

# Sound Study and the Coordination between Sound and Picture in Water-and-Ink Animation: Taking *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water* as Examples

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## Abstract

*Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water* were produced by Shanghai Animation Film Studio from 1960s to 1980s. These four water-and-ink animations show a trend of an increase in natural sound effects (especially recorded natural sounds), the aesthetic of the coordination between sound and picture also changes dynamically. From the perspective of sound study, this essay deals with the detailed analysis of specific water-and-ink animations and the possible reasons for the changing trend— inertia in creativity of a specific era and the personal aesthetic consciousness of animation creators.

## Keywords

Chinese Water-and-Ink Animation, Shanghai Animation Film Studio, Sound Study, Pictures

## 1. Introduction

### 1.1. Literature Review

As one of the traditional kinds of Chinese animation<sup>1</sup>, water-and-ink animation is characterized by its unique tradition of landscape painting and ideographic feature, which distinguishes it from other types of animation. Therefore, scholars' research on water-and-ink animation mainly focuses on its national characteris-

<sup>1</sup>Other kinds such as Chinese paper-cut animation and shadow puppetry animation.

tics.

Te Wei (1961, as cited in [Kongzang Animation Archive, 2024a](#)) proposed at the Second Member Representative Congress of the Chinese Film Workers' Association that as animation is an art form introduced from abroad, Chinese art films must have their own national characteristics. And ink wash painting, as a beautiful traditional Chinese painting art, is one of the important ways to endow animated films with a distinct national style.

In 1960, *Where Is Mama* was the first water-and-ink animation in Chinese history. Its creation sparked extensive discussions in academic circles. After that, Shanghai Animation Film Studio successively produced a number of excellent water-and-ink animations such as *The Cowboy's Flute* and *The Deer's Bell*. Yan Dingxian (1987, as cited in [Kongzang Animation Archive, 2023](#)) wrote in his review of the 30th anniversary of the establishment of the Shanghai Animation Film Studio that *Where Is Mama* and *The Cowboy's Flute* presented the unique ink wash painting style of China. The rendering of ink color and water content made the scenery in the animations show infinite changes in substance (shi) and void (xu), creating a beautiful artistic conception. The techniques of "ideographic feature (xieyi)" and "capturing the essence (shensi)" enabled the audience to feel higher quality of aesthetics. [Tao \(2021\)](#) argued in his thesis *A Study on the Animation Production of Shanghai Animation Film Studio during the "Seventeen Years" (1949-1966)* that the water-and-ink animations created in the 1960s placed too much emphasis on the presentation and expression of the art form, and neglected the in-depth exploration of the true aesthetic value in terms of content. In *Animating Shanshui: Chinese Landscapes in Animated Film, Art and Performance*, [Chu \(2015\)](#) discussed the combination of traditional painting art and camera language in water-and-ink animations. He selected several Chinese water-and-ink animations such as *The Cowboy's Flute* and *The Deer's Bell* as examples to expound on artistic expressions such as "blandness (pingdan)", "the combination of the substance and the void" and "roaming lens", and then analyzed the ecological consciousness of the dynamic changes in water-and-ink animations.

Japanese animation creators once discussed the aesthetics and national traditions of Chinese water-and-ink animations. Isao Takahata and Hayao Miyazaki (1981, as cited in [Kongzang Animation Archive, 2021](#)) put forward their own views on the audience issue of water-and-ink animations: Isao Takahata believed that *The Cowboy's Flute* did not achieve the goal of "serving the public", but instead fell into the narrow path of the aesthetic world. On the contrary, *Where Is Mama* "does not have that oppressive feeling of conceit". Hayao Miyazaki believed that the ink wash form of animation did express national pride, but the question of for whom the animations were created still needed to be considered. "Will the children who see those works really be happy?" Taku Furukawa praised the interwoven poetic sentiment between the child and the animal presented in *The Cowboy's Flute* and hoped that China could have more animated works as poetic as *The Cowboy's Flute*.

In addition to the research related to national characteristics, another research field of Chinese water-and-ink animation is the analysis of sound and picture. Scholars either analyze the sound from the perspective of the whole types of animation genre, or take water-and-ink animation as the focal point to analyze the coordination between sound and picture.

Fu (2021) analyzed the sound of musical instruments in the water-and-ink animation *Feeling from Mountain and Water*: since the sound of the reed flute was a bit too thin and couldn't meet the narrative effect of the film, it was replaced by the sheng<sup>2</sup> for performance. "Under the premise of the hypothetical aesthetic provided by the film, the combination of the reed flute in the picture and the sheng music off-screen actually appears to be in perfect harmony with the context. Not only do ordinary audiences not mind it, but even experts also applaud such a treatment". Tang (1989) mentioned in the article *Man's Skill Surpasses Nature: Random Notes on the Color Ink Wash Animation Feeling from Mountain and Water* that the sound of the qin and the flute represent the inner voices of the old man and the boy in *Feeling from Mountain and Water*, and they are the medium for emotional communication between the characters in the film. Wang (2013) recorded the interviews with Wu Shanming and Zhuo Hejun in his thesis *A Study on the Creative Characteristics of the Chinese Water-and-Ink Animation Feeling from Mountain and Water*. Wu Shanming believed that music is a highly infectious art form. *Feeling from Mountain and Water* involves the beauty of nature and the combination of human beings and nature, and music serves as the medium connecting the two. Zhuo Hejun said that *Feeling from Mountain and Water* replaced the dialogue between characters with music, making the whole film more appealing. Yu's (1982) *Exploration of Aesthetic Issues in Film Music* divided the relationship between sound and picture in films into two categories, which are synchronization and counterpoint, and the author thinks that the principle of sound-picture synchronization is the most common in Chinese film. In addition, Yu Runyang also summarized the functions of music in film works, such as suggesting specific spaces and times, and promoting the formal integrity of the film. Zhao (2020) discussed the use of sound effects in animations in her article *Sound, Music, Language: The Three Dimensions of Sound Design in Animated Films*. She illustrated that the abstract and non-realistic nature of animations makes them more suitable for the use of synthesized and exaggerated sound effects rather than real recorded sounds. "In animation production, 'plausibility' is a more important art than realism... In animated films, presenting sounds in an exaggerated form is more effective than using real sounds. Since many characters in animations do not exist in reality, ready-made sound materials are obviously inappropriate. Therefore, sounds with metaphorical meanings are very viable, and they seem more reasonable while outlining the individual characteristics of objects." In addition, the author also quoted the view of Adrian Rhodes, the head of sound design at Aardman Animation in the UK, that in an animated film, overly realistic

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<sup>2</sup>A traditional Chinese musical instrument.

sounds are likely to sound abrupt and out of place.

