

Binary Opposition and Synthesis in Tower's String Quartet No. 2

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Abstract: Tower's String Quartet No. 2 demonstrates her typical musical language. She embraces new ideas, sound effects, and the successful exploration of compositional techniques for string instruments. To some extent, Tower establishes a structural model that is based on a traditional rondo form. This study explores how Tower shapes her music, and the means by which she constructs her composition. The paper will investigate the structural aspects of Tower's composition, revealing how traditional musical idioms are introduced in the context of her music. In the composition, Tower also creatively employs pitch register to create an acoustic effect of musical space, indicative of her use of binary opposition, which is significant in her music.

Keywords: Joan Tower. String Quartet No. 2. 21st Century Music.

Título: Oposição binária e síntese no *Quarteto de cordas n. 2* de Tower

Resumo: O *Quarteto de cordas n. 2* de Tower é representativo de sua linguagem musical. Envolve novas ideias, efeitos sonoros e sua bem sucedida exploração de técnicas composicionais para instrumentos de cordas. Em certa medida, Tower estabelece um modelo estrutural baseado em uma forma rondó tradicional. Este estudo explora a maneira segundo a qual Tower molda sua música e os meios através dos quais ela constrói sua composição. Investiga aspectos estruturais da composição de Tower, revelando a introdução dos idiomas musicais tradicionais no contexto de sua música. Na composição, Tower, também criativamente, emprega registros de alturas para engendrar um efeito acústico do espaço musical, indicativo de seu uso de oposição binária, imbuído de significado em sua música.

Palavras-chave: Joan Tower. *Quarteto de cordas n. 2*. Música do século XXI.

J oan Tower is one of the most honored living composers, both in the United States and Europe. Her music has been developed in a manner that is unique in both its musical handling and listening experience. Not only has her music been performed widely, but her compositions have been released on many recordings.

Eight years after the completion of her String Quartet No. 1 in 1994, Tower again explored the possibilities of composing a second quartet that would embrace new ideas, sound effects, and the successful exploration of compositional techniques for string instruments. Her String Quartet No. 2 (2002) not only demonstrates Tower's typical musical characteristics, but also clearly illustrates her many unique musical ideas. Throughout the composition the music embraces both lyrical and energetic passages. It is a piece that shows Tower's skill in "creating high-energy" strategies. Tower explains that "creating high-energy music is one of my special talents; I like to see just how high I can push a work's energy level without making it chaotic or incoherent. But my lyrical nature has been emerging in snippets over the years, too" (HUMPHREY, 1990: 11). Therefore, in this paper I shall explore how Tower shapes her music, and the means by which she constructs her composition.

Apart from Tower providing thematic and motivic connections that provide structural coherence in the entire composition, she establishes a structural model that is based on a traditional rondo form. Throughout the composition Tower employs traditional resources. Mainstream and traditional ideas are recreated in her music. It is not surprising that Tower aims to communicate with her listeners through traditional channels. In this light, this paper, will also investigate the structural aspect of Tower's composition, revealing how traditional musical idioms are introduced within the context of her music.

In the composition, Tower also creatively employs high and low pitch registers on different instruments to create an acoustic effect of musical space. This is illustrative of Tower's musical ideas, where the use of binary opposition is significant.

In terms of Tower's musical balance, musical construction plays an important role in the interaction among instrumental parts, as does the arrangement of rhythmic activity in the melody. In this study, therefore, I also explore the aspects and methods where Tower skillfully balances contrast and complement with her musical events, and investigate how musical space is articulated in the music.

Although the music often contains moments of sudden change of texture, tempo and meter, they never result in a sense of discontinuity. A variety of musical features such as diatonic and octatonic scales and minimalist-like repetition are used as source material.

Several techniques are used to generate energetic power to project a sense of forward moving motion, such as a chain of tie-notes alternating between violins and the use of rhythmic vitality. Perhaps the most significant musical tool is the employment of repetition to create dramatic effects. It is not an overstatement that Tower demonstrates a much wider variety of compositional ideas than one would expect. As Tower once claimed, she has long been “fascinated with musical motion, the energy and consequences of its action, how lines acquire direction and shape, and musical time. Music has to be counterbalanced” (HUMPHREY, 1990: 10). Therefore, how Tower builds musical coherence requires a detailed examination.

