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Béla Bartók, George Crumb and Steve Reich.

An analysis of their works for two pianos and percussion,
with an emphasis on the use of rhythm and percussion instruments.

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Abstract

In this essay the author analyzes three important works written for two pianos and percussion from a perspective of a percussion player. The three pieces include Béla Bartók's *Sonata for Two Pianos and Percussion*, George Crumb's *Music for a Summer Evening (Makrokosmos III)* and Steve Reich's *Quartet* for two pianos and two vibraphones.

The analysis will focus on the parallels between pianos and percussion, the impact these compositions had on development of percussion instruments and the musicians behind them, as well as the importance of rhythm in music.

Introduction

Piano has a long history of composers trying to push the limits of this instrument further. However, percussion has fairly recently been discovered to be a possible medium for not only simple orchestral background. Nowadays, the chamber and solo repertoire for percussion develops rapidly, and the possibilities of this group of instruments are still not fully comprehended.

The basic concept of any percussion instrument is that one must strike two things together to produce a sound. Many consider the piano to be a percussion instrument precisely because of its mechanics of sound production, where the hammers are striking the strings.

Another common aspect of the nature of these instruments is the resonance. Both are able to control the attack and the length of the sustain, but unlike wind or string instruments they are not capable of affecting the sound throughout its sustain. Such characteristics have influence on the focus of musicians playing them, a focus then set on articulation, rhythm, and dynamic.

These parallels between piano and percussion are one of the reasons that so many composers became interested in exploring the collaboration of these instruments and the musicians behind them. Eventually it became expected of both pianists and percussionists to be capable of adapting to the unconventional techniques and experimental settings of contemporary pieces due to the high interest of modern composers.

In this essay, the author will analyze three important works written for two pianos and percussion from a perspective of a percussion player. The analysis will focus on the historical importance of the pieces, the aspects in which pianos and percussion complement each other, as well as the development of the approach to writing for and playing percussion instruments..

The essay will be divided in three parts, discussing *Sonata for Two Pianos and Percussion* by Béla Bartók, *Music for a Summer Evening (Makrokosmos III)* by George Crumb, and *Quartet* for two pianos and two vibraphones by Steve Reich. Each of these pieces is a unique representation of this chamber ensemble setting.

Chapter One:

Béla Bartók, Sonata for Two Pianos and Percussion

About the composer

Béla Viktor János Bartók was born on March 25, 1881 in Nagyszentmiklós, a Banatian town in the Kingdom of Hungary. Having been taught music by his mother, Paula, Bartók started playing piano and composing at an early age. He played his first public recital at the age of 11, at which he performed one of his own compositions written two years earlier.

Bartók's music in its originality and unique style contains many influences gathered throughout his life. He and Zoltán Kodály shared a mutual fascination with folk music. After meeting at the Royal Academy of Music in Budapest, they spent a lot of time researching the old Magyar folk melodies. Contrary to the beliefs of their contemporaries, the discovered music of Magyar was not similar to Romani music. Rather, the bases in pentatonic scales put it closer to the Asian traditions. Bartók found similar synthesis in Bulgarian music, which fascinated him with odd dance rhythms, asymmetrical phrases, and unusual harmonies. But perhaps he was able to find the most appeal in folk music's "absence of sentimentality and exaggeration of expression,"¹ as he described in his essay from 1944.

In his legacy we can find the assimilation of two distinct sources: Eastern folk music and Western European art. The most prominent influences from Western Europe are undoubtedly Richard Strauss's increased chromaticism and loosened tonality, as well as, and perhaps even more importantly, Liszt's thematic transformation in larger works and innovative piano technique. Claude Debussy was another very strong influence on Bartók's writing, as his music combined Western techniques and forms with the "exotic elements of the East."² Debussy's

¹ B. Bartók: *Béla Bartók Essays*, London: Faber and Faber 1976, "Hungarian Music" (1944), p.395.

² H.A. Simons: *Béla Bartók's Sonata for Two Pianos and Percussion*, a doctoral dissertation, University of Alberta 2000, p.10.

character in composing had a great effect on Bartók's style of *Night Music*, a genre represented in the second movement of the *Sonata for Two Pianos and Percussion*.

Bartók, like many composers before and after him, held a deep admiration for Bach and the baroque style, especially polyphonic works. The edition of *Das Wohltemperierte Klavier*, which he authored in 1907, shows that he studied in depth contrapuntal techniques of canon, fugue, and the ways of thematic transformation such as inversion, augmentation, and diminution.

Many prominent composers of the nineteenth century were writing folklore-inspired pieces, but Bartók was not convinced by, nor satisfied with, the superficial knowledge and use of the genre. His deeply investigative studies discovered the pure form of it and greatly contributed to the development of the ethnomusicology.

Bartók's strong focus with folk music lie with rhythm. He classified three types, which he later used in his compositions. He called the first *parlando rubato*, which is a free style where rhythm is based in accents of the spoken language. The second, which he called *tempo giusto*, is based in dance, in rigid character and set in regular meters. The third, the dotted rhythm, included patterns of dotted rhythmical figures.³

Bartók embraced all that could become an inspiration to his own work. In a January 10th, 1932 letter to a Romanian ethnomusicologist, he wrote:

My own idea (...) - of which i have been fully conscious since I found myself as a composer - is the brotherhood of all peoples, brotherhood in spite of all wars and conflicts. I try - to the best of my ability - to serve this idea in my music: therefore I don't reject any influence, be it Slovakian, Rumanian, Arabic, or from any other source. The source must only be clean, fresh, and healthy.⁴

Another strong impact on Bartók's work was the collaboration with Igor Stravinsky, Darius Milhaud, Paul Hindemith, Ferruccio Busoni, and members of the Schoenberg circle. In

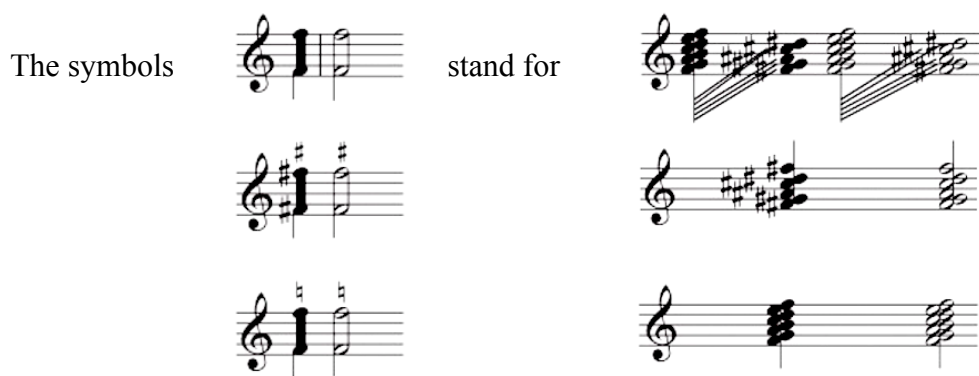
³ B. Bartók: *Béla Bartók Essays*, London: Faber and Faber 1976, "Harvard Lectures" (1943), p.383-384.

⁴ B. Bartók: *Béla Bartók Letters*, New York: St. Martin's Press 1971, letter to Octavian Beu (1931), p.201.

1922 (Salzburg), they created the Internationale Gesellschaft für Neue Musik (International Society for Contemporary Music (ISCM)), which actively exists to this day, connecting artists from around the world. The organization promotes contemporary music, and throughout its existence it has premiered many of the most prominent contemporary compositions, including the *Sonata for Two Pianos and Percussion* in 1938.

In 1923, Bartók had a chance to meet Henry Cowell during an ISCM event in London. This acquaintance strongly affected Bartók. A lot of aspects of Cowell's writing was highly innovative, and Bartók asked Cowell for permission to use his tone cluster technique (Example 1.1.).

Example 1.1. Henry Cowell, explanation of clusters.



