further enriches the study of Tang Dynasty costumes.

2 Evolution of online attention to Tang Dynasty clothing

The Tang Dynasty is considered as the peak of feudal society in China as it saw unprecedented improvements in the economic, political, cultural, institutional development and ideological fronts. Costume culture is one of the outstanding aspects of the blossoming period of Tang civilization. Accordingly, this paper will focus on the symbolic system of dress during the Tang Dynasty as a subject of research and analyze the changes in the online attention to Tang costumes in recent years using the point of view of computer-based analysis.

2.1 Data sources and research methodology

2.1.1 Data sources

As of now, there are various online attention platforms such as Baidu Index, 360 Index, Sogou Index and Micro Index. The dataset employed in the current research has been obtained based on the combined data offered by these online attention platforms. The search terms used in measuring online attention are: Tang Dynasty clothing, Tang clothes, and Tang Dynasty Hanfu. In order to enhance the credibility of the results and the validity of the dataset, the year 2020 was used as the base point and the period of observation was determined between 2020-2025 in order to obtain the general trend of attention of internet users to the costumes of Tang Dynasty over the last six years and to calculate the concentration index.

2.1.2 Research methodology

Degree of online attention can be considered to some degree as an indication of changes in users interest in Tang Dynasty clothing and presents a certain gauge index. The coefficient of variation, alternatively called a dispersion measure, is the standard deviation divided by the mean, and can be written as:

$$GV = \sqrt{\frac{\sum_{i=1}^n X_i - \bar{X}}{n\bar{X}^2}} \quad (1)$$

where: n is the number of samples, X_i is the sample value, and \bar{X} is the sample mean. This study uses this to measure the degree of dispersion in the intra-annual distribution of the public's online attention to Tang Dynasty costumes, and the larger the value of the coefficient of variation, the more uneven the spatial distribution of online attention to Tang Dynasty costumes and the more obvious the differences.

2.2 Temporal characterization

2.2.1 Annual Change in Attention

On the index platform to obtain the network search index of Tang Dynasty clothing in each year and month from 2020-2025, and calculate the growth rate, standard deviation, and coefficient of dispersion, the results of the annual change of the network attention of Tang Dynasty clothing are shown in Table 1. From the perspective of search index and growth rate, the overall network attention of Tang Dynasty clothing in 2020-2025 shows a fluctuating upward trend, and the daily average value of search index grows from 3593 in 2020 to 4857 in 2025. 2021 has the lowest growth rate of -6.04%, and the growth rate in 2024 is as high as 24.23%. From the point of view of the dispersion coefficient, the lowest dispersion coefficient is 0.093 in 2024, which is more concentrated throughout the year. 2020 has a higher dispersion coefficient of 0.225, which indicates that the attention of network users to the Tang Dynasty costumes is more dispersed in the year, and also indicates that the attention of network users to the Tang Dynasty costumes is not long-lasting in the year.

Table 1: Annual changes in the network attention of clothing in tang dynasty

Year	The daily value of the search index	Growth rate/%	Standard deviation	Discrete coefficient
2020	3593		346.27	0.225
2021	3376	-6.04%	165.71	0.187
2022	3288	-2.61%	245.52	0.142
2023	3735	13.59%	534.38	0.112
2024	4640	24.23%	601.45	0.093
2025	4857	4.68%	252.55	0.127

2.2.2 Changes in Monthly Concerns

On the index platform to obtain the daily average value of the Tang Dynasty dress search index in each month from 2020 to 2025, and accordingly calculate and draw the statistical chart of attention, the inter-monthly change in the network attention of Tang Dynasty dress is shown in Figure 1 The inter-monthly change in the network attention of Tang Dynasty dress

presents the following characteristics: in the same month from 2020 to 2025, the Network attention is on the rise, indicating that Tang Dynasty costumes are gradually getting more attention. In particular, the online attention around Labor Day and National Day holiday is higher than that of other months in each year. On the contrary, around the Spring Festival, especially around January of each year, web users generally pay less attention to Tang Dynasty costumes. For example, the attention in May and October 2025 showed two peaks, with attention levels of 1594 and 1519. The reasons for this are analyzed as follows: (1) Combined with the crowd portrait, the age distribution of high attention to Hanbok is concentrated in the age range of 20-39, mostly students and professionals, and it is only on holidays that there is more sufficient time to pay attention to activities related to the Tang Dynasty costumes. (2) Around January, the provinces and autonomous regions have lower winter temperatures and larger temperature differences, which are less suitable for organizing offline Hanbok-related activities, and the amount of searches inevitably declines while the attention to the topic of Tang Dynasty costumes decreases.