Binary Opposition in Music

Music lives by contrast and complement. Much thought about the aesthetics and theory of music has been devoted to the essential process of complementary opposition. To quote Michael Nyman, opposition exists as “a system of priorities which sets up ordered relationships between its components, and where one thing is defined in terms of its opposite” (NYMAN, 1999: 27). The customary methods of musical opposition, such as climax/stasis, thin/dense texture, soft/loud, fast/slow tempo, solo/tutti and many others have long been treated as fundamental compositional techniques for composers. However, twentieth-century composers have creatively deepened their pursuit to opposition in their compositions. In this regard, Tower, in some extent, applies the concept of binary opposition to create musical balance in her music. This aspect will be discussed later in the paper.

In many cases, one witnesses the emergence of an increased awareness of identifying formal structure and musical activity in regard to the concept of opposition; suffice to mention the music of Sofia Gubaidulina. Opposition is not only reflected in the titles of her compositions, but also in her music. Gubaidulina once said: “I find contrasting ideas very interesting, for example, in string terminology, setting against each other *arco* vs. *pizzicato*, *sordino* vs. *senza sordino*, *ponticello* vs. *sul tasto*, *feté* vs. *spiccato*. This concept of opposition influences my musical ideas” (POLIN, 1984: 15). The aspects of oppositional experience also include fixed detail and improvisation, symmetry and asymmetry, motion and stasis, thinness and density, complexity and simplicity, pitch and noise, and sound and silence. It is as if composers have discovered new perspectives and values in the concept of opposition. Berio, for example, once commented on the aesthetic viewpoint of opposition in his music:

We're pervaded with binary oppositions: positive and negative, heaven and earth...For me acting musically means making complementary or harmonizing the terms of an opposition or a group of oppositions – making them concrete... For me, music is giving a sense to the passage between the differing terms of an opposition, and between different oppositions, inventing a relationship between them and making one opposition speak with the voice of the other – as when the body speaks with the voice of the mind and vice versa (BERIO, 1985: 135-136).

In addition, there are other musical treatments that can be associated with the concept of binary opposition. Some composers, such as John Cage, offer such obvious grounds for an oppositional approach. The third movement of Cage's *Concerto for Prepared Piano*, for example, experiments with the interchangeability of sound and silence. James Pritchett claims that 'the third movement [of the *Concerto for Prepared Piano*] represented the resolution of the dualisms of piano and orchestra, sound and silence' (PRICHETT, 1993: 71). Moreover, Cage perceives sounds as existing in opposition to silence. He said: "the opposite and necessary coexistent of sound is silence" (CAGE, 1961: 63), and "the material of music is sound and silence. Integrating these is composing" (CAGE, 1961: 62). Indeed, twentieth-century music has dealt with the compositional handlings of binary opposition in many different ways. Taken as a whole, the treatment of binary opposition in twentieth-century music has revolutionized style and technique of musical composition more than in any century before.

String Quartet No. 2, "In Memory"

This composition by Tower was written for the Tokyo quartet. A music critic, Chris Pasles, provides a report on the reception given to the work's performance, stating that "the audience [was] stomping its feet as well as clapping its hands" (PASLES, 2003).

Throughout her oeuvre Tower evokes imagery with descriptive titles, which, like her music, frequently draw upon the natural world. It is a way "of creating a little window into the piece that isn't too heavy," she is quoted as saying (OTERI, 2005). In the preface of her String Quartet No. 1, "Night Fields", for example, she wrote a note tying the music to images of "a cold windy night in a wheat field lit up by a bright, full moon, with waves of fast moving colors rolling over the fields, occasionally settling on a patch of gold" (TOWER, s.n.).

Similarly, her String Quartet No. 2, "In Memory", was written in memory of Tower's deceased friend, Margaret Shafer, and has been described as a work that expresses

the composer's pain, love and anger (Sandow). Tower provides a summary, stating that "the writing contains high, celestial material, some of which descends very slowly. This is paired with more forceful and driving repetitive musical ideas that try to express the anger and pain that results from the loss of people in one's life" (GROLMAN, 2007: 83). Indeed, the music beautifully delivers the emotions of grief through the opening theme, and anger perhaps through the fast running passages as expressed by Tower.

