1988

Transcribing for Solo Marimba.

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Transcribing for solo marimba

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The Louisiana State University and Agricultural and Mechanical Col., 1988

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Order Number 8917842
TRANSCRIBING FOR SOLO MARIMBA

A Monograph

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Musical Arts

in

The School of Music

by

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December 1988

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ACKNOWLEDGMENTS

I wish to acknowledge the following individuals whose help and guidance have been vital throughout this project: Jerry Davidson, Associate Dean of the School of Music, for carrying out the administrative details of this paper and my graduate program; my graduate committee—Griffin Campbell, Jan Herlinger, William Ludwig, Richard Norem, and John Raush—for their careful reading of this paper, helpful suggestions, and considerable time and effort expended for my benefit; John Raush, my major advisor and percussion teacher whom I respect and appreciate greatly, for his wealth of useful knowledge, diverse and extensive experience, pedagogical skills, and general good humour, all of which were transmitted during our numerous hours together; Clint and Doris Norton, my parents, for encouraging me to do transcriptions at an early age and suggesting appropriate repertory; my wife, Leslie, for her support and patience which were essential in the completion of this project. This paper is dedicated to the glory of God, whose grace I continually experience: "My grace is sufficient for you, for My power is perfected in weakness" (2 Cor. 12: 9).
ABSTRACT

The marimba was ushered into the Western art world early this century. Thus, compositions written specifically for solo marimba are limited. One means of expanding the repertory is to transcribe for marimba.

This study discusses the techniques of transcribing for solo marimba. It represents a synthesis of information drawn from examining, performing, and creating transcriptions for marimba. The introductory chapter covers related pertinent and prefatory topics such as a brief history of the marimba and its literature, the necessity for transcriptions, and the benefits and value of transcriptions and transcribing.

The second chapter, which constitutes the body of the work, begins with a discussion of the criteria for selecting works to transcribe. It describes the limitations and idiosyncrasies of the marimba, discusses ways to handle the fundamental obstacles of range and sustaining, and outlines concerns in rewriting and idiomatic imitation. The examples for this chapter are drawn almost exclusively from the author's transcriptions of Bach's Invention No. 4 in D Minor and Debussy's "Doctor Gradus ad Parnassum" and "Golliwogg's Cake-walk" from Children's Corner. The third chapter summarizes the study.

The study concluded that the transcriber must possess historical knowledge and analytical skills in order to make musical, idiomatic, and
aurally convincing decisions in the transcribing process. Principles were derived and guidelines were developed to aid the transcriber, yet it was noted that the uniqueness of each obstacle in the transcribing process demanded a creative, discerning response.

Often the work of any such project is measured in part by its usefulness and contribution to the musical community. This study endeavors to serve as a "how to" manual for any musician desiring to transcribe for the marimba, to stimulate the growth of the solo marimba repertory with transcriptions and original compositions, and to give composers and others valuable general and specific information about the marimba.
CHAPTER 1

The Musical Heritage Society recently released a recording entitled

Johann Sebastian Bach: Works Transcribed for Marimba, performed by Leigh Howard Stevens. The record jacket notes appropriately defend the art of transcription by distinguishing a transcription from an arrangement:

No matter how well suited the marimba is for baroque music, there are still those who consider the very idea of transcription sacrilegious.

A distinction must be made, however, between an arrangement and a transcription. The word arrangement automatically confesses that changes have been made: notes added to make chords "fuller," harmonies "jazzed up," or even sections deleted. Serious musicians and listeners can justifiably cringe at the lengths certain performers will go to make a work more "accessible" (read saleable). A transcription, however, implies a certain faithfulness to the original. There are of course, many different opinions of what constitutes "faithfulness." There are those performers who profess to being wholly concerned with the overall spirit of a work, and others who feverishly compare minute pen strokes in different versions of the manuscript.¹

Those who consider transcription "sacrilegious" are encouraged to review the history of music literature. In the Renaissance and Baroque, it was not uncommon for pieces to be written stating that the parts may be played by a wide variety of instruments. In the Romantic era, Liszt was the champion of transcribing orchestra pieces for piano. In the twentieth century, it is Ravel's transcription of Mussorgsky's Pictures at an Exhibition that has made the piece

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so popular. Webern has transcribed the ricercar from Bach's *Musical Offering*.

Brahms' *G Minor Piano Quartet* was transcribed for orchestra by Schönberg.

Often, composers score their works for more than one medium: Brahms' *Variations on a Theme of Haydn*, Op. 56a for orchestra was scored and published for two pianos as Op. 56b; Darius Milhaud's *Scaramouche* was first published for saxophone and piano and then published a year later for two pianos.

Furthermore, a brief examination of the nature and history of the marimba will suggest its unique claim to the necessity of transcription.

The modern marimba has its origin in the 12th century in Indonesia with the *gendèr*, a metallophone. The relationship of the *gendèr* to the modern marimba is noted by John Raush:

\[\ldots\] as early as the twelfth century, the Indonesian Archipelago possessed instruments with cord-strung bars and, on occasion, separate resonators, presumably closed at the far end and tuned in unison to the bars below which they hung—two of the major structural features of the modern xylophone, marimba, and vibraphone.  

The marimba moved from Indonesia to the west coast of Africa in the first centuries of the Christian era through a "series of waves of colonization."  

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2 Other metallophones, xylophones, and especially lithophones existed long before the 12th century (e.g., evidence suggests that lithophones existed in China as early as 1400 B.C.).

3 John R. Raush, "Four-mallet Technique and Its Use in Selected Examples of Training and Performance Literature for Solo Marimba" (DMA treatise, The University of Texas, 1977), p. 34. The information in Chapter 2 of Raush represents an articulate synthesis of material contained in primary sources of marimba organology (see Bibliography entries for Chenoweth, Jones, Kirby, and Marcuse).