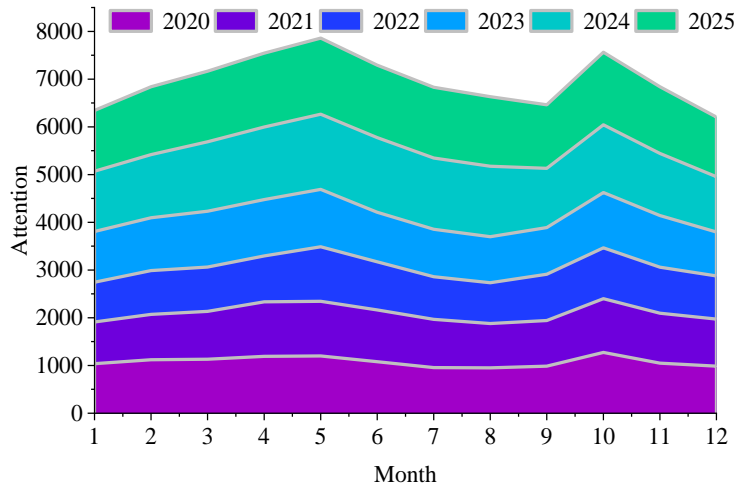


Figure 1: Month changes in the network attention of clothing in tang dynasty

3 Overall stylistic characteristics of Tang Dynasty clothing

3.1 Data acquisition

In recent years, major self-media platforms have developed rapidly, greatly facilitating the self-expression of the general public, and their data can be used as a rich and huge survey object. In this study, Octopus collector is chosen to collect text centered on subject words from major self-media platforms, and customized crawler collection mode is designed for different websites: input the webpage URLs that need to collect data, manually define the webpage X-Path of the required data for different URLs among them, and the collector will automatically identify and collect the data of all the similar X-Paths. This method can effectively avoid and reduce data noise. In this experiment, “Tang Dynasty Costume” is used as the theme word, and the collected results are filtered, denoised and de-emphasized.

3.2 Research methodology

In this paper, we adopt NLPPIR lemmatization method for lemmatization of collected data text, and use Word2vec model and TF-IDF algorithm for word vector representation and word frequency statistics respectively.

3.2.1 Word2vec modeling

Word2vec is very efficient framework for word vector training. Currently, it has gained wide popularity and become the most popular training method. Word2vec is mainly composed of two parts of models, which are CBOW model and Skip-gram model.

(1) Skip-gram model

Skip-gram model emphasizes on predicting the context by the current word, also known as jump language model, the parameter updating is done by gradient descent method, the input of the model is a word W_i and the output is its context $W_i - c, \dots, W_i + c$, where c is the size of the window set by the context.

(2) CBOW model

The Continuous Bag of Words (CBOW) model is a mirror image of the Skip-gram model, emphasizing the prediction of intermediate words by context, the context of a word is known and the posterior probability of the occurrence of this word is maximized.

In this case, the input to the model is a vector of words $\{x_1, x_2, \dots, x_v\}$ encoded by one-hot, where V in the vector denotes the number of different words covered in the text, and N denotes the number of neurons in the hidden layer. A matrix W of size $V \cdot N$ is used to represent the parameters between the input layer and the hidden layer, where V denotes the size of the lexicon and N denotes the number of neurons in the hidden layer. For the i th word in the dictionary denoted as w_i and the vector corresponding to the parameter matrix denoted as $v_{w_i}^T$, the hidden layer can be represented:

$$h = W^T x = v_{w_k}^T \quad (2)$$

Next compute a score for the word w_j in the dictionary, denoted u_j as:

$$u_j = v_{w_j}^T h \quad (3)$$

Finally, the posterior probability distribution of words can be estimated by means of the softmax function:

