

A CONTEXTUAL ANALYSIS AND PERFORMANCE GUIDE OF SELECTED WORKS
FOR SOLO BASS TROMBONE BY NORMAN BOLTER.

By

Copyright 2014

Eric E. Oleksiak

Submitted to the graduate degree program in Music and the Graduate Faculty of the University
of Kansas in partial fulfillment of the requirements for the degree of Doctor of Musical Arts.

Chairperson Dr. Michael Davidson

Dr. Paul Popiel

Dr. Martin Bergee

Dr. Alan Street

Professor Scott Watson

Date Defended: April 21, 2014

The Dissertation Committee for Eric E. Oleksiak
certifies that this is the approved version of the following dissertation:

A CONTEXTUAL ANALYSIS AND PERFORMANCE GUIDE OF SELECTED WORKS
FOR SOLO BASS TROMBONE BY NORMAN BOLTER.

Chairperson Dr. Michael Davidson

Date approved: April 22, 2014

Abstract

This document presents a survey of selected works for solo bass trombone by the trombonist and composer Norman Bolter (b. 1955). These works include *Sagittarius2* (2002), *Of Mountains* (2009) from *Of Mountains, Lakes and Trees* (1996-97), and *The Blue of Neptune* (2002). Since there is a lack of sufficient scholarly research on Bolter, this document is intended to enlighten other musicians about the lesser-known bass trombone compositions of Bolter. It serves as a vehicle to stimulate further research of Bolter's music. In addition, the performance guide and analysis allow future bass trombonists to gain a deeper understanding of the meanings behind the music. It begins with a biography of Bolter that focuses on his musical training and professional career. The order that the compositions will be addressed is as follows: *Sagittarius2*, *Of Mountains*, and then *The Blue of Neptune*. The commentary on *Sagittarius2* focuses on: a brief discussion of background information; a contextual analysis, including a discussion on astrology, numerology, and a biographical sketch of Steven Zellmer; a brief formal analysis; and a performance guide. With regards to *Of Mountains*, the following topics are discussed; a brief consideration of background information, a brief formal analysis, and a performance guide. *The Blue of Neptune* is approached in four ways: there is a brief explanation of the background information followed a short formal analysis and a more extended contextual analysis, including a discussion on the role of meditation, and finally a performance guide.

Table of Contents

Title Page	i
Acceptance page	ii
Abstract.....	iii
PART ONE: INTRODUCTION.....	1
PART TWO: BIOGRAPHY	3
PART THREE: <i>SAGITTARIUS2</i>	6
PART FOUR: <i>OF MOUNTAINS</i>	19
PART FIVE: THE BLUE OF NEPTUNE.....	25
REFERENCES.....	31

PART ONE: INTRODUCTION

The trombonist and composer Norman Bolter (b. 1955) composed *Sagittarius2*, *Of Mountains* from *Of Mountains, Lakes and Trees*, and *The Blue of Neptune*. These works are significant part of bass trombone repertoire and are performed by some of the top performers including: Charlie Vernon, *Sagittarius2* and *Of Mountains, Lakes and Trees*; Doug Yeo, *Of Mountains*; Scott Hartman, *Trees*.¹ *Sagittarius2* (2002) is used regularly for solo competitions and is a common choice for graduate school auditions. This popularity is due to Bolter's extensive understanding of the technical capabilities of the bass trombone. *Of Mountains, Lakes and Trees* (1996) was premiered by Charlie Vernon; this work for alto, tenor, and bass trombone is an early representation of a concerto where the performer uses all three instruments. Composers have explored this new multi-instrument grouping; most recently, Christian Lindberg composed the *Chickabone Checkout for Trombone and Orchestra* (2003–2006).² Unfortunately, in chamber music, there is a very limited amount of music with a bass trombone soloist. *The Blue of Neptune* (2002) helps to provide the bass trombone soloist more opportunities perform within the chamber music realm.

Since there is a lack of sufficient scholarly research on Bolter, this document is intended to enlighten other musicians about the lesser-known bass trombone compositions of Bolter. It serves as a vehicle to stimulate further research of Bolter's music. In addition, the performance guide and analysis allow future bass trombonists to gain a deeper understanding of the music.

¹ Norman Bolter and Carol Viera, "About Us: Norman Bolter's Biography," March 17, 2014, accessed March 17, 2014, <http://www.air-ev.com/normanbolter.cfm>.

² Christian Lindberg, "Christian Linberg: List of Works," Tarrodi: Christian Lindberg, April 19, 2014, accessed April 19, 2014, <http://www.tarrodi.se/cl/index.asp?show=41>.

The first topic that is discussed is a biography of Norman Bolter; this focuses on his musical training and professional career. The order that the compositions will be discussed is as follows: *Sagittarius2*, *Of Mountains*, and then *The Blue of Neptune*. The discussion on *Sagittarius2* focuses on: a brief discussion of background information; a contextual analysis, including a discussion on astrology, numerology, a brief biographical sketch of Steven Zellmer; a brief formal analysis; and a performance guide. While discussing *Of Mountains*, the topics of discussion are: a brief discussion of background information, a brief formal analysis, and a performance guide. *The Blue of Neptune* is discussed four ways: a brief discussion of background information; a brief formal analysis; a contextual analysis, including discussion on meditation; and a performance guide.

PART TWO: BIOGRAPHY

Norman Bolter was born in Minneapolis, Minnesota on January 17, 1955.³ He became interested in playing trombone at a young age after watching an episode of the *Captain Kangaroo* show that included Mr. Greenjeans playing trombone.⁴ Bolter explains that his first four teachers were not all trained musicians, but were nonetheless instrumental in his formative music education. These people included: Lena Neren, his grandmother; Herman Neren, his grandfather and a self taught violinist; Shirley Baker, his mother; and Charles Bolter, his father who first taught Bolter the concept of multiphonics by imitating the sound of a spaceship by whistling and singing at the same time. He considers these teachers to be very inspirational:⁵

These people showed me that music could heal, change your state of mind, transport you in time, and inspire your imagination with magical sound; . . . Music just flowed in and out of them whether it was happy times, sad times, religious ceremonies, or just to have fun. It was a natural expression; . . . They gave me the inspiration to first see music as a living thing.⁶

His formal music training started at age nine when he began taking lessons from the music store from which he rented his first instrument; the store, called Schimdt Music, offered six free lessons with the rental of the trombone.⁷ For two years after these first lessons, he

³ Norman Bolter and Carol Viera, "About Us: Norman Bolter's Biography," March 17, 2014, accessed March 17, 2014, <http://www.air-ev.com/normanbolter.cfm>.

⁴ Norman Bolter, *The Blue of Neptune: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002), 1.

⁵ Norman Bolter, "Tribute to My Teachers: The First Four," *Frequency Bone* (blog), August 30, 2007, accessed March 23, 2014, <http://www.frequencybone.blogspot.com/2007/08/tribute-to-my-teachers-first-four.html>.

