Abstract: Chinese Zodiac culture has a long history of development in China. The piano suite "Chinese Zodiac" composed by Mr. Yao Henglu, a famous Chinese composer, is a work that combines traditional Chinese culture and western compositional techniques. Mr. Yao integrates Chinese culture and western techniques through ingenious compositional techniques, and shapes the three-dimensional and real image of each animal by using acoustic writing techniques. The writing of each of these compositions incorporates the characteristics of the animals, which are reflected through the use of rhythm, beat, melodic material and nationalized harmonies, making the work come alive with a strong sense of picture. This paper explores the visualization of music through the analysis of Zodiac.

Keywords: Piano Suite, Nationalized Harmony, Linear Thinking.

1. Introduction to Zodiac

There is no lack of Chinese piano works with animals as the theme or source of inspiration, such as He Luting's Piccolo for Shepherd Boys, Wang Jianzhong's Hundred Years of the Phoenix, and Lai Yinghai's Zoo Suite, etc. Mr. Yao Henglu's composition "Zodiac" has been a great success in China. Mr. Yao Henglu's piano suite "Zodiac" is even more representative. It is a collection of twelve independent piano pieces under the title of twelve Chinese zodiacs, which is a long history and culture of China, and skillfully blends the western compositional techniques with the Chinese pentatonic modulation. In the score published by the People's Music Publishing House in 2014, each zodiac sign corresponds to a Chinese historical allusion and is accompanied by Chinese paintings in Chinese colors, and the composer has translated the table of contents and allusions into English to facilitate cultural exchange. Based on the character traits of each animal, the composer creates unique and individual motifs, rhythms and beats, national harmony patterns, and song structures that mimic the animal's personality, making the music vivid and graphic, and giving the listener a strong sense of the picture at first listen.

2. The Embodiment of Music Visualization in "Chinese Zodiac"

The overall tonal layout of the twelve pieces in "Chinese Zodiac" is created by the twelve-tone system of the ancient Chinese chimes. The twelve pieces correspond to twelve semitones, and the modes are written sequentially from #F to F. The twelve pieces are written in the same way as the twelve pieces in "Chinese Zodiac". The music expresses the characteristics of the twelve signs of the Chinese zodiac in a skillful way.

Music creation and painting, literature and other areas of mutual reference and integration, is an important way to make music visualization, and the work "Zodiac" is by the Chinese traditional culture and the image of the specific animals born from the joint influence of a work, which specific visualization techniques are analyzed as follows:

2.1. Rhythm and Beat Show Animal Habits

From the analysis of musical materials, the first is the change of rhythm and beat, for example, the rhythm through the accented notation, anti-accented rhythmic pattern, the use of rests on the strong beat, alternating between voices, etc., so that the original rhythmic rhythm group to change, the surround sound effect is more modern music color, and better shaping the shape of the animals imitating the Chinese zodiac animal characteristics. Frequent changes in the beat, multiple beats and additional beats of the three modern beat performance methods used to break the inherent rhythmic laws of beat strength and weakness, for the image of the Chinese zodiac animal features targeted selection of music beat rhythmic form, so that the music gives a wealth of the Chinese zodiac animal music expression.

For example, the first piece of music "Rat", the tonality of #F, the beat from the A section of the 9/8 beat to the B section of the 3/8 beat, and then by the C section of the reproduction of the A section, and the D section of the B section of the 3/8 beat, the use of beat changes plus the overall lively speed to reflect the rat's agility. The structure of the piece is a reproduction of a single two-part piece, and from the horizontal lines, the lines are mainly composed of eighth notes forming diatonic intervals and continuous sixteenth note organization. Through the writing techniques of minor second and skipping notes, the score vividly depicts the situation of a rat walking secretly.

Take the second piece of music "Cow" as an example, the cow is characterized as strong and diligent, in China's long-term farming life, the cow and the working people live together, in people's minds with a gentle and obedient habits and down-to-earth and willing to do the spirit of the revered image, and the composer seized this feature, first of all, in the opening A section of the speed of the small broadsheet, and the use of the passacaglia fixed bass to carry out the "Cow" of the theme of writing. Theme writing. The theme melody does not have complex rhythm, there is no strong contrast between strength and weakness, and the overall acoustic effect is slow and long, which vividly reflects the heavy image of the ox.

Another example is the sixth piece, "Snake," in which the whole piece is in 7/8 time, and the tempo changes from the
center plate in the A and B sections to the slightly faster mini-rhythm in the C section, and then returns to the soft center plate in the D section. As the snake's body is long and thin, it relies on twisting its body to walk forward, in order to emphasize this feature, the composer's melodic motifs are written in sixteenth note groups of six, and the order of the six groups of six is three tones upward, three tones downward, or downward and then upward, which always keeps the development of the two directions, which vividly and imaginatively expresses the snake's sinuous and winding form when it walks.