$$p(w_j | w_k) = y_j = \frac{\exp(u_j)}{\sum_{j=1}^V \exp(u_j)} \quad (4)$$

where y_j denotes the value of the j th neuron in the output layer, and $p(w_j | w_k)$ is the probability that the next feature word of the current word will appear. In order to facilitate the calculation we adjust the objective function as:

$$E = -\log p(w_j | w_k) \quad (5)$$

For a training sample where the training objective is to minimize E , the partial derivative of E with respect to u_i is:

$$\frac{\partial E}{\partial w_{ij}} = y_j - t_j = e_j, j = 1, 2, \dots, V \quad (6)$$

If $i = j$, then $t_j = 1$, otherwise $t_j = 0$. The partial derivative of E with respect to each cell W'_{ij} in W' is:

$$\frac{\partial E}{\partial w'_{ij}} = \frac{\partial E}{\partial u_j} \cdot \frac{\partial E}{\partial v'_{ij}} = e_j \cdot h_i \quad (7)$$

Assuming that the learning rate is denoted as η and $\eta > 0$, the update formula for the weight parameters of W' is:

$$w'_{ij}^{(new)} = w'_{ij}^{(old)} - \eta' \cdot e_j \cdot h_i \quad (8)$$

The second process is the update of the weight matrix W' between the input layer and the implicit layer, assembling the implicit layer and the output layer directly according to the weight matrix update process we can get the bias derivation of E for the i th cell h_i in the implicit layer:

$$\frac{\partial E}{\partial h_i} = \sum_{j=1}^V \frac{\partial E}{\partial u_j} \cdot \frac{\partial u_j}{\partial h_i} = EH_i \quad (9)$$

And because:

$$h_i = \sum_{k=1}^V x_k \cdot w_{k'i} \quad (10)$$

Available:

$$\frac{\partial E}{\partial w_{k'i}} = \frac{\partial E}{\partial h_j} \cdot \frac{\partial h_j}{\partial w_{k'i}} = EH_i \cdot x_k, k = 1, 2, \dots, V, i = 1, 2, \dots, N \quad (11)$$

When $k' = k$, $x_{k'} = 1$, otherwise $x_{k'} = 0$, and assuming that the learning rate is denoted as η and $\eta > 0$, the updating formula for the weight parameters of W is:

$$w_{ki}^{(new)} = w_{ki}^{(old)} - \eta \cdot EH_i, i = 1, 2, \dots, N \quad (12)$$

(2) Grid optimization parameters

In the word vector training phase, since the Word2vec model contains three important hyperparameters, i.e., the size of the window that identifies the context scanned during the model training, the dimensionality of the word vectors, and the number of words to be discarded, respectively. The choice of the hyperparameters determines the results of the model training, and these parameters are often guided by empirical rules, such as the word vector dimension is usually between 20 and 100 dimensions, but how to choose the appropriate parameters within the range usually needs to be further determined with the help of the lattice optimization parameter method. Lattice optimization parameters need to be given three alternative values of hyperparameters, through the combination of parameters to achieve model training and save the effect of model training history, until the completion of all parameter combinations of training.

3.2.2 TF-IDF algorithm

TF-IDF is one of the most popular classification algorithms in the field of text categorization. The underlying principle is to assess the relative value of a particular term in a given text or the entire corpus by giving it some weight. The core concept behind TF-IDF is that the importance of a word to a document is directly proportional to its frequency of occurrence in the text.

(1) TF

The TF-IDF has two elements namely TF and IDF. TF stands for Term Frequency that is used to describe how many times a particular term appears within a document. On average, those words which are more relevant to the theme of an article are more likely to be more commonly used and as such, can be more indicative of the essence and professional content of the article. The closest method of calculating TF is to divide the number of occurrences of a term in a document by the total number of words in that document. Nevertheless, in case the analyzed text is rather long, raw word count can tend to be too low, hence, TF is normalized. Following normalization, Equation (13) reads:

$$tf_{ij} = \frac{n_{ij}}{\sum_k n_{kj}} \quad (13)$$

where n_{ij} indicates the frequency of term i in document d_j , and the denominator represents the total frequency of all terms appearing in document d_j .

