

Research on the Protection and Inheritance of Opera Art in Linchuan Area Based on the Effectiveness Analysis of Witch Elements in Big Data Era

Ying Chen¹

¹East China University of Technology, Nanchang City, Jiangxi Province, China, 330000

Abstract. Opera art, which is a cultural symbol and life memory of a nation and a region, is the cultural root of people's homesickness, which combines various artistic elements such as excellent music, dance and poetry of the Chinese nation. Witchcraft custom, which has appeared since the primitive human period, is a series of activities made by human beings to try to explain some phenomena in daily life, and to predict, influence and control the development of implementation objects with the help of illusory supernatural forces. Witches and artists have the same line of thinking-similar social identity, state in action and functions. Get the wizard thinking characteristics of the artist, and how the artist, a stealth wizard, makes the works show the same effect as witchcraft ceremony. From the perspective of big data, this paper analyzes the protection and inheritance of opera art in Linchuan area based on the effectiveness of witchcraft elements, and examines the limitations of traditional means to protect and develop opera art, aiming at protecting and inheriting the inherent folk culture of the Chinese nation.

1 Introduction

Chinese traditional opera is a treasure in China's cultural heritage. It comes from the folk, and it is a high display of the creativity of People's life in China, which embodies the unique thinking mode, cultural awareness and wisdom of the Chinese nation. Opera in Linchuan area is a treasure house of Chinese culture and art, which is rooted in the folk, has a broad mass base and becomes the carrier of culture. As a unique Chinese excellent traditional culture, it has increased the confidence and pride of the Chinese people and the Chinese nation, and is also the foundation and source of the national cultural strength and cultural Industry development [2]. Linchuan culture, a branch of ancient Baiyue culture, is a typical farming culture. Farming culture is a kind of culture that takes agriculture and cultivation as the main mode of production. Linchuan culture sprouted in Shang and Zhou Dynasties and flourished in Song and Ming Dynasties. Linchuan culture not only plays an important role in Jiangxi culture, but also writes a rich and colorful page in the whole history of Chinese cultural development.

Witchcraft element in drama creation is a way to transform the objective reality in life by imitation and transplant it into the performing arts of drama stories, so as to meet the needs of drama and audience. The common witchcraft activities in Ming Dynasty opera scripts include three types: divination by omen, technique of change and salvation, and witchcraft activities related to ghost belief. According to the difficulties encountered in the protection

and inheritance of traditional Chinese opera art, combined with the development status and advantages of big data technology, this paper re-examines the limitations of traditional digital means to protect and inherit traditional Chinese opera art. Based on the effectiveness of witchcraft elements, this paper analyzes the protection and inheritance of traditional opera art in Linchuan area, and constructs the implementation path of protection and inheritance of traditional opera art under the big data environment, in order to provide theoretical thinking with certain reference value and guiding role in the protection, creation, education and dissemination of traditional opera art in the era of big data.

2 Sacred Concept of Witchcraft

The complex expression of witchcraft can be divided into three basic elements: wizard, behavior and representation. All these three have the characteristics of collectivity. Witchcraft can't become witches by themselves, but society treats them as witches. Similarly, witchcraft behavior and appearance are similar to those judged by collective ideas. Time seems to belong to everyone, but in fact everyone belongs to time. Time carries life, and at the same time it sweeps through it, never stopping and never returning. With the passage of time, the images of some gods have become far from the original belief. Ancient operas contain a large number of such scripts, and the witchcraft activity of divining fame and future has become the sustenance of the people's hopes, which naturally often appears in the plot, which greatly reflects the people's

spiritual desire for the upper class life [4]. In fact, wizards belong more to the world of elves than to the world of human beings. Therefore, even if a person does not have the qualification to be a wizard because of his social status, he may obtain such qualification by taking him as his goal and showing internal consistency.