In the seventh part of the piece "Horse", the beat is very variable, and the beat in the introduction alone goes through three changes, from 4/4 to 3/4 and then to 2/4. The horse is the embodiment of swiftness, gallop, gallop, based on this image, the composer in the rhythm focus on the use of the rhythmic motifs of the first eight after sixteen and sixteenth note groups of rhythmic motifs, the lower part of the main use of continuous eighth note skipping, in order to express the sound of the horse's hooves trampling.

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Example 1: Introduction to "Horses", bars 1-9

In the Ninth Minute, "Monkey," the tempo changes from the A section to the E section. The image of the monkey is clever and quick-witted, similar to the rat, so the second interval is frequently used in the piece, and combined with the dense variations of sixteenth note quartets, two eighth note combinations, and the rhythmic pattern of eight before and sixteen after the sixteenth note, the monkey is vividly depicted in the scene of playfulness and chasing.

The 10th piece "Chicken" adopts 8/8 and 5/8 beats, and the most impressive thing about the chicken is its beeping sound. Capturing this characteristic, the composer adopts two eighth note combinations and uses the method of skipping to show the beeping sound of the hen.

The eleventh piece "Dog" has five sections from A to E, with five tempos. The composer focuses on depicting the swiftness of the dog's running, using a large number of sixteenth-note quartets and thirty-second notes, and expressing the dog's swiftness through continuous running motivic material.

To summarize, the suite makes the habits of each animal suitably manifested through the selection and change of rhythm and beat.

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2.2. Melodic Material Presents Morphological Characteristics

From the melody point of view, it develops on the melody of traditional Chinese music, and through the use of variation, repetition, and polyphonic writing techniques, it makes the image of each kind of animal very full.

The tiger has long been a powerful image in people's minds. In the A section of the third part of the piece, the author creates an oppressive atmosphere of the tiger from far away and close to the tiger through the use of complete repetition and contrasting repetition. In the B section, it consists of two phrases, the first one is mainly a melodic progression, forming a reflection counterpoint between the two voices, and a contrast between one voice and the other, musically showing the tiger's slowing down when it sees its prey. The second phrase is mainly a column chord progression, and the linear melodic weave is transformed into a block weave structure, which gives a feeling of tension and excitement, and shows the tiger's rapid march and swiftness, while the C section is a combination of the A section and the B section, and the motive of the tiger appears in each voice in turn, which successfully creates a powerful image.

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Example 2: Thematic motif of "Tiger", bars 1-4
The image of rabbits in people's minds is hopping and docile, and the theme of the fourth part, "Rabbit", is enriched by off-key modal progression and compound counterpoint, and a large number of decorative notes and jumping notes in the B section, which show the rabbit's dynamic image in the most exquisite way.

Sheep and rabbits are similar in that they are both docile and timid, so in the eighth part of the piece, "Sheep", the tempo was chosen to be soft, and the imitation of sheep's cries appeared in the piece. The thematic motifs were not changed too much, and the piece as a whole gave a feeling of quietness and calmness.

2.3. Nationalization and Harmony Creation Reflecting Animal Metaphors

In terms of harmonic language, the composer mainly adopts the compositional technique of fusing the pentatonic folk tuning with the Western major and minor harmonic techniques, modernizing the traditional folk tuning and making the folk harmony innovative, for example, applying chromaticism in the pentatonic melody. The piece reflects Mr. Yao's continuous exploration and innovation in harmonic composition, and condenses the intrinsic aesthetic value of Chinese music in his music.

Taking the piece "Dragon" as an example, the dragon, as the only animal in the Chinese Zodiac, possesses the symbolism of good fortune and the image of flying in the clouds. In order to reflect this characteristic, first of all, in the introductory part of the piece, the sixteenth notes are used to form a four-note group of continuous progression, as if the dragon is soaring up and down, and in the ending part, the author adopts the use of continuous nationalized and modernized harmony and accent symbols to enhance the momentum, and continuously advances to reach a climax, and concludes the whole piece in the magnificent sound, which embodies the image of the Chinese dragon's tallness and splendor in a vivid and vivid way.

Example 3: "Dragon", bars 1-5.

For the pig, which is the last in the Chinese Zodiac, in Chinese people's impression, it symbolizes great wealth and prosperity, as well as good fortune. In the last piece "Pig", the composer expresses the image of the pig arching over the door to bring good fortune by using the symbolic method of the theme motif. The whole piece, by continuously distorting the original theme motif and strengthening the intervals of the third and the fourth, utilizes the method of parallel intervals and parallel harmonies, which jointly creates the image of the pig shaking and slowing down when it walks.