(2) IDF

The IDF stands for Inverse Document Frequency and indicates the rarity or distinctiveness of the term within the document collection. It is computed by dividing the total number of documents by the number of documents with the target term and then logarithmizing the resulting ratio. If a word occurs in less documents, its IDF value increases, which means that the word can be more discriminative across categories. The expression of IDF is given below:

$$idf_{ij} = \log \frac{|D|}{|\{j: t_i \in d_j\}|} \quad (14)$$

In this case, the symbol of the total number of documents in the corpus is $|D|$, and $|\{j: t_i \in d_j\}|$ denotes the number of documents containing the word t_i . However, textual data can contain non-standard expressions, e.g., traditional Chinese forms, transliterated words, or other uncommon variants. Linguistically speaking, it is possible to deduce the meaning of a term based on radicals, word-formation rules, harmonization, and similar elements. Nevertheless, even though it is possible to use large-scale pretraining with huge amounts of training examples, some rare terms do not necessarily occur in the training corpus. At that particular condition, the frequency of the word is equal to zero, and the denominator becomes zero (IDF) and creates trouble in the calculation. To address this issue, 1 is added to the denominator:

$$idf_{ij} = \log \frac{|D|}{|\{j: t_i \in d_j\}| + 1} \quad (15)$$

(3) TF-IDF

TF-IDF takes the frequency of a word in particular document and the inverse frequency of the documents in the whole corpus into consideration, with more significant weights assigned to the words that are relevant to a certain document. That is why TF-IDF has a tendency to minimize common words and focus more on informative ones. It is calculated by multiplying two parts, which are:

$$TF - IDF = \frac{n_{ij}}{\sum_k n_{kj}} * \log \frac{|D|}{|\{j: t_i \in d_j\}| + 1} \quad (16)$$

After all the candidate words in the collected text are cut and labeled with NLPiR software, the keywords are extracted using Word2vec word vector representation, TF-IDF word frequency, and other comprehensive calculations, and the keyword word list obtained in the field of Tang Dynasty dress contains words, weights, and word frequency statistics.

3.3 Analysis of results

3.3.1 Keyword extraction

The keywords extracted from the text were analyzed, and the factors most relevant to the style of Tang Dynasty clothing are shown in Figure 2. A detailed summary of the specific influencing factors of the clothing style reveals two major categories of factors related to the clothing style: (1) "color", "color scheme", "form", "pattern", "decoration" and other important elements that constitute the design of clothing; (2) "era", "status", "system", "ethnicity", "thought" and other important factors that constitute the social background of clothing. The combination of these two can form the genetic code of the clothing style of a dynasty. Among them, the weights of "form", "color", "era" and "image" are all greater than 90, and the word frequency statistics are 405, 402, 397 and 382, which have the highest correlation with the clothing style of the Tang Dynasty.

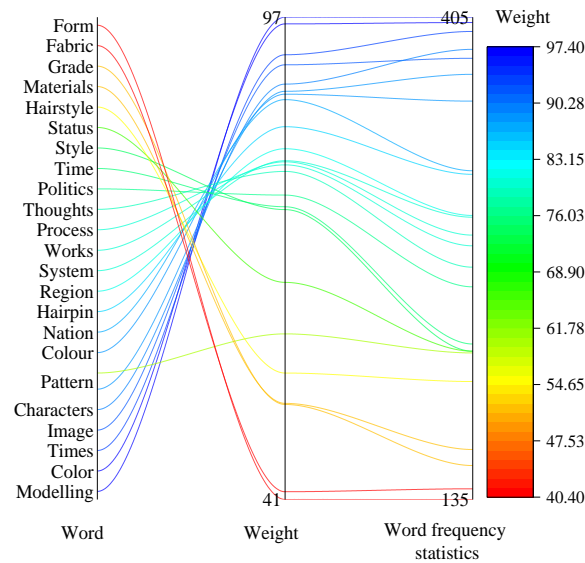


Figure 2: The most relevant factor in the clothing style in tang dynasty

3.3.2 Style influences

The collected texts were examined in terms of bigram association probability that indicates the frequency of occurrence of two consecutive words, as well as bigram information entropy that indicates the quantity of information transmitted by the word pair using the NLPIR-master software. Tables 2, 3 and 4 present the strongest collocations with the word pattern, shape and color in the textual material concerning the costume of the Tang Dynasty. Tang costume motifs are mostly connected with animals, plants and geometric ornamentation such as flowers, birds, dragons and phoenixes, and the related bigram probabilities are 0.306, 0.143 and 0.304 respectively. The elegance, nobility, gracefulness and fullness characterize the style of Tang dress and the related bigram probabilities are 0.018, 0.012, and 0.007 respectively. The colors of Tang Dynasty costumes are more vibrant, gorgeous, and flamboyant.