⁶ Ibid

⁷ Norman Bolter, "Tribute to My Teachers: Ronald Ricketts," *Frequency Bone* (blog), September 03, 2007, accessed March 17, 2014, <http://frequencybone.blogspot.com/2007/09/tribute-to-my-teachers-ronald-ricketts.html>.

studied with Edward “Ed” Von Hoff, a trumpet player, who was an old friend of Bolter’s mother and a teacher in the St. Paul public school system.⁸ At the age of eleven he began to study with Ronald Ricketts, the second trombonist (retired) of the Minnesota Orchestra.⁹ In 1969, his studies continued with Steven Zellmer; he was the principal trombonist of the Minnesota Orchestra from 1954–95 and the trombone teacher at the University of Minnesota. Bolter composed two works that are dedicated to Zellmer: *Sagittarius2* (2002) and *Morning Walk* (2002). Bolter was first introduced to trombonist John Swallow when he was twelve years old; his mother purchased a record of Swallow performing. It wasn’t until Bolter was seventeen years old in October of 1973 when he took his first lesson with Swallow at the New England Conservatory.¹⁰ Bolter subsequently composed a two-part work in honor of Swallow, called *Swallows* (1998–99); the titles of each part are called *Happy 75th*, *John* and *After a Call*.¹¹

He completed his undergraduate work at the NEC and became the second trombonist of the Boston Symphony Orchestra in 1975, a position that he held for thirty-two years. At the time, this was quite an achievement for Bolter; not only did he win the job at the age of twenty, he also became the youngest member of the BSO. He was a founding member of the Empire Brass Quintet and has served as the principal trombonist of the Boston Pops Orchestra. He retired from the Boston Symphony Orchestra in 2007 and is currently teaching at the Boston

⁸ Norman Bolter, “Tribute to My Teachers: Edward von Hoff,” *Frequency Bone* (blog), September 06, 2007, accessed March 23, 2014, <http://frequencybone.blogspot.com/2007/09/tribute-to-my-teachers-edward-von-hoff.html>.

⁹ Norman Bolter, “Tribute to My Teachers: Ronald Ricketts,” *Frequency Bone* (blog), September 03, 2007, accessed March 17, 2014, <http://frequencybone.blogspot.com/2007/09/tribute-to-my-teachers-ronald-ricketts.html>.

¹⁰ Norman Bolter, “Tribute to My Teachers: John Swallow,” *Frequency Bone* (blog), January 9, 2008, accessed March 17, 2014, <http://frequencybone.blogspot.com/2008/01/tributue-to-my-teachers-john-swallow.html>.

¹¹ *Ibid.*

Conservatory, the New England Conservatory, University of Massachusetts – Amherst, and the Longy School of Music.¹² In addition, Bolter co-founded the Frequency Band with Carol Viera.

Bolter has been composing since a young age, but over the last twenty years he has produced a plethora of new works. He currently has several hundred compositions for a broad range of instrumentations; including trombone, trumpet, horn, tuba, didgeridoo, flute, serpent and ram's horn. He has several recordings commercially available, including: *Anew at Home* (1998), *Experiments in Music* (1997–98), *Occurrences* (2002), *Phoenix* (2009), and *In Living Continuance* (1998). In addition to his solo literature, he has written several papers, booklets, and trombone methods, which include: *Methods of Effective Practice*, *High Range Exercises*, *It's Not All in the Air*, *The Metronome Meditation*, and *Reading at the Speed of Sight*.¹³

In addition to his these many contributions to the musical world, Bolter has a website called the *Frequency Bone* that he started in 2007. On his website he provides a great detail of information into his musical life and influences. Over the past four years he has supplemented his website with video entries; these videos include pedagogical teaching, historical recollections, and other music related topics.

¹² Norman Bolter, "Norman Bolter," March 17, 2014, accessed March 17, 2014, <http://www.bostonconservatory.edu/bio/norman-bolter>.

¹³ Norman Bolter and Carol Viera, "About Us: Norman Bolter's Biography," March 17, 2014, accessed March 17, 2014, <http://www.air-ev.com/normanbolter.cfm>.

PART THREE: *SAGITTARIUS2*

Bolter was commissioned to write two pieces for the final round of the 2002 Zellmer-Minnesota Orchestra Trombone Competition by Douglas Wright, principal trombonist of the Minnesota Symphony. He composed *Morning Walk* for solo tenor trombone and piano and *Sagittarius2* for solo bass trombone and piano. Bolter donated these two works in honor of Steven Zellmer, his former teacher from 1969–73.

He based the contextual concepts of both of these compositions on the life of Steven Zellmer. *Morning Walk* became a musical portrait of Zellmer;¹⁴ Bolter paints a musical picture of Zellmer walking around Cedar Lake, a lake near Minneapolis Minnesota, with his two dogs on a winter morning. He attempts to express Zellmer’s inner thoughts and a “glimpse into a complex and multifaceted life.”¹⁵ Like *Morning Walk*, *Sagittarius2* is based on the life of Zellmer, but unlike *Morning Walk*, it is not a portrait. Instead, Bolter takes two aspects of Zellmer’s life, his astrological sign and his root number¹⁶, and musically portrays the internal struggle between them.

Bolter explains that his reasoning for using these two facets of Zellmer’s life was because Zellmer was extremely interested in astrology, so much so that he always would ask his students when their birthdates were.¹⁷ Bolter recalls, “In fact, after I played for him at my first lesson, he asked me, ‘When is your birthday?’ I told him it was January 17th and he said, ‘You’re a Capricorn! Many great trombonists are Capricorns.’”¹⁸ Zellmer was not only interested in

¹⁴ Norman Bolter, *Sagittarius2: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002), 1.

¹⁵ Norman Bolter, “Morning Walk,” accessed, <http://www.air-ev.com/catalogue.cfm?productid=17>.

¹⁶ The life path number, or root number, is determined by the by the birthdate of a given person; it can be 1 – 9, 11, 22, or 33. This number explains the correct path required to fulfill one’s destiny or full potential.

¹⁷ Norman Bolter, *Sagittarius2: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002), 1.

¹⁸ Norman Bolter, “Tribute to My Teachers: Steven Zellmer,” *Frequency Bone* (blog), October 20, 2007, accessed March 23, 2014, <http://frequencybone.blogspot.com/2007/10/tributue-to-my-teachers-steven-zellmer.html>.

astrology but he was also a great teacher, performer, stamp collector, gardener, investor, and wine collector.¹⁹ In an article that he wrote for the *International Trombone Association Journal*, Douglas Wright tells of his experience after being awarded the principal trombone chair in the Minnesota Symphony, following Zellmer's retirement. Wright explains that he would constantly hear stories about his predecessor from other musicians in the orchestra. Some of these stories were serious accounts of Zellmer, both about how much he loved playing trombone and how dedicated he was to the orchestra. The bulk of the stories that were told were of a man that could be both serious and playful at the same time. He would tell great jokes and would continually pull pranks on the orchestra's tours.²⁰ These stories show that there were always two sides to Zellmer: one that is serious, and the other is more relaxed and playful.