As a composer, Tower tends to employ single movement forms. Indeed, like many of her compositions, the quartet is in one continuous movement that can be divided into several slow-fast sections of unequal lengths: slow (mm. 1-29) – fast (mm. 30-54) – slow (mm. 55-82) – fast (mm. 83-207) – slow (mm. 208-291) – fast (mm. 292-406) – slow/coda (mm. 407-434). The slow sections are lyrical and thin in texture and the fast sections generally have a thick and quick moving texture. Although the contrast among sections may seem great, Tower connects the music through various compositional techniques, which I discuss later in the paper.

The music begins with a lyrical, expressive melody in violin I that springs to mind the opening theme of Rimsky-Korsakov's *Scheherazade*. Here, the melody appears in all slow sections. Nevertheless, with each reappearance, it is developed and slightly transformed. This melody not only connects the entire composition, but also the expressive opening sets the mood for the following slow sections. On the other hand, the fast section is characterized by energetic, driving rhythms and an abundance of repeated figures. To some extent, they also share similar pitch contours and ideas. One cannot help drawing a relation of such formal structure with a simple rondo form presented in an untraditional way. Traditionally, this formal structure is comprised of a recurring theme alternating with contrasting material, and also aims to provide continuity and unity to the composition.

Throughout the composition Tower skillfully employs the idea of binary opposition. The music is arranged with the first three sections in shorter lengths and expands in the rest of the work (excluding coda) towards the second half of the composition. Although Tower does not exactly divide the length of the work into two equal lengths between the first and second halves, she nevertheless, to some extent, creates a sense of short-long opposition between them, as illustrated in Table 1:

	Slow	Fast	Slow	Slow	Fast	Slow	Slow (Coda)
Total Measures	29	25	28	125	84	115	28

Table 1: Structure of Tower's String Quartet No. 2.

Similarly, a melody that begins in a high pitch range in a character of rest with rhythmic resistance often leads to a lower pitch range with energetic, more rhythmic activity and fast running notes as it progresses. In other words, there is a contrast in motion between slow-fast, although of unequal lengths; Tower introduces the fast moving motion about two thirds of the way from the start. Each melodic character – that is, the musical behavior of somewhat static against energetic, slow against fast pace – is never over-stated to create boredom, nor are they overly intense in the melody; rather, they seem to complement each other. Long-note values in the melody are gradually replaced by shorter ones, including the use of triplets and quintuplets, without providing a sense of abruptness or incoherence. All these happen naturally in Tower's music.

Tower's admiration of Beethoven's creativity in musical construction, in particular the balancing of musical elements, is evident. She once claimed that, among the many composers from whom she learnt, she has gained much advantage from learning the musical construction of Beethoven. She said: "Beethoven is certainly the more important composer for me because of his incredible strong sense of architecture; every phrase – within a larger phrase, within a section, within a movement – is tightly balanced and motivated" (TOWER; NEULS-BATES, 1996: 354). Tower called it "balancing of musical energies" (GROLMAN, 2007: 37).

In music, balance is a concept that is difficult to define. The term is often referred to phrase structure that can be found in traditional music, especially in the Classical period, in which logically-connected phrases should be placed together to balance one another. For example, in a melody that is in a traditional two four-measure halves, one often finds the second half is the complement to the first half, sometimes calling for a tonic finish. The term has also been explained as melodic structure or a formal scheme that is associated with symmetry. In Meyer's *Explaining Music*, he writes that, "in symmetrical melodies, the relationship between successive events is such that one event *mirrors* the patterning of another" (MEYER, 1973: 174).

