



The Contrabass Trombone: Into the Twenty-First Century.

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The Contrabass Trombone:
Into the Twenty-First Century

by

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To my wife, Mikal, my boys, Kamryn, Kacey, Koen, and Kruze, and my parents. Your love and support during the writing of this document was my fuel and inspiration. To Phil Teele, who passed away during the completion of this document. I hope the knowledge that you shared for this document and the work you quietly did over your sixty-year career continues to inspire trombone players forever.

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PUBLIC ABSTRACT

Despite hundreds of years of existence, even until the early 2000s the contrabass trombone was not a widely known member of the trombone family. In recent years there have been many developments leading to increased usage and acceptance. This increased usage stems from the key elements of accessibility and advancement in design. The available literature about the contrabass trombone is limited. New information that has become available recently does not identify the causes for the contrabass trombone's increase in popularity.

In this thesis I document the expanded usage of contrabass trombone through interviews with thirteen professional trombonists who use contrabass trombone. This thesis also includes a review of available literature, an overview of compositions since 1800 that include contrabass trombone, and a discussion of advances in manufacturing that have revolutionized contrabass trombone performance. Specific events led to the contrabass trombone becoming more accessible to those who were interested in it. Trends in manufacturing and music production have made the contrabass trombone easier to play and use.

This project shows that over time, along with the innovations and design improvements of the entire trombone family, the contrabass trombone is being used more regularly because it has grown increasingly user-friendly and desirable in compositions where its unique timbre is warranted. This has led to the contrabass trombone gaining acceptance as a true member of the trombone family: worthy of study, application, and usage.

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CHAPTER 1

INTRODUCTION

The contrabass trombone has endured a long history of sparse and erratic use during most of its existence. In its historical form, which we will call “straight,” as in single slide and no valves, it was difficult and taxing to operate and control.¹ Utilizing both qualitative and quantitative research, this project shows that over time, along with the innovations and design improvements of the entire trombone family, the contrabass trombone is being used more regularly by musicians because it has grown increasingly user-friendly and desirable in compositions where its unique timbre is warranted. This change is especially evident in the responses from interviews that I conducted for this essay, via telephone, skype, direct message or email. Additionally, in-depth research was conducted on the history and current state of the contrabass trombone’s usage, production, sound, and mechanics.

Many factors have influenced the growth in interest in the contrabass trombone in recent years. The most prevalent of these are advancements in design by manufacturers, professional trombonists that increasingly advocate for its use, and composers’ demand for new timbral possibilities. This study views the development of the contrabass trombone from the perspective of the player by describing advancements in design that made the instrument more easily playable in the various contexts requiring its use. I will also show that those advancements, coupled with the promotion of professional players and the proliferation of information through the internet, have been the greatest contributors to the rise of the contrabass trombone. As such, this study remedies the current literature’s neglect of pivotal individuals, events, and circumstances that are largely responsible for the growth of the contrabass trombone.

¹ Anthony Baines, *Brass Instruments: Their History and Development* (Dover 1976), 118.

The Contrabass Trombone

The contrabass trombone is the lowest and largest member of the trombone family. Each member of the trombone family is traditionally named for its connection with its corresponding voice-part: soprano, alto, tenor, bass, and contrabass. Although modern innovation has allowed for crossover, soprano, tenor, and contrabass trombones were commonly found based on the B-flat harmonic series, each one octave from the next, leading to the common historical designation of the contrabass trombone as the “octave” trombone or “trombone doppio (double trombone).” In between were the alto and bass trombones, both in F or E-flat, with alto situated between soprano and tenor and bass between tenor and contrabass. Any trombone, in order to complete its chromatic range from the second partial upward, requires a slide that can add at least forty percent to the original length when extended.² The contrabass trombone in B-flat, approximately eighteen feet in length, requires a slide that can extend enough to add over seven feet of tubing to its overall length. With a standard, single-slide contrabass trombone, the player would have to extend the slide over three and one-half feet in order to complete the chromatic range. Because human arms are not long enough to extend the slide over three feet, an extension handle was used, which made the already heavy and unwieldy slide more difficult to use.³

History

According to Bruce Tracy’s 1990 dissertation, “The Contrabass Trombone: Its Development and Use,” the earliest known examples of these instruments are from the 1500s, with a mention of it in a 1540 letter from the Duke Albrecht of Prussia to a prominent instrument

² Anthony Baines, *Brass Instruments*, 115.

