

Concerto for Harmonica and Orchestra, Op. 86 by Alexander Tcherepnin:
An Arrangement for Marimba with a Performance Guide

by

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ABSTRACT

Paul Creston's *Concertino for Marimba and Orchestra*, the first marimba concerto written in 1940, along with Ney Rosauro's *Concerto for Marimba and Orchestra* written in 1986, are considered two of the most performed marimba concertos to date.¹ While these two pieces are both great works in the repertoire of the marimba concerto, the question is raised as to why these early pieces have not been surpassed by recent compositions? It is because of this question that the author feels there is a need for further depth in the repertoire of the marimba concerto. The goal of this study is to shed new light on an underperformed work written for an even more obscure instrument than the marimba and to add another quality work to the marimba concerto repertoire.

The first chapter will discuss the status of the marimba concerto repertoire and the reasons behind this project, including limitations, justification, and a review of related literature. The second chapter is a look at the people involved in the original work, including a biographical sketch of the composer, Alexander Tcherepnin, along with brief remarks about the piece's premiere performer, John Sebastian Sr., and the details surrounding the premiere. Chapter three will discuss the history and manufacturing of the instruments involved; the harmonica and the marimba. The last two chapters focus on the work itself, with the fourth chapter providing a somewhat formal description of the work, *Concerto for Harmonica and Orchestra, Op. 86* by Alexander Tcherepnin, and the last chapter providing an examination of the arranging process and, through specific examples, the arrangement itself.

¹ Nathan Daughtrey, "Marimba Concerto Performances in the United States Orchestras: 1940 through 2002" (D.M.A. diss., The University of North Carolina at Greensboro, 2004), 90-92.

Due to the perceived undervalued view of the composer, and the “novelty” status of both instruments involved in this project, the author hopes that this arrangement project will elevate awareness about the composer and the work itself. The scope of this study is to examine the life of Tcherepnin, understand the basics of the instruments involved including their history and manufacturing, and formally describe and arrange the work in question. Limitations of literature and/or other materials on the composer, premiere performer, and the work itself have hindered the finding of any related literature. However, there are a few sources discussing the life of Tcherepnin that the author has found very helpful. The author was unable to find any related literature in the area of the work itself, with the exception of a scan of the program from the premiere performance.

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Chapter 1

Introduction: The Why

The solo concerto form was first developed during the Baroque Era (1600-1750), with Johann Sebastian Bach writing numerous concertos for string instruments in the early 1700s. Once the construction of the piano occurred, it too became one of the more common instruments for concerto composition, particularly in the Classical Era (1750-1820). The first marimba concerto, however, was written over two hundred years later in 1940. Clearly the marimba is a “young” instrument when compared to the age of instruments like the violin and the piano; therefore, the repertoire for the marimba concerto is still relatively small. In his dissertation, “Marimba Concerto Performances in the United States Orchestras: 1940 through 2002,” Nathan Daughtrey cited a list of eighty-nine marimba concertos that had been performed.¹ While this is not a comprehensive list of all of the marimba concertos, it is however a relatively comprehensive list of the “standard” marimba concerto works. According to Michael Lasley’s dissertation, “Eric Ewazen’s Concerto for Marimba, Orchestrated for Chamber Ensemble: A Performance Edition,” there are now over two hundred marimba concertos in print today.²

¹ Nathan Daughtrey, “Marimba Concerto Performances in the United States Orchestras: 1940 through 2002” (D.M.A. diss., The University of North Carolina at Greensboro, 2004), 90-92.

² Michael Lasley, “Eric Ewazen’s Concerto for Marimba, Orchestrated for Chamber Ensemble: A Performance Edition” (D.M.A. diss., The University of North Carolina at Greensboro, 2008), 3.

Overview

Paul Creston's *Concertino for Marimba and Orchestra*, the first marimba concerto written in 1940,³ along with Ney Rosauro's *Concerto for Marimba and Orchestra* written in 1986, are considered two of the most performed marimba concertos to date.⁴ While these two pieces seem to be popular choices in the repertoire, other more recent marimba concertos still have not seemingly surpassed the popularity of the Creston and Rosauro concertos. The author feels there is a need for further marimba concerto options for performers. The goal of this study is to shed light on an underperformed work written for an even more obscure instrument than the marimba, and to add another quality choice, via arrangement, to the marimba concerto repertoire. *Concerto for Harmonica and Orchestra, Op. 86* by Alexander Tcherepnin is a concerto with virtuosic solo lines and fantastic interplay between the soloist and the accompaniment. This concerto, originally written in 1953, currently has only two recordings and is rarely performed, the author believes, mainly due to the declining view of the harmonica in the United States.

The first chapter will discuss the status of the marimba concerto repertoire and the reasons behind this project, including limitations, justification, and a review of related literature. The second chapter addresses the people involved in the original work for harmonica, including a biographical sketch of the composer, Alexander Tcherepnin, brief remarks about the piece's premiere performer, John Sebastian Sr., and the details surrounding the premiere. Chapter three will present a brief history and construction of the instruments involved; the harmonica and the marimba. The last two chapters focus on

³ Rebecca Kite, *Keiko Abe: A Virtuositic Life* (Virginia: GP Percussion, 2007), 176.

⁴ Daughtrey, "Marimba Concerto Performances," 43.

the work itself, with the fourth chapter providing a somewhat formal description of the work, *Concerto for Harmonica and Orchestra, Op. 86* by Alexander Tcherepnin, and the last chapter providing an examination of the arranging process and, through specific examples, the arrangement itself.

Justification

Due to the perceived undervalued view of the composer, and the “novelty” status of both instruments involved in this project, the author hopes that this arrangement project will demonstrate an increased awareness of the composer and the work itself. The scope of this study is to briefly examine the life of the composer Alexander Tcherepnin, the basics of the instruments involved including their history and manufacturing, and formally provide a description and an arrangement of his concerto for harmonica and orchestra.

Limitations

The goal of this project is to arrange one concerto from a more obscure instrument, like the harmonica, for marimba. The author feels that this project is a valuable resource to expound upon in further studies, but for the sake of this project only one piece was arranged. Due to copyright issues and rental prices, the author was only able to obtain a piano reduction of the concerto, yielding all analysis and arranging from this reduction. The ability to check for discrepancies between the piano reduction and the original orchestral parts has not been possible for the purposes of this study. The inclusion of the chapters relating to the composer, premiere performer, the instruments involved, and the composition are included to provide a ground work or context for the arranging process. This project is not meant to provide conclusive research and/or a detailed analysis, rather to enhance the music being arranged.

Related Literature

Limitations of availability of resources on the composer, premiere performer, and the work itself have hindered the finding of related literature. However, there are a few sources discussing the life of Tcherepnin that the author has found very helpful, most notably Ludmila Korabelnikova's biography of Tcherepnin entitled, *Alexander Tcherepnin: The Saga of a Russian Émigré Composer*. The Tcherepnin Society, dedicated to providing information on the Tcherepnin family, hosts a website with detailed biographies, lists of works, and other related details about the family. There are, in particular, three books that the author was unable to use and/or examine via interlibrary loan. The first two are biographies on Alexander Tcherepnin,⁵ one in German,⁶ and the third is a set of manuscripts and letters relating to John Sebastian,⁷ located at the library of Haverford College, of which Sebastian is an alum. The author was unable to find any related literature in the area of the work itself, except for a scan of the program from the premiere performance (See Appendix A).⁸

⁵ Arias, Enrique. *Alexander Tcherepnin: A Bio-Bibliography*. New York: Greenwood, 1989.

⁶ Reich, Will. *Alexander Tcherepnin*. Bonn: Belaieff, 1970.

⁷ Sebastian, John. *Papers 1940-1974*. Haverford College.

⁸ "Stadium Concerts Review," New York Philharmonic Digital Archives, accessed January 24, 2014, <http://archives.nyphil.org/index.php/artifact/abf5fca0-aab7-4fd8-956a-1388f6591919>.

Chapter 2

Who, When, and Where

Alexander Tcherepnin

Alexander Tcherepnin was born in 1899 in St. Petersburg, Russia to Nikolai and Maria Tcherepnin. Nikolai Tcherepnin was a distinguished composer, conductor, and pedagogue while his mother was a singer who often sang Russian, German, and French songs in the parlor. Because of his parents' rich musical lives and careers, most importantly his father's position as conductor of Serge Diaghilev's famed Ballet Russe, Tcherepnin met many of the prominent figures in Russian music and dance, among them Nikolai Rimsky-Korsakov, Anatoly Liadov, Alexander Glazunov, and Igor Stravinsky. Also, Sergei Prokofiev would frequently play his latest compositions for Tcherepnin, when he would visit for a lesson from the elder Tcherepnin.

