LECTURE RECITAL:

BACH AND THE MARIMBA: BRIDGING THE GAP TO NON-PERCUSSIONISTS

by

NATHAN DAVID TINGLER

(Under the Direction of Timothy K. Adams Jr.)

ABSTRACT

Though the marimba is a relatively young instrument, it's requirement for semi-professional and professional job auditions requires an increasing level of mastery on the instrument. The music most commonly requested on auditions for the marimba is the music of Johann Sebastian Bach. Since auditions are a subjective judging environment a candidate must try and perform the music of Bach without offending non-percussionist members of the audition committee. I have chosen four of the more asked for works, Bach's *Cello Suite No.1 in G Major, Prelude*, *Violin Sonata in G minor, Fuga*, *Lute Suite in E minor, Allemande*, and *Invention No.4 in D minor* to attempt to showcase both general strategies for using multiple recordings of each work to determine an aural middle ground and specific issues that must be dealt with to perform each work.

INDEX WORDS: Marimba, Bach, Performance Practice, Transcription, Historically Informed Performance, Lute, Violin, Cello, Harpsichord, Leigh Howard Stevens

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF MUSICAL ARTS

ATHENS, GEORGIA

2020

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DEDICATION

I dedicate this project to my mother, Stephanie, for her many sacrifices to give me a better life and for teaching me the value of persistence, faith, and creativity.

ACKNOWLEDGEMENTS

I would first like to thank my teachers, Timothy Adams and Kimberly Toscano Adams. Through their guidance I have become a better musician and a better person who is fully prepared for employment in the music industry. Their teachings have transformed me into an artist who has the ability to clearly articulate my thoughts and feelings through music. I would like to thank the members of my committee, Dr. Michael Robinson and Dr. David Haas for their time and effort in not only serving on my DMA committee, but also in making my education at the University of Georgia possible over the past decade with a teaching assistantship in musicology and a job working with the Redcoat drumline, both of which have made me more valuable to potential employers. I would also like to thank Dr. Tony McCutchen for accepting me at UGA at the beginning of my college career and for providing me with so many opportunities to grow in music. Finally, I would like to thank two of my early mentors and friends, Dr. Todd Mueller, who started my journey in percussion all those years ago, and Dr. Ryan Smith, who nurtured my love of Bach, the marimba, and of composition.

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INTRODUCTION

As a western classical solo instrument, the marimba could scarcely be considered to be beyond its infancy. Vida Chenoweth, widely considered the first professional classical marimba soloist, debuted in Chicago only 64 years ago.[1] Though the marimba has existed close to its current physical form since the early 1910s, the marimba was widely used as a novelty instrument for chamber ensembles until 1940 when the first concerto for the instrument with orchestra was premiered. The marimba's development as a folk instrument, outside the realm of western classical music, could have contributed to the instrument's late start in art music.

Chenoweth, a musicologist as well as a performer of the marimba, researched the earliest origins of the marimba in southeast Asia, through Africa, to Guatemala, before the instrument finally made its way to America.[2] The marimba has evolved with each new culture that has developed it, gaining dried gourds below each wooden bar to magnify the sound created, then eventually trading the gourds for a large box below the bars and finally transforming the box into separate metal tubes, commonly called resonators, below each bar.[3] With each technological addition to the marimba, the number of possibilities for its use in art music grew larger. Chenoweth became the first to successfully make a career of performing solo recitals on

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[1] Vida Chenoweth, "What Do You Mean by 'Transcribe'?," *Percussive Notes* 44, no. 1 (February 2006): 36.

[2] Vida Chenoweth, *The Marimbas of Guatemala* (Lexington, KY: University of Kentucky Press, 1964), 53-54.

[3] James Blades and James Holland, "Marimba," *Grove Music Online*, *Oxford Music Online*, Oxford University Press, accessed January 2, 2020, http://www.oxfordmusiconline.com/subscriber/article/grove/music/40082.

marimba which helped transition the public appearance of the instrument from a novelty, exotic instrument to a serious vessel for western style musical expression. Composers began writing more difficult music for the instrument which led to the development of a technique for performing chords on marimba with four or more mallets, offering new possibilities not only for music to be written specifically for marimba, but also for marimba soloists to perform transcriptions of more difficult music.

The marimba has become a staple of western, especially American, musical tradition and is constantly growing in popularity and use. Though the number of professionals who make their living solely as marimba soloists have diminished since the 1990s, performing on the marimba has become a basic requirement for percussionists, even from early in their musical development. Middle school students now learn the basics of four mallet technique and perform music written to be performed with four mallets. High school students must know how to perform with four mallets on marimba to compete for positions with competitive outdoor marching groups such as Drum Corps International (DCI) and its indoor, smaller ensemble based counterpart known as Winter Guard International (WGI). In the last thirty years DCI has raised its maximum corps size from 128 to 154 to include, among other personnel, more mallet performers and has doubled or tripled the subjective standard number of mallet instruments to four marimbas and four vibraphones, all requiring four mallet technique.[4] Colleges of all levels require auditionees to perform on marimba to be considered for admittance. Summer programs, necessary for professional development, networking, and resume building, now require two and four mallet marimba solos. Some of the most well-known summer programs including the Brevard Music Center, the Aspen Music Festival, and Music Academy of the West all require

[4] Michael Boo, "Pit Stop: A Front Ensemble Primer," *Fanfare* (Wednesday, April 28, 2004): 1. https://www.dci.org/news/pit-stop-a-front-ensemble-primer

marimba solos as part of the audition process. Competing for jobs, both performing and educating, requires marimba solo performance as well. Interestingly, while solo performance on marimba has grown in popularity and new compositions push the limits of the instrument, the requirements for professional development programs and jobs have remained anchored in the past, specifically to Johann Sebastian Bach. This project recognizes the required performance of the music of J.S. Bach on marimba in a competitive, subjective judging environment and will provide both general and specific strategies for successfully appealing to diverse audition committees. I will provide specific case studies of four examples Bach's music commonly asked for in auditions. My selections include Bach's Cello Suite No. 1 in G Major: Prelude (1717-1723), Violin Sonata No. 1 in G minor: Fuga (1720), Lute Suite in E minor: Allemande (1708-1717), and Invention No.4 in D minor (1723).

Need for Study

If one looks at any percussion audition list from the past ten to fifteen years, one will likely find a requirement of a two or four mallet solo by J.S. Bach at the top of the list. The current Aspen Music Festival audition requires one solo work by J.S. Bach.[5] The New World Symphony audition requires a J.S Bach solo of choice for two or four mallets.[6] Some professional job auditions, such as the Sarasota Orchestra have asked for specific Bach solos such as Violin Partita no.1.[7] Others like the Virginia Symphony have more generalized

[5] Aspen Music Festival and School Percussion Audition Repertoire, http://www.aspenmusicfestival.com/students-welcome/admissions/programs-of-study/instrumental-orchestral/percussion.

[6] New World Symphony Audition Repertoire, https://www.nws.edu/admissions/application-process/audition-repertoire/.

[7] 2018 Sarasota Symphony Percussion Audition Repertoire List, http://mag.numop.us/auditions/3366.

requirements like “choose a solo from the Sonatas and Partitas for Violin by J.S. Bach.”[8] In some cases an audition will require more than one Bach solo such as the upcoming 2020 Kansas City audition for Assistant Principal Percussion that asks for movements from both a violin sonata and a lute suite.[9] In any case it is obvious that performing Bach in a competitive environment has become commonplace at multiple levels of the music world.

Why is the music of Bach required for an instrument that did not exist during his lifetime? William James, the Principal Percussionist of the Saint Louis Symphony said “I think Bach is commonly requested because it is a very familiar style of music that everyone has studied and has a high expectation for performance. There are ample opportunities for expression, and most of his works are technically demanding.”[10] While marimba soloists train as percussionists and learn from percussionists, they are more commonly judged in audition situations by non-percussionists. According to James, “The committee will be made up of string, wind, brass, and percussion players, all of whom have very different experiences with Bach.”[11] Audition committees in orchestras rarely consist only of percussionists and often those performing a violin, cello, or lute solo by Bach on marimba find themselves judged by musicians who play the instruments Bach wrote for, which are far older and have much more established expectations for how Bach’s music should sound. It is therefore necessary to try and navigate subjective judging environments by finding an “aural middle-ground” with non-percussionists. This can be difficult for young percussionists, many of whom are encouraged to listen to

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[8] 2018 Virginia Symphony Core Percussion Audition Repertoire List, https://virginiasymphony.org/wp-content/uploads/2018/07/Core-Percussion-2018.pdf.
[9] 2020 Kansas City Symphony Principal Percussion Audition Repertoire List, https://www.kcsymphony.org/wp-content/uploads/2019/11/KCS-Principal-Percussion-2020-Rep-List.pdf.
[10] William James, "Preparing a Solo for an Orchestra Audition," *Percussive Notes* 53, no. 4 (September 2015): 61.
[11] James, 61.

recordings of the music they learn for auditions, yet continue to perform Bach's compositions on the marimba without attempting to create a sound similar to the recordings they use as reference material.

The issue facing percussionists in an audition environment is how to attract the ears of both the percussionists and non-percussionists present in an audition committee. To achieve an aural middle ground with the non-percussion members of the audition committee, an audition candidate should attempt to make their performance of Bach on marimba sound more like the performances and recordings that the audition committee is likely to have heard over the course of their musical careers. This project will provide strategies to play Bach on marimba in a way that is less like a marimba player and more like the instrumentalists for whom Bach originally composed. I have chosen to focus on four examples that represent four different instruments and some of the most asked for repertoire on semi-professional and professional job auditions.

Review of Literature

The question of how to perform Bach has been debated and there are several large issues that should be acknowledged before narrowing the focus to performing Bach on marimba. When preparing Bach for public performance there is always the question of authenticity. Wanda Landowska, a musicologist and performer of Bach's music, did extensive research into the performance practice of Baroque music, especially keyboard music. Her negative views on modern performances of Baroque music led her to perform Baroque keyboard music exclusively on the harpsichord.[12] Landowska did extensive research into creating historically informed performances of Bach and wrote much on Baroque techniques for ornamentation and phrasing.

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[12] Lionel Salter, "Wanda Landowska," Grove Music Online. *Oxford Music Online*. Oxford University Press, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/\gmo/9781561592630.001.0001/omo-9781561592630-e-0000015951?rskey=yABeXB.

She believed that treating Baroque music like any other period of music, devoid of historical knowledge, would blur the lines of musical tradition, creating bland performances:

> Besides, the knowledge and perfect rendering of signs, dynamics, ornaments, and particular taste of the period to which the work belongs will never restrain an interpreter nor prevent his daring anything. On the contrary; it is when we follow the same routine for all epochs that we become prisoners, eternally breathing the same air. This is not a question of musicological pedantry, but of a knowledge of the language of the work to be performed.[13]

Landowska believed that the performer would still contribute their individuality in the performance of a work by learning about the composer and the time and circumstances in which the work was composed. "All interpretations must be studied and thought out; and the more they are, the more they give the illusion of spontaneous inspiration."[14]

Richard Taruskin debated Landowska's position on performance, questioning the legitimacy of creating historically informed performances of Bach's music. Taruskin believed the individuality of the performer could be lost in the search for authentic performances:

> All too often the sound of a modern "authentic" performance of old music presents the aural equivalent of an Urtext score: the notes and the rests are presented with complete accuracy and an equally complete neutrality (and this seems to be the most characteristic – dare I say it? – of English performances). Nothing is allowed to intrude into the performance that cannot be "authenticated." And this means nothing can be allowed that will give the performance, in the sense in which we first defined the word, the authenticity of conviction.[15]

Taruskin also believed that authenticity was found as much in the efforts of the performer as in the study of the score and composer. He questions the validity of valuing one "authenticity" over the other:

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[13] Wanda Landowska, *Landowska on Music*, Edited and Translated by Denise Restout and Robert Hawkins (New York: Stein and Day, 1965), 96.

[14] Wanda Landowska, *Landowska on Music*, Edited and Translated by Denise Restout and Robert Hawkins (New York: Stein and Day, 1965), 96.

[15] Richard Taruskin, *Text and Act: Essays on Music and Performance* (New York: Oxford University Press, 1995), 72.

> We seem to have paid a heavy price indeed for the literacy that sets Western musical culture so much apart and makes its past available in the first place, if the text must be so venerated. Is the text only an exacting responsibility? And if so, to what or whom is the responsibility due? Can the text not be an opportunity – for the exercise of imagination, the communication of delight, even the sharing of emotion? Can there be no reconciliation between the two authenticities, that is, the authenticity of the object performed and the authenticity of the subject performing? And is a musical performance to be regarded as an "object" at all?[16]

Though the debate is interesting, for the purposes of this project, the question of authenticity is not as important in the subjective judging environment as promoting favor with non-percussionists through aural familiarity, which will be discussed shortly.

Another major issue to be discussed is the difference in the technique and sound of performing on the marimba and the instruments that J.S. Bach originally wrote for. There is some debate as to whether the marimba, when performing transcriptions, should be played with techniques and implements that attempt to make the marimba sound like another instrument.

Leigh Howard Stevens, the creator of modern marimba technique, worked on several projects dealing with performing Bach on marimba. In addition to the recording of an album called *Bach on Marimba,* which is widely used to train young percussionists, Stevens wrote a 17-page manual on how to perform Bach on Marimba with examples from Bach's Cello Suite in G Major. Stevens' manual is currently the only written resource for percussionists learning to perform Bach on marimba but the manual is only a general guide. Though the manual covers most of the basics of creating Baroque performances on marimba, Stevens admitted that it is not an in-depth study and he offered information that could be expanded and used in a different approach:

> A detailed discussion of how to perform Bach on marimba would require a sizable book, but this publication has only room for presenting the most important considerations in a

[16] Richard Taruskin, *Text and Act: Essays on Music and Performance* (New York: Oxford University Press, 1995), 72.

> very abbreviated, condensed form – the equivalent of music lessons IN HEADLINES. The student should bear in mind that follow this introduction are brief, and not sufficient in themselves to address every musical or technical issue the marimbist is likely to encounter in performing Bach's Cello Suites – let alone those that will be encountered in the performance of Bach's Violin Sonatas or his keyboard music.[17]

While many of the techniques and strategies of Stevens will be used in my project, I will go more in depth, applying technique in specific examples to simulate the sounds of recordings that musicians use to study the music of Bach, therefore creating an aural bridge to non-percussionists.

Stevens' work influenced one other document that discusses performing Bach on marimba. The same year that Stevens published his manual, James Chong wrote a paper in completion of a bachelor's degree at Edith Cowan University in Australia citing Stevens' work in a case study on Bach's Violin Sonata in A Minor. Chong used techniques described by Stevens to provide a guide for creating a historically informed performance of the work.[18] Chong uses Stevens' technique and strategy to create more authentic performances of Bach on marimba, but, as stated before, authenticity is not the focus of my project, and my choice of repertoire differs, serving the purpose of assisting young percussionists in successfully creating favor with audition committees to win auditions.

Methodology

In order to win an audition, a percussionist must garner as many votes as possible from audition committee members. I believe this may be achieved by attempting to attract the ears of the committee. There is some research that suggests human beings are consciously or unconsciously attracted to that which is familiar to them. There have been multiple

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[17] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 7.

[18] James Chong, *Bach on Marimba: a case study using the Violin Sonata in A minor (BWV 1003)* (2012, Edith Cowan University).

psychological studies that suggest familiarity increases attraction. One psychology textbook states that "the familiarity principle of attraction is perhaps the most basic of the [general principles of attraction]"[19] To apply this principal to music, on a basic psychological level, musicians performing on the instruments Bach originally wrote for are more likely to be comfortable hearing Bach solos performed the way they play it, with the timbres and colors of their own instrument. A violinist may favor, even if only subconsciously, the sound of a solo by Bach that resembles what they have learned and know in their own experience.

The main issue performing on the marimba is that the instrument is commonly activated by percussive force, producing very different sounds than the instruments Bach wrote for. The marimba also cannot control sustain or decay of sound in real time. Combine these issues with the tendency of percussionists to perform Bach "like a marimba soloist" with exotic mallet choices and extended techniques made popular by contemporary marimba compositions and the result is a sound that can be off-putting to instrumentalists with expectations of a sound similar to their own. Alison Shaw, a professor and established virtuoso of percussion, offered a good representation of how the modern marimbist thinks about using the music of Bach to explore the possibilities of the marimba, rather than attempting to manipulate the marimba to sound like the instruments Bach wrote for:

> Bach was a master of transcription and modification. Perhaps it is fitting, then, that instrumentalists of practically every classical genre continue to transcribe the music of Bach. What does this have to do with marimba? I can tell you what it means to me. It means freedom. It is this freedom to explore the voice of the marimba, using Bach's music as a vehicle, that has made me reach far beyond the idiomatic technical issues encountered in our standard marimba repertoire.[20]

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[19] Ellen Berscheid and Pamela Regan, *The psychology of interpersonal relationships*. (Upper Saddle River, NJ: Pearson Education, 2005), 177.

[20] Alison Shaw, "Coming Back to Bach," *Percussive Notes* 41, no. 1 (February 2003): 55.

Bill Sallak provided a slightly more radical, yet still popular, view of performing Bach on marimba:

> One can choose to begin by eliminating facets of the original work imposed by the limitations of the original instrument. Think about it: What is we could take steps to hear the sort of music Bach might have written for the marimba if it had been around when he was alive?[21]

How then can a percussionist who relies on the subjective judgement of non-percussionists to earn a career in performance or education play the music of J.S. Bach to the satisfaction of these other instrumentalists? Of course there must be a discussion of technique, of ornamentation, of phrasing, and of mallet choice, but only so far as to serve the purpose of presenting Bach's music on marimba in a form aurally similar to the instruments Bach wrote for. Therefore, to describe this project as a series of transcriptions would be somewhat inaccurate. Rather, I will more closely follow the methodology of the original marimba musicologist, Vida Chenoweth who took issue with the term "transcribe:"

> When I began my concert career – first in Chicago (Fullerton Hall of the Chicago Art Institute) and the New York – critics were made aware of the fact that I *never* altered the score of anything I performed; that is to say, it was played from the original score, note for note. They pondered this and agreed that what I was playing – even though it may have been conceived for an instrument other than marimba – was *not* a transcription. It was not rewritten, arranged, or changed in any way as to its form. Only the instrumentation was substituted. After scratching their heads for a while, they came up with the relevant term *reassigned.*[22]

This project offers strategies to "reassign" the music of Bach for marimba, utilizing the basic techniques outlined by Leigh Howard Stevens and other marimbists combined with professional recordings of the selected repertoire to create performances that appeal to non-percussionists above other performances of the same music in an audition setting. It is my hope that this

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[21] Bill Sallak, "Minor matters of adjusting Bach," *Percussive Notes* 43, no.6 (December 2005): 36.