³ An example of an extension handle can be seen in Figure 1 on page 15.

maker. An inventory report of the royal court at Dresden in 1593 reported that an octave trombone was kept “as a rarity,” suggesting that it was likely not a new instrument at that time.⁴ Contrabass trombones, along with the contrabass flute, krumhorn, pommer and contrabassoon appeared around the same time, completing the downward extension of those instrument consorts. These contrabass instruments were used primarily to double the bass voice of compositions an octave lower. Because of the lack of agility and taxing nature of the contrabass trombone at this time, it was common for the smaller and more agile quart (F) or quint (E-flat) bass to be substituted.⁵ These instruments’ increased agility, combined with their ability to cover a similar range, instigated the design changes undergone by both the bass and contrabass trombones in the following years.

Trombone Distinctions

Recent innovations, such as the addition of valves, have skewed the nomenclature of these instruments, as they are able to retain a higher initial harmonic series and, with the use of valves in combination with the slide, are able to reach the lower range of an instrument with a lower initial harmonic series. Therefore, while an F trombone would traditionally be considered a bass trombone, its chromatic range can be covered by a B-flat trombone with added F and G-flat valves, granting it the new name of tenor-bass, commonly shortened to bass. The term tenor is used because the trombone has the same B-flat initial harmonic series as a tenor trombone, and bass denotes that it can descend chromatically through the range of an F or E-flat bass trombone. Similarly, the F bass trombone, outfitted with valves in C and D-flat or D and B-flat (among

⁴ Bruce Tracy, “The Contrabass Trombone: Its Development and Use” (DMA diss., University of Illinois, Urbana-Champaign, 1990), 13.

⁵ *Ibid.*, 21.

other popular configurations), can descend through the chromatic range of a B-flat contrabass trombone and is given the name bass-contrabass, shortened to contrabass. While the bass trombone and contrabass trombone are capable of covering much of the same range, the contrabass trombone has a darker, warmer timbre and is better suited to the lower portion of that shared range. In both cases, the higher initial harmonic series of the B-flat bass trombone and F contrabass trombone directly influence the ease of tone production and the agility of the instrument in producing more complicated patterns in music. For the purposes of this document, both the bass-contrabass trombone and the traditional contrabass trombone are considered and referred to as contrabass trombones. When “bass trombone” is mentioned, that term is referring directly to the modern bass trombone in B-flat in its most popular configuration with F and G-flat valves.

Literature Review

While there are many sources available about the historical and current uses of the trombone, most pertain to the trombone as a generalized family and are specific to the tenor trombone and less so to the bass trombone. Little of the available literature about the trombone even mentions the contrabass trombone, let alone covers it in sufficient detail. This section includes a chronological review of available literature on the contrabass trombone, which informed the research and conclusions within this study.

Kunitz

Hans Kunitz published *Die Posaune* in 1956 as the eighth of his series of thirteen texts, *Die Instrumentation*.⁶ Kunitz's writing on the contrabass trombone is very limited. While Kunitz's research has informed much of the current performance practice on the contrabass trombone, he does not provide much detail concerning the actual role and use of the instrument. Since the publication of *Die Posaune*, there have been many developments regarding the role and concept of sound for the contrabass trombone. Kunitz's work has been cited and expanded in English language publications on the trombone family, namely Robin Gregory's *The Trombone* and David M. Guion's *The Trombone: The Instrument and its Music, 1697-1811*.⁷

Gregory, Guion, and Baines

Robin Gregory's *The Trombone: The Instrument and Its Music* and David M. Guion's *The Trombone: The Instrument and its Music, 1697-1811* contribute more detailed information on the use of the contrabass trombone in the United States, expanding on what previously was written by Kunitz. Both of these texts mention specific instruments, manufacturers, and venues for performance, including brass bands, orchestras, and even the Moravian Trombone Choir. However, there is nothing written in either text about the role of contrabass trombones within these contexts or with regard to any specific type of music literature applicable to the instrument. Gregory notes that the contrabass trombone was used often in brass bands and sometimes wind bands, including "The President's Own" United States Marine Band, yet no records exist of what

⁶ Hans Kunitz, *Die Instrumentation: Die Posaune* (Leipzig: Breitkopf & Härtel, 1956).

