

Contrastive Study of the Images of Figures of Ladies in the Tang Dynasty and Japanese Ukiyoe Beauty Paintings

Edrisen Zeinali*

Dhurakij Pundit University, Thailand

**corresponding author*

Keywords: Portraits of Ladies in the Tang Dynasty, Japanese Ukiyo-e Beauty Paintings, Image Contrast, History and Culture

Abstract: VR panoramic video is the most popular VR service. It is widely used in many scenarios and has attracted the attention of industry and academia. The beauty paintings of the Tang Dynasty occupies an important position in the history of ancient Chinese beauty paintings. In Ukiyo-e beauty paintings, you can clearly see that it has a deep relationship with traditional Chinese ladies' pictures. It is undoubtedly influenced by ladies' pictures in the Tang Dynasty especially, and draws nourishment and seeks inspiration. This article mainly studies the image comparison between the portraits of ladies in the Tang Dynasty and the beauty paintings of Japanese Ukiyo-e. This article systematically compares and contrasts the two female themed art of Chinese beauty painting and Japanese Ukiyo-e beauty painting. From this we can see the close connection between the cultural origins of the two countries and the difference in the artistic styles of the two nations. This article first divides the Tang Dynasty lady pictures and the Japanese Ukiyo-e beauty painting panoramic video into 1152 tiles with a resolution of 1280×1280, and uses the motion-restricted video block division method to encode; downloads the zoomed area according to the viewpoint position during playback Then merge the code streams of the tiles into one, use a single decoder to complete the decoding, and render to the circular enlarged area. The experimental results show that the perceptible pixel ratio of the experimental image is increased by 2.56% at the lowest and 9.72% at the highest; the central area of the image is more prominent, so the contrast in the grayscale result image is enhanced, which highlights the difference in the part of interest. With colors, users get more information, and the sense of immersion and realism is stronger.

1. Introduction

The concept of Virtual Reality (VR) was proposed in the last century. In recent years, with the rapid development of image acquisition, image processing, and computer graphics and other technical fields, VR technology has begun to rejuvenate and develop in a spurt. The Tang Dynasty

was the most prosperous feudal dynasty in Chinese history. Due to the heyday of the Tang Dynasty, the Tang culture had a far-reaching impact on countries around the world. In this era of extreme openness and freedom, the influx of foreign cultures made the Tang Dynasty The styles of ladies are unique, and the culture of ladies in the Tang Dynasty has therefore formed a special situation than any previous era. The plump and luxurious look of the Tang lady not only reflects the unique cultural atmosphere of the Tang Dynasty, but also has a precious cultural treasure for later generations.

Tracing back to the cultural exchanges between China and Japan, it has a long history. Japanese art and Chinese art are blended together. We often use a piece of water to evaluate the relationship between the two countries [1]. During the more than one thousand two hundred years of development of Japanese painting from the Asuka period to the Edo period, the paintings of various eras have all studied Chinese painting, and reflected the ancient Chinese cultural thoughts and ancient Chinese culture in different forms. There are inextricably linked and inseparable relationship [2].

Berger et al.'s new research on grayscale images. The idea of attributing a single feature function to the image part is introduced, and a mechanism to control its positioning is described. These parts are separated by sufficiently strong gray value changes to make the original global fingerprint have semi-local features. He proposed a method to extend this idea to color images, so that not only the brightness gradient but also the hue or chroma gradient can cause the localization of the feature function. This is achieved by generalizing the eigen function to a value function and mapping the colors to a symmetric matrix. Then use the generated matrix field to modify the Laplacian. Finally, he proposed a distance function that uses the co-domain information of feature functions to compare fingerprints based on feature values [3]. Mikolajczyk uses conventional methods to measure tool wear parameters V_B , and uses neural wear (a custom software package that combines side wear image recognition and artificial neural network (ANN)) to estimate the same parameters. Second, use the data collected from the first two cutting edges to train the ANN model of tool life, and then evaluate the subsequent models on two different subsets of the third cutting edge: the first subset is done by directly measuring tool wear and the first The second is obtained from the neural wear software, which uses edge images to estimate tool wear [4]. Kazuma believes that the image processing device is configured to provide services related to at least one of the following in response to a request from the following devices: (1) image data generated by the function of the image processing device; and (2) indicating that Image data of the formed image. The image processing device may include a parameter specification unit, a service request unit, and a function realization unit, which is adapted to implement the function of the image processing device based on the service provision parameters specified by the parameter specification unit. The service providing device is provided with a service providing execution unit, which is adapted to execute a process of providing a service to the image processing device after receiving a request from the service request unit provided to the image processing device [5].

This article expands the artistic practice by studying the modeling expression of female images in the beauty paintings of the Tang Dynasty, summarizing and collating. The review of the modeling and technique materials of traditional paintings will help us have a more comprehensive and in-depth understanding of the tradition, and discover and select the most targeted and expressive content for artistic expression. The integration of modernity and ancient times can not only change the aesthetic image of artistic language, but also inspire inspiration and change artistic concepts. Therefore, a comprehensive study and inheritance of tradition is the prerequisite for carrying forward the tradition. Therefore, the study of the image of beauty paintings in the Tang Dynasty must be creatively inherited.

