Vibraphone Orchestral Excerpts & Adapting J. S. Bach's Violin Sonata No. 1 in G Minor for Vibraphone

Tyler Nelson Tolles
FLORIDA STATE UNIVERSITY
COLLEGE OF MUSIC

VIBRAPHONE ORCHESTRAL EXCERPTS & ADAPTING J. S. BACH’S

VIOLIN SONATA NO. 1 IN G MINOR FOR VIBRAPHONE

By

TYLER NELSON TOLLES

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Tyler Nelson Tolles defended this treatise on March 24, 2020.
The members of the supervisory committee were:

John W. Parks IV
Professor Directing Treatise

Alice-Ann Darrow
University Representative

Alexander Jiménez
Committee Member

Christopher Moore
Committee Member

The Graduate School has verified and approved the above-named committee members, and certifies that the treatise has been approved in accordance with university requirements.
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ABSTRACT

This treatise seeks to examine the importance and relevance of the vibraphone and its functional adaptability in all genres (classical, jazz, etc.). In the canon of vibraphone research and literature, there exists only a modicum of information on the topics of orchestral vibraphone excerpts and adapting the music of Johann Sebastian Bach for vibraphone. This treatise serves as a resource that details recommendations on performance practice, dampening solutions, rhythmic interpretations, and stylistic information regarding the aforementioned topics. In addition, two lecture recitals were presented to support this document with tangible information and concise demonstrations that aided in the understanding of these topics and recommendations.

The first lecture discussed how the vibraphone plays a distinctive role in three orchestral works, in that its use is synonymous with jazz. Excerpts from John Adams’ *City Noir*, Leonard Bernstein’s *Symphonic Dances from West Side Story*, and John Williams’ *Catch Me If You Can: Escapades* are not only the three most common vibraphone excerpts called in orchestral auditions, but are also deeply rooted in jazz. The second lecture discussed and demonstrated the capabilities of vibraphone dampening as it pertains to my transcription of J. S. Bach’s *Violin Sonata No. 1 in G minor (BWV 1001)*. It provided a detailed outline of vibraphone dampening techniques, as well as excerpts of Bach’s *Violin Sonata No.1* that include vibraphone dampening markings and notation. This lecture also presented a new dampening concept and a more effective approach to vibraphone dampening techniques.

As noted in the first lecture, the vibraphone is utilized as a symbol of jazz in some of the most respected 20th-century orchestral masterworks. As stated in the second lecture, the vibraphone functions effectively as a solo instrument because of its dampening capabilities—more so than other keyboard percussion instruments.
INTRODUCTION

As a student of the vibraphone, I have often witnessed a severe disconnect between vibraphone performance and pedagogy, particularly when it comes to pedal dampening techniques. Therefore, I developed the concept of “gas” pedal dampening as a performance teaching concept, because it more clearly reflects how vibraphonists pedal.

The first lecture is titled: “A Guide to the Incorporation of Jazz Vibraphone Performance Practice into Orchestral Vibraphone Excerpts: An Analysis of Excerpts from John Adams’ City Noir, Leonard Bernstein’s Symphonic Dances from West Side Story, and John Williams’ Catch Me If You Can: Escapades.” Each of the vibraphone parts from these works are written explicitly in a jazz style, and in order to execute them effectively, the performer must have a thorough understanding of jazz idioms, performance practice, and vibraphone techniques. I chose these three excerpts because they have all appeared on orchestral percussion audition lists throughout the United States.

The second lecture is titled: “Vibraphone Dampening Techniques: Adapting J. S. Bach’s Violin Sonata No. 1 in G minor.” This lecture focused on gas pedal dampening and various mallet dampening techniques that help shape articulation and clarity. I found it necessary to discuss dampening techniques in Violin Sonata No. 1 because the sonata is more commonly performed on marimba, which does not use dampening.

My primary research tool for both lectures was qualitative observation through score study, recordings, transcriptions, live performances, masterclasses, clinics, and lessons. As the following treatise will support, the vibraphone remains one of the most diverse instruments in the percussion family, and its importance in modern percussion performance— as well as a multitude of different genre— is unparalleled.
CHAPTER 1

BRIEF HISTORY OF THE VIBRAPHONE

The vibraphone was invented in 1916, when the concept of a steel marimba inspired Herman Winterhoff of the Leedy Drum Company to create an entirely new instrument.\(^1\) The term “vibraphone” was coined by George Way, who worked for the Leedy Company.\(^2\) The Leedy vibraphone bars were made of steel and had an early version of the rotating pulsators, or fans, that now come standard with the modern vibraphone. However, the instrument did not have a damper bar or pedal mechanism, which meant there was no way to dampen the sustain of the steel bars.