In traditional tastes, Chinese people often look at life from the perspective of poetry, are good at capturing the true meaning of life in concrete things, and pin their fundamental views on the world, society and life on concrete things. The dance beauty of classical drama is a comprehensive audio-visual art, which has both time art and space art, with both time mobility and space expansion. The development of the plot also shows contradictions and conflicts through time and space modeling, so that the audience can feel the impact of emotion and thought, thus highlighting the charm of aesthetic exchange of stage art. In the time structure form of "flowing without passing away", people can also realize the author's complicated mood. At this point, the artist's profession is a more specialized profession, which has the same characteristics in the public's expectation of artists [5]. For example, viewers always want to see beautiful lines, colors, or interesting shapes in a painting when they appreciate artworks. Some things he can understand and some things he can't understand. It is precisely because of the influence and restriction of mainstream thoughts that black witchcraft has become a shameful behavior of the people. Black witchcraft activities are no longer conducted in public. It may be precisely because of this that opera writers are also influenced by this idea, and rarely put such activities on the stage of opera.

3 Types and Main Characteristics of Witchcraft in Ancient Operas

Although the contents of witchcraft activities in ancient opera scripts are rich, they do not cover all types of witchcraft, nor can they completely coincide with real life. The witchcraft plot in the script serves the opera, and the appearance of each witchcraft plot is directly related to the opera itself. Therefore, the creation of art does not have to stick to the actual life; Because the purport of art lies in the soul, the time and space of art need not be bound by the laws of physics. Therefore, time and space in art, their connection, transition and transformation are often driven by the artist's emotional direction and ideal. On different occasions, according to the needs of the plot and the characters, a large number of forms, such as front-curtain accompaniment, chorus, duet and help singing, are used to show the turning changes of different emotions, so that the whole drama music is integrated into one, and the development of the plot and the feelings of the characters are accurately expressed.

Most of the witchcraft activities in traditional Chinese opera are omen witchcraft. The omen witchcraft belongs to neither the white witchcraft nor the black witchcraft, which is a kind of white witchcraft between them. Spells based on similarity law are called 'homeopathic witchcraft' or 'simulated witchcraft'. Spells based on contact law are called 'contact witchcraft' [6]. The ancients believed that

gods were inevitable, but invisible "nothing", but "being" hidden deep in the heart. Dancing is a way of lowering spirits by witchcraft, but witchcraft dance reveals the essence, way and nature of witchcraft.

When dealing with time, works of art generally enlarge or condense the original life time. This paper traces the release conditions of the underworld in ancient folklore from Judge Hu's release of Du Liniang's ghost, and analyzes the important role of body and virtue in the resurrection story system from the judge's charge to the flower god "not to damage the body" and considering Du Liniang's father's "being an official and being upright". The story types and plot patterns of ancient Chinese opera are closely related to its background, cultural atmosphere and customs. For example, Yuan Dynasty was the first unified empire established by ethnic minorities in Chinese history. The nomadic people have a discriminatory attitude towards the cultural tradition of the Han nationality, the imperial examination system was once banned, and Confucianism was greatly suppressed.

The custom of ghost marriage is the basis of the formation of the archetype of human ghost love story. The concept of ghost and hell is the basis of the formation of plot units such as dream, soul tour, and ghost judgment. The witchcraft such as portrait witchcraft, name witchcraft and so on have a very important influence on the formation of the plot of playing truth and calling painting. Tang Xianzu's time structure, which combines ancient and modern times, can be regarded as the tragicomedy that the author emphasizes in operas. Whether it is the development and destruction of officialdom, the pursuit and pain of love, or the psychology and behavior of various characters, it is not only ancient, but is still repeating itself now.

4 Dramatic Presentation of Ghost Belief and Related Witchcraft

The belief in ghosts is fully reflected in ancient drama texts. Nowadays, ghost belief no longer shows people only in the image of feudal superstition. From the perspective of folklore and literature, ghost belief has an important influence on the creation of ancient opera. Witchcraft thinking is a developing stage of primitive thinking. Witchcraft thinking is a way of thinking that describes an objective existence with vivid and irrational thinking. Association is carried out according to "similarity law" and "contact law". It can be said that witchcraft thinking is relative to rational thinking. Opera has a rich accumulation, inherited the excellent traditional Chinese culture, and formed a dramatic culture with distinctive national characteristics and unique aesthetic spirit. Its unique and distinctive Chinese cultural characteristics, cultural style and charm are irreplaceable precious wealth left by predecessors and artists to future generations. The "line" feature of music thinking reflects the idea of "people-oriented" in traditional culture, which is consistent with the method of understanding things in ancient folk customs [7]. It is precisely because the ancients have such folk cultural psychology that witchcraft activities such as evocation are used in the

script, so that the dead are revived, ghosts appear, grievances are reported with the living, and the conflicts in the drama are solved, and finally the end of their grievances and enmities is completed.

