Non-Traditional Factors in Debussy's Creation Take the Prelude "Voiles" as an Example

Abstract: "Voiles" stands as the second piece in Debussy's "Twenty-four Piano Preludes", marking a mature stage in his musical oeuvre. Debussy, as the pioneer of Impressionism style, demonstrates remarkable innovation and personality in contrast to traditional norms. Drawing from the acoustic expressiveness evident in Impressionist piano compositions, this study begins with an exploration of the aesthetic perception of acoustic color. It intertwines this exploration with the psychological concept of "synesthesia", which links time, space and visual perception. Focusing on auditory aesthetic perception of acoustic color, this paper takes “Voiles” as the research object, and analyzes its melody, structure and acoustic characteristics from the perspective of music analysis. In this way, the sound innovation and impressionism style in Debussy's creation can be explored.

Keywords: Voiles; Non-traditional factors; Impressionism

1. Debussy and Impressionism

As a cultural form, music, like other tangible art forms of the same period (such as painting, sculpture, architecture, etc.), serves as a specific cultural expression entrenched in a specific historical period. It accurately reflects the profound impact of political, economic, and social-cultural dynamics on the collective consciousness. In late 19th to early 20th century France, the musical composition style was closely associated with the contemporary artistic movements, with Debussy's oeuvre resonating with the "symbolism" of poetry and "Impressionism" of painting. This period also witnessed the emergence of a novel musical style known as Impressionism. Claude Debussy (1862-1918) was a central position within the realm of Impressionism. Impressionism, originally a term in the field of painting, embodies an outdoor, realistic approach that pursues visual authenticity. It ignores the traditional notions of theme and structure, emphasizing the expression of light and color. Drawing inspiration from this painting style, Impressionist music is composed and expressed in a variety of harmony and timbre. From the perspective of specific acoustic practice, Impressionism's conception of sound is different from the functional harmony-based acoustic language of western classical music. Instead, it pays more attention to acoustic art. In the sound with a series of chord progression, it does not judge and classify according to functionality. This shift reveals novel acoustic concepts, exemplified by the utilization of unresolved dissonance, tritone, chords in parallel motion, chromaticism, whole tone scale, church scale, and fragmentary phrases, etc.

Debussy's musical compositions possess the unique quality of capturing fleeting moments and translating their ever-changing appearance into fluid music. In his collection of "Twenty-four Piano Preludes", the title of each work has cultural symbols, highlighting the intrinsic connection between music and sensory perception. These titles mostly express the connotation of music with an intuitive visual language, which helps people to capture the instant image from the hearing. Debussy expresses the visual and perceptual impression through delicate harmony. By employing bright images to stimulate the senses, his compositions effectively convey visual narratives. The composer tries to break through the shackles of the traditional major and minor key systems, prefers a "timbre-focused" style of expression. This allows for the portrayal of people's subjective impression of the objective world.
utilizing techniques such as ambiguity, suggestion, and metaphor in musical expression to reflect the fleeting changes of light and color in nature. Notably, the segments within Debussy's "Twenty-four Piano Preludes" have no conventional structural boundaries, and the structural framework and lines are diluted, so that the music presents a free and continuous state.

2 Musical analysis of “Voiles”

"Voiles" stands as a renowned piece within Debussy's preludes, showcasing numerous traits of the Impressionist style. Debussy published it with the French word “Voiles” at the end, signifying sails or veils. This composition exhibits a logical motion-theme pattern running through its pitch organization, based on a whole tone scale with interspersed pentatonic passages. Both scales contribute to the overall construction of the piece's form. Furthermore, the continuous tone throughout the piece yields a hazy auditory effect, enhancing the discrete tonal colors within the piece.

2.1 Theme analysis

The theme of “Voiles” can be divided into three levels, each encompassing its own unique materials. The three voice parts are respectively characterized as follows: the theme a, a brief melody in the high register; the theme b, medium rhythm in the middle register; and the long-sustained voice in the low register.