[22] Vida Chenoweth, "What Do You Mean by 'Transcribe'?," *Percussive Notes* 44, no. 1 (February 2006): 36.

performance guide will assist those currently auditioning for positions with semi-professional or professional groups and provide a strategy for preparing similar repertoire for future auditions. Though choices in audition repertoire may change, the make-up of an audition committee will inevitably remain diverse, creating challenges for percussionists wishing to win a position for years to come.

CHAPTER 2

CELLO SUITE NO. 1 IN G MAJOR: PRELUDE

The Prelude from J.S. Bach's Cello Suite No 1. In G Major is one of his most known and loved works. Having been recorded by many artists over the years, there have been many interpretations and much work put into understanding the piece and how best to perform it. Pablo Casals said that "The Six Suites for Cello give an idea of Bach's vision of the possibilities of this instrument, possibilities which had not been exploited before. Here, as in so many other branches, Bach was in advance of his time."[23] Yo Yo Ma had a more emotional response to the cello suite. "Bach's cello suites have been my constant musical companions. For almost six decades, they have given me sustenance, comfort, and joy during times of stress, celebration, and loss. What power does this music possess that even today, after three hundred years, it continues to help us navigate through troubled times?"[24] Bach's cello suites were thought to capture the essence of the cello. David Ledbetter said of the Prelude from Cello Suite No 1. In G Major "This Prelude is an extraordinary and classic example of Bach's ability to make his material grow from the inherent nature of an instrument, from the smallest motifs to the broadest structures."[25] With such high praise for Bach's compositional prowess for the cello, one might

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[23] Pablo Casals, Josep M. Corredor, and André Mangeot, *Conversations with Casals*, First edition, (New York, E.P. Dutton & Co., Inc. 1957), 120. http://search.ebscohost.com/login.aspx?direct=true&db=cat06564a&AN=uga.99971963902959&site=eds-live.

[24] Yo Yo Ma, Liner notes to J.S. Bach, *Six Evolutions: Bach Cello Suites*, Naxos 886447042472, 2018, CD.

[25] David Ledbetter, *Unaccompanied Bach : Performing the Solo Works* (Yale University Press, 2009), 177.

be wary of the task of manipulating the sound of a marimba to simulate the cello, however the marimba does have a few advantages that will assist in this task.

Instrument Range and Mallet Choice

As the marimba is a massive instrument that is not easily transported, auditions will provide a marimba for the performer to play on. Though this means that there may be slight differences between the instruments the student prepares and then performs upon, modern marimbas used for auditions have certain features that remain the same from instrument to instrument. The audition will likely provide a 5-octave instrument, which is a great boon to a candidate playing the Cello Suites as the range of the 5-octave marimba (C2-C7) contains the same range as the cello (C2-C6) with the addition of an extra higher octave.[26] This means that the *Prelude* can and should be performed in the same register as the cello to begin the attempt to simulate the cello sound.

Mallet choice can be difficult for a young percussionist as there are an extremely diverse range of mallets to choose from that each create different timbres on the marimba. It is generally accepted that the lower range of the marimba is warm and resonant and that longer tones may be created in this range with soft mallets. “Rolling on the lowest bars with large, soft sticks, makes the bars ring, creating an almost uninterrupted long tone. A good marimbist, playing with thick yarn mallets, can almost sing in the low register.”[27] Leigh Stevens approached the problem of choosing mallets for Bach by first explaining the differences in the creation of sound between string and percussion instruments:

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[26] All designated pitches come from American Standard Pitch Notation for the entirety of this document.

[27] Michael Colgrass, "Marimba--the chameleon of percussion," *Percussive Notes* 41, no. 1 (February 2003): 53.

> It feels like you "push" or "drag" the sound out of stringed instruments; push is also an appropriate description for a sustained vocal note or a French horn tone. When you stop pushing or pulling the sound out of these instruments, the instrument stops sounding…In our world of percussion, it might be more appropriate to imagine a ball on a tabletop. Poke the ball and it rolls a certain distance across the table. Poke it harder and it rolls further. You have to know how far and how fast you want the ball to go before you poke it, and you can't change much after it is poked…[28]

The cello can produce a wide range of sounds that are friction based, therefore it has capabilities outside the realm of simulation by the marimba, an instrument that creates sound by being struck with percussive force. The cello has a broad warm sound, especially in the lower register, so a large mallet with a lot of yarn might be recommended, however the cello can also create shorter, more pointed sounds so the marimbist needs a mallet with a range of sounds that all fall within the range of the "fat" sound of the cello.[29] Most yarn mallets may produce a warmer, gentler tone if the performer raises their wrists when playing, changing the angle of striking so that the mallet strikes near the top of the mallet, a glancing blow to the mallet core, rather than at a perpendicular angle, striking the mallet core directly.[30]

Figure 1: Direct strike on mallet core.

Figure 2: Glancing blow to mallet core.

[28] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012): 16.
[29] Stevens, 18-19.
[30] Leigh Howard Stevens, *Method of Movement for Marimba: With 590 Exercises* (Asbury Park, NJ: Marimba Productions Inc, 1979): 22-23.

When striking the core of a mallet, a sharper articulation is created, less pronounced with soft mallets. Therefore I suggest for Bach's *Prelude* to use a soft mallet with a lot of yarn that allows for fat and slightly articulate sounds when playing on the core and extremely legato sounds when playing on the upper edge of the mallet. The question of using graduated mallets, or mallets of differing degrees of hardness in each of the four spots across the four hands may arise, however, as the *Prelude* mostly stays in the lower register of the marimba, I recommend using the same mallets. Experimenting with different graduated sets of mallets may be appealing, but can be difficult to manage due to the difference in weight between the mallets and the tendency of certain notes to "stick out" from the texture of a line due to a mallet used that is too soft or too hard.[31]

Technique and Sound Manipulation

There is some debate as to how sound may be manipulated on the marimba. Pius Cheung, a famous marimba soloist, enumerated several technical ways to change the sound of the marimba:

> First, we have three stroke types: up, down and full. Second, we have five basic levels of stroke speeds: military, assertive, normal, relaxed, and slow-motion. Military is the most aggressive and quickest; slow-motion is the most useful for developing a physical feel for the connection between notes and horizontal motions on the instrument. Third, we have five basic levels of stroke weight, utilizing the control and natural weight of different body parts: fingers, wrist, forearm, whole arm, and body. We use fingers for easy control over the most delicate passages, and when the music calls for it, we can throw our body-weight onto the instrument for those special peasante moments… In addition, we can also draw out different tone colors by playing on different parts of the bar.[32]

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[31] Christopher Wilson, "Use and Selection of Graduated Mallets," *Percussive Notes* 49, no. 1 (January 2011): 39.

[32] Pius Cheung, "Marimba Romanticism," *Percussive Notes* 47, no. 4 (August 2009): 37.

This explanation would lead the performer to believe that there are many different ways to change the sound of the marimba. Leigh Stevens offers a different, more simplistic explanation of sound manipulation on the marimba:

> Having performed this experiment approximately 241,627 times, I can assure you in advance that when the volume, playing spot, and angle of the stroke are identical, it doesn't matter if the stick is tight or loose, or whether you use fingers, wrist, arm or foot: the sound heard by the ear of a conservatory-trained musician is identical.[33]

Stevens disagrees with Cheung on the use of anything except angle of strike, placement on the marimba bar, and velocity of stroke to manipulate the sound of the marimba. Another percussionist, Erick Saoud, decided to test the acoustics of the marimba to help settle the debate of sound manipulation on the marimba. Before conducting his test, Saoud said:

> It is a controversial belief that through alteration of stroke alone, marimba performers are unable to modify a single performance of one note (the combination of the stroke and resulting tone) to a degree relative enough to be heard in the resulting tone. In simpler terms, through stroke alone, performers cannot simulate a legato or staccato tone on a single note. Instead, through a combination of techniques employed by the performer, the illusion of staccato and/or legato can be achieved.[34]

After an exhaustive test utilizing sophisticated recording equipment to test the sound produced by the marimba:

> Results indicated that while there were measurable differences between pairs of legato and staccato strokes, the differences were minimal and inconsistent. It is unclear, but doubtful, whether any of the differences found in the analyzation would be discernable by any listener.[35]

As Stevens explains, and confirmed by testing, there are only three things outside of mallet choice that affect the sound of the marimba. One thing that all marimbists agree on, however, is

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[33] Leigh Howard Stevens, *Method of Movement for Marimba: With 590 Exercises* (Asbury Park, NJ: Marimba Productions Inc, 1979), 22.
[34] Erick Saoud, "The Effect of Stroke Type on the Tone production of the Marimba." *Percussive Notes* 41, no. 3 (June 2003): 40.
[35] Saoud, 45.

that different places on the marimba bar create very different colors. These playing spots are similar on every bar.

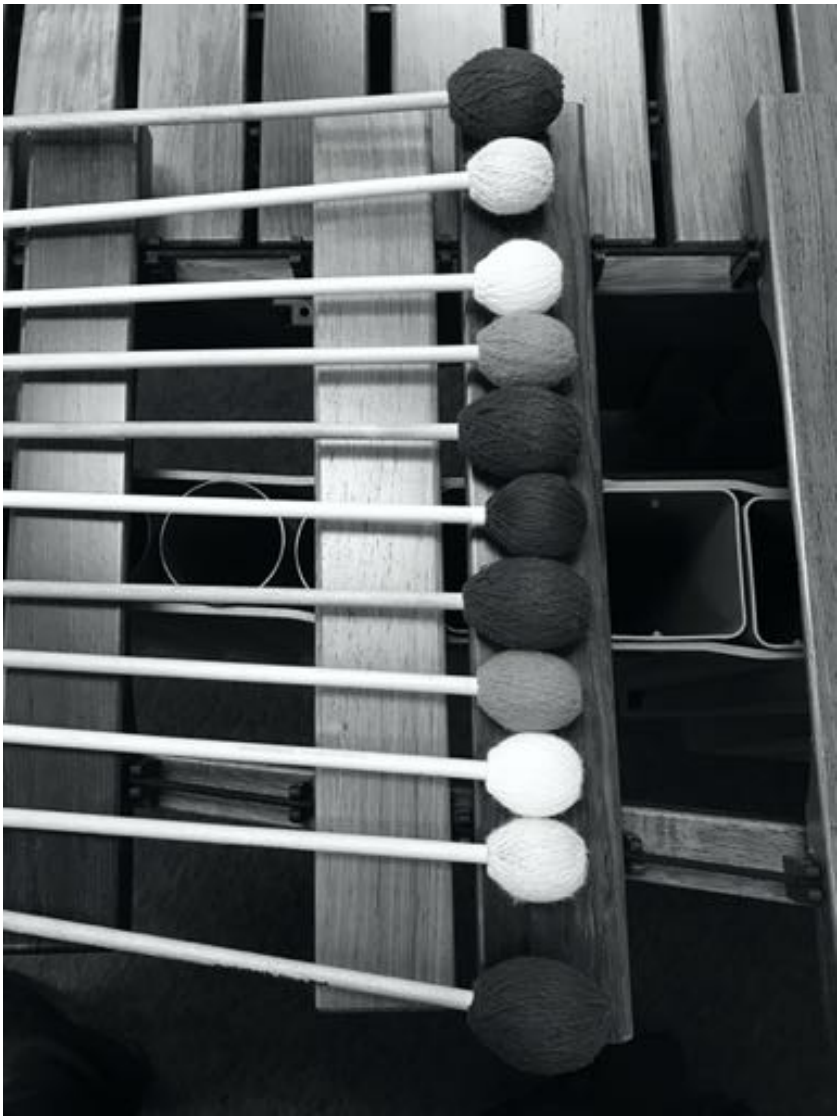

Figure 3: Locations of different colors on a marimba bar.

As you can see, there are several different colors available from each marimba bar and some of the placements have similar colors to one another. On this palette, the darker, warmer colors are toward the middle or the very edges of the marimba bar while the brighter colors may be found closer to where the string goes through the end of each marimba bar, which is known as

the node. Stevens describes the most resonant, full sounding places to play on each bar to be near the center over the resonators or at the very edges of the bar.[36]

Performing the Prelude

The Prelude may well be the most important movement of Bach's Cello Suite No. 1 in G Major. According to David Ledbetter, the function of the Prelude as a Baroque genre was to introduce the key for concert music in church or to introduce dance music.[37] Pablo Casals stated that "The first thing we must understand when playing the cello suites…is that, as with the partitas for violin and for keyboard, the prelude gives the character to the whole work…a fundamental mood of "optimism " prevails in the First Suite…"[38] This background information on the prelude will inform what the performer will hear on recordings. Thus the next step is to dive into the Prelude by taking several well-known recordings and trying to find trends in the cello performances to attempt to simulate on the marimba.

Figure 4: Bach, Cello Suite No.1 in G Major, Prelude, mm. 1-4.

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[36] Leigh Howard Stevens, *Method of Movement for Marimba: With 590 Exercises* (Asbury Park, NJ: Marimba Productions Inc, 1979), 22.

[37] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works* (Yale University Press, 2009), 176.

[38] David Blum, *Casals and the Art of Interpretation* (Berkeley: University of California Press, 1980) http://search.ebscohost.com.proxy-remote.galib.uga.edu/login.aspx?direct=true&db=nlebk&AN=995323&site=eds-live.

Figure 4 shows the first four measures of Bach's Prelude without any markings. The original manuscript from Anna Magdalena Bach contains very few markings concerning dynamics, phrasings or bowings, and the markings that are in the manuscript are "almost deliberately confusing".[39] This lack of markings from the original manuscript, combined with the possibility of the use of the Prelude for teaching basics of improvisation and the inability to determine by ear exactly which edition of the Prelude the performer in each recording is reading from leads me to desire a blank slate to begin my study.[40]

By listening to a variety of recordings, one will find that there several possible interpretations for the first four measures of the Prelude. Yo Yo Ma elongates the pedal G out from the time, then speeds the following notes and slurring them to lead to the chord change in measure 2, where he begins the pattern of pulling and pushing the time again.[41] If one were to try to follow this while reading the music, it might be confusing due to the lack of any kind of markings other than steady 16th notes. Pablo Casals pulls the very first pedal G out of time more drastically than Ma, but then follows a similar but more conservative pattern of slightly elongating the pedal G of the next chord in measure 2, while slightly swinging the 16th notes rather than playing them steadily.[42] Mstislav Rostropovich also elongates the first pedal G, but performs the rest of the opening very steadily without elongating any notes and with an added phrasing that leads in intensity to measure 4 and then subsides to the next pedal G in measure

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[39] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 15.

[40] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works* (Yale University Press, 2009), 176.

[41] Johann Sebastian Bach, Prelude, Suite No. 1 in G Major, BWV 1007, Performed by Yo-Yo Ma on *Six Evolutions: Bach Cello Suites* (Sony Records, 2018), CD.

[42] Johann Sebastian Bach, Prelude, Suite No. 1 in G Major, BWV 1007, Performed by Pablo Casals on *J.S. Bach: Six Cello Suites for Solo Cello* (Warner Classics, 2012), CD.

5.[43] Mischa Maisky combines the elongation of the pedal G of Yo Yo Ma with the larger scale phrasing of Rostropovich, but performs the suite nearly twice as fast as any of the other performers.[44] If you combine the different interpretations to create an aural middle ground, then the music might look more like Figure 5.

Figure 5: Bach, Cello Suite No.1 in G Major, Prelude, mm. 1-4

From this point the performer should attempt to bring these new markings out in their performance, but should attempt to make the changes subtle, which will add depth to the performance and create hints of familiarity in the members of the committee who have heard any of these standard recordings. The pedal G, when played on the marimba, may drown out the next note, even with a slight elongation of the G, so, utilizing placement on the bars, the performer should play on the top of the mallet for the bass note, a bright color placement on the second note of each measure, and slur the C, B, and C by playing all three notes with the right hand pair of mallets and moving from the core striking angle up to the top of the mallet.[45]

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[43] Johann Sebastian Bach, Prelude, Suite No. 1 in G Major, BWV 1007, Performed by Mstislav Rostropovich on *J.S. Bach Cello Suites* (Warner Classics, 1995), CD.
[44] Johann Sebastian Bach, Prelude, Suite No. 1 in G Major, BWV 1007, Performed by Mischa Maisky on *Bach: Six Cello Suites* (Deutsche Grammophon, 1999), CD.
[45] See Figure 6

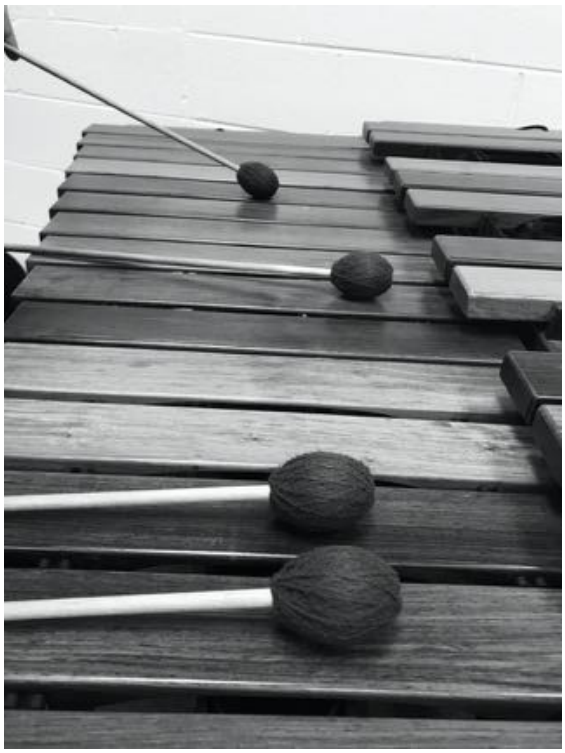

Figure 6: Suggested mallet positions and angles to perform opening of Bach Prelude

The pattern of phrasings suggested in Figure 5 could be used for much of the Prelude as the "wave motif" that David Ledbetter notes in the first few measure of the Prelude return often throughout the piece.[46]

Echo

Measure 12 presents another opportunity to make some artistic choices. In Rostropovich, Ma, and Maisky's recordings, the performers create an echo effect from the first two beats to the last two beats of the measure.