## 1.2. Significance of the Selected Topic and Research Approaches

First of all, research related to water-and-ink animation mainly focuses on the study of national characteristics. Scholars have analyzed the uniqueness of water-and-ink animation from the perspectives of painting (ink wash painting), the aesthetic concepts of literati, etc. However, there is relatively little research on sound, and most of it is carried out from a macro perspective of sound. There are a few studies that make a more detailed classification of sound, such as natural sound effects, human voices, recorded sound effects, musical instrument sounds, environmental sounds, etc. As an important part of animation, sound, and the degree of harmony between it and the picture affect the final artistic effect of the animation. Therefore, it is well worth taking sound as a starting point, and on this basis, further subdividing the types of sound to discuss its coordination with the pictures of water-and-ink animation.

Secondly, as a unique traditional Chinese art form, water-and-ink animation not only has the uniqueness of ink wash painting in terms of the picture, but also has characteristics that cannot be ignored in terms of sound at the beginning of its development. The four water-and-ink animations created by Shanghai Animation Film Studio from 1960 to 1988, which are *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water*, are important witnesses of the development period and are representative. Through the connection and comparison of these four water-and-ink animations, it can be seen that *Where Is Mama* is the only ink wash animation with a human voice narration. The theme sounds of *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water* are the sounds of bells, flute and qin respectively, and are supplemented by an increasing number of natural environmental sounds. This not only shows the important role of sound in water-and-ink animation, but also allows us to analyze how the narrative effect of non-human voices coordinates with the pictures in the absence of human voices, based on the sound composition (musical instruments + natural environmental sounds) of the latter three animations.

Finally, the selected examples of water-and-ink animations and the characteristics of the sounds mentioned above all bear the cultural significance of their respective eras. The coordination between sound and picture in these four water-and-ink animations can not only present different artistic features, but also, through the dynamic changes and development of this coordination, offer a glimpse into the aesthetic understanding of sound art and the changes in values among animation workers from 1960s to 1980s.

This essay selects *Where Is Mama* created by Shanghai Animation Film Studio in 1960, *The Cowboy's Flute* in 1963, *The Deer's Bell* in 1982, and *Feeling from Mountain and Water* in 1988 as the research objects. From the perspective of sound study, it analyzes the coordination among the theme musical instruments, natural sound effects and the pictures. It discusses and compares the narrative

effects of the four water-and-ink animations in four stages: the beginning, transitions, the climax, and the ending. The main research method of this essay is the combined analysis of animations and relevant historical materials.

In addition to the four water-and-ink animations to be discussed in this paper, other water-and-ink animations such as *The Snipe and the Clam* were also created in China during 1960-1988. The reason for choosing *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water* as the analysis clues is that they constitute a complete context of the early development of Chinese water-and-ink animations. First of all, Shanghai Animation Film Studio is a very representative animation production team in China. Its establishment and evolution have also witnessed the social changes in China from the 1960s to the 1990s. Moreover, in the 20th century, the number of water-and-ink animations created in China was extremely small, and most of them were produced by Shanghai Animation Film Studio, so this paper selects the water-and-ink animations of Shanghai Animation Film Studio as the research object. Secondly, *Where Is Mama* created the technical paradigm of the world's first water-and-ink animation and should be taken as the starting example for water-and-ink animations analysis. As the second water-and-ink animation following *Where Is Mama* three years later, *The Cowboy's Flute* is feasible to be included in the research in terms of timeliness, and it strengthens the traditional artistic conception of ink wash painting on the basis of the former. Although *The Deer's Bell* is separated from the previous two by about 20 years, Shanghai Animation Film Studio did not produce other ink wash animation works during these 20 years. This long-time gap also makes the breakthrough of *The Deer's Bell* in the times necessary for research, from which we can discuss what changes have taken place in the aesthetic consciousness of water-and-ink animation workers after a long period of creative vacancy. *Feeling from Mountain and Water* is the last water-and-ink animation created by Shanghai Animation Film Studio in the 20th century. It has the particularity of summarizing Chinese water-and-ink animations in the 20th century in terms of time, and its artistic techniques have also ushered in innovative development.

The second chapter briefly introduces the concepts of the main sound effects in animated films, and then defines, classifies the natural environmental sound effects analyzed in this paper. The third chapter analyzes the audio-visual coordination in *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water*. The fourth chapter, based on the review of the characteristics of the four water-and-ink animations in the second chapter (natural sound effects, the artistry of audio-visual coordination), attempts to discuss the reasons behind them.

## 2. Sound Effects in Animations

The sounds in animations include human voices and non-human voice effects. Non-human voices refer to natural environmental sounds, instrumental sounds, etc. Sound effects refer to the effects created by various sounds, including realistic

sound effects, such as the sounds of nature like the wind and birdsong, as well as other sounds that imitate reality, such as the sound of footsteps. Unrealistic sound effects are sounds that do not exist in real life and are often used in science fiction, mythological and other film and television works (Zhu, 2018). Animation workers usually adopt various methods when creating the sound effects in films. Among them, real recording and foley are two opposite methods. Real recording means recording sounds from real geographical or humanistic environments and using them directly or after a little processing. Foley means simulating the similar effects of the target sounds through the cooperation of various tools in the recording studio.