EXAMPLE 1: Voiles, mm.1-6

Bars 1-6 of the piece are the theme I, which is based on the whole-tone scale, entering with a weak beat. In the high register, it progresses in parallel thirds, forming a double tone progression (Example 1). The basic intermezzo relationship in the whole-tone scale is embodied in the whole-tone scale, which is 3Major in the vertical and 2Major in the horizontal. Initially descending the scale, the theme then jumps up the octave, pausing on F# and Bb. Its interval is a reduced fourth, an equal interval of the third degree, and the emphasis is still the relationship of the third degree. The theme recurs six times in the first section, each time with a slight change. Upon its second repetition, the melodic progression continues to decline and stops at C and E, creating a pause similar to a steady stop. The rhythmic pattern adopts a long - short, long - short - long sequence, showing the image of a lonely sailing boat swaying upon the sea.

Following this, the 5th bar begins with a sustained Bb that enters in extremely low positions in the form of quarter and eighth-note hops, creating a bass layer. Traditionally, the harmonies produced by Bb, C and E would yield dissonance. However, Debussy strategically introduces the sustained Bb on a weak beat and separated by two octaves, which greatly weakens the sense of dissonance and imparting an ethereal, hazy quality consistent with the impressionist style.

In bars 7-14, theme b appears in the mid-range, structured as an A♭-B♭-C three-tone motor. This motif is reiterated until the E tone is extended to the full scale 5 tone down, and gradually adds the melody of theme a above it.

EXAMPLE 2: Voiles, mm.7-14

All three levels converge in bar 10, where theme a in the upper register appears in a condensed form, omitting the upward leap and concluding, as in the initial phrase, on the notes C and E. Bar 15 reproduces theme a, still entering
in a strong beat, while bar 18 goes in reverse, returning to the beginning. Theme b is overlaid below theme a, becoming an octave higher and repeating the ascending triadic motifs in the form of augmented triplets.

Bars 1-22 constitute the first part of the piece, and the whole is based on a whole-tone scale. Theme a and theme b are introduced separately, followed by their subsequent modification and development. The key notes of the three levels are also different. The low sustained note emphasizes B♭, while the initial and concluding notes of theme a reside on E, and those of theme b on A♭. Both material and central note arrangement across the three levels show the characteristics of counterpoint. Additionally, the structure also forms the nature of reproducing the three-part structure, and accompanying variations and rotations.

According to the characteristics of the respective vocal ranges and melodic forms of the three levels, and weaving in the evocative imagery suggested by Debussy's title, we can envision a compelling maritime scene. The continuous tones in the lower register evoke the depths of the ocean, while the meandering contours of theme b in the middle register resemble the undulating surface of the sea. Meanwhile, the rhythmic interplay of theme a is a swaying sailboat, presenting the image of a sailboat floating in the dark blue sea of B♭.

As the composition progresses into Bar 22, we enter segment B, marked by a contrasting melody. However, this material is not a new factor, but a transformed development of some features of theme a and theme b. At the same time, the dotted rhythm pattern of D-C-F♯-C appears in the middle part, which is still a combination of the two motifs of theme a, and the static continuance of the half note in the low part contrasts with the rapid rhythm above.

**EXAMPLE 3:** *Voiles*, mm.22-28: The transformation of Theme A

**EXAMPLE 4:** *Voiles*, mm.28-30: The variation of Theme B
Here is the variation of theme a, which, while descending, retains the circuitous character of theme b, ultimately concluding on the notes of E and A\textsuperscript{b}. Therefore, this section is a fusion of the two themes.

**EXAMPLE 5: Voiles, mm.28-30: The variation of Theme A**

Bars 28-32 continue the thematic development, emphasizing the relationship between major seconds and major thirds, while the core notes are all on the A\textsuperscript{b}-B\textsuperscript{b}-C triad of theme II. In the middle part, there is diatonic ascending material. Bar 31 marks the culmination of the piece's first climax, introducing a crucial chromatic factor (the only occurrence of the whole piece, the minor second interval relationship being a pivotal feature of classical tonality, hinting at the ensuing pentatonic passages). Additionally, two counterpoints of the high note form a reflection imitation relationship.

In contrast to the first section, this passage exhibits a relatively stable structure, featuring a parallel phrase, and the internal structure also shows a short-short-long structure of 1+1+2+2. The inner part of the second phrase becomes the reflection of the theme a, while the melodic backbone above emphasizes the chordal breakdown of A\textsuperscript{b}-C-E. Bar 31 reaches the first climax of the whole piece, introducing a very important chromatic factor (the sole instance in the whole piece, characterized by the minor second 2minor interval relationship, with the important characteristic of classical traditional tonality, suggesting the forthcoming pentatonic passages). Furthermore, the two melodies in the high register mirror each other, forming a reflection imitation relationship.