Figure 7: Bach Cello Suite No. 1 in G Major, Prelude m.12.

Figure 8: Bach Cello Suite No. 1 in G Major, Prelude m.12.

[46] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works* (Yale University Press, 2009), 176.

The majority of the performers also add phrasings to lead to the two high C4s with Casals being the lone performer to continue to emphasize the lower C3s. The music with the added phrasings now appears as in Figure 9.

Figure 9: Bach Cello Suite No. 1 in G Major, Prelude m.12.

Figure 10: Bach Cello Suite No. 1 in G Major, Prelude m.12.

In order to make the phrasing in Figure 9 speak on the marimba, the performer must apply a Stevens technique for playing legato phrasings. Stevens says that "If the new note is *stronger than the volume level that the previous note is ringing,* the listener hears clear articulation. That is the opposite of "legato."[47] Therefore, in order to make Figure 9 sound correctly on the marimba, the performer must execute the markings in Figure 10, pulling some of the notes out of the texture and hiding others in a line of steadily softer notes. These markings are, of course, exaggerated and should be applied in a subtle manner to add phrasings conservatively to an audition performance. Rebecca Kite agrees with Stevens' technique for playing legato, but adds to the technique, stating that:

> Notes can be grouped by using a slight crescendo with a slight acceleration or by a slight decrescendo with a slight retard. Approaching the marimba with the metronomic precision of snare drumming make music that becomes relentless, unfeeling, and unnatural…For example, the fact that much of Bach's music is rhythmically the same (sixteenth notes) does not mean that it should be approached with the same metronomic precision that a snare drummer would use. The fact that there are few dynamic markings doesn't mean that every note in a Baroque composition should be exactly the same loudness.[48]

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[47] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 17.

[48] Rebecca Kite, "From Bach to the blues: the Art of Musical Styles for the Marimbist," *Percussive Notes* 36, no.5 (October 1998): 40.

Kite's variation on Stevens' legato technique works well with the pulling and pushing of the tempo by Casals, Ma, Maisky, and Rostropovich, and should be applied to the rest of the Prelude but the performer should apply this technique conservatively. William James, a percussionist who, through an audtion, won a job with the St. Louis Symphony, says "Rather than try to please everyone, stick to a conservative approach that will show plenty of musicality but not go too far. Sometimes the best thing a committee member can say is "I had no problem with that."[49]

To Roll or Not to Roll

One of the most important moments of Bach's Prelude is measure 22, which moves from the lowest note on the cello, C2, up two octaves to a high D4, hanging on the dominant through a cadenza section before modulating to D.[50] The trend of the performers I'm using for reference is more difficult to place here. Rostropovich and Maisky both execute a ritardando in measure 21, pause on the low C on beat 1 of measure 22, and slowly climb up the arpeggio to D4. Casals and Yo Yo Ma do not ritard into measure 22, but do linger briefly on the low C before climbing up to D4. Ma also is the only performer of the four to not hold the fermata. I believe the aural middle-ground to be performed here should look like Figure 12.

Figure 11: Bach Cello Suite No. 1 in G Major, Prelude m.12.

Figure 12: Bach Cello Suite No. 1 in G Major, Prelude m.12.

In order to make the fermata sustain, the performer has two options. The performer may choose to roll, or tremolo, or simply manage the angle and velocity of the stroke to create as

[49] William James, "Preparing a Solo for an Orchestra Audition," *Percussive Notes* 53, no. 4 (September 2015): 61.

[50] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works* (Yale University Press, 2009), 178.

much sustain as possible. According to Brian Cole, "The consensus among non-percussionists is that the marimba roll sounds out of place in a Baroque style. The roll is usually perceived as a tremolo, and the disruption in the musical line is undesirable."[51] Stevens chooses to issue caution about the use of the marimba roll, rather than outlawing it as Cole does:

> With the right mallets in the correct hands, the occasional use of a roll can add great beauty and a convincing sense of organ-like legato. With the wrong mallets, or an insensitive pair of hands wielding them, the misplaced intrusion of a rolled texture can shatter the atmosphere of a passage and convince listeners that the marimba is the distant cousin of the mandolin.[52]

I believe that Stevens' legato performance technique can be applied in this situation, offering a way to use the marimba roll for expression without causing distraction. If the performer can play a very fast tremolo, but hide each successive note in the sound envelope of the previous note, then length may be added to the fermata in measure 22 without offending the ears of the non-percussionists who are listening.

Bar Placement and Final Chord

Measures 31-36 present an interesting challenge for the marimbist. In this section the cellist uses martellato strokes alternating on the C and G strings in order to create a pedal A with a simultaneous moving melodic line.[53] Even with the repeating pedal A, the use of the two different strings creates clarity as the C and G strings have very different colors. For the marimba, the only way to create clarity in this section is to utilize different parts of the marimba bars, especially on the repeated A, to create different colors to better match the sound of the cello. In Figure 13 one can see all of the repeated As that must be performed. By utilizing the

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[51] Brian Cole, "Baroque Performance Practice and the Marimba Transcription." *Percussive Notes* 29, no. 5 (June 1991): 7.

[52] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.

[53] Gerhard Mantel, translated by Barbara Haimberger Theim, *Cello Technique: Principles and Forms of Movement* (Bloomington, Indiana University Press, 1975), 211-212.

bar placements shown in Figure 14 the repeated As will have different colors and clarity will be achieved.

Figure 13: Bach, Cello Suite No. 1 in G Major, Prelude mm. 35-36.

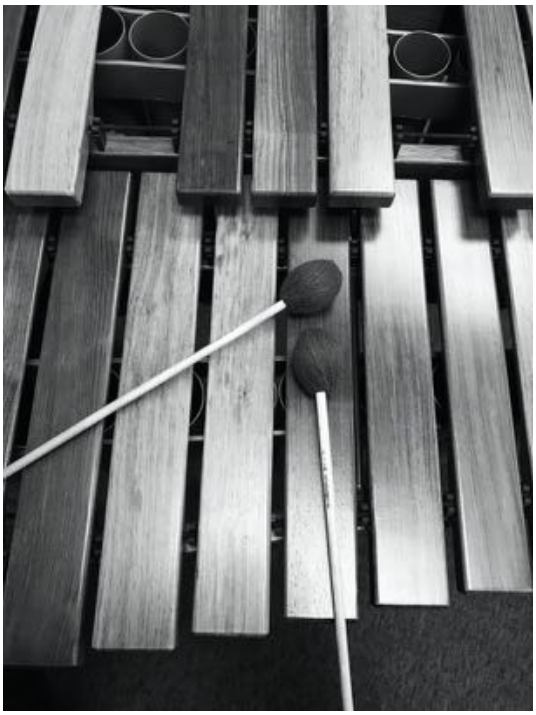

Figure 14: Bar Placements for creating two color clarity on single repeated note.

The final measure of Bach's Prelude contains a G Major chord with a fermata. David Ledbetter describes why the fermata in the final measure is interesting:

> Most unusually in these suites, the fermata at the end is over the final chord rather than over the double bar line. This is presumably because the climax comes right at the end of the piece in the last four bars, and the final chord needs to be dwelt on since it is the goal of it all.[54]

[54] David Ledbetter, *Unaccompanied Bach: Performing the Solo Works* (Yale University Press, 2009), 178.

Based on Ledbetter's assessment of the final four bars, it is not surprising that the trend of the four selected recordings is to slow the tempo in the last four bars leading to the final chord. The differences between the performers comes in the execution of the final chord. Pablo Casals lingers on the pedal G2 before performing the other two notes in quick succession. Mischa Maisky and Yo Yo Ma both perform the notes of the chord slowly, one after the other. Rostropovich plays the G2 and B3 simultaneously and then repeats the B3 simultaneously with the G4. In all four performances, the cellists add heavy vibrato to the chord and keep the intensity of the chord building until they end the chord. Unfortunately this is just not possible on the marimba. Therefore I suggest following the examples of Maisky and Ma, playing each note of the final chord in slow succession, but relying on the marimba's ability to ring in an open performance environment rather than attempting vibrato through a tremolo roll.[55]

For such a short piece, Bach's Prelude has multiple issues that have to be dealt with. That being said, this is a fantastic piece to begin with to learn the strategies that have been discussed in this chapter, strategies that may be applied to other pieces composed by J.S. Bach. The single most important strategy when approaching Bach for an audition is to listen to multiple recordings and attempt to find the middle ground between the performers. Discovering and attempting to recreate this aural middle ground on the marimba gives the best chance to reach more of the audition committee favorably.

[55] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.

CHAPTER 3

VIOLIN SONATA IN G MINOR: FUGA

J.S. Bach's Fuga is one of the most well-known, and most difficult of Bach's compositions for Violin. Even professional violinists find performing the piece challenging as modern instruments and bows cannot replicate the sounds of Baroque instruments. Miriam Fried says that:

> The modern bow is constructed to fit tightly on the string and sustain the sound, which is perfect for the long phrases of Romantic repertoire but a disaster when playing Bach. In the Sonatas and Partitas, the lightness of the dance movement and the clarity of the polyphonic writing is better served with a Baroque bow, which does not adhere as much to the string. Having less hair on the bow produces a leaner sound, which gives the kind of clarity that we look for in later music.[56]

Another violinist, Viktoria Mullova, says that "A Baroque bow tells you how to play, because this music was written for one.[57] Unfortunately the marimbist does not benefit from the training of a Baroque bow, but we can apply the basic sound that is created by a Baroque bow, lean and short through mallet choice and utilizing the direct core strike angle of each mallet for music of Bach's *Fuga.*

The *Fuga* is required very commonly on auditions and presents a number of technical challenges for marimbists, not to mention the difficulties of attempting to simulate the sound and traditions of the violin to bridge the gap to the ears of non-percussionists on audition committees. Though I will provide some specifics on navigating the technical issues present in this piece, to

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[56] Christian Lloyd, "Miriam Fried," *Strad* 127, no. 1509 (2016): 98.
[57] Ariane Todes, "Lessons in Time Traviel," *Strad* 124 (1479)(2013): 45. http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=89710805&site=eds-live.

serve the goal of simulating the sound and choices made by violin performers I will focus on the latter more than the former.

Range and Mallet Choice

As the lower range of the marimba is thought to be more resonant and superior in sound to the middle or upper range, young marimbists may make the choice to perform the Fuga an octave lower than is written. This is a mistake, as the change in range of the piece would be instantly recognized as unfamiliar and would be a high risk to alienate non-percussion members of an audition committee, especially any violinists. Though playing in the written range on the marimba does not provide the same resonance as the lower range, this difficulty may be countered with smart mallet choices. Christopher Wilson says "The marimba shares a problem with many wind instruments: an uneven scale and uneven timbres in extreme ranges."[58] Wilson continues "When selecting various sizes of mallets to use, a basic rule of thumb is not to have an extreme difference in hardness between the inner two mallets, as well as between the mallets in the right hand….There are times when the inner mallets may cross paths or roll on the same notes, so they need to be of similar articulation"[59] When choosing mallets for the Fuga, one must take into account Wilson's observation of differences in sounds of this range of the marimba and Bach's three part fugal writing. Wilson says that the graduated set of soft, medium, medium, and medium hard is the least used, but in this case, I believe it is the best option to bring out the three different voices.[60]

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[58] Christopher Wilson, "Use and Selection of Graduated Mallets," *Percussive Notes* 49, no. 1 (January 2011): 38.
[59] Wilson, 38.
[60] Wilson, 39.

Technical Issues

There are a few issues that must be addressed in order to successfully perform Bach's Fuga. The first and main problem is how to bring out the different voices in the music.

Figure 15: Bach, Violin Sonata in G minor: Fuga mm. 1-3.

In Figure 15 one can see the introduction of the three voices with the main theme of the piece. Each voice continues to develop while the next voice enters the texture, and this type of fugal writing with the main theme returns throughout the piece. The best way to achieve clarity with each new voice is to emphasize each voice. This is more difficult than it sounds however because the proper touch to emphasize each voice must shift from mallet to mallet in the performers hand. Figure 16 shows a possible way for dealing with these type of fugal statements.

Figure 16: Bach, Violin Sonata in G minor, Fuga, mm.1-3

Another issue that must be addressed is the execution of the chords throughout the work. There are many opinions on the proper execution of the chords. Alina Grimm says that "When arranging one of the most revered solo works for violin, percussionists must address many delicate issues. These include such things as whether to "break up" (or arpeggiate) the chords as

opposed to playing all the notes of a chord simultaneously."[61] Elizabeth Wallfisch says "Never use the Romantic style of dividing the chords 'two notes by two notes' here. The lute or the harpsichord can help inform us: approach chord playing as if you were plucking an arpeggio across the strings."[62] Applying this method to the Fuga might look like Figures 17 and 18.

Figure 17: Bach, Violin Sonata in G minor, Fuga m.5.

Figure 18: Bach, Violin Sonata in G minor, Fuga m.5.

Is this method appropriate to apply to every chord in the Fuga? Excessive ornamentation could alienate non-percussion members of an audition committee. Consulting a series of recordings should help determine the best course of action. Itzhak Perlman performs most of the chords in a block format.[63] Several times Perlman actually uses the "two by two" arpeggio that Wallfisch specifically advised against.[64] Hilary Hahn alternates between performing chords in block format and in quick arpeggios.[65] Gidon Kremer performs the chords almost exclusively as blocks, with a few fully arpeggiated chords.[66] Jascha Heifetz uses full arpeggios more liberally than the other performers, but still relies on the block chord as the standard for performing the

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[61] Alina Grimm. "Performance and Transcription Issues for Bach's "Violin Sonata No. 1 in G Minor" When Adapted for Marimba." *Percussive Notes* 52, no. 6 (November 2014): 36.

[62] Elizabeth Wallfisch, "Masterclass - Bach's 'Solo Violin Sonata in G Minor,'" *STRAD* 118 (1407)(2020): 64. Accessed February 28. http://search.ebscohost.com/login.aspx?direct=true&db=edswah&AN=000248028400031&site=eds-live.

[63] Johann Sebastian Bach, Fuga, Violin Sonata in G minor, BWV 1001, Performed by Itzhak Perlman on *Sonaten und Partiten* (EMI Classics, 1988), CD.

[64] Wallfisch, 64.

[65] Johann Sebastian Bach, Fuga, Violin Sonata in G minor, BWV 1001, Performed by Hilary Hahn on *Hilary Hahn Plays Bach, Sonatas No. 1 and 2; Partita No.1* (Decca, 2018), CD.

[66] Johann Sebastian Bach, Fuga, Violin Sonata in G minor, BWV 1001, Performed by Gidon Kremer on *Bach, the Sonatas and Partitas for Violin Solo* (ECM Records, 2005), CD.

chords in the Fuga.[67] Each of the performers applies arpeggios in different locations throughout the Fuga. In the case of chords in the Fuga, the aural middle ground appears to be wide, allowing for personal choices to be made about where to use arpeggiated or block style chords. In any case, it makes the most sense to keep to these two executions and avoid the more Romantic performance of Perlman.

Another set of technical issues to deal with are the many legato markings present in Bach's Fuga.

Figure 19: Bach, Violin Sonata in G minor, Fuga, mm. 30-32.

One may see above a passage requiring steady legato playing. As discussed in the previous chapter, Leigh Howard Stevens' method for legato performance may be applied here, and for all the rest of the legato passages in the Fuga.[68]

[67] Johann Sebastian Bach, Fuga, Violin Sonata in G minor, BWV 1001, Performed by Jascha Heifetz on *Bach: Sonatas and Partitas (The Heifetz Collection, Vol. 17)* (Sony Classical, 1995), CD.

[68] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.

Figure 20: Bach, Violin Sonata in G minor, Fuga, mm. 30-32.

Figure 20 shows what applying Stevens' method for playing legato would look like on the page.

Multiple Voices in a Single Line

Measures 7-10 of the Fuga presents an interesting opportunity to suggest multiple voices within a single melodic line. Heifetz and Kremer both execute this section with small pauses at the B4 in measure 7, Eb5 in measure 8, A4 in measure 8, E4 in measure 9, and F#4 in measure 10. Perlman also applies this pulling of the tempo, but much less pronounced. Hilary Hahn plays the section without moving the time. Rebecca Kite would agree with Heifetz and Kremer, saying "the fact that much of Bach's music is rhythmically the same (sixteenth notes) does not mean that it should be approached with the same metronomic precision that a snare drummer would use. The fact that there are few dynamic markings doesn't mean that every note in a Baroque composition should be exactly the same loudness."[69] If one were to take this approach with measures 7-10 and add a bit of emphasis on some of the notes, then the result would be a

[69] Rebecca Kite, "From Bach to the blues: the art of musical styles for the Marimbist," *Percussive Notes* 36, no.5 (October 1998): 40.

single line that seems to present multiple voices.[70] Figure 21 shows how to achieve the performance of multiple voices within a single melodic line. Since several of the recordings already achieve this to a lesser degree, I do not believe this would alienate non-percussion members of an audition committee and could, in fact, show the candidate's proficiency in Bach's compositional style.

Figure 21: Bach, Violin Sonata in G minor, Fuga, mm. 7-10.

Ornamentation

Measures 35-41 of Bach's Fuga is a famous and widely debated passage. Presenting with a passage that is not possible on the violin, one might assume some sort of ornamentation might be required to perform the passage. According to Jerome Carrington "We are told that in Bach's time, trained musicians – remarkably – fully understood the style and execution of ornaments."[71] Leigh Stevens created an arrangement of Bach's Fuga, changing the key from G minor to A minor and adding much ornamentation to the piece. In this section Stevens suggests two

[70] See Figure 21.
[71] Jerome Carrington, *Trills in the Bach Cello Suites* (Norman, University of Oklahoma Press, 2009), 23.

different forms of fast, rhythmic arpeggios that, while being idiomatic to performing on the marimba, differ wildly from how violinists tend to perform this passage.[72] Each recording performs this passage in a slightly different way.

Figure 22: Kremer execution of Bach, Violin Sonata in G minor, Fuga, mm. 35-41.

Figure 23: Perlman execution of Bach, Violin Sonata in G minor, Fuga, mm. 35-41.

[72] Johann Sebastian Bach, *Sonata in a minor for marimba alone (original Sonata in g minor for violin alone,* Arranged and transcribed by Leigh Howard Stevens (Asbury Park, NJ: Keyboard Percussion Publications by Marimba Productions, Inc. 1989), 7.

Figure 24: Hahn execution of Bach, Violin Sonata in G minor, Fuga, mm. 35-41.