2. Painting of Ladies in Tang Dynasty and the Beauty Painting of Japanese Ukiyo Painting

2.1. Figures of Ladies in the Tang Dynasty

The Tang Dynasty's politics, culture, and economy have all achieved unprecedented development, and it is rare in Chinese history to have such a creative and dynamic era. At this time, China has become the most prosperous country in the world. The territory of the Datang Empire expanded and the transportation was convenient. The capital, Chang'an, has a population of more than one million. People of different races and skin colors gather here to promote the development of cultural and religious exchanges. During the period of more than 280 years in the Tang Dynasty, the prosperity of culture, education and martial arts was enough to survive in history. There are Li Bai and Du Fu in poems, Han Yu and Liu Zongyuan in writings, and Ouyang Xun, Yan Zhenqing, and Zhang Xu in calligraphy. As far as painting is concerned, there are nearly 400 painters of this era who have documents or paintings to check, such as Yan Liben, Li Sixun, Zhang Xuan, Wu Daozi, Zhou Fang, Wang Wei, etc. are all famous [6]. According to literature records at the time, painting seems to have been divided into subjects, such as figures, landscapes, flowers and birds, pommel horses, and houses, which became a breakthrough development in the image of Tang Dynasty painting. Chang'an, the capital of the Tang Dynasty, is an international metropolis. It inherited the Daxing City of the Sui Dynasty. In 582 AD, Emperor Wen of the Sui Dynasty began to build a new capital in Longshouyuan, 6.5 kilometers southeast of Chang'an City in the Han, Jin, and Northern Zhou Dynasties. The following year, Emperor Wen of the Sui Dynasty started using the new city that was beginning to take shape. This glorious city has since become the most important stage for the Sui and Tang Dynasties [7]. During the Kaiyuan and Tianbao years of the Tang Dynasty, with the establishment of Daming Palace and Xingqing Palace, members of the upper class moved to the east of Zhuquemen Street. After the Anshi Rebellion, in Chang'an City, the east of the street was generally the place where the bureaucrats lived, and the west of the street was the place where civilians lived and operated. On both sides of the street stand the most influential Buddhist temples and Taoist temples, such as Jianfu Temple in Kaihuafang, Ci'en Temple in Jinchangfang, Daxingshan Temple in Jingshanfang, Xuandu Temple in Chongyefang, and Dayun Temple in Huaiyuanfang. Here, you can see the famous celebrities who haunt the high gates and the deep houses, the poor people living in the shabby huts, and the Persians, big cannibals, scorpions, Japanese, and Sillas who flood in from all directions. People from Linyi, Linyi, Shizi, etc., brought commodity goods, mission and other things, gathered in Chang'an in an endless stream, and brought their own culture, customs and religion. Since Zhang Qian's hollowed out, the Chinese have once again opened their horizons, and have also accepted foreign religions such as Nestorianism, Manichaeism, and Zoroastrianism [8].

2.2. Japanese Ukiyo-e Beauty Painting

The term "floating world" can be traced back to ancient Japan. At the beginning, it means "worrying about the world", that is, "weariness" caused by yearning for "pure land". As Buddhism gradually entered Japan, sincere feelings for life replaced part of the original nihilistic connotations. Since then, the term "floating world" also has the meaning of instant pleasure, and it also has a bit of eroticism [9]. The "painting" in Ukiyo-e expresses a form of artistic expression. Although "painting" is an inseparable word, the two characters have their own meanings. They were introduced to Japan, but the Japanese have a different way of understanding these two characters from China. In Japanese art, "e" is an art form with prominent color characteristics, such as Yamato-e and Ukiyo-e. And so on are wonderful to express the charm of colors. The "painting" is mainly expressed in black and white of ink and wash, and the color of the picture is relatively

simple. For example, Chinese ink painting and Han painting are mainly expressed in lines[10]. Ukiyo-e emerged in the early seventeenth century. At that time, Japan was under the rule of the Tokugawa Shogunate. The economy was stimulated to a certain extent. Edo, as the main political station, developed rapidly, and the population rose sharply. Prosperity, these have also led to the increasing demand for reading books by the local public, and books are often painted with certain illustrations. Various conditions have gradually developed Ukiyo-e prints [11].

When Ukiyo-e was just emerging, the original skills and painting techniques of the painters did not reach a very mature stage, and they had to learn from two painting samples: one is that woodcut scriptures in the Tang Dynasty were passed to Japan and became the enlightenment of Japanese prints. The Chinese printmaking art in the Song Dynasty was more exquisite[12]. Japan was amazed by the exquisite Chinese printmaking skills at that time and spread it in its own country. Because of this, the printmaking art of the Heian period in Japan began to develop rapidly[13]. The illustrations in the Buddhist scriptures are similar to the portraits of the Buddha. The second is the printmaking from Ming and Qing Dynasties in China. The development of folk art in the Ming Dynasty promoted the continuous progress of printmaking art. The output of "Mustard Seed Garden Painting Biography" had a great influence on Japanese art[14]. Under the influence of these two art forms, "Ukiyo-e", which spreads painting works mainly in the form of prints (Ukiyo-e is often considered to refer to color-printed woodblock prints, which is called Jin-e in Japanese, but there are also many works that are Hand-painted by hand) has gradually become the mainstream of Japanese art[15]. With the gradual development of the Edo period, the art of Ukiyo-e has become more and more mature, gradually incorporating Japanese painting techniques and mainly civilian worldviews. The content of his paintings, its values are universally representative, and show its profound national significance. These factors have promoted Ukiyo-e's slow progress on the road to becoming a Japanese iconic art [16].