Table 2: The highest words with the "pattern"

Previous word	Afterword	Common frequency	Binary probability	Information entropy of binary words
Clothing	Pattern	98	0.033	0.002193
Color	Pattern	26	0.054	0.000593
Flowers	Pattern	18	0.306	0.000454
Decoration	Pattern	14	0.057	0.000359
Twig	Pattern	11	0.262	0.000280
Floral designs	Pattern	9	0.035	0.00225
Geometric	Pattern	8	0.369	0.000192
Lucky	Pattern	7	0.208	0.000163
Flower-bird	Pattern	6	0.143	0.000162
Textured	Pattern	5	0.308	0.000137
Dragon and phoenix	Pattern	5	0.304	0.000136

Table 3: The highest words with the "molding"

Previous word	Afterword	Common frequency	Binary probability	Information entropy of binary words
Molding	Dignified and graceful	8	0.018	0.000193
Molding	Graceful	7	0.012	0.000132
Molding	Fullness	5	0.007	0.000107
Molding	Freshness	4	0.006	0.000073
Molding	Peculiarity	3	0.006	0.000072
Molding	Brevity	3	0.006	0.000072
Molding	Ornate	2	0.006	0.000071

Table 4: The highest words with the "color"

Previous word	Afterword	Common frequency	Binary probability	Information entropy of binary words
Color	Brightness	15	0.034	0.000395
Color	Flowery	12	0.026	0.000308
Color	Texture	6	0.011	0.000133
Color	Showy	5	0.011	0.0000132
Color	Colorful	5	0.011	0.0000132

3.3.3 Stylistic characterization

The adjectives in the keyword list were studied as a whole, and the aesthetic characteristics of Tang Dynasty clothing styles are shown in Figure 3. The weights of gorgeous, prosperous,

free, bold, rich, plump, and generous are 21.91, 18.48, 24.22, 16.14, 16.85, 19.42, and 15.61 respectively, which are all above 15. It can be seen that the overall Tang Dynasty clothing shows the graceful and luxurious style characteristics as well as the free and bold social and cultural atmosphere, reflecting the prosperity and advanced social development of the Tang Dynasty.

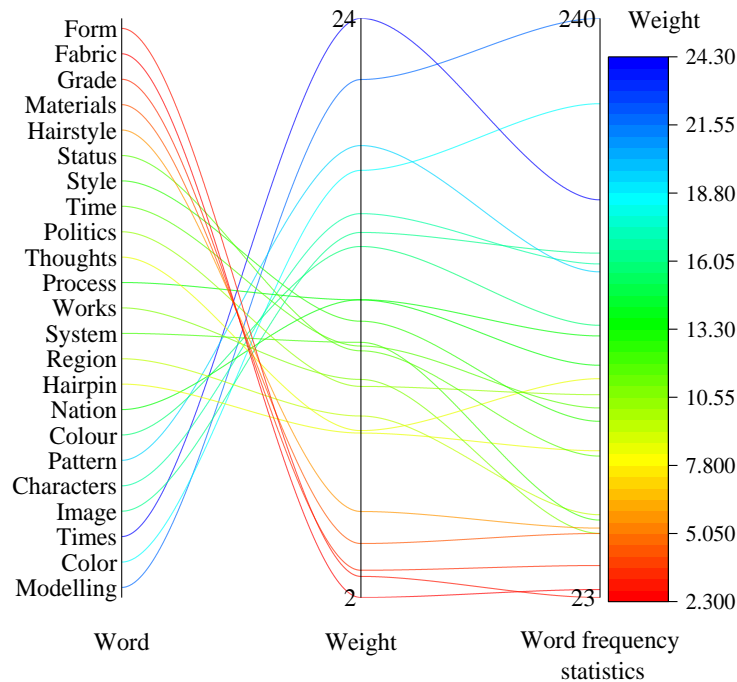


Figure 3: The aesthetic characteristics of the clothing style of the tang dynasty

