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ANALYSIS OF THE EFFECT OF THE APPLICATION OF MONTAGE ARTISTIC EXPRESSION OF VIDEO DATA INFORMATION TECHNOLOGY PROCESSING IN FILM AND TELEVISION CHOREOGRAPHY

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Abstract. Film and television works blend the dynamic interplay of light and shadow within the camera, using a combination of visual composition, character portrayal, and artistic techniques to evoke emotions and convey deeper narratives to the audience. As artistic creation shifts towards perceptual and cognitive dimensions, traditional forms of expression in film choreography are being pushed to their limits. Among these, montage has remained a cornerstone of cinematic storytelling, continuously evolving throughout film history. It serves as both a sensory expression and a powerful artistic technique that harmonizes light, shadow, and narrative flow. This paper explores the artistic essence of montage, examines its application in film and television choreography, and integrates video information processing technology to enhance its expressive capabilities. Experimental results demonstrate that our approach significantly improves the effectiveness of montage in film and television editing and directing. Moreover, the incorporation of advanced video processing techniques further refines the precision and impact of montage, elevating the overall artistic and technical quality of film production.

Key words: Video processing; Application practice

1. Introduction. Montage is a French phonetic word, originally an architectural term meaning composition and assembly. With the development of multimedia technology, montage technique has been widely used in the field of film and television [1]. Montage includes three aspects: first, as a narrative way of film and television, a group of shots can form a montage sentence, and several montage sentences are combined to form a whole film; second, as a technique and means of film and television editing, montage combines various elements such as sound, acting and photography to form a complete visual image; third, as a unique way of thinking, montage thinking can be applied to The choreography of film and television works [2, 3]. Take film and television images as an example, montage technique can edit two or more shots in the film and television images together to form a new image and produce a stronger impact. The montage technique can make film and television works more vivid and transform them from mechanized sound and color art to a highly creative art. With the continuous development of film and television industry, the application of montage technique has become more and more widespread, but due to the lack of professional talents and insufficient attention to montage technique, the application of montage technique in China is not effective and its development is limited [4, 5].

In a narrow sense, montage is a creative means of expressing the plot of a film, consisting mainly of picture editing and picture composition. However, in the current film and television choreography, the value of montage is being redefined: when a story unfolds around a time line and a space line, it must be narrated around a specific structure, and the single line of film and television choreography becomes inevitable [6]. Montage provides creators and directors with more options: with the help of film editing technology, writers and directors can break the comprehensive restrictions of time and space and combine shots from different angles to form a more meaningful picture. Under montage, different shots echo and refute each other, enhancing the impact and structure of the story. For the creation of film and television choreography, montage is an artistic technique, but moreover a peculiar creative idea [7].

With the continuous development of the film and television industry, the application of montage technique is becoming more and more common, but in China. The application of montage technique is not effective

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Table 2.1: Montage film and television choreography video choreography data encoding format classification.

Properties	Format
Video Encoding	H.264
Audio Encoding	PCM, AAC, MP2, MP3
Encapsulation Format	PS, TS
File Storage Format	AVI, MP4

and does not have its essence deeply [8]. On the one hand, domestic film and television choreographers do not use montage technique much. With the continuous progress of montage techniques and technologies, the montage technique is becoming more and more important in film and television choreography, but this technique originates from foreign countries and has a short history of development and insufficient experience in China, resulting in less use of the montage technique and no in-depth exploration of it [9]. At present, the montage technique used in domestic film and television choreography is mainly focused on photography and dubbing, which is more applied in the combination of shots in the early stage of film and television, and less applied in the post-production of film and television. On the other hand, many directors in China lack the sense of innovation and do not adjust the concept of film and television production in time, and still adopt the traditional shooting method when shooting works [10].

In the era of continuous development of information intelligence, various choreography systems are constantly being updated and improved, and the data generated is growing rapidly. The rapid development of the Internet has driven the production level of all industries, and at the same time, the era of intelligent networks has brought new challenges to film and television choreography. Artificial intelligence is widely used in choreography video processing systems, and by applying deep neural networks (DNN) can achieve high accuracy in choreography, but requires a lot of computing power and storage space to store video data. Based on this paper, we study the method of video information processing technology to apply montage representation technique to film and television choreography efficiently.