2.3. Guided Filtering Algorithm

Guided filtering is called this name because in the framework of the algorithm, to filter the input image p to get the output image q , a guided image I is needed. At this time, the filtering result at pixel i is expressed as a weighted average.

$$q_i = \sum_j W_{ij}(I) p_j \quad (1)$$

Suppose the initial transmittance map is the input image, the haze map is the guide image I , and the refined transmittance map is q . The grayscale image can also be selected as the guide image, and its execution speed is faster, but the resulting transmittance image retains less edge detail information than the RGB image, and the effect will be slightly worse.

Assuming that the guided filter is a local linear model between the guided image I and the filtered output q , the kernel function has the following definition:

$$q_i = a_k I_i + b_b, \forall i \in \omega_k \quad (2)$$

Among them, ω_k represents a window centered on k and a radius of r , and a_k and b_k represent two coefficients in the linear relationship. It can be seen from the above formula that these two coefficients are constants in the local window. When the image has boundary information, the filtered output image will also generate the corresponding boundary. Assuming that the noise is n , the optimization goal can be set as $\min \|n\|$, which is equivalent to $\min(n^2)$, that is,

$$\min \left(\sum_{i \in W_k} (q_i - p_i)^2 \right), \text{ so:}$$

$$\min \left(\sum_{i \in W_k} (a_k + b_k - p_i)^2 \right) \quad (3)$$

So we got a least squares problem. Ordinary least squares sometimes cause some trouble, so the penalty term ε should be appropriately introduced, that is, regularization is used to prevent a_k from being too large. That is, solve the parameters a and b corresponding to the following optimization (minimization) objective:

$$E(a_k, b_k) = \sum_{i \in W_k} \left((a_k I_i + b_k - p_i)^2 + \varepsilon a_k^2 \right) \quad (4)$$

Solve the above optimization problem, you will get

$$a_k = \frac{\frac{1}{|\omega|} \sum_{i \in \omega_k} I_i p_i - \mu_k \bar{p}_k}{\sigma_k^2 + \varepsilon} \quad (5)$$

In addition, when calculating the linear coefficient of each window, it can be found that one pixel will be contained by multiple windows, that is, each pixel is described by multiple linear functions. Therefore, when you want to find the output value of a certain point, you only need to average all the linear function values that contain that point, as follows:

$$q_i = \frac{1}{|\omega|} \sum_{i \in \omega_k} (a_k I_i + b_k) = \bar{a}_i I_i + \bar{b}_i \quad (6)$$

3. Comparative Experiment on the Images of Ladies in Tang Dynasty and Japanese Ukiyoe

3.1. Data Sources

The experiment tested the method and comparison method in this paper on three international public image databases: MSRA-1000, SED2, and ECSSD. Usually, the performance of the algorithm is evaluated by comparing the saliency map generated by the saliency detection algorithm with the labeled saliency map.

3.2. Experimental Procedure

In the process of conducting experiments on the three data sets, all use ten-fold cross-validation, that is, the data set is divided into ten randomly, nine of which are used to train the model, one is used to test the model, and the cross-validation is repeated ten times, So that each copy is selected as the test set once, and the average cross-validation correct rate of 10 times is used as the final result. In the process of training SAE, in order to train a better encoder, for each data set, 200 samples are randomly selected from each picture for training; in the process of training CNN and classifier, for each data set, from each According to the sample selection rules, 10 positive samples and 20 negative samples are randomly selected for training the model in this picture.

In the process of training the sparse autoencoder, in order to be able to extract higher-quality low-level contrast features and reduce the amount of calculation as much as possible, the following

settings are made for the training parameters of the sparse autoencoder: The number of neurons in the hidden layer is set to 25×3 ; the weight attenuation parameter and the sparsity penalty parameter are set to 0.0001 and 3 respectively; the L-BFGS optimization algorithm is used in the training process, and the maximum number of iterations is set to 400.

In the process of training the CNN network, in order to be able to extract more abstract top-level semantic features, the relevant training parameters are set as follows: The initial learning rate of weight and bias is set to 1 and 2, where basic learning The rate of initial value is 0.01, and the initialization methods of the initial value are gaussian (std=0.01) and constant (value=0) respectively. The learning rate is reduced every 1000 iterations, and the change index of the learning rate is 0.1, and in order to prevent overfitting Set the attenuation coefficient of weight to 1; the dropout rate of the data in the Dropout layer is set to 0.5; the maximum number of iterations in the training process is set to 5000; in order to speed up the learning speed, the momentum parameter is set to 0.9.