Compared with the early resurrection stories, Peony Pavilion has changed greatly in characters, plot and story center of gravity through Tang Xianzu's adaptation and creation, and the conflicts in drama have been greatly strengthened. The theme of the story has also changed from the early resurrection stories of ordinary talented people and beautiful women to the praise of human nature and emotion, the accusation of feudal ethics and the pursuit of a happy ending. The stage space treatment of ancient Chinese opera is unique. Because ancient Chinese opera is expressionism's art, not imitative art. It mainly expresses the subjective world and behavior of the characters, while expressing the "focus" of the drama, it also jointly outlines the surrounding environment. In its comprehensive performance means such as singing, doing, reading and playing, as well as freehand brushwork and virtual stage presentation, it integrates exquisite and unique cultural skills from all over the world, so the opera in Linchuan area has become an indispensable platform to show the cultural characteristics of all over the world. The audience's wishes were met without losing kindness, and they were recognized. The combination of illusion and reality makes the plot more "real". In addition, the play's use of witchcraft related to ghost belief makes the playwright successfully express his feelings about the current social situation.

Traditional opera music pursues integrity and naturalness in structural form. The board cavity of Chinese opera takes the scattered board as the guide plate, which changes from slow board to medium board and Allegro to scattered board. A large number of ghost images appear in ancient drama texts, which means that the number of death plots is also considerable. The description of this kind of content is also a great challenge to the concept of death in ancient China. Although the soul is immortal after the death of faith, the people's fear of death cannot be completely eliminated. They act as prophets in the society, communicating between man and God. Then this kind of people bear a kind of responsibility, or only the social integrity consciousness leads to such consequences. They must explore the unknown world, understand the mysteries of the universe, and pursue eternal truth. The creator has consciously painted the magnificence of the dream world. Although his purpose is to try his best to prove that the story is true, objectively speaking, the vivid description of the dream is in sharp contrast with the time and space of the real world. The real uniqueness of the space structure of Linchuan opera lies not in the flexible combination and free transformation of various parts of the space; It is because the author designed the form of multiple spaces, and with the help of this structural form of multiple spaces, he effectively lost his thoughts and feelings about society and life.

5 Protection and Inheritance of Opera Art in Linchuan Area in Big Data Era

5.1 Integrate the traditional Chinese opera cultural resources, strengthen and perfect the traditional Chinese opera database.

As far as the form of opera communication is concerned, it can be divided into stage communication era, printing communication era, radio, film and television communication era, and then new media communication era. The mode of communication in the first three times has lasted until now, and has been accepted by more and more people. Through inter-departmental cooperation, we should establish a multi-source data platform and a co-construction and sharing mechanism for opera culture, and break the information island phenomenon in the original construction. Through the stage, Linchuan opera reflects the living conditions, lifestyles and pursuit of ideals of people everywhere in all directions, and constitutes a vivid road map of life. For a period of time, singing opera in a foreign language appeared in traditional Chinese opera performances, which was called the reform of traditional Chinese opera, and it was necessary to conduct foreign cultural exchanges in this way. We can't throw it into the market unilaterally and let it go to its own devices. On the basis of fully respecting the characteristics of Linchuan opera, we should restore its ecological environment and increase the government's support.

CRF is short for Conditional Random Fields, that is, conditional random fields. In recent years, CRF word segmentation method has been widely used in image processing and natural language processing. Given output identification sequence Y and observation sequence X , CRF describes the model by conditional probability $P(X|Y)$ instead of joint probability distribution $P(X, Y)$, and we can regard CRF as an undirected graph model.