Henry Cowell was a pioneer in seeking new sound effects, including treating the piano as a harp or a percussion instrument. Perhaps it was Cowell's huge fascination with percussiveness and rhythm that partially inspired Bartók's instrumentation in the Sonata.

As Bartók soon realized, the choice of the ensemble was more ahead of his time than he could expect. The piano parts were challenging, and to this day it is not easy to find pianists willing to take on this task. However, the percussion parts appeared to be the most troubling for the contemporary musicians of Bartók's time. The piece is originally written for two percussionists, but Bartók was anticipating a possible change in a letter to Paul Sacher: "(...) if

two percussionists are not enough, a third performer may perhaps also be needed, so that the “quartet” may turn into a “quintet”.”⁵

The first performances in Europe posed different challenges, mainly caused by the level of preparation and ability of the percussionists. Sonata was first performed in 1938 by Bartók himself on the piano, playing alongside his second wife, Ditta Pásztory. Fritz Schiesser and Philipp Rühlig were the percussionists from the Swiss section of the ISCM in Basel and they became a sort of prototype for the future percussion players who would take on the piece that year with Bartók and Ditta. It was only after the Bartóks travelled to different places and planned on hiring local musicians in each city that one understood just how well they had prepared. The next performance was in Luxembourg, where they had to perform with a conductor leading four percussionists. The concert in Budapest that year was close to being canceled due to the percussionists failing to stay together. They finally managed to perform under Ernest Ansermet as conductor. The trip to Italy was especially challenging, because the Bartóks had to play on unmatching pianos and with a conductor and six underprepared percussion players. After these experiences, one might find such a note on the front of the score: “(...) one of the pianists should lead the whole ensemble. In addition, he should supervise the percussion players during rehearsal and see that the requirements of the score are strictly observed.”⁶

One must understand that this Sonata was the very first piece written for such an ensemble and one of the first chamber works which included percussion. At this point in the history of Western music, no such thing as a percussion solo repertoire had ever existed. The most common experience a percussion player of Bartók’s time had was playing in an orchestra where the technical and musical demands were much less than those of the Sonata. This piece posed obstacles for the percussionists at levels they had never experienced, since Bartók put equal importance on the percussion parts as on the pianos. In his essay *About the Sonata for Two Pianos and Percussion* from 1938 he wrote:

⁵ Ibid., letter to Paul Sacher (1937), p.562.

⁶ B. Bartók: *Sonata for Two Pianos and Percussion*, New York: Boosey & Hawkes 1942, p.2.

These two percussion parts are fully equal in rank to one of the two piano parts. The timbre of the percussion instruments has various roles: in many cases it only colours the piano tone, in others it enhances the more important accents; occasionally the percussion instruments introduce contrapuntal motives against the piano parts, and the timpani and xylophone frequently play themes even as solos.⁷

Percussion instruments are featured as soloists, often melodic, whereas piano's rhythmic role has been expanded and treated as percussive equals.

Analysis

Sonata for Two Pianos and Percussion was commissioned by the Basel Kammerorchester in 1937 and written in three movements:

1. *Assai lento - Allegro troppo*
2. *Lento, ma non troppo*
3. *Allegro non troppo*

The first movement is in sonata form with an introduction and an extensive coda replacing the recapitulation. The second movement is written in ABA song form. The third, final movement is a combination of a rondo and a sonata form.⁸

The instrumentation of the piece includes two pianos and an array of orchestral percussion, including:

- 3 Timpani (although most modern performances include four)
- Xylophone
- Side drum with snares
- Side drum without snare
- Cymbal suspended

⁷ B. Bartók: *Béla Bartók Essays*, London: Faber and Faber 1976, "About the Sonata for Two Pianos and Percussion" (1938), p.417-418.

⁸ Ibid.

Pair of Cymbals

Bass Drum

Triangle

Tam-Tam

To this list Bartók adds a description of detailed techniques and different mallets to be specifically used according to his instructions:

The Bass Drum is to be played with a double-headed stick.

The Triangle is to be played (a) with the usual metal beater; (b) with a wooden stick; (c) with a short, but rather heavy, metal beater; each according to the indications in the score.

The Cymbal is to be played (a) with an ordinary timpani stick; (b) with the heavy end of a side drum stick (marked in the score “col legno” or “c.l.”) —here the Cymbal should be struck either on the edge or, if indicated, on the dome in the centre; (c) with a thin wooden stick; (d) with the blade of a pocket-knife or some similar instrument. The sign “a2” indicates that two Cymbals should be clashed.

The Side Drums, either with or without snares, are to be played with the usual sticks. If, however, the Side Drum with snares, should sound too loud, thinner sticks may be used especially in mezzoforte, piano and pianissimo passages (the same as those mentioned above in (c) for the cymbal). The snares of the Side Drum should be release when the instrument is not in use, to prevent vibration.⁹

All of the above comments show the very thorough nature of Bartók’s research and observatory skills as a composer and a performer. It shows a will to strive for perfection, and an understanding of the dilemmas the performer might face when reading a score. Up to this point in the history of percussion, composers rarely indicated anything beyond what instrument they wanted to be played, in what rhythm and dynamic. However, Bartók concerned himself with not only the tool that would be used for striking, but the placement on the instrument, possible problems with balance in sounds, and even the noises caused by the vibration of the snares from the drums. This shows a knowledge and expertise not seen up to this point in the music of most composers.

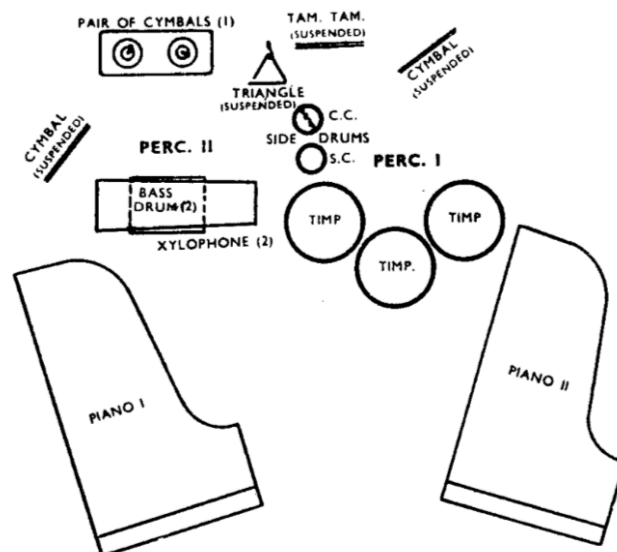
⁹ B. Bartók: *Sonata for Two Pianos and Percussion*, New York: Boosey & Hawkes 1942, p.3.

Another important aspect is the choice of two pianos. The idea of combining the rhythmic nature of the piano with melodic aspects of percussion came to Bartók much earlier, but his original thought included one piano. An article written before the premiere in Basel quoted:

For some years now I have been planning to compose a work for piano and percussion. Slowly, however, I have become convinced that one piano does not sufficiently balance the frequently very sharp sounds of the percussion. That is why I changed my mind and included two pianos instead of only one in contrast to the percussions.¹⁰

While paying attention to such details, Bartók also included a diagram which suggests the set up of the stage (Example 1.2.).

Example 1.2. Béla Bartók, Sonata for Two Pianos and Percussion, stage plan.



This plan acknowledges the difficulties of the logistics which percussionists face when dealing with complicated pieces, where they have to play multiple instruments and share them between different players (e.g. the side drums and triangle played by Percussion I and Percussion

¹⁰ B. Bartók: *Basler National Zeitung*, (January 13, 1938), Über die Sonata für Zwei Klaviere und Schlaginstrumente [About the Sonata for Two Pianos and Percussion].

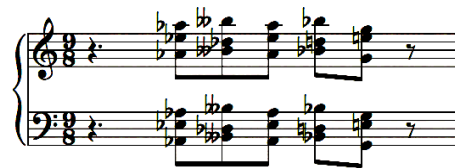
II have to be placed in such a way that fits both musicians). It also shows an awareness of the acoustic balance by placing melodic percussion instruments in front of the non-melodic.