2. Methods.

2.1. Video data imputation and encoding conversion.

2.1.1. Automatic video data assembly. The data management scheme adopted by different choreographers' video choreography equipment varies greatly [11]. Considering that the choreographer's video choreography system has a network interface, a unified FTP service can be built through this interface to transfer the data at runtime; then the video data transfer equipment establishes a high-speed wireless network link with the server, and when it enters the access point (AP) coverage of the machine section, the video data in the transfer equipment is transferred to the server through the high-speed wireless network at one time to realize the automatic collection of different models of choreographer's video choreography data [12]. When it enters the wireless access point (AP) coverage area of the aircraft section, the video data in the transcoding equipment is transmitted to the server through the high-speed wireless network at one time, realizing the automatic collection of video programming data of different models.

2.1.2. Transcoding target format. Currently, the classification of video choreography data encoding formats used in domestic railway systems is presented in Table 2.1. These formats are selected based on factors such as compatibility with existing infrastructure, compression efficiency, real-time processing capabilities, and adaptability to different operational environments. Understanding these classifications is crucial for optimizing video storage, transmission, and playback in railway applications, ensuring both efficiency and reliability in real-world scenarios.

The target format of video transcoding needs to have good enough compatibility and universality, on the one hand, it should be able to be played by common player and support browser to decode and play directly to meet the flexible system linkage under B/S architecture; on the other hand, it needs to have a unified and standard file format and efficient target transcoding efficiency. On the other hand, it is necessary to have a uniform and standard file format and efficient transcoding efficiency.

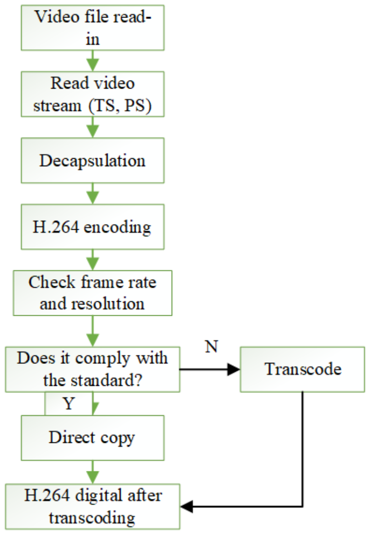

Fig. 2.1: Flow chart of video transcoding.

2.1.3. Encoding and encapsulation conversion. According to Table 2.1, there are various combinations of video, audio, encapsulation and file formats for video data. Among them, encapsulation and file formats do not involve re-encoding and decoding of video data, but only adding structured logos and container shells to the original data. In fact, the encapsulation of program stream (PS) or transport stream (TS) formats is used for all the choreographed video data and stored directly as non-standard MP4 format files. Therefore, for different video files, it is necessary to first decapsulate the video files using FFmpeg and then process the video and audio parts of the streams separately.

(1) Video transcoding. Each video coding system on the video stream part of the encoding are used a unified standard format, that is, the use of H.264 format for encoding, the main difference is reflected in the resolution and frame rate. The problem of different resolution can be stretched proportionally to ensure the same size of the video playback screen during the display playback, so it can be adjusted without the transcoding process. The frame rate difference can affect the synchronization of multi-screen fast forward, fast rewind and linked playback, which needs to be solved by interpolation compensation for low frame rate videos or frame extraction for high frame rate videos during transcoding. The flow of video transcoding is shown in Fig. 2.1, taking into account the smoothness of the image during motion and the storage space limit of the director's memory.