The first side of Zellmer that is found within the music of *Sagittarius 2* is the astrological sign of Sagittarius. Astrology, according to *Encyclopædia Britannica Online*, is a practice "that involves the forecasting of earthly and human events through the observation and interpretation of the fixed stars, the sun, the moon, and the planets."²¹ Modern astrology uses both the positioning of the planets and the twelve astrological constellations, or Zodiacal signs, relative to one's birthdate. The Zodiacal signs are further defined by: sex – masculine or feminine; nature – moving, fixed, or common; classical elements – fire, earth, water, or air; and house – Venus, Mars, Mercury, moon, sun, Jupiter, or Saturn.²²

Astrology is not a new concept for inspiration for composers; both Gustav Holst (1874–1934) and George Crumb (b. 1929) were musical influenced by astrology. Holst used astrology to compose the seven movement orchestral suite, *The Planets* (1914–16); each movement is

¹⁹ Norman Bolter, "Tribute to My Teachers: Steven Zellmer," *Frequency Bone* (blog), October 20, 2007, accessed March 23, 2014, <http://frequencybone.blogspot.com/2007/10/tributue-to-my-teachers-steven-zellmer.html>.

²⁰ Douglas Write, "Steven Zellmer: The Man Behind the Competition," 2008, accessed March 17, 2014, <http://www.zellmer-competition.com/Steven>.

²¹ *Encyclopædia Britannica Online*, s. v. "astrology," accessed March 20, 2014, <http://www.britannica.com.www2.lib.ku.edu:2048/EBchecked/topic/39971/astrology>.

²² Ibid.

based on the astrological origins behind each planet.²³ George Crumb's *Makrokosmos* (1972) for amplified piano contains twelve pieces, one for each of the Zodiacs; he includes a friend's name that has each sign.²⁴ Unlike Holst and Crumb, who focused on the multiple facets of astrology, Bolter focused on one: Sagittarius.

Fig. 1. The Archer Centaur²⁵



Astrologists believe that Sagittarians (11/22–12/21) are governed by the house of the planet Jupiter and symbolized by the archer centaur, (Fig. 1). The elemental sign behind Sagittarius is fire; they are usually confident people and make great leaders. Sagittarians do their jobs with so much enthusiasm that it inspires other people to do the same.²⁶ Some key personality attributes of a person with a fire sign are: energy, aggressiveness, originality, and

²³ "The Planets," *The Oxford Dictionary of Music*, 2nd ed. rev., *Oxford Music Online*, Oxford University Press, accessed April 3, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e7980>.

²⁴ "Makrokosmos," *The Oxford Dictionary of Music*, 2nd ed. rev., *Oxford Music Online*, Oxford University Press, accessed April 3, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e6439>.

²⁵ *book of hours: Sagittarius*, Photograph, from *Encyclopædia Britannica Online*, accessed March 20, 2014, <http://www.britannica.com/EBchecked/media/7201/Sagittarius-illumination-from-a-Book-of-Hours-Italian-1475-in>

²⁶ Hanne Kline, *Astrology Made Simple and Easy to Understand* (n.p.: Hanne Klein, 2013), under "The Elements," Amazon Kindle edition.

warmth.²⁷ In addition, Sagittarians are believed to be cheerful, good - natured and optimistic. Often, they make great teachers; their pedagogical techniques are mostly based on imagery and entertainment. They can also easily inspire people with ease to create a higher level of awareness.²⁸

The second side of Zellmer that is found within the music of *Sagittarius2* is his root number of two; this is the concept of numerology. According to *Encyclopædia Britannica Online*, numerology is a way to use numbers to interpret a person's character or future.²⁹ The concept of numerology has been used throughout society for more than a thousand years.³⁰ Numerologists believe that the life path number, or root number, is determined by the birthdate of a given person; it can range from 1–9, 11, 22, or 33. This number explains the correct path required to fulfill one's destiny or full potential.³¹ Bolter uses the symbolic meaning behind Zellmer's root number and explains how this is traditionally calculated: "In Mr. Zellmer's case, his birthday was 11/28/1925, and when added together (canceling out any 9) the resulting root number is two, (1+1+2+8+1+1=13, which breaks down to 1+3=4; cancel the 9; add the remaining 2+5 to the 4=11, which breaks down to 1+1 = 2)."³² The most important concept to take away from that equation is the root number of two; the process to achieve this number is not as important as the result. Traditionally, numerologists believe that the root number of two is typically representative of the Yin, which is considered a symbol of femininity, passivity, and

²⁷ Ibid. "The House of the Fire signs"

²⁸ Ibid. "Sagittarius"

²⁹ *Encyclopædia Britannica Online*, s. v. "numerology," accessed March 20, 2014, <http://www.britannica.com/EBchecked/topic/422413/numerology>.

³⁰ AJ Redding, *Numerology: An Introduction to Numerology and How It Works* (n.p.: Amazon Digital Services, 2014), 1, Amazon Kindle edition.

³¹ "Seven Reflections," April 19, 2014, accessed April 19, 2014, <http://www.sevenreflections.com/numerologycalculator/>.

³² Norman Bolter, *Sagittarius2: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002), 1.

darkness.³³ People with the root number of two seek to help others in order to bring balance to their surroundings. Numerology is not a new concept of inspiration for composers; Japanese composer Tōro Takemitsu (1930 – 96) in *Quatrain* (1975) for violin, cello, clarinet, piano and orchestra, uses the number four in many aspects of the work: four soloists, four movements, four-bar phrases, and the extensive use of the interval of the fourth.³⁴

When looking at this work in a formal context, this composition is in a four-part form with an introduction, (Fig. 2).

Fig. 2: Form Chart of *Sagittarus2*

Section	Measures	Tonal Centers	Prevailing contextual element
Introduction	mm. 1–5	A \flat pedal point that shifts to G in m. 4	
A	mm. 6–47	Constantly shifting: starts with focus on G then continuously changes until it returns to G in m. 46	Sagittarius and Jupiter: full and confident with a hint of warmth
B	mm. 49–94	Starts on D, shifts through several key centers before arriving on B \flat in m. 91	The number two: hidden, warm and reflective
C	mm. 95–199	Strong emphasis on G and C	Sagittarius and the Archer Centaur: fire, aggression and drive
D	mm. 200–243	Constantly shifting: starts with focus on C# then continuously changes until it arrives on B in m. 235	Blended balance between Sagittarius and the root number two

³³*Encyclopædia Britannica Online*, s. v. “yinyang,” accessed March 20, 2014, <http://www.britannica.com/EBchecked/topic/653297/yinyang>.

³⁴Yoko Narazaki and Masakata Kanazawa. "Takemitsu, Tōru." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed April 3, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/grove/music/27403>.

After a brief introduction, section A starts in m. 6 and culminates in m. 46; there is a short two-measure transition followed by the entrance of B in m. 48. Section C starts abruptly in m. 95 and continues until the final section in m. 200. When looking at the overall length of each formal section, it would seem on paper that C is considerably longer than the other formal sections. In terms of the actual measure count this would be correct; but upon closer inspection, the real measures are actually two notated measures; by using the formula of $r = 2n$, whereas r is the real measure and n is the notated measure, the real measure count would be 52.5 measures.