For a more detailed analysis, the material below will be divided in three parts.

1. Assai lento - Allegro troppo

The piece begins with a slow and mysterious introduction by solo timpani blending into the first slow octaves in piano. The beginning is very quiet, but anxious, highly chromatic material with sudden and extreme interruptions of cymbal, and hectic passages in the pianos. The build up in tempo and volume, colored by added Tam-Tam, leads to an *Un poco più mosso* section, where the timpani beats a steady eighth-note rhythm while the pianos present motives which will become the themes of the upcoming sonata form (Examples 1.3. and 1.4.).

Example 1.3. Béla Bartók, Sonata for Two Pianos and Percussion, movement I; mm. 18; Piano I.



Example 1.4. Béla Bartók, Sonata for Two Pianos and Percussion, movement I; mm. 21-22; Piano I, Piano II.



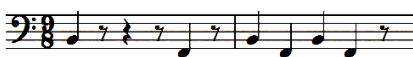
The final accelerando and crescendo before the upcoming *Allegro molto* feature a reoccurring rhythmical motive played in canon (Example 1.5.). This motive will become the rhythm of the first, principal theme of the first thematic group.

Example 1.5. Béla Bartók, *Sonata for Two Pianos and Percussion*, movement I; mm. 26-28; score.



An interesting observation on this rhythm comes from János Kárpáti in his book *Bartók's Chamber Music*, where he describes the influence of Bartók's fascination with folk rhythm on the creation of this theme. By using the 9/8 meter he is simulating the feeling of a Hungarian *asak* ("limping"),¹¹ an effect which slightly stretches the last beat in an even 4/4 meter; when writing this effect, we will get Bartók's division of 9/8, presented in the timpani part (Example 1.6.).

Example 1.6. Béla Bartók, *Sonata for Two Pianos and Percussion*, movement I; mm. 21-22; Timpani.



This ostinato put together with the rhythm of the theme in piano parts creates a perfect counterpoint by filling out all the rhythmical gaps between each other and building up the tension.

These first thirty-one measures can be considered from two perspectives: as an introduction to the sonata form, foreshadowing the themes of the upcoming Allegro section, or as

¹¹ J. Kárpáti: *Bartók kamarazenéje [Bartók's Chamber Music]*, translated by Fred MacNicol and Maria Steiner, New York: Pendragon Press 1976, p.409.

the first part of a four-movement sequence (like the Baroque sonata with four parts (slow-fast-slow-fast), dividing the first movement in two (slow-fast)).

Like the introduction, the exposition of the sonata form starts with solo timpani, this time establishing a rhythmic and bold character. The first theme comes in both pianos in unison, in syncopation with timpani. The pianos always starts on the off-beat, while the timpanist continues the odd *asak* pattern, giving it a forward-motion feeling. The secondary theme of the first thematic group starts immediately after, bringing back the chromatic eighth-note melody from the introduction (Example 1.7.), while keeping a clear relation to the first theme with the off-beat rhythm played on side drums.

Example 1.7. Béla Bartók, Sonata for Two Pianos and Percussion, movement I; mm. 41-43; score.

Both materials are combined and put together throughout the exposition, with the xylophone accentuating the melodic aspects, side drums the rhythmical, and timpani the harmonic. The themes intertwine while Bartók manipulates them in inversion, imitation, and transposition.

The second theme comes in a new tempo *Un poco più tranquillo*. It has a more mysterious character with juxtaposing parts of the pianos. The melody in Piano I, with its irregular rhythm, creates a rubato effect, while Piano II provides a steady background with an eighth-note ostinato (Example 1.8.).

Example 1.8. Béla Bartók, *Sonata for Two Pianos and Percussion*, movement I; mm. 84-86;
Piano I, Piano II.

The image displays a musical score for two pianos, Piano I and Piano II, from Béla Bartók's *Sonata for Two Pianos and Percussion*, movement I, measures 84-86. The tempo is marked 'Un poco più tranquillo, ♩ = 104'. Piano I is marked 'p dolce' and features a melodic line with irregular rhythms. Piano II features a steady eighth-note ostinato. Percussion symbols are shown below the Piano II staff.

The section starting at mm. 105 is a codetta and a transition concluding the exposition, with an interesting rhythmical illusion of a duple meter through the process of dividing the measures in dotted half-notes going over the bar-line.

The beginning of the development puts together a nine-note theme of the introduction with the first theme of the exposition, at first using timpani and percussion for the mostly rhythmic role, and as the development continues, employing the timpani and xylophone as melodically and harmonically leading instruments.

The recapitulation abbreviates the first thematic group and does not feature either themes in its original form. The second theme appears in inversion, as well as in canon, combining the original and inverted form. An extensive coda follows, built on the material from the codetta. The dotted rhythm is developed in a *fugato* beginning, featuring thematic material in both pianos and two side drums.

Treatment of rhythm and manipulation of the metric feeling throughout this movement is one of the most interesting features of Bartók's musical language. The duality present in Bartók's writing also appears in the juxtaposition of duple and triple groupings, adjacent to or against each other.

2. *Lento, ma non troppo*

This movement is an example of *Night Music*, a style in which the composer focuses on the sound and color, often imitating nature in its nocturnal mood. From a technical perspective, it is used most often in slow movements, in tonally and rhythmically ambiguous and irregular settings.

Bartók describes the movement as a "simple song form, ABA."¹² The introduction is an atypical percussion duet exploring sounds of side drums and cymbals. Worth mentioning is Bartók's use of different parts of the instruments; each note indicates which part of the head of the drum or the cymbal should be struck. The beginning is calm and soft, and the alternating use of duple and triple meters gives the melody in piano I the effect of movement without a meter. The role of percussion instruments in this part is primarily for sound effects.

An interesting aspect of this movement as an example of *Night Music* is Bartók's use of his instincts and knowledge to portray different characters while using the same melodic material. After a long build up from both pianos and a tam-tam, he uses a xylophone, which with its high register and bright articulation perfectly accentuates the culmination and ecstatic feeling. When the music calms down, timpani takes over the repetitive quintuplet motive. The sound of this instrument, with its often ambiguous pitch recognition, gives it a mysterious and haunting color.

The next section brings metric stability, but the fast groups of quintuplets and sextuplets (also written in combined groups of ten and twelve) bring a more anxious feeling.

¹² B. Bartók: *Béla Bartók Essays*, London: Faber and Faber 1976, "About the Sonata for Two Pianos and Percussion" (1938) p.417-418.

The last section is extended by a coda, in which the quintuplet motive appears again, passed between Piano II, timpani, and side drums. The rhythmic augmentation of this melodic motive in Piano II and xylophone finishes the movement (Examples 1.9. and 1.10.).

*Example 1.9. Béla Bartók, Sonata for Two Pianos and Percussion, movement II; mm. 85-87;
Piano II, Timpani.*

*Example 1.10. Béla Bartók, Sonata for Two Pianos and Percussion, movement II; mm. 88-90;
Piano II, Timpani, Percussion.*

3. *Allegro non troppo*

The third movement, set in a sonata-rondo form, is a hybrid combining features of both forms. The principal theme is presented in xylophone and timpani, with the pianos providing the hocketing background. This movement requires both percussionists to come together as one when both parts continuously intertwine, as well as when the logistics require constant cooperation from both players (such as picking up cymbals for the other player, or turning snares on and off when the other needs to continue with their part). The movement goes on rapidly and both percussionists have to rely on one another for support.

The theme could be used as an example of the *tempo giusto* style, with its regular meter and rigid but dance-like character. Rhythmically and metrically this movement is, by comparison, more straight forward and simple in character than other movements. However, the material is in constant movement and imitation between both pianos and percussion instruments, which fill up the rhythmical gaps between them. The movement starts off energetically and fades away during the coda, creating an unexpected and even surprising ending with the pianos' sustained chord, while snare drum with cymbal (the latter played “with the fingernail, or the blade of a pocket knife, on the very edge”¹³ for a more gentle effect than if hit with a regular stick or a triangle beater) slowly and rhythmically disintegrate and disappear dynamically (Example 1.11.).