Heifetz's execution of this passage is identical to Perlman's. The aural middle ground here that will attract more non-percussionist members of an audition committee is Perlman and Heifetz's interpretations. Performing Kremer's interpretation would not necessarily alienate audition committee members, but Heifetz and Perlman offer an interpretation slightly more diverse in content and possibly more interesting to listen to.

In the final measure of Bach's Fuga, all four of the selected performers execute a trill on beat three, elongating the leading tone before resolving to the tonic. This is interesting, as Anna Magdalena Bach's original manuscript did not contain the trill. Frederick Neumann says that:

> Before Bach's time composers were often quite specific about ornament notation, but it was generally accepted that performers had the option of changing, adding, or omitting ornaments at their discretion. However J.S. Bach did not share this liberal attitude about the ornamentation of his music. Wherever there was any ambiguity, or complex ornaments were needed, Bach was careful to write out their specific note configurations.[73]

It would seem that the addition of the trill the is out of character with Bach's compositional practices, however, as all of the selected performers execute the trill, the aural middle ground for the final measure of the Fuga is obvious. Leigh Stevens explains how to achieve the trill in his performance guide.[74]

Figure 25: Bach, Violin Sonata in G minor, Fuga, m. 94.

The written out trill in Figure 25 may be performed with two of Stevens' techniques, either both notes played by alternating between the two mallets held by one hand or by alternating one of the two mallets held in each hand.[75]

The strategies in this chapter provide a basis for preparing an aural middle ground performance of Bach's Fuga. The basic techniques for simulating how a violin would perform the Fuga may be applied to multiple compositions by Bach that could be asked for in an audition. The specific examples in this chapter cover the major areas of debate in the Fuga and hopefully

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[73] Frederick Neumann, *Ornamentation in Baroque and Post-Baroque Music : With Special Emphasis on J.S. Bach* (Princeton, NJ, Princeton University Press 1978), 332.

[74] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.

[75] Leigh Howard Stevens, *Method of Movement for Marimba: With 590 Exercises* (Asbury Park, NJ: Marimba Productions Inc, 1979), 30.

give the audition candidate a head start towards preparing a performance of the piece that will bridge the gap to the non-percussionists on an audition committee.

CHAPTER 4

LUTE SUITE IN E MINOR: ALLEMANDE AND INVENTION NO.4 IN D MINOR

As most of the techniques and strategies explained in the previous chapters will also apply to creating aural middle ground performances of Bach's Allemande and Invention no.4 in D minor, it makes sense to combine the two pieces. While seeing the Invention no.4 in D minor on an audition list is somewhat rare, the Allemande has become wildly popular on auditions in the past several years. Deciding on recordings to use as reference material can be difficult as the instruments that Bach wrote these two pieces for are not widely used anymore. That being said, there are some opportunities for interesting forms of expression in these two pieces that should not alienate the non-percussionists on an audition committee.

Range and Mallet Choice

The range of both the Allemande and the Invention no.4 in D minor can be found on the standard 5 octave marimba, and as such, should be performed in the original range to promote familiarity in the listener. Choosing mallets for the Allemande can be difficult "…because evidence suggests (see below) that it may have been performed on a variety of instruments, such as the lute, lute-harpsichord, or harpsichord. Additionally, as with all of Bach's harpsichord and clavichord works, today it is played on the modern piano; even more frequently, however, it can be heard performed on the modern guitar."[76] David Ledbetter also supports the notion that the lute suite was originally intended for keyboard. "This is both the earliest of Bach's lute works

[76] Christoph Öhm-Kühnle, "Heinrich Nikolaus Gerber's Rediscovered Manuscript of Johann Sebastian Bach's Suite in E Minor (BWV 996): A Copy of Bach's Hitherto Unknown Revised Edition." *Bach* 38 (2007): 45. http://search.ebscohost.com.proxy-remote.galib.uga.edu/login.aspx?direct=true&db=rih&AN=A549670&site=eds-live.

and the one that is most problematic for performance on the lute. Various scordaturas and transpositions have been suggested, but nothing can get around the fact that it is almost certainly intended for keyboard."[77] This means one first must decide what instrument to simulate. Since Bach entitled the work Lute Suite in E minor, I suggest attempting to choose mallets based on performing the work like a lute or guitar would. The plucking of the strings on a guitar can create the slightest metal twang sound. This may be simulated on the marimba by using a matched set of four hard yarn mallets and performing in the center of each marimba bar for a unifying color scheme on the instrument.

The Invention No. 4 in D minor provides an interesting vehicle to try something "outside the box". While the Invention No. 4 in D minor may now be performed regularly as part of standard piano repertoire, originally, the piece was meant to be used a training piece to build strength in the fingers.[78] While simulating the piano may be a safe choice, going back to the instrument Bach wrote for, the harpsichord, would call for very different mallets. When one listens to Wanda Landowska's recording of Bach's Invention No.4 in D minor, the sound of the harpsichord is extremely articulate and metallic.[79] This effect may actually be simulated on the marimba with cord-wrapped mallets, which are normally used for vibraphone, but may be used on the marimba as well. Combine the cord-wrapped mallets with a bright placement on every bar and the desired effect will be achieved.

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[77] David Ledbetter, *Unaccompanied Bach : Performing the Solo Works* (Yale University Press, 2009), 245.

[78] Olli Väisälä, "Bach's Inventions: Figuration, Register, Structure, and the "Clear Way to Develop Inventions Properly"," *Music Theory Spectrum* 31, no. 1 (2009) 101. Accessed February 28, 2020. doi:10.1525/mts.2009.31.1.101.

[79] Johann Sebastian Bach, Invention No. 4 in D minor, Two Part Inventions, BWV 775, Performed by Wanda Landowska on *Legendary Performers: Wanda Landowska - Bach: Goldberg Variations/Partita No.2/Inventions* (RCA Victor Gold Seal/BMG Classics, 1992), CD.

While simulating the sound of the harpsichord may be interesting, it is somewhat risky to perform this way in an audition. Therefore the audition candidate may choose to simulate the sound of the modern piano on the marimba. Fortunately Leigh Howard Stevens recorded Bach's Invention No.4 in D minor and one may use this recording as a good reference.[80] The issue with simulating the piano is that, while the original version of the Invention No.4 in D minor was devoid of markings as it was a training piece, modern piano editions have added many different markings, taking advantage of the modern piano's ability to perform legato and staccato passages with relative ease. If the audition candidate wishes to perform the piano version of the Invention No.4 in D minor, then careful attention to different markings in multiple editions will have to be employed. I believe an aural middle ground may be achieved without following added marking and by attempting to perform the piece as clearly as possible, with the intention of building and showing off the difficult techniques required to perform the Invention No.4 in D minor.

Technique and Ornamentation

Bach's Invention No.4 in D minor was composed for performance with ten fingers. Attempting to perform the piece with six fewer playing implements creates a real challenge for the performer.

Figure 26: Bach, Invention No.4 in D minor from *Two Part Inventions*, mm. 3-6.

[80] Johann Sebastian Bach, Invention No. 4 in D minor, Two Part Inventions, BWV 775, Performed by Leigh Howard Stevens on *Bach on Marimba* (Resonator Records, 1987), CD.

The entirety of Bach's Invention No.4 in D minor requires extreme dexterity and independence between the two hands of the marimbist. Figure 26 shows an example of the two constantly separate and moving lines in Bach's Invention No.4 in D minor. One will find that the only way to accurately perform the piece is to play every note on the top staff with the mallets in the right hand and every note in the bottom staff with the mallets in the left hand.

Another technical challenge comes in measure 17 as the right hand must create a short trill while the left hand continues a separate moving line.

Figure 27: Bach, Invention No.4 in D minor from *Two Part Inventions*, m.17.

Measure 17 may be performed only by using a fast version of the single alternating stroke outlined in Leigh Stevens' training manual.[81] This same technique may be used to play other problem spots such as measures 19-21.

Finding an aural middle ground in Bach's Allemande depends mostly on tempo and ornamentation. Selected recordings reveal a performance tempo that is very quick to try and play on the marimba. John Williams recording of the piece clocks in at 142bpms.[82] Andres

[81] Leigh Howard Stevens, *Method of Movement for Marimba: With 590 Exercises* (Asbury Park, NJ: Marimba Productions Inc, 1979), 47-48.

[82] Johann Sebastian Bach, Lute Suite in E minor, Allemande, BWV 996, Performed by John Williams on *Bach: The Four Lute Suites* (CBS Records Masterworks, 1986), CD.

Segovia's performance is around 130 bpms.[83] Fortunately, the prescribed hard yarn mallets will still create clarity at these quick tempos. Yasunori Imamura's recording clocks in at a slower 106 bpms but this could be necessary as Imamura's interpretation includes heavy amounts of ornamentation.[84] When performing Bach's Allemande, it would most conservative to avoid all ornamentation, however even the most conservative interpretation from the selected recordings, performed by John Williams, still adds small trills at cadential points for dramatic effect.

To cover several possible places for added ornamentation one must first look at the one ornament found in the original manuscript, the mordent in measure 1. There are wildly differing performance practices for this measure. Imamura, Williams, and Segovia do not play the mordent at all, even though it is written in the original manuscript. Jason Vieaux performs the mordent, but only on the second repetition of the section.[85] Craig Einhorn performs the mordent in both repetitions of the first section but uses a chromatic lower neighbor rather than the normal diatonic lower neighbor.[86] Normally, the aural middle ground would be to go with the majority of the recordings and avoid the mordent, however, in this one example that would not bridge the gap to the audition committee because the committee members will have the music in front of them as they listen to each candidate play and will question the absence of an ornament they see on the page. Therefore the candidate should perform the mordent, in one or both repetitions of the first section of the Allemande.

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[83] Johann Sebastian Bach, Lute Suite in E minor, Allemande, BWV 996, Performed by Andres Segovia on *J.S. Bach: Lute Suite in E minor, BWV 996 (arr. Andres Segovia)* (Geffen, 1987), CD.

[84] Johann Sebastian Bach, Lute Suite in E minor, Allemande, BWV 996, Performed by Yasunori Imamura on *Bach: Complete Works for Lute* (Naxos, 2018), CD.

[85] Johann Sebastian Bach, Lute Suite in E minor, Allemande, BWV 996, Performed by Jason Vieaux on *Bach: Vol. 1 Works for Lute* (Azica, 2009), CD.

[86] Johann Sebastian Bach, Lute Suite in E minor, Allemande, BWV 996, Performed by Craig Einhorn on *Einhorn Plays Bach* (Einhorn, 2013), CD.

The mordent may be performed with two mallets in one hand using Stevens "multi-lateral" stroke, executed with two lightning fast twists of the wrist to perform a note, the lower neighbor to the first note, and then a repetition of the first note. [87]

Figure 28: Bach, Allemande from E minor Lute Suite m.1.

Figure 29: Bach, Allemande from E minor Lute Suite m.1 (Mordent written out).

Refer to Figures 28 and 29 for the example from the Allemande. The numbers below the notes in Figure 29 represent a suggested sticking where the four mallets in a marimbist's hands may be numbered 1 to 4 from the left most mallet in the left hand, called the outside mallet, to the same mallet in the outside of the right hand. The suggested sticking shows how to perform Stevens' multi-lateral technique.[88]

Lute or Guitar players may perform a mordent simply by sliding their fingers across the strings on the fingerboard. To perform this on marimba, use Stevens' technique for playing legato, performing the three notes with a slight decrescendo to hide the impact of each mallet and simulate the sliding effect available to string instruments.

Figure 30: Bach, Allemande from E minor Lute suite, m.1.

[87] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.
[88] Stevens, 20.

Figure 30 shows the written version of how to perform the mordent in measure 1 of Bach's Allemande to best simulate the sound of a lute or guitar player. If the audition candidate does not have the technical proficiency to use one hand to play the ornament, two mallets, one from each hand, can perform the ornament with the same degree of accuracy as long as the phrasing is performed in the same way.

Though no other ornaments are written in Bach's Allemande, there are a few places where ornamentation may be added without alienating non-percussionists in an audition committee. One such place is at the two significant cadential points in beat four of measures 7 and 17. Both of these measures briefly ornament the dominant with duration before resolving, to B Major and E Major respectively. The dotted eight notes in measures 7 and 17 present the opportunity to ornament with a short trill. This is the one ornament that John Williams adds to his performance of the Allemande. Jason Vieaux performs a trill in both measure 7 and 17 as well. Andres Segovia adds this ornamentation as well, but only in measure 17. Though the trill is not written, the aural middle ground here is to perform the trill at the two cadential points. To help connect to the non-percussion members of the audition committee, it is advised to try and use the Baroque trill, which begins on the upper neighbor of the written note and ends on the written note.[89]

Other options for added ornamentation may be found in the final chords of the first section in measure 8 and the final chord of the piece in measure 18. These chords are written as block chords, which the lute or guitar may perform as such, but chords are drawn across the lute or guitar in an arpeggio very often as well, thus the audition candidate may decide to arpeggiate these chords for dramatic effect in closing each section of Bach's Allemande. The candidate

[89] Leigh Howard Stevens, *Marimbist's Guide to Performing Bach* (Asbury Park, NJ, Keyboard Percussion Publications by Marimba Productions, Inc. 2012), 20.

should, however, take care to adjust the speed of the arpeggio to match the norm of a lute or guitar arpeggio. While the examples from Bach's Cello Suite in G Major from Chapter 1 suggest a slow arpeggio to finish the Prelude, here in the E minor Lute Suite the audition candidate should create a fast, strumming style arpeggio, unconcerned with impact sound as the lute or guitar creates a percussive sound from the plucking or strumming of the lute or guitar strings.

While the Allemande from the E minor Lute Suite and Invention No.4 in D minor are not as complex to discuss as the Cello Suite in G Major, Prelude or the Fuga from Violin Sonata in G minor, it is my hope that the audition candidate will attempt to listen to just as many recordings of the "easier" pieces as the longer, more difficult parts of Bach's compositions and will attempt to apply the strategies found in this document to their own audition pieces by Bach as the single best chance of winning an audition comes through reaching the audition committee and connecting with most of the committee members. Simply showing off one's technical prowess or including every little trick and ornament will not reach most members of an audition committee. Real study, not just into the composer, or historical background, or music theory, but also into the instruments Bach originally wrote for and what they sound like and how they create sound will help the audition candidate to produce a performance that will bridge the gap to a much greater proportion of the audition committee, which will give the candidate a better opportunity to win a job and have a career in performance.

CHAPTER 5

CONCLUSION

Fortunately, most of the techniques necessary to play the music of Bach on marimba are applicable to each of Bach's other similar compositions. This means that deep study of creating an aural middle ground performance for one audition will serve many future auditions. The subjective judging environment is merciless and unpredictable. This project serves as a guide to giving oneself the "best shot" at bridging the gap to the ears of the audition committee. Ultimately there is no sure thing when it comes to auditions. One may play perfectly and still lose based on a "feeling" held by only one audition committee member. Therefore a candidate must strive to continue learning about the history and performance practice of J.S. Bach and the trends in recordings by each instrument. Only by comparing multiple recordings of the same piece may an audition candidate begin to discern an aural middle ground.

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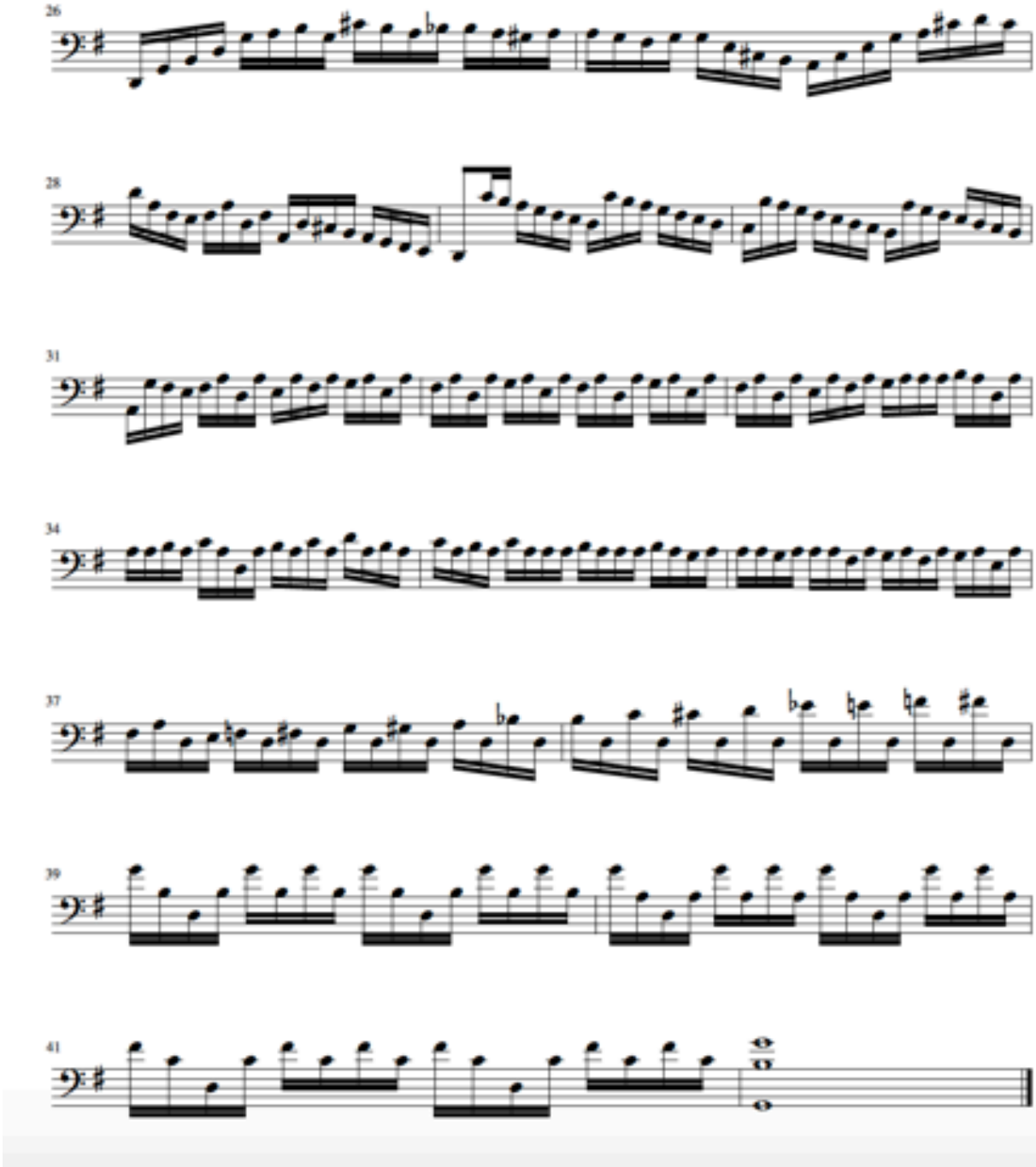
APPENDIX A