For Joan Tower, the notion of balance involves pitch, rhythm, register, and structural level. She remarks that, to “balance something, one has to know and understand what is being balanced – which really means identifying the main feature (or ‘itness’) of any given passage, which is dependent on its environment for its identification” (GROLMAN, 2007: 30). Here, in her Quartet No. 2, although the violin is employed as the leading voice that plays the opening theme, the idea of balance is extended to the arrangement of the four parts in the music; it is as if they are having a dialogue among themselves. In other words, the accompanying instruments are not strictly assigned to the viola and cello; each instrumental part takes up different roles. Such a musical concept is also promoted in Schumann’s string quartets. He argues that string quartets should resemble a four-way conversation; in a proper string quartet “everyone has something to say”; it is, by turns, a “beautiful and even abstrusely woven conversation among four people” (DAVERIO, 1997: 248).

Similarly, there are moments where a chain of tie-notes alternate between violins, creating a sense of forward moving momentum, recalling the musical handling of chained suspensions found in the passages of Arcangelo Corelli’s trio sonatas. An example is Corelli’s Trio Sonata Op. 3, No. 2 (Grave) (Example I).

Grave.

Violino I.

Violino II.

Violone,
e Organo.

6 5 6 5 4 5

6 # 6 5 4 6 2 5 # 6 6 9 6

Example I: Corelli’s Trio Sonatas, Op. 3 No. 2 (mm. 1-9).

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Those passages demonstrate two violin parts that complement each other, giving an aspect of Baroque musical treatments. An example is at measures 13-27 (Example 2).

♩ = ca. 58 rit. (♩ = ca. 42) (rit.) Subito ♩ = ca. 50

(cresc.) f broadly ff appassionato ff appassionato

poco più mosso (♩ = ca. 108) marc. marc. accel. poco a poco

Example 2: Tower's String Quartet No. 2 (mm. 13-27).

At times, speedy running notes and repeated pitch patterns alternate between instrumental groups (eg. violins against viola and cello); this creates not only a flow in the music, but also stresses the balance of sounds and the equal role of the instruments. Tower clearly has a good sense of balancing her music.

Apart from thematic connection, motives are also used to provide unity to the composition. Throughout the music, motivic materials are often taken from the opening ideas. The primary and most obvious motivic material of the quartet is derived from the first four notes of the opening theme, G6-F#6-G6-F6, (Example 3) (pitch references are based on the Acoustical Society of America standard: middle C = C4).

$\text{♩} = \text{ca. } 40$

Violin I *pp sost. ed espr.* *poco cresc.*

Violin II

Viola

Violoncello

poco più mosso ($\text{♩} = \text{ca. } 48$) *a tempo* ($\text{♩} = \text{ca. } 40$) *accel.*

p *pp espr.* *cresc. poco a poco* *pp cresc. poco a poco*

Example 3: Tower's String Quartet No. 2 (mm. 1-12).

Tower once mentioned: “the starting ideas provide the fuel for the form of the piece,” and further explained that “I learned long ago that the beginning idea is very minimal, and it’s what you do with the idea that makes the piece. After all, the opening motive of Beethoven’s Fifth [Symphony] is quite trivial, but look at what Beethoven does with it! The context is everything for me; it shapes the idea and is the strength of the piece” (TOWER; NEULS-BATES, 1996: 354-355). Although each appearance of the motive may vary in pitches, rhythms and note-values, Tower keeps its melodic contour. Thus, it is easily followed throughout the music.

Tower’s quartet is not without allusion to the techniques or styles of others, but these references and techniques are presented in a new light. Indeed, her fascination with traditional musical idioms is evident. One aspect of the musical techniques used here reminds one of invertible/double counterpoint that is most often found in the music of the Baroque era. Traditionally, invertible counterpoint involves inversions of two parts in a polyphonic texture. It can occur at various intervals, most often the octave. Invertible

counterpoint flourished and achieved its height in J. S. Bach's *Art of Fugue*. In Tower's quartet, beginning at measure 388, the musical material and idea, such as fast running notes based on an octatonic scale (G-G#-A#-B-C#-D-E-F-G), which had been in the first and second violins, is now in the viola and cello, creating a kind of "textural inversion". Although some alterations are made in the musical contour and material, Tower keeps the action of changing the voices (Example 4).

poco più mosso

385

389

392

Example 4: Tower's String Quartet No. 2 (mm. 385-392).