The sounds which are analyzed in this article refer to human voices, instrumental sounds, and natural environmental sounds. Among them, natural environmental sounds can be divided into broad and narrow senses. In a broad sense, natural environmental sounds refer to all sounds related to nature in water-and-ink animations, such as the sounds of water and wind. In a narrow sense, natural environmental sounds refer to the real sound effects recorded on-site by animation workers, rather than foley effects. In *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water*, the proportion of various sounds is constantly changing. Different animations and different segments of the same animation all show variations in proportion. For example, there are situations where human voices dominate, where human voices are absent, where there is a completely silent effect, or where there is only a single natural environmental sound.

### **3. The Coordination between Sound and Picture in Water-and-Ink Animation**

#### **3.1. *Where Is Mama***

Compared with *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water*, the most prominent characteristic of the sound effects in *Where Is Mama* is the introduction of the human voice narration, which almost runs through the entire animation. It not only serves to advance the story plots but also enriches the images of various animal characters. That is, by using changing human voice tones and coordinating with diverse instrumental melodies, it showcases the personalities of different animals such as tadpoles, frogs, chicks, crabs and so on.

In the *Chinese Arts* interview (Yu, 2023), Lin Wenxiao talked about the design of the visual effects that express the emotional changes of the tadpoles in *Where Is Mama*. "It doesn't matter if the tadpoles don't have eyes or noses. Sometimes when they are unhappy, they just stay still and let themselves slowly sink. This movement is really good. It shows that they have emotions, that they are unhappy and feeling miserable inside". For example, in the animation, when the theme of "looking for mom" first appears at 05:40, the solo music melody (low and deep) first reveals the low and hesitant mood of the tadpoles. When the voice-over says,

“Where is our mom?” the music coordinates with the human voice again, and the emotion changes from low to high. During the process of looking for their mom, the tadpoles experience many failures, and their sad emotions are also presented jointly through the image of “their bodies sinking downward”, the human voice, and the low tone of the musical instruments.

However, not all kinds of sounds in the animation exist simultaneously all the time. There are occasional silent effects or the absence of a certain sound effect. For example, when the chicks first appear at 04:18, the musical melody pauses, and a single human voice is used to dub the chicks to highlight the appearance of the new characters. At 05:42, the tadpoles realize the loss of not having a mother, and all kinds of sound effects pause for about three seconds here. Only the movement of the pictures is present. The silent effect conveys their hesitation when thinking about the question of “mother”.

It can be seen that, as the first experimental water-and-ink animation, although *Where Is Mama* adopts an original ink wash painting style in form, its content maintains the educational function of an animated film. The narration of the voice-over, the dubbing, and the coordination with the melody of musical instruments are also traditional forms of sound.

### 3.2. *The Cowboy's Flute*

Compared with *Where Is Mama*, the natural environmental sounds effects appeared in *The Cowboy's Flute* in 1963 and became one of its significant features, the movement of the pictures presents aesthetic scene transitions. Moreover, the coordination between the sound and the pictures is more diversified, which is more in line with the literati artistic conception of traditional Chinese ink wash paintings. As for the types of sound effects, the voice-over disappears and is replaced by natural environmental sound and the sound of musical instruments.

First of all, *The Cowboy's Flute* uses the sound of the bamboo flute as the sound effect running through the narrative of the entire animation. The sound of the bamboo flute can be heard at the beginning of the animation. The boy rides on a cattle and passes through the willows while playing the bamboo flute. As the plot develops, the sound of the bamboo flute is interspersed. At the end, the picture returns to the scene of the boy riding on the cattle again. With the melodious sound of the bamboo flute, it achieves an echo of the narrative at the beginning and the end.

Secondly, *The Cowboy's Flute* has also made innovations and changes in the application of various types of sound effects compared with *Where Is Mama*. At 02:57, a realistic natural environmental sound—the chirping of cicadas—appears. This is a type of sound that did not exist in *Where Is Mama*. It provides an immersive depiction of the real countryside environment. Moreover, other sound effects such as the melody of musical instruments did not appear between 02:57 and 03:04. The solo chirping of cicadas, accompanied by the scene of the cattle

walking away and the boy leisurely lying on the tree, gives the audience a tranquil rural feeling. From 03:28 to 04:23, it is a scene of birdsong among the trees. However, instead of using realistic natural environmental sounds like the chirping of cicadas, the sound of birdsong is replaced by the melody of musical instruments. This not only harmonizes with the sound of the boy playing the bamboo flute but also paves the way for the climactic part of “the sound of the flute attracting all animals” later. It can be seen from this that although *The Cowboy’s Flute* features realistic natural environmental sound effects, it does not use them in all feasible parts. Instead, it makes artistic treatments in some scenes where natural environmental sounds could have been used, which is more in line with the theme and plot development of the animation.

Finally, the treatment of the scene transitions is also a major feature of *The Cowboy’s Flute*. It can reasonably allocate the needs of the abstract and realistic plots, which is in line with the characteristic of “combining substance with void (xushijiehe)” in traditional Chinese ink wash paintings.

The picture at 05:19 is the scene before the boy falls asleep. The sound effect of the musical instrument is replaced by an ethereal melody with an echo. Accompanied by the slow falling of the leaves and the scene gradually zooming out from the close range, it also represents the boy gradually falling into a dream. The misty and ethereal melody of the musical instrument here simulates the drowsy effect when a person is falling asleep. Different from the realistic chirping of cicadas and the cheerful playing of the bamboo flute before, the sound effect here is abstract and perfectly integrated with the unreality of the dream.

The scene from 05:27 to 05:40 is also an ingenious transition representing the dream. The leaves turn into yellow butterflies while falling (as shown in **Figure 1**). The bright yellow color forms a sharp contrast with the traditional black, white, and gray colors in water-and-ink animations. With the cheerful musical melody, such an imaginative scene transition into the dream is completed.