(2) Audio Transcoding. The transcoding of audio streams in the choreography video data is more complex and involves a variety of audio coding formats, mainly including AAC, PCM, MP2 and MP3. Especially in some early video coding products, some manufacturers use PCM_MULAW audio coding format, which makes it difficult for FFmpeg to correctly identify the sample accuracy of such audio coding format, resulting in the problem of sample bit mismatch when selecting audio decoder. Generally speaking, the current mainstream devices adopt 16bit sampling precision, but in the process of actual application, we found that some videos adopt the rare 8bit sampling precision. When transcoding, if the interface is used directly, the audio decoder will be selected automatically, and the PCM decoder with 16bit sampling precision will be used by default to decode, which will result in the problem of decreasing sampling rate, leading to sound quality degradation and more noise, and the length of the video will also be changed as a result. Therefore, when audio coding conversion is performed, if an abnormal sample rate is detected, an audio decoder needs to be specified in time to decode audio streams of different coding formats correctly. The transcoding flow of audio code streams is shown in Fig. 2.2.

After completing the encoding conversion of video and audio streams, the video stream is converted into a uniform H.264 format video encoding with a frame rate of 15 f/s; the audio stream is converted into an AAC

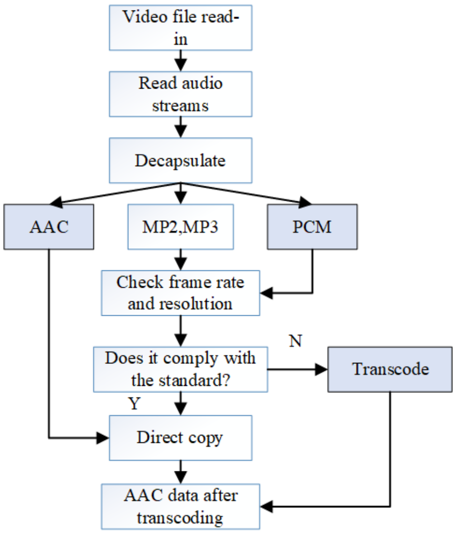

Fig. 2.2: Flow chart of transcoding audio stream.

audio encoding with a sampling rate of 8,000 Hz and a sampling precision of 16 bit, and both are encapsulated using the MP4 standard container.

2.2. Integrated Film and Video Programming Application System. The UEVideo(Usability Engineer Video) developed in this study is an integrated system based on edge computing, where video analysis can be performed in real time.In the process of real-time editing and directing of video capture, the process of data acquisition and transmission is inevitably affected by external factors. In order to reduce noise interference and improve data accuracy, Kalman algorithm is used to improve the filtering of video data. The Kalman algorithm is calculated as follows:

First, the state equation and the measurement equation are established at the key choreography nodes as:

$$\left\{\begin{array}{l} x_{k+1} = A_k x_k + w_k \\ y_k = H_k x_k + v_k \end{array}\right. \tag{2.1}$$

where K denotes a natural number that is not zero at a certain moment; x_k andy_k denote the state variables and measurement variables of the film and television choreography data signal at time k ; A_k and $H_k$denote the state transfer matrix and measurement coefficient matrix of the film and television choreography signal at time k; w_k and v_k denote the dynamic noise and measurement noise of the film and television choreography signal at time k , respectively.

Secondly, the error initialization equation is established according to Eq. 2.1 as:

$$\left\{\begin{array}{c} x(0 \mid 0) = E\left(x_0\right) \\ P_x(0 \mid 0) = E\left[\left(x_0 - x(0 \mid 0)\right)\left(x_0 - x(0 \mid 0)\right)^T\right] \end{array}\right. \tag{2.2}$$

where P is the covariance and E is the error. After Kalman's recursion, we get:

$$\left\{\begin{array}{c} x(k \mid k-1) = A_k x(k-1 \mid k-1) \\ P_x(k \mid k-1) = A_k P_x(k-1 \mid k-1) A_k^T \end{array}\right. \tag{2.3}$$

$$J_k = \frac{P_x(k \mid k-1)}{H_k P_x(k \mid k-1) H_k^T + R_v(k)} \tag{2.4}$$

$$Q_w = E\left[w_k w_k^T\right] R_v = E\left[v_k v_k^T\right] \tag{2.5}$$

In Eq. 2.3- Eq. 2.5, we denote the respective covariances of the dynamic noise and the measurement noise of the film and television choreography signal at time k, respectively; J denotes the filtered value of the final operation.