The main theme that is used is the “Jupiterian Announcement,” (Ex. 1). It is used a total of five times throughout *Sagittarius2*. The first time this theme occurs is in m. 6. Each time it enters, it is changed depending on which contextual element, astrological or numerological sign, is the most dominant. The occurrences of the “Jupiterian Announcements” that are found in A (Ex. 1) and D (Ex. 2) are a balanced combination of both *Sagittarius* and the number two.



Ex. 1: mm. 6–7, “Jupiterian Announcement”



Ex. 2: mm. 201–203, “Jupiterian Announcement” variation D

The statements that are found in the two inner sections, B and C, are the extremes of both concepts. The statement that is found in B is referencing the qualities of the numeral two; warmth, reflectiveness, and passivity. This can be seen by the metric shift from a duple feel to a triple feel; he also uses a passive approach to the placement of the theme, (Ex. 3).



Ex. 3: mm. 67–75, “Jupiterian Announcement” variation B

Instead of placing it at the beginning of the section, Bolter places the theme in the middle of this passage. The statement of the theme found in C is the epitome of Sagittarius and the Archer Centaur. This statement is aggressive, loud, and extremely energetic.

The statements of the “Jupiterian Announcement” that are found in the final formal section D are different than all of the previous statements of the theme, (Ex. 4 and Ex. 5).



Ex. 4: mm. 201–203, The “Jupiterian Announcement,” variation D



Ex. 5: mm. 231–233, The “Jupiterian Announcement,” variation E

After being transformed and influenced by both the B and C Styles, these last two statements synthesize the two concepts. They now include triplet figures in the middle of the statement that are both reminiscent of the triple feel that is found in the B statement and the triplet feel that is found in the C statement.

When preparing to perform *Sagittarius2* the performer needs to consider many different musical choices before the actual performance of this work. The purpose of the following section is to help aid in this decision-making process. The topics that will be discussed will include tempo choices, stylistic recommendations, and alternate position recommendations. It is

important to take the information that is presented here and weigh the options, because what works for the author may or may not work for another performer.

There are several styles present throughout the work, and occasionally there is a rapid shift between them; each stylistic section corresponds with the four major formal sections. Section A starts at the beginning and continues until m. 48; it starts with the initial style marking of “direct and generous.” This means that the performer should use a solid and clean attack on each note, but the articulation should never feel heavy or weighted down. Nothing in this section should be at the extremes of dynamics or articulation; instead it should be controlled and restrained. This is especially true with any of the thirty-second notes or any heavily rhythmic passages like mm. 11–17.

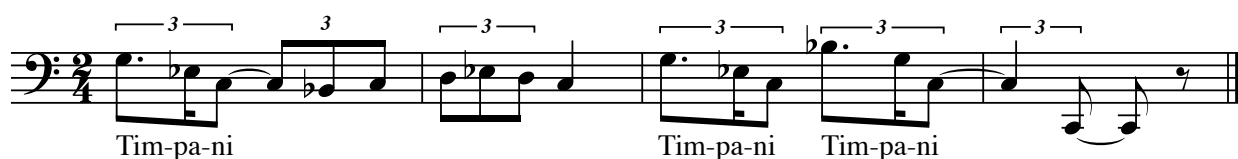
The B formal section starts in m. 49 and is quite different stylistically from what is found in the surrounding sections. Bolter explains this section in this way: “This warmer, more intimate side of *Sagittarius* is itself in sympathy with the number 2.”³⁵ Consider this section as an operatic monologue where the performer is looking inwards and weighing the options of a tough decision. This should be the most lyrical and emotionally weighted section of the piece.

The C formal section begins in m. 95 with a stylistic description of “Fire as positive” and is followed by a section titled “the Archer Centaur;” both are suggestive of a Sagittarian. The pianist and trombonist should interpret these markings by performing with great intensity and forward motion. Bolter explains that the piano part starting at rehearsal F is symbolic of the fire element.³⁶ The bass trombonist needs to make sure that the stylistic shift from duple to triple starting in m. 102 is rhythmically accurate and does not slow down. These triplets should always have the correct emphasis; more weight is needed on the first note of every three and even more weight on every downbeat. The piano part assists with this shift by only having eighth notes on beats one and two; this needs to be exaggerated starting in m. 108. In m. 108, there is a tempo

³⁵ Norman Bolter, *Sagittarius2: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002), 1.

³⁶ *Ibid.*

shift and a new sub section called “the Archer Centaur.” The key to the style of this section is to not play it too quickly; a good tempo for this section is from ♩ = 92–100. Stylistically, a good way to look at this section is in a similar manner to Wagner’s “Die Walkure.” It is a similar concept between the archer centaur (a half man, half horse warrior) and a Valkyrie (a female warrior that rides a flying horse.) When working up the “ride” excerpt, it is important to work on the correct syllabic emphasis; use phonetics to achieve the style that is preferred. In triple feel the dotted eighth–sixteenth–eighth rhythm use the word timpani or **Tim**-pa-ni with more stress on the first note and less following notes, (Ex. 6).



Ex. 6: mm. 110–113 with the phonetic stress of timpani

This should be applied anytime this rhythm occurs in this work. This articulation can be lost if this section is taken too fast.

In m. 134, the feel shifts immediately from a triple to a duple. The pianist does not prepare this shift; rather, they have the first downbeat, so the performer can easily adjust the tempo. This section should sound easy; it should never sound harsh or be played with too hard of an articulation. A possible practice aid for this section is use flutter tonging with all of the sixteenth note runs. Flutter tonging will force the performer to use their air, instead of articulation in order to make connections between notes. Bolter does not give any indication of dynamics so the performer needs to make some musical choices. It is suggested that the performer should not to play above or below a comfortable dynamic; there always should be clarity in the sixteenth notes. Occasionally this section will quickly shift from the duple feel to triple feel. During these shifts, it is easy to forget to use the correct emphasis on the dotted eighth notes.

The final part of C starts in m. 176, where it is marked “Authoritative.” This section has one main performance problem; the tendency is to fall behind because the music is much simpler

than what preceded it and the performer's concentration may lapse. To help counter this mental lapse, the performer needs to apply linear direction on the quarter notes that are in ascending or descending lines. These should always lead towards the dotted half-note C or the whole-note G. This will help not only to keep the music moving forward but keep the tempo moving as well.

The final formal section D is very similar to the opening music. It should use a direct and generous style; only this time it should be more inward looking. The way to achieve this combined style is to use very light but clear articulation with a warm tone. The musical momentum has a tendency to fade away by the end of the piece; to prevent this, add some dynamic contrast and some ebb and flow within the musical line. A good place to add some extra emphasis is on the single sixteenth notes found in m. 234 and 236. As for the dynamic contrast, just follow the standard rules; always be heading to or from a goal.