**Figure 1.** The scene transition of dream in *The Cowboy’s Flute*.

Moreover, *The Cowboy's Flute* has more silent scenes compared to *Where Is Mama*, and they are cleverly used. For example, at 11:48, the boy finds his cattle by the waterfall. At this moment, the fast-paced music that had been gripping the audience's emotions just a second ago suddenly stops, and a silent shot lasting for ten seconds. In the scene, only the boy and the cattle look at each other, seemingly observing each other. After this ten seconds' shot, the musical melody sound begins again, and the emotions of the audience that had been heightened drop back. The boy and the cattle also hug and recognize each other.

It can be seen that *The Cowboy's Flute* has played down the educational function similar to that of *Where Is Mama* and returned to the literati artistic conception of the ink wash painting itself. In terms of the use of sound, the absence of human voices highlights the role of other sound effects. Whether it is the silent shots, natural environmental sounds, or the changing melodies of musical instruments, they have all replaced human voices and become the representatives of the characters.

### 3.3. *The Deer's Bell*

In 1982, *The Deer's Bell* is the third water-and-ink animation produced by Shanghai Animation Film Studio after *The Cowboy's Flute*. *The Deer's Bell* continues the use of theme sound effects in *The Flute*, which means a certain musical instrument is also selected as the narrative thread running through the story. However, the sound of the bell does not appear as frequently as the sound of the flute in *The Cowboy's Flute*. It more often appears as a watershed for the increasing changes in characters' emotions and the plots, so it is more transient and appears less frequently. Moreover, the human voice effect is also absent in *The Deer's Bell*, the natural environmental sounds and the melodies of musical instruments together constitute the overall sound effects of the animation.

First of all, just like *The Cowboy's Flute*, *The Deer's Bell* also features a large number of natural environmental sounds. For example, at 01:42, when the deer's family is playing along the water, the realistic sound effect of the water, combined with the action of the little deer leaping in the picture, makes the scene more lively and lifelike. The sound of the deer's bleating at 03:56 is also a relatively realistic environmental sound, which is very likely the real bleating of deer recorded by the animation team during the on-location shooting (this will be discussed in detail in the next chapter).

Secondly, the bell, serving as the main theme melody of *The Deer's Bell*, its uniqueness lies in its short and ringing sound effect. Different from the melodious sound of the bamboo flute, the sound of the bell stands out among various sound effects and is more likely to attract the audience's attention when it appears in the animation.

The scenes where the sound of the bell appears in the animation are the dividing points of the plot and characters' emotions: The first scene is at the beginning of the story. The little girl brings the injured deer home and takes care of it. In order

to amuse the deer and get closer to it, the girl takes out the bell and shakes it. The ringing sound catches the deer's attention, and the two start to get to know each other. The second scene is when the girl gets injured. The deer, with the bell around its neck, goes down the mountain to buy food for the girl. At this time, their relationship takes a step further and they are very close. The third scene is when the girl and the deer part ways. The girl ties the bell around the deer's neck again as a gift and watches the deer's family walk into the mountain forest. The sound of the bell lingers melodiously.

Every time the sound of the bell rings, it represents the relationship and emotions exchanged between human and animal. When the bell rings for the first time, from the perspective of human (represented by the girl), she attempts to tame and get closer to the animal, and the deer, which is in a vulnerable position, accepts this friendship. When the bell rings for the second time, the situations of the girl and the deer are reversed. The bond between the injured girl and the deer enables them, through the exchange of the bell, to complete the transformation of the positions of caregiver and the one being cared for. That is, the subject and object of the "taming" between humans and animals<sup>3</sup> are reversed. At the end of the animation, the bell is handed over again, and the fading sound of the bell symbolizes the permanent emotional connection between the girl and the deer. The last exchange of the bell as an item and the sound of the bell ringing again no longer represent the fluctuating superiority and inferiority between humans and animals, but have reached a certain degree of harmony and balance.

Finally, as a water-and-ink animation created by Shanghai Animation Film Studio after a gap of 19 years, *The Deer's Bell* retains some of the literati temperament of *The Cowboy's Flute*. Both the artistic conception of the pictures and the selection of traditional Chinese musical instruments are representative of China's traditional nationality (ink wash paintings and traditional Chinese music). However, in terms of its idea concept, *The Deer's Bell* has also, to a certain extent, returned to the educational characteristics of *Where Is Mama*, which is related to the historical background of its creation and the changes in the aesthetic consciousness of its creators. This will be discussed in detail in the next chapter.

### **3.4. Feeling from Mountain and Water**

The use of sound effects in *Feeling from Mountain and Water* are more diversified and refined compared with the previous three water-and-ink animations. It not only gives full play to the "blank space (liubai)" effect of the natural environmental sounds more vividly, but also the use of on-site recorded environmental sounds is one of the characteristics of the sound effect in this water-and-ink animation. Moreover, the ingenious combination of sound and picture in *Feeling from Mountain and Water* also presents various transition forms, as well as the creative

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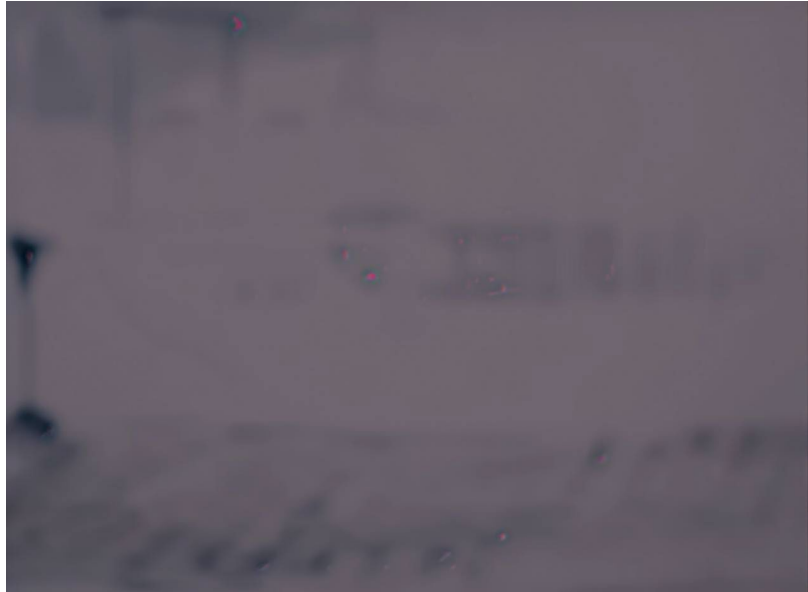
<sup>3</sup>Here in this essay, it does not refer to the concept of "domestication" or "taming" with hostility, but a relatively neutral relationship.

methods of on-site splashing ink for painting and camera movement.

