

The Important Element of Combining Music and Painting in Tan Dun's "Eight Memories in Watercolor" - "Synesthesia"

Zhang Yangxiaoxi and Shang-Wen Wang

Krirk University, Thailand

Corresponding Author, Email: 317422016@qq.com

Abstract

This study examines Tan Dun's "Eight Memories in Watercolor," a seminal work that exemplifies the composer's innovative approach to blending Eastern and Western musical traditions. Tan Dun, born in Hunan, China, draws deeply from his rich cultural heritage, particularly the Xiang-Chu music tradition, to create a unique compositional style. The research aims to analyze how this piece integrates Chinese traditional folk music with Western piano techniques and explores the representation of visual elements through musical expression. Employing a comprehensive analysis of the composition's cultural context, melodic structures, and the concept of synesthesia in music, the study reveals how Tan Dun transforms visual imagery into auditory experiences. Results demonstrate that "Eight Memories in Watercolor" successfully translates the visual beauty of Hunan's landscapes into musical form, creating a distinctive fusion of auditory and visual perceptions. Each of the eight pieces functions as a vivid watercolor painting, evoking strong nostalgic sentiments and showcasing the integration of heaven, earth, and human elements central to Chinese philosophical thought. The study concludes that Tan Dun's work represents a significant contribution to contemporary classical music, effectively bridging cultural divides and expanding the expressive possibilities of piano composition through its innovative use of musical symbolism to convey visual imagery.

Keywords: Eight Memories in Watercolor; Tan Dun; Synesthesia

Introduction

The relationship between music and visual arts has long been a subject of fascination for artists, composers, and scholars alike. This interconnection is particularly evident in the work of contemporary Chinese composer Tan Dun, whose piano suite "Eight Memories in Watercolor" exemplifies a unique synthesis of auditory and visual elements. This study explores the concept of synesthesia - the phenomenon where stimulation of one sensory or cognitive pathway leads to involuntary experiences in another - as it manifests in Tan Dun's composition and its corresponding visual interpretations.

Tan Dun, born in Hunan, China, is renowned for his innovative approach to blending Eastern and Western musical traditions. His background, deeply rooted in the rich cultural heritage of Xiang-Chu music, provides a unique perspective on the integration of traditional Chinese elements with Western classical piano techniques. "Eight Memories in Watercolor," composed early in his career, serves as a perfect case study for examining the interplay between music and visual arts, particularly in the context of Chinese aesthetic traditions.

This research aims to analyze how Tan Dun's composition translates visual imagery into musical form, and conversely, how the music inspires visual representations. By examining the suite's eight pieces and their corresponding watercolor paintings by artist Chen Wenze, we seek to uncover the mechanisms of synesthetic translation between auditory and visual media. The study focuses on three key areas of comparison: the similarity between melody and painting lines, the relationship between timbre and color, and the parallels in spatial modeling between music and painting.

Furthermore, this investigation explores the commonalities in aesthetic principles, creative techniques, and structural arrangements between Chinese music and painting traditions. By doing so, it aims to shed light on the broader cultural context that informs Tan Dun's work and its visual interpretations.

The significance of this research lies in its potential to enhance our understanding of cross-modal artistic expression and the cultural foundations that shape such expressions. By examining the synesthetic elements in "Eight Memories in Watercolor," we can gain insights into the creative processes that bridge different art forms and cultural traditions. This study contributes to the ongoing dialogue about the nature of artistic expression and the possibilities for cross-cultural and cross-modal artistic creation in an increasingly globalized world.

Through a combination of musical analysis, visual art interpretation, and cultural contextualization, this research aims to provide a comprehensive understanding of the synesthetic elements in Tan Dun's work and their significance in contemporary artistic practice.

Content

I. Common Points between Music and Painting

Within the scope of art, music, painting, and poetry can be regarded as the three major categories of art, often integrating with each other. We call the relationship between music and painting "musicality in painting", which leads to the metaphor that "music is flowing painting, and painting is solidified music". The famous composer He Luting understood the connection between the two as follows: "Paintings have far, middle, and near views, changes in composition, color, and rhythm, which is the same as music. The difference is that music is flowing and temporal, while painting is static and spatial." From this, we can see that the melody in music and the lines in painting, the tonality in music and the color in painting, the complexity of rhythm and the overlapping of colors in painting all have intricate corresponding relationships. Music and painting are artistic creative processes of emotional experience in which humans adapt to and change nature in production and life. These two art forms have an important position in human civilization history. They are not only the crystallization of human understanding and integration with nature but also the fusion of philosophy, psychology, and other contents. Music originates from human use of sound imitation, allowing people to gain emotional experience and spiritual sublimation through auditory elements such as melody, rhythm, and harmony. The creation and performance of musical works are often closely related to the life experiences and emotional states of composers and performers, which makes music have relatively strong personality characteristics. Painting uses visual elements such as graphic symbols to form emotional and spiritual resonance from visual aspects. Painting works display the creator's unique insights into nature, society, and life through expressive techniques such as color, line, shape, and texture. The emergence of different schools in painting history reflects the social backgrounds and aesthetic orientations of different eras and regions.

The creation and development of these two art forms are deeply influenced by factors such as politics, philosophy, productivity, and production relations. This has led to a gradual formation of consistency in aesthetic psychology in the creation and appreciation of music and painting. This consistency is the result of mobilizing different senses based on various media as the foundation in human artistic pursuit and aesthetic activities. This aesthetic consistency makes them have a connection called "synesthesia", which makes them not exist independently and have no clear boundaries. To a large extent, they can influence each other and be mutually convertible. Just as the ancient Chinese talent Cao Zhi said in "Seven Initiations": "Painting forms in the formless, creating sounds in the soundless". This sentence concisely summarizes the close relationship between sound and painting.