E In one ♩. = 56ish

warm, not too soft

mf (*dim.*) *mf* (*dim.*) *mf* (*dim.*) *mf* (*dim.*) *mf* (*dim.*)

pp *pp* *pp* *pp* *pp*

Ex. 7: mm. 49–53 with the author's dynamic suggestions noted in parentheses

Before rehearsing with the pianist, it is important to listen to the work with the piano score. *Sagittarius* is recorded on the CD *Occurrences*; Mark Cantrell performs this on bass trombone with John Ferguson on piano.³⁷ There are several spots the performer will benefit from listening to the recording and studying the piano score. The first passage where this will be helpful is mm. 49–64. As an ensemble this can be difficult; Bolter obscures the downbeat with

³⁷ Norman Bolter, *Occurrences*, Performed by Norman Bolter and others, AIR-EV 72890, CD, 2002.

the left hand of the piano only playing on beat three and superimposes a duple feel over the triple feel in the piano, (Ex. 7). To alleviate this, the pianist needs to reduce the emphasis on beat three; this can be achieved by de-emphasizing the left hand and adding additional stress on the downbeat. The next passage is from mm. 134–170; this section contains multiple levels of rhythmic subdivision. There are times when the soloist is performing sixteenth notes against the pianist's sixteenth note triplets and eighth notes. Studying the score will inform the performer to keep the music rhythmically accurate. In this section, there are several passages of sixteenth notes where the soloist is in octaves with the pianist; it is important that both the soloist and pianist match length and articulation.

The final topic that should be discussed is authors slide position recommendations. For this section, only the standard tuning bass trombone with B \flat –F–G \flat –D independent tuning will be discussed. There are several obvious places where alternate positions should be used, such as passages with adjacent half-steps or passages where slide positions are the same for more than one note; however, this section will only discuss the less obvious passages. This piece lends itself towards the use of alternate positions throughout the range of the instrument. To make the explanations easier, the following abbreviations for valves will be used; V for the F attachment, S for the G \flat valve, and T for both valves. Much of this work, for the instances where the valve is required, the G \flat valve is the more practical choice.

The first place where valve combinations should be discussed is in the “Jupiterian Announcement” starting in m. 6, (Ex. 1). This author suggests that the performer should perform this entire passage by only using the G \flat valve instead of the F valve; this is for both the slurred thirty-second note passage in m. 6 and the double thirty-second note passages that occur in the measures that follow, (Ex.8).



Ex. 8: mm. 6–7, “Jupiterian Announcement”

This passage can be executed several different ways; a. V7 7 5 2 V1(S2), b. T4 V2 5, 2, V1(S2), c. T4 7 5 2 V1(S2), d. T4 S3 S1 2 S2, (Ex. 9).

A		B		C		D
V		T	V	T		T
7 7 5 2	V(S) 1(2)	4	2 5	4 7 5 2	V(S) 1(2)	4 3 1 2 2

Ex. 9: m. 6 thirty-second notes

Each of these valve combinations has advantages and disadvantages. In the author’s opinion the most in tune combination and technically viable option is d; starting with both valves to play the C gives a good foundation, and then there is very little actual movement between each note. This helps with clarity and tuning accuracy. With this option, this passage requires only two light articulations, one to start the C and one to articulate the F#. The rest of the notes in the passage are just simple valve slurs, which, with good valve care and maintenance, should easily sound smooth.

Another place in *Sagittarius2* where there may be a need to use an alternate position is on the thirty-second notes of m. 21 and 22. There are several options for his this repeated D–A–C# passage; a. T1 2 5(S1), b. V5 2 S1(5), c. V5 V5 5. Option c may be the best choice because it is a slurred passage and only contains natural and valve slurs, (Ex. 10).

Ex. 10: m. 21, thirty-second notes

Another passage where alternate positions might be overlooked is in m. 70 with the ascending dotted sixteenth notes. This passage can be achieved by using all across-the-grain (harmonic glissandi) and natural slurs. The positions that should be used are V1(c) 2(e) 5(f#) 6(a) \flat 6(c). This will create a good visual effect and smooth out the melodic line, (Ex. 11).

$\text{♩} = 56\text{ish}$

Ex. 11. mm. 67-75

PART FOUR: *OF MOUNTAINS*

Composition of *Of Mountains, Lakes and Trees* was started in the spring of 1996 and finished the following year. This large work was originally written for solo alto, tenor, and bass trombone and orchestra. Charlie Vernon premiered this work in 1998 with the Brevard Music Festival Orchestra. *Of Mountains, Lakes and Trees* is written in three movements and an epilogue. The first and last movements, *Of Mountains* and epilogue, were written for solo bass trombone; *Lakes* is written for solo tenor trombone; *Trees* is written for solo alto trombone. A conversation between Charlie Vernon, bass trombonist of the Chicago Symphony Orchestra, and Bolter inspired *Of Mountains, Lakes and Trees*. In this particular conversation, Bolter and Vernon were discussing what inspires Vernon.³⁸ He responded, “Mountains, lakes and trees.”³⁹ Thus this work was born. Bolter expanded on these concepts and inserted his own experiences with the natural occurrences of these phenomena.

When he was doing his research into mountains, he used inspiration from recorded experiences of cultures and religions that reside or find significance with mountains. With *Of Mountains* Bolter successfully attempts to musically represent the majesty, beauty, haunting qualities, and enormous proportions of a mountain. Bolter believes that the bass trombone can show these qualities extremely well, due to the expansive low register and deep rich sound. The bass trombone can at the same time provide the required authoritative style, which mountains portray; they never falter and are always standing strong.

³⁸ Norman Bolter, *Of Mountains from Of Mountains, Lakes and Trees: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2009), 1.

³⁹ Ibid.

Fig. 1: *Of Mountains* form chart

Section	Measures	Tonal Centers
Intro	mm. 1–10	F minor
A	mm. 11–29	E minor that shifts to B minor
B	mm. 30–56	F Minor that shifts to the tonal center of C
C	mm. 57–82	Starts and ends on the tonal center of G
D	mm. 82–102	Starts and ends on the tonal center of G

Bolter reduced *Of Mountains* from the full orchestral score to piano accompaniment in July of 2009; the analysis and performance guide will focus on the reduction. *Of Mountains* is in a five-part form, (Fig. 1). The intro occurs from the beginning to m. 10; this introduction is heavily based in F minor and introduces several of the motives that occur throughout *Of Mountains*.



Ex. 1: m. 11–12, main theme

Section A begins in m. 11 with the main theme, (Ex. 1). This section centers on E minor, but shifts toward a minor key center of B in m. 21; this is prefaced by the B pedal point in the accompaniment starting in m. 19. In m. 21, the main theme is partially augmented; the first two measures of the main theme are augmented so that the main theme is now twice as long, (Ex. 2).



Ex. 2: mm. 21–25, augmented main theme

Section B starts in m. 30, with some new material in the bass trombone and the brief shift to a key center of F minor. This key center does not last long and quickly shifts to a tonal center of C. At the same time, the bass trombone enters with a new motive that is much different from the main theme. This new four-note motive is direct and articulated; this is due to the double dotted rhythm that is used throughout this section. (Ex. 3)



Ex. 3: mm. 36–37, four note motive

Section C starts in m. 57 with sweeping harp-like passages in the accompaniment. These sweeping passages are modally centered on G, shifting between Locrian and Mixolydian modes. This section climaxes in m. 65 in the cadenza. After the cadenza is finished, the accompaniment transitions into an inward looking section. This section provides the bass trombonist with a new melodic statement that is intertwined with some passages that were previously stated. This section shifts harmonically several times before arriving to key center of G.