First of all, in *Feeling from Mountain and Water*, the natural environmental sound effects are used in many places. Compared with the previous three water-and-ink animations, the proportion of natural environmental sound has increased significantly, and they are more closely integrated with the sounds of the theme musical instrument (the sound of the qin). At the very beginning of the animation, there is a silent shot lasting nearly twenty seconds. Coupled with the ethereal feeling of the small islet in the water, it can immediately immerse the audience in the “void” of Chinese ink wash paintings. After twenty seconds, extremely realistic sound of the wind and flowing water gradually emerge, and they present an auditory effect of approaching from a distance. At the forty-ninth second, the melody of the musical instrument sound and blends with the sound of the flowing water. Thus, within the first minute of the beginning of *The Legend of the Mountains and Rivers*, the combination of “substance and void” in Chinese ink wash paintings is demonstrated, and the silent shot is also very similar to the technique of leaving blank spaces in paintings. In the part close to the end, the natural sound effects are used more frequently and become the dominant sounds of the animation, and the frequency of the appearance of the musical instrument is greatly reduced. For example, within the four minutes from 09:55 to 13:56, the sound of the musical instrument disappears, and there are only realistic sounds of flowing water, rapid chirping of birds in the mountains and the sound of other animals, accompanied by the sound of the wind in the valley.

Secondly, there are three wonderful transitions represented by sound and picture in *Feeling from Mountain and Water*.

The first part is at 02:51. The fainted old master is taken back to the boy’s home and gradually wakes up. Instead of using the conventional way of waking up by “opening the eyes”, it first introduces the realistic chirping of birds into the scene, representing the passage of time—at least one night has passed by this time (the clear chirping of birds doesn’t give the first impression of it being night). Immediately after that, the old master blinks, and at this moment, a hazy image appears in the shot. After that, the image gradually becomes clear and finally freezes on the table and chairs. From this, it can be seen that the narrative perspective shifts from the third person to the first person perspective of the old master. The initial hazy feeling of the image simulates the blurry vision when a person first opens their eyes after a long period of sleep (as shown in **Figure 2**), and the final freeze frame of the table and chairs in the room also represents the flow of space and time (as shown in **Figure 3**), that is, the old master has already come from the riverbank to the boy’s home, and has been taken care of by the boy during the time of lethargy. The chirping of birds doesn’t stop during this transition that lasts nearly half a minute, until the sound of the boy’s reed pipe instrument rings out and harmonizes with the sound of the qin played by the old master. This transition is guided by the realistic natural environmental sounds and coordinated with the movement of the images, explaining the passage of time and the change of space within just thirty seconds.



**Figure 2.** The scene transition of blurry vision in *Feeling from Mountain and Water*.

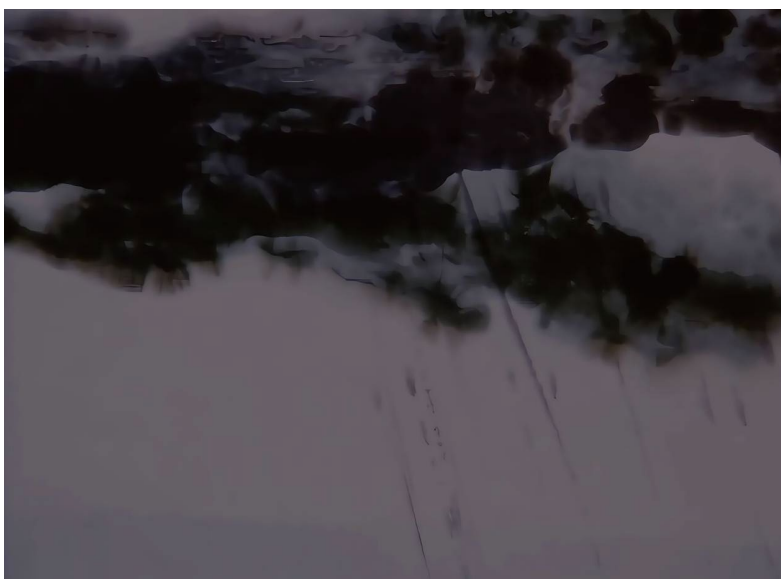


**Figure 3.** The final freeze frame of blurry vision scene transition in *Feeling from Mountain and Water*.

The second part is from 05:13 to 07:50. The sound of the qin and the movement of images cleverly show the passage of time throughout a whole year (from autumn to summer). At 05:13, the falling red maple leaves appear in the image, which has the same effect as the bright yellow butterflies in the dream transition scene of *The Cowboy's Flute*. Their appearance indicates an obvious dividing lines of time or space: the falling of the maple leaves is accompanied by the scene of the old master teaching the boy the techniques of playing the qin. The falling of the maple leaves represents the passage of time, and the autumn scene also comes to an end. The stove and the white snow stand for winter, the melting lake ice in

spring and the real chirping of birds represent the revival of life, and the lotus leaves and flowers in the pond and the croaking of frogs represent summer. During the cycle of the four seasons, the sound of the qin does not stop, which represents the boy's diligent practice of qin-playing skills throughout the year.

The third part is the climax near the end of *Feeling from Mountain and Water*, from 16:23 to 16:35. The clouds created with splashed ink, combined with neat and smooth lines, present a weather condition of a heavy rainstorm (as shown in **Figure 4**). The creation of this shot was that the painter was painting while the photographer was shooting (Wang, 2013). By using the creative method of “being in progress”, it gives the audience an immersive feeling as if they were at the scene of the rain.