Constant changing of ideas in texture and rhythmic activity are also significant in this piece. "I try to choreograph a landscape of sound that reaches people in an emotional, visceral, and formal kind of way. The 'formal' being the sense of coherence of this landscape," she explains (DUFFIE; TOWER, 2001). Indeed, Tower's music never fails to communicate. In addition, she once remarked that, as a composer, she always remains true to herself; she listens to herself and follows her own direction:

I like to think that my landscape has a shape. I know pretty much when it's done because I work very hard on the whole sense of a contour and a shape - a beginning, middle and end. My music is very organic and I won't make a move unless I feel that it's going somewhere and has arrived somewhere and is finishing from somewhere. So I do have a sense of endings, beginnings, and middles. At least I work on that (DUFFIE; TOWER, 2001).

She also claims that a piece of music has its own personality. "I really think if you listen to it, a piece of music starts to have its own personality. You have to listen to it and let it guide you. That takes a lot of patience and discipline to be able to respond to that in a sensitive way" (DUFFIE; TOWER, 2001).

Although, the music is linear in design, there are moments when melodic lines and "block chords" are juxtaposed, creating a sharp contrast. It clearly generates part of the compositional writings of the work by Stravinsky, such as *The Rite of Spring*. The fact is that, throughout her compositional career, Tower has been exposed to various musical styles, apart from traditional classical training at a young age. For example, her *Throbbing Still* (2000) reminds one of impressionist texture found in Maurice Ravel's *Jeux d'eau*. Nevertheless, in an interview Tower remarks that the scale and rhythm found in her *Throbbing Still* are derived from Bartók's *Constrast* (JEOUNG, 2009). Tower also admits to the influence of Stravinsky in the rhythmic aspects in her *Concertos for Flute, Clarinet, Violin and Piano* (AMERICAN RECORDS GUIDE, 1997).

In addition, some of Tower's musical ideas in her compositions are inspired by pre-WW II and modernist composers. "About the sixties, I hooked up with the uptown group – the Babbitt group, the serialists – and I was very involved for about ten years from 1962-1972," she said (TOWER; NEULS-BATES, 1996: 347). For example, her *Prelude for Five Players* (1970) is influenced by serialism; she employs the idea of twelve-tone set structure. Her *Breakfast Rhythms I* (1974) also shows the influence of serialism. Groups of notes in fragmentation in her *Black Topaz* (1976) bring to mind *klangfarbenmelodie* and pointillistic techniques. According to Tower, the rising fourths idea used in the theme of *Silver Ladders* (1986) was derived from Schoenberg (CRUTCHFIELD, 1987). "The passage [which contains ascending fourths in Schoenberg's *Chamber Symphony* in E major, op. 9] always had a great impact on me when we played it, and so those ascending fourths are all over my music," she explains (TOWER; NEULS-BATES, 1996: 354).

According to Tower, beginning from the 1970s she discovered the music of Oliver Messiaen and George Crumb and became heavily influenced by them. Indeed, her compositional styles began to move toward more tonal, Messiaen-like sonorities. She once claimed that after hearing Messiaen's *Quartet for the End of Time* (1940-1941) and Crumb's *Eleven Echoes of Autumn* (1965) she began to change her musical perspective. She recalled that these two pieces were "the most gutsy piece[s] I had heard in a long time" (PASLES, 1995). Tower has also written a number of works paying homage to composers such as Messiaen (*Très Lent*) in 1994, as a tribute to Messiaen's *Quartet for the End of Time*, to Beethoven (Piano Concerto No. 1) in 1985, Stravinsky (*Petroushskates*) in 1980, and Copland (*Fanfare for the Uncommon Woman*) in 1987-1992. Indeed, she absorbs different musical styles and develops her own musical language.

