

Audio Visual Presentation and Effect Analysis of Animation Film and Live Action Film of Mulan

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Abstract: Based on the application of visual effects and auditory design in the film creation process of the Disney animated film and the live-action film *Mulan*, this paper analyzes the different plastic art styles shown in the two films due to the different visual elements of the shots, and compares the different application of montage language in the two films in the combination of shots and images. As well as the different characteristics of subjective music in the guidance of shots and the comprehensive use of original sound and dubbing, this paper expounds the audio-visual language characteristics of animated films that are different from live-action films. Starting from the audio-visual language strategy of animated films, this paper discusses the distinctive characteristics and rules of audio-visual language of animated films in exaggerated modeling, montage free narration and auditory design of "first sound and then painting", reveals its essential characteristics of "exaggeration" and "freedom", and explores the unique artistic charm of animated films.

Keywords: animated film, live action film, audio visual language

1. Introduction

Mulan is a live action movie directed by Nikki Karol. The film was released in September 2020 to the expectation of millions of audiences, but it was a box office smash. The film, which is said to have cost as much as \$200 million to make for the Chinese market, is time-consuming and expensive, but it has not been a hit with *Mulan* fans in China or around the world. No matter the film content or role setting, the live action version of *Mulan* makes many audiences involuntarily associate with the animated version of *Mulan*, also produced by Disney Company in 1998. Once it was released, it was highly praised. Tony Bancroft won the best director award of the Annie Award, the Oscar in the animation industry, by virtue of the director *Mulan*. The two films bring different emotional experience to the audience, each has praise and criticism, but the box office gap suggests that we still need to find the reason from the film itself.

Apart from the external factors of the COVID-19 pandemic, what other factors could have led to the failure of the live-action *Mulan*? What lessons can we learn from two animated and live-action films on the same theme after 22 years? Film technology and audiovisual language are developing dynamically. Of course, the audience's demand for film viewing is also changing. What is worth our reflection is what is the unique charm of film and television animation from the perspective of audio-visual language? This paper tries to make a comparative analysis from the perspective of audio-visual language, focusing on the differences between the two films in terms of visual elements of the lens, the use of montage language for the combination of lens and pictures in visual language, and the analysis of different audio-visual presentations and effects in terms of the guidance of subjective music on the lens and the integrated use of original sound and dubbing in auditory language, and discusses the characteristics and laws of audio-visual language that are different from real life movies. (Su Bo, Li Xun, 2008)^[1]

2. Presentation and effect comparison of different visual elements in films

2.1. A series of changes brought about by different visual elements of lens

The proportion of frame of different lenses determines the difference of visual elements of many lenses. The animated version uses widescreen 16:9, while the live-action version uses ultra-widescreen 21:9. 16:9 widescreen is in line with the visual experience of ordinary people, and most of the current

mobile phone, computer and TV screens use this ratio. 21:9 ultra wide screen is the mainstream film screen size ratio adopted by cinemas now, which is more suitable for the performance of grand themes with ultra wide view. Because the different lens frames naturally bring about the different lens composition, lens Angle and lens motion. This is not a comparison.

Head lighting and camera color vary greatly depending on how the film is made. In terms of production means and requirements, animation is drawn, while live-action movies are more often actually shot, so there are obvious differences in lens light and color. Figure 1 and Figure 2 are similar scenes of Mulan's blind date in the two films. The light of the live-action film creates a stronger three-dimensional sense and sense of reality. However, the subjectivity of animated films is stronger. In terms of picture composition effect and lens color, the pictures of animated films are more clean and pure, just like the classic ladies' paintings in ancient China, which are magnificent and beautiful.