Example 1.11. Béla Bartók, Sonata for Two Pianos and Percussion, movement III; mm. 413-420; Percussion.

The musical score for Percussion I and Percussion II from Bartók's Sonata for Two Pianos and Percussion, movement III, measures 413-420. Percussion I (Perc. I) plays Cym. (cymbal) with a series of notes, some marked with 'pppp'. Percussion II (Perc. II) plays S.D.c.c. (snare drum with cymbal) with a series of notes, some marked with 'calando'. The score ends with a first ending bracket labeled '1. 16'.

¹³ B. Bartók: *Sonata for Two Pianos and Percussion*, New York: Boosey & Hawkes 1942, p.96.

Conclusion

Bartók's *Sonata for Two Pianos and Percussion* is a milestone in writing for percussion. It showed and directed growing possibilities of chamber music and percussion instruments, as they were known at the time. This piece is still often performed, and it will never cease to be a challenge for musicians. It requires a thorough analysis and chamber music skill from the percussionists, as well as virtuoso playing from both pianists. It has become a staple in the percussion repertoire and an inspiration for composers to come.

The quality of Bartók's writing in this piece is beautifully portrayed in the words of Haley A. Simons, who references Bartók's own idea of art connecting people regardless of their origin:

The "brotherhood" of influences is one of the most astounding features in the Sonata for Two Pianos and Percussion. In this work we witness a remarkable collaboration of sources and influences gained throughout Bartók's life and synthesized into what has been called the "Makrokosmos" of his entire career.¹⁴

This is what we see in so many artists who came after Bartók and were shaped by his music. He became an infinite source of inspiration, and one can already say that his art has passed the test of time, becoming an influence for all to come.

¹⁴ H.A. Simons: *Béla Bartók's Sonata for Two Pianos and Percussion*, a doctoral dissertation, University of Alberta 2000, p.16.

Chapter Two:

George Crumb, Music for a Summer Evening (Makrokosmos III)

About the composer

George Crumb was born on October 24, 1929 in Charleston, West Virginia. Raised in a musical family, Crumb was exposed to music as a listener and a player from an early age. His family cultivated the tradition of chamber music at home. His first lessons were on clarinet and piano, but through his father's encouragement Crumb found his way into composition. Crumb admits that living in an Appalachian river valley had a huge impact on his understanding of music from the sense of hearing he developed there.¹⁵

Crumb received his Bachelor of Music degree in composition from Mason College in 1950, and after studying with Eugene Weigel at the University of Illinois, he earned his Masters of Music in 1952. He then worked with Ross Lee Finney, an award-winning American composer at the University of Michigan, where he received his Doctor of Musical Arts in 1959. The times Crumb spent with Finney allowed him to continue to develop his own unique style of compositional techniques, score notation, create new soundscapes, etc., while studying works of composers such as Bartók, Bach, or Stravinsky. After moving to Boulder, Colorado, Crumb was introduced to a pianist, David Burge, for whom he composed the famous *Five Pieces for Piano*. That time strongly defined Crumb's style and technique.

In 1971, Crumb started his work on another piece for David Burge, this time for amplified piano entitled *Makrokosmos*; volume I was completed in 1972 and volume II the following year. A piece in five movements titled *Music for a Summer Evening*, for two amplified pianos and percussion, was finished in 1974 and forms the third volume of *Makrokosmos*. The fourth volume, for amplified piano and four hands, was completed in 1979, which completed the tetralogy.

¹⁵ E. Strickland: *American Composers: Dialogues on Contemporary Music*, Bloomington: Indiana University Press 1991, p.163.

Music for a Summer Evening is a perfect example of all the traits of George Crumb's music. A lot of his pieces, as the composer himself describes, have a "mosaic design,"¹⁶ a synthesis of contrasting stylistic elements combining musical quotation, tonality with atonality and paratonality, exploration of unusual timbres (by adding exotic instruments or exploring extended techniques on more traditional instruments), unique style of notation, and a composition frequently based on cells and sets with present symmetry and numerological importance.

The piece was commissioned by the Fromm Foundation. It premiered at Swarthmore College, Pennsylvania in 1974 by pianists Gilbert Kalish and James Freeman, and percussionists Raymond DesRoches and Richard Fitz. The piece is set in five movements:

1. *Nocturnal Sounds (The Awakening)*
2. *Wanderer-Fantasy*
3. *The Advent*
4. *Myth*
5. *Music of the Starry Night*

The third movement is divided into two parts, with the second half subtitled *Hymn for the Nativity of the Star-Child*. The fifth movement, the longest one in the piece, has two subtitles; after the first section, a very short fragment is titled *The Fivefold Galactic Bells*, and the last part of the movement is called *Song of Reconciliation*.

The first, third, and fifth movements are larger in size and instrumentation; they define the primary import of the work. Each carries poetic quotations, and in the liner notes for the recording of his piece Crumb wrote that he had these quotations in mind while sketching the piece.¹⁷ The movements in between are almost like intermezzos, much more confined and dream-like.

¹⁶ G. Crumb, G. Kalish, J.D. Freeman, R. DesRoches, and R. Fitz: *Music for a Summer Evening (Makrokosmos III)*, New York, N.Y: Nonesuch Records 1975, program notes in CD booklet.

¹⁷ Ibid.

The instrumentation of the piece, like the title of the *Makrokosmos*, is an homage to Béla Bartók (especially to his piano pieces *Mikrokosmos* and his *Sonata for Two Pianos and Percussion*), who greatly influenced Crumb early on. The setting of two pianos and percussion (with highly extended instrumentation) gives the composer significant space for coloristic innovation and creativity. Crumb decided to amplify the pianos for the effect it brings to all of the resonant sounds and colors he achieves through use of extended techniques. He does not use the same percussion instruments as Bartók, but rather extends it to an arsenal of traditional and exotic sounds. The instrumentation includes:

3 Japanese temple bells	Variety of tam-tams
2 maracas	Glass wind chimes
Variety of cymbals	Detached cymbal to be placed on a timpano
Claves	3 wood blocks
2 Sleigh bells	Glockenspiel
Large timpano	2 slide whistles
Metal thunder sheet	Crotales
Quijada	Log drum
Bass drum	2 tom-toms
Bongos	Sistrum
Tibetan prayer stones	Bell tree
Alto recorder	Tubular bells
Xylophone	Vibraphone
Bamboo wind chimes	5 temple blocks
Jug	2 triangles

Both pianists are also required to play percussion instruments in the fourth movement, which involves: detached crotales, guiro and mbira (alto African thumb piano) placed on a timpano.

This extended list is combined and enhanced with a variety of special effects produced by pianos which are often treated as percussion instruments. The techniques include covering strings with paper, production of harmonics, pizzicato playing, muted tones, etc. In addition, both percussionists and pianists are required to produce vocal sounds, such as whistling, singing, shouting, etc.

The set up, on a large scale dictated by the composer, also plays a very important role in the piece. As Crumb remarked, “to play [...] is to perform a kind of choreography. [...] I love to see a performance rather than just hear a recording.”¹⁸ Especially with this piece, a performer must be concerned with moving from instrument to instrument and pay attention to how each sound should be produced visually, since it is all a part of the grand effect.

For a more precise understanding, the analysis will be presented by movements.