It can be seen from Eq. 2.1- Eq. 2.5 that the Kalman algorithm process is an iterative process, which realizes the noise reduction of the original video choreography data through repeated calculations.

2.3. Intelligent recognition of video processing. After the video data undergoes noise reduction using the Kalman algorithm, the computing unit of each edge node in the UEVideo system concurrently processes the data using a partitioned DNN model. This approach enables efficient real-time analysis, as the workload is distributed across multiple edge nodes, reducing latency and enhancing processing speed. The partitioned DNN model is specifically designed to handle various segments of the video data, allowing for parallel processing of different features such as motion detection, object recognition, and scene analysis. This technique not only improves the overall system performance but also ensures that the video data is processed in a timely and scalable manner, making it well-suited for dynamic and resource-constrained environments.

Firstly, let the three different structures of video choreography data set, N is the total number of data samples, and after correlation and fusion, we get the data sample set.

Secondly, a neural network model with three hidden layers is built to extract the feature information of the film and television choreography data, which mainly includes the encoding and decoding processes. In the encoding process, the Kth sample of film and television choreography data is encoded with the following equation:

$$a_k = f_\theta\left(d_k\right) = f\left(T_1 a_n + C_1\right) \tag{2.6}$$

$$b_k = f_\theta\left(d_k\right) = f\left(T_1 b_n + C_1\right) \tag{2.7}$$

$$c_k = f_\theta\left(d_k\right) = f\left(T_1 c_n + C_1\right) \tag{2.8}$$

where f_x denotes the activation function and θ denotes the parameter of autoencoder. Usually, the activation functions commonly used in encoding and decoding are the ReLU function and the sigmoid function [13], and in this paper, the ReLU function is used in the encoding process, while the two activation functions are mixed in the decoding process.

In the decoding process, the film and television choreography data are reconstructed to obtain the output quantity , which is closest to the original film and television choreography data in the input layer, as shown in Eq. 2.9:

$$g_k = f_\theta(x) = f\left(T_2 x + C_2\right) \tag{2.9}$$

$$x = a_k, b_k, c_k \tag{2.10}$$

where x represents any one of the three film and television choreography datasets $T_1 = T_2^T, C_1 = C_2^T$.

Finally, the parameters are set. The parameters of the DNN model are mainly composed of the number of iterations, batch processing, and learning rate, and the loss function is called by the mean square loss function MSELoss in the PyTorch database to prevent overfitting of the data [14].

After feature extraction, the model decomposes the target recognition image into several sub-windows with different parts and scales, and the classifier determines whether the sub-windows match, classifies the judgment information, and finally merges all the judgment information to complete the video image recognition of film and television choreography [15].

The feature classification of film and television choreography video data is divided into strong classifier and weak classifier, and the source value of the recognized image is obtained after data processing before classification:

$$f(x, y) = \int_0^y \int_0^x g\left(i', j'\right) d_x d_y \tag{2.11}$$

where $f(x,y)$ is the source value of the recognition map, and $g(i',j')$ is the source image. The calculation process is to use the sum of the pixel values located in (i,j) as the integral map value at the corresponding (i',j') . The computation process can be simplified as follows,

$$f(x,y) = g(x',y') \tag{2.12}$$

The number of target samples is determined by using the integration diagram to quickly calculate the total sum of pixels in the target obtained region, and each feature of 20 × 20 pixel points is used as a weak classifier, while the number of positive and negative samples is guaranteed to be the same.

The minimum feature correlation parameters of the discrete samples are saved, and the sample feature data values and the corresponding data frequency values are obtained. After processing, the highest recognition rate of all features is obtained, and the parameters corresponding to the highest recognition rate are obtained, and the preliminary recognition of the image is completed, and the results of the weak classifier are obtained for the recognition of the sample choreography .

