

Lou Harrison's "Triphony" Realized for Solo Marimba

BY DR. NICHOLAS PAPADOR

Lou Harrison's "Triphony" is of particular interest to the percussion community because it constitutes a repertoire piece for marimba, which was unforeseeable as a performance outlet to the composer at the time of its composition. Harrison composed "Triphony" in 1945, but the work was not published until 1997. The piece is scored simply for "keyboard," meaning that it could be

performed on piano, fortepiano, harpsichord, clavichord or organ, among others. The work was created before any widespread use of synthesizers or electric keyboards, and before keyboard percussion was commonly used in a soloistic setting, either alone or with an ensemble.

It now seems that there are a number of ways to perform the work in the

present day that Harrison may not have originally intended or been aware of. With respect to keyboard percussion, the piece fits entirely within the range of a five-octave marimba. Only one note in the last beat of measure 72 (see Example 1) is out of the range, and that note is an *ossia*, considered to be optional.

"Triphony" is remarkable in that it is

Example 1

The image displays a musical score for Lou Harrison's "Triphony," showing three systems of music. The first system, starting at measure 64, features a piano part with a dynamic marking of *mf* and a marimba part with a dynamic marking of *sfz*. The piano part includes a 5-measure slur and a 7-measure slur. The marimba part includes a dynamic marking of *sfz* and a tempo marking of *Agitato*. The second system, starting at measure 67, features a piano part with a dynamic marking of *sfz* and a marimba part with a dynamic marking of *sfz*. The piano part includes a 9-measure slur. The marimba part includes a dynamic marking of *sfz* and a tempo marking of *sfz*. The third system, starting at measure 70, features a piano part with a dynamic marking of *ff* and a marimba part with a dynamic marking of *ff*. The piano part includes a 9-measure slur. The marimba part includes a dynamic marking of *ff* and a tempo marking of *(Quasi Tempo I) Maestoso liberamente*. The score concludes with an *ossia* marking.

one of very few works for solo marimba by one of the major composers associated with American experimentalism during the early to middle twentieth century. Because of the indeterminate nature of the scoring, performing the piece on marimba does not constitute a transcription or arrangement, but a true realization of the piece based upon the logistical confines of the score.

HISTORICAL OVERVIEW

Harrison composed "Triphony" as a "cry of grief and anguish," as the composer was entering what is called the most difficult period of his life. His nervous breakdown occurred near the end of his "having done ten years in New York [City]," a setting to which he could not adjust, despite the creative environment.¹ This crisis was both so extremely emotional and spiritual in nature that Harrison withdrew from society by taking a nine-month retreat to the Psychoanalytic Clinic in New York. Harrison learned much later that he had diabetes and likely had physical imbalances that contributed to the breakdown. John Cage arranged for Harrison's lodging and care, but was not able to cover the costs. Charles Ives, whose scores Harrison was looking after, stepped in and paid all of Harrison's bills and provided generous cash advances for his work.²

Composers of mid-twentieth century experimental and avant-garde circles composed works for solo and ensemble percussion with a premeditated preference for nonpitched sonic materials. Much of the continued interest in western percussion since the Romantic period derives from composers' desire to enhance musical color and rhythmic impact as well as discover new timbres and programmatic suggestions in a concert setting. While experimental and/or avant-garde composers may also have shared these goals, there is a deeper level of reactionary even nihilistic motivation behind composing for percussion. While Arnold Schoenberg's atonal and twelve-tone music emancipated dissonance in concert scores, the futurists and early percussion composers used noise and nonpitched percussion to create music that emancipate nonpitched sounds and noises from pitch or at least from the equal temperament tuning system.

Harrison, as well as experimental figures such as John Cage, Henry Cowell, Harry Partch, Terry Riley, LaMonte Young, and Ben Johnston, all found the system of equal temperament to be a severe tonal and timbral limitation. Johnston went so far as to say he believed tempered music to be physically and psychologically harmful due to its consistently imperfect intervallic intonation.³ Harrison and Johnston both believed that the keyboard instruments' development and dominance in instrumental music during the Baroque period was, in a sense, a wrong turn with respect to just intonation and other tuning systems used in world cultures.⁴ In John Cage's 1937 lecture *The Future of Music: Credo*, he summed up the views of he and many of his contemporaries' compositional interests in percussion:

Percussion music is a contemporary transition from keyboard-influenced music to the all-sound music of the future.

Any sound is acceptable to the composer of percussion music; he explores the academically forbidden "non-musical" field of sound insofar as is manually possible.⁵

These are important beliefs to be aware of when considering why some prominent composers welcomed the development of keyboard percussion instruments while others showed little or no interest in contributing to their repertoire.