II. "Synesthesia" between Music and Painting

Synesthesia (Greek: Synesthesia), also known as associated sensation or co-sensation, is composed of two Greek words syn- (together, with) and aesthesis (sensation). It is a special sensory phenomenon, referring to the involuntary experience of a second sensory or cognitive pathway caused by the stimulation of one sensory or cognitive pathway. (Cytowic, 2002) In the art world, the most commonly discussed synesthesia is between vision and hearing, and contemporary artist Wassily Kandinsky (1866-1944) and French musician Olivier Messiaen (1908-1992) are famous synesthetes who applied this special sensory phenomenon in their works. As a psychological perceptual phenomenon, "synesthesia" can also be called an aesthetic experience in art. The compound word "Synesthesia" originates from the ancient Greek word "συν-αίσθάνομαι". The concept of synesthesia can be traced back to the ancient Greek philosophical era, with Aristotle discussing synesthesia in "On Sense and the Sensible". He believed that human vision, hearing, taste, touch, and other senses have their independent processing modules, and people establish a common core perception while processing these senses. Therefore, he believed that synesthesia is a rational fixed relationship with a rational order. But if it's a rational corresponding relationship, why do different people experience different synesthesia? Since the 18th century, Enlightenment philosophers of the Romantic trend began to acknowledge individual differences in common senses and gradually became dissatisfied with the explanation of rationalist philosophy and its disregard for intuitive sensibility. Kant mentioned in "Critique of Judgment" that although people can feel sound, the impression of sound melody needs to be perceived through subjective aesthetics. Aesthetic common sense has subjective universality, that is, after a person makes an aesthetic judgment, the beauty is conveyed to more people through resonance and sharing, depending on the specific situation of the pleasant feeling felt by the object. So this subjective common sense is determined by "feeling" rather than "concept". Until the establishment of Gestalt cognitive psychology in the mid to late 20th century, scientists and psychologists' analysis and research on this discipline gave a new understanding of synesthesia. The phenomenology master Merleau-Ponty proposed the concept of "holistic structure" in "The Structure of Behavior", stating that a structure is not simply a formal structure, nor a simple sum of individuals and parts, but includes the interaction between all parts including the whole. He also explained the subjective individual differences in synesthesia, believing that the human body is not only a material organ but also shapes its own unconscious subjective experiences, with physiological basis forming Gestalt synesthesia in psychological perception. Vision and hearing are the two most important sensory perceptions of humans. The mutual communication and association between vision, hearing, and perception is called the "synesthesia" of vision and hearing. We

can see fine arts and music as originating from art and belonging to art. From the literal meaning of the English word "art", we may also discover the characteristics of synesthesia. In ancient Rome, art in Latin was the word "ars", which meant "artworks, practical skills, etc.". It included the meanings of "art" and "fine arts", and at that time, it generally referred to various handicrafts and music, literature, painting, sculpture, etc. created by people. The corresponding word "art" in English also includes art forms such as music, film visuals, painting, sculpture, etc. Therefore, the two words "art" seem to reflect the close "synesthetic" relationship between music and fine arts themselves.

Artists are good at using "synesthesia" to reprocess limited artistic materials to create artworks with "aesthetic feeling". Appreciators, on the other hand, give unlimited emotional content to limited art forms through "synesthesia". Although changes in light and color cannot be captured by ears, and the retina cannot affect changes in sound waves, the beauty of all things in the universe can be felt through "synesthesia". The melody in music is a line drawn with time as a brush at different pitch positions. This understanding aptly illustrates the basic relationship between the abstract melodic lines in music and the lines that make up specific visible images in fine arts, and also confirms the commonality between music and fine arts. For example, the Russian painter Kandinsky is the pioneer who used the combination of points, lines, and planes to convey concepts and emotions through painting, referring to the expressive language of music. He advocated that fine arts should be the product of audiovisual synesthesia and always regarded painting as an "inner sound" that evokes hearing, advocating experiencing the colors of painting from an auditory perspective. For example, he believed that "yellow - like a trumpet or drum", "blue - similar to flute, large organ or cello", and "purple - like an English horn". He elaborated on similar views in works such as "Concerning the Spiritual in Art" and "Point and Line to Plane", thus laying the theoretical foundation of abstract art in fine arts influenced by music. Secondly, from the perspective of physics, the synesthesia between music and fine arts also objectively exists. Both sound in music and color in fine arts are a kind of vibration, namely sound waves and light waves. Newton, while studying the color spectrum, also came up with an interesting hypothesis. He found that the seven colors of red, orange, yellow, green, cyan, blue, and purple exactly correspond to the seven tones of C, D, E, F, G, A, B. His basis was: the ratio between the seven notes 1, 2, 3, 4, 5, 6, 7 is: just a little bit, and the ratio between red and purple in the seven colors is also exactly: just a little bit. Although this speculation is not sufficient to correspond musical colors to fine art colors, people still set up certain corresponding relationships between them based on feelings, making both sound and color give people various different feelings such as brightness and dullness. Once a certain sound and color can give people similar feelings, people will naturally associate them. This forms a certain consensus, that is, the synesthesia that exists between music and fine arts. Next, we will verify the two statements of "musical sense" attached to painting and "pictorialness" existing in music by studying the connectivity between the two.