In this quartet, apart from her favorite use of chromatic and diatonic scales that can be found in many of her compositions, Tower once again draws our attention to her interest in octatonic scales. She claims that using octatonic, chromatic and whole tone scales is like "deciding whether to use bricks, marble, stone, wood, tile, or glass to build a house" (GROLMAN, 2007: 29). Moreover, in the quartet, Tower employs a technique that she calls "motivated music," that is, "working on the energy line of a phrase, of an action, of a motive" and explains that it is "music that has a motivation rather than music that is just constructed" (GROLMAN, 2007: 30-31). Here, octatonic scales first appear as sixteenth-running-notes and are saturated throughout the music, especially in the fast sections. On most occasions, fragments of an octatonic scale are first introduced in a musical event and slowly accumulate their significance as the music progresses. A clear example can be seen at measures 84-108 where Tower uses an octatonic scale with pitches: G - A - B flat - C - D flat/C# - E flat/D# - E- F# - G (Example 5).

This is a quality that also can be readily found in her earlier works such as her String Quartet No. 1 "Night Fields" (1994), *Or like a...an Engine* (1994), and *Ascent* (1996).

Tower's music demands virtuosity. In her *Ivory and Ebony* (2009), for example, a pianist describes his personal experience as he "was enmeshed in episodes of speedy, Bartokian complexity and fortissimo Lisztian dazzle. It is the kind of work that sounds as if it required more than 10 fingers, not to mention the agility to shift quickly between styles" (KOZINN, 2011). Here, at times, the music may present challenges to performers. In addition to fast running notes, a melodic line is often presented in alternation between quintuplets and sextuplets against its counterpart in triplets, giving complex rhythms.

83 $\text{♩} = \text{ca. } 92+$

93

103

Example 5: Tower's String Quartet No. 2 (mm. 83-108).

Minimalist repetition, to some extent, also finds its way into Tower's music. Of her String Quartet No. 4 "Angels" (2008), Kozinn writes that "it was as if Ms. Tower were using the building blocks of Minimalism to create a score of decidedly non-Minimalist

complexity" (KOZINN, 2011). Such a repetitive technique also can be seen in her early pieces such as *Snow Dreams* (1983) and *String Quartet No. 1 "Night Fields"* (1994).

In her *String Quartet no. 2* Tower's typical repetition does not emerge until the first fast section. Like many of her typical compositions, the music sounds minimal; it is based on the repetition of limited musical materials. Nevertheless, unlike some musical examples of traditional minimalist repetition composed by La Monte Young, Steve Reich and Terry Riley, the repeated notes here tend to cumulate tension, generating forward movement and goal direction in the music. Such moments are particularly significant in the fast sections. Tension in the music gradually builds in a fast section through long stretches of repeated ideas and released right before its following slow section. To an extent, the "tension-resolution" handling reflects the earlier, traditional concepts of musical form. Despite the textural difference between the fast and slow sections, the music flows smoothly from one section to another.

In recent years there has been increasing discussion by musicologists such as Kenneth Gloag, Jonathan D. Kremer, and Timothy D. Taylor about musical space in relation to the temporal relation of sounds that are most commonly associated with the characteristics of postmodernist music; however, with Tower, one witnesses experiments with spatiality through pitch register as a musical event in its own unique manner. To her, music is very much like a dance. "You have an action and a reaction and it can be a physical action that's located in a particular space... or [it can be] low, middle or high... The spatial-physical reactions are very closely related...between dance and music" (GROLMAN, 2007: 31). Vincent McDermott explains that there are many dimensions to musical space and claims that spatial organization is used as a partial description and explanation of the structure of a composition: "every pitch, timbre, dynamic, every group of tones, every formal intricacy, every durational emphasis, even every rest – in sum, everything about a piece of music – contribute in some manner, substantially or only slightly, to the spatial organization of the work" (McDERMOTT, 1972: 491). Musical space can also be created by using volume and dynamics as "background" and "foreground". To a degree, however, pitch register of a high and low distinction may provide a sense of space and it is with regard to this aspect that Tower uses pitch register as a means to experiment with musical space in her music and to provide a listening experience.

Here, in the quartet, there are times when the music is divided into upper and lower ranges, with the first violin in the high pitch register and the rest of the strings in the lower ranges, creating a sense of high and low pitch range distinction between them.

Nevertheless, such an audible effect is achieved not without a careful design. Example 6 demonstrates how the pitch register space is created and becomes obvious and distinct with the first violin gradually moving upward to higher pitches; whereas the rest of the instruments remain in the lower pitch range. Indeed, the musical space is less obvious if the pitches used are within an octave.