Let $G = (V, E)$ be an undirected graph, where V is the set of nodes and E is the set of edges. $Y = \{Y_v | v \in V\}$, that is, each node in V corresponds to a random variable Y_v , and its value range is the possible marker set $\{Y\}$. If the observation sequence X is taken as the condition, each random variable Y_v satisfies the following Markov characteristics:

$$p(Y_v | X, Y_w, w \neq v) = p(Y_v | X, Y_w, w \sim v) \quad (1)$$

Among them, $w \sim v$ indicates that the two nodes are adjacent nodes in the graph G . Then (X, Y) is a conditional random field.

Given the observation sequence X , the probability of a particular marker sequence Y can be defined as:

$$\exp(\sum_j \lambda_j t_j(y_{i-1}, y, X, i) + \sum_k \mu_k s_k(y_i, X, i)) \quad (2)$$

In which $t_j(y_{i-1}, y, X, i)$ is the transfer function, which indicates the transfer probability that the labeled sequence is marked at the i and $i-1$ positions for the observation sequence X ; $s_k(y_i, X, i)$ is a state function, which represents the marking probability of its i position for the observation sequence X ; λ_j and μ_k are the weights of t_j and s_k respectively.

According to the construction theory of Chinese knowledge map, this paper designs a Hadoop-based knowledge extraction model of opera culture, which mainly includes data capture module, entity extraction

module, relationship extraction module and data storage module. The framework of the model is shown in Figure 1.

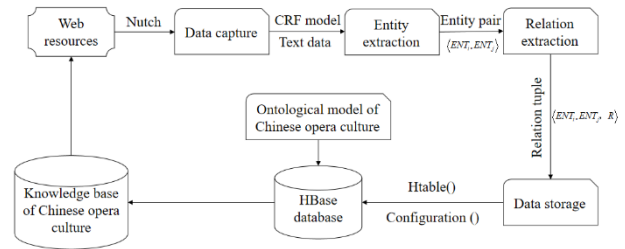


Fig1. Extraction model of traditional Chinese opera culture knowledge.

The model was evaluated by conllval. pl and the results are shown in Table 1.

Table1. Experimental results of extracting traditional Chinese opera cultural entities

Named entity	Number of named entities identified	Number of names and entities identified correctly	Accuracy (%)
Name	8562	8541	99.75
Domain terminology	8801	8708	98.94
Opera name	8449	8329	98.58

From the above table, it is not difficult to see that the model has a good recognition effect on people's names, domain terms and opera names. Widely collect drama data from network platforms, and concentrate various related data scattered offline and online on a unified platform to jointly promote the construction of drama resource database. The purpose is to give participants more opportunities to pay attention to emotions and experiences. This makes the experience design of man-machine interaction become an interesting and personalized art design form and artistic style.

5.2 Make full use of network technology resources to serve the creation and dissemination of opera

At present, the status of Chinese opera art is impacted by domestic and foreign cultures. Meanwhile, modern young people have low love and attention to Chinese opera. Therefore, we should continue to inherit and innovate Chinese opera, so that Chinese opera art can stay on the history and culture of our country. It embodies people's morality and aesthetics, fully reflects the value orientation of the creators and audiences of Chinese opera, and contains the essence of Chinese traditional culture. We should be good at organically unifying and closely combining the promotion of excellent traditional culture and the development of realistic culture, developing in inheritance and inheriting in development. This points out the direction for the development of opera creation. Therefore, opera artists should try their best to master the new technology of the network, and use the network to communicate with the majority of opera audiences in

order to promote their artistic practice. In addition, network opera workers should make more efforts in the form of communication and provide special services according to the physiological and psychological characteristics of teenagers, so as to attract more young people to become interested in opera. Only by truly understanding the rich treasure of Chinese culture and the great contribution of regional culture to Chinese culture and world culture in history, can we unswervingly follow the The path of development that suits our own characteristics and create new glory of Chinese culture.