During the processing, the strong classifier initializes the sample weights as:

$$w_j = \frac{1}{M}, j = 1, 2, \cdots, M \tag{2.13}$$

Calculate the weighted error rate δ of the -th strong classifier, and get:

$$\delta_i = \sum_{j=1}^{M} w_{ij} \left(y_j - h_i(x_i)^2 \right) \tag{2.14}$$

The meaning of $h_i(x_i)$ function is the classification result of the i-th strong classifier for the j -th target. If the classification is $h_i(x_i) = 1$, we get a positive sample; if not, $h_i(x_i) =$ - 1.

According to the optimal strong and weak classification results, the target weights of each sample are adjusted to obtain:

$$w_{i+1,j} = w_{i,j} \exp\left(-y_j h(x_j)\right) \tag{2.15}$$

According to the calculation results, the classification target sample parameters are updated, the sample data parameters are differentiated, and the deep processing of video data for film and television choreography is completed.

3. Experiments.

3.1. Basic tests. In this section, we will conduct experiments to verify the applicability and effectiveness of the UEVideo system. The experimental hardware environment is Pentium (R) CPU, 8 cores and 16G memory, the hard disk capacity of the computer is 512G, the software operating system is Windows 10, JDK5. 0, and the simulation is performed by MATLAB software system.

3.1.1. Experimental setup. In this study, mobile camera smartphones (computing elements) are used as edge nodes, and Wi Fi routers are used as components of UEVideo system access points. Considering the radio signal strength on the mobile peripheral node, the research records the location of the wireless access point, and moves the border node to a certain range.

For video processing, this experiment configures two network bandwidths, and tests the performance of systems processing three types of video resolutions, 1280 *720, 640*480 and 320 *240, respectively. One of the relevant parameters involved in the computational framework is shown in Table 3.1.

3.1.2. Performance Evaluation. In this section, we analyze the performance of choreography and recognition in terms of execution time and power consumption for processing video data of film and video choreography using cloud computing model and UEVideo system, respectively.

Table 3.1: Relevant parameters in the computational framework.

Parameters	Code	Number
Number of iterations	Nmm_epochs	200
Number of batches	Batch_size	1280
Learning rate	lerning_rate	1e-3
Adam optimizer	Torch optim. Adam	1e-5
Mean square loss function	Criterion	MSEloss

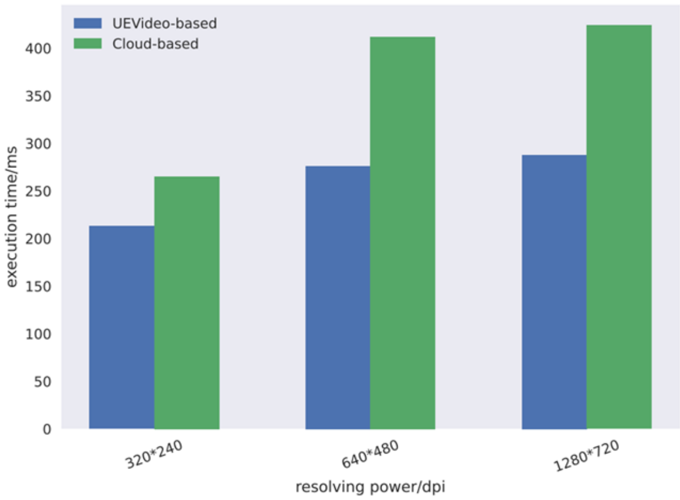

Fig. 3.1: Execution time at different resolutions (HBLD).

(1) Execution time. Fig. 3.1 and Fig. 3.2 show the implementation time of cloud computing model and UEVideo system in the same video format.

From Fig. 3.1 and Fig. 3.2, it can be seen that the execution time using the cloud computing model is always longer than the execution time of the UEVideo system in this study for deep processing of video data for film and video choreography. In the LBHD network, the implementation time of cloud based video conferencing is similar to that of UEVideo in the HBLD network, while the implementation time of UEVideo is relatively short, and almost remains unchanged with the improvement of resolution. On the contrary, the running time of cloud computing model increases gradually. In the HBLD based network, the UEVideo is implemented at a speed of about 309ms, with a resolution of 1280 * 720 and almost real-time. In contrast, the deployment time of cloud based frameworks is about 4500 milliseconds, almost 1.45 times that of UEVideo.