The immersive nature of music in his household led Tcherepnin to feel that, "In our home... music was religion."⁹ He learned the fundamentals of music at age five, before he had learned even the alphabet. His mother would support his early efforts to become a composer while his father initially hoped he would find a more lucrative and less stressful life than composing. However, Tcherepnin's serious intent would eventually lead his father to embrace the idea. By the time Tcherepnin was fifteen, he had already become a prolific composer, having written several symphonies, piano concertos, operas, piano sonatas, and a few dozen piano pieces. At age eighteen, Tcherepnin enrolled at the St. Petersburg Conservatory, where his father also taught. About this time, Tcherepnin

⁹ Ludmila Korabelnikova, *Alexander Tcherepnin: The Saga of a Russian Émigré Composer*, Trans. Anna Winestein, ed. Sue-Ellen Hershman-Tcherepnin (Illinois: Indiana University Press, 2008), 183.

developed a preoccupation with the major-minor triad that would ultimately lead to his development of the nine-tone scale that would later become known as the “Tcherepnin Scale.”¹⁰ The scale would be as follows, on C: C, Db, Eb, E, F, G, Ab, A, B, [C], and contains six major-minor triads: on C, Db, E, F, Ab, and A.¹¹

In 1918, the Tcherepnin family left the famine and cholera of St. Petersburg and moved to the republic of Georgia, where Nikolai Tcherepnin had been appointed Director of the Tbilisi Conservatory. It is here that another lifelong influence on Tcherepnin’s music would be found, Georgian folk music. In 1921, the civil war that had been ongoing in Russia made its way to Tbilisi. The Tcherepnins would move once again, this time out of Russia, to France, where they would settle in Paris. Tcherepnin would finish his studies in Paris and began his international career as a composer/pianist. In 1927, Tcherepnin gained notoriety as the premiere of his *First Symphony* at the Paris Theatre du Chatelet nearly incited a riot because of the work’s “Scherzo,” which was written for mainly unpitched percussion instruments and stringed instruments tapped with the bow as if they were wooden drums. His *First Symphony*, and more specifically the “Scherzo,” predates what is largely considered to be the first percussion ensemble work, *Ionisation* by Edgar Varèse, by four years.

Throughout the 1920s, in Paris, Tcherepnin began producing works with a much more distinctive character than before, attributed to the influence of such companions as Maurice Ravel, Igor Stravinsky, Darius Milhaud and others, as well as the influence of the culture of Paris. Tcherepnin initially believed in simplification, but eventually

¹⁰ “Biography of Alexander Tcherepnin,” The Tcherepnin Society, accessed January 17, 2014, http://www.tcherepnin.com/alex/bio_alex.htm.

¹¹ Korabelnikova, *Alexander Tcherepnin*, 186.

realized that if simplification continued then nothing would be left. Thus he began to move in the opposite direction creating what he called “Interpoint,” a system of often dissonant polyphony where rhythmic units were employed thematically.

In the 1930s, Tcherepnin visited China and Japan multiple times to teach composers and established a press, *Collection Tcherepnine*, to publish his pupils’ works. He was seen as a sort of father figure to the composers of Japanese serious music. On one of his trips to China, he met a young pianist named Lee Hsien Ming, who would later become his wife. During World War II the family was stuck in Nazi-occupied Paris, having failed to escape. Furthermore, Tcherepnin wrote many pieces that he felt were trite in order to make any amount of money with which to support his family during these times. By the time the war was over, Tcherepnin had regained his fervor and resumed his traveling and concertizing.

After Tcherepnin toured America in 1948, he, along with his wife, accepted teaching positions at DePaul University in Chicago and he would later write that coming to America in 1949 was “the great change in my life.”¹² Tcherepnin, Ming, and their three sons, Peter, Serge, and Ivan, would live in Chicago until he resigned from DePaul in 1964 and they would then move to New York. Ivan Tcherepnin would eventually become a composer in his own right, graduating from Harvard University (B.A. 1964; M.A. 1969) and teaching at the San Francisco Conservatory of Music, Stanford University and Harvard University.¹³ Ivan, unlike his father, focused in the avant-garde realm of combining electronic music with acoustic, studying with composers like

¹² Ibid., 190.

¹³ “Biography of Ivan Tcherepnin,” The Tcherepnin Society, accessed February 12, 2014, http://www.tcherepnin.com/ivan/bio_ivan.htm.

Karlheinz Stockhausen and Pierre Boulez. In 1996, Ivan won the University of Louisville International Grawmeyer Prize for Music Composition for his *Double Concerto for Violin, Cello, and Orchestra*, written for his students Lynn Chang, violin, and Yo-Yo Ma, cello.

While Tcherepnin was in America, his compositional style can be considered a synthesis of all the styles he had gone through, as he attempted to consolidate and develop all of the earlier elements he had utilized. It was also during these years that Tcherepnin wrote many of his most notable works, including *Symphony No. 2 & Symphony No. 4*, premiered by the Chicago and Boston Symphony Orchestras respectively. In 1967, Tcherepnin became the second Russian émigré composer invited back to the U.S.S.R., the first being Stravinsky. Unfortunately Tcherepnin's compositional output was cut short due to his death in 1977 in Paris. Tcherepnin wrote a book entitled *Basic Elements of My Musical Language* discussing all the different scales he used including a nine-note "Chromatic Perfect" scale. In specific regard to percussion, Tcherepnin also composed a solo timpani piece titled *Sonatine for Timpani and Piano*. It is difficult for this author to determine if Tcherepnin used his nine-note scale in this piece as the solo line is more rhythmically based with few pitch changes, and the piano accompaniment is constantly changing keys through introduced chromatics that change from measure to measure. The piece is in four movements and involves many different timpani playing techniques such as rolls, odd metered rhythms, multiple grace notes, dampening, and pitch changes between drums.

John Sebastian

John Sebastian was born in Philadelphia, Pennsylvania in 1914, and died in France in 1980. Sebastian graduated from Haverford College in 1936. He wrote a beginner's method book entitled, *Introduction to the Chromatic Harmonica* in 1972. In this method book he takes a beginner, with no assumed knowledge of music, through learning notes, scales, and specific techniques involved in playing the harmonica, and uses popular folk tunes to demonstrate these techniques. His son, also John Sebastian, started out playing the harmonica like his father, but would eventually become a guitar player for his band The Lovin' Spoonful, which was inducted into the Rock and Roll Hall of Fame in 2000. There is a collection of papers and letters relating to John Sebastian Sr., his life, and his musical career, however, the author was unable to get copies of these prints to conduct further research in this area due to copyright issues.

When and Where

Concerto for Harmonica and Orchestra, Op. 86 was written specifically for John Sebastian Sr. in 1953. Sebastian and the New York Philharmonic, conducted by Thomas Scherman, premiered the concerto in New York in July of 1957 at Lewisohn Stadium in Manhattan, NY, as part of the New York Philharmonic's Stadium Tours that summer.¹⁴ At the time of this writing there are only two major recordings of this work, the first was recorded by John Sebastian and the Stuttgart Radio Symphony Orchestra in 1959, while the second was released in 2007 by Joseph Ashley, conducted by Co Nguyen, orchestra unknown. There are slight differences between the two recordings; however, the author believes both performers provide excellent performances.

¹⁴ New York Philharmonic Digital Archives, "Stadium Concerts Review."

Chapter 3

The What: The Instruments

The Harmonica

The harmonica, also referred to as the French harp, blues harp, or mouth organ, is a free-reed wind instrument in which a reed is fixed at one end of a chamber while the air passes through the opposite end creating a vibration of the reed. There are two main types of harmonicas, the diatonic harmonica and the chromatic harmonica.

The construction of the harmonica consists of five main parts: the reed-plate(s), the comb, the windsavers, the cover plate, and the mouthpiece.¹⁵ The reed-plates are a group of reeds fixed to a single housing (See Figure 3-1). Most commonly, the reeds and the housing are made out of brass, with some other possible materials being aluminum, steel, and plastic. The reeds are fixed at one end with a rivet, although they may be nailed or glued, and there are reeds on both sides of a hole so that the inner reed reacts to blowing while the outer reed reacts to suction. The comb, named for its similarity to a hair comb, is the main body of the instrument, which contains the air chamber covering the reeds (See Figure 3-2). Traditionally, the comb was made from wood, but now is usually made from metal or plastic. While there is a slight difference in the sound production between these materials used, the main difference is the durability of the comb itself. With most wooden combs, the exposure to moisture, through the saliva of the player, would cause the wood to expand. Also, overtime, the wood would shrink creating holes in the “air tight” formation of the comb and reed-plates causing air to leak

¹⁵ William Melton and Randy Weinstein, *The Complete Idiot's Guide to Playing the Harmonica*, (Indianapolis: Alpha, 2002), 30.

between reeds and cause incidental activation of the neighboring reed. One solution for this was to use a one-way valve, the windsaver, usually made of plastic or leather, to prevent air from leaking through the inactive blow reed when a draw note is being played. However, many performers prefer the wood combs and developed ways to deal with the shrinking effects by dipping the harmonica in water to help expand the wood. With the advances in technology, the use of plastic has become a popular replacement for the wood combs.



Figure 3-1. Comb and reed-plates



Figure 3-2. Reed-plates mounted on a comb

The cover plate is usually made of metal, although wood and plastic have been used, and will determine much regarding the tone quality of the sound produced. The cover plate is probably the most customizable feature about the harmonica as there is not a true standard way of making one. The final component of the harmonica is the mouthpiece. This is the part of the harmonica that covers the openings of the air chambers to allow for a smoother playing surface for the performer. During World War II, the harmonica experienced a certain “rebirth” as many of the soldiers would carry a small harmonica, usually the diatonic harmonica.¹⁶ Because of the high demand, harmonica makers like the Hohner Company, began making harmonicas completely out

¹⁶ Melton and Weinstein, *Playing the Harmonica*, 15.

of plastic. The durability of these harmonicas, and their tones, were not as good as the wood or metal alternatives, but they could be mass-produced; therefore, the harmonica began to be viewed, by some, as a toy rather than a serious musical instrument.