4 Tang Dynasty Dress Symbol System Based on Conceptual History

Based on an exploration of the concerns and overall stylistic characteristics of Tang dynasty costumes, this chapter discusses the major ideological concepts of the Tang dynasty and their influence on the dynamic evolution of the symbol system of Tang dynasty costumes from the perspective of conceptual history.

4.1 Main Ideologies

4.1.1 The concept of “less noble, less different”

The Tang Dynasty was a period of political, economic, and cultural prosperity in ancient China's feudal society, but it was also a time when the concept of hierarchy was slightly weaker. Li Yuan, the first Tang emperor, adopted Taoism as the state religion and recognized Li Er as his ancestor, which led to the rapid development of Taoism. Wu Zetian's reverence for Buddhism led to the rapid popularization of Buddhist ideas in the Tang Dynasty. With regard to the hierarchical relationship between superiority and inferiority in society, Taoism advocates “ruling by doing nothing”, and Buddhism advocates “all beings as one”. The rise of Buddhism and Taoism undoubtedly brought about a certain impact on the Confucian concept of superiority and inferiority.

4.1.2 The concept of “China and Yi a respect”

As a result of the Wei and Jin period of national integration, the Tang dynasty ruling class blood and the Tang dynasty rulers the influence of the concept of governance, the Tang dynasty for the distinction between Chinese and barbarians of the national concept is relatively thin. The Tang dynasty is strong, in the national concept of more favored “China and Yi a respect”, that is, the Chinese nation and the barbarians and other ethnic minorities are equally honored, and in the trend of national integration has given rise to the phenomenon of cultural exchanges between the Hu-Han prosperity, so that the Tang dynasty has become a reverence for the foreign, eclectic and open and confident dynasty.

4.1.3 The concept of “internal and external integration”

Women occupied a previously unparalleled place in the Tang Dynasty, compared to the past dynasties. Firstly, the concept of equality amongst all beings, which is a part of Buddhism, entered the social life thanks to the propagation of Buddhism, which assisted to enhance the status of women in the society. Moreover, women of the Tang era were also affected by the Hu cultural modes and the practice of cross-ethnic marriages, and this led to a more daring and individualistic personality.

Nevertheless, the idea of male dominance in Tang society was still present. However, contact and slow integration between Hu customs, foreign cultures, and religious beliefs with indigenous practices developed a more liberal spirit in society characterized by the values of inclusivity and openness in the Tang period. This, in its turn, contributed to the continued development of gender consciousness and created the social atmosphere in which the condition of men and women was relatively more balanced, i.e., what can be called the stage of the unity of the inner and outer.

4.2 Dynamic evolution analysis

4.2.1 Early Tang clothing: fresh and elegant

In the early Tang Dynasty, clothing was mainly influenced by the concept of revering nature, and naturalness was the characteristic of clothing in that period. At that time, the social strata were dominated by “Laozhuang Thought”, which advocated the “original” Taoist beauty and pursued a kind of fresh and unassuming beauty. Lao Zi believed that the freshness and simplicity of the colors of the costumes would make people more calm and collected, which was also reflected in the concept of costume culture in the early Tang Dynasty. The shape and color of the costumes in the early Tang period were mostly combined with nature, such as women wearing lotus dresses and light and elegant plain clothes. The use of simple patterns to portray the image of nature is a symbol of the clothing culture of the Early Tang Dynasty.

4.2.2 Shengtang Costumes: Graceful and Magnificent

In the Tang Dynasty, the most prosperous period of time, the dress is more elegant and luxurious, fat and white is the mainstream clothing characteristics of women in society at that time. This is because the Tang Dynasty and foreign exchange countries more and more closely, by the “China and Yi a respect” and the concept of openness and compatibility.