Figure 1: Comparison Chart of Applying Lipstick



Figure 2: Comparison Chart of Walking

In terms of the use of screen colors, the shooting effect of the live action movie has a stronger sense of hierarchy, delicate and vivid colors. As shown in Figure 3, Mulan takes a bath in the water at night. The live action movie uses a low short tone of gray, blue and black. The character image is almost integrated with the water surface background, and only the approximate figure of the character can be seen. The picture in the animated film improves the color brightness of the water surface. The whole picture uses the gray blue medium tone, and Mulan's face uses the warm color. Although it is close to the brightness of the background color, the audience will still feel that what they see is in the pond in the night, but the contrast between the warm color of the face and the background color is large, and it seems that the image of the characters in the picture is more prominent. Figure 4 shows Mulan coming back from the army to meet and embrace her father. It can be seen that the live action movie screen uses warm colors to express the joy of the reunion of father and daughter, while the animated version uses cold and warm colors, with a simpler background and more prominent characters. These can be seen from the difference in color language between live action movies and animated movies. The animated version has a more subjective color, a stronger sense of design, and a more aesthetic picture effect.

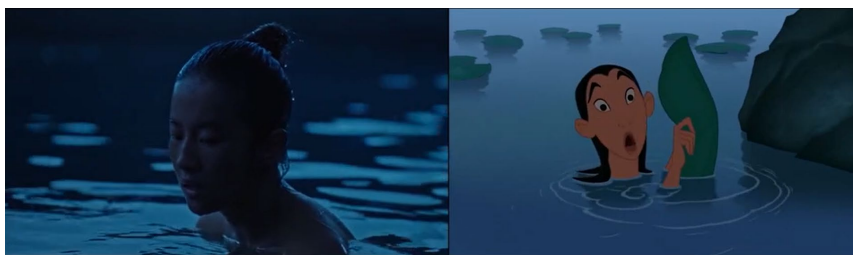


Figure 3: Comparison Chart of Bathing



Figure 4: Comparison Chart of Embrace

2.2. The influence of different character images on the composition of pictures

The animated version of Mulan uses the freehand style of character modeling. The use of exaggeration and anthropomorphism makes the image of Mulan more typical and prominent. As shown in Figure 2, Hua Mulan's flowing black hair, yellow skin, flat face, willowy curved eyebrows, long and pointed eyes and full lips in the animation represent the aesthetic impression of most westerners on the appearance of Chinese women at the end of the 20th century, and her body, form and movements are more exaggerated than those in live-action movies. Live-action mulan relatively realistic stronger in the "mulan", carrying the knife-shaped eyebrows, high stand of bridge of the nose and face full of Oriental beauty as before the magnolia in the animation modelling brought tremendous change, most of the audience in Chinese Mainland to film a hit red farming, spirited I interpretation of mulan's image to give the pertinent evaluation. It is learned from SocialBeta that the animated Mulan IP has been cooperated with more than 20 well-known brands, and its market influence is still favored by "Mulan fans".

The difference in composition between Hua Mulan and Shan Yu in the animated version is more prominent than that in the live-action version. In the animation version, the composition of Hua Mulan is mostly in the panorama, overlooking or head-up view, and the figure is placed slightly off the center of the picture. (Qiu Baili, Wang Liang, Wang Zhenzhen, 2013)^[2]This composition depicts the character of Hua Mulan, who is gentle and filial, witty, intelligent, brave and resolute. However, for the simple Yu, it is mostly to take a close shot, look up at the machine position, and the composition of the figure takes up 3/4 of the area of the picture. This kind of domineering composition depicts the image characteristics of a strong body and a cold and fierce personality. This contrasting composition not only depicts the two different personality characteristics, but also highlights the seemingly weak Hua Mulan will overcome the strong solo drama conflict. There is a big physical difference between Hua Mulan and the villain Buddhi Khan, who is strong and tough, but there is not a single bit of difference between Hua and the villain Shan Yu in the animated version. As shown in Figure 5, the scene of fighting with the enemy in the snow-covered mountain highlands. The villain Budi Khan selected in the live version does not stand out among many soldiers, while Khan in the animated film occupies a very prominent position in the picture composition, giving people the feeling that he can stand out with the spirit of a hundred. The comparison between the two is clear.