The two main types of harmonicas differ not only in their construction but also in their function and through different playing techniques. The chromatic harmonica, for which *Concerto for Harmonica and Orchestra, Op. 86* was written, can have 12, 14, or 16 holes, can play in any key and uses a button-activated sliding bar to redirect the air to a different reed-plate, which would be the reed for the note a half step higher (See Figures 3-4 and 3-5). The range of the chromatic harmonica is 4 octaves for a standard 12-hole instrument, while a 16-hole harmonica would include an extra octave in the bass range. The chromatic harmonica is used more commonly in classical or jazz music. The diatonic harmonica is usually a 10-hole instrument and is designed to play in a single key (See Figure 3-3). The range of the diatonic harmonica is technically three octaves, although the only full scale available is in the middle octave. However, through techniques such as “overblowing” or “overdrawing,” the performer can bend the pitches and turn the diatonic harmonica into a chromatic harmonica. Howard Levy is considered, by many, to be the foremost pioneer of this technique, demonstrated in his *Concerto for Diatonic Harmonica*, written specifically around this technique. This is of note since the diatonic harmonica is typically used in the blues and rock genres and not in the classical genre due to the diatonic harmonica’s limited range and key.

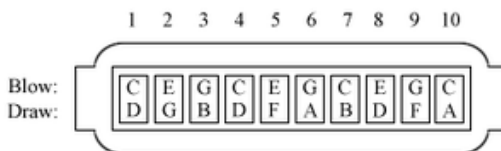


Figure 3-3. Diatonic harmonica (Blues Harp) layout

	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	
	`1 `2 `3 `4 1 2 3 4 5 6 7 8 9 10 11 12	

blow:	C E G C C E G C C E G C C E G C	key out
draw:	d f a b d f a b d f a b d f a b	

	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	
	`1 `2 `3 `4 1 2 3 4 5 6 7 8 9 10 11 12	

blow:	C# F G# C# C# F G# C# C# F G# C# C# F G# C#	key in
draw:	d# f# a# c d# f# a# c d# f# a# c d# f# a# d	

Figure 3-4. Solo tuning on a chromatic harmonica

	`1 `2 `3 `4 1 2 3 4 5 6 7 8 9 10 11 12	

blow:	C E G B C E G B C E G B C E G B	key out
draw:	d f a c d f a c d f a c d f a c	

	`1 `2 `3 `4 1 2 3 4 5 6 7 8 9 10 11 12	

blow:	C# F G# C C# F G# C C# F G# C C# F G# C	key in
draw:	d# f# a# c# d# f# a# c# d# f# a# c# d# f# a# c#	

Figure 3-5. Classical tuning on a chromatic harmonica

The Marimba

The marimba is arguably one of the oldest instruments and yet is also considered one of the youngest in terms of established pedagogy and repertoire. It is the intention of the author in this chapter to provide a basic understanding of the marimba's development geographically as well as its construction. For a more detailed account of the marimba's history, refer to the sources cited in the Bibliography. Other early keyboard percussion

instruments closely related to the marimba, such as the xylophone or vibraphone, are excluded from this project.

The marimba made its debut as a solo instrument with orchestral accompaniment in 1940 when Ruth Jeanne premiered Paul Creston's *Concertino for Marimba and Orchestra*.¹⁷ The origins of the marimba; however, can be traced back to different struck keyboard instruments found in Asia, Africa and Guatemala. Some accounts from different paintings and documents cite a similar type keyboard instrument as far back as 3700 B.C. in places like Greece, China, and even in the great pyramids of Giza.¹⁸ While these instruments were crude versions of the marimba we know today, the generic idea of striking a tuned slab and creating a defined pitch has been around for centuries. For many centuries, these crude marimbas were made of different materials, sometimes stone, wood, or even bamboo, and included many different methods of construction. The French National History Museum in Paris has what it calls the oldest music instrument in the world, the lithophone, constructed like a stone marimba.¹⁹

Through research of documents, archaeology, and art, it is believed that the marimba was established in the Middle East and travelled outward from there. It is unclear when exactly the keyboard we now call a marimba made its way between these different civilizations; however, there are many theories. In Indonesia, the marimba family of instruments were used to a much greater extent than any culture previously, in the

¹⁷ Kite, *Keiko Abe*, 176.

¹⁸ Gordon B. Peters, *The Drummer: Man, A Treatise on Percussion* (Illinois: Kemper-Peters Publications, 1975), 125-126.

¹⁹ *Ibid.*

early parts of the 12th century.²⁰ Instruments like the saron and gender are both forms of metallophones that are believed to have made their way through Asia from the earlier forms of the marimba. From Asia, the marimba is thought to have made its way into Africa, where it became a standard among many tribes. In Africa, the developments of the marimba made at this time are similar to the current instrument. The use of wood for the bars instead of stone or bamboo, the use of individual resonators for each bar, as opposed to the trough-like resonators that had been used in many of the keyboards of Asia, were present in these African instruments. From Africa, the marimba made its way across the Atlantic to Guatemala. The transfer of the instrument between the Asian, African, and Guatemalan cultures is believed to have transpired through the slave trades that predominated in those regions. While the marimba made many travels around the world, it is interesting to note that it made its way to Europe very late. The following account, used to show that even the xylophone was rare in Europe at this time, is taken from the *Origin of the Xylophone* by Georges Servieres (translation by Camille Marcel Siquot, Baltimore, Maryland, 1953):

All those who, like me (Servieres), are of an age to have heard in 1875 the first production of the *Danse Macabre* by Camille Saint-Saens will remember the deep impression of surprise for the ear produced by the strange sound of the xylophone playing the rhythm of the 'skeleton waltz.' The realistic click of the bones even caused some scandal. The originality of color, also the truthfulness of the plan, and the clarity of the selection contributed to its quick diffusion over the whole of Europe.

Where did the idea come to the composer to use for an imitative effect these kinds of tonal wooden blocks? The xylophone was not even listed in a book about orchestration used in his time. In Berlioz' treatise on instrumentation, published in 1844, a book which Saint-Saens considered of paramount importance, writing about keyboard percussion instruments mentions only the glockenspiel used by Mozart in the *Magic Flute* and the

²⁰ Ibid., 129.

harmonica with the glass blades. Berlioz himself refers to the general treatise on instrumentation written by his predecessor, J.G. Kastner in 1837, which was most useful to him; but in that book Kastner did not mention the xylophone either.²¹

One theory as to why the marimba stayed mainly in the areas of Africa and Guatemala for so long is due to the availability of suitable wood. The best suited wood, mahogany, hormigo, or Honduras rosewood, that can be used for marimba making, most importantly the bars, is usually found in tropical locations. Because of these limitations in terms of wood, most marimbas today utilize these same types of wood, shipped in from other parts of the world. However, with all the research, speculation, and inquiry into the origin of the marimba, there are many different views as to where the marimba came from and how it travelled across the globe. There are even accounts suggesting how or why the marimba originated, like the legend of the Zulu nation of Africa about a goddess named “Marimba” who created the first keyboard, named marimba after the goddess.²² Furthermore, Jesús Castillo, a prominent musicologist in Guatemala, has stated that the native name of the China Jul Mountain means “marimba of the ravines.”²³ This project, however, does not aim to solve that mystery, instead allowing for a brief knowledge of the instrument’s history and its construction.

The African and Guatemalan marimbas are relatively similar and would be again what most people consider as the ancestor to the marimba we know today. In Africa, different areas have different names for this instrument, such as balafo, mahambi, malimba, mbila, gyil, amadinda, or ambira, but the generally accepted name is marimba.

²¹ Ibid., 132.

²² Frank MacCallum, *The Book of the Marimba* (New York: Carlton Press, 1969), 13-15.

²³ Peters, 144-145.

The African marimba would be considered a gourd marimba (See Figures 3-6 and 3-7). This marimba is usually laid out diatonically, with a possible range of two to three octaves, with each note having its own specific resonator, made from a hollowed out gourd, often with some sort of wax or thin membrane inside the gourd to create a unique buzzing sound. This marimba is also seen in Guatemala under the same name.



Figure 3-6. Primitive African gourd marimba²⁴

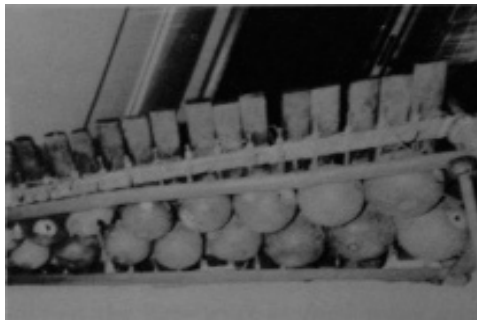


Figure 3-7. Underside of African gourd marimba with spherical resonators²⁵

It wasn't until 1894 when Sebastian Hurtado made the first marimba in the style we see today, with two rows of bars separating the accidentals and the naturals.²⁶ In Guatemala, this is called the chromatic marimba, or often seen as marimba doble, or double marimba. The marimba doble is a pairing of two marimbas, one larger than the other, played by up to seven performers with three on the smaller marimba and four on

²⁴ MacCallum: 36.

²⁵ Ibid.