Performance Materials for J.S. Bach:

Cello Suite No.1 in G Major, Prelude

Prelude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Johann Sebastian Bach

Cello Suite No.1 in G Major, Prelude

Edited with performance suggestions by Nathan Tingler

Prelude


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31 Excecute "middle of the bar" placements for the repeated A3s and "one inch higher than middle of the bar" placements for other notes
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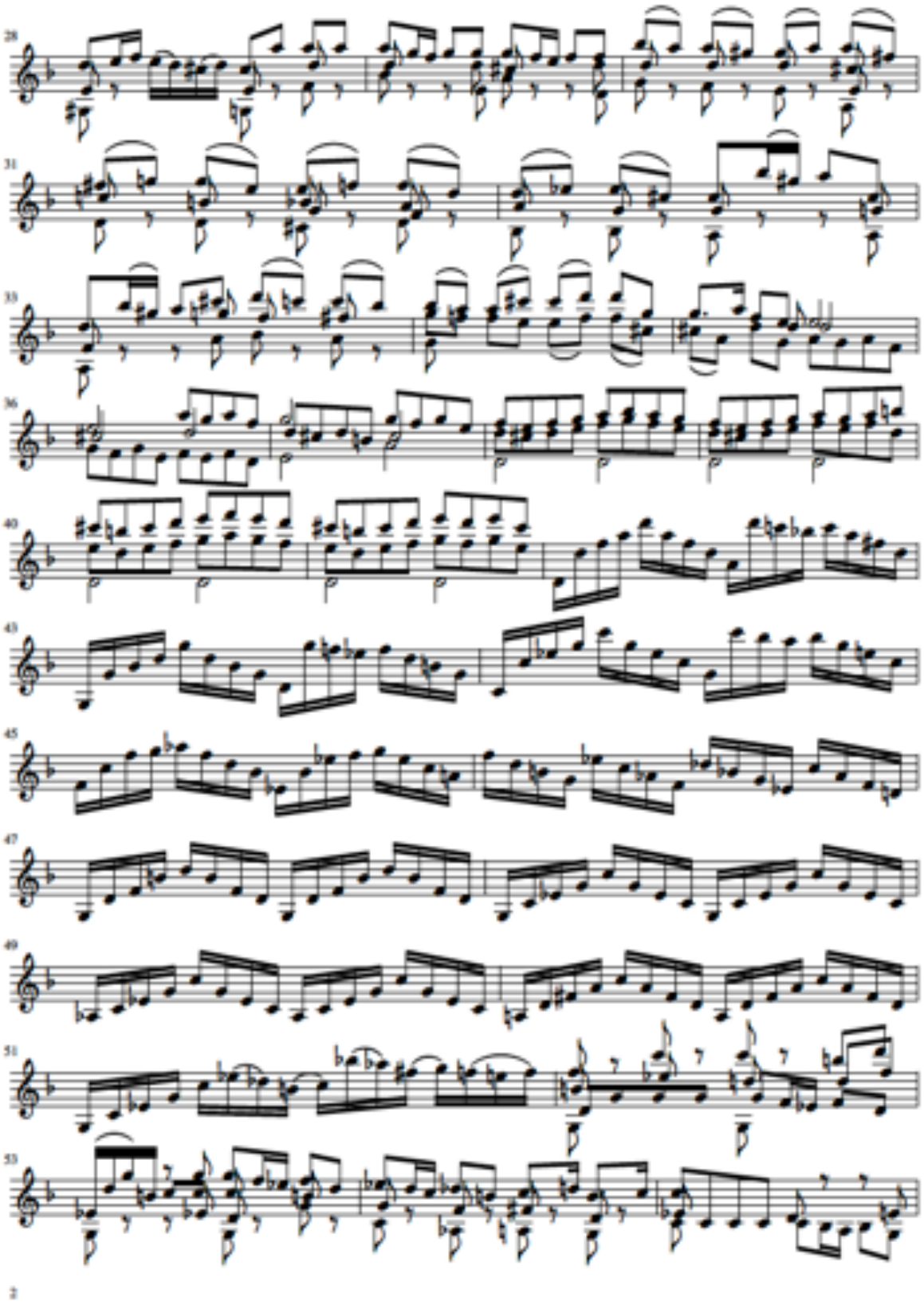
APPENDIX B

Performance Materials for J.S. Bach:

Violin Sonata in G minor, Fuga (Allegro)

Fuga (Allegro)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Johann Sebastian Bach:

Violin Sonata in G minor, Fuga (Allegro)

Edited with performance suggestions by Nathan Tingler

Fuga (Allegro)


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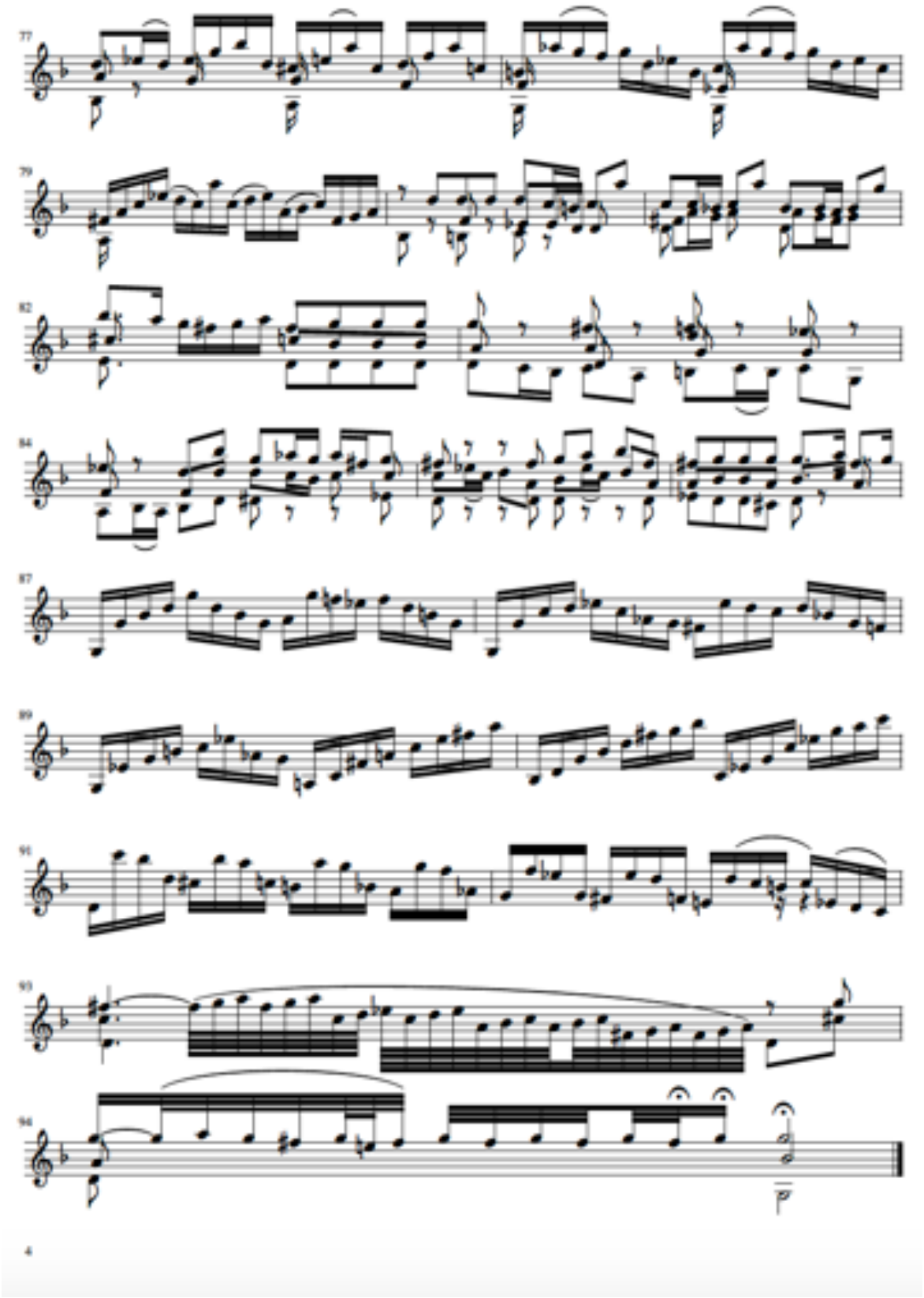
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APPENDIX C

Performance Materials for J.S. Bach:

Lute Suite in E minor, Allemande

Allemande

APPENDIX D

Performance Materials for J.S. Bach:

Invention No.4 in D minor from *Two Part Inventions*

Invention No 4 in D minor


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APPENDIX E

Script to Accompany Lecture Recital

WELCOME (Slide 1)

Good day and welcome to my lecture recital, entitled Bach and the Marimba: Bridging the Gap to Non-Percussionists.

INTRODUCTION (Slide 2)

As a western classical solo instrument, the marimba could scarcely be considered to be beyond its infancy. Vida Chenoweth, widely considered the first professional classical marimba soloist, debuted in Chicago only 64 years ago. Though the marimba has existed close to its current physical form since the early 1910s, the marimba was widely used as a novelty instrument for chamber ensembles until 1940 when the first concerto for the instrument with orchestra was premiered. The marimba's development as a folk instrument, outside the realm of western classical music, could have contributed to the instrument's late start in art music.

Chenoweth, a musicologist as well as a performer of the marimba, researched the earliest origins of the marimba in southeast Asia, through Africa, to Guatemala, before the instrument finally made its way to America. The marimba has evolved with each new culture that has developed it, gaining dried gourds below each wooden bar to magnify the sound created, then eventually trading the gourds for a large box below the bars and finally transforming the box into separate metal tubes, commonly called resonators, below each bar. With each technological addition to the marimba, the possibilities for its use in art music was expanded. Chenoweth became the first to successfully make a career of performing solo recitals on marimba which helped transition the public appearance of the instrument from a novelty, exotic instrument to a serious vessel for western style musical expression. Composers began writing more difficult

music for the instrument which led to the development of a technique for performing chords on marimba with four or more mallets, offering new possibilities not only for music to be written specifically for marimba, but also for marimba soloists to perform transcriptions of more difficult music.

INTRODUCTION PART 2 (Slide 3)

The marimba has become a staple of western, especially American, musical tradition and is constantly growing in popularity and use. Though the number of professionals who make their living solely as marimba soloists have diminished since the 1990s, performing on the marimba has become a basic requirement for percussionists, even from early in their musical development. Middle school students now learn the basics of four mallet technique and perform music written to be performed with four mallets. High school students must know how to perform with four mallets on marimba to compete for positions with competitive outdoor marching groups such as Drum Corps International (DCI) and its indoor, smaller ensemble based counterpart known as Winter Guard International (WGI). In the last thirty years DCI has raised its maximum corps size from 128 to 154 to include, among other personnel, more mallet performers and has doubled or tripled the subjective standard number of mallet instruments to four marimbas and four vibraphones, all requiring four mallet technique. Colleges of all levels require auditionees to perform on marimba to be considered for admittance. Summer programs, necessary for professional development, networking, and resume building, now require two and four mallet marimba solos. Some of the most well-known summer programs including the Brevard Music Center, the Aspen Music Festival, and Music Academy of the West all require marimba solos as part of the audition process. Competing for jobs, both performing and educating, requires marimba solo performance as well.

INTRODUTION FINAL (Slide 4)

Interestingly, while solo performance on marimba has grown in popularity and new compositions push the limits of the instrument, the requirements for professional development programs and jobs have remained anchored in the past, specifically to Johann Sebastian Bach. This project recognizes the required performance of the music of J.S. Bach on marimba in a competitive, subjective judging environment and will provide both general and specific strategies for successfully appealing to diverse audition committees. I will provide specific case studies of four examples Bach's music commonly asked for in auditions. My selections include the Prelude from Bach's Cello Suite No.1 in G Major, the Fuga from Violin Sonata in G minor, the Allemande from E minor Lute Suite, and Invention No.4 in D minor from the *Two Part Inventions*.

NEED FOR STUDY (Slide 5)

If one looks at any percussion audition list from the past ten to fifteen years, one will likely find a requirement of a two or four mallet solo by J.S. Bach at the top of the list. The current Aspen Music Festival audition requires one solo work by J.S. Bach. The New World Symphony audition requires a J.S Bach solo of choice for two or four mallets. Some professional job auditions, such as the Sarasota Orchestra have asked for specific Bach solos such as Violin Partita no.1. Others like the Virginia Symphony have more generalized requirements like "choose a solo from the Sonatas and Partitas for Violin by J.S. Bach." In some cases an audition will require more than one Bach solo such as the upcoming 2020 Kansas City audition for Assistant Principal Percussion that asks for movements from both a violin sonata and a lute suite. In any case it is obvious that performing Bach in a competitive environment has become commonplace at multiple levels of the music world.

NEED FOR STUDY PART 2 (Slide 6)

Why is the music of Bach required for an instrument that did not exist during his lifetime? William James, the Principal Percussionist of the Saint Louis Symphony said "I think Bach is commonly requested because it is a very familiar style of music that everyone has studied and has a high expectation for performance. There are ample opportunities for expression, and most of his works are technically demanding." While marimba soloists train as percussionists and learn from percussionists, they are more commonly judged in audition situations by non-percussionists. According to James, "The committee will be made up of string, wind, brass, and percussion players, all of whom have very different experiences with Bach." Audition committees in orchestras rarely consist only of percussionists and often those performing a violin, cello, or lute solo by Bach on marimba find themselves judged by musicians who play the instruments Bach wrote for, which are far older and have much more established expectations for how Bach's music should sound. It is therefore necessary to try and navigate subjective judging environments by finding an "aural middle-ground" with non-percussionists. This can be difficult for young percussionists, many of whom are encouraged to listen to recordings of the music they learn for auditions, yet continue to perform Bach's compositions on the marimba without attempting to create a sound similar to the recordings they use as reference material.

The issue facing percussionists in an audition environment is how to attract the ears of both the percussionists and non-percussionists present in an audition committee. To achieve an aural middle ground with the non-percussion members of the audition committee, an audition candidate should attempt to make their performance of Bach on marimba sound more like the performances and recordings that the audition committee is likely to have heard over the course

of their musical careers. This project will provide strategies to play Bach on marimba in a way that is less like a marimba player and more like the instrumentalists for whom Bach originally composed. I have chosen to focus on four examples that represent four different instruments and some of the most asked for repertoire on semi-professional and professional job auditions.

REVIEW OF LITERATURE (Slide 7)

The question of how to perform Bach has been debated and there are several large issues that should be acknowledged before narrowing the focus to performing Bach on marimba. When preparing Bach for public performance there is always the question of authenticity. Wanda Landowska, a musicologist and performer of Bach's music, did extensive research into the performance practice of Baroque music, especially keyboard music. Her negative views on modern performances of Baroque music led her to perform Baroque keyboard music exclusively on the harpsichord. Landowska did extensive research into creating historically informed performances of Bach and wrote much on Baroque techniques for ornamentation and phrasing. She believed that treating Baroque music like any other period of music, devoid of historical knowledge, would blur the lines of musical tradition, creating bland performances:

> Besides, the knowledge and perfect rendering of signs, dynamics, ornaments, and particular taste of the period to which the work belongs will never restrain an interpreter nor prevent his daring anything. On the contrary; it is when we follow the same routine for all epochs that we become prisoners, eternally breathing the same air. This is not a question of musicological pedantry, but of a knowledge of the language of the work to be performed."

Landowska believed that the performer would still contribute their individuality in the performance of a work by learning about the composer and the time and circumstances in which the work was composed. "All interpretations must be studied and thought out; and the more they are, the more they give the illusion of spontaneous inspiration."

Richard Taruskin debated Landowska's position on performance, questioning the legitimacy of creating historically informed performances of Bach's music. Taruskin believed the individuality of the performer could be lost in the search for authentic performances:

> All too often the sound of a modern "authentic" performance of old music presents the aural equivalent of an Urtext score: the notes and the rests are presented with complete accuracy and an equally complete neutrality (and this seems to be the most characteristic – dare I say it? – of English performances). Nothing is allowed to intrude into the performance that cannot be "authenticated." And this means nothing can be allowed that will give the performance, in the sense in which we first defined the word, the authenticity of conviction.

Taruskin also believed that authenticity was found as much in the efforts of the performer as in the study of the score and composer. He questions the validity of valuing one "authenticity" over the other:

> We seem to have paid a heavy price indeed for the literacy that sets Western musical culture so much apart and makes its past available in the first place, if the text must be so venerated. Is the text only an exacting responsibility? And if so, to what or whom is the responsibility due? Can the text not be an opportunity – for the exercise of imagination, the communication of delight, even the sharing of emotion? Can there be no reconciliation between the two authenticities, that is, the authenticity of the object performed and the authenticity of the subject performing? And is a musical performance to be regarded as an "object" at all?

Though the debate is interesting, for the purposes of this project, the question of authenticity is not as important in the subjective judging environment as promoting favor with non-percussionists through aural familiarity, which will be discussed shortly.

REVIEW OF LITERATURE PART 2 (Slide 8)

Another major issue to be discussed is the difference in the technique and sound of performing on the marimba and the instruments that J.S. Bach originally wrote for. There is some debate as to whether the marimba, when performing transcriptions, should be played with techniques and implements that attempt to make the marimba sound like another instrument.

Leigh Howard Stevens, the creator of modern marimba technique, worked on several projects dealing with performing Bach on marimba. In addition to the recording of an album called *Bach on Marimba,* which is widely used to train young percussionists, Stevens wrote a 17-page manual on how to perform Bach on Marimba with examples from Bach's Cello Suite in G Major. Stevens' manual is currently the only written resource for percussionists learning to perform Bach on marimba but the manual is only a general guide. Though the manual covers most of the basics of creating Baroque performances on marimba, Stevens admitted that it is not an in-depth study and he offered general information that could be expanded and used in a different approach:

> A detailed discussion of how to perform Bach on marimba would require a sizable book, but this publication has only room for presenting the most important considerations in a very abbreviated, condensed form – the equivalent of music lessons IN HEADLINES. The student should bear in mind that follow this introduction are brief, and not sufficient in themselves to address every musical or technical issue the marimbist is likely to encounter in performing Bach's Cello Suites – let alone those that will be encountered in the performance of Bach's Violin Sonatas or his keyboard music.