From Africa it made its way to Guatemala along with the slaves who were exported to Guatemala in 1550-1650. The Guatemalans are credited with many of the improvements of the marimba, as Raush notes:

... the contributions of the Guatemalans must not be underestimated. Their structural innovations—horizontal string and free suspension of the bars between spacing pegs, the construction of efficient resonators and the extension and modernization of the keyboard—transformed a primitive gourd xylophone into an instrument ready to enter the arena of Western musical art.\(^5\)

The Guatemalans developed the first chromatic marimba, known as the marimba doble. As the name implies, the marimba doble is actually two marimbas, placed side by side. As one is facing the instrument, the larger marimba (marimba grande) is on the right, over six octaves (from G1 to b4), and played by four marimberos. The smaller instrument (marimba cuache) is almost four octaves (f to e4) and played by three marimberos.\(^6\)

The seven players of the marimba doble were often from the same family, and one famous family, the Hurtados, may be credited with bringing the chromatic marimba to the United States in the early 1900's. Their performances of historical importance include: (1) 1901, exposition in Buffalo, Hurtados, marimba sencilla, performance cancelled (death of President McKinley); (2) 1908-11, United States tour, Hurtados and Mariano Valverde, marimba doble; (3) 1912, United States tour, Hurtados' Royal Marimba Band of Guatemala, marimba

\(^5\)Raush, p. 83.

doble; (4) 1915, exposition in San Francisco, Hurtados' Royal Marimba Band of Guatemala, marimba doble; (5) 1915, recording for RCA Victor, Hurtados' Royal Marimba Band of Guatemala, marimba doble; and (6) post-1915, several tours and performances in the United States, Hurtados, marimba doble.

The J. C. Deagan Company and Musser Marimbas, Inc. were manufacturing marimbas by the 1920's in the United States. The primary differences between the marimba of these companies and the Guatemalan chromatic marimba are: (1) the former was a single marimba—as opposed to the two marimbas of the marimba doble—from three to five octaves in length; (2) the latter has narrower keys; (3) the "black" keys of the latter are not centered between the "white" keys, rather the sharps are squarely over the natural keys; (4) the resonators of the former are constructed of a metallic substance, while the latter has gourds or wooden resonators; (5) there are no buzzing membranes ("mirliton devices") in the resonating chambers of the former.

The Hurtados brought not only their instrument into the United States but also their repertory, which consisted of Guatemalan popular music and a number of arrangements and transcriptions of pieces by composers such as Liszt and Paganini. Just as the United States was quick to emulate the Guatemalan instrument, the repertory of the early United States marimba bands was

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7John Calhoun Deagan had begun experimenting with bar keyboard instruments derived from the European xylophone as early as 1880.

8Chenoweth, p. 14.

9Chenoweth, p. 20.
patterned after the Guatemalans: it included many transcriptions of orchestral pieces. Additional reasons for the large percentage of arrangements and transcriptions in the early United States marimba band repertory are: by playing serious music by renowned composers, these bands hoped to sever the connection of their instrument with the Vaudeville era; few original works had been written for marimba band.

Clair Omar Musser (b. 1901) contributed prolifically to the repertory of transcriptions for marimba band. Musser was and is the outstanding innovator of the modern instrument, having worked as chief engineer and manager of the mallet instrument division for the J. C. Deagan Company from 1930 to 1947 before starting his own company in 1948. As a designer, composer, transcriber, teacher, and performer, Musser may be credited with making the greatest strides for the recognition of the marimba as a viable concert instrument. He was one of the first to write (and perform) original compositions for solo marimba, many of which are among the most frequently performed pieces today.

In addition to Musser's works, three concertos for solo marimba and orchestra were written by distinguished composers, Paul Creston, Darius

\textsuperscript{10} A Guatemalan marimba band consists of the aforementioned marimba doble, and there are never more than two marimbas. This contrasts with the early United States marimba bands which often had more than two marimbas--in one case 100 marimbas--and usually with only one or sometimes two players at an instrument. In this way, the United States marimba bands resembled those of Africa.

\textsuperscript{11} "Early" may be defined roughly as since 1930.
Milhaud, and Robert Kurka. The premieres of the three concertos were received well by the public and press, though marimba concertos were and still are considered "unusual." Since the premiere of the Kurka in 1959, many more pieces for solo marimba have been written, yet the marimba repertory is still neither extensive nor particularly diverse. This is due to percussionists outstepping their boundaries by composing, some with success, most without; composers whose unfamiliarity with the instrument has led to poor, unidiomatic writing (though, if musically sound, marimba players will generally find a way around the unidiomatic difficulties), who avoid writing about that which they do not know, or who will not write for a relatively "unknown" instrument (an instrument not used in the standard orchestral repertory) when they think they can earn more money and broader acclaim by writing for the more "standard" instruments; the "vaudeville" image problem (cited above); the marimba's brief existence in the Western art world (cited above).

Good transcriptions ensure more high-quality repertory for the solo marimbist, repertory that is not limited by style (i.e., music written by composers living in the twentieth century). The chain of events that the marimbist hopes for is that as more serious literature (including transcriptions) is performed, the marimba will receive more attention, more people will develop an

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12Creston, Concertino for Marimba and Orchestra (1940); Milhaud, Concerto for Marimba, Vibraphone, and Orchestra (1949); and Kurka, Concerto for Marimba and Orchestra (1959).

understanding of the instrument, and more high-quality original compositions will be written.