Figure 5: Comparison Chart of Battle

3. Montage narrative's lens picture, rhythm presentation and effect comparison

Montage is a unique means of expression that constitutes a complete film. If all the elements in the audio-visual language system are scattered pearls, montage is the silk thread that strings these pearls into a necklace. Montage thinking is a unique image thinking method of film and television art, which

runs through the entire audio-visual language system.(O 'mon. Mary. Vernet, 2010)^[3]

Live action film is the art of motion shooting, while animated film is the art of drawing. Therefore, in the early stage of production, live action films and animated films have different shots, and animated films are more meticulous in drawing the shooting script. A live-action film is a single shot drawn as a whole shot. In the shooting process, the actors acted independently according to the story of the storyboard, and then made editing adjustment through the later stage. Animated films do not rely on the performance of actors but on the animation workers draw every picture with computer software production, which is also the unique preset of animation audio-visual language.

3.1. Combination and transition comparison of lens pictures

There are two main methods of connecting shots: Lian Opera and Montage. Lian Opera is a straight narrative without using any rhetorical devices. It simply connects shots according to the logical development of the story. Montage, on the other hand, is a means of modification with special effects, splicing relevant materials according to the ideas of discourse rather than narrative. The transition is the connection between the shot paragraphs. Hua Mulan is a narrative film with the primary task of portraying characters. The performance of the "arc light" in the film further tests the lens skills. The two films have adopted several common techniques in the combination and transition of camera scenes, especially the important plot of shaping the protagonist. They also have their own characteristics in camera processing. From the effect of the film, the animated version is better in terms of the variety of connection and transition types and the frequency of use.

The scenes of these two films are viewed in the form of three acts. The high point in the construction of the first act is undoubtedly the night when Mulan decides to join the army for her father. Both films show this scene, but they use different methods in the sequences and transitions. In the animated version of Mulan, after trying to persuade her father not to go to war at the dinner table, she witnessed the silhouette of the quarrel in her parents' room outside the courtyard on a rainy night. She made a secret determination to worship at the ancestral temple, took the military order, cut off her long hair, put on military uniform, and joined the army on a horse. Let's take a look at the combination of shots and the rendering effect of transitions.



Figure 6: Mulan's emotional changes

From the perspective of Lianxi technique, the scene of Hua Mulan persuading her father at the dinner table can be seen as a shot of Hua Mulan's personal emotional expression from a subjective perspective (Figure 6). The first shot is a panorama, describing the dining scene so that the audience can understand the scene location of the event; In the second shot, the middle shot pushes the close shot to show Hua Mulan's complex expression; Later, she gave her grandmother a close-up expression, showing that Mulan wanted to help her grandmother but failed. The camera switched back to Hua Mulan, who then looked at her parents and gave them close-up shots. When no one is willing to speak,

the camera switches back to Hua Mulan from close-up to close-up, and uses the mirror to show Mulan's dark and firm mind; Finally, the close-up ended with putting the cup firmly on the table. The drama at the dinner table reasonably assigns the focus angle and the most suitable description scene of the items to be described according to the narrative idea. In line with the social logic, the use of several subjective shots also increases the audience's sense of substitution and presence. The whole climax fragments are grouped according to the audience's attention and development trend of events.