**Figure 4.** The raining scene transition in *Feeling from Mountain and Water*.

Finally, in terms of the overall style and artistic conception of *Feeling from Mountain and Water*, it has returned to the literati artistic conception inherent in ink wash painting itself. Moreover, the scenes depicting mountains and flowing water further intensify the elegant atmosphere, taking it to a higher level compared to the tranquil rural scenery in *The Cowboy's Flute*. Although its educational function still exists, it is somewhat less prominent than that in *Where Is Mama* and *The Deer's Bell*.

### 3.5. A Summary of the Comparison of Sound Categories in Four Water-and-Ink Animations

According to the close reading of the above animation scenes, the sound categories in the four water-and-ink animations can be classified and compared as follows: human voice effects, instrumental sound effects (theme instruments and background music), natural environmental sounds (Foley and on-site recorded), and silent effects (as shown in **Table 1**).

**Table 1.** A synthesis comparison of sound categories.

	<i>Where Is Mama</i>	<i>The Cowboy's Flute</i>	<i>The Deer's Bell</i>	<i>Feeling from Mountain and Water</i>
Human voice effects	Human voice narration	Shout of the cowboy (only a brief sound)	×	×
Theme instruments sound effects	×	Sound of the bamboo flute	Sound of the bell	Sound of the qin
Background instruments sound effects	✓	✓	✓	✓
Foley (natural environmental sounds)	×	✓	✓	✓
On-site recorded (natural environmental sounds)	×	✓	✓	(It accounts for a larger proportion than the other three animations.)
Silent effects	✓	✓	✓	(It accounts for a larger proportion than the other three animations.)

## 4. The Use of Natural Environmental Sound and the Aesthetic Consciousness of Era and Individuals

### 4.1. On-Site Recorded Natural Environmental Sound in Water-and-Ink Animations

As can be seen from the above, in *Where Is Mama*, *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water*, the frequency of the use of natural sound effects has increased from none to more, and the forms and aesthetics have also been constantly developing. That is to say, animation workers may gradually attach importance to the on-site recorded natural environmental sound.

The reason why realistic and recorded natural environmental sounds appear in *The Cowboy's Flute*, *The Deer's Bell* and *Feeling from Mountain and Water* is somewhat related to the on-location shooting for scenery collection carried out by the animation team in the early and middle stages of production.

There is a strong possibility that the sound of deer in *The Deer's Bell* are on-site recorded sounds. According to Yu Miaoying's (1985, as cited in [Kongzang Animation Archive, 2024c](#)) work journal on *Sambar Deer* (shuilu) and *The Squirrel Saves the Deer* (jiazi jiulu), animation workers once went to the deer farm in Tianmu Mountain to record the howl of deer. As a work produced around the same time, *The Deer's Bell* also features the sound of deer. Such realistic deer sound are most probably recorded on site by the creators.

The sounds of the forest waves and the wind in *Feeling from Mountain and Water* were indeed recorded on-site during outdoor shooting. When it comes to the sound effect production of *Feeling from Mountain and Water*, according to the *Chinese Arts* interview with Qiang Xiaobai (Yu, 2023), he once said, "There is another difficulty. Besides the music, a large part of it is Foley. Te Wei was most

worried about one scene, that is, the parting scene. There is no music in this scene. He said this is the sound of the forest waves, which posed a difficult problem for us. I said that when I was an educated youth, I lived in the mountains in Northeast China in summer. At that time, the whirring sound came with the leaves, and the sound of the strong blizzard in winter was howling and cold. I said that neither of them seemed to be suitable for this scene. We needed to find a sound that could express a bit of chill. Why? Because it was a parting scene, and this kind of atmosphere should have a bit of sadness. So, we must properly place this piece of sound. Finally, we still found this sound and completed the problem set by the old gentleman. Although Qiang Xiaobai said that the sound of the forest waves was “Foley”, it should be a slip of the tongue. Because according to the work log of *Feeling from Mountain and Water* by the sound recorder Yu Miaoying (1985, as cited in [Kongzang Animation Archive, 2024c](#)), the production team once went to Nanjing for outdoor shooting to record the sound of the pine forest waves. And combined with Qiang Xiaobai’s specific description of this segment of the forest waves, it should be the scene of the pine forest waves in the mountains in the climax part near the end of *Feeling from Mountain and Water* (12:35). In the scene, the pine trees in the mountains are swaying in the wind, accompanied by the howling sound of the wind (as shown in [Figure 5](#)). To sum up, this long-lasting sound of the forest waves and the wind in the mountains is actually the real environmental sound of the outdoor scene, which was recorded during the on-location shooting in Nanjing. And compared with the long sound of the wind on the water at the very beginning of the animation, the two should belong to the same sound source and are both recorded on-site.



**Figure 5.** The waving pine trees in *Feeling from Mountain and Water*.

However, in these water-and-ink animations, not all the shots of natural scenery are dubbed with Foley sound or on-site recorded natural sound effects.

From the perspective of animation workers, they need to consider various factors when selecting natural environmental sounds. The first one is the existing sound resources. That is to say, animation workers need to check whether there are ready-made sound effects that meet the requirements of the film. If they are suitable, they can be directly used. If not, they can process the existing recordings or record them again. But the more important factor is the actual needs of the animation, which means whether the realistic or on-site recorded natural environmental sounds should be in line with the specific plot, the emotions of the characters and the audience's viewing experience. For example, as mentioned above, in *The Cowboy's Flute*, there is a segment where the birds among the bamboos could have been dubbed with Foley sound or on-site recorded bird chirping. However, the animation workers chose to use the sounds of musical instruments such as the flute for dubbing instead of the real bird chirping. This is a consideration based on the overall plot development.