Furthermore, though some marimba composers may try to imitate a style, there are no truly original compositions for marimba from the Baroque, Classical, or Romantic eras. Thus, marimbists have difficulty following keyboardists in presenting recital programs with pieces from a variety of musical-historical periods, for example a Bach Prelude and Fugue, a Beethoven Sonata, a Brahms Rhapsodie, and a Bartók character piece. This type of diverse programming of serious music with audience appeal is not possible for the marimbist unless he plays transcriptions. In addition, the percussion student's education is broadened by having direct contact with music from many periods.

After acquiring an understanding of the brief history and status of the marimba in the Western art world and of the nature of the limited solo marimba repertory, the idea of transcribing for solo marimba gains respect and demands attention. How then does one go about selecting pieces to transcribe? What does one need to know about the marimba before transcribing? Are there any rules or guidelines in transcribing peculiar to the marimba? These questions are addressed in the following chapter.
CHAPTER 2

The first thing that the transcriber must do in the transcribing process is to select the work to be transcribed. This is the point at which transcription has fallen into disfavor with those who regard transcriptions as "sacred." There are some pieces that should not be transcribed for any instrument, and there are some pieces which should only be transcribed for certain instruments. The determining factor lies in the answers to the questions: What is the central aspect of the composition to be transcribed? Is the timbre or instrumentation an inseparable part of the message of the piece? For example, the timbre and instrumentation are inseparable parts of the message of Stravinsky's *Histoire du Soldat*. It would be unfortunate to see this work transcribed for marimba ensemble; a public performance of such a transcription would be "sacred" indeed. Yet transcriptions of this sort are published, and it is this lack of discernment in choosing pieces to transcribe that has led the academic community to frown upon all transcriptions. On the other hand, it seems that the melody and harmony of Schumann's *Fantasie-Stücke*, Op. 73 are the most important aspects of the message of the work, and thus the existing transcriptions for horn and cello work quite well. Bach's Inventions were written as wonderfully musical studies for the development of independence of

\[14\] See Musical Heritage Society quotation, p. 1.
hands and digital technique for the keyboard player. Their purpose of mastering
technique in a musical setting is accomplished equally well on the marimba.
Thus, in selecting a work to transcribe, the marimba transcriber must use his
musical integrity and knowledge to answer: Is this piece appropriate for this
instrument—can I aurally conceive of it for marimba?

If a piece passes this aural and aesthetic conception test, it does not mean
necessarily that it will work on the instrument. This raises a second question the
marimba transcriber must ask: Is it technically possible to adapt this work to the
marimba with only minimal change to aspects other than the medium? To
answer this question, the transcriber must examine the score, ascertain problems,
and consider solutions. As Socrates said "Know thyself," so must the transcriber
know the limitations and idiosyncrasies of his instrument prior to attempting
transcription (see Table 1).

Table 1

LIMITATIONS AND IDIOSYNCRASIES OF THE MARIMBA
(1) Range: 4 1/3 octaves
(2) Problem of sustaining
(3) Maximum simultaneity: 4 notes (4 mallets)
(4) No contact with keyboard
(5) Limitation of harmonic intervals per hand (10th)
(6) Limitation of speed of such intervals
(7) "Black" keys do not hang over "white" keys like the piano

The first idiosyncrasy of the marimba has to do with range. The marimba
comes in many shapes and sizes, but the collegiate standard is 4 1/3 octaves, from
A to c4 (see Table 2). Thus, the marimba can handle the range of notes of most
violin literature but must make adjustments for the literature of the 7 1/3 octave
The second idiosyncrasy deals with sustaining. The average duration of resonance for a marimba bar when struck is about one second, notes in the lower register ringing longer than those in the upper register. There is no sustain pedal on the marimba, nor any windstream or continuously drawn bow to sustain its sound. The marimbist does have methods of sustaining (to be discussed later in detail), primarily involving rolling techniques.

The marimba is generally played with two, three, or four mallets. Although some marimbists (such as Keiko Abe and Linda Pimental) have developed the ability to play with six mallets, such technique is rare and limited. Four-mallet technique, however, is quite common and the transcriber should not hesitate to write four-note chords.

One difficulty of playing marimba is the absence of tactile contact with the keyboard. Unlike the pianist or clarinetist, the marimbist cannot feel the keys before producing a sound. This limitation poses accuracy problems, especially with large leaps.

With the four-mallet technique, the maximum harmonic interval for
one hand (two mallets) is a tenth. Furthermore, there is a limitation as to the speed of succession of such intervals: successive wider intervals are more difficult to play than successive smaller intervals. An additional factor is the disposition of these intervals, as the "black keys" of the marimba do not hang over the "white" keys as on the piano. There are four classifications of intervals with respect to mallet placement: (1) both mallets on white keys; (2) both mallets on black keys; (3) inside mallet on white key, outside mallet on black key; (4) inside mallet on black key, outside mallet on white key (see Example 1). Successive harmonic dyads which change from one such classification to another are more difficult to play than dyads which stay within one classification. Thus, successive chromatic thirds are quite difficult, involving significant arm and wrist movement—movement which impedes the rapidity of execution (see Example 2).

Example 1

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15 All such information represents norms.
These limitations and idiosyncrasies of the marimba are summarized in Table 1 (above). The last four problems are widely variable depending on the technical ability of the player. The first three, though—range, sustaining, and maximum simultaneity—are invariable, and thus the ensuing discussion and examples will mostly address these issues.

