

A Study of Coloristic Effects in Joan Tower's Works for Piano:
*Petroushskates, Ivory and Ebony, and Sixth Fanfare for The
Uncommon Woman*

By

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Abstract

The purpose of this study is to examine Joan Tower's treatment of sound and coloristic effects in selected chamber and solo works for piano. Prior to the twentieth century, timbre, modes, and other coloristic effects were often associated with a mood, character or emotion, and were primarily presented by various tonal intervals. With the rise of *fin-de-siècle* avant-garde trends such as impressionism, the association of color and music became integrated. As Jörg Jewanski has noted, the concept of color was equated with individual musical parameters in the twentieth century. One composer who has shown a particular interest in color is Joan Tower, who is celebrated as one of the most important contemporary American composers.

This study will analyze factors of coloristic traits in three of Tower's piano works. Tower consistently applies multiple musical elements in her works. For example, Tower has several musical influences including various composers that she wrote in the style of, such as Debussy, Messiaen, and Stravinsky. She also found out that a powerful tool in projecting pitch content is the use of register. In addition, she is interested in varied rhythmic patterns, which she has said results from her upbringing in South Africa.

Table of Contents

Abstract	iii
Table of Contents	iv
List of Figures	v
Chapter One: Introduction	1
Chapter Two: The relationship of music and color in 20 th century	3
Chapter Three: Analysis	8
Rhythm.....	9
Pitches.....	15
Musical Texture	19
Conclusion	23
Bibliography	25

List of Figures

Figure 1: Tower, <i>Petroushskates</i> , m. 1.	9
Figure 2: Stravinsky, <i>Petrushka</i> , “at the Shrovetide Fair”, m. 1.	9
Figure 3: Tower, <i>Petroushskates</i> , mm. 16–19, piano.	10
Figure 4: Tower, <i>Petroushskates</i> , m. 16, woodwinds.	10
Figure 5: Tower, <i>Petroushskates</i> , m. 19, strings.	10
Figure 6: Tower, <i>Petroushskates</i> , mm. 11–12, piano.	10
Figure 7: Tower, <i>Petroushskates</i> , mm. 11–12, strings.	11
Figure 8: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 1.	11
Figure 9: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 9.	11
Figure 10: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 70.	11
Figure 11: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 92.	12
Figure 12: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 123.	12
Figure 13: Tower, <i>Petroushskates</i> , additive rhythm in violin, mm. 112–114.	12
Figure 14: Joan Tower, <i>Ivory and Ebony</i> , mm. 100–103.	13
Figure 15: Tower, <i>Petroushskates</i> , m. 96, reduced score.	14
Figure 16: Tower, <i>Petroushskates</i> , mm. 100–101, reduced score.	14
Figure 17: Tower, <i>Petroushskates</i> , m. 103, reduced score.	14
Figure 18: Tower, <i>Ivory and Ebony</i> , mm. 182–184.	14
Figure 19: Debussy, <i>Voiles</i> , mm. 1–2.	15
Figure 20: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 83.	15
Figure 21: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , m. 92.	15
Figure 22: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , mm. 84–91.	16

Figure 23: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , mm. 76–77.	16
Figure 24: Tower, <i>Ivory and Ebony</i> , mm. 243–245.	17
Figure 25: Debussy, <i>Danse Sacrée</i> , mm. 8–9.	17
Figure 26: Stravinsky, <i>The Rite of Spring</i> , “Dances of the Young Girls”, m. 1.	18
Figure 27: Tower, <i>Petroushskates</i> , m. 140.	18
Figure 28: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , mm. 47–49.	18
Figure 29: Tower, <i>Ivory and Ebony</i> , mm. 166–172.	19
Figure 30: Joan Tower, <i>Ivory and Ebony</i> , mm. 143–145.	20
Figure 31: Tower, <i>Ivory and Ebony</i> , mm. 146–147.	20
Figure 32: Tower, <i>Ivory and Ebony</i> , mm. 248–253.	20
Figure 33: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , mm. 168–170.	21
Figure 34: Cowell, <i>The Tides of Manaunaun</i> , mm. 18–20.	21
Figure 35: Tower, <i>Petroushskates</i> , mm. 70–73.	22
Figure 36: Tower, <i>Ivory and Ebony</i> , mm. 1–4.	22
Figure 37: Tower, <i>Ivory and Ebony</i> , mm. 275–277.	23
Figure 38: Tower, <i>Sixth Fanfare for the Uncommon Woman</i> , mm. 162–167.	23