Analysis

1. Nocturnal Sounds (The Awakening)

“I hear ephemeral echoes, oblivion of full night in the starred water”

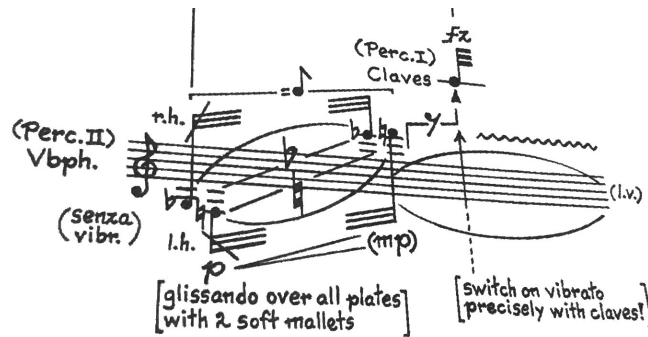
- Quasimodo

The movement starts with sparse gestures in pianos divided by motives in percussion, alternating combinations of Japanese bells with tam-tam and bowed vibraphone, and maracas with bamboo or glass chimes. This part requires an in-depth knowledge of the score since each gesture is perfectly connected to the others. The timing of this movement might feel ambiguous for the listener; however, as with the entire score, Crumb notates every note with exact precision. The section develops and leads to a glissando in the vibraphone. Notation of this part (Example 2.1.) shows the knowledge and expertise Crumb gained in the percussion field. The directions are

¹⁸ E. Strickland: *American Composers: Dialogues on Contemporary Music*, Bloomington: Indiana University Press 1991, p.169.

very specific and show an understanding of the instrument, as well as the purpose and intention behind each expression and indication.

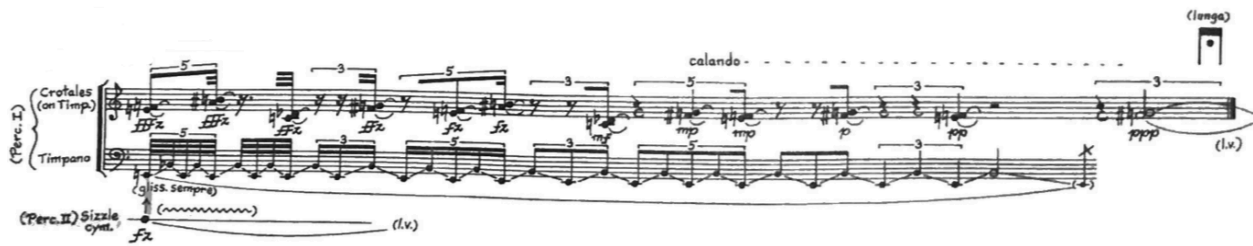
Example 2.1. George Crumb, Music for a Summer Evening, Nocturnal Sounds (The Awakening); p. 8; Percussion.



This gesture starts a more agitated, rhythmic character. While the pianists play fast, polyrhythmic passages, the percussionists accent the rhythmicity with wood blocks and temple blocks that lead up to an even more agitated xylophone solo accompanied by an almost blurry passages in piano I and vibraphone, and with sudden interjections in Piano II. With density increasing in pianos and vibraphone, Crumb thickens the texture with sleigh bells. The passage ends with a simultaneous stroke in pianos and a large tam-tam. The approximately 7-second rest lets the listener hear the built up sound come and go together in a mass of color and resonance.

The movement ends with two strokes of vibraphone and glockenspiel extended with short gestures in the pianos. The last chord played by the pianos, a whole-tone cluster, resonates with a sizzle cymbal and dies away with a very intricate sound of crotales placed on a timpano, struck with metal beaters while using the tuning pedal to change the pitch of the resonance (Example 2.2.).

Example 2.2. George Crumb, *Music for a Summer Evening, Nocturnal Sounds (The Awakening)*; p. 10; Percussion.



2. Wanderer-Fantasy

The second movement starts and ends with both percussionists playing mystique-sounding callings on slide whistles directed into the pianos (with pressed pedals), which help the melodies resonate. This part is quite challenging, especially for percussionists, due to the choice of instrumentation. The melody for the slide whistles is expected to be performed precisely, pitch- and rhythm-wise, and the range of both melodic lines is extensive for an average slide whistle. After finding a proper whistle capable of reaching all the notes, one might have to prepare it to be able to find the exact pitches at a moment's notice.

The middle section is for two pianos, with a direction from the composer: “as from afar, gently wafting.”¹⁹ Even though this part is notated without a meter, the passages and rhythms are often in smaller or larger groups of five. Even the last rest, before the recapitulation of the slide whistles, is notated as approximately five seconds.

3. The Advent

“The eternal silence of infinite space terrifies me”

- Pascal

¹⁹ G. Crumb: *Music for a Summer Evening: Makrokosmos III*, New York: C.F. Peters Corp 1974, p. 11.

This movement is divided into two parts played *attaca*; the second is subtitled *Hymn for the Nativity of the Star-Child*. Both parts show special importance to numbers four and five. The beginning is notated in 15/8, with each measure divided into three groups of fives.

Ostinato in both pianos consists of an eighth-note movement with special effects on each downbeat like scrapes, glissandi inside the piano, and a semi-melodic line using pizzicato on off-beats. Almost the entire melodic and harmonic material in this part consists of fourths and fifths. After five measures, the percussion joins with cymbal, thunder sheet and tubular bells playing the interval C-G five times, each lasting five eighth notes. This build up leads to *fffz* chords in pianos, and *ffz* tam-tam hits (using three tam-tams simultaneously) held for approximately 15 seconds (Example 2.3.). After the resonance fades away, a slightly altered build up repeats.

Example 2.3. George Crumb, *Music for a Summer Evening, The Advent*; p. 12; score.

In the following section, strokes in glockenspiel and vibraphone trigger a series of quickly repeated intervals of fifths in both pianos. The sound transitions from bright and sharp to ghostly and echo-like. The ending references the first movement with the percussionist playing a tremolo on a cymbal placed on a timpano with glissando effect.

The character of the *Hymn for the Nativity of the Star-Child*, the second part of the movement, is described by the composer as “solemn, fateful.”²⁰ The melodic material consists of chords built on fourths and fifths, and is exchanged between the pianos in over-the-strings glissandi. Each presentation of the melody is divided by four-second rests and develops more with each exposition. The next entrances are enhanced by a strong sound of tubular bells and vibraphone, doubling the melody in intervals of fourths. These cells of melody are interrupted by the material from the first part of this movement, with glockenspiel and crotales triggering repeated intervals in both pianos.

The density of this part increases with each presentation of the melody, adding more simultaneous layers often in different keys. Towards the end, both percussionists join their voices to sing a chorale of the melody, underlining the spiritual character of this movement. One part is particularly interesting for Percussion II, where the player must play in one tonality, in unison with Piano I, and sing at the same time in a different tonality, in unison with Piano II (Example 2.4.).

Example 2.4. George Crumb, *Music for a Summer Evening, The Advent*; p. 15; score.

The musical score for Example 2.4, George Crumb's *Music for a Summer Evening, The Advent*, page 15, is a complex orchestral and vocal work. It features multiple staves for piano, percussion, and voices. The piano part includes glissandi and chords. The percussion part includes tubular bells and vibraphone. The vocal part includes a soprano and two voices (I and II) singing a chorale. The score is marked with various dynamics and performance instructions.

Key elements of the score include:

- Piano:** Multiple staves showing glissandi and chords. Dynamics include *mp*, *ff*, *f*, and *mf*. Instructions include "gliss. (f.t.)", "gliss. (f.n.)", and "gliss. (f.n.) come sopra".
- Percussion:** Includes tubular bells and vibraphone. Dynamics include *ff*, *f*, and *mf*. Instructions include "gliss. (f.n.)", "gliss. (f.n.)", and "gliss. (f.n.) come sopra".
- Vocal:** Includes a soprano and two voices (I and II) singing a chorale. Dynamics include *mf*, *f*, and *mf*. Instructions include "gliss. (f.n.)", "gliss. (f.n.)", and "gliss. (f.n.) come sopra".
- Other:** Includes instructions like "depress silently", "secure with PII.", "PII. sempre", "sing", and "Vibraphone".