Henry Schluter, who was a skilled keyboard tuner and employee of the Deagan company, designed the Model 145 vibra-harp in 1927, and standardized the construction of the instrument: three octaves (F3-F6), aluminum alloy bars, damper bar, pedal mechanism and a motor that rotated pulsators inside the resonators to create a “Vox Humana” effect (tremolo/vibrato).\(^3\) The term vibra-harp derives from the Deagan organ vibra-harp attachment that they were producing at the time. Only minor adjustments have been made since the original construction of the Model 145, including weight, wheels, size/length/height, and pedal design. The Model 145 became the blueprint for all vibraphone construction thereafter, which has stayed the same for nearly 100 years.

In October 1930, Lionel Hampton— who was primarily a jazz drummer— started playing the vibraphone because of jazz trumpeter, Louis Armstrong. Hampton was playing with the Les Hite Band in Los Angeles, CA and Armstrong hired them to record two tracks on his album.

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\(^1\) (Meyer 1976)
\(^2\) (Meyer 1976)
\(^3\) (Trommer 1996)
Armstrong asked Hampton to play the vibraphone and liked the sound so much that he included it on the record. As a result, *Memories of You* became the first jazz recording to feature a vibraphone. Hampton went on to play with the Benny Goodman quartet, which included Teddy Wilson (piano), and Gene Krupa (drums). They were featured performing in the 1937 film *Hollywood Hotel*; where Hampton is playing on a Deagan Model 145 or a similar instrument.

The vibraphone was born in jazz, and because of Hampton’s fame, it became a symbol of jazz music. Two other notable figures in the history of jazz vibraphone are Milt Jackson and Gary Burton. While Hampton played in an exuberant style indicative of the 1930s Swing era, Jackson played in a smooth, lush style indicative of the Bebop era of the 1940–1950s. Jackson was famous for using a slow vibrato setting on the motor, where Hampton used the fastest possible setting. Jackson primarily played with two mallets (one in each hand) as he considered his role to be melodic, like a trumpeter or vocalist, as opposed to a harmonic instrument like guitar or piano.

Gary Burton is notable for being the first jazz musician to play the vibraphone with four mallets (two in each hand). He developed his own four-mallet technique so that he could play four-note chords and function as a harmonic instrument. Burton was the first to develop and master the concept of solo vibraphone playing.

Both Jackson and Burton represent two distinct schools of jazz vibraphone playing: two-mallet and four-mallet. The lineage of a jazz vibraphonist today can be traced back to either one of these two masters. Examples of Jackson disciples include Bobby Hutcherson, Stefon Harris, and Warren Wolf, while examples of Burton disciples include David Friedman, David Samuels, and Joe Locke.

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4 (Stallard 2015)
5 (Quartet 1937)
The vibraphone has maintained a presence at the forefront of the jazz scene throughout most of jazz history, whereas in classical music it is traditionally a lesser-known instrument, although there are a few notable examples in addition to the three focal works of the first lecture recital. Ferde Grofé’s *Grand Canyon Suite* (1931) was premiered by the Paul Whiteman Orchestra, a prominent jazz ensemble of the era. Grofé was known as one of the earliest composers to combine jazz and classical music, and the “On The Trail” movement included the optional use of vibraphone.⁶ Alban Berg’s opera *Lulu* (1937) was the first example of the vibraphone being used in Western art music and not in a jazz capacity.⁷ In the 1940s, composers Morton Gould and Darius Milhaud wrote works that used the vibraphone as a feature instrument: *Harvest for Vibraphone, Harp, and Strings* (1945) and *Concerto for Marimba, Vibraphone and Orchestra* (1947). Benjamin Britten’s *Spring Symphony* (1949) features the vibraphone with motor and a fast oscillation of the pulsators.⁸

The vibraphone progressed as a solo instrument in the 1990s when the landmark work *Interzones* (1996) by Bruce Hamilton featured the vibraphone with electronic playback. Today, the vibraphone continues to be used frequently in modern concert band, orchestral, jazz, percussion ensemble, and chamber music. The vibraphone’s ability to function effectively and naturally in all the works discussed in both lecture recitals is a testament to its unique characteristics and adaptability as an instrument.

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⁶ (Grofe 1931)
⁷ (Blades 1984)
⁸ (Opera 1989)
A careful study of various dampening techniques is necessary to thoroughly realize the capabilities of musical expression on the vibraphone. There are three vibraphone dampening techniques that will be discussed: hand, pedal, and mallet.

The first type of dampening is hand dampening. Hand dampening is performed by engaging the pedal and striking a note with a mallet, then dampening it with the same or other hand. Fingers may also substitute for the whole hand. This technique is rarely used except in special circumstances, but it is a great pedagogical tool for teaching beginning students the concept of dampening. Hand dampening allows the player to maintain a physical connection with the bar while dampening.