While many of the techniques and strategies of Stevens will be used in my project, I will go in depth, applying technique in specific examples to simulate the sounds of recordings that musicians use to study the music of Bach, therefore creating an aural bridge to non-percussionists.

Stevens' work influenced one other document that discusses performing Bach on marimba. The same year that Stevens published his manual, James Chong wrote a paper in completion of a bachelor's degree at Edith Cowan University in Australia citing Stevens' work in a case study on Bach's Violin Sonata in A Minor. Chong used techniques described by

Stevens to provide a guide for creating a historically informed performance of the work.[90] Chong uses Stevens' technique and strategy to create more authentic performances of Bach on marimba, but, as stated before, authenticity is not the focus of my project, and my choice of repertoire differs, serving the purpose of assisting young percussionists in successfully creating favor with audition committees to win auditions.

METHODOLOGY (Slide 9)

In order to win an audition, a percussionist must garner as many votes as possible from audition committee members. I believe this may be achieved by attempting to attract the ears of the committee. There is some research that suggests human beings are consciously or unconsciously attracted to that which is familiar to them. There have been multiple psychological studies that suggest familiarity increases attraction. One psychology textbook states that "the familiarity principle of attraction is perhaps the most basic of the [general principles of attraction]" To apply this principal to music, on a basic psychological level, musicians performing on the instruments Bach originally wrote for are more likely to be comfortable hearing Bach solos performed the way they play it, with the timbres and colors of their own instrument. A violinist may favor, even if only subconsciously, the sound of a solo by Bach that resembles what they have learned and know in their own experience.

The main issue performing on the marimba is that the instrument is commonly activated by percussive force, producing very different sounds than the instruments Bach wrote for. The marimba also cannot control sustain or decay of sound in real time. Combine these issues with the tendency of percussionists to perform Bach "like a marimba soloist" with exotic mallet choices and extended techniques made popular by contemporary marimba compositions and the

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[90] James Chong, *Bach on Marimba: a case study using the Violin Sonata in A minor (BWV 1003)* (2012, Edith Cowan University).

result is a sound that can be off-putting to instrumentalists with expectations of a sound similar to their own. Alison Shaw, a professor and established virtuoso of percussion, offered a good representation of how the modern marimbist thinks about using the music of Bach to explore the possibilities of the marimba, rather than attempting to manipulate the marimba to sound like the instruments Bach wrote for:

> Bach was a master of transcription and modification. Perhaps it is fitting, then, that instrumentalists of practically every classical genre continue to transcribe the music of Bach. What does this have to do with marimba? I can tell you what it means to me. It means freedom. It is this freedom to explore the voice of the marimba, using Bach's music as a vehicle, that has made me reach far beyond the idiomatic technical issues encountered in our standard marimba repertoire.

Bill Sallak provided a slightly more radical, yet still popular, view of performing Bach on marimba:

> One can choose to begin by eliminating facets of the original work imposed by the limitations of the original instrument. Think about it: What is we could take steps to hear the sort of music Bach might have written for the marimba if it had been around when he was alive?

METHODOLOGY PART 2 (Slide 10)

How then can a percussionist who relies on the subjective judgement of non-percussionists to earn a career in performance or education play the music of J.S. Bach to the satisfaction of these other instrumentalists? Of course there must be a discussion of technique, of ornamentation, of phrasing, and of mallet choice, but only so far as to serve the purpose of presenting Bach's music on marimba in a form aurally similar to the instruments Bach wrote for. Therefore, to describe this project as a series of transcriptions would be somewhat inaccurate. Rather, I will more closely follow the methodology of the original marimba musicologist, Vida Chenoweth who took issue with the term "transcribe:"

> When I began my concert career – first in Chicago (Fullerton Hall of the Chicago Art Institute) and the New York – critics were made aware of the fact that I *never* altered the

> score of anything I performed; that is to say, it was played from the original score, note for note. They pondered this and agreed that what I was playing – even though it may have been conceived for an instrument other than marimba – was *not* a transcription. It was not rewritten, arranged, or changed in any way as to its form. Only the instrumentation was substituted. After scratching their heads for a while, they came up with the relevant term *reassigned.*

This project offers strategies to "reassign" the music of Bach for marimba, utilizing the basic techniques outlined by Leigh Howard Stevens and other marimbists combined with professional recordings of the selected repertoire to create performances that appeal to non-percussionists above other performances of the same music in an audition setting. It is my hope that this performance guide will assist those currently auditioning for positions with semi-professional or professional groups and provide a strategy for preparing similar repertoire for future auditions. Though choices in audition repertoire may change, the make-up of an audition committee will inevitably remain diverse, creating challenges for percussionists wishing to win a position for years to come.

CELLO SUITE NO. 1 IN G MAJOR: PRELUDE (Slide 11)

The Prelude from J.S. Bach's Cello Suite No 1. In G Major is one of his most known and loved works. Having been recorded by many artists over the years, there have been many interpretations and much work put into understanding the piece and how best to perform it. Pablo Casals said that "The Six Suites for Cello give an idea of Bach's vision of the possibilities of this instrument, possibilities which had not been exploited before. Here, as in so many other branches, Bach was in advance of his time." Yo Yo Ma had a more emotional response to the work. "Bach's cello suites have been my constant musical companions. For almost six decades, they have given me sustenance, comfort, and joy during times of stress, celebration, and loss. What power does this music possess that even today, after three hundred years, it continues to help us navigate through troubled times?" Bach's cello suites were thought to capture the essence of the cello. David Ledbetter said of the Prelude from Cello Suite No 1. In G Major "This Prelude is an extraordinary and classic example of Bach's ability to make his material grow from the inherent nature of an instrument, from the smallest motifs to the broadest structures." With such high praise for Bach's compositional prowess for the cello, one might be wary of the task of manipulating the sound of a marimba to simulate the cello, however the marimba does have a few advantages that will assist in this task.

INSTRUMENT RANGE AND MALLET CHOICE (Slide 12)

As the marimba is a massive instrument that is not easily transported, auditions will provide a marimba for the performer to play on. Though this means that there may be slight differences between the instruments the student prepares and then performs upon, most modern

construction marimbas used for auditions have certain features that remain the same from instrument to instrument. The audition will likely provide a 5-octave instrument, which is a great boon to a candidate playing the Cello Suites as the range of the 5-octave marimba (C2-C7) contains the same range as the cello (C2-C6) with the addition of an extra higher octave. This means that the Prelude can and should be performed in the same register as the cello to begin the attempt to simulate the cello sound.

MALLET CHOICE (Slide 13)

Mallet choice can be difficult for a young percussionist as there are an extremely diverse range of mallets to choose from that each create different timbres on the marimba. It is generally accepted that the lower range of the marimba is warm and resonant and that longer tones may be created in this range with soft mallets. I will now demonstrate the difference in sound of a few types of mallets. **DEMONSTRATE SOFT TO HARD YARN MALLETS.** "Rolling on the lowest bars with large, soft sticks, makes the bars ring, creating an almost uninterrupted long tone. A good marimbist, playing with thick yarn mallets, can almost sing in the low register." Leigh Stevens approached the problem of choosing mallets for Bach by first explaining the differences in the creation of sound between stringed instruments and percussion instruments.

> "It feels like you "push" or "drag" the sound out of stringed instruments; push is also an appropriate description for a sustained vocal note or a French horn tone. When you stop pushing or pulling the sound out of these instruments, the instrument stops sounding…In our world of percussion, it might be more appropriate to imagine a ball on a tabletop. Poke the ball and it rolls a certain distance across the table. Poke it harder and it rolls further. You have to know how far and how fast you want the ball to go before you poke it, and you can't change much after it is poked…"

MALLET CHOICE PART 2 (Slide 14)

The cello can produce a wide range of sounds that are friction based, therefore it has capabilities outside the realm of simulation by the marimba, an instrument that creates sound by

being struck with percussive force. The cello has a broad sound, especially in the lower register, so a large mallet with a lot of yarn is recommended, however the cello can also create shorter, more pointed sounds so the marimbist needs a mallet with a range of sounds that all fall within the range of the "fat" sound of the cello. Most yarn mallets may produce a warmer, gentler tone if the performer raises their wrists when playing, changing the angle of striking so that the mallet strikes near the top of the mallet, a glancing blow to the mallet core, rather than at a perpendicular angle, striking the mallet core directly. Now I will demonstrate the sounds created by the two angles of striking. **DEMONSTRATE GLANCING AND DIRECT STRIKES**

When striking the core of a mallet, a sharper articulation is created, less pronounced with soft mallets. Therefore I suggest for Bach's Prelude to use a soft mallet with a lot of yarn that allows for fat and slightly articulate sounds when playing on the core and extremely legato sounds when playing on the upper edge of the mallet. The question of using graduated mallets, or mallets of differing degrees of hardness in each of the four spots across the four hands may arise, however, as the Prelude mostly stays in the lower register of the marimba, I recommend using the same mallets. Experimenting with different graduated sets of mallets may be appealing, but can be difficult to manage due to the difference in weight between the mallets and the tendency of certain notes to "stick out" from the texture of a line due to a mallet used that is too soft or too hard.

TECHNIQUE AND SOUND MANIPULATION (Slide 15)

There is some debate as to how sound may be manipulated on the marimba. Pius Cheung, a famous marimba soloist, enumerated several technical ways to change the sound of the marimba:

> First, we have three stroke types: up, down and full. Second, we have five basic levels of stroke speeds: military, assertive, normal, relaxed, and slow-motion. Military is the most

> aggressive and quickest; slow-motion is the most useful for developing a physical feel for the connection between notes and horizontal motions on the instrument. Third, we have five basic levels of stroke weight, utilizing the control and natural weight of different body parts: fingers, wrist, forearm, whole arm, and body. We use fingers for easy control over the most delicate passages, and when the music calls for it, we can throw our body-weight onto the instrument for those special peasante moments… In addition, we can also draw out different tone colors by playing on different parts of the bar.

This explanation would lead the performer to believe that there are many different ways to change the sound of the marimba. Leigh Stevens offers a different, more simplistic explanation of sound manipulation on the marimba:

> Having performed this experiment approximately 241,627 times, I can assure you in advance that when the volume, playing spot, and angle of the stroke are identical, it doesn't matter if the stick is tight or loose, or whether you use fingers, wrist, arm or foot: the sound heard by the ear of a conservatory-trained musician is identical.

Stevens disagrees with Cheung on the use of anything except angle of strike, placement on the marimba bar, and velocity of stroke to manipulate the sound of the marimba. Another percussionist, Erick Saoud, decided to test the acoustics of the marimba to help settle the debate of sound manipulation on the marimba. Before conducting his test, Saoud said:

> It is a controversial belief that through alteration of stroke alone, marimba performers are unable to modify a single performance of one note (the combination of the stroke and resulting tone) to a degree relative enough to be heard in the resulting tone. In simpler terms, through stroke alone, performers cannot simulate a legato or staccato tone on a single note. Instead, through a combination of techniques employed by the performer, the illusion of staccato and/or legato can be achieved.

After an exhaustive test utilizing sophisticated recording equipment to test the sound produced by the marimba:

> Results indicated that while there were measurable differences between pairs of legato and staccato strokes, the differences were minimal and inconsistent. It is unclear, but doubtful, whether any of the differences found in the analyzation would be discernable by any listener.

TECHNIQUE AND SOUND MANIPULATION PART 2 (Slide 16)

As Stevens explains, and confirmed by testing, there are only three things outside of mallet choice that affect the sound of the marimba. One thing that all marimbists agree on, however, is that different places on the marimba bar create very different colors. These playing spots are similar on every bar. As you can see, there are several different colors available from each marimba bar and some of the placements have similar colors to one another. On this palette, the darker, warmer colors are toward the middle or the very edges of the marimba bar while the brighter colors may be found closer to where the string goes through the end of each marimba bar, which is known as the node. Stevens describes the most resonant, full sounding places to play on each bar to be near the center over the resonators or at the very edges of the bar. I will demonstrate the different colors created when playing different parts of the marimba bars.

DEMONSTRATE PLAYING SPOTS

PERFORMING THE PRELUDE (Slide 17)

The Prelude may well be the most important part of Bach's Cello Suite No. 1 in G Major. According to David Ledbetter, the function of the Prelude as a Baroque genre was to introduce the key for concert music in church or to introduce dance music. Pablo Casals stated that "The first thing we must understand when playing the cello suites…is that, as with the partitas for violin and for keyboard, the prelude gives the character to the whole work…a fundamental mood of "optimism " prevails in the First Suite…" This background information on the prelude will inform what the performer will hear on recordings. Thus the next step is to dive into the Prelude by taking several well-known recordings and trying to find trends in the cello performances to attempt to simulate on the marimba.

We begin by looking at the first four measures of the Prelude without any markings. This is for several reasons. The original manuscript from Anna Magdalena Bach contains very few markings concerning dynamics, phrasings or bowings, and the markings that are in the manuscript are "almost deliberately confusing". This lack of markings from the original manuscript, combined with the possibility of the use of the Prelude for teaching basics of improvisation and the inability to determine by ear exactly which edition of the Prelude the performer in each recording is reading from leads me to desire a blank slate to begin my study.

The first four measures of the Prelude can be very different from performer to performer. Let us listen to several performers playing this section. Yo Yo Ma elongates the pedal G out from the time, then speeds the following notes and slurring them to lead to the chord change in measure 2, where he begins the pattern of pulling and pushing the time again. **PLAY YO YO MA EXAMPLE** If one were to try to follow this while reading the music, it might be confusing due to the lack of any kind of markings other than steady 16th notes. Pablo Casals pulls the very first pedal G out of time more drastically than Ma, but then follows a similar but more conservative pattern of slightly elongating the pedal G of the next chord in measure 2, ect. while slightly swinging the 16th notes rather than playing them steadily. **PLAY CASALS EXAMPLE** Mstislav Rostropovich also elongates the first pedal G but performs the rest of the opening very steadily without elongating any notes and with an added phrasing that leads in intensity to measure 4 and then subsides to the next pedal G in measure 5. **PLAY ROSTROPOVICH EXAMPLE** Mischa Maisky combines the elongation of the pedal G of Yo Yo Ma with the larger scale phrasing of Rostropovich but performs the suite nearly twice as fast as any of the other performers. **PLAY MAISKY EXAMPLE** If you combine the different performances to find a "middle ground", the music might look more like this.

PERFORMING THE PRELUDE PART 2 (Slide 18)

From this point the performer should attempt to bring these new markings out in their performance, but should attempt to make the changes subtle, which will add depth to the performance and create hints of familiarity in the members of the committee who have heard any of these standard recordings. The pedal G, when played on the marimba, may drown out the next note, even with a slight elongation of the G, so, utilizing placement on the bars, the performer should play on the top of the mallet for the bass note, a bright color placement on the second note of each measure, and slur the C, B, and C by playing all three notes with the right hand pair of mallets and moving from the core striking angle up to the top of the mallet.

DEMONSTRATE THE ANGLES AND PERFORM MM. 1-4

The pattern of phrasings suggested in this slide could be used for much of the Prelude as the "wave motif" that David Ledbetter notes in the first few measure of the Prelude return often throughout the piece.

ECHO (Slide 19)

Measure 12 presents another opportunity to make some artistic choices. In Rostropovich, Ma, and Maisky's recordings, the performers create varying degrees of an echo effect from the first two beats to the last two beats of the measure. **PLAY EXAMPLES** The majority of the performers also add phrasings to lead to the two high C4s with Casals being the lone performer to continue to emphasize the lower C3s. The music with the added phrasings now appears as in the bottom, larger example on this slide.

In order to make the phrasing in this example speak on the marimba, the performer must apply a Stevens technique for playing legato phrasings. Stevens says that "If the new note is *stronger than the volume level that the previous note is ringing,* the listener hears clear

articulation. That is the opposite of "legato." Therefore, in order to make Figure 9 sound correctly on the marimba, the performer must execute the markings in Figure 10, pulling some of the notes out of the texture and hiding others in a line of steadily softer notes.

DEMOMNSTRATE PLAY EXAMPLE These markings are, of course, exaggerated and should be applied in a subtle manner to add phrasings conservatively to an audition performance. Rebecca Kite agrees with Stevens' technique for playing legato, but adds to the technique, stating that:

> Notes can be grouped by using a slight crescendo with a slight acceleration or by a slight decrescendo with a slight retard. Approaching the marimba with the metronomic precision of snare drumming make music that becomes relentless, unfeeling, and unnatural…For example, the fact that much of Bach's music is rhythmically the same (sixteenth notes) does not mean that it should be approached with the same metronomic precision that a snare drummer would use. The fact that there are few dynamic markings doesn't mean that every note in a Baroque composition should be exactly the same loudness.

Kite's variation on Stevens' legato technique works well with the pulling and pushing of the tempo by Casals, Ma, Maisky, and Rostropovich, and should be applied to the rest of the Prelude but the performer should apply this technique conservatively.

ECHO PART 2 (Slide 20)

William James, a percussionist who won a large job with the St. Louis Symphony, says "Rather than try to please everyone, stick to a conservative approach that will show plenty of musicality but not go too far. Sometimes the best thing a committee member can say is "I had no problem with that."

TO ROLL OR NOT TO ROLL (Slide 21)

One of the most important moments of Bach's Prelude is measure 22, which moves from the lowest note on the cello, C2, up two octaves to a high D4, hanging on the dominant through a

cadenza section before modulating to D. The trend of the performers I'm using for reference is more difficult to place here. Rostropovich and Maisky both execute a ritardando in measure 21, pause on the low C on beat 1 of measure 22, and slowly climb up the arpeggio to D4. Casals and Yo Yo Ma do not ritard into measure 22, but do linger briefly on the low C before climbing up to D4. Ma also is the only performer of the four to not hold the fermata. I believe the aural middle-ground to be performed here should look like the example on the right.

In order to make the fermata sustain, the performer has two options, to roll, or tremolo, or not to roll and manage the angle and velocity of the stroke to create as much sustain as possible. According to Brian Cole, "The consensus among non-percussionists is that the marimba roll sounds out of place in a Baroque style. The roll is usually perceived as a tremolo, and the disruption in the musical line is undesirable." Stevens chooses to issue caution about the use of the marimba roll, rather than outlawing it as Cole does:

> With the right mallets in the correct hands, the occasional use of a roll can add great beauty and a convincing sense of organ-like legato. With the wrong mallets, or an insensitive pair of hands wielding them, the misplaced intrusion of a rolled texture can shatter the atmosphere of a passage and convince listeners that the marimba is the distant cousin of the mandolin.