(2) Power consumption. For the same amount of film and TV choreography data, the power consumption of the cloud computing model and the UEVideo system for different frame sizes (1000 8000) of film and TV choreography data are compared in two different scenarios, and the results are shown in Fig. 3.3 and Fig. 3.4.

The power consumption of the UEVideo system in this study is always lower than that of the cloud computing model for deep processing of video data for film and video editing. In the LBHD network environment, for example, the difference between the cloud computing model and the UEVideo system is small at 1000 frames, but the difference increases exponentially as the number of frames increases, and at 8000 frames the power consumption of the cloud computing model is almost 2. 13 times that of the UEVideo system.

According to the experimental results, it can be concluded that the implementation time of UEVideo system in LBHD based network is almost the same. With the increase of network bandwidth, each frame will be transmitted to the server, so the running time will increase greatly. At the same time, the boundary computing system is used in the UEVideo system to make full use of computing resources in peripheral nodes

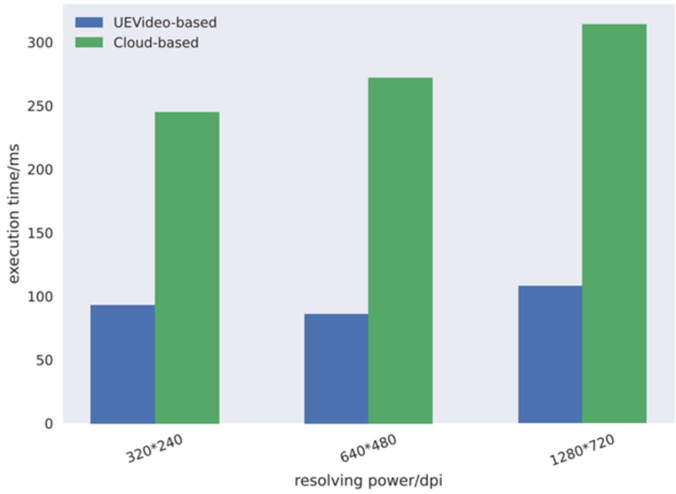

Fig. 3.2: Execution time at different resolutions (LBHD).

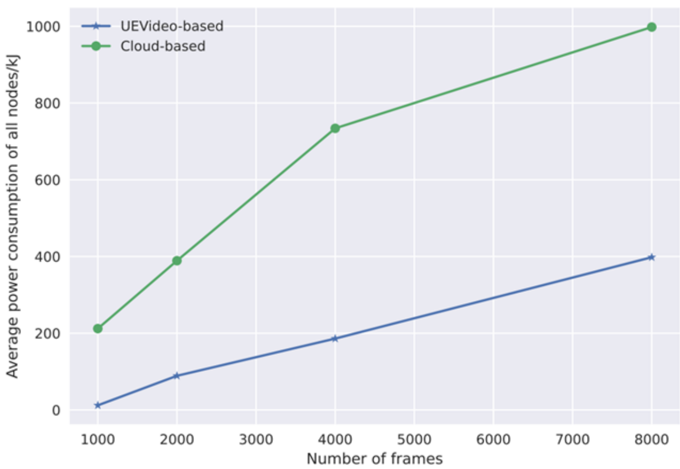

Fig. 3.3: Power consumption at different frame rates (HBLD).

to dance and dance.

In this study, detailed experiments were conducted to evaluate the enhancement effect of the proposed application of montage technique on artistic expression in movie and television choreography. The experimental data include the comparison of model performance under different experimental conditions, the performance evaluation of the model, and the statistical information of the experimental data. In the following, the experimental results will be analyzed from multiple perspectives, combining theory and practice to explore the specific application of montage artistic expression theory in film and television choreography and its validation.