III. The Correspondence of Synesthetic Elements between Music and Painting in the Work

The reason why Tan Dun chose to name this work with watercolor paintings, rather than oil paintings, murals, prints, or Chinese paintings, may be because watercolor painting is a painting method that uses water to mix transparent pigments. It originated in Europe and developed unprecedentedly in England in the 18th century. Water has the characteristics of transparency and fluidity. When mixed with pigments, it forms a combination of water and color. Through methods such as overlapping, rendering, and leaving blanks, the watercolor painting becomes flexible, with colors moving and changing due to water, having the charm of water and ink blending full of spirit. The colors, rhythms, and artistic conceptions of the entire painting in watercolor are related to the water content. The fluidity of water and color blending shows unexpected possibilities on the paper, so watercolor painting is also known as the "lyric poetry" in painting. Perhaps it is because the technique of watercolor painting is closer to Tan Dun's childhood hometown in his memories, that kind of hazy, beautiful, and freely flowing scenery, and it is also more suitable for expressing his various feelings for his hometown. The famous painter Repin once said: "Paintings always have transparent shadows of air, like wonderful orchestral music, with the sound of chords vibrating on the entire background of the painting". Chen Wenze, a national gift painter who studied in the West and settled in Atlanta, USA, and Tan Dun, who has studied Western composition techniques in the United States for many years, paid attention to Mr. Tan Dun because they are both Chinese. After hearing Tan Dun's suite "Eight Memories in Watercolor", he specially created eight corresponding watercolor paintings. Through these paintings, we can more concretely perceive the childhood memories hidden in this suite by the masters. The music and visual sense in the work form a sense of order and harmony through the clever combination of regular and irregular colors, lines, and shapes.

3.1 Similarity between Melody and Painting Lines

The melody of music is a line drawn with time as a brush at different pitch positions, which is also the main pictorial factor in music. It can depict the ups and downs of emotions. In painting, lines are also the basis of composition, with painting using lines and directions to form a specific image.

Tan Dun uses a short tune named "Autumn Moon" as the opening, indicating the importance of this piece in his heart. It represents the freehand style in watercolor painting, reflecting the colorful artistic appeal of music. "Autumn" can express the desolate and cold meaning of wind whistling and rain drizzling. Many ancient Chinese poems also use "autumn" to express Chinese-style romance. Li Qingzhao's "Yi Jian Mei" says, "The fragrance of red lotus fades on the jade mat in autumn, lightly taking off the silk clothes, alone boarding the orchid boat." Also, Bai Juyi's "Song of Everlasting Regret" says, "On the day when spring breeze blows and peach and plum flowers bloom, in autumn rain when phoenix tree leaves fall." Liu Yong's "Yu Lin Ling. Cold Cicadas Cry Sadly" says, "Since ancient times, being sentimental often hurts when parting, how much more unbearable is the cold and desolate autumn season. Where to wake up from drunkenness tonight, on the willow bank, in the morning breeze with the 殘 moon." The deep cool autumn and lonely fallen leaves seem to always be associated with desolation and sadness. The author's use of "autumn" can be understood as the loneliness and depression of studying alone abroad. "Moon" is a beautiful image condensed in traditional Chinese culture. The bright moon shines on ancient and modern

times, and how many poets' emotions have been entrusted to it. Zhang Jiuling's "Looking at the Moon and Thinking of Someone Far Away" says, "The bright moon rises over the sea, we share this moment though far apart." Also, Wang Jian's "Looking at the Moon on the Fifteenth Night and Sending to Du Langzhong" says, "Tonight the moon is bright and everyone is looking at it, not knowing in whose home autumn thoughts fall." Although living in different places, the moon overhead is exactly the same. The moon represents the symbol of reunion and the sustenance of emotions. In the spiritual wilderness of Chinese people, there is always a bright round moon hanging high, making people resonate with thoughts of home and the unity of family and country. At that time, Tan Dun was studying alone in Beijing, with the moon full but people not reunited. Under the nostalgia and homesickness, he created this piece "Autumn Moon" when touched by the scene.

In "Autumn Moon", the theme part is marked "rubato" with sextuplets appearing in the right-hand high voice part in a free and relaxed pattern, as if the rippling moonlight reflected in the village, flowing yet quiet, setting off an ethereal atmosphere in the night. The continuous lower wave sounds in the left hand make the clear moonlight lively and interesting, like color blocks constantly dotted on watercolor paper. Due to the different speed and water content of each stroke, the speed and depth of the spread also vary. Under the flowing rhythm of this section of music, the direction, continuity, and pause of the left-hand melody are very similar to the direction, height, and pause time of strokes in painting. Thus, it depicts the beautiful scene of the moon gently and coldly shining on the earth at night, making people fall into endless contemplation and nostalgia.

In the painting, the mid-autumn moonlight quietly rises in the deep blue night sky, like a jade plate, emitting a mysterious luster, shining on the village in motion and drift, quiet and poetic. The moon appears and disappears between the clouds, like the theme melody wrapped in gentle and relaxed sextuplet patterns, expressing his hometown nostalgia and ambitious thoughts through the interplay of blue and haziness.

The third part of the work, "Mountain Song", is obviously created by the author for his hometown scenery. When recalling his hometown, what appears in his mind is the unique beauty of mountains and rivers in Hunan, and what appears in his ears is the familiar melodious and graceful mountain songs from childhood. When ancient people praised the fresh and beautiful scenery of nature, they also often recorded it. Wang Wei's "Zhongnan Retreat" says, "Walking to where the water ends, sitting to watch the clouds rise." Also, Li Bai's "Mountain Moon" says, "The bright moon comes out of Tianshan Mountain, vast in the sea of clouds." All these express the literati's closeness to nature, transforming their love for nature into spiritual ideals.

All the bar lines in the entire work are in the form of dotted lines, without fixed beats, which can be changed according to the performer's auditory aesthetics. The "rubato molto" at the beginning of the work can be imagined as the casualness of working people conversing in the valley, with the high notes imagined as the clear singing of workers, and the middle notes as the echoes from the valley. This piece retains the original form of Hunan mountain songs, leading people to imagine the characteristic of mountain songs being melodious and lingering. The genre of mountain songs itself is improvisational creation based on feelings, which perfectly matches the vivid feeling of watercolor paintings, making listeners feel as if they are in the scene of young men and women singing passionately in the valley.

