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TRIPTYCH FOR BRASS AND PERCUSSION

A Thesis
Presented to
the School of Graduate Studies
Ouachita Baptist University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Henry Harmon Dempsey
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TRIPTYCH FOR BRASS AND PERCUSSION

Approved:

W. F. McBeth
Major Professor

Robert P. Brewer

William C. Franham

Alex. K. Nisbet

Carl E. Todd
Dean of Graduate Studies

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THE PROBLEMS

A problem involved in writing this piece of music is one which is present in the composition of any selection of music. This problem consists of combining the available material into an ordered, sensible composition. The facing of this problem is much like the artist or sculptor deciding what materials to use on a certain project.

As the artist must know what to combine to achieve certain hues he desires, so the composer must know what sounds he may combine to produce a particular timbre or color effect. The composer has to consider the media he is writing for, and strive to compose music which will sound characteristic of that particular grouping of instruments.

Music for brass instruments is usually characterized by the ability of the instruments to sound very regal and noble. At the same time, brass instruments possess the ability to give very soft and warm sounds. Percussion music, always rhythmic and active, is capable of covering the entire dynamic range from the very softest sound to the very loudest sound. The percussion section is one of the most powerful sections in the orchestra or concert band. When the brass and percussion families are combined, the possibilities for colors and rhythmic expression are almost boundless.

Another problem involved in the writing of music is the problem of deciding the length of the composition. Too many

sections will **be dull** and very tiresome to the performers and listeners, **and too few** will have the same effect. It was felt that **the three** movements which were written would be of sufficient **length** to justify the material that was used in the **composition**.

BACKGROUND

In the repertoire of the modern percussionist, the number of compositions which are worthy of performance is very small. The reason for this lack of repertoire is that the percussion ensemble as a unit itself is a relatively new medium.

In earliest times, the percussion instruments were used as war drums. Crude cymbals added to the cacophony were supposed to inspire and frighten at the same time. In the early Middle Ages, the tympani were scarcely larger than the fist of a man. Cymbals and triangles were known at the time but were never considered as members of even the crudest orchestra. In the late Middle Ages, the tympani accompanied the trumpet, and the snare drum was used to accompany the flute. These early snare drums were of wooden construction, with a gut snare stretched across the lower head. The instrument was used strictly as a delicate rhythm instrument. Also, in the late Middle Ages, we find the tambourine included in concerted music as well as in the music of jugglers and minstrels.

Triangles in this era were often made with four corners. Small rings suspended from the lower limb produced a blurred, but bright, sound.¹

During the Renaissance, one of the most important developments in the field of percussion was the development of the xylophone. This instrument was developed in the East and was used in Germany where it was further employed and improved upon.²

In the Baroque and Rococo periods, the tympani were used in countries other than Germany. Composers in other countries gradually began to recognize the value of the tympani in serious music. Lully was using the tympani in France in 1670, and they often appeared in the scores of Bach and Handel. The tympani were customarily used in pairs, and one was tuned to the tonic of the scale, the other to the dominant. Due to the many screws holding the head in place, rapid tuning changes were hard to achieve so the tympani were left tuned to the tonic and the dominant. Handel, in his Royal Fireworks Music, was the first to employ three tympani.³

¹Karl Geiringer, Musical Instruments (New York: Oxford University Press, 1943), p. 83

²Ibid., p. 112

³Ibid., p. 148

In the Baroque and Rococo periods, the construction of the snare drum was improved by replacing the wooden shell with a stronger metal shell. This gave a clearer sound to the snare drum. The snare drum was still unable to break away from its purely military employment to obtain a place in serious music. In Holland, the xylophone was provided with a clavier-type keyboard, but this development was not justified and soon disappeared.⁴

In the second half of the eighteenth century, the use of the tympani in the orchestra became more and more commonplace. Mozart was one of the first composers to make use of the bass drum, in Il Seraglio, in 1782.⁵ Haydn also employed the bass drum in his Military Symphony in 1794.⁶ It was in this period that Beethoven achieved a mysterious pianissimo effect on the tympani at the end of his Fourth Symphony. In the Romantic period, the tympani underwent some significant structural changes which facilitated tuning. Cranks and pedals were added to simplify the tuning of the tympani. Beethoven was the first to depart from the tuning of tympani in fourths and fifths.⁷ In his Seventh Symphony the tympani