In the process of training the classifier, it is obvious that the number of individual classifiers is 2, and other parameters adopt the commonly used default settings: the calculation of the classification results is carried out in the form of probability estimation.

In the SCS image saliency detection model proposed in this paper, the extraction of low-level contrast features of the pixel unit limits the extraction range, which is limited to 40×40 pixels on the periphery of the center pixel unit, which is twice the size of the center pixel unit on the periphery, for our convenience It is called double-range comparison calculation. Considering the two contrast factors, in order to extract better low-level contrast features, try to change the calculation range of low-level contrast features to find an optimal calculation range and further improve the classification and detection performance of the model. To this end, a comparative experiment was designed and implemented. Set the contrast feature calculation range of the scs model to one-fold contrast range, two-fold contrast range, and three-fold contrast range. Through comparison experiments, observe the performance of model detection under different contrast ranges, and select the best performance Then find the best low-level contrast feature extraction range suitable for the image saliency detection problem, and achieve the purpose of optimizing the sCS saliency detection model.

3.3. Evaluation Criteria

According to whether the pixel unit is a salient unit or not, it is divided into two categories, namely a salient unit and an insignificant unit, and the corresponding pixel points in the pixel unit are salient points and non-salient points. ROC is one of the most commonly used evaluation indicators for evaluating the performance of classification models. The area under the ROC curve (AUC) reflects the performance of the model. The larger the area, the better the performance of the model. Therefore, the AUC can also be equivalent. Used to evaluate the classification model. However, the practical results show that the AUC value is easily affected by the center deviation problem and the boundary interruption problem, which leads to a biased evaluation. In order to eliminate the above influence, the researchers proposed an optimized AUC evaluation standard, namely S-AUC. Based on the consideration of the above reasons, this experiment also adopted S-AUC as the evaluation standard. In addition, referring to the generation and processing methods of saliency maps of other models, this article also uses Gaussian function to blur the original saliency maps, and counts the S-AUC values under different Gaussian function standard deviations.

4. Comparative Analysis of the Images of Ladies in Tang Dynasty and Japanese Ukiyoe Beauty Paintings

4.1. Perceivable Pixel Ratio Analysis

Table 1. Perceivable pixel ratio improvement

Original image number	Control group	Test group	Increase (%)
1	0.1155	0.1633	5.5217
2	0.0618	0.1155	5.9029
3	0.2801	0.3429	6.2252
4	0.1163	0.2116	9.7228
5	0.0445	0.0717	2.5629
6	0.0969	0.1269	3.4786

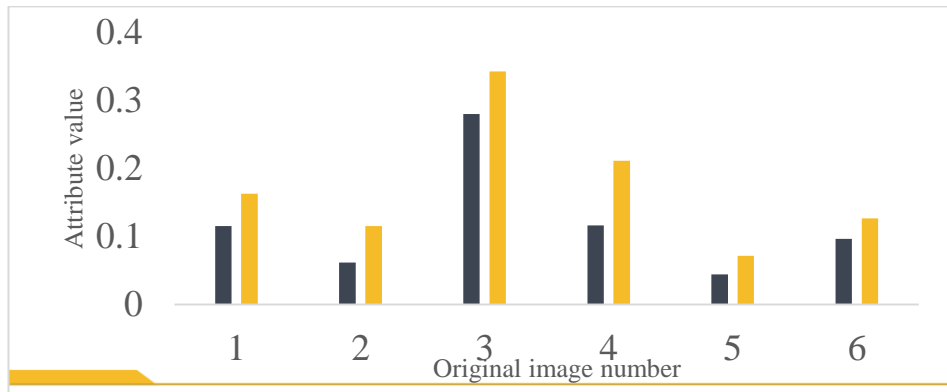


Figure 1. Perceivable pixel ratio

As shown in Table 1 and Figure 1, through a large amount of test data, we can also determine that the experimental group has a certain improvement in the perceptible pixel ratio of the control group. However, if the image is enhanced many times, it is found in the experiment that not all images can get better visual effects than the original image

Table 2. Picture processing time statistics

Original image number	Image segmentation time	Graying time	Total time
1	80.874624	559.453100	640.327723
2	47.701144	751.779653	799.480798
3	332.267053	881.469222	1213.736275
4	184.418800	760.474705	944.893505
5	107.626211	367.381536	475.007747
6	366.693273	542.781487	909.474760

As shown in Table 2 and Figure 2, in the result of the saliency detection result guided grayscale, because the automatically detected area of interest contrast is enhanced, the obtained image can better meet the human visual needs [17]. In the first line, after processing the image with the method in this paper, the small pink dots in the center of the image are well highlighted, and the line information on the image is also clearly highlighted. It can be seen from the saliency map that the

image The central area has a high degree of saliency, so the contrast in the gray image result image is enhanced, which highlights the different colors of the part of interest [18].