The high register is the main melody, while the low register imitates or responds to the main melody, like two young people expressing their feelings to each other, one person singing and the other responding from across the mountain, distant yet melodious. It presents a world of imagery that makes people imagine endlessly.

The painting has typical characteristics of mountain songs in the countryside of western Hunan, using shepherd boys, green willows, and larks to spread the atmosphere of love songs. The land, cattle and sheep, countryside, and we are all "musical notes" that have emerged from nature, jointly composing the most moving natural sounds. The melody is beautiful and long, with heaven and earth hidden in the heart, full and vast, and the feeling of emptiness quietly disappears.

The seventh part of the suite, "Clouds", is a symbol of nature and also a portrayal of a state of life. "Clouds" move with the wind, following the laws of nature and integrating with nature. When people have the quality of "clouds", they will not be troubled by the unpredictable changes in the world, moving with the wind, conforming to all things, and calmly facing everything while integrating with all things. In traditional Chinese culture, "clouds" are considered to be the blessing and protection of spirits, while in Western culture, "clouds" are seen as a symbol of angels. Therefore, clouds have also become a symbol of people's spiritual sustenance. Wei Lizhong's "Dian Qian Huan. Bi Yun Shen" says, "The cloud's heart has no self, the cloud and I have no mind," expressing that the ethereal nature of clouds just shows that it has no worldly thoughts, which is very much like the state that poets want to achieve. Du Fu's "Jiang Han" says, "A piece of cloud is far away with the sky, the eternal night moon is lonely together," using clouds as an imagery, drifting with the wind and living without roots, expressing the poet's bitterness and sorrow of drifting away from home and unable to return. Tan Dun used the tune of Hunan mountain songs to depict the mountains in his hometown memories, integrating internal emotions into external scenes, admiring the beauty of his hometown's mountains and rivers while lamenting his current state of drifting everywhere.

The whole work is quiet, elegant, and full of lyricism. The introduction part of the music is composed of intervals of minor thirds, minor sixths, and minor sevenths, leaning towards a minor key color. The low-pitched accompaniment is like a gentle breeze blowing, and the high-pitched melody is like clouds slowly drifting, creating a quiet scene. As the accompaniment pattern repeats continuously, the scroll slowly unfolds, seeming to return to childhood, lying by the lake and watching the changes of clouds in the sky. The tremolo appearing in the third measure is like birds chirping incessantly. The clouds in the childhood hometown seemed to protect Tan Dun's youth, casting away all his worries. The melody is beautiful and full of fantasy, the flowing accompaniment part is like a delicate landscape painting of white clouds floating in the blue sky. The surging pentatonic mode in the left hand as an accompaniment texture depicts the ever-changing scenes of clouds, giving people a sense of elegance and beauty, reminiscent of clouds floating and changing in the sky, sometimes gathering together, sometimes expanding into various shapes. The beautiful melodic lines are just like the brushstrokes of Chinese watercolor painting, splashing ink to express true feelings, making the music and images truly flow.

The strange scenes of ever-changing clouds in the painting make people imagine in a full of rural atmosphere. The painter intentionally added flocks of birds like musical notes in the colorful sky, giving the floating clouds wings to fly. The fluidity of watercolor perfectly corresponds to the flowing linear accompaniment pattern in the music. Water is suitable for

expressing the flowing atmosphere in the air such as curling smoke, water vapor, and clouds and mist. The accompaniment texture of "Floating Clouds" reflects this flowing and freehand characteristic of watercolor.

3.2 Similarity between Timbre and Painting Colors

Timbre in music is a means of reflecting sound effects, while color is the factor that most easily arouses aesthetic feelings in painting. Different color combinations and different painting techniques bring different psychological feelings to people. Harmony and timbre are the two major elements of rendering color in music. Changes in harmonic texture and mode will cause dark, bright, soft emotional tones in music. The high and low of sound, the strength and weakness of intensity, and the superposition of harmony will also lead to color differences in hearing. The use of different timbres in music is very similar to the use of different colors in painting works. In watercolor sketching, the depth of water can ensure that the colors of watercolor paintings complement each other. The addition of water can reduce the color saturation, achieving a fresh and elegant picture. The reduction of water can increase the color saturation, thereby increasing the brightness of the picture. The superposition of different colors will also increase the vividness of the overall picture. Therefore, when a certain timbre and color can give people similar feelings, people naturally associate them together. So the superposition of timbre, harmony, and changes in tonality can all make the audience have visual synesthesia.

The fourth work "Listening to Mother's Story" seems to depict the scene of lying in mother's arms listening to stories as a child, and thinking of mother makes the heart settled. Chinese literature's depiction of mother's love is countless. Li Shangyin's "Sending Mother Back to Hometown" says, "Mother's love has no way to repay, what more to seek in life." Meng Jiao's "Song of the Wanderer" says, "The thread in the caring mother's hand, becomes clothes on the wandering child's body. Before departure, she sews densely, fearing the child's late return." Bi Shumin's "Go Home to Ask Mom" says, "We once searched all over the world for sincerity, not knowing that the sincerity we wanted most was with our mother." Writers from various periods have used the simple yet profound word "mother's love" to express the warm image of mothers full of love and beautiful emotions. As a young wanderer who had just left his hometown to study, Tan Dun must have had similar feelings, thinking of home and recalling the warm conversations with his mother in the past.

The andante rhythm in the work is like childhood memories slowly appearing in the mind. The main theme melody in the first eight measures is like a mother's whispers to a child who is about to travel far, and after the low voice appears, it begins to imitate the melody of the high voice, as if the child is carefully responding to each of the mother's questions. The whole piece repeatedly uses canon-style counterpoint techniques to make the melodies of both hands appear alternately. This polyphonic simulation of vocal writing technique reflects a certain sense of dialogue. In terms of harmony, the suite uses a lot of superposition of intervals and chords.