⁴Ibid., p. 151

⁵Ibid., p. 181

⁶Edgar S. Kelley, Musical Instruments (Boston: Oliver Ditson Company, 1925), p. 214

⁷Ibid., p. 191

are tuned in sixths. In the Eighth and Ninth Symphonies, the tympani are tuned in octaves.⁸ In this era, the snare drum was provided with metal threaded rods to replace the cumbersome rope tuning devices. Instruments added to the percussion section since the Romantic period include: tenor drum, gong drum, antique cymbals, musical saw, modern xylophone and marimba, glockenspiel, celesta and typophone. The typophone is similar to the celesta in that it employs tuning forks instead of metal bars.

With such a variety of instruments available, the percussionist found himself with nothing to play in the way of a concerto, sonata or even a simple solo piece. The solo pieces in existence were the rudimental street cadences of the American Revolutionary War.

In the early 1920's the scene seemed to be set for some great change in the world of music. In keeping with the trend toward mechanization in art and music, George Antheil composed Ballet Mecanique in 1924. This composition is a three-part work for four pianos, two xylophones, glockenspiel, tympani, tenor and bass drums, military drums, gong, triangle, cymbal, woodblock, large and small airplane propeller and large and small electric bell. In 1931, Edgar Varese composed Ionisation, a monumental percussion work for thirteen

⁸Geiringer, op. cit., p. 249

performers and thirty-five instruments. This work contains such strange sounds as that of a siren and a lion's roar. Varese noted that the siren could be replaced by a theremin.⁹ In 1936, Bela Bartok composed his Music for Strings, Percussion and Celeste, for chamber orchestra. In 1938, he composed his famous Sonata for Two Pianos and Percussion. In 1942, Carlos Chavez also noted the need for percussion literature and the valuable resources being untapped in the percussion ensemble. He composed Toccata for Percussion Instruments, a work which is heavily shaded with the use of his native Mexican percussion instruments. Also in 1942, Alan Hovahness wrote October Mountain, a work tinged with his Armenian background. By the late 1950's and early 1960's, the percussion ensemble had come into a new world, a world of solo and accompaniment duties. Composers such as Milhaud, Boulez, Stockhausen, Stravinsky and Shostakovitch have helped to give the percussion ensemble prominence.

To bring out the qualities of the percussion section, music must be produced that is specifically intended for the percussion instruments. The author set out to achieve this goal in his composition which is written for brass and percussion instruments.

⁹Joseph Machlis, Introduction to Contemporary Music (New York: W. W. Norton and Company, 1961), p. 629

SIGNIFICANCE

This composition is significant in that it was written specifically for brass and percussion instruments. It is a combination of the potentialities of both groups with neither group dominating the other. The composition is entirely original and makes use of a limited amount of tonal and rhythmic material. It is not an arrangement of a popular tune or an arrangement of some other composer's material.

DELIMITATIONS

This work was written specifically for eleven brass instruments and six percussion instruments. It is three movements in length. This work is further delimited by the fact that the music employs only the sounds of brass and percussion instruments.

CRITICAL ANALYSIS

In the critical analysis of this composition, the formal, harmonic and rhythmic structure of the work is discussed.

Formally, the overall scheme of the composition is like the French overture. Its basic structure is made up of a slow movement, followed by a fast movement, and a final slow movement. The first and third movements are related in tempo and in the use of melodic material. The first

movement gives an impression of solitude, while the third movement gives a more resolved and settled impression. These two slow movements help to set apart the livelier middle section. The first movement could represent one color while the second movement could represent another color, very much in contrast to the first color. The third movement could represent a combination of the two colors, for it is not as somber as the first movement and yet not as active and alive as the second movement. The entire composition presents itself as one picture made up of three different shades of color.

The use of thematic material contributes to the form of the composition. The melody in the first movement by the solo trumpet is always present in the composition. It is either stated in an inverted manner or fragments of the melody are used. Although the melody is never stated outright in the second or third movements, portions of it are present in these two movements.

Formally, the first movement is made up of four sections which may be referred to as AAA¹B. The first two sections, which are comprised of measures one to eleven and measures twelve to nineteen, are almost identical, except for the accompanying harmonic figures. The third section, measures twenty to twenty-eight, is a variation of the original section which leads to the B section. The B section,

measures twenty-nine to thirty-two, is in reality a coda. The form of this movement is more easily identifiable because of the repetition of the melodic figures.