5.3 The opera in Linchuan reflects the traditional core values of the Chinese nation

The spread of traditional Chinese opera is accomplished by both the sender and receiver. The history of the development of traditional Chinese opera shows that the interaction between the audience and the performer of traditional Chinese opera has a great adverse effect on the creation of traditional Chinese opera. We are the cultural inheritors of the times and play an immeasurable positive role in the inheritance of sociality. Through visual expression, writers and literary and art units have a clear vision and strategy for the theme orientation, story structure, characters, activity planning and publicity mode of opera works. Chinese opera artists should constantly draw lessons from the past experience, conform to the trend of the times according to the current actual situation, and thus create a drama form that conforms to the orientation of society and people. The database platform based on big data technology can accurately locate the attitudes, preferences and values of the audience and

reshape the communication mode. By imitating the words and deeds of various characters and reappearing the events of historical figures, we can convey the evaluation of characters, express the values of praising good and belittling evil, and carry forward the traditional virtues of the Chinese nation, which are the inherent requirements of enhancing the core competitiveness of Chinese culture.

5.4 Strive to develop new media drama products different from previous drama styles

The combination of new media and traditional art will inevitably collide with the original art form. This is a typical example of the combination of traditional art and high-tech to produce a new art form. We should guide them to get new life in the market. In the active protection of local opera, the core is to protect the inheritors of local opera, which has been highly valued by the government. In the new media environment, people's attention time can only last for a few minutes, while traditional opera's performance time of several hours can't pull the number of on-demand in the spread of new media. On the one hand, it is required to maintain the original flavor of intangible cultural heritage; On the other hand, we should keep pace with the times, actively introduce some modern elements, combine the characteristics of the times, and innovate, that is, actively protect local operas. Establish an operational mechanism involving the government and the market, and keep the database updated in real time and running normally. Sixth, from the legal and technical aspects, strengthen the protection of database intellectual property rights and information security, which is an important prerequisite for database construction.

6 Summary

Opera in Linchuan area is produced in folk soil, which reflects the thoughts, feelings, value judgments and aesthetic images of local people, and conveys people's evaluation of events and characters. The protection and inheritance of traditional Chinese opera art based on big data technology is a kind of active protection. Through the deep integration of traditional Chinese opera art and science and technology, the traditional Chinese opera culture will glow with vigor and vitality. Witchcraft custom has become an important content and expression form of opera art, and has influenced the creation of opera script; The witchcraft used in opera creation is based on real life, and this folk custom is presented in a certain stylized way, which contributes to the witchcraft activities in reality. Traditional Chinese opera also needs new media for digital integration of resources, and efforts should be made to develop new media traditional Chinese opera products which are different from previous traditional Chinese opera styles. Special services should be provided for the wider dissemination of traditional Chinese opera, especially for the physiological and psychological characteristics of young people, so as to attract more young people to become interested in traditional Chinese opera.

Acknowledgements

The 13th Five-Year Plan of Social Sciences in Jiangxi Province (2019), Research on the Effectiveness of Witchcraft Elements in Linchuan Opera in Ming Dynasty, 19YS15.

References

1. Hou Lin. Reconstruction of the path of the protection and inheritance of opera art in the era of big data[J]. *Drama Literature*, 2017, 000(008): 125-131.
2. Wen Lijun. Inheritance and protection of opera art from the perspective of new media[J]. *Drama Literature*, 2016, 000(008):74-76.
3. Guo Xiao, Wang Wenna, Cheng Jia, etc. Du Wei: Suggestions on the Priorities of the Protection and Inheritance of Traditional Chinese Opera [J]. *Art Education*, 2019, 344(04): 14.
4. Zhong Gao. Communication between Heaven and Earth and the Effect of Witchcraft: A Genetic Study of Western Regions Culture (2) [J]. *Xinjiang Art: Chinese*, 2018, 000(003): P.114-120.
5. Yang Qingmei. Witchcraft, writing and civilization: starting from Tao Yunkui's divination study in the southwestern region [J]. *Journal of Southwest University for Nationalities: Humanities and Social Sciences Edition*, 2016, 37(12): 27-33.
6. Miao Yulu. Witchcraft, Metonymy and Classification: Fraser's Totem Theory and Its Thinking Research Value[J]. *Journal of Ethnology*, 2018, 9(06):66-78+124-127.
7. Wang Baoning. The protection and inheritance of opera art in the new media environment[J]. *Chinese Literary and Artist*, 2018, 000(003): P.131-131.