**EXAMPLE 6: Voiles, mm.30-31: The change in intervals from whole tones to semitones foreshadows the change in scales.**

The reproduction of bars 33-37 is a representation of the higher octave of theme b, with the harmonic treatment shifting the octave into the augmented triad. The ornamental repetition of D and E above, apart from the sixteenth notes, mirrors the latter section of theme a's material. In the subsequent phrase, material b forms a reflection imitation in two parts, and still resolving to the core note A\textsuperscript{b} of theme b, which can be seen that it also maintains unity in development and contrast.
EXAMPLE 7: *Voiles*, mm.32-34: Reprise of the theme

In bars 42-47, an interlude unfolds, characterized by a shift to the E♭ pentatonic mode: E♭-G♭-A♭-B♭-D♭, in sharp contrast to the previous style. Here, the sustained note B♭ assumes harmonic functionality, transforming into a dominant continuance. This passage is characterized by rapid scale running patterns, with an emphasis on the descending minor third at the treble point. The low voice introduces parallel fifths and octaves in the weak beat of bar 43 and bar 44. The termination of bars 45-47 shows the progression of the traditional harmony from 7 to the main, but the second degree of D♭-E♭ foreshadows the forthcoming diatonic reprise. The insertion of pentatonic passages contrasts with the preceding diatonic stages, producing wonderful changes in color.

EXAMPLE 8: *Voiles*, mm.42-47: Interlude

In bar 48, a variation of the theme emerges, where the sustained note combines all the rhythmic patterns that have occurred before, incorporating dotted rhythms. The reflection of the inner part reproduces the theme a as a diatonic step up; meanwhile, the dotted rhythms in the high register derive from theme a's characteristic. In bar 50, theme b is fully reproduced in the high voice, and the theme b material increases in pitch throughout the song. Moving to bar 54, theme b transitions to an inner whole-tone scale chord, while the upper register employs a superimposed whole-tone scale chord comprising a minor seventh + major second. After that, theme a is repeated almost completely, and the music ultimately resting on the notes C and E, creating a cohesive bookending effect.
EXAMPLE 9: Voiles, mm.54-57

2.2 Structural analysis

The work of “Voiles” has broken through the constraints of the Western classical major and minor key system, and employed a variety of innovative writing methods. Therefore, when analyzing its structure, people cannot rely solely on traditional tonal methods for categorization. Instead, a comprehensive consideration of its various factors and analysis from different angles is highly needed.

2.2.1 Ternary form characteristics

The work of “Voiles” breaks through the constraints of traditional tonal music and employs various innovative compositional techniques. The reason to call it ternary form instead of three sections is because Debussy’s departure from traditional sense of three pieces or three parts. The “Voiles” embodies the tripartite structure of exposition -- expansion/insertion -- representation. The work of “Voiles” breaks through the constraints of the Western classical major and minor key system, and utilizing a variety of innovative writing methods. Therefore, when analyzing the structure of it, it is imperative not to rely solely on the traditional tonality method for categorization, but should synthesize various factors and analyze it from different angles.

First of all, regarding thematic development, bars 1-22 constitute the exposition phase, presenting and variating theme a and theme b, which can be considered as the first section in structure; Bars 23-32 is the extended development of the two themes, marked by significant variation, it can be regarded as the second section; Bars 33-41 reproduce the melody of theme b, and can be regarded as a reenactment, thus the three sections form a tripartite structure. Bars 42-47 introduce new material for the pentatonic scale, which can be seen as an insertion; Bar 48-64 reintroduce theme b and theme a, is the reproduction part, constituting the recapitulation and adhering to the ternary form.

Secondly, in terms of tonality, bars 1-41 are based on the whole tone scale mode, representing the exposition; Bars 42-47 introduce pentatonic passages, which can be regarded as intersections; Bars 48-64, returning to the whole-tone scale, can be regarded as a reproduction, conforming to the ternary form characteristics.