The second movement deals with the development of a fragment of the melody of the first movement in its inverted form. The melodic fragment is stated at the beginning of the movement and is subsequently employed in two different ways. A pyramid of sound, built on perfect fourths, is employed to introduce the first section of development in measure thirty-one. The harmonic material which is used after the quartal pyramid antiphonally contrasts the orchestra bells, xylophone, muted trumpet and trombones. The quartal pyramid is used again to introduce the second developmental section in measure forty-five. A variation of the melody is developed in the trumpets, with frequent interjections by the percussion instruments. In this section, the percussion instruments are given an extended break in which some of the rhythmic material from the first measure of the movement is developed. The original melody, harmonized poly-chordally, is stated after the percussion break beginning in measure sixty-seven. After this section, the quartal pyramid, in shortened form, is used to introduce a four bar coda at measure seventy-six.

The third movement follows the style of a chorale. The fragment of the melody which is employed in this

movement is found to be stated in the orchestra bells. The basic structure of this movement is ABA. This movement is given formal strength through the varied dynamic levels which occur throughout the movement. At the end, the dynamic level is increased to a loud climax.

This composition is considered to be conservative, harmonically, because of the predominant use of tertian and quartal sonorities. The first movement uses quartal sonorities and tertian sonorities. The technique of using quartal harmony is a refreshing change from pure tertian sounds. These quartal sounds do not tend to demand any sort of commonplace resolution, but they are not so unrestful as to be unpleasant. Persichetti says that the quartal sonority is one which is ambiguous. In chord progressions, these sonorities may be easily combined with tertian sonorities.¹⁰

In the closing fourteen bars of the second movement, polychordal harmonies are used to give harmonic contrast to the simple harmonies of the first part of the movement. The first of these polychords is major-major; that is, two major triads are joined by a major second. The polychordal material which precedes is primarily a mixture of major-major and ~~minor-minor~~ polychords. Minor-minor polychords consist of ~~two minor~~ triads joined by a major second.

¹⁰Vincent Persichetti, Twentieth-Century Harmony (New York: W. W. Norton and Company, 1961), p. 94.

The composer considers the third movement to be the most interesting, harmonically. In this movement, both dynamics and a method of tension and release are used to lead the movement to a dramatic ending. A chart of the final twelve measures of this movement is included in the Appendix. This chart gives a comparison of the dissonance level and the dynamic level of these final measures. The chord analysis is based on the system developed by Dr. Howard Hanson in his book, Harmonic Materials of Modern Music. The system employs a code of six letters which enables the analyst to classify any combination of tones. The six letters in the code are P, M, N, S, D, T. The letters P, M, N, represent the intervals which are commonly considered to be consonant. The letter P represents the perfect intervals in a sonority. The letters M and N represent major and minor thirds. The letter S represents major seconds, the letter D represents minor seconds, and the tritone is represented by the letter T. Numerals following the letters indicate the number of those intervals present in the sonority. The number of consonant intervals is indicated by the top numeral of the fraction-like figures and the number of dissonant intervals is indicated by the bottom numeral of the figures. Measures are indicated by the broken line at the top of the chart. Each heavy vertical blue line represents one chord. There may be any number of chords occurring in a measure. On the graph,

a line which is marked by the figure, "0", indicates the division between consonant and dissonant intervals. The figures which give the number of consonant intervals in a particular chord are added together and a point is placed on the graph above the line of division to indicate the level of consonance for that chord. The figures which give the number of dissonant intervals in a particular chord are added together and a point is placed on the graph below the line of division to indicate the level of dissonance. Each square of the graph indicates a unit of consonance or dissonance.