Section D enters in m. 83, with the new rhythmic drive in the accompaniment. This section combines all of the previous styles and motives. This is harmonically centered on G; it shifts modally and to other related keys but it starts and ends centered on G. The last statement of the main theme occurs in m. 95. Just like the second statement that is found in m. 21, this statement is also an augmented version of the original main theme.

The performer's first step when learning this work might be to find a recording of the original orchestral version of *Of Mountains*. Currently there are two recordings with Doug Yeo

as soloist, *Experiments in Music* (1998)⁴⁰ and *Take I* (1998).⁴¹ When listening to this work, it is important to take notes on which instrument of the orchestra that the pianist is attempting to emulate at various points throughout the piece. It is strongly recommended that both performers listen to the orchestral version of this work.

When it was composed, *Of Mountains, Lakes and Trees* was never intended to be a composition that shows the performer's technical ability levels. Rather, Bolter composed all three movements to provide the "essence opportunity" behind the lives of mountains, lakes, and trees.⁴² This shifts the focus from the technical abilities of the performer their underlying musical abilities.

The performer must decide what styles should be used in each of the formal sections. One way to help decide how to approach the performance style is by the indications that Bolter has placed in the score. In addition, the performer may associate an image of a mountain that corresponds with the music. This concept is a way to decipher your own unique style for each of the sections. For example, the first section, mm. 11–29, Bolter has marked "Haunting." A great example of an image in this style could be to view a tall, heavily wooded mountain from a good distance, just before dawn, with a full moon present. The moon illuminates the silhouette of the mountain clearly; a thick layer of fog surrounds the mountain. This image in the performer's mind may conjure the dark and enduring style that is required to perform this section. This is just one idea of what can be applied to every formal section. Performers may find that some sections will share a very similar evocative image.

There are some sections that should have a certain feel for them and this feel may adjust the image that was created for it. The first section starts in m. 30; this section should contrast the opening section by being more majestic. Bolter does not indicate a new style but the music lends

⁴⁰ Norman Bolter, *Experiments in Music*, Performed by Norman Bolter and others, AIR-EV 72724, 1997.

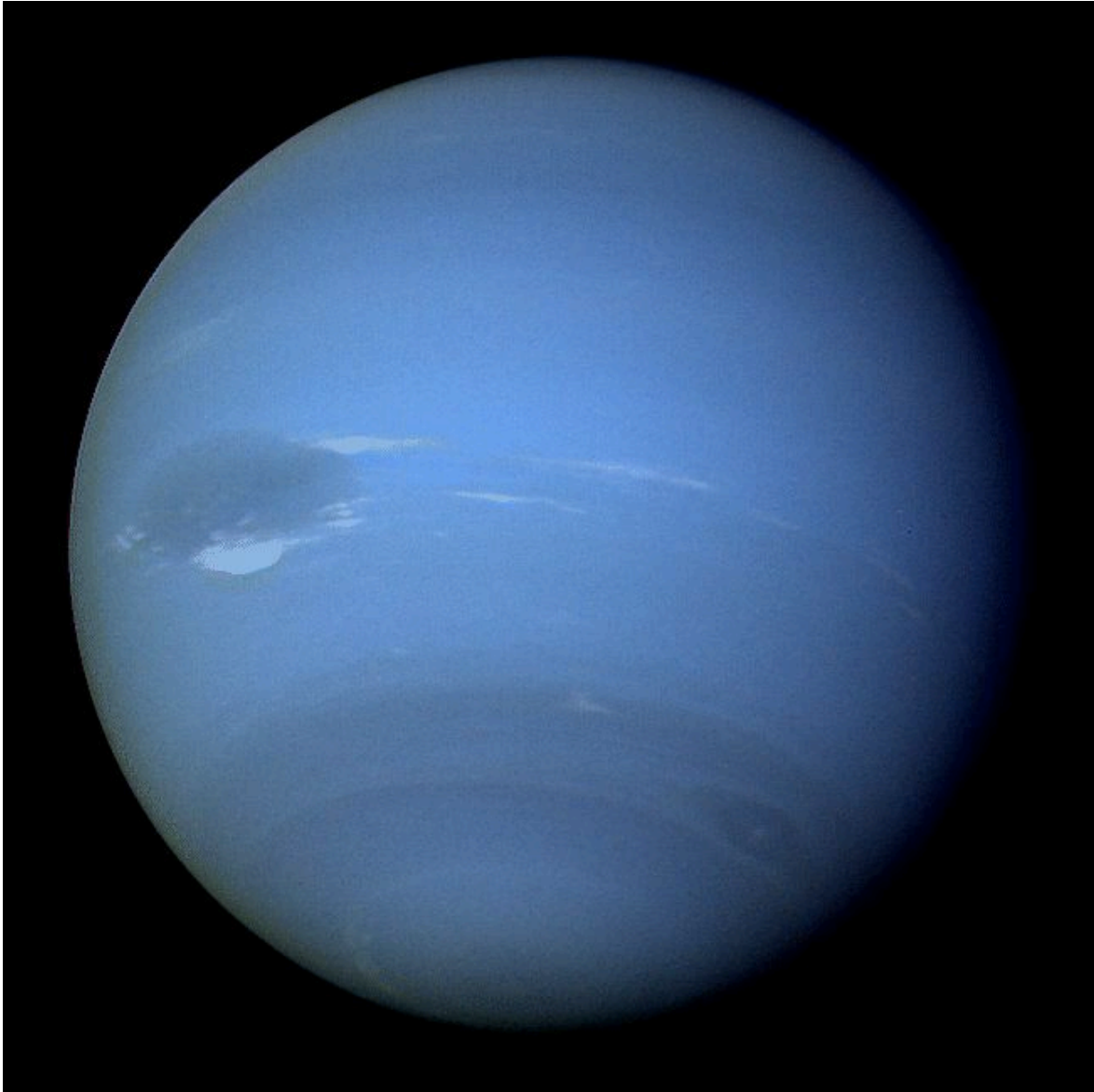
⁴¹ Doug Yeo, bass trombonist, *Take I*, Die Letzte Posaune, CD. 1998.

⁴² Ibid.

It is imperative that the performer uses all natural or valve slurs when performing these sections. There should be no glissandos in between the notes; use this logic whenever this motive is encountered in the music.

PART FIVE: *THE BLUE OF NEPTUNE*

Fig. 1: Photograph of Neptune⁴³



⁴³ N.A.S.A., *Voyager Image of Neptune*, 1989, *Voyager: The Interstellar Mission*, accessed March 22, 2014, <http://voyager.jpl.nasa.gov/gallery/images/neptune/neptunex.gif>.