²⁶ Ibid., 16.

the larger. This is the most common appearance of the marimba in Guatemala. These marimbas were crafted solely out of wood, for the inclusion of metal would change the sound. The marimba makers, throughout the different civilizations, often had strange beliefs about what type of wood, how long it had to be dried, or even what gender the tree was that the wood came from. The construction of the marimba involves a sturdy frame to support the weight of the instrument, rails on which the bars rest, the bars themselves, and small pegs that go between each bar so as to keep them in place. The frame and construction of the marimba also needed to be sturdy enough to support the transportation methods of the time (See Figure 3-8). The most important aspect of the construction of the marimba is the tuning of the bars (See Appendix B), the stringing of the bars, and the placement and construction of the resonators. The bars themselves are tuned by cutting out a curve on the underside of the bar. Either shaving under the center to lower the pitch or shaving the edge of the bar to raise the pitch provides fine-tuning. The stringing of the bars is done through a precise process to find the node of the bar. This process usually involves pouring sand on the bar, striking it and finding where the sand collects, as this indicates where there are no vibrations and a hole is then cut through the bar in this place. The final detail is the resonators themselves. A resonator must be in tune with the bar that it is supposed to resonate. This is achieved through creating resonators of different lengths or sizes, often times the lowest resonators must be curved in order to fit within the scope of the instrument.



Figure 3-8. Large marimba being carried on a man's back²⁷

The Hurtado family, featuring many of the first notable names in marimba playing, formed the Hurtado Brothers Royal Marimba Band (See Figure 3-9). This marimba band, performing on the marimba doble, toured across America and Europe in the early 1900s and also recorded some of the earliest recordings of the marimba in 1915.²⁸

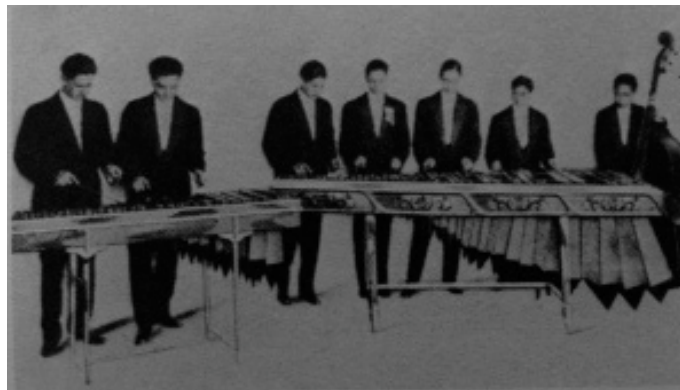


Figure 3-9. The Hurtado Brothers Royal Marimba Band of Guatemala²⁹

²⁷ Ibid., 37.

²⁸ Ibid., 24-25.

²⁹ Ibid., 35.

Because of this exposure for the marimba, and the use of the xylophone in Vaudeville shows, the marimba began to grow rapidly in popularity in the United States. It was around this time that the Deagan Company was founded by J.C. Deagan in Chicago. The Deagan Company started making glockenspiels in 1880 and became incorporated in 1913 as the J. C. Deagan Musical Bells, Inc., changing their name to J. C. Deagan, Inc. three years later. Deagan, Inc. and the Leedy Co. were both instrumental in creating new versions of the marimba, like the Deagan nabimba (See Figure 3-10). This was Deagan's attempt to recreate the feel of the Central American marimbas with the unique buzzing resonators.

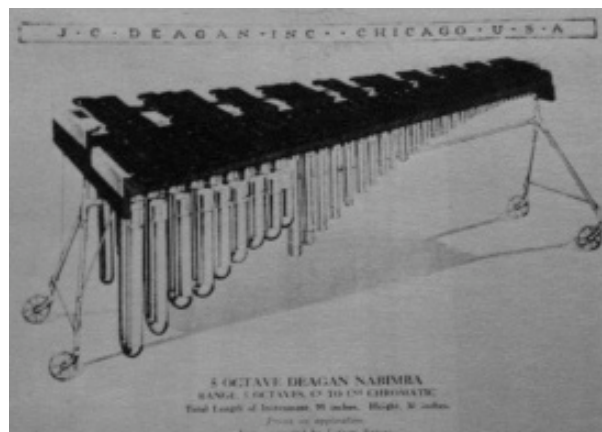


Figure 3-10. Deagan 5-octave nabimba³⁰

In the 1930s Clair Omar Musser, under the auspices of the Deagan Company organized a marimba orchestra of fifteen players. A few years later, at the Century of Progress Exhibition in Chicago, there were one hundred marimbas playing together, and in 1935 Musser formed the International Marimba Symphony Orchestra, also with one hundred players, performing all across Europe and even in Carnegie Hall, of which a review in the New York Times stated:

³⁰ Ibid., 44.

The International Marimba Symphony Orchestra... gave its first New York Concert last night in Carnegie Hall before a large and enthusiastic audience. Clair Omar Musser is the conductor of this organization which has been touring Europe. The program had considerable variety, from two movements of César Franck's Symphony, and the Pilgrims' Chorus from Wagner's Tannhäuser through a group of arrangements of music by Chopin, Rosales, Ketelby, Thomas, Rubinstein, Elgar and Dvorak. It gave admirable opportunities for the display of virtuosity and of varied and brilliant tone color by the assembled instruments. Mr. Musser's orchestra, which seeks to restore the classic marimba to its place as an ensemble instrument is made up of fifty men and fifty women. It uses specially fabricated marimbas valued at more than \$100,000. The marimbas... were said to weigh more than twenty tons.

The perfection of intonation of the ensemble, its rich sonority and the uniqueness of the effect gave last night's concert exceptional distinction. There was the impression of the most ancient of musical instruments capable of awakening atavistic emotions, developed and subtilized to a point when it made an intimate appeal to the intelligence and emotions of the man of today.³¹

Musser would go on to create his own company, eventually standardizing the range of the marimba to four and one-third octaves (See Figure 3-11). Other people who have been considered extremely influential in the development and advancement of the marimba include: Vida Chenoweth, the "First Lady" of the marimba (See Figure 3-12); Gordon Peters and the Marimba Masters (See Figure 3-13), an ensemble that Peters started at the Eastman School of Music which even made appearances on television; and Carolyn Reid, the first marimba major in history, graduating from Northwestern University in Chicago, taught at that time by Musser, and also the founder of the International Guild of Mallet Percussionists in 1957.

³¹ Ibid., 58-59.



Figure 3-11. Clair Omar Musser and his 4.3 octave marimba³²

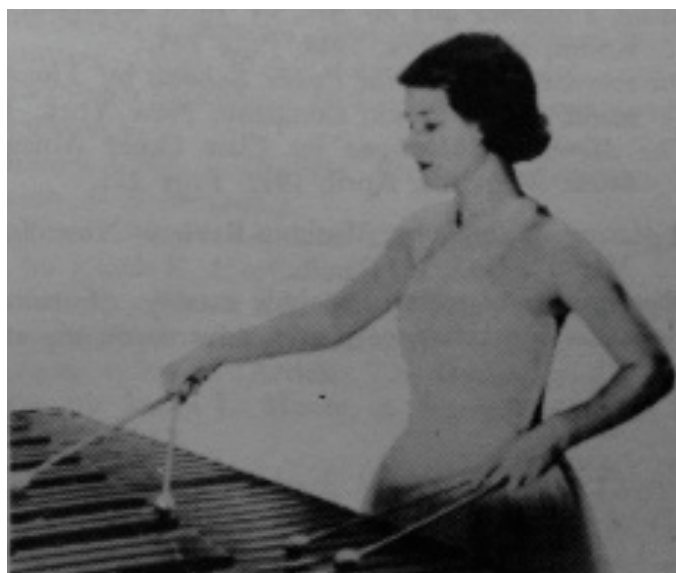


Figure 3-12. “First Lady of the Marimba” Vida Chenoweth³³

³² Ibid., 78.

³³ Ibid., 95.



Figure 3-13. Gordon Peters (center) and the Marimba Masters³⁴

³⁴ Ibid., 82.

Chapter 4

The What: A Description of the Composition

Concerto for Harmonica and Orchestra, Op. 86

Concerto for Harmonica and Orchestra, Op. 86 is a four-movement work, with the layout of the movements following the Classical era symphonic model of fast-slow-fast-fast. The first movement is in a quick “Allegro,” the second in a slow “Lento,” the third in a very fast “Presto,” and the fourth begins with a “Poco Sostenuto” and “Cadenza” but is mainly in a quick “Allegretto.” The formal layout of this concerto is very traditional in nature, relating very closely to the piano concertos of Beethoven.

The author’s intention of this chapter is not to provide a detailed theoretical analysis of the work. Instead it should serve as a guide, highlighting the basic formal structure. Additionally, the author hopes this overview will serve as a performance guide for any marimbist interested in performing this concerto.

The first movement is in a sonata-allegro form with the exposition being from the beginning to measure 112, the development section then occurs from measure 112 to measure 168 and the recapitulation starts at measure 168 and ends at measure 279 with conclusion of a short coda following. The exposition contains two main sections, the opening “Allegro” and a “Poco Meno Mosso” section. The A section of the exposition, the “Allegro,” has two main themes. The first theme is stated almost immediately in the third measure and is rooted around one of the main motives of the movement (See Figure 4-1). The second theme appears later in measure 45, this theme begins the transition between the A and B sections of the exposition (See Figure 4-2). The B section is mainly

based around one theme, which is built around the second main motive of the movement, and is stated first by the orchestra then repeated by the soloist (See Figure 4-3).