In the modern paradigm of vibraphone pedaling, there are three modes of pedal dampening: full, half, and dry. Vibraphone pedaling modes are commonly defined as positions, which implies a stationary nature. Full pedaling requires the player to press the pedal so that the damper is completely disengaged from the bars, half-pedaling requires the player to press the pedal down so the damper pad maintains slight contact with the bars, and dry pedaling requires the player to simply not press or engage the pedal. Vibraphonist Arthur Lipner describes the commonly accepted paradigm of pedal dampening as “basically, the pedal can be down, up, or in between (‘half-pedaling’), and it can be released before, during or after the stroke.”\(^9\) Although pedal dampening is simplistic in nature, the application of only three dampening positions is counter to realistic vibraphone performance techniques.

Vibraphone pedaling is more clearly defined by the motions between the positions rather

\(^9\) (Lipner 1996)
than the positions themselves. I have codified this concept by coining the term “gas pedaling.” The term gas was chosen because the concept is synonymous with the motion of pressing and releasing a gas pedal in a car or truck. The term also derives from David Friedman’s description of what a performer should perceive in their mind while pedaling: “The process of pedaling will be as unconscious and natural as the ability to operate, without deliberation, the gear shift and clutch of an automobile.”

Gas pedal dampening encapsulates the practice of maintaining pedal motion. Overall, pedaling is more effective if it is perceived as motion along the dampening spectrum, and not simply as stationary positions. Gas pedaling fills a gap in the vibraphone pedaling lexicon, since there is no other effective and concise term that most accurately defines the motion between full and dry pedaling. By the definition of gas pedaling, the term half-pedaling is rendered non-essential. Thus, the three modes of pedal dampening would be full pedaling, dry pedaling, and gas pedaling.

The term gas pedaling offers a more concise substitute for other pedal dampening descriptions, such as “tap and gradually release.” According to Errol Rackipov:

“Tap [refers to] depressing the pedal or tapping, without completely releasing the damper from the bars [which] will give you a clearer and more articulate sound.” While “gradually release [refers to] catching the last note of a fast run of notes, to avoid the cluster (unclear) sound.”

Both terms require pedal motion along the spectrum, and emphasize the importance of clarity and articulation. However, instead of using dampening descriptions that refer to mechanical aspects of the instrument, one could suggest that musical terms like clarity and articulation are

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10 (Friedman 1973)
11 (Rackipov 1995)
12 (Rackipov 1995)
13 (Rackipov 1995)
more applicable to vibraphone dampening. Conceptually, the vibraphone pedal should move with what a player hears musically. Gas pedaling allows the performer to dampen with a more fluid and creative pedal dampening approach.

The third type of dampening is mallet dampening, which requires the pedal to be engaged fully. There are two types of mallet dampening: alternate hand, and same hand. Alternate hand is a method in which the player strikes the bar with one mallet, and subsequently dampens with the other mallet. The player can either slide the dampening mallet across the bars, or lift-press to dampen. Same hand requires that the player strike the bar with one mallet and dampen with the same mallet. The player can lift-press the mallet to dampen after striking. Mallet dampening allows a player to change notes while other notes are still ringing. This is particularly helpful when a chord is sustained, and a melodic line needs to develop while the chord remains sustained.

Smear dampening is another form of vibraphone dampening, which is commonly utilized in jazz vibraphone performance practice to ornament or create emphasis on notes. To correctly execute smear dampening, the performer fully engages the pedal and dead-stroke dampens the grace note while striking the primary note, allowing it to ring. This particular dampening effect is analogous to the pitch bending of a wind or brass instrument.

Vibraphone dampening notation is like piano pedaling notation. Ped. is short for pedal, which indicates that the player presses the pedal and allows the sound to sustain until the next Ped. marking. The symbol may also include a line to denotes sustain duration or an ending mark that denotes when the pedal should be depressed. Mallet dampening, which is vibraphone-specific, is indicated by an X symbol, which allows notes to be dampened while others sustain. “Dampening at the performer's discretion” is a phrase denoted to allow the performer freedom of
dampening choices. If no dampening notation is listed, it is expected that the player makes informed dampening decisions based on the style and context of the music.

The purpose of dampening is to create a smooth connection of sound by dampening bars simultaneously with striking other bars. If bars are dampened before or after the striking of following bars, the sound produced will leave an undesired space or create a crossover of sound. There are two concepts to consider when making dampening choices: clarity and articulation. Dampening for clarity is one of the most important concepts for a vibraphonist to master, specifically in achieving melody, harmony, and rhythm. The vibraphone is relatively unique within the mallet percussion family in that its aluminum bars sustain when struck. The sustain allows the performer to manipulate the amount of time the bars will ring. The bars decay anywhere from 8-15 seconds, which enables various lengths of articulation like staccato and legato to be achieved. Most percussion instruments naturally articulate staccato, (i.e. xylophone, marimba) and in order to create a legato connection of notes (without re-articulation) those aforementioned instruments utilize techniques such as rolling (or a fast articulation of notes) to create the perception of legato. The vibraphone does this as well, however; because it can sustain pitches for extended durations the performer is able to manipulate a seemingly smooth, connected legato line.