The Blue of Neptune was composed in 1997, for bass trombone solo with trombone trio, after Bolter saw a satellite photograph of Neptune. This photograph, similar to the one shown on the previous page, was taken from the satellite Voyager 2, (Fig. 1). Bolter devoted a substantial amount of time with his photograph; he discovered that the heavy, relaxed, and vast nature of Neptune's blue atmosphere to be calming.⁴⁴ Using a photograph or paintings as a source for musical inspiration is not a new concept: Mussorgsky (1839–1881), in his *Pictures at an Exhibition* for solo piano, used ten different paintings by artist Victor Hartmann;⁴⁵ Claude Debussy (1862–1918), in his *L'isle joyeuse* for solo piano, created a musical representation of a painting from the collection *L'Embarquement pour Cythère* by artist Jean-Antoine Watteau.⁴⁶ *The Blue of Neptune* is recorded on the compact disc *Occurrences*; Mark Cantrell performs this on bass trombone with Norman Bolter, Darren J. Acosta and James Nova on tenor trombones.⁴⁷

This work is in a seven part form (Fig. 2); sections *a* through *f* contain eleven of the twelve notes of the chromatic scale; Bolter refrains from using B \flat until *a'* in m. 12. He harmonically centers each individual section on a note from an E^{m7} chord: *a* is harmonically centered on G, section *b* starts with an emphasis on B but shifts to D, section *c* is directed towards G, section *d* focuses on B first then shifts to E, section *e* first emphasizes E then moves to B, section *f* starts with E and slides down to B, section *a'* is heavily focused on G and uses G as a pedal point in mm. 9–11 which ends the piece. He also shows this focus on E minor in the last minor third in the piece; the bass trombone is holding a G in the fermata and the first tenor

⁴⁴ Norman Bolter, *The Blue of Neptune: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002).

⁴⁵ "Pictures at an Exhibition," *The Oxford Dictionary of Music*, 2nd ed. rev., *Oxford Music Online*, Oxford University Press, accessed April 2, 2014, <http://www.oxfordmusiconline.com/subscriber/article/opr/t237/e7921>.

⁴⁶ "Isle joyeuse, L'," *The Oxford Dictionary of Music*, 2nd ed. rev., *Oxford Music Online*, Oxford University Press, accessed April 2, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e5242>.

⁴⁷ Norman Bolter, *Occurrences*, Performed by Norman Bolter and others, AIR-EV 72890, CD, 2002.

enters a beat later with the E. The original pitch class set in *a* is transformed, by way of common tone transformation, in each subsequent formal section, (Fig. 3).

Fig. 2: Form Chart of *The Blue of Neptune*

Section	Measure / Beats	Pitch Class Set
a	m. 1 (b. 1–13)	Set 6–z4 [7,8,9,11,0,1]; Centered on G
b	mm. 1(b.14–25)–2	Set 6–z44 [2,3,4,7,8,11]; Stronger emphasis on B moving to D
c	mm. 3–4	Set 7–z37 [11,0,2,3,4,6,7]; Slight emphasis on G
d	mm. 5–6	Set 7–21 [7,8,9,11,0,3,4]; Starts with emphasis on B and shifts to E
e	m. 7	Set 7–z37 [8,9,11,0,1,3,4]; Starts with emphasis on E as pedal point but ends with G.
f	m. 8	Set 7–z38 [8,9,11,0,2,3,4]; Starts with emphasis on E and shifts to B
a ¹	mm. 9–13	Chromatic with emphasis on G as pedal point

Fig. 3: Common tone transformation chart of *The Blue of Neptune*

Section	Pitch Class Set	Common Tones
a	6–z4 [7,8,9,11,0,1]	
b	6–z44 [2,3,4,7,8,11]	3 CT: 7, 8, 11
c	7–z37 [11,0,2,3,4,6,7]	5 CT: 2, 3, 4, 7, 11
d	7–21 [7,8,9,11,0,3,4]	5 CT: 0, 3, 4, 7, 11
e	7–z37 [8,9,11,0,1,3,4]	6 CT: 0, 3, 4, 8, 9, 11
f	7–z38 [8,9,11,0,2,3,4]	6 CT: 0, 3, 4, 8, 9, 11
a ¹	Chromatic	

Common tone transformation is when common tones are used as compositional device to connect multiple sections of music together. As the composition progresses, the number of common tones (CT) between each section increases: between *a–b* 3 CT, between *b–c* and *c–d* 5 CT, between *d–e* and *e–f* 6 CT. When looking at the complete work 11(b) is the only common tone that is found in all seven sections and both 3 ($e\flat$) and 4 (e) are found in all sections except for *a*.

This work can be a challenge to perform; this is due to the obscurity of the music in relationship to a photo of Neptune. To bridge the connection between a photograph and the music, Bolter explains that the performer should “ find a photograph of Neptune... and then to spend time with it, allowing oneself to sink into and connect with that magnificent rich, deep blue...”⁴⁸ This is an easy task, with modern technology it is very easy to locate a photograph; the image that was shown earlier in the document was from NASA and their Voyager Satellite website, (Fig. 1). Once a photograph is located, Bolter is recommending that the performer should meditate with it. One way to meditate with a photograph is by sitting in a relaxed position and focusing on simple breathing then, when one’s mind is settled, shift one’s attention towards the photograph.⁴⁹ Just a few times meditating with a photograph will help to influence the performance of this work.

The next challenge that this work presents is the notion of time. Bolter explains that the performer needs to release the normal notion of time or tempo and allow “...oneself to drift into the vast ocean of the blue of Neptune...”⁵⁰ So what does this mean to the performer? Bolter’s idea is that the performer needs to be patient and have a slow internal clock constantly moving throughout this work. This slow internal clock is the tempo; a good tempo recommendation is from $\text{♩} = 48\text{--}58$. With this in consideration, the tempo throughout this work should never be

⁴⁸ Norman Bolter, *The Blue of Neptune: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002).

⁴⁹ Stephan Bodian, *Meditation for Dummies, 2nd Edition W/audio Cd* (Indianapolis, IN: For Dummies, 2006), 11.

⁵⁰ Norman Bolter, *The Blue of Neptune: Program Notes* (Chestnut Hill, MA: Air-ev Productions, 2002).

static; there should always be constant motion both fast and slow. This work requires a great amount of discipline in performing the rests correctly; the amount of time that the bass trombone is silent is just as important as when it is heard. Rests should always be relative to the music that it surrounds; this can be quite an unusual sensation to have extended durations of silence occurring as part of the music. In a performance situation, the best way to ensure that there is a proper amount of silence in the rests is to assign a numerical value for each rest. This value is not required to be the actual value that is on the page; for example, in the first measure, this author assigns three counts for every quarter rest. Typically, a quarter rest would get two eighth note length beats but one may add an extra count because when in the performance situation, it is very easy to increase the tempo due to nerves. Adding the extra beats will compensate for this performance issue.

With these extremely slow tempos, it is easy to let the melodic motion fade away. There are several different ways to help keep the melodic motion moving forward. First, create goal notes for each section; for example, in the first phrase the goal note would be the low D \flat ; the music that precedes that should lead to the D \flat and the two notes that follow the D \flat should move from it. Second is the use of vibrato; by varying the speed and width of the vibrato the performer can direct the musical line and intensity. Finally, this work has moments where the soloist needs to connect notes through an entire phrase. A possible practice strategy to work on connections is by using flutter tonguing or glissandi; both techniques will help to make smooth connections between each note and will allow for continuous sound until the end of each phrase.