Figure 4-1. Exposition, A section, Theme 1



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Figure 4-2. Exposition, A section, Theme 2

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Figure 4-3. Exposition, B section, Theme 1

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The development section is unusual from most Classical era symphonies in that this development is actually half as long as the exposition and recapitulation sections. In classical models, the development section was where most composers would spend their time expanding upon themes and seeing how drastic of variations and experimentations they could create. This practice led to longer development sections in comparison to the exposition and recapitulation sections. The development section in this work is 56 measures long compared to the 112 measures for the exposition and recapitulation each,

precisely half as long. The author believes the composer did this on purpose. The development section is built around the first half of the second theme of the A section in the exposition (See Figure 4-4). Tchernin also notably includes the motive from the first theme as part of his developmental material. This thematic material is also in a new key from the original exposition theme.

Figure 4-4. Development, Theme 1 (from 2nd theme in exposition)



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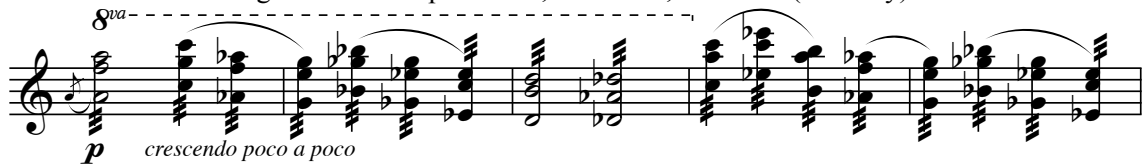
The recapitulation begins with a near exact repetition of the beginning statements of the exposition. There are some slight differences in the melodies that are played between the orchestral accompaniment and the soloist, from the exposition, but the main material is generally the same. When Tchernin gets to the second theme of the A section, he only states the second half of the theme and by now has gone into a new key (See Figure 4-5). The form remains the same, continuing through the new key, and when the B section arrives Tchernin again utilizes a new key, keeping the theme as announced earlier. From here there is a transition into the coda, highlighted by the repetition of one chord in the solo line with a slight ritardando into the coda.

Figure 4-5. Recapitulation, A section, Theme 2 (new key)



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Figure 4-6. Recapitulation, B section, Theme 1 (new key)



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The coda is relatively short and draws most of its material from the first theme of the exposition and, most importantly, the motive used in the first theme.

Figure 4-7. Coda, motive 1 from Theme 1 of the exposition



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The second movement is in a slow “Lento.” This movement incorporates three different themes throughout, although it could be argued that the first theme is actually stated three times, separated by the differing material played by the soloist. The soloist opens the movement with the statement of the first theme which, including the transitional material, lasts for twelve measures (See Figure 4-8). This theme is based off the motive introduced on the second beat of the first measure, in particular the half step relation between the first two sixteenth notes and the last two sixteenth notes. This motive is constantly in use throughout the entire movement.

Figure 4-8. Theme 1 (including motive 1 on beat two)



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This is followed by the statement of the first theme, in the accompaniment, simultaneously with the second theme being played by the soloist. The second theme lasts for fifteen measures, again including the transitional material into the third theme.

Figure 4-9. Theme 2



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The soloist plays the third theme while the accompaniment again plays the first theme; however, in this occurrence the first theme is started after the previously exemplified first four measures. This encompasses the last thirteen measures of the movement, interestingly using the same transitional material employed from the first to the second themes to conclude the movement.

Figure 4-10. Theme 3

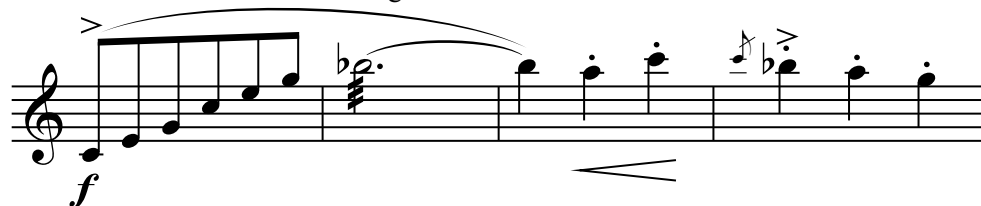


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The third movement is similar to the second in that there are three main themes employed. This movement is more akin to the “Scherzo” type movements found in the classical symphonies. The use of staccato notes and short, syncopated rhythms suggests a hint at the scherzo movement of Tchaikovsky’s *Fourth Symphony*. This movement is in a quick three, felt in one, and due to the fast tempo, is the shortest movement of the concerto. It begins with an introduction lasting twenty-four measures, of which the mood is rather dark and poignant. This is followed by the first theme, played by the soloist,

which then goes through a variation and transition leading into the second theme. The first theme and transition lasts for forty measures.

Figure 4-11. Theme 1



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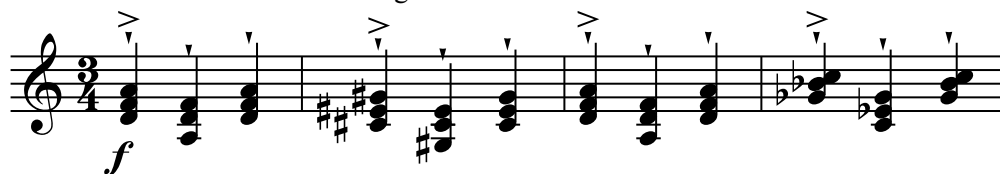
The second theme is a much more subdued, romantic sounding melody utilizing a two over three feel in the solo line, while the accompaniment is in a more flowing waltz-like feel. This theme, while syncopated, actually creates an overlay of 3/2 time on top of the accompaniment's 3/4 time. The second theme is relatively short, only twelve measures long, before it is interrupted by two measures of sharp, syncopated hits in the accompaniment which lead into the third theme. The third theme is the same length as the second theme, but is completely different in feel as the third theme is more aggressive and syncopated.

Figure 4-12. Theme 2



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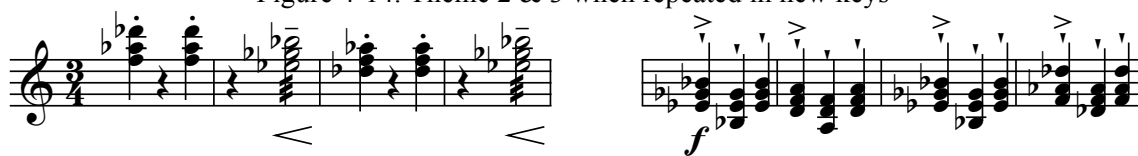
Figure 4-13. Theme 3



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After a short transition, ten measures, Tcherepnin makes the listener think there is a return to the first theme; yet, he quickly moves on through variations and development of these ideas into a repeat of the second theme. This time the second theme is in a new key; furthermore, the form between second theme, sharp and syncopated interruption, and third theme, also in a new key, is the same as before (See Figure 4-14). This then leads into the coda, which lasts for thirty-four measures, the longest section of the piece. The coda is highlighted by unison, syncopated hits in the accompaniment and soloist, slowly dying away to the end of the piece. The movement ends with the soloist utilizing a technique where the slide button is only halfway depressed, allowing for the air to pass through both reeds creating a cluster chord of half steps between the desired notes (See Figure 4-15).

Figure 4-14. Theme 2 & 3 when repeated in new keys



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Figure 4-15. Cluster chords from half-depressed slide button



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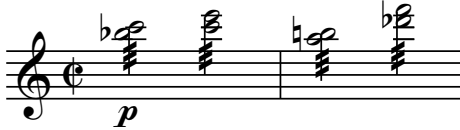
The fourth movement begins with a “Poco Sostenuto” section with the accompaniment playing staccato notes in a very mysterious and dark fashion. This then leads into a “Cadenza” for the soloist, highlighted by two different motives.

Figure 4-16. Cadenza motive 1



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Figure 4-17. Cadenza motive 2



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Immediately following the “Cadenza” is the “Allegretto” section, which from this point forward is in the form of a rondo, ABaCABa, with three contrasting themes. The first theme is stated at the beginning of the “Allegretto.” This is the primary theme used in the A section of the rondo. This section lasts for forty-two measures leading into the B section.

Figure 4-18. Allegretto, A section, Theme 1



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The primary theme of the B section (See Figure 4-19) utilizes a slower than average rhythmic speed than the A section theme; however, it is not as lyrical as the C section theme that follows. One of the unifying features of this B theme is the use of the grace note in a very similar manner to that of the first theme from the third movement.

Figure 4-19. Allegretto, B section, Theme 2



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After a brief return to some fragments and variations of the A section's theme, we come to the C section, which is in a new tempo marked with a "Poco Meno Mosso." This section begins with an introduction in the accompaniment followed by the statement of the primary theme in the solo line. This theme was actually written by Tcherepnin's son Ivan, at the age of six,³⁵ who would later grow up to be a composer in his own right. This melody goes through a few variations before we finally return to the A section again.

Figure 4-20. Poco Meno Mosso, C section, Theme 3



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Upon return to the original A section, there are only a few minor differences in the melody and the interplay between the solo and accompaniment lines. However, as we progress, Tcherepnin changes keys multiple times throughout the repeat of the B section.

Figure 4-21. Allegretto, second B section, Theme 2 (in new key)



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³⁵ "Biography of Alexander Tcherepnin," The Tcherepnin Society, accessed January 17, 2014, http://www.tcherepnin.com/alex/bio_alex.htm.