Chapter One

Introduction

Joan Tower's compositional style is divided in two periods: serialist and post-serialist. Prior to 1974 Tower was influenced by serialist composers, including Mario Davidovsky, Charles Wuorinen and Milton Babbitt. In earlier years, her compositional process relied on serialist procedures and structures. But later she realized that every pitch has individual identity and decided to turn her attention to developing her own pitch structures.¹ Hence, she moved away from serialism toward free formal structures and more organic forms. As stated in Jenny Raymond's interview with Tower, she prefers writing works in single movements and believes a piece is a "one-moment experience."² Emphasizing the concept of this structure, Tower frequently develops her succeeding motives from preceding ideas, creating lines of energy in various directions such as upward, straight or downward. Thus, people often describe Tower's music as being "seamless" musical thoughts develop without breaks.³

Although Tower almost exclusively limits herself to one-movement forms, she almost never abandons other musical elements, such as pitches, register, and rhythm. In Tower's dissertation "On 'Breakfast Rhythms I and II' (Analysis of Original Composition)," she mentions an experience of hearing an orchestrated version of her original piano works and realizing that only pitches can change color.⁴ She also discovered that register could be a powerful tool that allowed pitch content to shape a piece.⁵ In addition, her works frequently use

¹ Ellen. K. Grolman, *Joan Tower: The Comprehensive Bio-Bibliography* (Lanham, MD: Scarecrow Press, 2007), 27.

² Ibid, 34.

³ Ibid, 30.

⁴ Joan Tower, "On "Breakfast Rhythm I and II. (Analysis of Original Composition)," (n.p., 1978), 3.

⁵ Ibid, 7.

varied rhythmic patterns that she attributes to her upbringing in South America. Because of how she emphasizes the aspect of richness in tone and color, Tower's music often evokes an impressionistic atmosphere.

Joan Tower has composed for a broad array of instrumentation and ensembles. Composers often choose their instrumentation based on timbre or the particular musicians who will play the work, but some of Tower's instrumentation choices are simply based on possibilities. She frequently exploits unusual instrument combinations due to her understanding of each instrument's capabilities. As a pianist herself, she uses the piano most frequently. She also favors the clarinet, due to the instrument's capability of producing a wide range of dynamics and expression.⁶ Percussion takes an important role as an extension of the percussive aspect and the tone quality of the piano, especially in *Black Topaz* (1976). Some of her ensembles are common, like piano trios; others are more unusual combinations that highlight each instrument's tone quality. Her output contains a wide range of genres, ranging from solo works to small and large ensembles, chorus, ballet, and orchestral works. Joan Tower's works have been commissioned by several leading ensembles and orchestras; thus, her compositional process has developed through hands-on performance experiences.

⁶ Nancy Leckie Bonds, "An analysis of Joan Tower's *Wings* for solo clarinet," (n.p., 1992), 15.

Chapter Two

The relationship of music and color in 20th century

“Color” is a term used primarily in visual arts. The term has appeared less frequently in the music scholarship, though it is often used to describe varying timbres, textures, and melodic or harmonic layers of sound. Prior to the twentieth century, composers often featured different musical colors by using various tonal intervals. At the turn of the twentieth century, composers were challenging the fundamental principles of functional tonality. Additionally, composers such as Aleksandr Skryabin and Nikolai Rimsky-Korsakov are documented as having had chromesthesia, a form of synaesthesia in which perceptions of sound and color are linked.⁷ Hence, the concepts of color and music became integrated. As Jörg Jewanski has noted, many composers attempted to establish “color” as an independent art relating to music in many ways.⁸

Composers who were interested in abandoning tonality often experimented with various timbres and musical color. For example, in *Cloches à travers les feuilles* (1907) and *Voiles* (1909), Claude Debussy used whole-tone scales to avoid leading-tone resolutions. Maurice Ravel used bitonality with vertical juxtaposition of two keys such as Concerto in G Major for Piano and Orchestra (1931). In the first *Mouvement Perpétuel* (1918) and the dance suite *Saudades do Brasil* (1920), Francis Poulenc and Darius Milhaud both created horizontal juxtapositions of two distant keys; in *The Rite of Spring* (1913) and other works, Stravinsky used repetitions of dissonant chords to establish a kind of tonal center that went against the rules of functional tonality.