I believe that Stevens' legato performance technique can be applied in this situation, offering a way to use the marimba roll for expression without causing distraction. If the performer can play a very fast tremolo, but hide each successive note in the sound envelope of the previous note, then length may be added to the fermata in measure 22 without offending the ears of the non-percussionists who are listening. I will now demonstrate applying Stevens' technique to a roll to extend the length of a note. **DEMONSTRATE ROLL**

BAR PLACEMENT AND FINAL CHORD (Slide 22)

Measures 31-36 present an interesting challenge for the marimbist. In this section the cellist uses martellato strokes alternating on the C and G strings in order to create a pedal A with a simultaneous moving melodic line. Even with the repeating pedal A, the use of the two different strings creates clarity as the C and G strings have very different colors. For the marimba, the only way to create clarity in this section is to utilize different parts of the marimba bars, especially on the repeated A, to create different colors to better match the sound of the cello. In this slide you can see all of the repeated notes that must be performed. These will get lost in the blending sounds of the marimba unless one utilizes different playing spots. I will now demonstrate this section. **DEMONSTRATE MEASURES 31-36**

The final measure of Bach's Prelude contains a G Major chord with a fermata. David Ledbetter describes this interesting event. "Most unusually in these suites, the fermata at the end is over the final chord rather than over the double bar line. This is presumably because the climax comes right at the end of the piece in the last four bars, and the final chord needs to be dwelt on since it is the goal of it all." Based on Ledbetter's assessment of the final four bars, it is not surprising that the trend of the four selected recordings is to slow the tempo in the last four bars leading to the final chord. The differences between the performers comes in the execution of the final chord. Pablo Casals lingers on the pedal G2 before performing the other two notes in quick succession. **PLAY EXAMPLE** Mischa Maisky and Yo Yo Ma both perform the notes of the chord slowly, one after the other. **PLAY MA AND MAISKY EXAMPLES** Rostropovich plays the G2 and B3 simultaneously and then repeats the B3 simultaneously with the G4. **PLAY ROSTROPOVICH EXAMPLE** In all four performances, the cellists add heavy vibrato to the chord and keep the intensity of the chord building until they end the chord. Unfortunately this is

just not possible on the marimba. Therefore I suggest following the examples of Maisky and Ma, playing each note of the final chord in slow succession, but relying on the marimba's ability to ring in an open performance environment rather than attempting vibrato through a tremolo roll.

For such a short piece, Bach's Prelude has multiple issues that have to be dealt with. That being said, this is a fantastic piece to begin with to learn the strategies that have been discussed in this chapter, strategies that may be applied to other pieces composed by J.S. Bach. The single most important strategy when approaching Bach for an audition is to listen to multiple recordings and attempt to find the middle ground between the performers. Discovering and attempting to recreate this aural middle ground on the marimba gives the best chance to reach more of the audition committee favorably.

VIOLIN SONATA IN G MINOR: FUGA (Slide 23)

J.S. Bach's Fuga is one of the most well-known, and most difficult of Bach's compositions for Violin. Even professional violinists find performing the piece challenging as modern instruments and bows cannot replicate the sounds of Baroque instruments. Miriam Fried says that:

> The modern bow is constructed to fit tightly on the string and sustain the sound, which is perfect for the long phrases of Romantic repertoire but a disaster when playing Bach. In the Sonatas and Partitas, the lightness of the dance movement and the clarity of the polyphonic writing is better served with a Baroque bow, which does not adhere as much to the string. Having less hair on the bow produces a leaner sound, which gives the kind of clarity that we look for in later music.

Another violinist, Viktoria Mullova, says that "A Baroque bow tells you how to play, because this music was written for one. Unfortunately the marimbist does not benefit from the training of a Baroque bow, but we can apply the basic sound that is created by a Baroque bow, lean and

short through mallet choice and utilizing the direct core strike angle of each mallet for music of Bach's Fuga.

The Fuga is required very commonly on auditions and presents a number of technical challenges for marimbists, not to mention the difficulties of attempting to simulate the sound and traditions of the violin to bridge the gap to the ears of non-percussionists on audition committees. Though I will provide some specifics on navigating the technical issues present in this piece, to serve the goal of simulating the sound and choices made by violin performers I will focus on the latter more than the former.

RANGE AND MALLET CHOICE (Slide 24)

Very often, because the lower range of the marimba is thought to be more resonant and superior in sound to the middle or upper range, young marimbists may make the choice to perform the Fuga an octave lower than is written. This is a mistake, as the change in range of the piece would be instantly recognized as unfamiliar and would be a high risk to alienate non-percussion members of an audition committee, especially any violinists. Though playing in the written range on the marimba does not provide the same resonance as the lower range, this difficulty may be countered with smart mallet choices. Christopher Wilson says "The marimba shares a problem with many wind instruments: an uneven scale and uneven timbres in extreme ranges." Wilson continues "When selecting various sizes of mallets to use, a basic rule of thumb is not to have an extreme difference in hardness between the inner two mallets, as well as between the mallets in the right hand….There are times when the inner mallets may cross paths or roll on the same notes, so they need to be of similar articulation" When choosing mallets for the Fuga, one must take into account Wilson's observation of differences in sounds of this range of the marimba and Bach's three part fugal writing. Wilson says that the graduated set of soft,

medium, medium, and medium hard is the least used, but in this case, I believe it is the best option to bring out the three different voices.

TECHNICAL ISSUES (Slide 25)

There are a few issues that must be addressed in order to successfully perform Bach's Fuga. The first and main problem is how to bring out the different voices in the music. In this example one can see the introduction of the three voices with the main theme of the piece. Each voice continues to develop while the next voice enters the texture, and this type of fugal writing with the main theme returns throughout the piece. The best way to achieve clarity with each new voice is to emphasize each voice. This is more difficult than it sounds however because the proper touch to emphasize each voice must shift from mallet to mallet in the performers hand. The lower example shows a possible way for dealing with these type of fugal statements. **DEMONSTRATE PLAYING EXAMPLE**

TECHNICAL ISSUES PART 2 (Slide 26)

Another issue that must be addressed is the execution of the chords throughout the work. There are many opinions on the proper execution of the chords. Alina Grimm says that "When arranging one of the most revered solo works for violin, percussionists must address many delicate issues. These include such things as whether to "break up" (or arpeggiate) the chords as opposed to playing all the notes of a chord simultaneously." Elizabeth Wallfisch says "Never use the Romantic style of dividing the chords 'two notes by two notes' here. The lute or the harpsichord can help inform us: approach chord playing as if you were plucking an arpeggio across the strings." Applying this method to the Fuga might look like the example on the right.

Is this method appropriate to apply to every chord in the Fuga? Excessive ornamentation could alienate non-percussion members of an audition committee. Consulting a series of

recordings should help determine the best course of action. Itzhak Perlman performs most of the chords in a block format. Several times Perlman actually uses the "two by two" arpeggio that Wallfisch specifically advised against. **PLAY PERLMAN EXAMPLE** Hilary Hahn alternates between performing chords in block format and in quick arpeggios. **PLAY HAHN EXAMPLE** Gidon Kremer performs the chords almost exclusively as blocks, with a few fully arpeggiated chords. **PLAY KREMER EXAMPE** Jascha Heifetz uses full arpeggios more liberally than the other performers, but still relies on the block chord as the standard for performing the chords in the Fuga. **PLAY HEIFETZ EXAMPLE** Each of the performers applies arpeggios in different locations throughout the Fuga. In the case of chords in the Fuga, the aural middle ground appears to be wide, allowing for personal choices to be made about where to use arpeggiated or block style chords. In any case, it makes the most sense to keep to these two executions and avoid the more Romantic performance of Perlman.

TECHNICAL ISSUES PART 2 (Slide 27)

Another set of technical issues to deal with are the many legato markings present in Bach's Fuga. This is a passage requiring steady legato playing. As discussed in the previous chapter, Leigh Howard Stevens' method for legato performance may be applied here, and for all the rest of the legato passages in the Fuga. The lower example shows what applying Stevens' method for playing legato would look like on the page.

MULTIPLE VOICES IN A SINGLE LINE (Slide 28)

Measures 7-10 of the Fuga presents an interesting opportunity to suggest multiple voices within a single melodic line. Heifetz and Kremer both execute this section with small pauses at the B4 in measure 7, Eb5 in measure 8, A4 in measure 8, E4 in measure 9, and F#4 in measure 10. **PLAY HEIFETZ AND KREMER EXAMPLES** Perlman also applies this pulling of the

tempo, but much less pronounced. **PLAY PERLMAN EXAMPLE** Hilary Hahn plays the section without moving the time. **PLAY HAHN EXAMPLE** Rebecca Kite would agree with Heifetz and Kremer, saying "the fact that much of Bach's music is rhythmically the same (sixteenth notes) does not mean that it should be approached with the same metronomic precision that a snare drummer would use. The fact that there are few dynamic markings doesn't mean that every note in a Baroque composition should be exactly the same loudness." If one were to take this approach with measures 7-10 and add a bit of emphasis on some of the notes, then the result would be a single line that seems to present multiple voices. The example in this slide shows how to achieve the performance of multiple voices within a single melodic line. Since several of the recordings already achieve this to a lesser degree, I do not believe this would alienate non-percussion members of an audition committee and could, in fact, show the candidate's proficiency in Bach's compositional style.

ORNAMENTATION (Slides 29-31)

Measures 35-41 of Bach's Fuga is a famous and widely debated passage. Presenting with a passage that is not possible on the violin, one might assume some sort of ornamentation might be required to perform the passage. According to Jerome Carrington "We are told that in Bach's time, trained musicians – remarkably – fully understood the style and execution of ornaments." Leigh Stevens created an arrangement of Bach's Fuga, changing the key from G minor to A minor and adding much ornamentation to the piece. In this section Stevens suggests two different forms of fast, rhythmic arpeggios that, while being idiomatic to performing on the marimba, differ wildly from how violinists tend to perform this passage. Each recording performs this passage in a slightly different way. Let's listen to each example and the music will

be on the slide so you can see the differences between each performer's recording. **PLAY EXAMPLES**

Heifetz's execution of this passage is identical to Perlman's. The aural middle ground here that will attract more non-percussionist members of an audition committee is Perlman and Heifetz's interpretations. Performing Kremer's interpretation would not necessarily alienate audition committee members, but Heifetz and Perlman offer an interpretation slightly more diverse in content and possibly more interesting to listen to.

In the final measure of Bach's Fuga, all four of the selected performers execute a trill on beat three, elongating the leading tone before resolving to the tonic. This is interesting, as Anna Magdalena Bach's original manuscript did not contain the trill. Frederick Neumann says that:

> Before Bach's time composers were often quite specific about ornament notation, but it was generally accepted that performers had the option of changing, adding, or omitting ornaments at their discretion. However J.S. Bach did not share this liberal attitude about the ornamentation of his music. Wherever there was any ambiguity, or complex ornaments were needed, Bach was careful to write out their specific note configurations.

It would seem that the addition of the trill the is out of character with Bach's compositional practices, however, as all of the selected performers execute the trill, the aural middle ground for the final measure of the Fuga is obvious. Leigh Stevens explains how to achieve the trill in his performance guide. The written out trill in may be performed with two of Stevens' techniques, either both notes played by alternating between the two mallets held by one hand or by alternating one of the two mallets held in each hand. I will demonstrate these techniques now.

DEMONSTRATE PLAY FINAL MEASURE WITH ONE HANDED AND TWO HANDED TRILL

The strategies in this chapter provide a basis for preparing an aural middle ground performance of Bach's Fuga. The basic techniques for simulating how a violin would perform

the Fuga may be applied to multiple compositions by Bach that could be asked for in an audition. The specific examples in this chapter cover the major areas of debate in the Fuga and hopefully give the audition candidate a head start towards preparing a performance of the piece that will bridge the gap to the non-percussionists on an audition committee.

LUTE SUITE IN E MINOR: ALLEMANDE AND INVENTION NO.4 IN D MINOR

As most of the techniques and strategies explained in the previous chapters will also apply to creating aural middle ground performances of Bach's Allemande and Invention no.4 in D minor, it makes sense to combine the two pieces. While seeing the Invention no.4 in D minor on an audition list is somewhat rare, the Allemande has become wildly popular on auditions in the past several years. Deciding on recordings to use as reference material can be difficult as the instruments that Bach wrote these two pieces for are not widely used anymore. That being said, there are some opportunities for interesting forms of expression in these two pieces that should not alienate the non-percussionists on an audition committee.

RANGE AND MALLET CHOICE (Slide 32)

The range of both the Allemande and the Invention no.4 in D minor can be found on the standard 5 octave marimba, and as such, should be performed in the original range to promote familiarity in the listener. Choosing mallets for the Allemande can be difficult "…because evidence suggests (see below) that it may have been performed on a variety of instruments, such as the lute, lute-harpsichord, or harpsichord. Additionally, as with all of Bach's harpsichord and clavichord works, today it is played on the modern piano; even more frequently, however, it can be heard performed on the modern guitar." David Ledbetter also supports the notion that the lute suite was originally intended for keyboard. "This is both the earliest of Bach's lute works and the one that is most problematic for performance on the lute. Various scordaturas and transpositions

have been suggested, but nothing can get around the fact that it is almost certainly intended for keyboard." This means one first must decide what instrument to simulate. Since Bach entitled the work Lute Suite in E minor, I suggest attempting to choose mallets based on performing the work like a lute or guitar would. The plucking of the strings on a guitar can create the slightest metal twang sound. This may be simulated on the marimba by using a matched set of four hard yarn mallets and performing in the center of each marimba bar for a unifying color scheme on the instrument.

The Invention No. 4 in D minor provides an interesting vehicle to try something "outside the box". While the Invention No. 4 in D minor may now be performed regularly as part of standard piano repertoire, originally, the piece was meant to be used a training piece to build strength in the fingers. While simulating the piano may be a safe choice, going back to the instrument Bach wrote for, the harpsichord, would call for very different mallets. When one listens to Wanda Landowska's recording of Bach's Invention No.4 in D minor, the sound of the harpsichord is extremely articulate and metallic. This effect may actually be simulated on the marimba with cord-wrapped mallets, which are normally used for vibraphone, but may be used on the marimba as well. Combine the cord-wrapped mallets with a bright placement on every bar and the desired effect will be achieved.

While simulating the sound of the harpsichord may be interesting, it is somewhat risky to perform this way in an audition. Therefore the audition candidate may choose to simulate the sound of the modern piano on the marimba. Fortunately Leigh Howard Stevens recorded Bach's Invention No.4 in D minor and one may use this recording as a good reference. The issue with simulating the piano is that, while the original version of the Invention No.4 in D minor was devoid of markings as it was a training piece, modern piano editions have added many different

markings, taking advantage of the modern piano's ability to perform legato and staccato passages with relative ease. If the audition candidate wishes to perform the piano version of the Invention No.4 in D minor, then careful attention to different markings in multiple editions will have to be employed. I believe an aural middle ground may be achieved without following added marking and by attempting to perform the piece as clearly as possible, with the intention of building and showing off the difficult techniques required to perform the Invention No.4 in D minor.

TECHNIQUE AND ORNAMENTATION (Slide 33)

Bach's Invention No.4 in D minor was composed for performance with ten fingers. Attempting to perform the piece with six fewer playing implements creates a real challenge for the performer. The entirety of Bach's Invention No.4 in D minor requires extreme dexterity and independence between the two hands of the marimbist. This slide shows an example of the two constantly separate and moving lines in Bach's Invention No.4 in D minor. One will find that the only way to accurately perform the piece is to play every note on the top staff with the mallets in the right hand and every note in the bottom staff with the mallets in the left hand.

TECHNIQUE AND ORNAMENTATION PART 2 (Slide 34)

Another technical challenge comes in measure 17 as the right hand must create a short trill while the left hand continues a separate moving line. Measure 17 may be performed only by using a fast version of the single alternating stroke outlined in Leigh Stevens' training manual. This same technique may be used to play other problem spots such as measures 19-21.

DEMONSTRATE MULTI-LATERAL ORNAMENT

TECHNIQUE AND ORNAMENTATION PART 3 (Slide 35)

Finding an aural middle ground in Bach's Allemande depends mostly on tempo and ornamentation. Selected recordings reveal a performance tempo that is very quick to try and

play on the marimba. John Williams recording of the piece clocks in at 142bpms. **PLAY WILLIAMS EXAMPLE** Andres Segovia's performance is around 130 bpms. **PLAY SEGOVIA EXAMPLE** Fortunately, the prescribed hard yarn mallets will still create clarity at these quick tempos. Yasunori Imamura's recording clocks in at a slower 106 bpms but this could be necessary as Imamura's interpretation includes heavy amounts of ornamentation. **PLAY IMAMURA EXAMPLE** When performing Bach's Allemande, it would most conservative to avoid all ornamentation, however even the most conservative interpretation from the selected recordings, performed by John Williams, still adds small trills at cadential points for dramatic effect.

TECHNIQUE AND ORNAMENTATION PART 4 (Slide 36)

To cover several possible places for added ornamentation one must first look at the one ornament found in the original manuscript, the mordent in measure 1. There are wildly differing performance practices for this measure. Imamura, Williams, and Segovia do not play the mordent at all, even though it is written in the original manuscript. **PLAY WILLIAMS EXAMPLE** Jason Vieaux performs the mordent, but only on the second repetition of the section. **PLAY VIEAUX EXAMPLE** Craig Einhorn performs the mordent in both repetitions of the first section but uses a chromatic lower neighbor rather than the normal diatonic lower neighbor. **PLAY EINHORN EXAMPLE** Normally, the aural middle ground would be to go with the majority of the recordings and avoid the mordent, however, in this one example that would not bridge the gap to the audition committee because the committee members will have the music in front of them as they listen to each candidate play and will question the absence of an ornament they see on the page. Therefore the candidate should perform the mordent, in one or both repetitions of the first section of the Allemande.

The mordent may be performed with two mallets in one hand using Stevens "multi-lateral" stroke, executed with two lightning fast twists of the wrist to perform a note, the lower neighbor to the first note, and then a repetition of the first note. This slide shows the example from the Allemande. The numbers below the notes in the example on the right represent a suggested sticking where the four mallets in a marimbist's hands may be numbered 1 to 4 from the left most mallet in the left hand, called the outside mallet, to the same mallet in the outside of the right hand. **DEMONSTRATE MALLET NUMBERING AND MULTI-LATERAL STROKE**

Lute or Guitar players may perform a mordent simply by sliding their fingers across the strings on the fingerboard. To perform this on marimba, use Stevens' technique for playing legato, performing the three notes with a slight decrescendo to hide the impact of each mallet and simulate the sliding effect available to string instruments.