Figure 7: A silhouette of the argument by the window

From the perspective of montage, Mulan sees the silhouette of her parents arguing at the window of the room outside the courtyard, which reflects the flexible and free characteristics of montage (Figure 7). From the warm yellow light at the beginning to the slow fading of the light at the back, from the beginning of two people standing together to the back of the lonely, this is a psychological montage to show the despair of the flower family when the father was called to join the army. In addition to the group, this high tide point also contributed three ingenious and ornamental transition design. Scene 3 (Figure 8) shows Mulan kneeling down at the ancestral hall and then turning to get the military order from her parents' bedroom. The dragon pattern on the blue stone tablet in the ancestral hall is similar to the dragon pattern on the door screen of the bedroom. It is matched with the brightness and darkness of the lightning on a rainy night, completing the transition between the two scenes. Scene 4 (FIG. 8) shows that when Mulan opens the wardrobe in the room and sees the battlefield military uniform placed, it is similar to the image of Mulan after putting on the military uniform. With the bright and dark white gauze curtain blown by the wind, the transition from seeing the military uniform to putting on the military uniform is completed. The transfer of the same subject also greatly reduces the tedious time of wearing real clothes. Scene 5 (Figure 8) is a sword light formed by Mulan at the moment of wielding her sword, which is similar in shape to the projection formed by moonlight from the crack of the door to the slightly open stable ground. Similar directions and shapes are used to complete the last transition on this high tide point. These three transitions all use the characteristics of visual coherence in the coherent transition, and are flexible and free in the use of montage techniques. Therefore, the whole climax has a strong impact on the audience's vision, which can still be remembered even after many years.



Figure 8: Shape transition

In the live-action version of Mulan, the plot has been adjusted. In the scene of eating around the table, the role of grandma has been changed to that of her sister, which saves Mulan from mental construction and a series of preparation processes in the courtyard. From the point of view of the sequence, it is also the scene of communication at the dinner table (Figure 9). The live-action film does not adopt the combination of pictures from a single individual's subjective perspective. The shot group

starts with the back and forth of the parents' dialogue, and then turns into the back and forth of the dialogue between Mulan and her father, which is combined with the forward and backward shooting, but makes the whole segment slightly messy. The audience has not sorted out the previous clue, but switches the perspective and has no subjective perspective, which makes the audience less sense of insertion and presence. From the perspective of montage language, it gives meaning to jade and sword, which can be regarded as a manifestation of metaphor montage. From the perspective of transition, it is different from the exquisite and coherent transition in the climax segment of the animated version of Mulan, "Joining the army for my father". Most of the transitions used here are incoherent transitions, and the plot changes from "ancestral hall worship - taking the military order - cutting off long hair - changing into military uniform - riding a horse to join the army" to "sword dance - ancestral hall worship". The transition from sword dancing to the ancestral hall only uses a rhythm transition, and the rhythm change between this paragraph is not particularly obvious.



Figure 9: Pieces of dinner table communication

3.2. Rhythm comparison of camera changes

When the lens picture transits from one scene to another, the change of spatial content in the picture produces an obvious rhythm. This rhythmic change is not only the difference in the content of the picture, but also the rhythm of the change in the length of time.

Still from the footage of the night Mulan joined the army for her father, animated films attach importance to the expression of narrative shots, and the scenes are varied. There are panoramic shots to restore the traditional Chinese courtyard scene, close-up shots to capture the complex emotions of the characters, and empty shots to express the mood of the theme and the mood of the characters. A total of 29 shots were used in the process of "ancestral temple worship - taking the military order - cutting off long hair - changing military uniform - joining the army on horseback", which lasted about 1 minute and 10 seconds, including 6 panoramas, 10 close-ups, 2 empty shots, and 11 close-ups and middle shots. There is so much information to be expressed in just over a minute, so most of the scenes are selected in close-up and medium and close range. Close shot in close-up and because performance subject close to the camera, image information is relatively less, the audience recognition time is shorter, so the required duration will be shorter and shorter the time needed for switching and the lens the more frequently the switching frequency, and the rhythm is strengthened, can let the audience feel the increasing tension and excitement. From the whole segment, Mulan failed to persuade her father to run into the courtyard at the dinner table, the mirror is 56 seconds long; When I saw my parents arguing in the courtyard, I made up my mind. The mirror length was 45 seconds, the shrine worship mirror length was 21 seconds, the military command mirror length was 8 seconds, the long hair cutting mirror length was 11 seconds, the military uniform mirror length was 10 seconds, and the military riding mirror length was 20 seconds. The overall picture of the camera is loose-tight-tighter - burst - release of the rhythm. In addition, Mulan failed to persuade her father to run into the courtyard at the dinner table and saw her parents arguing in the courtyard and made up her mind to use panoramic and distant shots. The scenes are longer, the number of camera transitions is less, and the sense of rhythm is relatively slow. Such a scene design is the strong camera language support for Hua Mulan's transformation from mentality to action, and the fast scene switch adopted in the animated film is also a new type of screen performance in that situation. The scene switch not only finished the important story plot but also

completed the character arc shaping.