⁷ Gerard McBurney, “Colour and Music.” Oxford Music Online.
<http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e1503>.

⁸ Jewanski, “Colour and Music.” Grove Music Online,
<http://www.oxfordmusiconline.com/subscriber/article/grove/music/06156>.

Some composers make associations with visible spectral colors, while others use color as part of the composing process. In *the Poem of Fire* (1909–10), Skryabin visualized his piece in its final state as a series of colors and even wrote a part for “color organ,” an instrument that projected various colors during the performance. Oliver Messiaen also saw color as an important aspect of the compositional process. He employed subjective association of color with forms, chords, and themes, and linked sequences of well-defined colors with particular modes.⁹ Unlike Skryabin, though, he did not see the colors as the end goal.

Another way to highlight a color of sound or timbres is to emphasize a specific musical texture. Some composers create a distinctive color of sound by minimizing the musical elements. In Arnold Schoenberg’s “Farben,” the third movement of the *Five Pieces for Orchestra*, Op. 16, he introduced the concept of *Klangfarbenmelodie*, or tone color melody, by composing a piece that consisted of a single chord played by shifting combinations of orchestral instruments.¹⁰ In *Metastasis* (1953–54), Iannis Xenakis created a variety of sound masses with varying densities of texture and timbre. In *Atmosphères* (1961), György Ligeti emphasizes tone color by removing the aspect of rhythm and creating a musical form defined by contrasting texture.

Two other ways composers use colors are by highlighting specific instrumental voices and by exploring the color possibilities of individual instruments. In *The Firebird* (1910), particularly in the “Berceuse” and “Finale,” Stravinsky highlighted the distinctive tone color of each instrument.¹¹ George Crumb, in *Madrigal* (1965–1969), features a unique instrumentation of flute, harp, percussion, and double bass to accompany the soprano.¹² Some composers

⁹ Jewanski, “Colour and Music.”

¹⁰ Jewanski, “Colour and Music.”

¹¹ McBurney, “Colour and Music.”

¹² George Crumb. *Madrigal*. University of Pennsylvania Chamber Players. Richard Wernick. New World Records Cat# No. 80357, 1987, compact disc. Liner notes.

emphasize particular a tone color by extending performance technique. Henry Cowell, for example, frequently called for innovative treatments of the instrument. In some works, he requires the performers to manipulate the piano strings directly; in “The Banshee” (1925), for example, the unusual techniques include strumming, stroking, and scraping the piano strings.¹³ George Crumb, in *Vox balaenae* (1971), requires the flutist to play and sing simultaneously, while the cellist plays harmonic glissandos to imitate the cries of seagulls.¹⁴

Tower herself has identified several musical influences, including many composers whose styles she has imitated.¹⁵ In *Steps* (2011), she uses whole-tone scales in homage to Debussy; in *Petroushkates* (1980), she follows Stravinsky’s model of creating chord structures and rhythmic patterns; in *Très lent (Hommage à Messiaen)* (1994), she follows Messiaen’s example and uses melodies that move in slow rhythms along with many distinctly Messiaen-like harmonic elements. More broadly speaking, the concept of sound is crucial to Tower’s music as a whole. She writes, “As a pianist I learned that performing and communicating in sound was the only way I could really communicate, and then that got transferred into composing and projecting an image of sound to other people.”¹⁶ In the past two decades, Tower has often combined multiple styles in her compositions.¹⁷ In *Steps*, Tower combines two styles from Milton Babbitt and Claude Debussy, who have significantly influenced her writing style. Milton

¹³ David Nicholls. "Cowell, Henry." Grove Music Online, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/06743>.

¹⁴ Richard Steinitz. "Crumb, George." Grove Music Online, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2249252>.

¹⁵ Grolman, 36-37.

¹⁶ Sharon Prado, “New Wine into Old Bottles: Traditional Media and Contemporary Women Composers,” *Contemporary Music Review*, vol. 16, nos.1-2, Special issue “American Women Composers,” (1997): 51.

¹⁷ DoHaeng Jung, “Joan Tower's Piano Concertos "Homage to Beethoven" (1985), "Rapids" (1996), and "Still/Rapids" (2013): A Style Study,” (n.p., 2014), 119.

Babbitt and his serialist techniques inspire the harmonic language of the piece, while Debussy's works from the 1890s inspire the musical textures.