In Figures 1–9, examples of wavelength graphs compare articulations on the vibraphone, marimba, and xylophone. The same frequency pitch (C4-G4), position on the bar, angle of the mallet, and approximate velocity were used to provide consistency across the instruments. The mallets used are considered medium on the scale of hardness for their particular instrument: Xylophone Malletech OR33R, Marimba Malletech LS15, and Vibraphone Malletech DS18. Moreover, the graph representations are set to scale so that the wavelengths are comparable.
Figures 1–3 highlight the natural resonance and sustain of each instrument. The xylophone sustained the shortest duration at approximately one half-second, the marimba sustained second longest at approximately one second, and the vibraphone sustained the longest at approximately seven seconds. The wavelength graphs also suggest that the vibraphone decays the slowest of all three instruments allowing the sound to more smoothly connect to another articulation.

Figure 1 - Xylophone Sustain ~0.5 second, Frequency: G4

Figure 2 - Marimba Sustain ~1 second, Frequency: G4
Figures 4–6 display examples of legato articulation, which is not a natural articulation for mallet instruments as they are commonly struck with a mallet to create sound. In order to create the effect of legato, players will roll or create a fast series of articulations to evoke the sound of legato, or the smooth connection between notes. The xylophone and marimba are more commonly rolled as they have a short sustain. The vibraphone is less frequently rolled unless sustain is required for a much longer duration than its natural sustain. These examples contained five pitches C4, D4, E4, F4, and G4, and were played as connected as possible. The xylophone and marimba notes were rolled, while the vibraphone was struck and dampened with mallets. Based on the wavelength graphs, the vibraphone most clearly creates a smooth connection between the notes.
Figure 4 - Xylophone Legato (Rolls), Frequency: C4-G4

Figure 5 - Marimba Legato (Rolls), Frequency: C4-G4
Figures 7–9 display examples of staccato articulation, which for mallet instruments is a natural articulation because they are struck not blown or bowed. The graphs for xylophone and marimba show each note struck in succession with its natural resonance and without dampening. To create an even more staccato articulation on these two instruments, a player may mallet dampen or deaden the stroke into the bar. These techniques are not common (nor displayed in the following graphs) and are only utilized as extended techniques, not ordinary performance practice. The vibraphone, on the other hand, can articulate staccato like instruments that blow and bow. To create various amounts of separation between notes, the vibraphone may be dampened with mallets or the pedal. Figure 9 highlights just three different staccato interpretations, the first with a one-half interval, the second with a three-quarter interval, and the third with a seven-eighths interval.
Figure 7 - Xylophone Staccato, Frequency C4-G4

Figure 8 - Marimba Staccato, Frequency C4-G4
Gas pedal dampening is a new concept that will aid in helping students and professionals develop a lasting, functional approach to vibraphone dampening. In addition, it is imperative that performers continue to develop advanced mallet dampening techniques. Mastery of vibraphone dampening is crucial to achieving clarity and articulation on the instrument. Vibraphonists must continue to redefine the limits of dampening techniques through continued practice and effective incorporation in music.
CHAPTER 3
ORCHESTRAL VIBRAPHONE EXCERPTS

City Noir

*City Noir* is a symphonic work that evokes the sounds and images of the classic 1950s Film noir period. The music of Film noir was a mix of symphonic and jazz music. *City Noir* was composed by John Adams in 2009 and premiered by the Los Angeles Philharmonic. Adams uses the sound of the vibraphone in *City Noir* to establish a picturesque jazz scene and create running counter-harmonic lines. In the words of the composer:

The music of *City Noir* is in the form of a thirty-minute symphony. The formal and expressive weight of its three movements is distributed in pockets of high energy that are nested among areas of a more leisurely— one could even say “cinematic”— lyricism...Those images and their surrounding aura whetted my appetite for an orchestral work that, while not necessarily referring to the soundtracks of those films, might nevertheless evoke a similar mood and feeling tone of the era. I was also stimulated by the notion that there indeed exists a bona fide genre of jazz-inflected symphonic music, a fundamentally American orchestral style and tradition that goes as back as far as the early 1920’s.\[^{14}\]

For most of the three movements, the vibraphone plays a supportive and textural role. The movements are titled, “The City and its Double, The Song is for You, and Boulevard Night. The third movement, “Boulevard Night”, features the vibraphone soli with the alto saxophone in a flurry of rapid bebop lines.