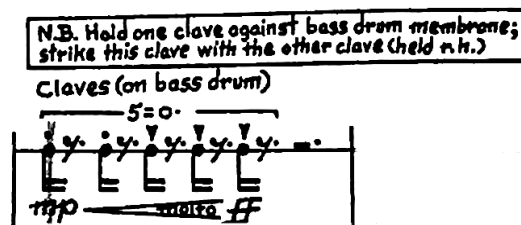
²⁰ Ibid., p. 14.

The movement finishes with the theme rapidly disintegrating and dying away.

4. *Myth*

This movement focuses on percussion effects, especially exploring the raw and more untamed side of it. In fact, the only use of the piano is when it is struck on the inside with a beater, or a suspended crotale is dropped directly on the strings. The movement is strongly based on symmetry, and most of the rhythmic groupings, like in the previous movements, focus around number five. The form, when looked at the percussion parts, is symmetrical in its entirety, with some changes in sounds and specific notes. The character is very pagan and even ritualistic, and it is illustrated with sounds of exotic and unusual instruments, such as quijada (donkey jaw bone), log drum, jug (with bend pitch), sistrum, Tibetan prayer stones, mbira (played on a timpano), and vocally produced groaning sounds, and spoken (or shouted) syllables. Crumb achieves one of the very interesting colors (which sounds exotic but comes from common instruments) by placing one clave on a head of a bass drum and striking it forcefully with another, combining the sharpness of a clave with depth and resonance of a bass drum (Example 2.5.).

Example 2.5. George Crumb, Music for a Summer Evening, Myth; p. 16; Percussion.



This movement resembles a kind of ceremonial experience. The sorts of effects, such as moaning and shouting, require the musician to step out of the comfort zone and become a performer. Crumb also pushes the abilities of all musicians by asking them to play unusual

instruments which require studying and practicing various techniques; for example, playing an alto recorder or mbira (African thumb piano).

5. *Music of the Starry Night*

“And in the nights the heavy earth is falling from all the stars down into loneliness. We are all telling. And yet there is One who holds this falling endlessly gently in His Hands.”

- Rilke

The last movement is the most extended one. It starts with a very bright and majestic gesture between piano I and crotales which will reoccur throughout the movement. This part is very fragmented, with short and forceful motives and cells divided by long rests. The three strokes of Piano II with crotales appear again, echoed by Piano I and a rhythmic and dynamic build up in xylophone on a single pitch - high B. The figure in the xylophone resembles a motive from Bartók’s concerto for orchestra, where the composer creates a natural accelerando by gradually shortening the rhythmic values. The xylophone’s crescendo is unresolved and dropped; the resonance of the color is enhanced by very soft glissandi inside the pianos and a barely audible tam-tam stroke.

After a long rest, Piano II quotes a fugue by J.S.Bach (Fugue VIII from Volume II of the *Das Wohltemperierte Klavier*), which should sound “like a ghostly-surreal harpsichord.”²¹ The “surreal harpsichord” effect is achieved by placing a sheet of paper over the strings inside the piano, and the ghostliness is accomplished by a “dream-like echo”²² of the vibraphone played with a pedal pressed down and a slow vibrato throughout. The quote reappears two more times in slight alterations juxtaposed between the imitative fast passages in the pianos.

Following a long (approximately 13-second) rest, Crumb separates a very short part titled *The Fivefold Galactic Bells*, which consists of two chords, each approximately seven seconds long, played by joined Piano II and crotales in unison. Each stroke brightly resonates and helps

²¹ Ibid., p.18.

²² Ibid.

creating a transition to the last part of the piece - the *Song of Reconciliation*, which Crumb notates as “Joyous, ecstatic; with a sense of cosmic time.”²³

This part is in 7/8, in a tempo close to one second equal to one eighth-note. One should notice the importance of number seven throughout, as well as the ever-present number five. The eighth- and sixteenth-note patterns in both pianos start on the second beat of each measure, in groups of five (or ten respectively). On top of this ostinato, a slow and mesmerizing melody appears in the vibraphone, doubled by a soft whistle and echoed with bowed crotales enhanced by whistling. The harmony in this part is more stationary; the ostinato is present throughout in an almost unchanged form, but the development comes from the texture and the volume. Small figures are added sporadically in pianos, and when the xylophone comes in with the main motive all the parts respond imitating with build-up intensity. The motives consist of groups of five, six, and seven, and one might hear a clear influence of Bartók’s second movement of *Sonata for Two Pianos and Percussion* with the odd-rhythm motion in pianos paired with the xylophone (Example 2.6.).

Example 2.6. George Crumb, *Music for a Summer Evening, Music of the Starry Night*; p. 23; score.

The image shows a page from a musical score for George Crumb's 'Music for a Summer Evening, Music of the Starry Night', page 23. The score is for Piano I, Piano II, Percussion I, and Percussion II. It features complex rhythmic patterns, including eighth and sixteenth notes, and dynamic markings such as sfz, sf, and ppp. The score is written in 7/8 time and includes various performance instructions and musical notations.

²³ Ibid., p.20.

When both pianos and Percussion II (xylophone) intensify the development, Percussion I creates the background of different sonorities, from tubular bells to cymbals, tam-tams, bell tree, glockenspiel, and crotales. When seen during a live performance, one realizes the meaning of a choreographed piece with this part especially; a percussionist needs a dance-like, planned movement to be able to execute all the notes in the right time.

The sound of glass chimes brings this very intense build up to a finish, and the percussion II moves from the xylophone to vibraphone. With the ostinato still present, the tension decreases with mystical-sounding chords in Piano I and vibraphone. The melody doubled by a gentle whistling sound reappears yet again, partially imitated in the bowed crotales.

The ending breaks down the melody and ostinato almost completely, and the figure with three Japanese bells is brought back once more from the beginning of the first movement. The piece finishes when the resonance of a bowed tam-tam, and the two soft chords on pianos die away.

Conclusion

Music for a Summer Evening has pushed the boundaries of writing for percussion to the world unknown to us before Crumb's time. To this day it is a one of a kind piece which expands the horizons of any percussionist or composer who encounters this music. The sounds and techniques in Crumb's music come from the past, the present, and perhaps sometimes from the future. This universal embrace of diverse resources comes across as a music that combines various techniques and soundscapes from so many different elements and approaches. It eventually creates something so unique that one could not mistake it for anyone else's writing. Everything about this piece is evocative: the harmonic language, sounds and colors, notation, titles, and poetry that speaks throughout. Every piece of this mosaic has a specific purpose and meaning. Crumb made all of the decisions thoughtfully and with very specific intention. One can only try to analyze it more and more in depth, but still know that this only touches the surface.

Chapter Three:

Steve Reich, Quartet

About the composer

Steve Reich was born on October 3, 1936 in New York City. He began his music education with piano lessons, and later learned percussion and drums. Reich graduated from Cornell University with a Bachelor in Philosophy and a minor in music. In the following years Reich studied music at Juilliard and privately, eventually earning a master's degree in composition from Mills College (California), after studying under Luciano Berio and Darius Milhaud. During his studies at Mills College, Reich was exposed to West African drumming and Balinese gamelan, which had a huge impact on his compositional style and taught him to think outside of the boundaries of Western Music. In later years he sought out native teachers to learn more of these traditions and their music.²⁴

While living in California, Reich worked with the San Francisco Tape Music Center, a cultural studio for performance and education, where he met and befriended Terry Riley. Riley was the author of *In C*, a piece often considered to be the first example of minimalism in music, and one of the first to be based so strongly in pulsation and repetition of patterns. The people Reich met at Tape Music Center inspired his early works, which were created by looping tape recordings. The first such work was called *Meet Walter in Union Square after Listening to Terry Riley*, originally titled *It's Gonna Rain* (1965).

It's Gonna Rain is also an example of a technique which became a staple of Reich's early compositions; namely, phasing. Richard Taruskin describes the phasing process as involving "identical tape loops feeding into two speakers or headphones [which] go in and out of phase with one another (or more precisely, out and back into phase)."²⁵

²⁴ R. Taruskin: *Oxford History of Western Music Volume V: Music in the Late Twentieth Century*, New York: Oxford University Press, Chapter 8 "A Harmonious Avant-Garde?"