Range is one of the fundamental struggles for the marimba transcriber. Range problems can be dealt with through octave transposition, key transposition, alteration (including omission) of notes, or a combination of these techniques. Octave transposition can be incorporated on a small level—a few notes, on a medium level—a phrase, or on a large level—an entire section or piece. Octave transposition on the small and medium levels involves sound musical judgement as to where the original line (register) should be broken and transposition begin and end. "Sound musical judgement" essentially requires a good theoretical and aural understanding of how music in general and how the specific piece and phrase work. It is assumed that prior to attempting
transcription the transcriber has this aural and analytical understanding of the piece: what are the main themes, primary motives, large-scale form, phrase structure, and so forth. In the case of Bach's Invention No. 4 in D Minor (from which many of the ensuing examples on range derive), the transcriber must know what is the subject and countersubject, and where are the subject entries, episodes, sequences, cadences, key areas, and so forth. This knowledge is absolutely essential to all transcribing decisions.

Octave transposition at the small and medium levels is employed in the transcription of Bach's Invention No. 4 in D Minor. In examining the original score, one sees that all the notes in the first sixteen bars can be played in their original register. Beginning in m. 17 in the left hand, there are a number of notes below A, the lowest note of the marimba; this range problem continues until m. 29. Example 3a solves the range problem by octave transposition at the small level—namely, transposing only the problematic notes: m. 17 - C; m. 18 - F, G; m. 19 - E, G. The shortcoming of this solution lies in its disruption of the original contour and resultant broken contour. Example 3b also employs octave transposition at the small level; however, it not only transposes the problematic notes but also tries to make the resultant line a bit more musical than Example 3a by making it more continuous and using anacrusis figures. Octave transposition at the medium level is demonstrated in Example 3c, as all the notes after the third beat of m. 17 are transposed up an octave. This is clearly the best solution so far; the material in mm. 18ff is the Invention's subject, and it is critical that the exact contour be preserved. As the range problem is only in the
left hand, any decision to transpose material up an octave must be checked to make sure that it does not conflict with the right hand. No such conflict occurs until m. 29, by which point the left hand returns to the original register (discussed below). Finally, Example 3d is exactly like Example 3c with one additional improvement: the C in m. 17 (beat 3) is transposed up two octaves. Measures 17-18 cadence in F major, with the dominant C's of m. 17 surrounding the tonic F to which they resolve. Rather than repeating the C's in the same register as in Example 3c, Example 3d maintains the idea of surrounding the tonic resolution by the dominant C's.

Example 3

Thus, in theoretical terms, Example 3d is the best transcribing solution to the problem of range at this point in the Invention. However, the ear must be the final judge in all decisions. All reasonable solutions should be played and

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judged aurally. The transcription must sound *good* or—at worst—*acceptable*.

And sometimes no explanation other than "it sounds the best" is necessary: sometimes factual, theoretical, defensive explanations are only a means of supporting an immediate aural, intuitive judgment. Obviously, it is best to have both the intellect and the ear agree on the transcribing solutions.

After transposition begins, the transcriber should look for the earliest place to make a smooth return to the original register. As mentioned above, there are notes lower than A in just about every measure from mm. 17-28. However, after the G# in m. 28 until the F# in m. 39 the original stays within the range of the marimba. Furthermore, if the left hand were to remain transposed up an octave, it would begin to conflict with the right hand in m. 29 (see Example 4a). Thus, the problem here is when to return smoothly to the original register after the G# (m. 28) and prior to the e trill beginning in m. 29. Example 4b returns after the g#. The temporary tonic at this point is a minor, thus making g# the leading-tone. According to principles of voice leading, it would be best for the g# to resolve to a in the same register. Example 4c resolves the g# and then leaps down after the a to the anacrusis B - c - d which leads to the e trill. Example 4d is unacceptable because the b is a passing tone and should resolve to c in its original register. Example 4e works theoretically, but does not establish the new register as well as Example 4c, the best solution.

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16 See Appendix 1 for registral designation.
Cadences and other strong sectional breaks are always primary points after which registral alteration may be considered. Two examples occur within the Invention. The first of these occurs in m. 38 following the cadence in a minor. The range problem in the left hand in mm. 39-41 is handled through octave transposition beginning after the cadential a (the first sixteenth note) in m. 38 (see Example 5). Further support for this choice is revealed by examining the right hand in the same measure: the two successive a1's are in the same register (see circle 1 in Example 5). Also, transposition begins after a strong beat, thus maintaining the anacrusis aspect of the figure (see circle 2 in Example 5). The second example of octave transposition following a cadence occurs after the deceptive cadence in m. 49. The problematic G of m. 50 is taken care of through
octave transposition of the line c - Bb - A - G following the deceptive Bb of m. 49 (see Example 6). The original contour of the left hand is maintained, including the disjunct motion from the g to bb in m. 50, the point at which the return to the original register occurs. An additional advantage of transposing after the Bb is its relatively long duration which produces a stable stasis.

Example 5

Example 6

Consistency in transcribing decisions is important if the transcription is to sound as a cohesive whole. The transcriber should seek to employ similar techniques in similar musical areas, as demonstrated above in the treatment of octave transposition following cadences. The criteria incorporated in octave transposition in mm. 17-18 are used consistently in two other points in the piece, mm. 41-42 and mm. 51-52. In mm. 41-42, the transcription returns smoothly to
the original register with the f in m. 42 (see Example 7b). These measures involve a dominant to tonic progression in F, and the transcription allows the dominant c's to surround the tonic f to which they resolve. In mm. 51-52, the final D of the piece is too low for the marimba, and by transposing it up an octave, the preceding dominant A's surround it (see Example 7c).