The live action film, which is also expressed by narrative lens, simplified the preparation stage of the original compact rhythm to "sword dance - ancestral hall worship", but the duration was also 1 minute and 14 seconds. When the amount of information expressed is not much, compared with the multi information of the animation version, the duration of the live action lens is longer. It includes 10 shots, including 2 panoramic shots, 4 close-up shots, 1 empty shot, and 3 close-up and middle shots. With similar duration, the lens is nearly 2/3 less than that of the animation version. There is no intensive output and no sense of climax and fluctuation. In particular, the scene switching from sword dancing to ancestral hall worship lacks the foreshadowing before joining the army and the internal logic that can convince the audience to make Mulan firmly join the army. The switching of these two scenes is just a simple focus switching, which makes the sudden change of the protagonist a little abrupt, and it seems that the dimensions and levels of the characterization arc are not diversified and rich enough.

4. Presentation and effect comparison of film sound language

Sound language and picture language together constitute the audio-visual language of the film, and sound language can be seen as the supplement and extension of picture language. In terms of expressing emotions, because pictures and sounds have different characteristics, when they are added together, they will produce more artistic appeal.(Wei Li, 2013)^[4]

4.1. Comparison of subjective music in movies

Subjective music refers to the score created through the audience's perspective (God's perspective) or the subjective perspective of the characters in the play. It only needs to express the inner feelings of a certain perspective, and sometimes it can even be the opposite of the pictures presented in the lens. When the film needs the emotional expression of a subjective perspective, it usually uses subjective score to achieve the maximum resonance between the characters' feelings from this perspective and the audience's feelings, so that the audience and the characters in the play can feel the same. Animated version uses more subjective music with stronger tendency than live film, which is one of the main factors to form the different rhythm styles of the two films.

The animated version of Mulan continues the consistent style of Disney animated films, adopting the form of song and dance films. Among them, 12 pieces of music have been specially produced for the film. The theme of most of the songs is related to the ideological core that the film wants to convey. It can be seen from the names of the songs: <Reflection>, <Honor to Us All>, <Mulan's Decision>. At the beginning of the film, "Honor to Us All" leads out, and the lively and brisk rhythm instantly brings the audience into the atmosphere of Mulan's happy and childlike life. At the same time, it also shows the technical effect of synchronized sound and painting, and the picture and music are highly compatible. In addition to these songs, there are scores tailored to the content and mood of the characters. As for the music Mulan chose for her father in the army, when Mulan witnessed her parents' quarreling partners, she watched the flute lead, with a soothing melody. When she made up her mind to go to the shrine, the music suddenly became compact and passionate from the original soothing sadness, adding percussion, more emphasis on the more passionate melody under the regular rhythm. The preparation process of "ancestral worship - taking the military order - shaving off long hair - putting on the military uniform - joining the army on horseback" was quickly completed with the intensive drumming, and the melodious flute set off her sadness. It is not difficult to see that the combination of rock band and symphony orchestra is used in the instrument configuration, so that the work has both modern atmosphere and grand momentum. The rhythm of western music and the charm of eastern music are perfectly combined. It became a clever combination of music that East and West could understand. (Xue Yidan, 2011)^[5]

Due to the inertia of Chinese films, the live-action version of Mulan is not made into a song and dance drama. The classic songs of the animated version will only be presented in the form of music. In the night of the military, Mulan's sword dance was accompanied by the gentle and low sound of Erhu in the background music, and then it was directly switched to the ancestral hall scene. The strings were gradually added in a regular manner, and the percussion music played the drum. The tone of the music was finally transformed into a march ready for battle. Compared with the animation version, the overall music is much more relaxed, and the progressive feeling is relatively reduced. More of it is the performance of the actors' body dancing.