From there Tcherepnin uses fragments of the A theme to build into a cascading interplay between the solo and the accompaniment building until a sudden drop occurs in the last six measures of the movement. These last six measures are notated as a slow whole note arpeggiation of an A minor seven chord leading to the final C major downbeat. Yet, in John Sebastian's recording of this work, these last six measures are treated with more flare and showmanship through Sebastian's use of glissandi and cluster chord blowing and drawing techniques to create a fuller and denser sound leading to the final note.

In this work, Tcherepnin has created a virtuosic concerto for the harmonica player. This is evidenced through the melodic, harmonic, and rhythmic aspects of the solo line itself, as well as the work as a whole. The author believes Tcherepnin's use of the Classical symphony model and the sheer length of the work provides an exciting musical adventure for the soloist and the orchestra as well.

Chapter 5

The How

The Arrangement and Arranging Process

The arrangement of Tcherepnin's harmonica concerto for marimba involved not only a transcription, but also a re-arrangement. Throughout the arranging process for marimba, there were several specific sections that required some alteration. Excluding these sections, the solo part transferred smoothly from harmonica to marimba, as neither is a transposing instrument. Additionally, the natural parallel motion used to play the harmonica allows the marimbist to move in a natural parallel motion as well. The range of the marimba is large enough to cover more than the range of the harmonica, negating the need for octave adjustments. Due to the nature of the harmonica, and its ability to play four or even five note chords in rapid succession through specific techniques, there were multiple sections needing simplified chords or rhythms to allow the marimba performer to achieve Tcherepnin's basic melodies and harmonies. Two other factors unique to the harmonica, the use of the slide button and the use of man-made vibrato, also accounted for some of the passages requiring re-arrangement on marimba.

The first passage involving a major adjustment occurs in the first movement during the exposition's A section, Theme 2 (See Figures 5-1 and 5-2). In this passage the original solo line utilized the harmonica's ability to sound full chords in rapid rhythmic succession. While the author believes modern techniques of four-mallet marimba playing has progressed, this technique is limited in the speed, accuracy, and maneuverability of

blocked³⁶ chords along the instrument. The layout of the marimba's bars also hinders the performers ability to change chords quickly (See Figures 5-3). The most dramatic changes of this passage happen in the last measure shown, where the original line contains steady sixteenth notes leaping octaves. This is a feat the author believes to be near impossible on the marimba, thus he was forced to change the rhythm, allowing for a split second of time for the performer to maneuver the distance.

Figure 5-1. Original exposition, A section, Theme 2

The musical score consists of four staves of music. The first staff is in 3/4 time and begins with a dynamic marking of *f*. It features a series of chords with accents (>) and a double bar line with a repeat sign. The second staff is in 2/4 time and begins with a dynamic marking of *mf*. It continues with chords and accents. The third staff is in 2/4 time and begins with a dynamic marking of *sf f*. It features a series of chords with accents and a double bar line. The fourth staff is in 2/4 time and begins with a dynamic marking of *sf*. It continues with chords and accents. The score is written in treble clef and includes various articulations such as accents and slurs.

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³⁶ Referring to the striking of multiple notes at the same time.

Figure 5-2. Arranged exposition, A section, Theme 2

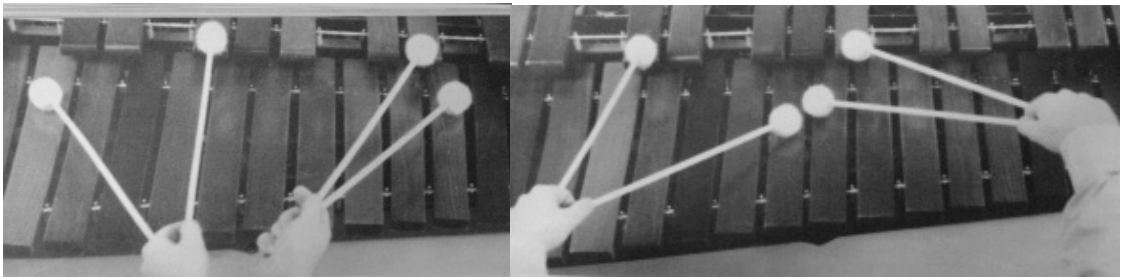


Figure 5-3. Extreme angles for blocked chord playing on marimba³⁷

The next three adjustments are relatively similar in nature; however, different techniques had to be deployed to create the most natural sound. The first occurrence is in the beginning of the development section in the first movement. Originally, Tcherepnin wrote a group of nine sixty-fourth notes, also called a ninelet, in the space of eight sixty-fourth notes (See Figure 5-4). Due to the relatively small nature of the harmonica, and thus its extremely close note layout, the performer could play an entire three-octave scale with one breath in a relatively quick motion. The ability to slur these notes together

³⁷ Leigh Howard Stevens, *Method of Movement* (Leigh Howard Stevens, 1979), 34.

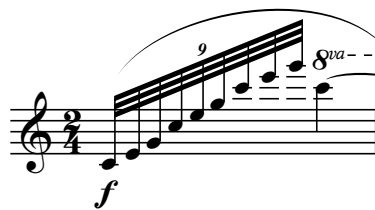
through a single breath allows for a wide-ranging scale to be played quickly. However, for the marimba player, the author felt the only way to recreate this idea was to perform a glissando, a technique where the mallet is set on a low note of the marimba and, without lifting, slides up the keyboard. This technique can also be performed on the piano with the use of the performer's hands. The glissando technique is limited to the individual registers, the naturals and the accidentals, similar to the black and white keys on a piano, thus making any glissandi involving both naturals and accidentals relatively impossible. Since the originally written ninelet uses notes on both the natural and accidental registers the glissando technique would normally not be adequate, however, in this specific instance a glissando of just the accidentals achieves the same idea of the ninelet since it is based off the C# major arpeggio. The second instance of this ninelet is based off the C major arpeggio leaving all the notes on the natural register (See Figure 5-5). While the glissando technique is not perfect in replicating the exact notes and rhythm of the ninelet Tcherpnin originally had written, it does allow for the marimba performer to achieve the same effect as the harmonica performer with minimal distinction between the parts (See Figures 5-6).

Figure 5-4. Original C# Major ninelet



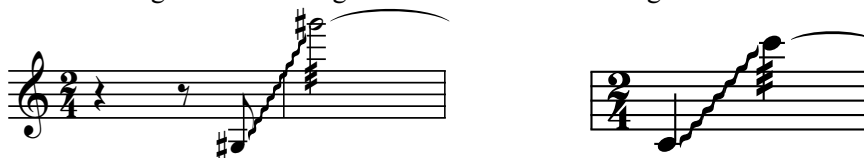
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Figure 5-5. Original C Major ninelet



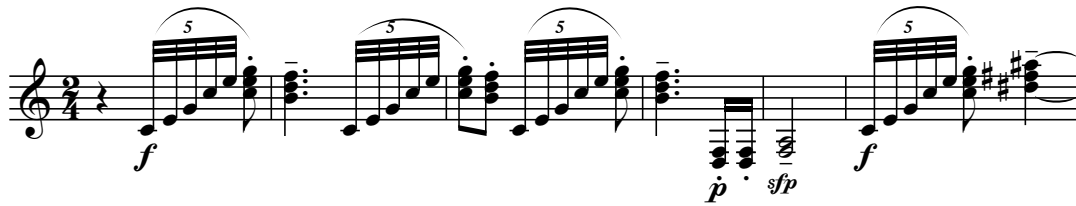
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Figure 5-6. Arranged accidental and natural glissandi



The second similar occurrence is seen later in the first movement during the development where Tcherepnin originally wrote a group of five grace notes, or a fivelet, leading to the main note of a three-note chord (See Figure 5-7). Like the first occurrence, the speed of the notes involved in the grace note are written for the much smaller harmonica and are beyond the abilities of the marimbist, according to the author. In order to alleviate this, the author subtracted the last note of the fivelet and the bottom two notes of the release chord to help keep the continually rising idea of the passage (See Figure 5-8). The most interesting, and difficult, aspect of this passage is the fact that the marimba performer will be playing this section with two mallets instead of four. This is actually due to the section immediately prior, in which a sequence of arpeggios ascends and descends rapidly through different chords (See Figures 5-9 and 5-10). Because of the wide range of this section, the lack of enough time to add the other two mallets, and the grace note arpeggios themselves, the use of two mallets proved to be the best solution by the author for both of these sections, albeit proving as one of the most difficult sections of the piece.