Through the above brief analysis, it can be seen that the whole work uses music as the ink to draw twelve kinds of animals with distinctive and different characteristics, and the work adopts the method of audio "writing" to shape the audio image with descriptive and figurative methods, instead of just singing a melody. The composer uses the theme motifs with strong Chinese Zodiac animal characteristics, with ethnic harmony weaving, and the combination of Chinese and Western modes to build up the skeleton of the compositional structure, and innovates and develops the original composition, rather than just adapting the folk song melody, so that the music can be visualized.

3. Reflections on Music Visualization Triggered by Zodiac

Throughout the history of music development, we can find that the orchestral suite "Carnival of the Animals" created by Saint-Saëns and "Chinese Zodiac" have similarities and differences, both of them have chosen the theme of animals as the object of their creation. It vividly depicts the swan's graceful and elegant posture as it swims in the water at ease. In addition to animal themes, many Western composers have also used some kind of figurative objects as the object of their musical creations. For example, Debussy, the master of Impressionism, was deeply influenced by paintings, and often drew inspiration from Impressionist paintings, and named his musical works after visual vocabulary such as "sketches and patterns", creating a lot of piano music with pictorial imagery. Mussorgsky's "Piano Music", which has a lot of painting imagery, includes "The Collection of Prints" and "The Collection of Imagery", among others. In addition, Mussorgsky's "Pictures at an Exhibition" is also one of the iconic representative works. Mussorgsky completed the piano suite "Pictures at an Exhibition" in one go after visiting the exhibition in honor of Gartman's legacy, and it was based on the content of the paintings that he interpreted them in the dynamic process of the march of time. For composers inspired
by literature, we have to mention several composers in the Romantic period, such as Liszt, who was influenced by Dante's Divine Comedy and created the passionate Dante Sonata; Schumann, who was influenced by Hoffmann's literary work The View of the Life of the Male Cat Muir and created the piano suite Chrysler's Puppet, and so on. The results of numerous recent studies in experimental aesthetics have also proved that "purely musical hobbies are extremely rare, and many people rejoice in music not because they appreciate the harmony of sound, but because they rejoice in the visual imagery it evokes." Professor Delacroix of the University of Paris has conducted psychological experiments on the relationship between music and visual imagery, and the subjects described the visual associations evoked by music, "Listening to Wagner's 'Ringing in the Woods' I could clearly see a clump of green oaks and palms, the oaks as tall as ordinary oaks, the palms sometimes as tall as three or four meters.

The essence of "music visualization" discussed in this article is the "otherness" of music, which mainly refers to the content that cannot be contained in the musical sound itself, but can be provided to the listener through music. The content of musical otherness mainly contains two aspects: firstly, the visual images and pictures obtained through auditory imagination; secondly, the process and plot of various developments obtained through auditory imagination, for example, the Zodiac explored in this paper belongs to the former, and the reason why this work is able to vividly show each animal is that firstly, in the paintings of twelve kinds of animals, the image of the twelve kinds of animals has long been deeply rooted in people's hearts, and secondly, in the literature, it is due to the fact that the twelve kinds of animals have long been in the hearts of Chinese people. Secondly, thanks to the rich connotation of traditional Chinese culture, these animals are symbols that every Chinese person knows well. In addition, opera is a good example of transforming a play into a literary image, such as Verdi's The Lady of the Camellias, Puccini's Madama Butterfly, Bellini's Norma, and so on.

Mr. Yao Henglu through the "Zodiac", shows some unique creative methods, the first is to determine the theme, which can be specific characters, animals, or events, and after determining the goal of writing, the key is to capture the universally recognized and iconic characteristics of the object, and the "Zodiac" is to have a long tradition of Chinese culture as the foundation, the image of the twelve kinds of animals has long been deeply embedded in the minds of people. The images of the twelve animals have long been deeply embedded in people's minds. After grasping the core features, the next step is to convert them into the corresponding musical language, of which the most crucial and difficult part is how to "translate" them into the musical language, which is not only based on tradition, but also takes into account the development of the times and incorporates the essence of a hundred rivers.

In traditional Chinese culture, there are not only symbols such as the twelve Chinese zodiacs that can be visualized, but also many other elements that are equally expressive. From the work "Zodiac", we can get some inspiration from the fact that the Chinese piano works of the new era that Mr. Yao Henglu wants to convey to us should not only be combined with the ethnicity, but also with the writing techniques of the times. Liu Tianhua, a national musician, once said, "A country's culture should not be copied from others to be counted. .... Nor can it be counted by adhering to the old ways and sticking to one's own way of doing things. Must be taken on the one hand the essence of the country's inherent, on the one hand, to accommodate foreign trends, from the east and west of the harmony and cooperation, to fight a new way."

References