²⁵ Ibid.

By writing about going “in and out of phase,” Taruskin explains the moment when both identical recordings are played at steady, but slightly different tempi, which first leads to an echo-like effect, then the doubling of a part with each sound repeated twice, and eventually coming back to a part-time unison. This compositional technique first found its use in electronic music and was later applied in instrumental-acoustic pieces such as *Piano Phase* from 1967, where both pianos repeating the same patterns continue to go in and out from each other’s pulse.

In *Clapping Music*, a piece composed in 1972, Reich presents a pattern of twelve eighth notes and rests. This pattern shows the influential role of Western African traditions in Reich’s music. The pattern presented below alongside a Yoruba clave rhythm reappears on many occasions in his later compositions (Example 3.1.).²⁶

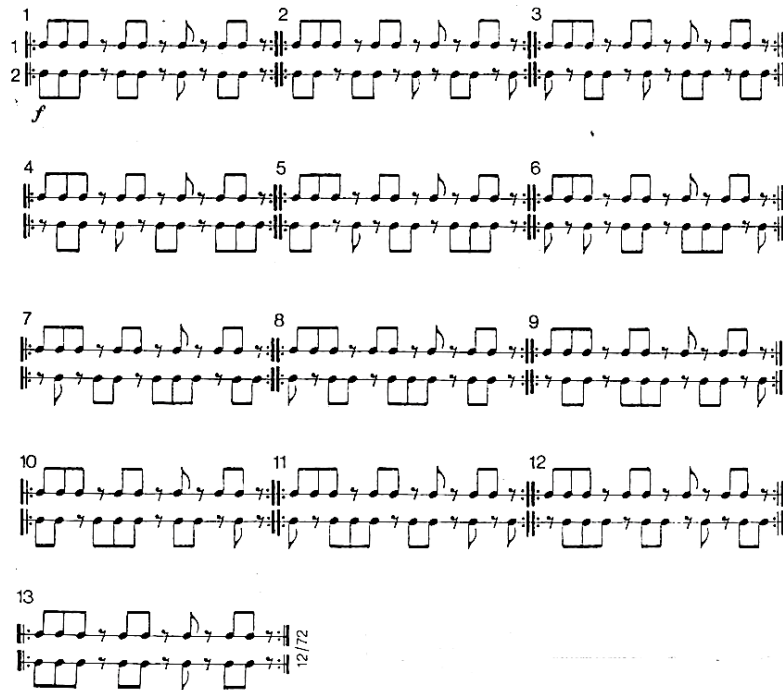
Example 3.1. Pattern comparison; Reich’s pattern vs. Yoruba clave.



In *Clapping Music* Reich presents twelve phases of this phrase (Example 3.2.), but by skipping the gradual speed up, he jumps directly to the rendering of patterns in canon. In each transition one of the voices jumps one eighth-note ahead. The piece circles from two parts played in unison, through each stage of misalignment, and finally returns to both voices back in unison.

²⁶ M. Pękala: *Postminimalizm w muzyce kameralnej na przykładzie wybranych kompozycji. Problemy wykonawcze i interpretacyjne* [Postminimalism in selected chamber music works with focus on difficulties relating to performance and interpretation], a Doctoral Dissertation, Warsaw: Fryderyk Chopin Music University 2013, p.77.

Example 3.2. Steve Reich, *Clapping music*; score.



The compositional techniques of Reich's writing have become the main focus of his music. Each piece going through one or several of these procedures creates the effect as a goal in itself. As Reich explains in his essay *Music as a Gradual Process* from 1968, the key point is for the listener to be able to observe these procedures clearly and through listening only:

I am interested in perceptible processes. I want to be able to hear the process happening throughout the sounding music.

To facilitate closely detailed listening a musical process should happen extremely gradually.

Performing and listening to a gradual musical process resembles: pulling back a swing, releasing it, and observing it gradually come to rest; turning over an hour glass and watching the sand slowly run through the bottom; placing your feet in the sand by the ocean's edge and watching, feeling, and listening to the waves gradually bury them.

(...) What I'm interested in is a compositional process and a sounding music that are one and the same thing.²⁷

²⁷ S. Reich: *Writings on Music (1965-2000)*, Oxford University Press 2004, "Music as a Gradual Process" (1968).

This brings us to the core of minimal music, the gradual processes. Most of the time, the developments in this style of music happens very slowly and gradually. The performer becomes a machine, allowing the processes to happen through them without much interference, and the listener can observe the unfolding of it, often experiencing a trance-like feeling.

In his essay, Reich later explains that “while performing and listening to gradual musical processes one can participate in a particular liberating and impersonal kind of ritual. Focusing in on the musical process makes possible that shift of attention away from he and she and you and me outwards towards it.”²⁸

By pointing to “it,” Reich suggests that the composer and the performer are often times, like the listener, just the observers of “the process.” In contrast to so many Classical Western composers, his music was never intended to be a personal expression of emotions or in any way conventionally expressive at all.

Another key point of focus in Reich’s compositional style is the exploration of rhythm. In the summer of 1970 Reich travelled to Ghana on a grant from the Special Projects division of the Institute of International Education. The main purpose of the trip was to study the musical culture of that region. In the following year, Reich finished a piece called *Drumming*, which became one of his most important compositions because it combined and consolidated so many characteristics of his style. The piece is in four movements and it uses an array of percussion instruments (tuned bongos, marimbas, glockenspiels) combined with voices and piccolo flute. The piece explores African polyrhythms based on a 12/8 cell pattern, reminiscent of an African bell pattern, and connects them with compositional tools which Reich created.

Other than phasing, we can see more characteristics common in Reich’s music, such as a gradual build up of patterns note-by-note. This technique appears in the very beginning of *Drumming* (Example 3.3.) and in many compositions to follow.

²⁸ Ibid.

Example 3.3. Steve Reich, *Drumming, Part I*; score.



With time, the music of the fathers of minimalism started to transition away from the strictness of the style and into postminimalism. During the last few decades, postminimalism in music appeared in many different ways, and it is difficult to categorize it as a specific style or genre. However, a good way to understand postminimalism is to observe it as a development of minimalism, as a growth away from limitations and in a direction to gain more emotional expressiveness, harmonic diversity, and more diverse forms.²⁹ Through works such as the *Counterpoint* series (1982, 1985, 1987, 2003), *Sextet* (1984), *Daniel Variations* (2006), *Double Sextet* (2007), *Mallet Quartet* (2009), *Quartet* for two pianos and two vibraphones (2013), *Pulse* (2015), and more, we can gradually see the development of a much more unrestrained genre. The compositions written by Reich in recent years are still recognizable to a lay listener; his musical language is very distinct, but the works have become much more free and less obvious.

Even though Reich moved away from the rigors of his own creation, as did other minimalist composers, the ideas behind minimalism are still present. To comprehend the new works, one must examine the background of the composer and the style itself. Only through

²⁹ J. Bernard: *American Music* (vol. 21, No. 1, 2003), “Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music”.

understanding the origins of Reich's writing, can one recognize where the current compositions are rooted.

In the postminimalist period Reich wrote two works worth mentioning in the context of this essay. *Sextet*, written in 1984, is a work of a substantial size consisting of five movements and lasting approximately thirty minutes. The techniques explored in this piece include the aforementioned canons and note-by-note built up of patterns, as well as hocketing, which is a procedure that divides a melody or a rhythm between two or more parts. Reich has used it often and in a variety of ways in his pieces. One of the most recognizable treatments is separating a chord in two and alternating them rhythmically (Example 3.4.).

Example 3.4. Steve Reich, Music for 18 Musicians, Section I; mm. 97; Piano I, Piano II.



This process is present not only in the harmonic background of *Sextet*, but also in the compound melodic canons.