Figure 5-7. Original fivelet grace notes



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Figure 5-8. Arranged grace notes

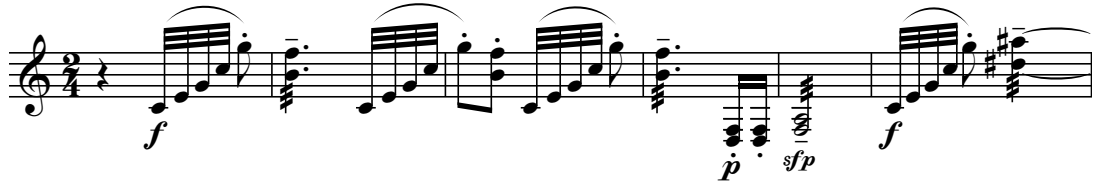
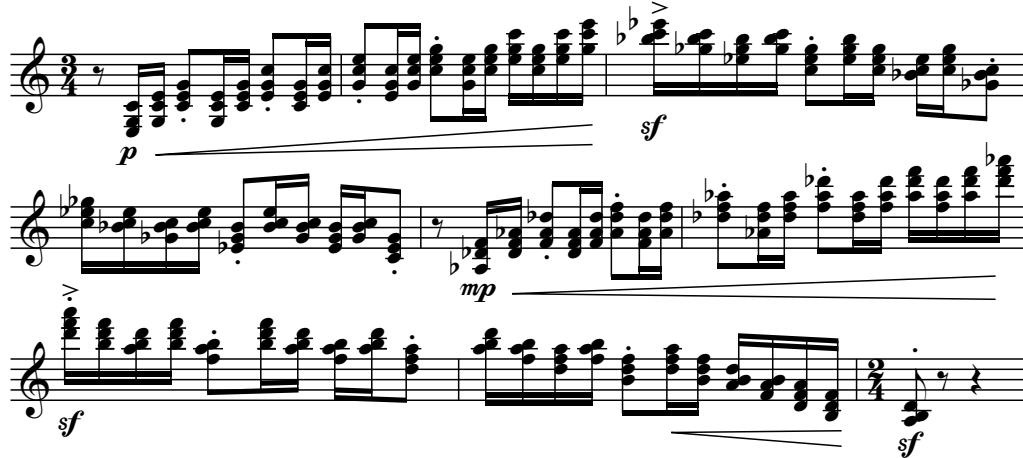


Figure 5-9. Original sequence of arpeggios



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Figure 5-10. Arranged sequence of arpeggios



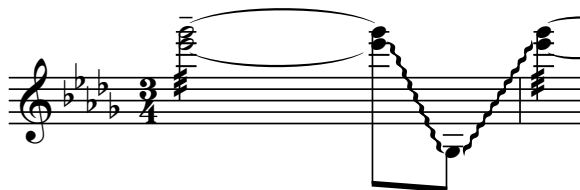
The final occurrence appears in the second movement. In this occurrence the original passage is written for the harmonica performer to play two, sixty-fourth note, ninelet scales down and back up the instrument (See Figure 5-11). The author's solution to the problem of performing these quick scalar passages, this time with double stops,³⁸ was the use of the glissando technique again. However, for this passage the use of two glissandi is needed to get down the instrument with one mallet and back up with the other. Although, due to the key signature, most of the notes played are accidentals, which led to the author employing what can be called a "black note"³⁹ glissando (See Figure 5-12). Because of the slow tempo marking of this movement and the long range of the glissando, the author feels the performer has to be extra careful when performing this task as the gaps between the sets of notes pose many problems to the glissando technique.

Figure 5-11. Original sixty-fourth note ninelets



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Figure 5-12. Arranged "black note" glissando



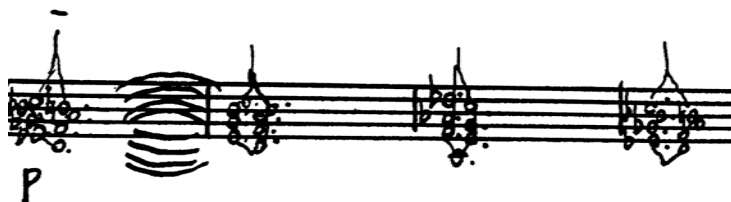
The next passage, located at the end of the third movement, contained one of the more challenging parts to arrange. In this section, as discussed in chapter four,

³⁸ Referring to the technique of playing two notes at the same time on the marimba.

³⁹ Referring to the black notes of the piano.

Tcherepnin wrote a large eight-note cluster chord. The performance of this chord on the harmonica utilized the special technique of depressing the slide button on the side of the harmonica halfway. Therefore, when the performer then blows through the desired holes, he is activating both sets of reeds involved, in this case a B diminished seven chord mixed with a C diminished seven chord for two measures, a C Major mixed with D-flat Major for one measure, and then returning to the B diminished seven/C diminished seven mixed chords (See Figure 5-13). On the harmonica, these chords are actually all played in the same position; the difference is created through the use of the draw reeds and the blow reeds. In order to maintain the multi-chord effect on the marimba, the author used the top two notes of each chord, except for the use of the G-flat instead of the B-flat on the C diminished seven chord. In order to also match the difference between the blow and the draw sounds the author believes the marimba performer must also put more weight onto the third measure to accentuate the change in tonality that would be present on the harmonica. Also of note, the preceding measures created a problem with the range of the two instruments. The harmonica is capable of playing up to a D two octaves above the treble clef staff, while the marimba can only play up to the corresponding C. In the preceding measures the author faced two options, the first, to take the entire passage down one octave, and the second to start on a lower note of the arpeggio on the second and third statements of the sequence (See Figures 5-15 and 5-16). The author decided instead of changing the notes intended by Tcherepnin, to take the passage down the octave, even though this would technically put the beginning notes out of the range of the originally intended harmonica.

Figure 5-13. Original eight-note cluster chords



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Figure 5-14. Arranged cluster chords

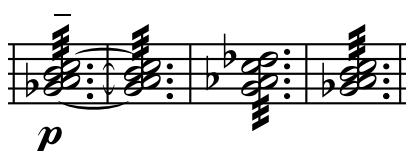


Figure 5-15. Original arpeggiated sequence



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Figure 5-16. Arranged arpeggiated sequence



The last two sections are located at the end of the fourth movement and posed some of the biggest questions for the author about how to truly end the piece with as much flair and energy as was originally intended. The first passage starts with what could be considered a short codetta at the end of the movement. In this passage, the soloist uses the motive used in the A section theme played in a call and response with the accompaniment, gradually using less and less of the motive until the call and response is

only two eighth notes long followed by a unison crescendo of eighth notes (See Figure 5-17). In the full orchestration; however, there is a tertiary line that could not be covered in a piano reduction and was inserted into the solo part by the author (See Figure 5-18).

Through the addition of this line, the call and response is no longer as apparent, since the soloist is playing during the response. Yet, this allowed for more excitement and build leading to the end.

Figure 5-17. Original call and response

The musical score for Figure 5-17, titled "Original call and response", is presented in five staves. The first four staves contain rhythmic patterns of eighth notes and chords, with a *ff* dynamic marking. The fifth staff is a single line with a *cresc.* marking and a double bar line with two slashes (//).

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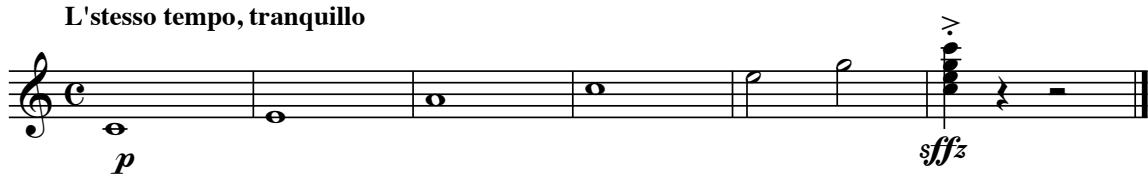
Figure 5-18. Arranged call and response

The musical score for Figure 5-18 is arranged in five staves. The first staff starts with a *ff* dynamic marking. The notation includes various chords and melodic fragments. The final staff is marked *cresc.* and ends with a double bar line and repeat dots, indicating a final flourish or roll.

The last passage is the final six measures of the work. In these measures, the original part is a long ascending whole note sequence. However, as stated in chapter 4, the written ending and the one performed by John Sebastian are not the same. In light of this fact, the author chose to emulate Sebastian's performance to allow for a much more exciting finish as opposed to the single notes themselves. The author used a technique called the "Musser roll," sometimes also referred to as the "flop roll" or "ripple roll," where the inside mallets are left loose and "flop" in-between the roll of the outside mallets. In order to create the dense clusters akin to Sebastian, the author took the original note and added the three lower diatonic pitches (See Figures 5-19 and 5-20). Though this may not be the most impressive technique and other options may be available to the marimba performer for the close of this work, the author felt that this is

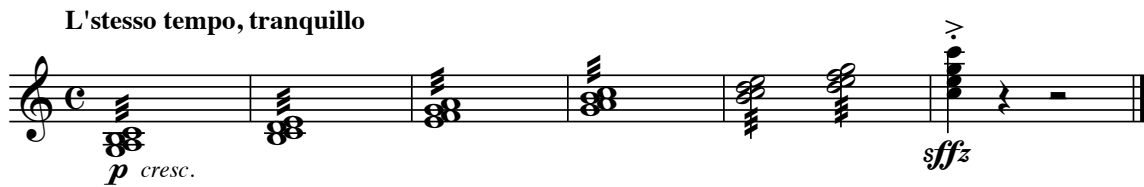
the best way to not only keep what was originally written and also follow the idea of the premiere performer.

Figure 5-19. Original ending



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Figure 5-20. Arranged ending



CONCLUSION

Through the arrangement of *Concerto for Harmonica and Orchestra, Op. 86* by Alexander Tcherepnin, the author feels that this work is worthy of a place in the concerto repertoire for the marimba. Not only has Alexander Tcherepnin proven to be a valuable contributor to the art of percussion, through his *First Symphony* and *Sonatine for Timpani*, but also for his contributions to music theory and his unique compositional styles. The author believes *Concerto for Harmonica and Orchestra, Op. 86* serves as a challenging four-movement concerto rivaling many of the standards in difficulty and musicality whether on harmonica or marimba. The author suggests that both the piece and composer deserve a “rebirth” in the marimba concerto genre.