Harrison certainly did write for keyboard instruments, but he composed most of his solo keyboard works prior to 1950. Most of the ones written afterwards, including the "Piano Concerto" for Keith Jarrett, incorporate a just or gamelan intonation. In preparation for Linda Burman-Hall's 2002 recording of "Triphony," Harrison wrote the following:

My "Triphony" is a fully chromatic work and I suggested our using the

Third Earl of Stanhope's well temperament which he published in 1806 for the reason that it has almost half just and half tempered fifths...five tempered and seven just, and seemed to me to fit the context.⁶

Over time, Harrison grew to greatly dislike equal temperament to the point where he would regularly threaten to quit composing for western instruments. He gave up equal temperament in his daily life by using the gamelan and tuning his personal piano to the Kirnberger Number 2 system of just intonation.⁷

The A = 430 tuning treatments developed by Stanhope and utilized on Burman-Hall's fortepiano recording of the piece do not appear in the C.F. Peters score. In spite of his frustrations with equal temperament, Harrison recognized that as long he was to compose for these "northwest Asian" instruments, he would have to leave matters of intonation in the hands of individual performers. For this reason, "Triphony" may be performed on

marimba without the overbearing and expansive task of creating custom justly tuned bars.

ANALYSIS

While certainly not a well-known work to percussionists and pianists, "Triphony" should not be thought of as an insignificant or minor work in Harrison's oeuvre. After leaving the hospital and resuming his work, Harrison reset the piece, by separating the three linear voices and transposing the whole piece up a major third, to create his "Trio" for violin, viola, and violoncello (1946). The piece undertook further reshaping and also became the fifth movement of the "Suite for Symphonic Strings" (1960). The work is a culmination of Harrison's work with dissonant contrapuntal textures during the time period following his formal studies with Henry Cowell and Arnold Schoenberg and also reflects his admiration for the modernist scores of Carl Ruggles.

Harrison's craftsmanship and refine-

ment of formal materials give the piece an expressive and beautiful effect despite the dissonant tonality. He uses musical gestures with consistent rising and falling contours within individual phrases, which are both recognizable in the score and audible to the listener.

The climax of the piece is framed between the last beat of measure 66 and the last beat of measure 72 (see Example 1). The last beat of measure 66 contains the highest pitch in the work, a B-flat 5, and the last beat of measure 72 contains C-sharp 2 (as well as C-sharp 1 in the ossia), the lowest pitch of the work. These extremities in tessitura, combined with the rapid falling non-tuplets, polyrhythm, and the only marked tremolos, clearly denote the climactic intentions of the composer.

After measure 72 the texture dissipates by slowing in tempo and rhythmic density, which sets up a recapitulation in measure 84. The low C-sharp arrival in measure 72 occurs almost exactly two thirds of the way through the piece.

Example 2

TRIPHONY
(for keyboard)

Lou Harrison

Poco lento

The image displays two systems of musical notation for the piece "Triphony" by Lou Harrison. The first system shows measures 1 through 5. The second system shows measures 6 through 10. The notation is for a keyboard instrument, with a treble and bass clef. The tempo is marked "Poco lento". The music is characterized by complex polyrhythmic textures, with various tuplets (5, 6, 3) and slurs. The key signature is one flat (B-flat major or D minor).

While not precisely proportional, Harrison seems quite aware of the “Golden Section” principles with regards to formal structure and organization in the work.

Harrison’s music from the 1930s contained a rigorous consistency with regard to fixed interval composition. In “Triphony,” linear intervals consist almost solely of minor seconds, major thirds, and perfect fourths. Although this is not a strictly enforced rule, the primary melodic or linear motive consists of a minor second followed by a perfect fourth, with the major thirds separating melodic fragments. In the analytical technique of set theory, a group of notes containing these intervals would be identified as a 016 set. For example, in measure two, beat three in the soprano voice, the C is followed by B and F-sharp. The B is one half-step from the C, and F-sharp is six half-steps from C, hence the naming of the set.

A skilled composer choosing any pitch set can create music of formal consistency and balance, but Harrison’s use of the 016 set is significant. The combination of these intervals outlines a tritone, and this choice was a favorite of Arnold Schoenberg in creating works such as “The Book of the Hanging Gardens,” “Erwartung,” and “Pierrot Lunaire.” These works defined Schoenberg’s emancipation of dissonance prior to developing the twelve-tone serial technique. Harrison was a student of Schoenberg during the 1940s and titled his 1945 serial woodwind sextet “Schoenbergiana.” “Triphony,” while not a serial piece, certainly shows a direct influence and perhaps even pays homage to his former teacher.

In points of tension or phrase climaxes, harmony is typified by what Heidi Von Gunden calls “secundal counterpoint.”⁸ This can essentially be defined as interaction between two voices in seconds and/

or moving linearly by seconds. This activity is immediately apparent in the first bar of the piece (see Example 2) where the E and F in the outer voices “resolve” to F and E. The first harmony outlines a minor ninth interval while the second outlines a major seventh. Both can be reduced to minor seconds, but to the ear minor ninths are generally heard as more dissonant. The phrase continues to resolve as it descends by introducing more consonant intervals.