Example 7

\begin{center}
\textbf{a.}
\end{center}

\begin{center}
\textbf{b.}
\end{center}

\begin{center}
\textbf{c.}
\end{center}

The foregoing transcribing decisions result in a transcription that remains in the original key, entirely without registral alteration to the right hand, but with some registral modifications made for the left hand (see complete
transcription in Appendix 2). According to the general ways that range problems can be handled (mentioned above), there are two other methods that have not yet been considered with respect to the Invention: transposing the entire piece up an octave or to another key. Before considering these possibilities, one must understand the characteristics of the marimba registers. As with other instruments, the lower notes on the marimba have a different tone quality than the higher ones. Specifically, the lower notes resonate more and have a richer sound than the notes of the upper register. Thus, the dark, driving Invention No. 4 in D Minor works best in its original register which corresponds to the middle to lower register of the marimba. Transposed up an octave, the piece would simply sound too high, unsatisfying, and unconvincing (and uncharacteristic of Bach, since even his Inventions stay within the vocal range [C-c2]). The three key areas of the piece—d, F, and a—allow for a maximum of successive adjacent white key notes in the primarily conjunct lines; this is important in terms of technical facility and playability, as the appropriate marimba technique involves successive same single stroke sticking (see Example 8)—a technique made easier by successive white key notes. Furthermore, the key of d minor makes the two trills in the piece white note trills, thus allowing the performer to use mandolin rolls (the mandolin roll and other sustaining techniques are discussed below). Lastly, the transcription described above basically stays in the original register, is truest to the original, and sounds good

17See Appendix 1 for sticking designation.
and convincing, thus making greater modifications—such as transposing the entire piece up an octave or to another key—unnecessary.

Example 8

The range in Debussy's "Doctor Gradus ad Parnassum" from the Children's Corner suite for piano is wider than that of Bach's Invention No. 4 in D Minor, thus presenting greater problems in transcription. The first problem occurs in the first measure with the grace note C, well out of the range of the marimba. The grace note could be transposed up an octave as shown in Example 9a, but the grace note loses its effect when it occurs on the same pitch that it decorates. Example 9b transposes the grace note up two octaves; this solution is better, especially if the grace note is played lightly, but it does break the register in which the right hand is to begin. Example 9c involves changing the grace note to B, the leading tone; aurally, the difference between an octave grace note and a semitone grace note is too great to make this solution feasible. One other possibility is to simply omit the grace note (Example 9d), the solution ultimately incorporated in the author's transcription (see Appendix 2). According to the principle of consistency, this solution is followed when the opening material returns in m. 22.
Example 9

If both hands were transposed up an octave in the preceding example, all intervallic relationships could be maintained. However, as discussed above, the lower register of the marimba is much richer and resonant and is more suitable for the opening of this movement. Thus, the benefits of maintaining the original register—even at the expense of excluding the grace note—outweigh those of transposing the entire opening passage up an octave. In general, as with the Bach Invention, the transcriber should work towards keeping as much of the original—including register—intact.

The first point at which both hands must be transposed up an octave is m. 7. This works fine because it occurs at the beginning of a phrase and introduces a new idea. A smooth return to the original register is accomplished in a unique way in m. 12. Here the dynamics suggest a solution: on the downbeat of m. 12 an octave E is struck sforzando, and before the sound has decayed the marimba begins (immediately) rolling on the lower e, the one in the original register (see
Example 10. This solution preserves the contour of the line from m. 11-12, heightens the *sforzando* dynamic effect, and accomplishes the return to the original register.

Example 10

![Example 10](image)

The next problem with range begins in the left hand in m. 32. As mentioned earlier, anacrusis grouping is often helpful in maintaining relative smoothness when introducing octave transposition; however, the material that precedes m. 32 contradicts anacrusis grouping as shown in Example 11, and thus octave transposition begins right on the downbeat of m. 32. Meanwhile, the right hand stays in the original register. However, because of the Ab in the left hand in m. 37, the left hand beginning in m. 35 will have to be transposed up not just one octave, but two. In order to avoid the crossing of hands and lines, the right hand must be transposed up an octave somewhere between m. 33 and m. 35. Anacrusis grouping is in effect here as shown in Example 11, and the transposition break is made after the first eighth note of m. 34.
There is no good place to return to the original register until m. 56 (this return is described below). The section from m. 37 to m. 44, with its bass pedal, prolongs Ab. The last four measures of this section function harmonically as an augmented 6th chord in C. This chord resolves as expected to a C6/4 chord, and the transcription demonstrates the proper stepwise voice leading in the same
register (see Example 12). This means that the return of the opening material in m. 45 is up an octave both from the original and from the opening of the transcription. In terms of the transcription, this may at first appear inconsistent. Closer examination reveals that this "return" in m. 45 differs from the opening in two significant ways: the opening has a C pedal (tonic, stable), while mm. 45ff have a G pedal (dominant, unstable); the dynamic of the opening is $p$, while mm. 45ff are $pp$. Because of these differences a different treatment is permissible. Furthermore, it is desirable in this case: the characteristics of the higher register of the marimba can be used to the advantage of the transcription by providing a delicate and distant sound.