It is not difficult to see from the comparison that the subjective music of the two versions of films is used that music is very important to guide the rhythm of the picture. Actors in live action movies can control their own body and plot rhythm, while characters in animation are not live action, so their sense of rhythm can be guided by the rhythm of music, and characters in animation cooperate with this sense of rhythm. Because of the "sound before painting" feature of animation, the rhythm of animation largely depends on the guidance of animation music, sound effects and language.

4.2. Comparison of the comprehensive application of film original sound and dubbing

The fictionality of animation determines that the voice of the character needs to be voiced to give the character life. However, live action movies often adopt the form of simultaneous sound recording, which makes the sound effect of such films more realistic and more telepresence. In fact, in the process of film post production, the effect of simultaneous sound recording will also be modified and improved, eliminating unnecessary noise, etc. at the same time, actors will also be required to record some missing clips.

The popular saying of Disney Company "you see it, you hear it, you believe it." means that you will believe its existence only after you see and hear it. It emphasizes the importance of the combination of sound and painting for film and television animation. The dubbing in animation not only endows the characters with vitality, but also makes the animated characters more likable, making the world in the film more authentic. The perfect combination of sound and painting enriches the artistic connotation of animation. The animation version of Mulan adopts the mode of dubbing before animation, which is also the basic paradigm of animation film production. The dubbing actors fully mobilize their emotions and imagination according to their understanding of the role, which greatly reduces the distance between the virtual animation role and the performance of real actors. Therefore, when we watch the animation, these animated characters are like real actors, and sometimes they are more vivid than real actors. Wen Mingna's dubbing is very excellent. When she portrayed the role of Hua Mulan, her voice changed from lively at the beginning to stable at the back, with a degree of relaxation. The dubbing makes this animation even better. In the live action version of Hua Mulan, most people use simultaneous sound and natural influence to restore the image of the characters, which naturally reflects the most real emotions of the actors when they enter the role on the spot. However, we also noticed that in the live version of Mulan, more multinational actors used more dubbing methods. Different from the presupposition and virtuality of animation, live action movies cannot guarantee the specific changes of the actors' mouths when they speak their lines. It is certainly better for the actors to dub themselves in the later stage. However, the actors may not be able to mobilize their physical and psychological emotions in the environment at that time, and the lines may have some emotional deviation. For professional dubbing actors to perform later dubbing, it is also necessary to consider the suitability of voice and real actor image. In the live action version of Hua Mulan, the actor's original voice and dubbing are combined. On the whole, the effect of voice synchronization is good, which makes the film screen more vivid, and makes the story more vivid, and makes the narrative more complete. It creates more off screen capacity for the internal space of the film screen, thus rendering the potential emotional atmosphere in the real environment.

5. Conclusion

Taking the application of visual effects and auditory design in the film creation process of Disney animated film and live action film Mulan as the starting point, this paper analyzes the different plastic art styles shown by the different visual elements of the animation film lens, and finds that the different visual elements bring about a series of changes in lens composition, lens angle, lens movement, lens lighting and shadow, and lens color. The difference of role image also brings about the difference of picture composition. By comparing the different features of the two films in the combination of shots, the different application of montage language, the guidance of subjective music to shots, and the application of original sound and dubbing, it can be seen that the biggest features of audio-visual language that distinguish animated films from live-action films are "exaggeration" and "freedom". The unique production mode of film and television animation conveys the sense of reality and aesthetic experience different from the live action film to people. The exaggerated visual image design, the free use of montage lens and the creation technique of "first sound and then painting" make film and television animation more characteristic of Chinese "freehand brushwork" art, with both shape and spirit, bringing unique aesthetic experience and viewing experience to the audience.

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