In addition to carefully constructed phrasing and consistent use of intervallic sets, other attributes unify the piece both structurally and aurally. First, there is a sense of repetition. Measures 5–7 (see Example 1) are essentially a repetition of the first three measures with a quintuplet anacrusis and a slightly differing harmonization. Consecutive phrases develop harmonically, rhythmically, and in length in an audibly organic fashion once this initial mood and texture is established.

As mentioned earlier, measure 84 is a recapitulation of the opening. Again, there are slight harmonic variations, but the melody line from the opening reappears verbatim in bars 84 and 88. The opening mood of the piece is also firmly established by a return to the original *Poco Lento/Lento* tempo region, although the recapitulation should be slightly slower to project a sense of relaxation and repose from the previous material.

The music from measure 34–83, containing the climactic material discussed earlier, is marked *poco più mosso* with generally faster rhythms and poly-rhythmic relationships between the voices. By using audible repetitions in the opening and recapitulation as well as this texturally active middle section, Harrison sets up a clearly audible ABA form (see Example 3), a trait commonplace with works from this period of his career.⁹

Example 3: Formal Structure of *Triphony*

Section	Measures	Tempo/Score Indications
A	1–33	Poco Lento
B	34–83	poco più mosso – Agitato – Maestoso liberamente
A	84–111	Lento

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PERFORMANCE PRACTICE

Although “Triphony” is not by definition a transcription, performing the piece requires similar interpretive preparation on the part of the performer. The range of the work is not overly expansive but is too large to be adequately played on a standard vibraphone (although much of the phrasing and note values could benefit from the instrument’s pedal and sustain). In the area of keyboard percussion, the piece is best suited for a five-octave marimba. The highest note in the piece is B-flat 5 above the treble clef, so it is possible to perform the piece on a smaller ranged instrument one octave higher.

The piece is in three-part counterpoint throughout, using no more than three voices at a time. While one could theoretically use only three mallets, using four is advisable. Although the middle voice is usually notated in the bass clef, there are instances where the interval spread in the left hand is awk-

ward, and voicing the middle voice in the right inside mallet would be much more comfortable. As suggested by Leigh Howard Stevens’ transcriptions of fugues and other contrapuntal works, using mallets of graduated hardness would greatly enhance the audibility of three individual lines. For that reason, I would recommend using mallets of medium hardness as the inside mallets while using a soft mallet in the outside left hand and a brighter mallet in the outside right hand.

The most compelling question of interpretation is whether or not to tremolo longer note values when performing on the marimba. This is commonly employed in transcriptions such as in the J.S. Bach “Sonatas and Partitas” as well as in piano transcriptions such as albums for the young.

Because of the indeterminacy of the term “keyboard,” Harrison has supplied no pedal markings, knowing that some keyboards have no sustain pedal. He

does utilize tied notes longer than a half note’s duration that overlap moving lines in another voice. A pianist not relying on any pedaling would need to hold notes depressed for their full duration. Looking at the first two phrases of the piece from the beginning to 7, it seems very plausible to roll long tones and treat the piece in an almost chorale-like setting. As the piece progresses this approach becomes distracting and difficult, if not impossible, with regard to voice leading and polyrhythmic interaction between the voices.

On the commercial keyboard recording, Linda Burman-Hall performs the initial *Poco lento* tempo at about quarter note = 100 and performs the *poco più mosso* B section anywhere between 116 and 132 bpm in building to the work’s climax. While no strict metronome markings are given and there seems to be some room for rubato, these general tempi allow the player to complete the piece in just over its duration

Encore!



of five minutes as suggested in the score.

Even with Burman-Hall's use of pedaling on the fortepiano, the long tones produce a natural and relatively quick decay as compared to the sustained effect produced by tremolo. It must also be remembered that keyboard instruments like the harpsichord do not have sustain pedals, and the plectrum mechanism that sounds the note do not sustain even when the note remains depressed. For these reasons, it is not recommended to approach the piece with rolls articulations strictly attached to notes of long duration.

With that said, there are moments of rhythmic unison or cadential repose where tremolos could give the marimba realization of the piece its own special character and timbre. Marimbists performing the work should feel free to experiment and develop new interpretational ideas while preparing the piece. Because of the frequent intervallic

shifts between the hands and the complex contrapuntal writing, "Triphony" is a work for advanced and professional-level marimbists.

CONCLUSION

Lou Harrison's career and music covers an extremely vast range of compositional mediums and styles virtually unmatched by any other composer. He, along with John Cage, was a pioneering figure in the development of the modern percussion ensemble and certainly did use keyboard percussion in a variety of ensemble settings. However, Harrison's disdain for equal temperament tunings and gravitation towards non-western instrumentations would lead us to believe that he might not consider the opportunity to write for solo marimba.

The composer's unexpected passing in 2003 left his ensemble work of the 1940s as the most significant contributions to the percussion world. However, upon reviewing Harrison's catalog of

works and coming across "Triphony," we realize that Harrison already had, albeit inadvertently, produced a work of substance for the marimba. It has taken time, but advances made in both marimba technique and the manufacture of extended-range instruments have now made it possible for us to welcome this work into our repertoire.

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ENDNOTES

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