The swing feel in jazz is often described as a triplet-based rhythm. Eighth notes in swing music are written the same as regular straight eighth notes for slow and medium tempi, except the performer sounds the first and third notes of a triplet to create a relaxed, swinging feel. However, in a bebop style (fast) swing, the swing feel is derived by sounding straight eighth notes rather than swing eighth notes because of the brisk tempos and phrasing. Swing 16th notes

\[^{14}\] (Adams 2009)
are approached the same way as swing eighth notes - the faster they are, the straighter they become. Often composers will notate swing as dotted eighth-sixteenths or as triplet-based rhythms, instead of straight eighth notes with *swing* written above. Without a consistent notational system for swing in orchestral music, performers are required to interpret rhythms by understanding and listening to the style of music from which they were derived.

Figure 10 - Interpreting Swing Rhythm Notation (Eighth Notes)

Figure 11 - Interpreting Swing Rhythm Notation (Sixteenth Notes)
When interpreting linear phrasing, the performer should allow the shape of the musical line to dictate phrasing and use accents to create architecture and structure for the phrase (See Figure 12). Opposite of accents are ghost notes, which de-emphasize notes within a line to allow for phrase clarity. Ghost notes are often felt more than heard, as well as textural and transitory in nature. It is important to create a drastic difference between accents and ghost notes, as this is essential to forming jazz lines.

The first *City Noir* excerpt is from the first movement and is an example that will highlight gas pedaling as well as dry, articulate pedaling to emphasize the dynamic changes. The key to this excerpt is manipulating the pedal to shape the dynamics and articulation with dampening. Without utilizing an active gas pedal dampening technique, the rapidly changing harmony will lack clarity or integrity, and this is particularly apparent in measure 52-59 where every chord should be re-pedaled. In measure 61-66, the rhythmic syncopation of the sixteenth
notes requires the pedal to be used sparingly in order to create a dry, separated articulation. The eighth note rhythms in this excerpt are interpreted as straight eighth notes and sixteenth notes are interpreted straight because of the double-time fast swing feel.

Figure 13 - City Noir mvt. 1, mm. 41-66

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The second City Noir excerpt is from the third movement and requires the use of linear phrasing with accents and ghost notes, as well as dry dampening in order to highlight the rhythmic phrasing of the lines. This excerpt is a solo with the alto saxophone and is reminiscent of the 1940s bebop style jazz lines (a la Charlie Parker). Dampening in this excerpt is particularly important, because in addition to accents and ghost notes, clarity of rhythm and style is paramount. The tempo of this excerpt is approximately quarter note= 152, therefore the
sixteenth notes are to be interpreted as straight (not swung) sixteenths. This is a common performance practice among jazz musicians, since swung sixteenth notes at fast tempos lack smoothness of rhythm. A swing feel, particularly at faster tempos, is achieved by an exaggeration of accents and ghost notes rather than the actual rhythm.

The excerpt from the third movement also features hemiolas, which are a rhythmic concept heavily utilized in jazz syncopation. Hemiolas present a new, related meter.
superimposed into the existing meter. Common examples of this are 3:2 and 5:4.

Figure 15 - Examples of Hemiola 3:2 and 5:4

Figure 16 - Examples Highlighting the 3:2 and 5:4 Hemiolas

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City Noir is an excellent example of an excerpt that requires an understanding of jazz as well as dampening techniques, which makes it a logical choice for an orchestral audition list. It is also important to develop listening skills and learn to internalize jazz music, as this is the
primary tenet of jazz pedagogy. All the previous dampening, articulations, and phrasing choices were derived from an extensive amount of active listening, score study, and focused practice.

*Symphonic Dances from West Side Story*

*Symphonic Dances from West Side Story* is a medley of music from the 1957 Broadway musical *West Side Story* by Leonard Bernstein, which is set in New York City, the jazz capital of the world. It is a well-known orchestral work, and for the vibraphone, one of the most important. The “Cool” movement from *Symphonic Dances* is where the vibraphone is featured most heavily and iconically. The movement’s music and structure sounds similar to a fugue, which is a baroque musical form based on a subject (or riff) that returns throughout the composition in various voices and harmonies.\(^{15}\) In this scene of the movie, the music is mirrored by the theatrical elements in which the street gang, the Jets, are preparing for a meeting with their rival gang, the Sharks. The tension in the scene is matched by the musical layering of voices and orchestration in the music.\(^{16}\) The vibraphone plays one of the key voices throughout the entirety of the movement.

This first *Symphonic Dances* excerpt is from the “Cool” movement and is an example of interpreting swing rhythm notation. The rhythm is written as straight eighth notes but should be sounded as swing eighth notes. This is the most common example of how swing rhythms are notated in jazz, except that the word *swing* is typically notated as a style or tempo marking. Pedaling with the phrase markings is the most effective way to perform this excerpt. Bernstein indicates specific slur, staccato, and accent markings, which can all be executed on the vibraphone. All the slurred notes should be slightly pedaled while the staccato notes should be

\(^{15}\) (Walker 2001)

\(^{16}\) (Wise and Robbins 1961)
mostly dry. The duration of the articulations should be left up to the performer, preferably matching the articulation of other instruments.