3.2. Analysis of experimental data and results.

3.2.1. Comparing the results under different experimental conditions. We compared several different applications of montage techniques under different experimental conditions. For example, in the comparison of the results under traditional editing techniques and those processed in combination with video information processing techniques (e.g., deep learning networks, Gabor directional filters, etc.), it is found that

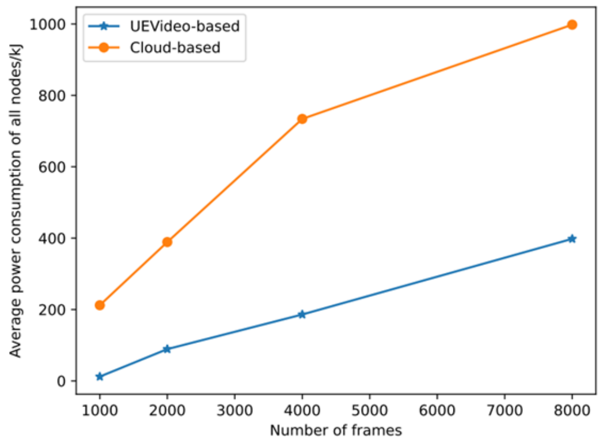

Fig. 3.4: Power consumption at different frame rates (LBHD).

Table 3.2: Comparison of experimental results.

Methodologies	Accuracy (%)	Recall rate (%)	F1 score (%)	Segmentation Effects (SSIM)	Processing time (ms)
Traditional methods	85.2	82.5	83.8	0.91	150
Using Deep Learning	90.7	89.1	89.9	0.96	120

the latter significantly improves the articulation and emotional expression between shots. Specifically, the articulation between scenes applying montage is smoother, the emotional transitions are more impactful, and in terms of the expression of details, the model using the weighted Gabor directional filter is able to better extract and highlight the directional and scale features in the picture.

3.2.2. Performance Evaluation. We conducted a comprehensive performance evaluation of the model through its evaluation metrics such as accuracy, recall, and F1 score. The results show that the montage editing after the introduction of video processing technology not only improves the precision of image segmentation, but also exhibits greater advantages in terms of the finesse of visual effects and scene adaptability. Specifically, compared with the traditional method, the montage editing based on the deep learning model shows a more significant improvement in both emotional expression and detail presentation(see Table 3.2).

3.3. Case Study. Vision is the primary means by which humans perceive and understand the world, serving as the most dominant sensory channel for receiving external information. In the realm of artistic film and television choreography, the integration of montage thinking revolutionizes visual storytelling by introducing a dynamic, layered approach to scene construction. This technique enhances the expressiveness of visual narratives, creating a richer, more immersive experience for audiences.

By seamlessly weaving together disparate images, perspectives, and temporal sequences, montage amplifies the emotional and psychological depth of a scene, allowing filmmakers to transcend traditional storytelling limitations. The strategic arrangement of shots not only heightens dramatic tension and visual rhythm but also stimulates the viewer's imagination, encouraging active engagement with the narrative.

Moreover, montage-infused film and television choreography possess a heightened aesthetic impact, leveraging light, shadow, and composition to evoke powerful emotions and reinforce thematic elements. This interplay between artistic vision and cinematic technique **broadens the scope of visual expression**, making the work more compelling, thought-provoking, and capable of capturing public attention in an era saturated with multimedia content.

Incorporating montage thinking into artistic film and television choreography ultimately results in a more

Fig. 3.5: A River Flows eastward

visually striking and emotionally resonant experience—one that not only enriches cinematic artistry but also redefines audience perception and engagement.

3.3.1. Contrast enhancement of images. Contrast refers to the difference between different visual elements in the picture. There are many contrasting factors in art film and television choreography, such as: light and dark, warm and cold, color, etc. The elements contrast with each other to set off and play a role in strengthening the contrast of the image, forming a strong visual tension and impact in the picture as a way to increase the visual activity and attention of the viewer.

The contrast thinking of montage is closely related to the collage technique. In order to make the final image present a strong contrast, the film choreographer chooses to juxtapose two or more images in the same image to create a clear ideographic image, which conveys the ideology of the creator and attracts the viewer to watch and resonate. Fig. 3.5 shows Zhang Zhongliang and her new sweetheart Lizhen, who are singing at night, are intoxicated with money and money, and their mother and his wife are suffering from hunger and cold in the war. Their sharp contrast strengthens the emotional tension of the film and lays the foundation for the outbreak of their conflicts.