Spectral color is not a direct association, but an inspiration of character in Tower's music. In Skryabin's music, spectral color refers to the specific colors projected by the color organ, but Tower does not do this. Her inspiration usually comes from mining and nature. Thus, her pieces have titles like *Red Garnet* (1977), *Black Topaz* (1976), *White Granite* (2010), and *Purple Rush* (2016). From these stones and a flower, she creates music whose characteristics are associated with colors. For example, we associate red with "bold" or "striking." Tower writes music that evokes boldness. Then, she titles that work with the color associated with the character of the piece: red.

Tower believes that the primary difference between a piece and a transcription is one of color; transcribing does not change the original musical idea. The elements that are significant to the identity of the piece are rhythm, pitch, harmony, and register. Tower states,

A piece of music is first and foremost a rhythm of pitches and harmonies and registers. If you play a piano version of an orchestra piece or an orchestra version of a piano piece, the difference between [them] is one of color. So you're not changing pieces, you have essentially the same piece but [with] a different coloring.¹⁸

Tower believes that solo works require a different compositional aesthetic from ensemble works. "The timbral shifts in the solo composition are less frequent and the activity is much more pure and focused so it has to move faster."¹⁹ In other words, chamber music has a variety of instrumental timbres that can be contrasted; this is not available in a solo piece. Because of this, contrast is created in the solo piece through other musical elements besides timbre. Tower

¹⁸ Grolman, 35.

¹⁹ Nancy E. Leckie Bonds, "An analysis of Joan Tower's *Wings* for solo clarinet," (n.p., 1992), 205.

says that writing for one instrument limits changes in texture and timbre. Thus, more weight falls to the ideas and profiles of the piece. The benefit of writing for piano is that it “has a wide range of registers and textural abilities so it becomes a sort of mini orchestra in a way.”²⁰ For example, in *Steps*, she features the pitch intervals as wide leaps, jumping from A-flat₆ to A₁. As she states, “I was trying to get the young pianist to be aware of the range of the piano. So, those were the Big Steps.”²¹

²⁰ Interview with the author.

²¹ Ji-Young Jeoung, “An analysis of Joan Tower's solo keyboard works,” (n.p., 2009), 39.

Chapter Three

Analysis

Three pieces that are strong examples of Tower's coloristic aesthetic are *Petroushskates*, *Ivory and Ebony* (2009), and *Sixth Fanfare for the Uncommon Woman* (2014). *Petroushskates* is written for a Pierrot ensemble consisting of flute, clarinet, violin, cello, and piano. It is a tribute to Stravinsky's *Petrushka* (1910–1911). The repeating sixteenth-note patterns are derived from similar rhythms in *Petrushka*, and the title is an homage to Olympic figure skating. *Ivory and Ebony* uses the piano's white and black keys separately to create a dialogue between pentatonic and diatonic pitch collections. *Sixth Fanfare for the Uncommon Woman* is part of a series of fanfares, all of which are inspired by, and in contrast to, Aaron Copland's *Fanfare for the Common Man* (1942). Part one, two, three, and five of the *Fanfare for the Uncommon Woman* were written for brass, and part four is for full orchestra. Part six was originally written for solo piano, and was later arranged for full orchestra.

Tower uses rhythm and pitches to highlight color. She emphasizes the organization of rhythmic patterns, using ostinato, additive rhythms, and changes in meter, as well as the whole tone scale, parallel harmonies, and chord spacing. Different aspects of musical texture—such as polytonality, polyrhythm, melodic leaps, tone clusters and glissando—are also explored to enrich color.

Rhythm

Tower often uses ostinatos to create persistent soundscapes. The continuous sixteenth-note rhythmic pattern in Tower's *Petroushskates* is similar to the pattern in Stravinsky's *Petrushka* (see figures 1 and 2).²² The sixteenth note pattern in the piano part, which consists of two repeating intervals, is the opening motive, and occurs frequently throughout the composition.



Figure 1: Tower, *Petroushskates*, m. 1.



Figure 2: Stravinsky, *Petrushka*, "at the Shrovetide Fair", m. 1.

The opening motive is then supported by other instruments, including the flute, clarinet, violin, and cello, and therefore creates a wealthier sonority than appeared at the beginning. All the instruments advance the repetitive pattern in different ways; the piano introduces "non-legato" articulation, changes the register, and doubles voices (see figure 3); in measure 16 the woodwinds play with the piano (see figure 4); and in measure 19, the strings arpeggiate the figure (see figure 5).