The second *Symphonic Dances* excerpt is prevalent in orchestral percussion auditions because it requires the performer to understand jazz performance practice and notation. The notation is written with dotted-eighth sixteenths and straight eighth notes, however, they are to be interpreted as a relaxed swing eighth note feel (as notated in Figure 19). The grace notes in the last two measures of the excerpt should be approached with smear dampening as is common in jazz vibraphone performance practice.

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“Cool” is one of the most musically challenging vibraphone excerpts because it requires an extensive understanding of bebop jazz, and is an iconic, well-known work. Bernstein’s notation is inconsistent and requires a careful interpretation in order to give the excerpt an authentic swing feel. The instructions on dampening and articulation choices from the previous “Cool” excerpts will aid performers in achieving an accurate style.

**Catch Me If You Can: Escapades**

The music from John Williams’ *Catch Me If You Can: Escapades* is derived from the 2002 Steven Spielberg film *Catch Me If You Can*. The score for the film is a blend of classical and jazz idioms that encapsulate the jazz music of the 1960s. *Escapades* is a symphonic suite created using all the major themes from the film. The vibraphone plays a leading role in the suite and is featured soli with the alto saxophone. The jazz vibraphone elements (swing rhythm...
interpretation, accents, and dampening) in the Escapades part are comparable to the vibraphone parts of the previous two works. However, the use of the vibraphone is approached more as a vibraphone concerto or solo feature, and not as a supporting instrument as in the Adams and Bernstein excerpts. According to Williams, “The film is set in the now nostalgically tinged 1960s, and so it seemed to me that I might evoke the atmosphere of that time by writing a sort of impressionistic memoir of the progressive jazz movement that was then so popular.”

The first Escapades excerpt is from movement one and features the vibraphone in unison with the alto saxophone. There are extensive examples of smear and mallet dampening, as well as the use of accents to denote the climax of phrases. Mallet dampening is particularly effective in the chromatically descending quarter note lines, which are reminiscent of a jazz walking bass line. Without mallet dampening for clarity, the chromaticism would become dissonant and not resemble the unison articulations of the alto saxophone.

The second Escapades excerpt is from movement two and highlights Williams’ use of

17 (Bedell 2017)
pedal dampening. The pedal is meant to be depressed for the duration of the phrase and no rhythmic clarity is required for this passage. The music in this passage evokes a somber and tense mood, which the vibraphone helps to enhance by creating a washy, dissonant effect.

The third Escapades excerpt (see Appendix A) is perhaps the most challenging excerpt in the orchestral vibraphone literature. It not only incorporates all the concepts of swing rhythm interpretation, linear phrasing, and all forms of dampening, but also requires technical mastery of the instrument in order to execute at the preferred tempo of q.=140. The excerpt is in unison with the alto saxophone which further adds to the complexity of the passage. Like the third movement of City Noir, this movement features weaving bebop lines as well as heavy accents and muted ghost notes.

The previously discussed vibraphone excerpts from all three works, City Noir, Symphonic Dances from West Side Story, and Catch Me If You Can: Escapades are written explicitly in a
jazz style, and in order to execute them effectively, the performer must have a thorough understanding of jazz idioms/performance practice as well as jazz vibraphone techniques. The lectures aimed to demonstrate the potential pitfalls of jazz rhythmic interpretation errors and realize the nuanced decisions that are involved in jazz vibraphone playing, in order to further shape and develop a more cohesive approach to orchestral vibraphone excerpts.
CHAPTER 4

VIBRAPHONE TRANSCRIPTION OF J. S. BACH’S VIOLIN SONATA

J. S. Bach’s Violin Sonatas and Partitas were completed in 1720 and have since been adapted for a variety of instruments including piano, guitar, marimba, and mandolin. The first sonata (BWV 1001) is in G minor and movements from it have been rearranged and transposed for organ (C minor, 1867) and lute (E minor, 1921). Starting in the 19th century, Bach’s music experienced a revival of performances, new arrangements, and transcriptions by well-known composers such as Felix Mendelssohn, Johannes Brahms, and William Schumann. Joel Lester, violinist and Bach scholar, commented on the arrangements and transcriptions of Bach’s solo violin works: “In addition to their history in editions and recordings, Bach’s solo-violin works have led a separate life in arrangements of various sorts.”

Sonata No. 1 was originally titled “First Sonata for Violin Solo without Bass” with an emphasis on “Solo without Bass.” Most of Bach’s compositions to this point had included bass that would support the counterpoint above it, but the violin sonatas, from the first chord, were written specifically to cover all elements: bass, harmony, and counterpoint.