When preparing to rehearse with the tenor trombone trio, it is important to discuss several concepts to fully grasp the gravity of the work. The first concept is the correct performance style of the glissandos that are found in the first trombone part; Bolter explains that these glissandi are “distant shooting stars, contributing to the sense of ‘outer space,’ its expansiveness and our own feelings of being far away from home....”⁵¹ On the recording *Occurrences*, these glissandi are

⁵¹ Ibid.

not full tone and harsh; instead each glissando is performed with a thin and transparent tone with great decay.⁵² To help achieve this thinner tone, consider having the first trombonist play on a smaller bore instrument; instead of a large bore (.547 inch) use either a medium bore (.525inch) or small bore (.0508 inch or smaller). If a smaller instrument is used, the second or third trombonist can play the glissando from D–B \flat in m. 4.

The next concept to discuss is Bolter's use of the third trombone; this part has one of the most important parts in the entire work. The only note that the third trombonist has is a B \flat that occurs in m. 12; this is the point in the work where, with one measure left, all twelve notes are finally presented. As it is scored the second trombones needs a quick mute change, it might be advisable to re-orchestrate m. 12 to facilitate the mute change in the second part; the second trombonist could play the B \flat and the third trombonist could play the muted C.

The last concept to discuss is how to perform mm. 9–11; m. 9 repeats almost verbatim in m. 10 and 11. Bolter gives dynamic markings in mezzo-piano m. 10 and piano in m. 11 but not in m. 9; play m. 9 with a louder dynamic of mezzo-forte. This dynamic level should be applied to both the solo part and first part; the second part has the melodic content and should perform at a dynamic louder than indicated.

⁵² Norman Bolter, *Occurrences*, Performed by Norman Bolter and others., AIR-EV 72890, CD, 2002.

REFERENCES

Musical References

Bolter, Norman. *The Blue of Neptune*. Chestnut Hill, MA: Air-ev Productions, 2002.

----- . *Sagittarius2*. Chestnut Hill, MA: Air-ev Productions, 2002.

----- . *Of Mountains from Of Mountains, lakes and trees*. Chestnut Hill, MA: Air-ev Productions, 2009.

Websites

Bolter, Norman, and Carol Viera. "About Us: Norman Bolter's Biography." March 17, 2014. Accessed March 17, 2014. <http://www.air-ev.com/normanbolter.cfm>.

Bolter, Norman. "Norman Bolter." 2002. Accessed March 17, 2014. <http://www.bostonconservatory.edu/bio/norman-bolter>.

----- . "Tribute to My Teachers: Edward von Hoff." *Frequency Bone* (blog), September 06, 2007. Accessed March 23, 2014. <http://frequencybone.blogspot.com/2007/09/tribute-to-my-teachers-edward-von-hoff.html>.

----- . "Tribute to My Teachers: The First Four." *Frequency Bone* (blog), August 30, 2007. Accessed March 23, 2014. <http://www.frequencybone.blogspot.com/2007/08/tribute-to-my-teachers-first-four.html>.

----- . "Tribute to My Teachers: John Swallow." *Frequency Bone* (blog), January 9, 2008. Accessed March 17, 2014. <http://frequencybone.blogspot.com/2008/01/tributue-to-my-teachers-john-swallow.html>.

----- . "Morning Walk." Accessed March 22, 2014. <http://www.airev.com/catalogue.cfm?productid=17>.

----- . "Tribute to My Teachers: Steven Zellmer." *Frequency Bone* (blog), October 20, 2007. Accessed March 23, 2014. <http://frequencybone.blogspot.com/2007/10/tributue-to-my-teachers-steven-zellmer.html>.

----- . "Tribute to My Teachers: Ronald Ricketts." *Frequency Bone* (blog), September 03, 2007. Accessed March 17, 2014. <http://frequencybone.blogspot.com/2007/09/tribute-to-my-teachers-ronald-ricketts.html>.

"Isle joyeuse, L'." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed April 2, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e5242>.

Lindberg, Christian. "Christian Linberg: List of Works." Tarrodi: Christian Lindberg. April 19, 2014. Accessed April 19, 2014. <http://www.tarrodi.se/cl/index.asp?show=41>.

"Makrokosmos." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed April 3, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e6439>.

"Pictures at an Exhibition." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed April 2, 2014, <http://www.oxfordmusiconline.com/subscriber/article/opr/t237/e7921>.

"Planets, The." *The Oxford Dictionary of Music*, 2nd ed. rev.. *Oxford Music Online*. Oxford University Press, accessed April 3, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/opr/t237/e7980>.

Narazaki, Yoko and Masakata Kanazawa. "Takemitsu, Tōru." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed March 25, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/grove/music/27403>

"Seven Reflections." April 19, 2014. Accessed April 19, 2014. <http://www.sevenreflections.com/numerologycalculator/>.

Walsh, Stephen. "Stravinsky, Igor." *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed March 25, 2014, <http://www.oxfordmusiconline.com.www2.lib.ku.edu:2048/subscriber/article/grove/music/52818pg10>.

Write, Douglas. "Steven Zellmer: The Man Behind the Competition." 2008. Accessed March 17, 2014. <http://www.zellmer-competition.com/Steven>.

Yeo, Doug. "An Interview with Norman Bolter and Carol Viera." February 3, 2014. Accessed February 3, 2014. <http://www.trombone.org/articles/library/viewarticles.asp?ArtID=80>

Books and Journals

Bodian, Stephan. *Meditation for Dummies, 2nd Edition W/audio Cd*. Indianapolis, IN: For Dummies, 2006.

Head, Raymond. "Holst - Astrology and Modernism in 'the Planets'." *Tempo, New Series* 187 (Dec., 1993): 1. Accessed March 25, 2014. <http://www.jstor.org/stable/945181>.

Joyce, George P. 2012. A graduate trombone recital: Selected solo trombone works of contemporary American composers. Order No. 1508795, Indiana University of Pennsylvania. In PROQUESTMS ProQuest Dissertations & Theses Full Text, <http://search.proquest.com/docview/1011480423?accountid=14556>.

Kline, Hanne. *Astrology Made Simple and Easy to Understand*. N.p.: Hanne Klein, 2013. Amazon Kindle edition.

Redding, AJ. *Numerology: An Introduction to Numerology and How It Works*. N.p.: Amazon Digital Services, 2014. Amazon Kindle edition.

Musical Recordings

Bolter, Norman. *Anew at Home*. Performed by Norman Bolter and others. Air-Ev 12888. CD. 1998.

----- . *Experiments in Music*. Performed by Norman Bolter and others. AIR-EV 72724. 1997.

----- . *Occurrences*. Performed by Norman Bolter and others. AIR-EV 72890. CD. 2002.

Yeo, Doug, bass trombonist. *Take 1*. Die Letzte Posaune. CD. 1998.