Example 12

The transcription returns to the original register in m. 56. The Ab-C-E triad is arpeggiated in mm. 55-56, with the last four sixteenths of m. 55 being repeated on the first beat of m. 56. Rather than making this repetition in the same octave, the transcription returns to the original register on beat one of m. 56 (see Example 13).
The F on beat three of m. 65 is out of the range of the marimba, and the solution shown in the transcription is simply one of omission (see Example 14). As mm. 57-65 comprise a large stepwise descent, there is no reasonable place to attempt octave transposition without destroying the integral aspect of this section of music. However, no harmonic dyads occur in this section prior to m. 65, and m. 66 is a repetition of m. 65 up an octave. Thus, the transcription omits the F in m. 65 but includes it in m. 66, the final bar of the section.
The last problem of range in this movement occurs in the concluding bars, beginning with the G in the left hand on beat three of m. 72. Again, the transcriber must first analytically ascertain the essential qualities of the measures being considered. Measures 71-73 accomplish an arpeggiated descent, with the repeated gesture E-C-E in the right hand and the C and G quarter notes in the left hand. As Example 15 shows, in the transcription the E-C-E figure of the right hand stays in the same register for all of m. 71, unlike the original where it drops the octave on beat three. In the transcription, the point at which this right hand figure drops the octave—beat one of m. 72—is the point at which the left hand remains in its register. Therefore, it is through these means that the transcription maintains the essential quality of the section—an arpeggiated descent—while keeping within the range of the marimba.
In summary, the guiding principle in all of the foregoing transcribing decisions is twofold: analyze the area of music being altered and uncover its most essential features, and accomplish the transcription technique—such as transposition—without damaging these features. As evidenced in the preceding examples, this meant following principles for good voice leading, resolving material in its proper register, and maintaining the contour of the subject or theme. Each situation demands a unique approach which makes transcribing a creative art, calling for the synthesis of knowledge of theory, composition, performance, and even history. Sensitivity to this uniqueness does not preclude extracting the following guidelines for dealing with range problems based on the foregoing examples: (1) alter as little as possible; (2) transpose only one hand, if possible; (3) return smoothly to the original register as soon as possible (smoothness being the priority); (4) for the sake of smoothness, investigate transposing more than just the problem notes when transposing at the small level; (5) be sensitive to the characteristics of the different registers of the marimba, using this knowledge in decisions; (6) employ anacrusis figures when
logical—they often help to undermine any transposition breaks; (7) consider
cadences, sectional endings, and long notes as points after which octave
transposition works well; (8) in order to achieve cohesiveness within the
transcription, be consistent in transcribing decisions yet sensitive to the
differences of recurring material.

The next major issue in transcribing for marimba concerns sustaining.
As mentioned earlier, the average duration of resonance for a marimba bar
when struck is about one second. The piano, woodwinds, brass, and strings all
have methods to sustain much longer than one second; in order to transcribe
literature of these instruments for the marimba, the transcriber must investigate
various ways to sustain or create the illusion of sustained sound. The primary
sustaining technique on marimba is rolling—a rapid alternation of single strokes.
The four types of rolls are the hand-to-hand or traditional roll, the Musser or
ripple roll, the one-handed roll, and the mandolin roll. Examples of these rolls
and of other sustaining techniques are incorporated in the transcription of
"Golliwogg's Cake-walk," the last movement of Debussy's *Children's Corner*
suite for piano.

The hand-to-hand roll is exactly what its name implies—an alternation of
strokes from one hand to the other. Rolls on a single note or on two notes
exclusively use this type of roll, and this is the sustaining technique used in mm.
2, 3, 39, 46, 60, 61, 65, 69, 70, 76, 79, 80, and 119 of "Golliwogg's Cake-walk" (see
Example 16). The hand-to-hand roll is often used to sustain three- or four-note
chords. In a four-note chord, the two mallets held in the right hand strike their
notes simultaneously, and this single dyadic stroke is alternated with a similar one in the left hand. The left or right hand may begin the roll, or all four mallets may make the first stroke together before immediate alternation begins. The hand-to-hand roll may be employed for the three- and four-note simultaneaities in mm. 62-63, 66-67, 73-75, and 77-78 (see Example 16).

Example 16

In these measures just cited, the Musser roll is another option. This roll can only be used to sustain three- and four- note chords. For a four-note chord, the Musser roll involves a similar alternation of wrist motion as the hand-
to-hand roll, but instead of each hand striking its dyad simultaneously, the outside mallets strike just ahead of the inside mallets (e.g., a sticking order of 4-3-1-2). This produces a rippling effect, and thus this roll is sometimes called the ripple roll. Though the Musser or ripple roll could be used in the aforementioned measures containing three- and four-note simultaneaities (Example 16), it is recommended that the hand-to-hand roll be used. These measures fall within a section of music which also has a number of two-note rolls (which must be played hand to hand)—often in adjacent measures to the three- and four-note rolls—and thus, for the sake of consistency, the hand-to-hand technique is employed throughout the section.\textsuperscript{18}

The Musser roll always uses the sticking order described above (i.e., with right hand lead, 4-3-1-2). There are a number of variations of the Musser roll, their differences lying in the sticking order. These variations include the "inverted Musser" or "Friscoe" roll (3-4-2-1), and a combination of the Musser and Friscoe rolls (3-4-1-2). All of these rolls sound slightly different and can be used at the performer's discretion to produce various desired musical effects, such as the accentuation of one chord member.\textsuperscript{19}

An important sustaining technique developed by Leigh Howard Stevens

\textsuperscript{18}This does not preclude the possibility of playing, for example, two adjacent four-note chords, one Musser and one hand-to-hand; the sound of the two rolls are noticeably different, and such alternation can be used to achieve special musical effects such as tension (fast hand-to-hand roll) and release (slowing Musser roll).

\textsuperscript{19}For a more detailed account of these rolls, their differences, and their use, see Raush, pp. 189-204.
is the one-handed roll. The wrist turns slightly and rapidly to produce a roll between the inside and outside mallets of the same hand. This roll is used in situations where one hand plays a sustained part while the other hand plays a non-rolled moving part of short durations, as in mm. 83-89 of "Golliwogg's Cake-walk" (see Example 17) and in mm. 35-36 of "Doctor Gradus ad Parnassum" (see Example 18).