²² Joan Tower, *Petroushskates*. (New York: Associated Music Publishers, 1980), preface.



Figure 3: Tower, *Petroushskates*, mm. 16–19, piano.



Figure 4: Tower, *Petroushskates*, m. 16, woodwinds.



Figure 5: Tower, *Petroushskates*, m. 19, strings.

Ostinato patterns can also be found in both solo works. In *Ivory and Ebony* and *Sixth Fanfare for the Uncommon Woman*, the sixteenth-note patterns occur sporadically throughout the composition, which consists of alternations of two notes or scalar figurations, serving as a contrasting color to the other voice.

Tower also uses reoccurring eighth notes to highlight the contrasting timbres of the instruments. While the piano begins with repetitive sixteenth notes (see figure 6), the strings enter with alternating eighth notes (see figure 7). In addition to the contrasting rhythms, timbral differences are also emphasized by slurs and larger intervals.



Figure 6: Tower, *Petroushskates*, mm. 11–12, piano.

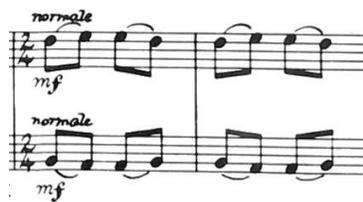


Figure 7: Tower, *Petroushskates*, mm. 11–12, strings.

As with *Petroushskates*, *Sixth Fanfare for the Uncommon Woman* also uses repetitive eighth notes, which creates a similar soundscape. The eighth notes are stated in different pitches and registers as the piece progresses, with the right hand rising while the left hand descends: D₄ in measure 1, A₄ in measures 9 to 11, C₆-sharp in measures 70 to 83, C₇ in measures 92 to 110, and then a return to D₇, though in different octaves, in measures 123 to 130 (see figures 8 through 12). Each time the different statements of eighth notes occur, other musical elements are introduced, including changes in dynamics, additional ostinatos in the bass, and doubling voices.



Figure 8: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 1.



Figure 9: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 9.



Figure 10: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 70.



Figure 11: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 92.



Figure 12: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 123.

Tower uses additive rhythms to extend rhythmic ideas. In *Petroushskates*, the violin in measure 112 introduces the motive B₃–G-sharp₃–A₃–G-sharp₃, a group of four sixteenth notes that are played in the first beat of a 2/4 measure, and proceeds with the same pattern in the second beat. Then the meter changes to 3/8, and rather than having two consecutive B₃–G-sharp₃–A₃–G-sharp₃ statements, Tower includes a neighbor tone to create B₃–G-sharp₃–A₃–G-sharp₃–A-sharp₃–G-sharp₃. The additive meters create more momentum, also shown by the *energico* marking in measure 112 (Figure 13).



Figure 13: Tower, *Petroushskates*, additive rhythm in violin, mm. 112–114.

In *Ivory and Ebony*, Tower uses a different additive technique. This one consists of a rhythmic pattern that adds notes sequentially. Each measure begins with a tone cluster centered around G₅. The first pattern is a group of ten sixteenth notes, the second a group of twelve, the

third a group of fourteen, and the fourth a group of eighteen. The rhythmic additions, along with dynamic support from a *crescendo*, increases the energy as this section progresses (see figure 14).

The image shows three systems of musical notation for piano. The top system is a short excerpt with a treble clef, 3/4 time signature, and a key signature of one flat. It features a right-hand part with chords and a left-hand part with a rhythmic pattern. The dynamic marking is 'mf sub.' and there is an '8va.' marking above the staff. The middle system starts at measure 101 and includes a 'cresc.' marking. The bottom system starts at measure 103 and continues the rhythmic pattern.

Figure 14: Joan Tower, *Ivory and Ebony*, mm. 100–103.

Tower also frequently changes between simple and compound meters in her music. In *Petroushskates*, she switches meters to indicate different motivic sections. In measure 96, all instruments play sixteenths in 3/4 (see figure 15); in measure 100, the meter changes to 3/8 (see figure 16); in measure 103, the meter changes back to 3/4 and the motive is introduced by piano and cello in triplets (see figure 17). Tower uses a tempo modulation to keep the speed of the primary rhythmic material consistent when she switches to triplets. Even though she uses this compositional tool to create the same rate of rhythm, there is a drastic change of register that necessitates reducing the instrumentation from flute, clarinet, violin, and cello to only the left hand of the piano and the cello.