The example at the bottom of this slide shows the written version of how to perform the mordent in measure 1 of Bach's Allemande to best simulate the sound of a lute or guitar player. If the audition candidate does not have the technical proficiency to use one hand to play the ornament, two mallets, one from each hand, can perform the ornament with the same degree of accuracy as long as the phrasing is performed in the same way. I will now demonstrate the two ways to perform this ornament. **DEMONSTRATE THE MORDENT**

TECHNIQUE AND ORNAMENTATION PART 5 (Slide 37)

Though no other ornaments are written in Bach's Allemande, there are a few places where ornamentation may be added without alienating non-percussionists in an audition committee. One such place is at the two significant cadential points in beat four of measures 7 and 17. Both of these measures briefly ornament the dominant with duration before resolving, to

B Major and E Major respectively. The dotted eight notes in measures 7 and 17 present the opportunity to ornament with a short trill. This is the one ornament that John Williams adds to his performance of the Allemande. **PLAY WILLIAMS EXAMPLE** Jason Vieaux performs a trill in both measure 7 and 17 as well. **PLAY VIEAUX EXAMPLE** Andres Segovia adds this ornamentation as well, but only in measure 17. **PLAY SEGOVIA EXAMPLE** Though the trill is not written, the aural middle ground here is to perform the trill at the two cadential points. To help connect to the non-percussion members of the audition committee, it is advised to try and use the Baroque trill, which begins on the upper neighbor of the written note and ends on the written note. This is what a non-Baroque style trill sounds like. **DEMONSTRATE** This is what a Baroque trill sounds like. **DEMONSTRATE**

Other options for added ornamentation may be found in the final chords of the first section in measure 8 and the final chord of the piece in measure 18. These chords are written as block chords, which the lute or guitar may perform as such, but chords are drawn across the lute or guitar in an arpeggio very often as well, thus the audition candidate may decide to arpeggiate these chords for dramatic effect in closing each section of Bach's Allemande. The candidate should, however, take care to adjust the speed of the arpeggio to match the norm of a lute or guitar arpeggio. While the examples from Bach's Cello Suite in G Major from Chapter 1 suggest a slow arpeggio to finish the Prelude, here in the E minor Lute Suite the audition candidate should create a fast, strumming style arpeggio, unconcerned with impact sound as the lute or guitar creates a percussive sound from the plucking or strumming of the lute or guitar strings.

While the Allemande from the E minor Lute Suite and Invention No.4 in D minor are not as complex to discuss as the Cello Suite in G Major, Prelude or the Fuga from Violin Sonata in G

minor, it is my hope that the audition candidate will attempt to listen to just as many recordings of the "easier" pieces as the longer, more difficult parts of Bach's compositions and will attempt to apply the strategies found in this document to their own audition pieces by Bach as the single best chance of winning an audition comes through reaching the audition committee and connecting with most of the committee members. Simply showing off one's technical prowess or including every little trick and ornament will not reach most members of an audition committee. Real study, not just into the composer, or historical background, or music theory, but also into the instruments Bach originally wrote for and what they sound like and how they create sound will help the audition candidate to produce a performance that will bridge the gap to a much greater proportion of the audition committee, which will give the candidate a better opportunity to win a job and have a career in performance.

CONCLUSION (Slide 38)

Fortunately, most of the techniques necessary to play the music of Bach on marimba are applicable to each of Bach's other similar compositions. This means that deep study of creating an aural middle ground performance for one audition will serve many future auditions. The subjective judging environment is merciless and unpredictable. This project serves as a guide to giving oneself the "best shot" at bridging the gap to the ears of the audition committee. Ultimately there is no sure thing when it comes to auditions. One may play perfectly and still lose based on a "feeling" held by only one audition committee member. Therefore a candidate must strive to continue learning about the history and performance practice of J.S. Bach and the trends in recordings by each instrument. Only by comparing multiple recordings of the same piece may an audition candidate begin to discern an aural middle ground.

APPENDIX F

Presentation Slides to Accompany Lecture Recital

Bach and the Marimba: Bridging the Gap to Non-Percussionists

BY NATHAN TINGLER

Introduction

- The Marimba – Widely used as a novelty instrument until 1940.
- 1940 – First concerto written specifically for marimba, Paul Creston's "Concertino for Marimba" premiered in Chicago.
- Evolution of the Marimba
  - Wood Slats over empty holes dug in the ground
  - Wood bars with dried gourds underneath for resonators
  - Wood bars with a wooden box underneath for resonance chamber
  - Wood bars with metal pipes underneath for individual resonance chambers for each bar

Introduction

- Four mallet marimba playing now a necessity
- Situations requiring four mallet playing
  - Higher level middle school percussion ensembles
  - High school percussion ensembles
  - High School outdoor Marching Band
  - High School indoor Marching Band
  - Drum Corp International Summer Marching Band
  - Winter Guard International Winter Marching Ensembles
  - High School/College Summer Music Programs
  - College Auditions
  - Professional Auditions including performing ensembles and college teaching positions

Introduction

- Common denominator for most higher-level auditions?
  - Johann Sebastian Bach

- *Cello Suite No. 1 in G Major, Prelude*
- *Violin Sonata in G minor, Fuga (Allegro)*
- *E minor Lute Suite, Allemande*
- *Two Part Inventions, Invention No.4 in D minor*

Need For Study

- Common phrase found on audition repertoire lists – "One movement of the candidate's choice from the *Sonatas and Partitas for solo Violin* by J.S. Bach"
- Recent Auditions requiring a Bach solo
  - Virginia Symphony Section Percussion
  - Sarasota Orchestra Principal Percussion
  - Kansas City Symphony Associate Principal Percussion
  - Kansas City Symphony Principal Percussion
  - St. Louis Symphony Associate Principal Percussion
  - Tucson Symphony Section Percussion
  - National Symphony Orchestra Section Percussion/Assistant Principal Timpani
  - Orlando Philharmonic Orchestra Principal Percussion
  - Dallas Symphony Principal Percussion
  - Omaha Symphony Principal Percussion

Need for Study

- Why Bach?
- William James, Principal Percussion of St. Louis Symphony
  - "I think Bach is commonly requested because it is a very familiar style of music that everyone has studied and has a high expectation for performance. There are ample opportunities for expression, and most of his works are technically demanding."
  - "The committee will be made up of string, wind, brass, and percussion players, all of whom have very different experiences with Bach."

FIND THE AURAL MIDDLE GROUND TO BRIDGE THE GAP

Review of Literature

- Landowska versus Taruskin – A question of authenticity
- Landowska – "Besides, the knowledge and perfect rendering of signs, dynamics, ornaments, and particular taste of the period to which the work belongs will never restrain an interpreter nor prevent his daring anything. On the contrary; it is when we follow the same routine for all epochs that we become prisoners, eternally breathing the same air. This is not a question of musicological pedantry, but of a knowledge of the language of the work to be performed."
- Taruskin - "All too often the sound of a modern "authentic" performance of old music presents the aural equivalent of an Urtext score: the notes and the rests are presented with complete accuracy and an equally complete neutrality (and this seems to be the most characteristic – dare I say it? – of English performances). Nothing is allowed to intrude into the performance that cannot be "authenticated." And this means nothing can be allowed that will give the performance, in the sense in which we first defined the word, the authenticity of conviction."

Review of Literature

- Leigh Howard Stevens – Father of modern marimba technique
  - 4 mallet grip isolating each of the four mallets from the other in the hand
  - Multiple stroke types for creating different sounds, rhythms, and effects on the marimba
  - Study of sound creation on the marimba and different coloring effects
  - Multiple standard recordings including *Bach on Marimba*
- Method of Movement
- Marimbist's Guide to Performing Bach

Methodology

- Familiarity Principle of Attraction
  - Human beings attracted, either consciously or unconsciously to what is familiar to them
  - Applied to audition committee who cannot see the audition candidate
    - Committee becomes attracted to what they hear – FAMILIAR SOUNDS

Methodology

- NOT a transcription project
- Vida Chenoweth - "When I began my concert career – first in Chicago (Fullerton Hall of the Chicago Art Institute) and the New York – critics were made aware of the fact that I *never* altered the score of anything I performed; that is to say, it was played from the original score, note for note. They pondered this and agreed that what I was playing – even though it may have been conceived for an instrument other than marimba – was *not* a transcription. It was not rewritten, arranged, or changed in any way as to its form. Only the instrumentation was substituted. After scratching their heads for a while, they came up with the relevant term *reassigned*."
- *Reassignment* Project

Cello Suite No.1 in G Major, Prelude

- Casals - "The Six Suites for Cello give an idea of Bach's vision of the possibilities of this instrument, possibilities which had not been exploited before. Here, as in so many other branches, Bach was in advance of his time."
- Ma - "Bach's cello suites have been my constant musical companions. For almost six decades, they have given me sustenance, comfort, and joy during times of stress, celebration, and loss. What power does this music possess that even today, after three hundred years, it continues to help us navigate through troubled times?"
- Ledbetter - "This Prelude is an extraordinary and classic example of Bach's ability to make his material grow from the inherent nature of an instrument, from the smallest motifs to the broadest structures."

Cello Suite No.1 in G Major, Prelude
Instrument Range

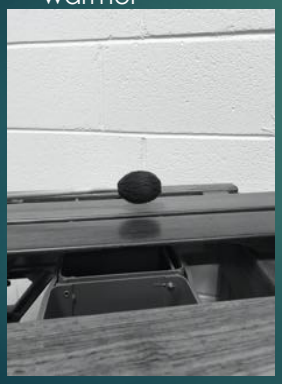
- Auditions requiring this piece SHOULD provide a five-octave marimba
- Five octave marimba – Same range as the cello
- Don't perform an octave up unless you don't have access to a five-octave marimba

Cello Suite No.1 in G Major, Prelude
Mallet Choice

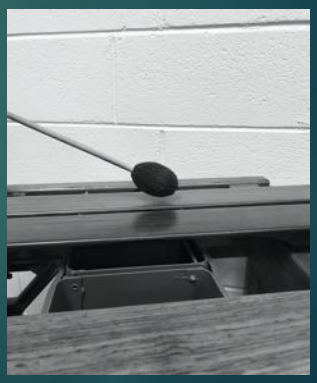
- Range of marimba – lower = warmer and higher = brighter
- Mallets
  - Hard yarn – brighter
  - Soft yarn – warmer
  - Hard wrapping of the yarn – faster articulation
  - Soft wrapping of the yarn – slower articulation (good for using the resonance of the marimba for blending or partially hiding notes)

Cello Suite No.1 in G Major, Prelude
Mallet Choice

- Mallet striking angles affect the sound produced
- Straight on the Core – faster articulation and brighter
- Glancing blow at an angle to the core – slower articulation and warmer



Left – Straight on the Core
Right – Glancing Blow



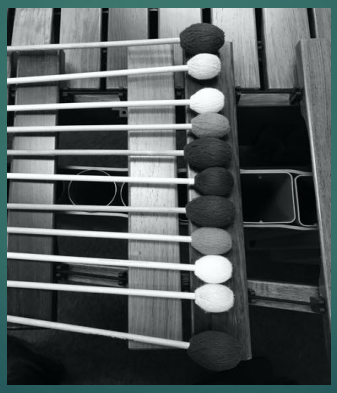
Cello Suite No.1 in G Major, Prelude
Technique and Sound Manipulation

- Three things that performer can control other than mallet choice
  - Volume – Height and velocity of stroke
  - Playing Spot – Allows color control with different parts of each marimba bar producing different colors
  - Angle of Stroke – Controls articulation and slight differences to brightness or warmth of the sound

- Erick Saoud - "Results indicated that while there were measurable differences between pairs of legato and staccato strokes, the differences were minimal and inconsistent. It is unclear, but doubtful, whether any of the differences found in the analyzation would be discernable by any listener."

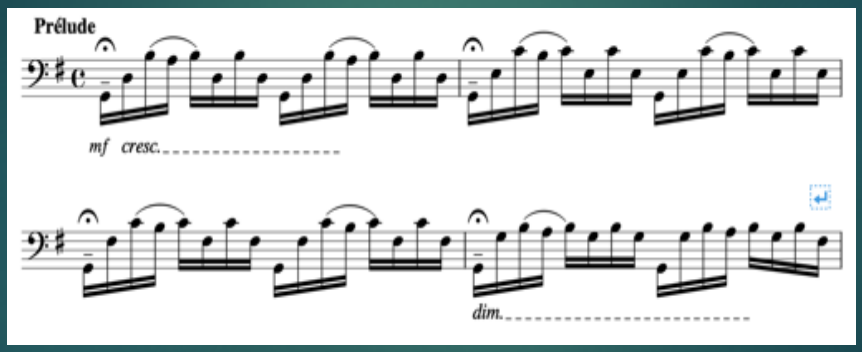
Cello Suite No.1 in G Major, Prelude
Technique and Sound Manipulation

- Playing spots create different colors on Marimba



Cello Suite No.1 in G Major, Prelude
Performing the Prelude

Cello Suite No.1 in G Major, Prelude
Performing the Prelude



Cello Suite No.1 in G Major, Prelude
Echo

Cello Suite No.1 in G Major, Prelude
Echo

- "Rather than try to please everyone, stick to a conservative approach that will show plenty of musicality but not go too far. Sometimes the best thing a committee member can say is "I had no problem with that."

Cello Suite No.1 in G Major, Prelude
To Roll or Not to Roll

Most Percussionists agree that the roll does not work in Baroque music BUT it can be done with careful attention to Stevens' technique for performing legato passages, but on a single rolled note

Cello Suite No.1 in G Major, Prelude
Bar Placement and Final Chord

Play final chord in a slow arpeggio, one note at a time, without other ornamentation or effect

Violin Sonata in G minor, Fuga (Allegro)

- Fried - "The modern bow is constructed to fit tightly on the string and sustain the sound, which is perfect for the long phrases of Romantic repertoire but a disaster when playing Bach. In the Sonatas and Partitas, the lightness of the dance movement and the clarity of the polyphonic writing is better served with a Baroque bow, which does not adhere as much to the string. Having less hair on the bow produces a leaner sound, which gives the kind of clarity that we look for in later music."
- Focus on the sound and phrasings that the violin masters choose to present in their recordings and find the aural middle ground to bridge the gap to the non-percussionists on the audition committee

Violin Sonata in G minor, Fuga (Allegro)

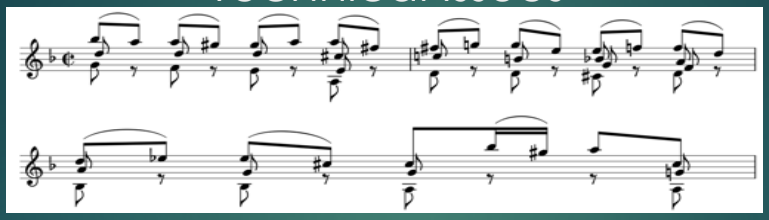
- Play the piece in the correct octave. Don't try to be clever using the part of the marimba that rings more and sounds warmer. That sound is further away from the sound of the violin and will sound strange to the audition committee
- Mallet choice for the *Fuga* from left to right – Soft, Medium, Medium, and Medium Hard

Violin Sonata in G minor, Fuga (Allegro) Technical Issues

Violin Sonata in G minor, Fuga (Allegro) Technical Issues

Avoid excessive arpeggiated ornamentation as this may alienate members of the audition committee

Violin Sonata in G minor, Fuga (Allegro) Technical Issues



- Apply Stevens' technique for performing legato sections

Violin Sonata in G minor, Fuga (Allegro) Multiple Voices in a Single Line

Violin Sonata in G minor, Fuga (Allegro) Ornamentation

- Kremer execution of mm. 35-41

Violin Sonata in G minor, Fuga (Allegro) Ornamentation

- Perlman execution of mm. 35-41

Violin Sonata in G minor, Fuga (Allegro) Ornamentation

- Hahn execution of mm. 35-41

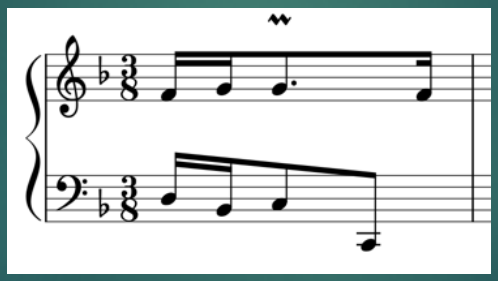
Lute Suite in E minor, Allemande and Invention No.4 in D minor

- Perform in the original range to avoid creating sounds unfamiliar to the audition committee
- Use four of the same hard yarn, tightly wrapped mallets to attempt to simulate the metal twang of the struck or strummed strings
- Invention No.4 in D minor – Try hard cord vibraphone mallets for even more of a bright sound attempting to simulate the harpsichord

Lute Suite in E minor, Allemande and Invention No.4 in D minor
Technique and Ornamentation

- Two constantly moving lines create issues for playing with only four mallets. Play the top line with the right hand and the bottom line with the left hand

Lute Suite in E minor, Allemande and Invention No.4 in D minor
Technique and Ornamentation



Lute Suite in E minor, Allemande and Invention No.4 in D minor
Technique and Ornamentation

- *Allemande*
- Most conservative to avoid all ornamentation and focus on building speed and accuracy
- Guitar players generally perform the *Allemande* more slowly the more ornamentation they add
- Trills at cadential points a common ornamentation choice among recordings

Lute Suite in E minor, Allemande and Invention No.4 in D minor
Technique and Ornamentation

Lute Suite in E minor, Allemande and Invention No.4 in D minor
Technique and Ornamentation

- Trills to ornament cadential points are one of the more common occurrences in professional recordings
- This is acceptable in the trends of Baroque interpretation and for modern interpretations
- Make sure to use a "Baroque" style trill, starting on the upper neighbor and ending on the written note.
- If you choose to arpeggiate chords, remember what the strumming of chords sounds like on guitar and simulate that with a faster arpeggio rather than a slower, more separated arpeggio

Conclusion

- Deep study- knowing the score, the composer, the historical background, trends in historically informed and modern performances
- Listen to MANY recordings and find the aural middle ground to emulate
- No sure thing in auditions so keep studying and keep practicing!