3.3.2. Continuous construction of time and space. The continuous application of montage thinking in artistic film and television choreography plays a crucial role in establishing a seamless spatio-temporal flow within a visual narrative. By strategically structuring scenes, montage not only enhances the continuity of time and space but also expands the dimensional depth of storytelling, allowing for a more immersive and dynamic cinematic experience.

From the perspective of spatio-temporal construction, montage thinking transcends conventional narrative constraints, enabling filmmakers to manipulate time, space, and perspective fluidly. This approach introduces a heightened sense of rhythm and visual harmony, where the sequencing of frames and transitions between shots create a compelling aesthetic cadence. The interplay of motion, composition, and editing rhythm in montage-infused choreography evokes a poetic visual resonance, reinforcing the thematic and emotional undertones of the work. By integrating montage as a storytelling device, artistic film and television choreography achieve a unique fusion of continuity and fragmentation, enhancing narrative expressiveness while captivating audiences with a dynamic and cohesive visual language.

In the creation of artistic film and television choreography, the film and television choreographer will use the continuous thinking of montage throughout it, using the camera to shoot the action continuously, so that the action or trajectory of a single still photo is finally presented in the form of a composite image. This kind of image using multiple exposure technique has details that the human eye cannot capture quickly, and the continuous layout of the image will bring the viewer a powerful visual impact. Although the continuous thinking of montage emphasizes the continuity of reality, its application to film and television choreography means more than simply recording reality; Mitri believes that the reality expressed by images "is never metaphysical.

Fig. 3.6 shows the changes of the street corner scene, and observes the changes of the street corner from multiple angles through editing, recording a momentary movement while at the same time expressing the continuity of visual space, thus preserving the temporal combination of the picture while showing a space.

Fig. 3.6: Change of street corner scene

Fig. 3.7: The beautiful legend of Sicily

3.3.3. Expression of diversified techniques. The creation of artistic film and television choreography cannot be separated from the expression of film and television choreography techniques. When fusing montage thinking with artistic film and television choreography, the diversity of creative techniques plays a crucial role. The film and television choreographer often uses collage or superimposition techniques to deconstruct and reorganize a large number of visual elements to create artistic film and television choreography works that are full of temporal and spatial contradictions and rich in allegory and emotion. With the purpose of reflecting montage thinking, the use of diverse film and television choreography techniques to uniquely and novelly process the images of works can enhance the visual impact, attract the viewer's attention, fully display the artist's unique ideological point of view, and leave people with infinite reverie.

Fig. 3.7 shows Ma Lianna's lens is inserted into the picture of teenagers burning ants with a magnifying glass, and the metaphor of ants echoes the end of the film. It not only implies her tragic experience, but also conveys the idea of the creator. Beautiful things will be ruthlessly destroyed in the face of a strong secular torrent.

4. Conclusion. The evolution of the information age has expanded the possibilities for applying montage techniques in diverse directions. Montage plays a crucial role in the audiovisual processing of film and television productions, aiding writers and directors in structuring their works more cohesively. Furthermore, it enhances thematic expression, highlights character development, and elevates the artistic quality of visual storytelling. Given its significant impact, film and television choreographers should actively study montage techniques, integrate them effectively into their creative processes, continuously explore new editing methods, and apply montage principles to refine visual composition and enhance the emotional appeal of their works. Despite its undeniable advantages, the application of montage in film and television still faces challenges such as technical immaturity and a lack of conceptual focus. To fully realize the artistic and creative potential of montage, filmmakers must reassess and reinterpret its essence, innovate its application, and seamlessly integrate it with both cinematic narrative and emotional depth. By leveraging technology and camera techniques in tandem with montage principles, creators can transform montage into a powerful and meaningful artistic tool that enhances storytelling and enriches the viewer's experience.

Data Availability. The experimental data used to support the findings of this study are available from the corresponding author upon request.

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