The second movement of the composition is the most active rhythmically. There is constant shifting of meters involving the meters of four-four, three-four, and two-four. Most of the rhythms in this movement are influenced by jazz rhythms. Rhythmic vitality is considered to be one of the characteristics of American music. Jazz rhythms have had a great effect on this rhythmic vitality. The percussion breaks in the second movement give a feeling of an implied three-four meter moving through the basic pulse of a four-four meter. Starting in measure sixty-two of the second movement, a cascading effect is achieved when the snare drum plays a group of six eighth notes, the large tom-tom enters one and one-half beats later with a group of six eighth notes and the tympani enters one beat later with a group of

six eighth notes. This rhythmic stretto is made more effective by the use of dynamic crescendos. The percussion break section is an example of rhythmic contrapuntal writing. A composition for percussion instruments comes to new life because the instruments are capable of any dynamic contrast desired. When written in a contrapuntal manner, each separate line can be readily distinguished. Also present in this movement is a driving ostinato pattern from measure twenty-two to measure thirty, in the piano and tympani which supports the music played by the remainder of the instruments in the ensemble. This driving rhythm is a characteristic of Baroque music and lends itself well to the building up of tension and rhythmic life in the music. This rhythmic drive of the ostinato figure helps to create a feeling of movement and unrest. Dissonant ostinato is a device which is used quite frequently by contemporary composers. Examples of this device can be found in the music of Dmitri Shostakovitch and Howard Hanson. This device may be compared to the music usually played by the ripieno section of the Baroque orchestra which was responsible for providing the driving force for the rest of the orchestra. In the modern idiom, the dissonant ostinato device helps create a movement toward a point of resolution. This device is not necessarily complementary to the harmonic scheme being played by the rest of the group; hence the name dissonant ostinato.

In **summary, this composition** was influenced by jazz, rhythmically. **The composition** was influenced harmonically by devices **used by contemporary composers**. In form, the **composition was influenced** by the French overture.

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APPENDIX

First time, mp. → * 1.
 Second time, mp-ff. → 4.

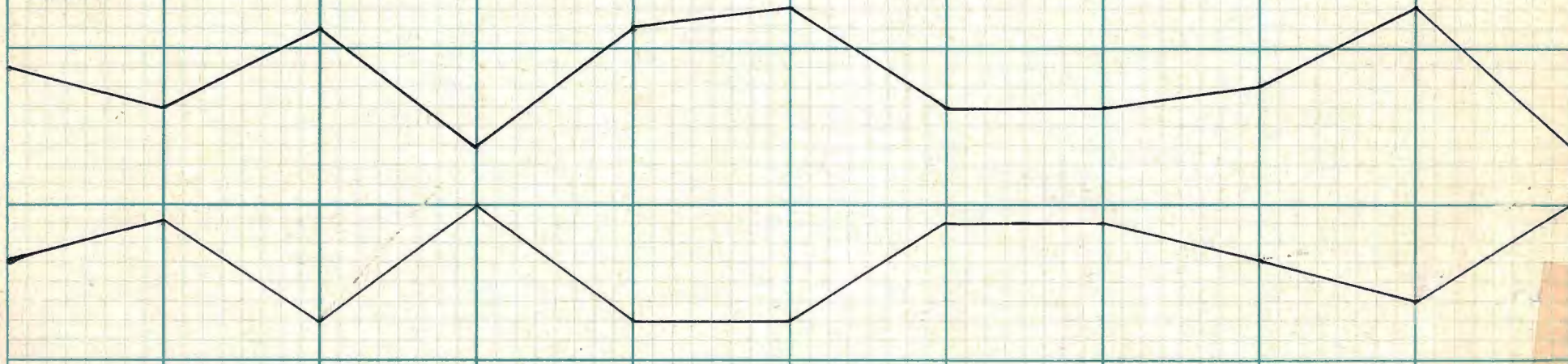
2. 3.

5. 6.

← P₃ M₂ N₂ ← P₂ M N₂ ← P₄ M₃ N₂ ← P M N ← P₄ M₃ N₂ ← P₄ M₂ N₃ ← P₂ M₂ N ← P₂ M₂ N ← P₄ M N ← P₅ M₂ N₃
 S₂ D S S₃ D₂ T S₃ D₂ T S₄ D T D D S₃ S₄ D

Con.* 7 ← 5 ← 9 ← 3 ← 9 ← 10 ← 5 ← 5 ← 6 ← 10
 Diss. 3 1 6 0 6 6 1 1 3 5

DISSONANCE CONSONANCE



* = Measure Numbers. Top figures are first time through, bottom figures are second time through.

* Top figure = number of consonant intervals in sonority
 Lower figure = number of dissonant intervals in sonority