The introduction of the piece also comes from a Hunan folk song. Mr. Chen Wenze specially went to Tan Dun's hometown to investigate for this painting. In Tan Dun's eyes, Western polyphonic counterpoint music is like a wine bottle, cleverly filled with the folk tunes of his hometown in Hunan. Although the texture is simple, it also illustrates the deep feelings between mother and child that seem simple but are profound. Therefore, in this painting, Mr. Chen Wenze used a warm and bright basic tone more like the G mode in terms of color tone, with warm and harmonious colors, vividly capturing the spirit of the piece.

"Joy" is the last work in the suite. Joyful festivals are always full of lanterns and decorations, with the sound of gongs and drums, depicting the joyful and lively scene of people in Tan Dun's hometown of western Hunan during festivals. In our traditional musical instruments, gongs and drums are an important component, often appearing in large-scale festivals and banquet occasions for performance. Gongs and drums seem to be able to raise magnificent waves, having thousands of heroic feelings and the power to shake mountains and rivers. Literati often use "gongs and drums" to depict exciting scenes, indicating the arrival of joy and good fortune. Tan Dun imitates the timbre and rhythm of gongs and drums to describe the joyful scene of children playing and adults celebrating reunions, indicating that the blood of Chinese people is beginning to awaken.

The four gong and drum sounds at the beginning of the work mark the start of the festival, with men and women, old and young dancing to the music, sharing the festive scene together. The minor second jump in the high voice part seems like the lively and mischievous dance steps of children, and when the fourth interval enters, it's like the singing and dancing of young adults full of vitality. The extensive use of superimposed fourth intervals increases the dissonance of the sound, vividly imitating the effect of folk major triad instruments, reflecting the momentum of drumming and the scene of singing and dancing, rendering the festive atmosphere vividly. The repetition of the main melody in different pitch areas vividly expresses the bustling scene of surging crowds. While listening, one can also feel a colorful and festive folk scene.

In the painting, the character "Joy" symbolizes joy, enthusiasm, and harmony. Tan Dun presents a lively scene of gongs and drums through distinct rhythms. The basic tone of the painting is also as cheerful and bright as C major. The children wearing colorful clothes seem to present the lively world depicted in the music. The brilliant colors in the picture and the scenes of playing and frolicking create a painting space full of rhythm.

3.3 Similarity between Musical and Painting Spatial Modeling

Music is often said to be flowing architecture because music has certain modeling characteristics. The modeling of painting is the combination of lines and colors on a plane to form a specific structural position, while the modeling of music is an intangible sound modeling. It symbolically expresses certain spatial relationships through specific sound combinations. In fact, the sound structure of music itself is a very elaborate modeling. This sound modeling reflects the connection between music and objects to a certain extent. For example, the distance between two sounds is called an interval, which can reflect a local space, and different pitch areas can also reflect an overall spatial range. The density of rhythm, the strength and weakness of sound, whether the texture is rich or not, these contrasts can all create a sense of space such as far and near, high and low, big and small. However, this sense of space caused by sound stimulation cannot become a clear visual object, so it often needs factors like synesthesia to establish the image of the picture and modeling.

Let's feel the sense of sound space from the sixth part of the suite, "Ancient Burial". Sacrificial rites come from belief. People believe in supernatural forces and spirits, and express respect and pray through sacrificial rites. True disappearance is when no one in the world remembers anymore, so the sacrificial rites during festivals are to let a wisp of the deceased's soul eternally exist in the world. As Haruki Murakami wrote in "Norwegian Wood", "Life is not the opposite of death, but exists eternally as part of life." Funerals are necessary activities in life, with different customs in different regions. Western Hunan is a place where witchcraft

culture prevails. Tan Dun himself has stated that he was influenced by witch culture from a young age, so the witch and ghost atmosphere has subtly penetrated into his creations. This piece is based on the folk elements of Xiang-Chu witchcraft tradition of mourning and sacrificing to heaven and earth. The introduction part enters with quarter note second D-C-D-C single notes, with pp dynamics but with sustained notes, as if the funeral procession is approaching from afar, walking slowly and heavily. The low and faint mourning expresses inner grief, and the witch's mumbling slowly opens the prelude of the funeral.

The climax part of the music is developed based on two motifs. The single notes become columnar chords, making the sound effect richer, and the speed also increases accordingly. The use of altered notes is added to the high voice melody, making the tonality always in an unstable state of wandering. The sound effect is more sorrowful and miserable, even slightly weird, as if the high sound of the suona has risen, accompanied by the ups and downs of crying, making people solemn and also feeling a respect for death rising from the bottom of their hearts. The theme shuttles between high, middle, and low voices, as if telling the past and present of witch culture on a timeline, a dialogue between descendants and ancestors, draping a mysterious veil over the music.

The painting is full of mysterious colors, reflecting the essence of Xiang-Chu culture's worship of gods and ghosts. The dense terracotta warriors in the painting are full of heroic spirit. Through the connection of staff, it creates a sense of continuity, advancement, and endlessness. The terracotta warriors in the painting seem to come alive as if through time travel. We are looking at them, and they are also looking at us. Although the Qin people have disappeared, they have become soil, becoming the earth that supports us to stand, never far from us. This dialogue across time and space brings out the mysterious atmosphere of the piece.

From Mr. Tan Dun's work, we can see that not only during his study in the United States, but even in the early stages of his study at the Central Conservatory of Music, he was already trying to have a dialogue between composers and painters. In the creation of the work, we can see that he has interpretations of the role of lines in painting, the relationship between musical scores and pictures, and the synesthesia between music and painting in the time dimension. This "composing based on paintings, generating paintings based on music" association of "synesthesia" between different senses enabled him to later create more mature visual arts with music. Mr. Chen Wenzhe's eight watercolor paintings are also the prototype of the concept of synesthesia. One is to present a series of short and interesting pictures to us through the medium of musical symbols using the power of imagination contained in recalling the beautiful times of childhood. The other is to appear a series of pictures through empathy when listening to music, and display them to us through the medium of painting. Synesthesia has an excellent artistic effect of expressing emotions through objects in both artistic creation and artistic appreciation.