One of the most interesting aspects of this composition is the instrumentation. The piece is orchestrated for four percussionists playing marimbas, vibraphones, and assorted smaller instruments, and two pianists performing on pianos and synthesizers. The setting of percussion and piano alone is quite rare in Reich's works; however, the soundscape is very compatible yet diverse.

The second work which catches the attention of a percussionist is the *Mallet Quartet* from 2009. It is a piece in three movements, scored for four percussionists playing two marimbas and two vibraphones. The movements follow a common sequence for Reich: fast-slow-fast

played without pause (*attaca*). It is Reich's first composition for a five-octave marimba, which for the majority of the work provides harmonic and rhythmic support. The two marimbas provide the minimalist movement with interlocking chords (Example 3.5.).

Example 3.5. Steve Reich, *Mallet Quartet*; mm. 1; Marimba I, Marimba II.

The image shows the first four measures of the Marimba I and Marimba II parts from Steve Reich's *Mallet Quartet*. Marimba 1 is written on a treble clef staff with a key signature of one sharp (F#) and a 3/2 time signature. Marimba 2 is written on a bass clef staff with the same key signature and time signature. Both parts begin with a *mf* (mezzo-forte) dynamic marking. The notation consists of interlocking chords, with notes beamed together in groups of three or four, creating a complex, layered rhythmic texture. The chords are primarily triads and dyads, with some intervals of a fourth and a fifth.

These marimba parts are a great example of the hocketing style common in Reich's music, which creates a rhythmically driven character where the vibraphones take on a melodically leading role. The main compositional technique in this work is the exploration of the canon in two outer movements with "a thinner, more transparent"³⁰ middle movement.

The two pieces mentioned from the postminimalist time - *Sextet* and *Mallet Quartet* - share a lot in common with the composition which will be discussed in more detail below. The instrumentation explored in *Sextet* showed an intricate symbiosis between pianos and mallet percussion instruments. The leading roles of vibraphones and the canonic variations in *Mallet Quartet* set a basis for the compositional processes explored in *Quartet* for two pianos and two vibraphones.

Analysis

Quartet was commissioned by a renown percussionist, Colin Currie, and composed by Reich in 2013. The work is in a typical fast-slow-fast setting to be played *attaca*; however, this is

³⁰ Reich, S.: *Mallet Quartet*, New York/London: Boosey & Hawkes/Hendon Music, 2009, notes.

where the “common” qualities start to disintegrate. This piece is one of Reich’s more complex works for several reasons. His compositional techniques have drifted further away from minimalism, perhaps even further than postminimalism captures. However intricate, this music is still highly recognizable as Reich’s work, since it undeniably bears his musical language.

The vibraphones assume a more leading role in this piece which, excluding percussion concertos, is still very uncommon for percussion instruments. Each vibraphone is paired with a piano and together create a synthesis of sounds by often doubling each other’s parts rhythmically and/or melodically (Vibraphone I with Piano I, and Vibraphone II with Piano II).

The first movement is a very unusual composition for Reich, stepping outside of the world of minimalism or postminimalism. In contrast with previous pieces, Reich does not explore the ideas in a slow and repetitive manner. The motives are frequently split up and the composer often breaks the continuity of the processes to pick up new material. The piece as a whole is perhaps one of the most harmonically complex compositions in Reich’s repertoire; the key frequently changes and the harmonic pairings are just as surprising. The constant metric changes also stand out in this composition; in contrast to his earlier pieces, often written in regular meters, here we can hardly find any patterns.

The canonic techniques in this movement might remind the listener more of an echo that comes out and disappears back again to unison. Reich uses the similarities between the vibraphones and pianos to create a unique blend of sounds. His notation in previous pieces had been minimal with regard to dynamic, articulation and phrasing, but here he uses the potential of different articulations and sustain pedal to develop different color plains.

In the middle section of this movement, Reich creates an interesting stereo effect by letting the motives flow between each vibraphone paired with a piano (Example 3.6.). The use of vibraphone pedals helps the line drift seamlessly between both instruments.

Example 3.6. Steve Reich, *Quartet*; mm. 239-244; score.

The musical score for Example 3.6 shows four staves. The first two staves are for two voices, and the last two are for two pianos. The music features a complex, non-repetitive texture with various rhythmic patterns and dynamics like 'mf' and 'f'.

In a surprising lack of repetitiveness in this work, the substance which flows through the piece is a simple motive from the very beginning of the piece (two eighth-note pick up leading to a sustained chord, (Example 3.7.). This motive, developed throughout the movement and at the end (Example 3.8.), evolves into the material of the last movement (Example 3.9.).

Example 3.7. Steve Reich, *Quartet*; mm. 1-2; score. (movement I, beginning)

The musical score for Example 3.7 shows four staves for Vibraphone 1, Vibraphone 2, Piano 1, and Piano 2. The music begins with a simple motive of two eighth notes leading to a sustained chord, marked with dynamics like 'mf' and 'f'.

Example 3.8. Steve Reich, Quartet; mm. 333-335; Piano I, Piano II. (movement I, ending)



Example 3.9. Steve Reich, Quartet; mm. 494-496; score. (movement III, beginning)



The last chord of the first part is a cluster of seconds B-C#-D-E-F# sustained on pedals to lead without a pause to the slow movement.

The middle section of the piece is an intimate harmonic dialogue between two pairs of instruments: Vibraphone I - Piano I and Vibraphone II - Piano II. Here, as in the other movements, the constant metric and harmonic changes create a challenge in recognizing the direction of the phrases. This process projects a feeling of suspension rather than motion. In Western Classical Music it is common to give guidance to each phrase: forward, upward, downward, etc. By contrast, Reich uses harmonic progressions that are lacking the standard motion of classical harmony with which he creates an unattached, floating character.

The last part of the piece picks up the material from the ending of the first movement. Here both vibraphones come together as one instrument during this rhythmically-driven first half of the movement and lead in a direction of the finale. As the pianos provide hocketing rhythmic and harmonic background (in a similar manner to marimbas in *Mallet Quartet*), the vibraphones take over the canonic variations presenting four different phrases. Each section starts with an exposition from Vibraphone I, followed by a response in canon from Vibraphone II. With each section the canonic delay is shortened: During the first two processes Vibraphone II starts with a dotted quarter-note delay. In the third section it comes a full quarter-note later, and the very last motive is played only an eighth-note apart.

As it is common for Reich, towards the end of the piece the shortened echoed phrases climb up in register and intensity to finally come together at the last, bright-sounding chord (a multiplied interval of A-D with a singular note E in the left hand of Piano I).

Conclusion

To understand Reich's contemporary works one must learn the history of his compositional language. The processes which were once obvious to the listener are now hidden in the backgrounds in new compositions. Reich might have stepped away from the strict ideas of early minimalism, but his writing stayed true to his ideas. The sound of Reich's compositions has been and still is undoubtedly recognizable; he became a composer with his own unique voice. His influence on the world of percussion is incalculable. His fame and close collaborations with world-renown percussionists brought the percussion music out of the background and onto the stages of the largest concert halls.

Final Conclusion

For many years, quartet has been considered an optimal setting for a chamber ensemble. With the innumerable pieces written for string quartets, composers and audiences recognize the potential of an ensemble of this size. A quartet formed by two pianists and two percussionists has a shorter history, but the composers and musicians themselves understand that the possibilities in such a setting are limitless. The diversity of sounds and the infinite colors provided by these instruments are more than worth exploring.

The three pieces analyzed in this essay are musically and historically important; the impact they had and continue to have on performers and listeners is undeniable. These works pushed the limitations of the instruments and the musicians behind them. They also inspired many artists to explore the world of percussion. Current percussion repertoire to this day is very limited due to the short history of concert percussion. Nonetheless, this has motivated percussionists to actively seek collaborations with composers, and in recent years a number of pieces have been added to the repertoire, including works for two pianos and percussion. However, it is possible that they only touch the surface of the possibilities lying ahead and one might only attempt to imagine how new works will affect us in the future.

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