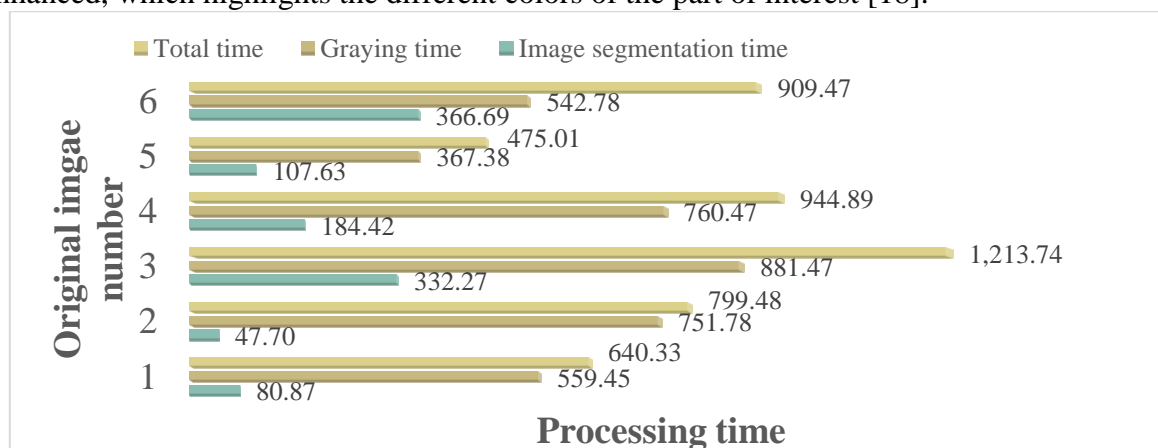


Figure 2. Picture processing time comparison

4.2. Style and Features of Traditional Chinese Beauty Paintings and Japanese Ukiyo-e Beauty Paintings

The Chinese nation has a very long history. In this vast land, people have gone through arduous struggles for generations, constantly transforming nature and constantly improving mankind itself. At the same time, people are gradually producing and developing their own creative thinking, aesthetic and artistic creativity. The history of Chinese art can also be traced from the distant antiquity. As early as the primitive society, there were activities that included aesthetic and artistic creation factors. With the development of the times, paintings of various styles and forms emerged in an endless stream. By the Tang and Song Dynasties, the development of Chinese painting basically reached its peak. According to the subject matter, Chinese painting can be divided into figure painting, landscape painting, flower and bird painting, etc. Looking back on the history of traditional beauty painting [19], as a kind of figure painting, it has many expressions. In the paintings of the past dynasties, we often see that it is written in the form of fine brushwork or part-time work. form. Therefore, most of its expression methods are more detailed, but the modeling emphasizes freehand. This freehand refers to not simply depicting natural objects in a very realistic manner, but to highly refine and generalize specific objects. The prerequisite to express the charm of the object is to grasp the essential form of the image, which is also the conveyance of the image emphasized in Chinese painting. Traditional meticulous figure painting generally has several forms of expression, such as heavy color, light color, and line drawing, and its performance objects are various characters [20]. Chinese painting pays attention to line modeling. It mainly uses the characteristics of line density, length and thickness, and straightness to describe the shape of the object. The relationship between the virtual and the reality of the brush, the uplift and the frustration reflects the grasp of the dynamics of the object, and the change of ink color and intensity. Dry and wet are fully integrated into the modeling, coupled with the use of cold and warm changes in color, as well as the application of techniques such as separate dyeing and cover dyeing, to express the spatial sense of the picture objects in detail [21].

The styles of beauty paintings in different periods reflect the aesthetic trends of the society and the ideal requirements for female beauty at that time. However, it is undeniable that from the paintings of ladies in the past dynasties, it can be seen that painting is closely attached to the function of political enlightenment and is closely related to the ideas of the feudal ruling class. Under the suppression of feudal ethics, women have long been constrained by feudal ethics, their

status is getting lower and lower, and they are subservient to men and even become their appendages[22], thus affecting women's thinking and understanding of themselves, and this is precisely a lady. The social origin of the painting has created the "sorrowful" and "traceful" emotional expression and the national aesthetic model of beauty paintings. Traditional Chinese beauty paintings do not simply take beauty as the only pursuit, but rather focus on the expression of the charm of the characters[23], emphasizing the feelings that the inner beauty of the characters brings to the viewer.

Ukiyo-e beauty painting has a large number of outstanding beauty painting masters in its development process. Shixuan Rishakawa is recognized as the founder of Ukiyo-e and is known as the originator of Ukiyo-e. He created the "Lingchuan Style", the most representative work "Looking Back at the Beauty". After Shixuan Ryokawa, there are also Torii Kiyoshinobu of the Torii school, who are all representatives of the early days of beauty painting. In the mid-stage of the development of beauty painting, the beauty painters represented by Suzuki Harunobu were mostly the girls next door in life, and they were idealized and stylized images of beauty. After Harunobu, Tori Kiyomizu began to focus on the "realistic beauty" of women, and created the style of "Qingzhang Beauty", which became one of the typical painting styles in the mid-Edo period [24]. Ukiyo-e's most representative beauty painting master Kitagawa Umata pushed the development of beauty painting to an unprecedented height and created the style of beauty painting of Dashoue, the classic representative work "Thinking of Love". After that, the beauty painting began to decline slowly. The development of Japanese art is closely related to the dissemination of Chinese culture and art. Ukiyo-e has absorbed Chinese painting language in the use of lines and shapes. However, due to the differences in culture and national aesthetics, Ukiyo-e has gradually divorced from Chinese culture and art on the road of development. The influence of, formed a painting style rich with national characteristics, and became a bright color in Japanese culture and art.