**Example 17**

![Example 17]

A different type of one-handed roll is the mandolin roll. In this case, the inside mallet is above the edge of the bar, while the outside mallet is underneath the edge of the bar (see Example 19). The roll is produced by a rapid and slight upward and downward motion of the wrist. This technique is much easier than

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the Stevens one-handed roll but has some shortcomings: (1) it can be used for rolls only on or between white keys; (2) as it involves the edge of the bars rather than the middle, its tone is less resonant; (3) a mandolin roll may be impossible to execute accurately if preceded by rapid notes, as the mallets have to move from their normal playing position above the keyboard and in the middle of the bar to the edge of the bar and "splitting" the keyboard; (4) wide intervals are somewhat awkward when splitting the keyboard. The mandolin roll is best suited for small intervals (single pitch or second) between white keys, such as for the two trills in the Invention No. 4 in D Minor, mm. 19-21 and mm. 29-33.

Example 19

There are times when some type of roll may not be a desired sustaining technique; there are other ways to prolong the sound of notes. For instance, rather than using a one-handed roll in the right hand in mm. 30-32 of "Golliwogg's Cake-walk," the rhythm of the moving part is duplicated in the sustained part (see Example 20). This is the same technique used in the left hand in mm. 38-39 (see Example 21).

A variation of this idea is to periodically repeat the sustained note, as in mm. 47ff where the gb is sounded every quarter note (see Example 22). This same technique prevails throughout "Doctor Gradus ad Parnassum," such as in
the opening measures (see Example 23). Care must be taken to ensure that this transcribing device sounds natural and unobtrusive.

Example 23

One other sustaining technique involves the measured alternation of the moving part with the sustained part, the former on strong metric subdivisions and the latter on weak metric subdivisions. This is the technique employed by Bob Becker in mm. 82-85 of his transcription of Bach's "Gavotte en Rondeau" from the Sonata in E Major for solo violin. Example 24 demonstrates this technique and compares the original to the transcription. The six sonatas for solo violin were also written for lute, and Becker's transcription is based on both the violin and lute versions; the lute version has a trill in mm. 82-85 (see Example 24c; lute tablature), further supporting the aforementioned sustaining technique.

Example 24

a. (vln.)
In "Golliwogg's Cake-walk," almost every note with the duration of a quarter note or longer employs one of the aforementioned sustaining techniques. However, there are a few exceptions, instances where the transcription works best, i.e., is less cumbersome and more natural sounding, without incorporating any of these techniques. In m. 21, the bb is simply struck once and rings naturally relying upon the listener's ear to sustain it. In m. 25, a roll on the first quarter beat is unnecessary and would only make the leap to the second beat more difficult. The d-f dyad in the right hand in m. 27 is treated similarly (see Example 25).
In summary, various rolls and rhythmic devices may be used to achieve the effect of prolongation of tones on the marimba, a vital element in transcription. These techniques are listed in Table 3.

**Table 3**

**WAYS TO SUSTAIN ON THE MARIMBA**

1. Rolling
   - (a) Hand-to-hand roll
   - (b) Musser/ripple roll
   - (c) One-handed roll - allows for simultaneous sustained and unsustained notes
   - (d) Mandolin roll - note difficulty of starting roll, different tone quality, restriction to "white" keys
2. Repetition of rhythm of moving part in sustained part
3. Periodic repetition of sustained note
4. Measured alternation of moving part (on strong metric subdivisions) with sustained part (weak metric subdivisions)
5. Natural resonance - strike once and let ring and decay naturally

Sometimes the marimba transcriber must assume the role of editor, and rewrite, revoice, or delete notes and chords to render a playable, idiomatic transcription. Often these marks of editing are incorporated in solutions to the aforementioned problems of range and sustaining. For example, in "Golliwogg's Cake-walk" the left-hand G in m. 17 and the left-hand Bb in m. 33 are simply omitted to get around their respective problems of range (see Example 26). In
mm. 22-23, the Gb-Db fifth which recurs every quarter beat is inverted to a fourth to overcome the problematic low Gb; furthermore, the left-hand Db's on the second and fourth eighth-note are omitted, as they are heard on the downbeats as the lowest pitch of the inverted fourth (see Example 27).

Example 26

Example 27

Such techniques of editing are necessarily employed when dealing with chords of four or more notes. The one-handed roll in the right hand in mm. 35-36 of "Doctor Gradus ad Parnassum" is unable to accommodate more than two pitches; thus, the Bb (doubled in the left hand) and the Gb (heard in the
preceding bar) are omitted (see Example 28). In "Golliwogg's Cakewalk," the Cb on the fourth eighth-note of m. 10 is excluded; the piano can play five notes simultaneously, but the marimbist cannot. Similarly, the A natural is deleted from the F13 chord in m. 24, while the Bb resolution chord on the downbeat of the next bar is revoiced and pared down to four voices (see Example 29). In mm. 63-64, each grace-note pitch is replaced by the chord tone Cb, thus completing the chord while maintaining the grace-note effect; the left hand omits its Cb and plays the Ab-F dyad (see Example 30). Example 31 shows how some notes are changed in the passage in mm. 71-73 of the transcription; the parallel descending thirds in the left hand in m. 71 continue throughout m. 72—unlike the original's change to sixths—to effect a descent and downward resolution to the Gb in m. 73.

Example 28

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Many of the foregoing decisions are governed by an effort to make the solutions technically more facile yet without violating voice leading principles. This is seen perhaps most clearly in m. 126, where the original figure is not only out of the range of the marimba, but also is unplayable in octaves on the marimba (at the required tempo). The right hand is transposed up an octave, and the left hand part is omitted, thus allowing hand-to-hand alternation for the single-line figure (see Example 32). The resultant solution is within the range of the marimba and within the technical ability of the advanced marimbist.