Correspondingly, from the audience's perspective, the usage location and degree of natural sound effects affect their watching experience. Yu (1982) once proposed the influence of different sound types on the audience's aesthetic and emotional changes. He said that descriptive sounds can capture certain acoustic characteristics in the real world, and through specific sound techniques, they are processed to emphasize and render the movements within the picture for the audience (such as the sound of horses' hooves, train sounds), which belong to external sound experiences, similar to the natural sound effects mentioned in this essay. Musical instruments and songs, on the other hand, can express the psychological experiences of characters and belong to internal sound experiences. Zhao's (2020) article once elaborated on the abstract nature of the sound effects in animations. She believes that various sounds in animated films should be somewhat abstract, which is in line with the exaggerated effect of animated films. However, Foley sound or directly using on-site recorded sounds may undermine the aesthetic effect and give the audience a sense of abruptness.

However, water-and-ink animations have their uniqueness. They originate from traditional Chinese ink wash paintings, and the subjects of ink wash paintings are mostly related to nature. Landscapes, animals, and plants are the main objects of depiction. Therefore, based on ink wash paintings, water-and-ink animations also mainly feature large sections of natural scenes and objects, which provides certain feasibility and conditions for the use of natural environmental sounds. That is, when animation workers record real environmental sound and use it appropriately, it will not bring a sense of disconnection and abruptness to the audience, but create a strong sense of presence.

Ma Kexuan (Yu, 2023), the director of *Feeling from Mountain and Water*, once said, "Water-and-ink animation not only has a set of new things in terms of the film's artistic form and production method, but actually its theme also has its own characteristics. Not everything can be made into a water-and-ink animation. If a comic film is made into an ink wash animation, there is no point in doing so. It

should be something full of poetic and picturesque charm, not something realistic.”

It can be seen that the aesthetics of ink wash paintings themselves make water-and-ink animation different from other types of animations, and the selection of sounds, especially natural environmental sounds, is even more important.

#### 4.2. Aesthetic Consciousness of Era and Individuals

The changes in the use of natural sound effects indicate that creators have paid increasing attention to the sound in animation and the evolving changes in aesthetics. The sound-collecting activity of “on-site recording” is closely related to the process of going on location and gathering folk customs. Therefore, it is possible to analyze, from the changes in the time frequency of such activities, to what extent the changes in different eras have brought about thinking inertia and changes in personal aesthetic awareness among water-and-ink animators in different periods.

It can be seen from the records of the animation team’s field trips (caifeng) from the 1940s to the 1990s that animators had records of going on location in the early and middle stages of animation creation ([Manlong Animation Literature Museum, 2015](#)). Taking 1966 and 1978 as demarcation points, there were 22 animations had the record of field trips from 1949 to 1965, none between 1976 and 1977, and 20 in the first ten years after the reform and opening-up (1978-1988). It can be seen that the era backgrounds such as the reform and opening-up have respectively brought restrictive or promotional effects on the field trip activities of the animation production team to a certain extent.

*The Cowboy’s Flute*, *The Deer’s Bell* and *Feeling from Mountain and Water* all had the field trip activities, however, there is no record of going on a field trip for the production of *Where Is Mama*. As a water-and-ink animation almost produced in the same period as *The Cowboy’s Flute*, it is obvious that the influence of the era is not sufficient to explain it, and it is actually related to the specific aesthetic consciousness of the animators. As the first experimental water-and-ink animation, *Where Is Mama* focused its creation on presenting the effect of Qi Bai-shi’s ink-wash paintings and realizing the idea of “making the ink-wash paintings come alive”. Thus, the consideration of sound effects might have been slightly reduced, with a greater emphasis on the study of the pictures. Therefore, the animators who created *Where Is Mama* during this period placed the creative emphasis on the form of water-and-ink animation and the innovation of the picture form. In terms of the selection of specific sound effects, they followed the previous way of using human voice dubbing in animations, and there was no obvious artistic effect or innovation in the mixed use of natural sound effects and various other sound effects.

Moreover, the changes in the internal stratification and composition of the animation organization have also affected the production of vocal music to a certain extent. According to Duan Shijun’s (1990, as cited in [Kongzang Animation Ar-](#)

archives, 2024b) *Forty Years of Music Creation in Chinese Art Films (1947-1987: A Memorabilia) (Draft for Soliciting Opinions)*, between the 1960s and 1980s, the listening and review system (tingshen zhidu) for animated films underwent several changes: After the composition group of Shanghai Animation Film Studio was officially established in 1961, in addition to organizing creative work and assigning tasks, it also focused on improving the quality of film music creation and the professional learning of composers themselves, and strengthened the connection with the social music community. A preliminary listening and review system was established in film music creation. After the music creation of each film was completed, the shooting crew would submit the full score to the Shanghai Film Orchestra for a trial performance. Then, the factory leaders, the person in charge of the Art Committee, the director, and all the composers would be invited to participate in the listening and review. After that, they would discuss and put forward modification suggestions. Then, the composer and the director would jointly study the modification plan, and after the composer made the modifications, the music would be recorded. From 1966 to 1976, the main leaders of the shooting crew were not centered around the director, but mainly the Workers' Propaganda Team and the Revolutionary Masses' Propaganda Team. After the Military Propaganda Team withdrew in 1975, the Workers' Propaganda Team took charge of everything. Regarding the review of music, in addition to the Music Team of the Film Bureau serving as the main reviewer, within the shooting crew, it was mainly the Workers' Propaganda Team and the director who were responsible. From 1977 to 1989, at the end of the 1970s, the Workers' Propaganda Team and the Military Propaganda Team withdrew. Since the 1980s, the listening and review system with layers of examination and approval has been abolished, and the director has been directly responsible. It can be seen that the listening and review system for animations has gone through a process of change from "simple → complex → simple". In different eras, animators faced different creative pressures and restrictions. The reform that made the director directly responsible since the 1980s has, to a certain extent, simplified the cumbersome process of "reviewing layer by layer". Both the composition group and the recording group belong to the sound production department of animations. Therefore, the systems and requirements they follow in the review process are very similar, and the similar creative environment of the recording group can also be analyzed from the changes in the listening and review system of the composition group.