4.3. Similarities and Differences in Expression Techniques between Traditional Chinese Beauty Paintings and Ukiyo-e Japanese Beauty Paintings

The composition is the formal beauty of the picture. Composition in painting is a concept of form. The artist organizes various form factors through a certain spatial arrangement, and processes them through lines, colors, shapes, etc., so as to recompose new visual images to express the artist's emotions and themes.. Chinese figure painting is mainly based on scattered perspective, and is good at using long scroll painting composition, blending scenes, dynamic and static, focusing on the main and the small, the virtual and the real. Traditional Chinese paintings of ladies have inherited this composition method since the beginning of Gu Kai. His masterpieces "Nv Shi Zhen Tu", "Zhu Qin Tu", "Luo Shen Fu Tu" and "Lie Nu Ren Zhi Tu" are all forms of expression space in the long scroll. The volume of "Nu Shi Zhen Tu" is one of the earliest paintings of beautiful women. There are 9 sections in existence. The pictures are divided into paintings with the content of the proverbs. Each section of the pictures vividly reveals the content of the proverbs. "Luo Shen Fu Tu" also adopts the form of a long scroll, which depicts the story of Cao Zhi meeting and falling in love with the imaginary Luo Shen. Trees and stones are used as the separation between the various segments of the picture, allowing Cao Zhi and Luo Shen to appear repeatedly, but the scenes vary in size and are not straightforward. The rocks and trees in the background are just sketched out with lines, and then set off the characters while showing a sense of space. The composition of the paintings of ladies in the Tang Dynasty inherited Gu Kaizhi's composition mode, with vertical scroll painting and scroll painting as the main forms of painting, but the depiction of the figures was more detailed [25]. As shown in Figure 3 (figure from www.baidu.com), the volume of "Training Drawing" depicts three scenes of mashing, sewing, and ironing in sequence from the right and left. The arrangement

of the characters pays attention to density and combination, and the characters echo with each other. In the Tang Dynasty, scroll painting and scroll painting were the main forms of painting in the Tang Dynasty. During the Five Dynasties period, Chinese traditional figure painting experienced important changes. The rise of landscape painting and flower-and-bird painting had a profound influence on figure painting. In the early days of Sheung Shui paintings, the small view was adopted, but the flower-and-bird paintings were small in the big and big. The micro-composition mode of flower-and-bird painting has an impact on the composition mode of landscape paintings, as well as the composition of portrait paintings. Gu Hongzhong's "Han Xizai Night Banquet" adopts the traditional composition method, breaking the traditional composition method, breaking the concept of time, and there are many characters, but the guests and hosts are arranged in an orderly manner and the complexity is simple. Between the scenes, the artist skillfully uses artifacts such as screens, tables, orchestras, beds, etc., to make them both connected and separated from each other. In particular, there is a certain degree of innovation in the handling of screens. Only the lower half of the screen is painted in the picture. The composition method of portrait painting is rare before. The composition of traditional Chinese paintings of ladies in the Song Dynasty has become more and more perfect.



Figure 3. Practicing diagram

4.4. Comparative Analysis of the Two in Artistic Style

"The essence of plastic art is not to imitate reality, but to create a brand-new form of re-melting and designing reality based on the aesthetic ideals embraced by the artist." The figures of traditional Chinese meticulous lady paintings are generally very proportional, and they are not necessarily all beauties, but the painters all put their yearning for beauty in their works, and according to the image of beauty in their minds, they conformed to the general aesthetics of the society at that time. View to shape various female images.

From the Wei, Jin, Southern and Northern Dynasties, it was represented by Gu Kaizhi's "Luo Shen Fu Tu", depicting fairies with clear bones and no elegance. The lady's facial shape was oval, the eyebrows were delicate, and the body was slender: Tang Dynasty emphasized realism and often used to enrich muscles. Show bones are beautiful. In Zhou Chou's "A Lady with a Fan", the face of the woman became rounded and plump, and her posture became plump and strong, fully demonstrating the magnificence and inner grace and noble temperament of royal aristocratic women in the heyday of the Tang Dynasty. By the Five Dynasties, the plump and lazy styling of ladies in the Tang Dynasty had emerged, and the faces of ladies changed from round to oval. As shown in Figure 4 (figure from www.baidu.com), Ruan Gao's "Langyuan Fairy Picture" has begun to show the lines of female figures. The curvaceous beauty of the lady, the slender figure of the lady, is more healthy. Gongbi ladies in the Song dynasty painted the classical style from the Jin and Tang Dynasties to the modern style after the Ming and Qing Dynasties. Due to the broad subject matter, although the representation of different women, the entire lady's shape inherited the legacy of "fine texture and even flesh and blood" of the characters in the Tang Dynasty.