During the Tang Dynasty, women's clothing was characterized by wider sleeves and larger sleeves, and women increased the degree of exposure of their clothing to show their charms through the exposure of their clothing, which was related to the concept of social development of “one inside and one outside” at that time. Under the background of a more open and compatible society, many traditional concepts and levels of thought began to be

gradually liberated, and bare-breasted dresses with low necklines exposed part of the breasts, showing women's voluptuous figures and self-confident temperament. In addition, women dressed in men's clothing is a major feature of women's clothing in the Sheng Tang Dynasty, such as round-necked gowns, turban, leather belt, pants, leather boots, etc., which broke the traditional gender boundaries and showed the independence and self-confidence of women's spirit in the Tang Dynasty.

Men's clothing in the continuation of the early Tang dynasty round-collar robes on the basis of the style and decoration more rich and diverse. In addition, men also popularly wore hu clothes, reflecting the society's open and tolerant attitude towards foreign cultures and the pursuit of fashion.

4.2.3 Late Tang dress: luxury and simplicity at the same time

During the Late Tang Dynasty, the gradual decline of the country, social unrest and economic recession prompted the return of Confucianism, and the dress shifted from ostentation to introversion, with the overall temperament returning to modesty and elegance. During this period, Tang costumes were characterized by the fusion of diversity and the coexistence of luxury and simplicity.

Although men's clothing is still dominated by the round-necked robe, it gradually tends to be conservative in style and style, gradually reverting to narrow sleeves, and the overall shape is more concise and sharp. In terms of color, the round neck robe in the late Tang Dynasty was dominated by dark colors, such as black, dark blue, dark brown and so on. The number of decorations and the degree of exquisiteness were reduced, and began to focus on practicality and simplicity. Among women's clothing, the qipao is still the main style. However, in design, more emphasis is placed on details and layering. The style of the dress patterns is more delicate and graceful compared to the Tang Dynasty. Additionally, women's clothing is more significantly influenced by foreign cultures and those of ethnic minorities, resulting in a clothing style that integrates multiple elements.

5 Conclusion

Chinese dress culture has a long history, and each period carries traditional Chinese national culture with its distinctive features and unique system. In this paper, we take Tang Dynasty costumes as the research object, combine computer analysis technology to analyze its network attention and style characteristics performance, and then explore the dynamic evolution of Tang Dynasty costume culture symbols in combination with the conceptual history.

From 2020 to 2025, the network attention of Tang Dynasty costumes shows an overall fluctuating upward trend, with the highest growth rate in 2024, amounting to 24.23%, and the highest level of attention is around May and October. The types of patterns related to Tang Dynasty costumes involve animal and plant patterns and geometric patterns, and the shapes are mostly graceful and luxurious, with bright and brilliant colors. Among them, gorgeous, prosperous, free, bold, rich, plump, and wide are the most frequent words describing Tang Dynasty costumes, with a weight range of 15 to 25.

The cultural symbolism in the dress of the Tang Dynasty can be summarized in this way. During the early Tang era, when influenced by Taoist beliefs that respected nature, clothing was normally simple, elegant and had a natural aesthetic. The prosperous Tang era, which was formed by the principles of China and Yi respecting each other and harmony between the internal and external environment, costume aesthetics showed gracefulness, extravagance, freedom, and tolerance. Women wore more colorful and brighter clothes, and clothing including women menswear and Hu clothing were in fashion. The ritual order was restored in

the late Tang era and more importance was attached to the qualities and cultural significance of the dress.

About the Author

Peixian Sui was born in Shandong, China, in 1994. She obtained a master's degree from Qingdao University in China. She is currently studying at the College of Fashion and Design, Donghua University. Her main research direction is the history of ancient Asian customs.

Xiangyang Bian was born in Nantong, Jiangsu, China, in 1965. He received his doctorate at Donghua University and is currently a professor at the College of Fashion Design at the same institution. He is also the vice-chair of the China Fashion Association and head of the Shanghai Promotion Center of the City of Fashion. His studies are focused on fashion history and theory, fashion branding and industry, fashion culture, and the fashion city.

Jinying Mou was born in Taizhou, Zhejiang, China, in 1997. She has a master's degree in Donghua University and is presently enrolled in the College of Fashion and Design, Donghua University. The areas of interest in her research are fashion culture and costume history.

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