After experiencing internal institutional changes and significant historical events, there is bound to be an era-based inertia in animation creation. Right after 1976, the creative style of animations (in aspects such as the use of pictures and sound effects) would not show a large number of new changes in a short period. Animations in the early days of the reform and opening-up would not immediately achieve an open style with a great variety of forms either. A transition period is necessary and certain to exist. During the transition period, inheriting the creative style of the previous time is perhaps a common phenomenon. At this time, the "innova-

tion” might not be greater than the inertia of “inheritance”. The four water-and-ink animations analyzed in this essay can well reflect this kind of era-based inertia. As an experimental work, *Where Is Mama* retained the educational theme that was common in Chinese animations at that time<sup>4</sup>. Although *The Cowboy’s Flute* made artistic improvements in the use of sound effects (the sounds of the natural environment began to appear), the main characters were still the shepherd boy and the cattle familiar to children, and the animation background also chose the rural fields that are close to reality. Between 1962 and 1981, various requirements for animated films restricted the creation and development of water-and-ink animations in Shanghai Animation Film Studio to a certain extent. After 1976, in the following six years, China went through the reform and opening-up. Between these two historical turning points, water-and-ink animations also went through two transitional periods of different eras, providing conditions for the creation of *The Deer’s Bell*. *The Deer’s Bell* not only has the educational intention of *Where Is Mama*, but also has the artistic expression of sound inherited from *The Cowboy’s Flute*, and makes a more profound use of the theme musical instruments and the sounds of the natural environment. The diversified and innovative coordination effect of sound and picture in *Feeling from Mountain and Water* also benefits from the adaptation during the transition in the early days of the reform and opening-up, and its aesthetic effect has reached a new level.

From the perspective of the personal aesthetics of animators, the above-mentioned reform of the listening and review system is also an example. After the director takes direct responsibility for the animation, their aesthetic pursuit will be more directly reflected in the overall effect of the animation, and sound effect production is also one aspect of it. For example, during the production process of *Ne Zha Conquers the Dragon King* by Shanghai Animation Film Studio, the chimes of Marquis Yi of Zeng from the Warring States period were selected as the dubbing for a short segment in the animation. Although the creators of this film, Xiao Huaihai and Jin Fuzai (Sun & Fu, 2024), only mentioned the “coincidence” of this idea: “The time when the chimes of Marquis Yi of Zeng from the Warring States period were unearthed happened to coincide with the creation time of *Ne Zha Conquers the Dragon King*, and we wanted to try combining the two”, but from the audience’s point of view, this undoubtedly shows the emphasis on the rigor and pioneering nature of sound recording.

In terms of organizing field trip activities, Hu Yongkai (Sun & Fu, 2024) once recalled: “Mr. Te Wei personally invited Mr. Zhang Ding, the president of the Academy of Arts and Crafts, to be the chief art designer. Mr. Zhang led a huge film crew and went to Penglai Pavilion in Shandong Province in batches for sketching and field trips... Because the materials and scenes taken from life are not imagined out of thin air. I remember that for the yellow sky, someone said at that

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<sup>4</sup>In Tao Bin’s thesis *Research on the Animation Production of Shanghai Animation Film Studio during the “Seventeen Years”* (1949-1966), page 103: During 1949-1966, the creative style of Chinese animations largely learned from the concept of Soviet animations, which was “providing children with correct education and entertainment”.

time, ‘Draw a blue sky with white clouds, and a dragon coming out of the sea.’ As a result, Ada didn’t say anything. Later, he said, ‘Blue sky with white clouds is too vulgar and has no charm at all.’ Later, an armor gold color, a very subtle color, was chosen, and with this as the main tone, it was used to represent a clear sky. It turned out to be very successful. At that time, Master Zhang Ding had very strict requirements for the film crew. He required everyone to go on field trips there and draw sketches”.

From this, we can draw an analogy to the creation of water-and-ink animations. Not only the director, but everyone involved in tasks such as creating pictures, making sound effects, and combining and editing, all show the pursuit of rigor in the coordination of sound and picture and the production of sound effects.

## 5. Conclusion

The four water-and-ink animations of Shanghai Animation Film Studio from 1960 to 1988 show both inheritance and development in two aspects: thematic conception and the coordination of sound and picture.

The educational characteristic and humanistic artistic conception of these four water-and-ink animations present a fluctuating trend of change. From *Where Is Mama* which initially highlights educational significance, to the artistic conception of the second animation *The Cowboy’s Flute*, the third *The Deer’s Bell* which combines the two, and then to *Feeling from Mountain and Water* where the abstract humanistic artistic conception surpasses the educational characteristic.

The coordination of sound and picture is the focus of this paper, mainly analyzing the cooperative relationship between human voice effects and non-human voice effects (especially natural environmental sounds).

The sound effects of *Where Is Mama* consist of human voices and instrumental sounds, complementing the moving images (dominated by pan movements) to complete the animation presentation, with no natural sound effects appearing. In *The Cowboy’s Flute*, realistic natural environmental sound effects first emerged, while human voice effects were greatly diluted in the animation. The movements of the images (such as scene transitions) also showed more artistic variations. *The Deer’s Bell* similarly featured natural environmental sounds, which were most likely on-site recorded. In *Feeling from Mountain and Water*, the phenomenon of on-site recorded natural environmental sounds was more prominent, with more frequent use of such sounds and human voice effects completely replaced. The expression of scene transitions in the images became more delicate (in presenting the passage of time and characters’ emotions).

Through historical materials analysis and detailed reading of animation scenes, the changes and developments in the above-mentioned thematic concepts and sound-picture coordination are mainly influenced by two factors: creation restrictions under different historical backgrounds (the evolution of the listening and review system), and the aesthetic awareness of core animators. First, the animation review system of Shanghai Animation Film Studio from 1960 to 1988 un-

derwent several changes, the main body responsible for review was simplified, and finally the director took direct responsibility, gradually relaxing the creative restrictions on animators. Second, the “field trips (cai feng)” activities of core animators such as directors, and their rigorous creative attitudes also influenced the artistic effects of water-and-ink animations. In addition, factors such as audience experience and technological changes also influence these developments, but this paper primarily attempts to analyze them from the perspectives of humanities (non-technological aspects) and animation creators.

## Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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