Figure 15: Tower, *Petroushskates*, m. 96, reduced score.



Figure 16: Tower, *Petroushskates*, mm. 100–101, reduced score.



Figure 17: Tower, *Petroushskates*, m. 103, reduced score.

In *Ivory and Ebony*, Tower switches meter to interrupt the regularity of the consistent rhythm. The piece begins in 4/4 and initially stays mostly in simple meters. As the piece proceeds, the meter more frequently switches between duple and triple subdivisions. In measure 182, Tower takes a motive that uses fast alternations between white and black keys that changes metrical organization from compound duple, to simple duple, to compound triple over the course of three measures, as seen in figure 18. This type of shifting is a recurring feature of the piece and offers some rhythmic variety.



Figure 18: Tower, *Ivory and Ebony*, mm. 182–184.

Pitches

Tower often orders pitch collections with the whole tone scale, which is a scale that Debussy used to avoid having a leading tone. An example of Debussy's use of the whole tone scale can be found in *Voiles* (1909), from his *First Book of Preludes* (see figure 19).



Figure 19: Debussy, *Voiles*, mm. 1–2.

Tower uses the whole-tone scale to connect harmonic areas. In *Sixth Fanfare for the Uncommon Woman*, the scale functions as a bridge between harmonic centers, with the first center focused on the pitch C-sharp in measure 83 (see figure 20) and the second on C-natural in measure 92 (see figure 21). In measure 85, both voices use the pitches C-sharp–E-flat–F–G–A–B, and this material serves to transition between the two harmonic areas. This transitional material consists of repeating sixteenth notes, and a melodic line in the left hand (see figure 22).



Figure 20: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 83.

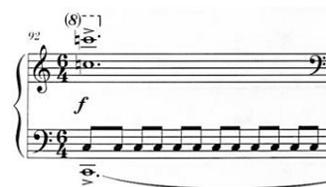


Figure 21: Tower, *Sixth Fanfare for the Uncommon Woman*, m. 92.



Figure 22: Tower, *Sixth Fanfare for the Uncommon Woman*, mm. 84–91.

Tower uses parallel harmonies, another device frequently used by Debussy. An example of this can also be found in *Voiles*, with descending parallel thirds in the opening (see figure 23). In *Sixth Fanfare for the Uncommon Woman*, Tower also uses chromatic parallel thirds in the right hand, as contrasting material to the repetitive eighth notes in the other hand. The lower-voice ostinato is another device frequently used by Tower to sustain a color.

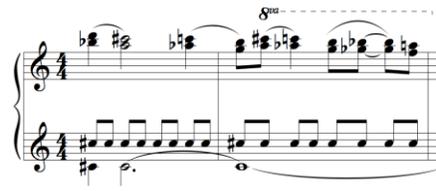


Figure 23: Tower, *Sixth Fanfare for the Uncommon Woman*, mm. 76–77.

In *Ivory and Ebony*, the upper and lower voices use a sort of parallel triad figuration diatonically in C major, but move in contrary motion away from each other. Therefore, a sort of bitonal atmosphere is created, highlighted by the separating hands (see figure 24). This can also be looked at as expanding or stretched triads. Debussy used parallel harmonies as a way to elude conventional tonal practice (see figure 25). Tower, on the other hand, uses parallel chords moving in contrary motion to extend harmonic sonorities.

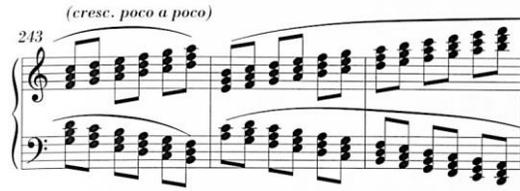


Figure 24: Tower, *Ivory and Ebony*, mm. 243–245.

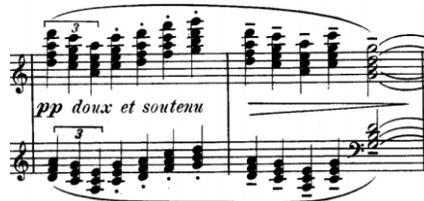


Figure 25: Debussy, *Danse Sacrée*, mm. 8–9.