![Figure 22 - First chord (G minor) of the Adagio](image)

The first and last chord of the G minor sonata is a solid G minor chord voiced over two octaves, which acts as a harmonic bookend of the entire sonata. Transcribing Sonata No. 1 for vibraphone is a logical pairing- not only because of the vibraphone’s unique dampening

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18 (Lester 1999)
19 (Lester 1999)
capabilities and its frequency range, but also because it was written by a composer who was a renowned keyboardist. Joe Lester states:

The conjunction of Bach’s extraordinary skills on organ and harpsichord and his solid knowledge of violinistic possibilities inspired him to compose the solo-violin works. He may well have dreamed that solo-violinistic music could, in fact, compete with the complex types of music commonly written for the keyboard instruments.20

Adagio

The first excerpt is from the Adagio of Sonata No. 1 and will feature mallet dampening examples that achieve harmonic clarity. The Adagio is the first movement of four in Sonata No. 1 and sets the harmonic pacing for the entire suite. The tempo of the Adagio is slow and often performed rubato, which allows a vibraphonist greater opportunity for mallet dampening. In addition to the following dampening recommendations, there are other opportunities for dampening that the performer may choose to include.

There are three instances in which mallet dampening is effective in this excerpt. The first two examples are in measure 10, and they both resolve harmonic suspensions (2-3 and 4-3, respectively). In beat 1 of measure 10 the A moves to a Bb creating a stable G minor chord. The A is struck and dampened with mallet 3, while the Bb is rearticulated with mallet 2. In beat 3 of measure 10 the G resolves to F# creating a stable D major chord. The G is struck with mallet 2 and dampened with mallet 3, while the F# is struck with mallet 2. The third example is in measure 12, beat 1 and exemplifies a harmonic suspension (4-3). The Ab is struck and dampened with mallet 3, while the G is rearticulated with mallet 2 solidifying the third scale degree of the Eb chord.

20 (Lester 1999)
The second excerpt, also from the *Adagio*, features pedal and mallet dampening examples that provide harmonic and linear clarity. There are three examples of 4-3 suspensions utilizing mallet dampening: measure 17 beat 1, measure 19 beat 4, and measure 21 beat 1. There are four examples of mallet dampening for linear clarity: measure 17 beat 3, measure 18 beat 3, measure 20 beat 3&4, and measure 21 beat 3.

Measure 21 beat 4 contains a trill that can only be achieved with mallet dampening. There are three notes in that final beat, G, F# (trill), and G, and an optional D natural not originally in the score. The pedal is engaged as the first G and D are struck with mallet 1 and 3, respectively. The F# trill is initiated with the upper neighbor (G) and at the end of the trill the G is dampened with mallet 3. The final G is articulated at the same time the F# is dampened, which ultimately leads to the final G minor chord. After that chord is struck, use gentle mallet dampening to slowly taper out the sound, synonymous to a violin bow tapering off the strings.
The third excerpt from the *Fuga* (Italian for fugue) features mallet dampening in both mallets 3 and 4, which allows the D natural pedal to sustain and provide harmonic stability. The
beginning of measure 38 and 39 feature an example of dampening for harmonic and linear clarity. The first eighth note (D, F) in the measure is struck with the right hand mallets 3 and 4, and during the second eighth note this same hand also dampens the notes it previously struck while the left hand mallets 1 and 2 move up to strike the C# and E dyad. Similarly, the left-hand mallets dampen the C# and E on beat 2 while the right-hand mallets re-articulate the D and F dyad. This creates a seamless linear motion and harmonic clarity, similar to legato articulation on the violin.

In measure 41, utilizing a one-handed slide dampening technique to allow the notes of the C# diminished chord (C#, E, and G) to ring clearly is challenging yet effective. The first two eighth notes in beat 3 of measure 41 are struck. Once the eighth note on beat 4 (G, E) is struck the mallets should slide down to the previous dyad (F, D) to dampen it simultaneously.

Figure 25 - Fuga, mm. 35-41

The fourth excerpt, also from the Fuga, features pedal dampening to provide harmonic clarity. This excerpt is an example of Bach’s use of the compositional technique known as a
sequence. In this example of a sequence the harmonic motion is descending fifths from D to G to C to F to Bb to Eb to A. The pedaling should closely match the harmonic rhythm of the excerpt to provide clarity of harmonic motion. In addition, the performer should listen for harmonic clarity and utilize gas pedal dampening to clear notes as is appropriate. The notated pedaling is only a recommended guide for dampening choices, the nuance is left up to the performer.

Figure 26 - Fuga, mm. 42-51

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21 (Crocker, Caldwell and Planchart 2001)
Siciliana

The third movement of Sonata No. 1 is entitled Siciliana and features only a few examples of mallet dampening. Most of the movement requires primarily pedal dampening, so the careful use of mallet dampening creates a unique color inside of the movement. The fifth excerpt is from measure 12 beat 4 in which all six sixteenth notes are mallet dampened with the same mallet they are struck with (mallet 3, 4, 3, 4, 3, and 4).