IV. Commonality of Creative Elements between Music and Painting in the Work

Music and painting are two distinctly different art forms. Music uses sound to express emotions and reflect reality, which is the unique characteristic that distinguishes music from other arts. At the same time, the non-figurative and non-conceptual nature of music means that music is not a concrete, visible material thing, so it cannot be touched or seen like architecture or painting. But the uniqueness of music is that it can use sound to express emotions, and can even express heights that language cannot reach. For example, when Beethoven, who was deaf in both ears and recuperating in the countryside, faced the baptism of life's hardships, he wrote works like "Pastoral Symphony" that firmly face and bravely optimistic spirit. Obviously,

traditional language could no longer fulfill Beethoven's love for nature that he wanted to express, but from the musical notes, we can hear his true feelings expressed for nature's mountains, flowers, grass, and oceans, as well as his inner thoughts on all living things.

Painting is both a static visual art and a creative spatial modeling art. Painting creators use tools such as paper, pen, and paint to vividly present the imagination and emotions in their minds through techniques such as lines, colors, and structures. They can not only delicately depict concrete things that really exist, but also shape abstract virtual graphics vividly. In painting art, modeling is not simply depicting characters or scenes, but requires creators to skillfully use techniques such as the thickness of lines, changes in light and shade, and color rendering for composition. They need to excavate and present the beauty of the real world from multiple levels and angles, convey profound thoughts, emotions and spiritual outlook through the picture, perfectly combine reality and imagination, and present a series of vivid, three-dimensional pictures through the canvas, making viewers feel as if they are there.

But when we see the picture or hear the notes, how do they transform between each other? This is where we must mention "commonality". The connection between music and painting artworks is mostly realized through "synesthesia". There is an obvious intuitive analogy relationship between them. When different stimuli cause people to have the same intuition and experience, this synesthetic relationship of having the same psychological movement experience in the creation of different things is also called "synesthesia".

4.1 Commonality in Aesthetics

"Calligraphy and painting share the same origin" refers to the close relationship between traditional Chinese painting and Chinese calligraphy. The generation and development of the two complement and promote each other. From the perspective of historical development, Chinese characters are pictographs, so the characters here are also paintings. From the artistic characteristics between calligraphy and painting, the brush techniques of calligraphy and painting are very similar. Chinese painting is based on calligraphy, so calligraphy brush technique is the basis of painting brush technique. From the aesthetic perspective of the same origin of calligraphy and painting, most Chinese calligraphy tools use brushes. In the process of writing with brushes, changes in lines such as light and heavy, slow and fast, straight and curved need to be produced, and painting also needs lines to be carried out. In other words, "calligraphy and painting share the same origin" are actually both linear arts. The Tang Dynasty painter Wu Daozi used brushes to create lines with changes in thickness and weight to vividly recreate the sense of movement and thickness of clothes.

Looking at music again, the main feature of traditional Chinese music is linear music. In the minds of Chinese people, those beautiful monophonic melodic lines are as free as flowing clouds and water. Linear art is closer to "temporal art", making each musical note move forward regularly and organizedly, able to present a temporal movement process. From the background of human historical development, folk music was prevalent in ancient times, and folk music was played and sung spontaneously to relieve worries and troubles and follow one's inner heart, so this kind of music has a high degree of improvisation. It does not need a certain logical thinking and polyphonic structure to gain the audience's understanding, so Eastern linear music does not have a rigorous musical form structure and framework like Western music. Moreover, traditional Chinese music is more like a declarative atmosphere, focusing more on the density of rhythm, the strength of intensity, and the rise and fall of pitch in the process of music flow.

It can be said that the main means of expression of Chinese linear music lies in the rise and fall, staggered arrangement, and infinite changes of melodic lines.

For example, in "Autumn Moon" from "Eight Memories in Watercolor", the continuous running of sextuplet melodies presents a picture of moonlight rippling in the night. The changing melodic lines and colors depict a smooth and gentle scene, while the composition of the left-hand descending tones is like gently outlining a few strokes of moonlight reflection on the lines, making the whole picture ripple with a melancholic sense of homesickness.

Also, in "Listening to Mother's Story" from "Eight Memories in Watercolor", the creation of the work uses more monophonic melodies to connect each musical note with a line, and then the melody keeps repeating as it progresses, with a kind of progressive musical development method that is like a broken lotus root with fibres still connected. The ending note of each melody seems to be the starting note of a new phrase, echoing and repeating like lingering sound. Under the linear melody's back and forth repetition, the theme's tone increases the charm of the music, making the melody endless and memorable. It tells of a traveler's reluctant attachment to his mother, making listeners feel as if they are there and moved by it.

The linear feeling and temporal linear flow state of music and painting are consistent. Early Chinese traditional religious rituals were all held periodically within a specified time to express remembrance and reverence for departed ancestors, thus the concept of "time" took root in Chinese minds. Even the traditional periodic 24 solar terms show worship of "time", which creates a unique linear time concept of past-present-future in Chinese works. Surrounding "time" also entered people's creative consciousness, making Chinese music and painting have a traditional form of unity of time and space. Therefore, piano works under Chinese aesthetics are inherently of the same origin as watercolor paintings. Many artistic conceptions and timbres are formed in the same structure under the influence of time. Unlike Western emphasis on polyphony and harmony, the creative technique emphasizes a kind of endless beauty of life. The music and images in the work both focus on linearity, and the commonality of the two forms the aesthetic formal elements.