Thirdly, in terms of the rhythm pattern of the continuous tone throughout the piece, bars 1-20 feature a pulsating rhythm of quarter notes and eighth notes for the continuance of Bb; Bars 21-43 adopt a sustained rhythm of half notes, resembling long breaths; Bars 45 begin with a return to eighth notes and continue to beat until the end. Although the rhythm at the beginning and the end may not be identical, the overall characteristics of the entire piece follows a pattern of dynamic, static, dynamic, tight, loose, tight, reflecting the ternary form characteristics.
2.2.2 Rondo characteristics

Rondo form represents a horizontal development of tripartite. In the previous analysis of this piece, most of the music is divided into three sections based on the use of whole-tone scale and pentatonic scale. Upon examining the repetition and variation of each theme in the whole composition, it becomes evident that while theme a repeats verbatim at the beginning and the end, it appears fragmented or expanded elsewhere, serving as an introduction and conclusion. On the other hand, theme b is completely repeated three times in the music, albeit with textural variations, maintaining its melodic integrity, thus can be regarded as the primary section (A) of the rondo form. According to the development of the two themes in the whole piece, the structure of the music can be divided into five concise rondo forms:

2.3 Analysis of acoustic characteristics

Debussy's emphasis on "non-functionality" in his compositions, although seemingly a "deconstruction" to the structural force in the traditional sense, actually signifies the emergence of a new "sound concept" rooted in a distinct "construction" approach.

The outstanding contribution to the "impressionist" music in the aspect of sound structure is primarily manifested in chordal arrangements. While traditional functional harmonic structure system of major and minor keys often employs ninth chord, eleventh chord, and thirteenth chord for decorative purposes to make a certain chord sound more solid and full, then, in "impressionist" music, these chords assume a substantive role, becoming pivotal elements in sound construction. They often replace the third and seventh chords, serving as a dominant logic of the basic sound structure. This shift not only makes the original sound more solid and plump, but also has a new sound meaning, especially the compound function of the ninth chord and the thirteenth chord itself, directly leads to the ambiguity of tonality.

Moreover, the complex treatment of single chordal sounds, coupled with the utilization of church scales, pentatonic scales, diatonic and other modes, as well as the extensive use of variations and whole tone chords, gives rise to what is referred to as the "new sound concept". This concept transcends an abstract "idea".
manifesting as a tangible sonic reality. From Debussy's music works can be seen in his sound structure, more use of block chords and harmony with modal flavor, often through the "janny-overlay" technique to enhance the thickness of the sound, the formation of the sound layer, and on the basis of the whole tone scale to establish harmony.

2.3.1 Whole tone scale
This composition employs Debussy’s most distinctive musical elements: the whole tone scale. The whole tone scale consists solely of major second, major third, and third diatonic relations and their inversions, which leads to the absence of any tonal gravitational pull between tones, and each tone is independent of the others. This results in a sense of ambiguity of the music's sound, which coincides with Debussy's impressionistic style.

2.3.2 Sustained tones
As can be seen from the thematic analysis above, the whole piece is built on the whole tone scale with pentatonic passages inserted in the middle. When considering the structural analysis, if the pentatonic passages are regarded as intersections, they show little relationship with the preceding and succeeding passages in terms of musical material and tone. Particularly, the contrast of sound color between the pentatonic passages and the whole tone stages of this piece is more significant. The only unifying factor is the sustained tone B♭, which not only contributes to the structure and expression of the image of the music, but also serves a supportive harmonic function of the pentatonic passages. The pentatonic passages are in the key of E♭, establishing a dominant relationship between B♭ and E♭. The conclusion of the interjection is also characterized by a 7-dominant terminating mode. In addition, both the beginning and end notes of theme a have E note. In the development of the music, E recurs in pivotal positions, with the final note is also on E♭. There is an augmented fourth relationship between B♭ and E, which is exactly the middle note of the whole-tone scale, and the arrangement of the central note is symmetrical, which can be seen from Debussy's careful thinking in tonality layout.

2.3.3 Parallel chord
The technique of parallel chords is also used in the music. For example, in bars 15, 17 and 19, triadic parallel chords are introduced into the theme II triplet motifs; the progression of the theme II phrase in bars 33-37; and the non-triad superimposed parallel chords in bars 54 and 56. These chords require no preparation or resolution, devoid of any harmonic progression and tonality tendency, thus exhibiting a strong independence, reflecting Debussy's innovation and breakthrough in harmonic tonality.