![Figure 27 - Siciliana, mm. 12-13](image)

The sixth excerpt, also from the Siciliana, utilizes mallet dampening in two important locations in the movement: the return to tonic (Bb) and the final resolution suspension. In measure 18 beat 4 the D natural is struck and dampened with mallet 3 and the Bb is struck and dampened with mallet 2. In measure 20 the last chord contains a 4-3 and 7-8 suspension which resolves on the second eighth note. In order to create legato articulation of the resolution, the first eighth note is struck with mallets 3/4, and dampened with mallets 1/2 at the same time the second eighth note with mallets 3/4.

![Figure 28 - Siciliana, mm. 18-20](image)
The *Presto* is the final movement from *Sonata No. 1*. Because the tempo is quick (dotted quarter = 82 bpm), utilizing gas pedal dampening will be most effective in achieving harmonic clarity. In addition, applying tenuto at the beginning or end of phrase marks aids in outlining harmonic and rhythmic phrases. The seventh excerpt is an example of pedal dampening with harmony, which also aligns with phrasing on beat 1 of every measure.

![Figure 29 - Presto, mm. 1-11](image)

The eighth excerpt, also from the *Presto*, contains micro-phrasing per each measure. In measure 43-45, slight tenuto emphasis should be placed on the first and third beat of the measures, while in measure 47-50 the emphasis should be placed on all three beats.

![Figure 30 - Presto, mm. 40-54](image)
In conclusion, dampening is the quintessential component to effective vibraphone performance, as per the examples cited in this lecture. The careful manipulation of the pedal and mallets allow the performer to create, shape, and express any kind of music at will. Furthermore, gas pedal dampening gives the performer a new, effective concept and approach to creating music. Considering that the music of Bach is masterful and full of nuance and character, it would be a disservice to his music if we, as vibraphonists, fail to fully realize the capabilities of our instrument or utilize our tools and implements to their maximum potential.
APPENDIX A

ESCAPADES– VIBRAPHONE WITH RECOMMENDED STICKINGS MVT. 3, MM. 126-175

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APPENDIX C

TRANSCRIPTION OF J. S. BACH'S VIOLIN SONATA NO. 1 IN G MINOR– FUGA

Violin Sonata No. 1 in G minor
Fuga

J. S. Bach
arr. Tyler Tolles

Vibraphone
APPENDIX D

TRANSCRIPTION OF J. S. BACH’S VIOLIN SONATA NO. 1 IN G MINOR– SICILIANA

Violin Sonata No. 1 in G minor

Siciliana

J. S. Bach

arr. Tyler Tolles

Vibrphone
APPENDIX E

TRANSCRIPTION OF J. S. BACH'S VIOLIN SONATA NO. 1 IN G MINOR – PRESTO

Vibraphone

Violin Sonata No. 1 in G minor

Presto

J. S. Bach
arr. Tyler Tolles
REFERENCES


BIOGRAPHICAL SKETCH

Tyler Tolles (b.1990) is a percussionist in the United States Air Force Band of the Golden West stationed at Travis Air Force Base in California, where he tours and performs throughout all the western United States. In addition, he serves as an adjunct faculty member at the University of North Alabama where he teaches jazz vibraphone. He is currently pursuing a Doctor of Music degree in Percussion Performance at The Florida State University under the tutelage of Dr. John W. Parks IV.

Tyler is originally from Monterey, CA, where at a young age he performed with professional ensembles at the Next Generation Jazz Festival and the Monterey Jazz Festival. He was involved with Drum Corps International performing and touring with the Santa Clara Vanguard Cadets (2005, 2006, 2008) and the Santa Clara Vanguard (2010). He holds a Bachelor of Music degree in Percussion Performance from the University of North Texas (UNT) under the tutelage of Christopher Deane, Mark Ford, Robert Schietroma, and Ed Smith. While at UNT, he performed with the 2 o’clock Steel Band at the 2012 Percussive Arts Society International Convention, toured with the Percussion Ensemble to Poland and Croatia, toured with the Symphony Orchestra to the Texas Music Educators Association Convention, and won the 2013 Downbeat Magazine Student Award for Best Latin Group with the Latin Jazz Ensemble and their album Late Night Mambo.

He holds two Master of Music degrees in Percussion Performance and Jazz Studies from The Florida State University (FSU). He has performed with the FSU University Symphony Orchestra, Wind Orchestra, Jazz Ensemble I and Percussion Ensemble and performed professionally with the Tallahassee Symphony Orchestra as Section Percussionist (2014-2016) and Principal Timpanist (2016-2018).