4.2 Commonality in Creative Techniques

Color treatment is a matter of great importance to Chinese composers, and "applying colors according to categories" is one of the basic requirements of painting creation. According to different expressive content, corresponding colors are applied. The colors of watercolor paintings are more reflected in the charm, paying more attention to the coexistence of artistic conception and spirit, and the unity of spirit and form. Therefore, in the creation of watercolor sketches, it is more necessary to accurately grasp one's inner world. Each use of brush and color selection reflects different charm, and the difference in charm affects the expression of emotions and the rendering of artistic conception. Unlike Western painting, which is more faithful to the color changes and tonal contrasts of objects, the use of color in Chinese watercolor painting is emotionally driven. The soft and elegant ink colors are just like the "gong, shang, jue, zhi, yu" in traditional Chinese pentatonic mode corresponding to the "thick, light, dry, wet, scorched" colors in watercolor painting. Compared with the Western twelve-tone equal temperament, the Chinese traditional pentatonic mode has its own different musical colors. The former's colors are clean and simple, while the latter's timbres are more exquisite and gorgeous.

For example, the performance of decorative descending tones in "Autumn Moon" is like the traditional Chinese instrument guqin. The timbre of the overtones produced by plucking the guqin reveals a fresh and otherworldly artistic conception. The continuous running of sextuplets in the right-hand high voice depicts the quiet scene of rippling waves and cloud shadows shuttling on the lake surface.

In "Clouds", ascending broken arpeggios are used as the accompaniment for the entire song, like floating clouds hanging on the edge of the sky. The rotation of sixteenth-note melodies makes the sound transfer quickly, making the timbre more leisurely and unified.

In the creation of watercolor paintings, only water colors are used, and the colors tend to be more pure and natural, with the artistic conception closer to fresh and elegant, also expressing a kind of ethereal realm and detached emotions. It can be said that the use and selection of colors in Chinese works are determined by the unique humanistic aesthetic form of the Chinese people. This color creation technique pursues more natural vitality and expressiveness, and this unique charm is something that Western music and painting art colors cannot present.

4.3 Commonality in Structural Arrangement

In painting, the most crucial factor is composition. Composition determines how painters adjust the layout and arrange the picture. The scene structure seen by human eyes may not be suitable for the effect of the picture, so painters need to allocate the picture to make the focus of the picture prominent, both macroscopic and detailed. Western painting pays more attention to rationality and rigorous logical argumentation, while Chinese watercolor painting emphasizes more on free and changeable perceptual thinking, paying more attention to freedom and looseness in the overall unified composition. From the perspective of painting structure, vertical lines can give people a sense of straightness, while horizontal lines make people feel more relaxed. The more prominent free line form in watercolor paintings can make the picture rich and fluid. Influenced by Confucian hierarchy concepts and literati, the relationship between host and guest is a basic principle of ancient painting composition. We can see that the main line in the composition of Chinese landscape painting history seems to be more obvious and prominent, while other embellishments are all to highlight the importance of the main body, forming the unique charm of "virtual and real complement each other". Therefore, although Chinese paintings seem to have no strict overall layout, they are well-arranged.

Chinese traditional music is influenced by this philosophical thought. In most works, the main melodic lines are more prominent, while the occasional harmony is non-functional, often only for rendering colors and increasing intensity, and ultimately to set off the atmosphere of the main melody. We can see that in the context of traditional Chinese music, there is more of a "virtual and real" relationship. The virtual and real structure of music is what we call "virtual meaning and real sound". Music expresses concrete sound in sound through specific musical text, while using the virtual to express the intentionality of the musical content in the work. In this work, the virtual and real relationship of musical creation techniques can be reflected through the contrast of different timbre changes and the contrast in different pitch areas. In "Mountain Song", the melody in the left hand and the response of the double notes in the right hand form a virtual and real relationship in timbre.

In "Joy", the melody appears alternately in different pitch areas, and the intensity progresses from the *fff* of the 4 chords at the beginning to the *p* of the theme part, and finally to *fff*, pushing the festive scene to a climax. In this real-virtual-real structure, the music progresses with ups and downs, fast and slow, light and heavy.

Finally, at the end, the melody of the introduction is repeated. Through the development of a single musical material in different pitch areas, it runs through and finally returns. Although the internal structure changes diversely, it can be unified in the overall effect, giving people a sense of integrity. It's like the virtual and real of Chinese Confucian and Taoist cultural thought, the final activity endpoint points to the core of Chinese cultural aesthetics "moderation and harmony", and circulates endlessly. "Joy", as the ending work of the entire suite, uses the method of "combined ending", forming a unity in structure. It further demonstrates Tan Dun's creative thought of "appropriate virtual and real" and "integration and transformation".

From Tan Dun's creative concept, we can see that he is full of respect for his deeply rooted traditional music of his nation. He respects traditional music as real and learns and borrows from Westernization as virtual. With a brand-new research thinking, he reformed traditional piano works, and also made Chinese traditional music highly valued under the world's attention. Tan Dun himself is also a representative composer of Chinese music that integrates and transforms. He retains the original foundation of national music culture, accommodates and integrates modern European composition techniques, integrates local culture and foreign music, lets the world see Chinese culture and Chinese traditional musical instruments, and adds a musician's strength to the development of traditional culture.

Conclusion

The Dutch painting theorist Karel van Mander said in "The Book of Painters" (*Het Schilder-Boek*), "The sound of music should be harmonious, the image of painting should be concordant, their ways are the same." He believed that painting and composing follow the same principle, and what they ultimately have in common is harmony. Harmonious melodies and harmonious pictures can, through the form of "synesthesia", allow the audience to experience the same emotions and atmosphere through different senses, thereby more deeply understanding and feeling the artworks. They influence and inspire each other, jointly creating richer and more profound artistic expressions.