3 Conclusion
In 1889 Debussy took part in the World Expo in Paris, where he encountered numerous national musicians from countries such as Hungary, Algeria, Spain, and Japan. This diverse array of musical influences greatly inspired Debussy, especially the pentatonic music performed by the Javanese Gamelan band, leaving a very deep impression on him. This influence played a pivotal role in the extensive use of pentatonic scales in his later works. It was during this time that Debussy got to know Impressionist poet Stephen Mallarme, through whom he was introduced to luminaries like the litterateur Maeterlinck, poet Wilan, and Impressionist painter Monet. These individuals shared a common spirit of innovation and seek new artistic paths in their respective fields. Debussy’s exposure to a wide range of aesthetic ideas from poetry, painting, drama, sculpture and other fields contributed to the gradual sprouting and growth of the Impressionist music in Debussy's artistic vision.
As a composer who pioneered new music in the 20th century, Debussy built a bridge between traditional music and modern music. To meet the demands of composition, he grounded himself in tradition while actively carrying out various experiments of new sound effects, seeking a new way out of music.

In the structure of "Voiles", diverse structural interpretations can be divided from different angles. The combination of thematic motifs exhibits greater freedom and flexibility, departing from the fixed thinking of unified pitch materials in traditional music. In terms of materials, it is more "unrestricted", but there are unified factors in the control of the whole music, which can be said that "dispersed form yet unwavering spirit".

In traditional music compositions based on the major and minor key system, emphasis is typically placed on the progression from the subdominant to the tonic, highlighting the function of harmony and the tendency of tonality. On the other hand, in "Voiles", chords are independent. Each chord stands as an individual entity, devoid of the need to be attached to other chords. This characteristic is not unique to “Voiles”, composed with atonal whole-tone scales, but is also evident in other works by Debussy. Even those with tonal music, the function and mode tendency of chords are greatly weakened. For example, Debussy frequently integrates parallel chords, a favored technique, into his works. There are also non-third overlapping chords, such as the second and the fourth and fifth overlapping chords, and chords extracted from the Organum further back in the Middle Ages. The use of these chords, which fully embody the innovative spirit of Debussy, as material for the creation of a new sound, marks a significant departure from tradition. The chords in his works broke through the confines of the traditional tonality and harmony rules, prioritizing the acoustic color of each chord itself. They all have an independent status, and together constitute a wonderful sonic painting.

Debussy's innovation of harmonic techniques and the expansion of tonality endowed the traditional tonality with new vitality and appeal. Unlike the chromatic major and minor key systems favored by his late romantic contemporaries, “Voiles” adopts diatonic mode and pentatonic mode, allowing a variety of key centers to coexist, generating novel colors in the confrontation of key centers. Similarly, other preludes employ techniques like dual tonality and ecclesial modes. For example, in the second set's opening piece "Brouillards", the column chord on the left white key and the broken chord on the right black key form the counterpoint of the black and white key. Conversely, in the third piece, "La Puerta del Vino ", the opposite approach is used, with the right hand playing the white keys and the left hand playing the black keys. Debussy's expansion of tonality was not just a compound experiment in tonality, he believed that dual tonality could achieve specific acoustic effects within a single composition. This departure from the traditional rule of a single key center fosters greater musical freedom and enriches the palette of sonic colors on display. The application of dual tonality and atonality shows that the classical tonality system has gradually lost its original position in Debussy's music. Other musical elements have emerged as the basis for controlling and dividing the structure of music.

Debussy yearned for the freedom of music creation and opposed the restriction of music within certain patterns or rules. In his ideal, the beauty of music should be based on the human sensory experiences, allowing listeners to be immersed in it unconsciously. Therefore, the importance of sound became pronounced in Debussy's music. The preludes stand as the representative works of Debussy's compositional techniques and aesthetic philosophy, which can best reflect the writing characteristics of his mature creative period. At the same time, it is also the result of Debussy's continuous exploration in his creative practice. This work not only continues the characteristics of late romantic music and folk music, but also goes to a higher level in the description of scenes and images. The
study of non-traditional factors in Debussy's preludes goes beyond mere scrutiny of his compositional techniques; it prompts broader reflections on the future development of music inspired by his works.

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