Example 32

There is one other question that the careful marimba transcriber should address: To what extent should the transcription be concerned with imitating idiomatic aspects of the original piece and instrument? The fundamental answer is: to the extent that it sounds good. There are special effects that the marimbist can employ to imitate such idiomatic aspects. For the wind or string legato, the marimbist can use the various rolling techniques described above. However, if there is a legato line of relatively fast notes, a rolling technique
might sound harried and tense and would destroy the legato intention. In this case, the transcription should simply mark the passage *legato* and rely on the skillful performer to provide a touch that would give a legato and connected sound (without rolling). *A più staccato* articulation could be accomplished on the marimba by a dead stroke—a marimba technique in which the mallet strikes the bar and is held against it, thus immediately dampening its resonance.

A string pizzicato might be imitated by turning the marimba mallets around and playing with the rattan ends. Such an effect works especially well at the end of *Caprice Viennois*, a violin solo by Fritz Kreisler often played on marimba; the last two notes are pizzicato, and a change to the rattan ends makes for a dramatic conclusion.

A muted effect can be accomplished on marimba by playing on the node, the part of the marimba bar that is the least resonant. This change in color might also be used to emulate the contrast between open and stopped strings.

When string players have more than two notes simultaneously, they must roll the chords. On marimba, this is unnecessary, and an instance where the idiomatic requirements of the original instrument need not be imitated.

Piano music sometimes requires the performer to cross hands in order to execute a passage. The marimba transcription of such passages can often be written with a sticking indication that removes the necessity for crossing hands, making the passage easier. However, as the marimba is equally as visual as the piano, it is best to maintain such hand crossing when possible. In addition, hand crossing is often employed in an effort to maintain a certain tone, a consideration.
no less important for the marimba. For these two reasons—visual and tonal effect—the transcription of "Doctor Gradus ad Parnassum" maintains the crossing of hands in mm. 24-30 (see Example 33).

Example 33

Sticking is perhaps less of an idiomatic concern than a generally musical one. Indications of phrasing for the wind player direct the articulation, and for the string player, the bowing. For the marimbist, phrase marks are interpreted through differences in touch, stick hardness, and sticking. The easiest or most natural sticking is not always the one that will result in the best musical interpretation. For instance, mm. 13ff of "Doctor Gradus ad Parnassum" would
be easier with alternating inside mallets, the sticking shown in Example 34b; yet, the recommended sticking that yields a sound most like the original is the more technically difficult one shown in Example 34c. Similarly, Example 35 shows two excerpts from Bach's "Gavotte en Rondeau" where the given sticking is for musical reasons preferable to alternating (1-2-3-4) sticking.

Example 34

a. 

b. 

c. 

Example 35

The aforementioned idiomatic concerns are summarized in Table 4. Basically, the special effects of the marimba do not so much imitate the effect of the original instrument as they represent a change in tone color.
<table>
<thead>
<tr>
<th>IDIOMATIC CONCERNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) wind or string legato: rolling, but too fast can destroy legato intent</td>
</tr>
<tr>
<td>(2) più staccato: dead stroke</td>
</tr>
<tr>
<td>(3) pizzicato: rattan end of mallet</td>
</tr>
<tr>
<td>(4) muted strings: play on nodes</td>
</tr>
<tr>
<td>(5) open strings: possibly play on nodes to contrast timbre</td>
</tr>
<tr>
<td>(6) rolled chords on strings: unnecessary to imitate</td>
</tr>
<tr>
<td>(7) piano crossing of hands: maintain if possible</td>
</tr>
<tr>
<td>(8) phrasing: choice of sticking</td>
</tr>
</tbody>
</table>
CHAPTER 3

The conclusion of this study is that there is a shortage of good marimba music due to the marimba's brief existence in the Western art world and basic exclusion from the band and orchestra repertory. A partial solution to this problem is to transcribe music for marimba. This expands the high-quality marimba repertory by drawing on the masterworks of renowned composers. In addition, it promotes the writing of original compositions for the marimba as it gains respect as a serious and viable concert instrument. After discussing the philosophical debate over the issue of transcribing, it was concluded that there are some compositions which should not be transcribed for public performance—those where the medium is an inseparable part of the message of the composition.

There are some qualifications prerequisite to transcribing. The transcriber must be familiar with the original instrument and knowledgeable of the idiosyncrasies and limitations of the marimba. He must possess the historical, stylistic, and theoretical skills necessary to analyze and understand the piece being transcribed; this understanding plays a key role in transcribing decisions.

The primary problems that face the marimba transcriber concern range and sustaining. Editing in the form of transposition, rewriting, revoicing, and even omission is critical to transcription. Also, the transcriber may incorporate
some special effects, with discretion, to emulate idiomatic peculiarities of the original instrument. A significant portion of this study was devoted to presenting guidelines and accompanying examples for transcribing for solo marimba; it is a "how to" manual. Yet the message in between the lines is that even with these (derived) principles, each measure presents a unique situation and demands the transcriber to draw upon all of his resources to make musical, idiomatic, and aurally convincing decisions. It is this challenge that makes transcribing a creative and rewarding art.

Appendix 2 places the foregoing examples in context by presenting the complete transcriptions of Bach's Invention No. 4 and Debussy's "Doctor Gradus ad Parnassum" and "Golliwogg's Cake-walk" from *Children's Corner*. These transcriptions represent the real essence and origin of this study. The time and thought expended in the transcribing process was the research of the body of this study. It was through the struggle with the problems and in the creative process of transcribing that the guidelines and techniques involved in transcribing for solo marimba were discovered, formulated, changed, and solidified.
BIBLIOGRAPHY


APPENDIX 1

The following system for registral pitch designation is employed when register needs to be specified.

Otherwise, pitches are simply given in upper case. References to sticking use the following scheme.
APPENDIX 2

Invention No. 4 in d minor

transcribed for marimba
by Christopher Norton

J. S. Bach

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CHILDREN'S CORNER

Dr. Gradus ad Parnassum

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tran. Christopher S. Norton

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Date of Examination:

November 21, 1988