In Tan Dun's eight musical miniatures, whether it's the expression of "scenery" or the presentation of "emotion", they are all a fusion of emotion and scene. There is scenery in emotion, and painting in scenery. Each scene contains Tan Dun's deep nostalgia for his hometown and the constant re-emergence of childhood memories. Tan Dun transforms emotions and atmospheres into flowing emotional notes through the images in his mind, and we seem to see the unique scenes of his hometown in Hunan from the musical pictures. The music he depicts is to evoke a kind of situation, a memory in the listeners, not to make you hear specific musical tones, but to make you listen to the "overtones" of emotional resonance behind the notes, to establish a connection with his creation in your own way. Using "synesthesia" provides us with a new dimension to think about life and the world. We firmly believe that this work will become an eternal artistic treasure, leading people to constantly discover new meanings and values in appreciation.

Recommendation

Based on our comprehensive analysis of the synesthetic elements in Tan Dun's "Eight Memories in Watercolor" and its relationship with visual arts, we propose the following recommendations:

1) Interdisciplinary Arts Education:

Encourage educational institutions to develop interdisciplinary programs that integrate music and visual arts. These programs should focus on the principles of synesthesia and cross-modal artistic expression, using works like Tan Dun's as case studies. This approach can foster a new generation of artists and musicians who are adept at creating and interpreting works that bridge multiple sensory experiences, thereby enriching the global artistic landscape.

2) Cultural Heritage Preservation through Innovative Artistic Practices:

Promote the use of contemporary artistic techniques, like Tan Dun's fusion of Eastern and Western elements, as a means of preserving and revitalizing traditional cultural heritage. Encourage artists and composers to explore their cultural roots while embracing modern artistic practices. This can lead to the creation of works that are both culturally significant and globally accessible, helping to maintain cultural diversity in an increasingly interconnected world.

3) Technology-Enhanced Synesthetic Experiences:

Invest in research and development of technologies that can enhance the synesthetic experience of art. This could include virtual reality installations that combine musical performances with interactive visual elements, or augmented reality applications that allow viewers to 'see' the musical structure of a composition. Such technologies could revolutionize how audiences engage with art, providing immersive experiences that blur the lines between different sensory modalities and deepen appreciation for works like "Eight Memories in Watercolor."

These recommendations aim to build upon the insights gained from studying Tan Dun's work, promoting a more integrated approach to artistic creation, education, and appreciation that acknowledges the interconnectedness of different art forms and cultural traditions.

Reference

- Bao Sangkui (1985), translated by Zhang Jin. *Aesthetic History*. Beijing: Commercial Press.
- Chen Jinhua (2021). On the Fusion and Creation of Sound and Painting in Mussorgsky's Pictures at an Exhibition. *Journal of Sanming University*. 38, 4.
- Cheng Qian (2021). *On the Artistic Conception and Performance of Tan Dun's "Recollections of Eight Watercolors"*. Master's thesis of Southwest University, Chongqing.
- Feng Mengzhi (2018). *Performance Analysis of Tan Dun's Piano Suite "Recollections of Eight Watercolors" from the Perspective of National Culture*. Sichuan Normal University, Sichuan.
- Guo Anqi (2014). *A Study on the Isomorphism of Ancient Chinese Music and Painting Theory*. Doctoral thesis of Guangxi Normal University, Guangxi.
- Han Yulin (2021). *Analysis of the characteristics and interpretation of the modern style of nationalization in Tan Dun's piano suite "Memories of Eight Watercolors"*. Jiangxi Normal University, Jiangxi.

- Huang Jiwen (2012). On the synaesthesia of music and art. *Journal of Hubei Institute of Fine Arts*. 01 (125-127)
- Jiang Jie (2022). *The manifestation and application of water in watercolor paintings*. Master's thesis of Shenyang Normal University, Shenyang
- Lei Yiyang (2021). *Analysis of the aesthetic characteristics and performance techniques of Tan Dun's piano suite "Memories of Eight Watercolors"*. Sichuan Normal University, Sichuan.
- Liu Yingtai (2012). *On the important element of the combination of sound and painting in Wang Lisan's "Toyama Kaii Painting" - "synaesthesia"*. Degree thesis of Hanjiang University, Hubei.
- Liu Zhihua (2021). *The intentional world of "Memories of Eight Watercolors"*. Master's thesis of Fujian Normal University, Fujian Province.
- Lu Ruihong (2011). *Interpreting the Cultural Connotation of Tan Dun's Musical Works*. Master's thesis of Henan Normal University, Henan.
- Ma Li (2018). On the Synaesthesia of Sound and Painting from the Perspective of "Painting in the Formless, Creating Sound in the Soundless". *Journal of Chifeng College*. 39, 2.
- Qian Renping. (2007). *What's Good About Tan Dun?* Shanghai: Shanghai Music Publishing House
- Tan Xiuli. (2004). On "Synesthesia" - Aesthetic Psychological Structure in the Reproduction of Musical Images. *Journal of Jinzhou Medical Journal (Social Sciences Edition)*. 4, (49-52).
- Wang Hui (2013). *Sound and Painting Have the Same Origin, Spirit Beyond Words - Analysis of Wang Lisan's Piano Suite "Toyama Kaii's Painting Concept"*. Master's thesis of Hunan Normal University, Hunan
- Yao Yirang. (2006). *"Music. Painting. Art Education Theory"*. Beijing: Central Conservatory of Music Press.
- Zhou Xian. (2002). *"What is Aesthetics"* Beijing: Peking University Press.
- Zhu Wentao. (2017). "From "Color Music" to "Visual Music": The Origin of Western Audiovisual Synaesthesia and Its Early Artistic Experiments". *Journal of Aesthetics and Art Research*. 05, (96-106).
- Zeng Zhen (1994). The Common Characteristics of Music Art and Emotions. *Journal of Shanghai Conservatory of Music*, 1994.