In terms of posture, traditional Chinese Gongbi ladies and Ukiyo-e beauty have different static and dynamic expressions. The images of women in traditional Chinese paintings of ladies with fine

brushwork are mostly static. "Quiet" is one of the characteristics of Chinese female beauty, and it is also a form of expression that matches the inner beauty. Traditional Chinese meticulous figure painting follows the traditional static modeling style. It does not directly express emotions such as love, sorrow, joy, and thought, but expresses it through the subtle movements of the human body and the changes in the posture of the hands. Whether it is Zhou La's "Photo of Hairpin Girl" or Zhang Qian, although it shows women playing or working, their body movements are very small, or they nod or lean slightly. Among the dynamic beauty of the body, the painters of Ukiyo-emi are very obvious. These characters appear in asymmetrical or unstable postures. Ukiyo-emi emphasizes the movement of the body. The different movements are composed of the postures of the head, hands, waist and feet, creating a sense of instability and instability, just like the ups and downs of a floating world.



Figure 4. The fairy tale of Langyuan

5. Conclusion

China and Japan have a long history. The art of China and Japan are closely linked, cultural exchanges are closely linked, and traditional craftsmanship are closely related. China and Japan learn from each other in terms of culture. Japanese Ukiyo-e paintings originated from paintings of ladies in the Tang Dynasty in China. Japanese painters introduced and learned various painting arts, combined with the cultural environment and customs of Japan, and gradually became unique to Japan. Painting style.

Through the analysis of Ukiyo-e art and looking at the beauty paintings of the entire Edo period, we found that there is no fixed pattern of aesthetic appeal, and its development is full of uncertainty. We can regard aesthetics as a regular "trend", and It can be regarded as a kind of cyclical "strange circle". In fact, the most important thing is our own attitude towards beauty, whether tall or short, fat or thin, or burly or petite. This is a summary of our own beauty of the world. At the same time, it's also the individuality that he shows to the outside world.

In the Tang Dynasty, people's appreciation of women's aesthetics was different from that of other periods. The beauty of the female image in the Tang Dynasty's beauty paintings was the most prominent impression. The peony flower shape seems to be noble and plump. It is loved by the Tang people. The horses are full of plump buttocks. They are also favored by the Tang people. However, the Tang people's advocacy of the "puffy, plump and gorgeous" shape of the women in the beauty paintings is not simply because of the plumpness of the female body. It is a cultural vision of a new concept and a comprehensive aesthetic concept. This majestic and majestic presents the profound accumulation and continuation of the cultural traditions of the Chinese nation. This majestic and majestic atmosphere is not the kind of overbearing and domineering, nor is it unreasonable, it is a kind of justice and awe-inspiring masculinity., Accumulated on the strong traditional cultural spirit of the Chinese nation. Under such aesthetic guidance, the unique modeling

language of women in the beauty paintings of the Tang Dynasty can be elegant in the public, reflecting the superb painting skills of the Tang Dynasty painters and this era. The magnificent peaceful and prosperous age has had an indelible influence on the later creation of Chinese figure painting. It is worth our inheritance and development.

Funding

This article is not supported by any foundation.

Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

- [1] Zhang X, Li X, Feng Y. A new multifocus image fusion based on spectrum comparison. *Signal Processing*, 2016, 123(Jun.):127-142.<https://doi.org/10.1016/j.sigpro.2016.01.006>
- [2] Takuji T. Harmonious beauty of Japanese cuisine. *Journal for the Integrated Study of Dietary Habits*, 2017, 27(4):231-236.https://doi.org/10.2740/jisdh.27.4_231
- [3] Berger B, Wolter F E, Vais A. Colocalization structures and eigenvalue spectra for colour image comparison. *Visual Computer*, 2016, 32(6-8):1057-1067.<https://doi.org/10.1007/s00371-016-1260-x>
- [4] Mikolajczyk T, Nowicki K, Bustillo A, et al. Predicting tool life in turning operations using neural networks and image processing. *Mechanical systems and signal processing*, 2018, 104(MAY1):503-513.<https://doi.org/10.1016/j.ymsp.2017.11.022>
- [5] Kazuma Aoki. Server for implementing image processing functions requested by a printing device. *Environmental Pollution*, 2018, 152(3):543-552.
- [6] Kok D. *Partners in Print: Artistic Collaboration and the Ukiyo-e Market* by Julie Nelson Davis (review). *Monumenta Nipponica*, 2016, 71(1):419-423.<https://doi.org/10.1353/mni.2016.0009>
- [7] Babchin A J, Naschie M S E. On the Real Einstein Beauty $E = Kmc^2$. *World Journal of Condensed Matter Physics*, 2016, 06(1):1-6.<https://doi.org/10.4236/wjcmp.2016.61001>
- [8] Gonzalez-Garcia R A, Mccubbin T, Wille A, et al. Awakening sleeping beauty: production of propionic acid in *Escherichia coli* through the sbm operon requires the activity of a methylmalonyl-CoA epimerase. *Microbial Cell Factories*, 2017, 16(1):121.<https://doi.org/10.1186/s12934-017-0735-4>
- [9] Sharma T, Rahul C, Shahul S, et al. Video Retrieval System-An Approach based on Image Comparison. *International Journal of Engineering and Technology*, 2016, 8(1):357.
- [10] Brombal L, Golosio B, Arfelli F, et al. Monochromatic breast computed tomography with synchrotron radiation: Phase-contrast and phase-retrieved image comparison and full-volume reconstruction. *Journal of Medical Imaging*, 2018, 6(3):1.<https://doi.org/10.1117/1.JMI.6.3.031402>
- [11] Chan S, Pullerits K, Riechelmann J, et al. Monitoring biofilm function in new and matured full-scale slow sand filters using flow cytometric histogram image comparison (CHIC). *Water Research*, 2018, 138(JUL.1):27-36.<https://doi.org/10.1016/j.watres.2018.03.032>