33

39

43

dim. poco a poco

dim. poco a poco

dim. poco a poco

dim. poco a poco

Example 6: Illustration of Musical Space.

Moreover, the distinction of space is made clearer when less rhythmic activity is employed in the instruments that contain sustaining lower pitches.

Since the late 20th century composers such as Libby Larsen, Ellen Taaffe Zwilich, John Adams, Michael Daugherty, Daniel Benard Roumain and many others have increasingly written music that fuses jazz, blues and pop with art music. These composers have certainly helped pave the development of art music. Tower argues that the boundaries among classical, folk and pop music should be further broken down (DUFFIE; TOWER, 2001). "I think there's a power of music that goes beyond style that is very, very important. I think these distinctions between classical, folk, rock, jazz, electronic, are a little bit strong", she said (OTERI, 2005). This engagement also suggests her interest in composing music that contains pop idioms. Nevertheless, it is debatable how far this influence extends.

In her quartet, there are no obvious musical events apart from her favor for off-beat stresses and syncopation that can be drawn from the pop musical culture. Nevertheless, the rhythmic vitality in Tower's music can also be connected to her experience of percussion instruments at a young age while living in La Paz. "In all we lived in South America for nine years, from 1947 to 1955, ... that experience has had a lot to do with my music", she explains. "...when I lived in La Paz, my nursemaid... loved to go to festivals and used to take me with her... I would be given some percussion instrument to play, like the maracas or the claves, and I would dance, too. So that's when I developed a love for rhythm, which later became the basis of my music, and percussion and dance. Actually, I now call myself a choreographer of sound" (TOWER; NEULS-BATES, 1996: 344). Indeed, some of Tower's musical characteristics owe much to her experience at a young age in Bolivia, Chile and Peru. Thus, one witnesses the energetic and strong rhythmic drive in her music.

Conclusion

Tower presents her quartet by drawing on a wide range of musical techniques, styles, ideas and her own experiences. She not only seeks to make an individual, stylistically consistent statement, but also explores something new in musical idioms. Indeed, Tower is clearly looking for different ways of presenting her music.

Indeed, Tower creatively employs musical ideas based on the concept of binary opposition. In the composition, the concepts are presented through: (1) the division of short-long length in the structure; (2) the musical behavior of static versus energetic; (3)

slow against fast pace; and (4) a clear division of upper and lower ranges of pitch register.

While her compositions use binary oppositions and thus can be a challenge to the audience in their listening experience, her musical language nevertheless also presents a synthesis of musical techniques and ideas. This is achieved by the use of musical elements and idioms such as minimalist-like repetition, pop-like rhythmic vitality, rondo-like structure, and Baroque musical style. Such synthesis demonstrates the diverse influence of 20th century music on the composer. As a result, the composition is not only delivered with originality but also with great clarity.

Throughout the composition there are several compositional strategies that contribute to the coherence of the music. One is the use of a traditional notion of thematic and motivic connections. Their identities are well established in the music. Another is the rondo-like formal structure; it ties together all musical events and ideas. Moreover, musical ideas are carefully organized to create forward movement and direction in the composition.

Tower's music certainly shows distinctive musical quality. She found everything she needed from the past and in the present. The rondo-related procedure employed in the composition demonstrates Tower's flexibility in applying a traditional form in a new context. Indeed, she does not ignore conventional musical handlings; instead, she represents them in something new, together with her own musical language. It is also not surprising that Tower communicates with her listeners through traditional musical writing that is familiar to most listeners.

Along with other musical explorations, Tower carefully organizes a sufficient balance among individual voices and their virtuoso display. In addition, she experiments with the aspect of high-low pitch register to create spatial quality in music, producing a different type of musical experience. Throughout the composition, the presentation of the repetition makes the music sound both familiar to and yet also different from minimalism. This highlights a very typical style of Tower. Indeed, her musical composition and styles have been marked as one aspect of musical development in the early twentieth-first century and will continue to attract the interest and attention of listeners.

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