Tower varies the registral placement of pitches in her chord structure. Inspired by Stravinsky, she states in the preface to *Petroushskates*, “a fleeting suggestion of the chord spacings of *Rite of Spring*.”²³ In the famous “Augurs of Spring” chord, Stravinsky juxtaposes two chords, an F-flat major triad and an E-flat dominant seventh (see figure 26). The two chords sound together so as to emphasize the dissonances between them. The result is that of a block of sound, rather than a functional harmony. In *Petroushskates*, Tower also uses chords as textures. The chords are closely scored with only intervals of a second or third (see figure 27), featuring staccato and strong dynamics that are similar to the “Augurs of Spring” chord.

²³ Joan Tower, *Petroushskates*. (New York: Associated Music Publishers, 1980), preface.

Figure 26: Stravinsky, *The Rite of Spring*, “Dances of the Young Girls”, m. 1.

Figure 27: Tower, *Petroushskates*, m. 140.

Tower also highlights the closed-position chord structure in *Sixth Fanfare for the Uncommon Woman*, but features the interval of a second as a recurring idea to create a richer sonority. Tower uses a C-minor-seventh chord in various inversions so that the second between B-flat and C-natural gradually shifts its position in the texture (see figure 28). This type of chord structure serves as an introduction to many of the *forte* sections in this piece. By an ascending line with the hands alternating, Tower creates an increasing energy and sonority.

Figure 28: Tower, *Sixth Fanfare for the Uncommon Woman*, mm. 47–49.

Musical Texture

Tower frequently creates polyphonic textures by superimposing musical elements, which creates layers of sound. Pitches and rhythms are used to create textural contrast. Regarding pitch, she writes that, “*Ivory and Ebony* is about the black and white notes of the piano which alternate ‘thematically’ but occasionally mix together.”²⁴ Mixing the white and black keys on the piano creates bitonality, because the black keys are a pentatonic pitch collection and the white keys are a diatonic pitch collection. Tower avoids having the two hands play homorhythmically in figure 29, which helps the listener to hear the two pitch collections. Each hand is not assigned to play only one pitch collection, rather the hands switch back and forth between the two pitch collections.



Figure 29: Tower, *Ivory and Ebony*, mm. 166–172.

Regarding rhythm, polyrhythm is used to create a sharp contrast to other rhythm textures. An example can be found in *Ivory and Ebony*. In measure 143, both voices play eighth-note triplets, but they are grouped differently (see figure 30). While the right hand is playing triplets in groups of two, the left hand is playing in groups of three. The pitch collections used by the hands help to make this difference more obvious. Though both hands use the whole tone scale, the upper voice emphasizes tritones from that scale while the lower voice uses major seconds.

²⁴ Website: Music sales Classical <http://www.musicsalesclassical.com/composer/work/42875>.



Figure 30: Joan Tower, *Ivory and Ebony*, mm. 143–145.

Continuing in measure 146 to 153, polyrhythm is used to enrich textural contrast. Different metrical organization is featured in both hands. The right hand has an eighth rest on the downbeat of each measure, followed by groups of two triplets or quintuplets in alternate measures; meanwhile the left hand plays a consistent scalar pattern in sixteenth notes (see figure 31). This kind of pattern create a sort of “off” beat pulsing in contradiction to the regular “on” beat, highlighting a different textural color from the previous passages.



Figure 31: Tower, *Ivory and Ebony*, mm. 146–147.

Tower uses different registers to create contrasting colors. In *Ivory and Ebony*, she alternates between having the hands play within two octaves to having the hands play with several octaves of space in between (see figure 32). The effect is of the hands leaping among the various registers

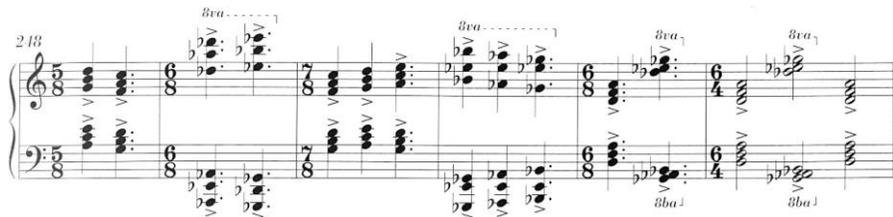


Figure 32: Tower, *Ivory and Ebony*, mm. 248–253.

At the end of *Sixth Fanfare for the Uncommon Woman*, the climax of the piece is reached when the hands reach the registral boundaries of the keyboard. The last notes of the piece have the hands separated more widely than at any other point (see figure 33). This creates a sonorous and resonant color.