- [12] Rodríguez Mariano, Julie D, Jean-Michel M. *Covering the Space of Tilts. Application to Affine Invariant Image Comparison.* *SIAM Journal on Imaging*, 2018, 11(2):1230-1267.<https://doi.org/10.1137/17M1140509>
- [13] Johnstone C D, Lindsay P, Graves E E, et al. *Multi-institutional MicroCT image comparison of image-guided small animal irradiators.* *Physics in Medicine & Biology*, 2017, 62(14):5760.<https://doi.org/10.1088/1361-6560/aa76b4>
- [14] Rhett J Drugge, Elizabeth D Drugge. *Temporal Image Comparison (Serial Imaging) in Assessing Pigmented Lesions.* *Dermatologic Clinics*, 2017, 35(4):447-451.<https://doi.org/10.1016/j.det.2017.06.005>
- [15] Lombardi T, Kahn B, Contreras S, et al. *Image Comparison of a Mobile Colposcope (EVA) versus a Standard Colposcope for Directing Cervical Biopsies in Women with Abnormal Pap Smears: A Non-Inferiority Trial.* *Journal of Minimally Invasive Gynecology*, 2016, 23(7):S92-S92.<https://doi.org/10.1016/j.jmig.2016.08.223>
- [16] Mishra P K, Goswami J G. *Image Comparison with Different Filter Banks On Improved PCSM Code.* *International Journal of Image, Graphics and Signal Processing*, 2016, 8(12):47-54.<https://doi.org/10.5815/ijigsp.2015.12.06>
- [17] Strathie A, Mcneill A. *Facial Wipes don't Wash: Facial Image Comparison by Video Superimposition Reduces the Accuracy of Face Matching Decisions.* *Applied Cognitive Psychology*, 2016, 30(4):504-513.<https://doi.org/10.1002/acp.3218>
- [18] Panneer R, Harisubramanyabalaji S P, Sribalaji C A, et al. *Prediction of surface roughness using spectral analysis and image comparison of audio signals.* *International Journal of Precision Engineering and Manufacturing*, 2016, 17(6):709-715.<https://doi.org/10.1007/s12541-016-0088-7>
- [19] Xia W, Han S, Cao J, et al. *Target recognition of ladar range images using slice image: comparison of four improved algorithms.* *Optical Engineering*, 2017, 56(7):073107.<https://doi.org/10.1117/1.OE.56.7.073107>
- [20] Ferrarini B, Ehsan S, Rehman N U, et al. *Performance comparison of image feature detectors utilizing a large number of scenes.* *Journal of Electronic Imaging*, 2016, 25(1):010501.<https://doi.org/10.1117/1.JEI.25.1.010501>
- [21] Wu Y, Kim J, Chan S T, et al. *Comparison of image sensitivity between conventional tensor-based and fast diffusion kurtosis imaging protocols in a rodent model of acute ischemic stroke.* *Nmr in Biomedicine*, 2016, 29(5):625-630.<https://doi.org/10.1002/nbm.3506>
- [22] A H C K, B H J K, B K K, et al. *Comparison of Image Uniformity with Photon Counting and Conventional Scintillation Single-Photon Emission Computed Tomography System: A Monte Carlo Simulation Study.* *Nuclear Engineering and Technology*, 2017, 49(4):776-780.<https://doi.org/10.1016/j.net.2016.12.002>
- [23] Sinnatamby M, Nagarajan V, Reddy K S, et al. *Comparison of image-based three-dimensional treatment planning using AcurosTM BV and AAPM TG-43 algorithm for intracavitary brachytherapy of carcinoma cervix.* *Journal of Radiotherapy in Practice*, 2016, 15(03):254-262.<https://doi.org/10.1017/S1460396916000248>
- [24] Havran V, Filip J, Myszkowski K. *Perceptually Motivated BRDF Comparison using Single Image.* *Computer Graphics Forum*, 2016, 35(4):1-12.<https://doi.org/10.1111/cgf.12944>
- [25] Kitazato Y, Kuga N, Shirieda K, et al. *Evaluation of Absorbed Dose for CBCT in Image-guided Radiation Therapy: Comparison of Each Devices and Facilities.* *Nippon Hoshasen Gijutsu Gakkai zasshi*, 2017, 73(4):309-316.https://doi.org/10.6009/jjrt.2017_JSRT_73.4.309