Implications for Further Research

The scope of this project has been limited to the arrangement of *Concerto for Harmonica and Orchestra, Op. 86* by Alexander Tcherepnin for marimba. The author feels that the arrangement of works from more obscure instruments to marimba, will not only enhance the marimba repertoire, but also provide composers with increased awareness of and performance opportunities for their works.

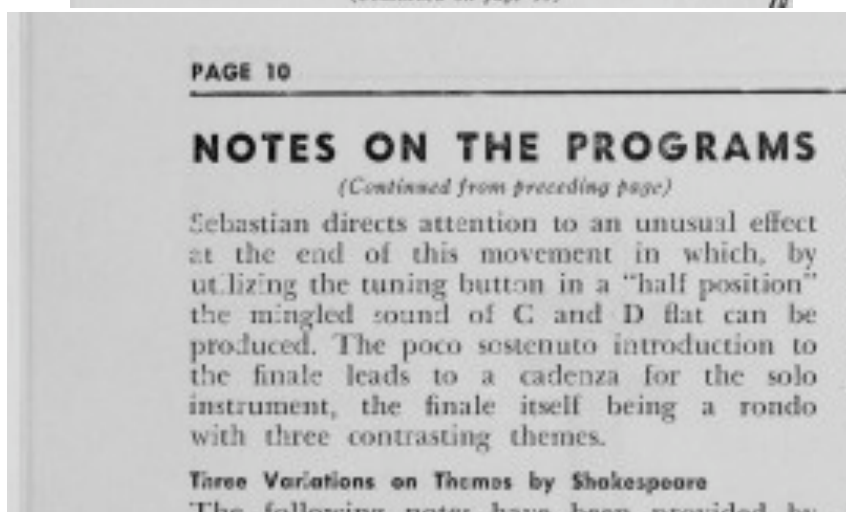
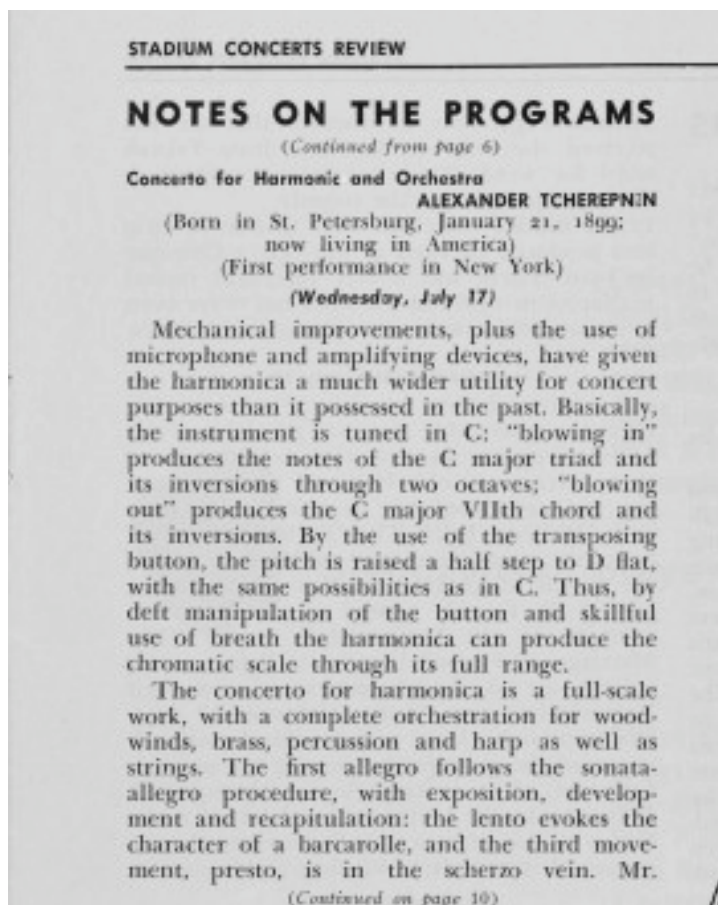
There is still much research to be done in regards to this harmonica concerto. The scope of this project did not include a full and detailed theoretical analysis of the work. Furthermore, the author did not address nor provide information regarding Tcherepnin’s more notable compositional techniques such as the nine-note scale, “Interpoint,” or unusual chord modulations and whether any or all of the techniques were present in his *Concerto for Harmonica and Orchestra, Op. 86*.

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Appendix A

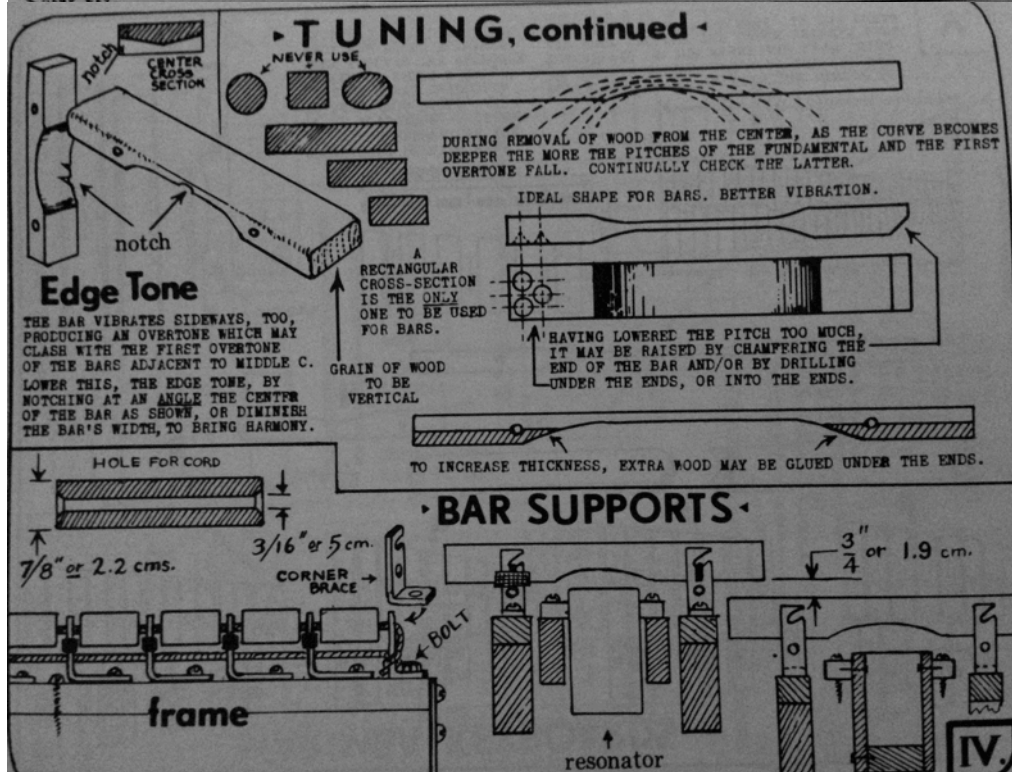
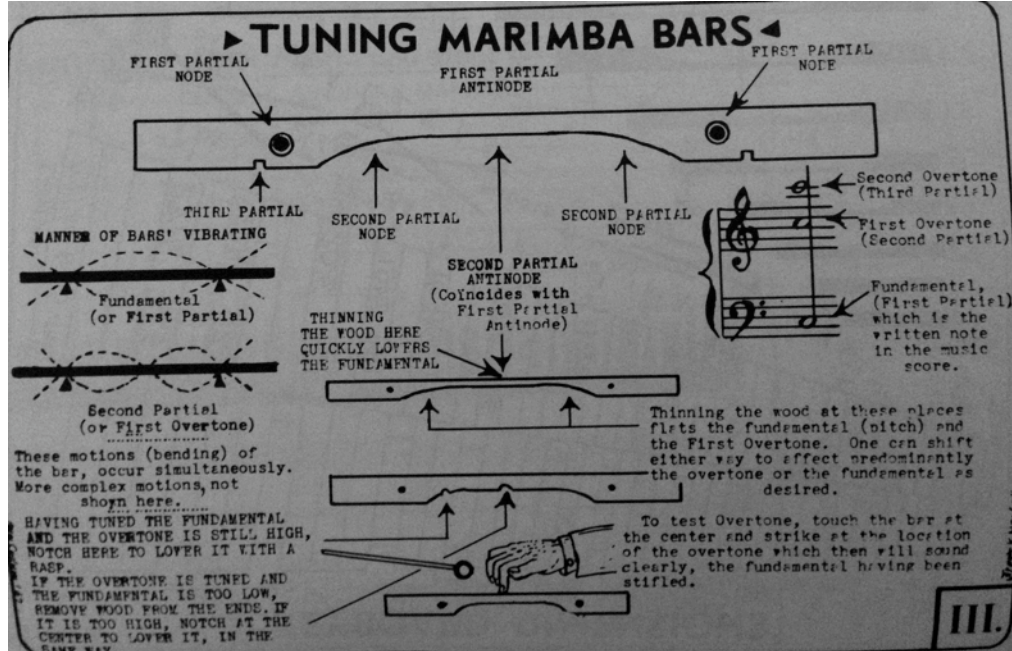
Excerpts from Program of Premiere Performance⁴⁰



⁴⁰ New York Philharmonic Digital Archives, "Stadium Concerts Review."

Appendix B

Tuning Marimba Bars⁴¹



⁴¹ MacCallum, 106-107.