Figure 33: Tower, *Sixth Fanfare for the Uncommon Woman*, mm. 168–170.

Tower also uses tone clusters, a device that comprises at least three consecutive tones in a scale, which many composers use to create a dissonant color. For example, in *The Tides of Manaunaun*, Henry Cowell used tone clusters to create a background texture of low, wavy pulses underneath the singing melody in the right hand (see figure 34).

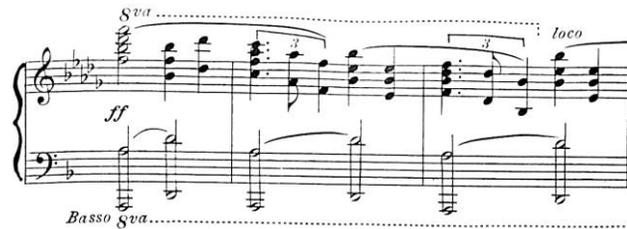


Figure 34: Cowell, *The Tides of Manaunaun*, mm. 18–20.

In *Petroushskates*, Tower uses tone clusters to differentiate instrumental voices. In measure 71, the woodwinds and strings introduce long sustaining notes, while the piano plays clusters, alternating between both hands, creating a shimmering color (see figure 35).

Figure 35: Tower, Petroushskates, mm. 70–73.

In *Ivory and Ebony*, Tower also uses two different tone clusters to contrast the color between the diatonic and pentatonic pitch collections. Measures 1 to 3 introduce a cluster wall by blocking a registral range, whereas in measure 4 she uses an ascending set of tight groups of three notes to emphasize the pentatonic sound (see figure 36).

Figure 36: Tower, *Ivory and Ebony*, mm. 1–4.

Tower uses glissando to close the final idea. This material is particularly featured in the end of both solo works. In *Ivory and Ebony*, two hands introduce glissandi with adjacent pitches and continue to play in separate directions. By expanding the glissandi from the middle range toward both ends of the piano, Tower creates a broad sonorous atmosphere (see figure 37).

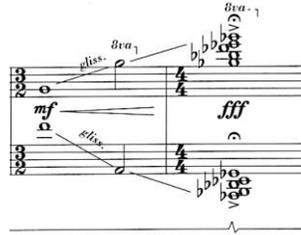


Figure 37: Tower, *Ivory and Ebony*, mm. 275–277.

In *Sixth Fanfare for the Uncommon Woman*, the two hands play glissandi alternately. Tower particularly indicated that all glissandi start and end with approximate pitches.²⁵ By gliding back and forth on the keyboard, glissandi highlight the color of different registers.

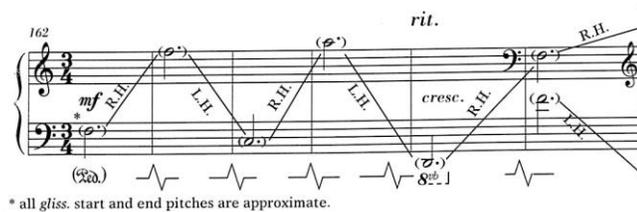


Figure 38: Tower, *Sixth Fanfare for the Uncommon Woman*, mm. 162–167.

Conclusion

Prior to the twentieth century, the tonal foundation of Western classical music centered on a system of functional tonality. Composers used harmonic intervals to alter a mood or an emotion. However, compositions in the late nineteenth century showed that tonality was not the only means of expressing emotions or sentiments. Instead, composers begin to find new methods and techniques to reorganize tonality by novel construction of unusual textures, rhythmic cells and fresh musical vitality that would soon be labeled as *colors*.

Tower's music highlights color primarily through organization of rhythm and pitches. Although these musical elements are comparatively simple, she discovers various possibilities in projecting the sound like: superimposition of pitches, registral differentiation of chords, or

²⁵ Joan Tower, *Sixth Fanfare for the Uncommon Woman*, p. 8, note.

varieties of rhythmic ideas. It is important to note that Tower uses these coloristic devices differently in *Petroushskates* and her solo compositions. In *Petroushskates*, she manipulates colors by emphasizing and layering individual instrumental timbre. In solo works, color is dependent on numerous factors but in the analysis of *Ivory and Ebony* and *Sixth Fanfare for the Uncommon Woman*, it is contingent on very abrupt metrical shifts, tempo fluctuations or different placements of an ostinato of repetitive eighth notes. These elements give her work a distinct style that distinguishes her organization of colors from other composers.

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