⁷ David Guion, *The Trombone: Its History and Music, 1697-1811* (New York: Gordon & Breach, 1988).

parts these instruments played.⁸ Since the time of these writings, more information has appeared about the contrabass trombone, due in large part to the wider availability of information on the internet.

Anthony Baines' *Brass Instruments: Their History and Development*, like Gregory and Guion, sparsely mentions contrabass trombone. The one full page dedicated to contrabass trombone describes the instrument being requested by Wagner and the subsequent ways other bass trombones were used instead of the cumbersome contrabass trombone, such as a G bass trombone with C valve as used in England and the first iterations of the double-valve bass trombone in the United States. Baines' treatment of the various innovations in trombone usage throughout their history explains the reasons leading to the improvements in contrabass trombone manufacturing, the majority of which occurred after the publication of his book.

Tracy

The first academic document to focus solely on the contrabass trombone is Bruce Tracy's 1990 dissertation, "The Contrabass Trombone: Its Development and Use."⁹ Tracy's document chronicles the development of the instrument from the sixteenth century to the present and discusses the prominent use of the instrument by important composers of the Renaissance, Baroque, Classical, and Romantic eras, as well its usage in modern works. For his dissertation, Tracy scoured official records dating back to the 1500s for traces of contrabass trombones being

⁸ Robin Gregory, *The Trombone: The Instrument and its Music* (Praeger, 1973).

⁹ Bruce Tracy, "The Contrabass Trombone: Its Development and Use" (D.M.A. diss., University of Illinois at Urbana-Champaign, 1990).

used, purchased, specified, or simply existing in a place and time. Tracy's document demonstrates musical need as the driving factor for the development of the contrabass trombone, in particular, Wagner's *Der Ring des Nibelungen*. Wagner had a need for a trombone that could execute a specific range and timbre, so he had one created to fulfill that need. While Tracy's document is still highly regarded for its historical depiction of the contrabass trombone, there are areas that have since been further researched, and the knowledge of the history of the contrabass trombone has deepened. Much of the recent development of the contrabass trombone has focused on the performer, as opposed to the lineage of the horn's development, as detailed by Tracy.

High

Eric High's 2006 dissertation, "The Contrabass Trombone: A Brief History and Survey Regarding its Use Today," includes a summary of Tracy's history of the instrument and compiled information gleaned from returned surveys he sent to "forty-five well-known" bass trombonists or tubists asking if they had performed on the contrabass trombone.¹⁰ High's document is useful because it chronicles the specific uses for the contrabass trombone in Europe and the United States in 2005/2006. High's document briefly outlines Tracy's but offers no new historical findings or insights. The survey was fairly straight-forward, asking questions directly related to actual performance on the instrument, such as "what instrument", "what piece", "how often", etc. and a very small number of more subjective questions, such as, "Does this instrument have a place in modern symphonic or operatic orchestras?"¹¹

¹⁰ Eric High, "The Contrabass Trombone: A Brief History and Survey Regarding its Use Today" (D.M.A. diss., Arizona State University, 2006).

¹¹ *Ibid.*, 48, 59-60.

There was only one question about pedagogy in High's survey: "What materials did you use to help you learn to play the instrument?" While High's document does briefly touch on pedagogical topics, there is no actual instruction for the reader that wishes to play the contrabass trombone. High describes, as a conclusion of his surveys, his respondents' excitement about the instrument and its expansion. At the time of his writing, manufacturers were making developments toward larger scale production of instruments, but contrabass trombones were still expensive and difficult to obtain and thus prohibitive to use. Of thirty-one returned surveys, only twenty-three respondents had ever used a contrabass trombone—even once. Many of the respondents did not answer all of the questions, thus, High was unable to draw some of the conclusions that his questions aimed to answer. A significant one was, "If contrabass trombones were more affordable and more available would you ever be interested in using one?"¹² Many respondents did not answer this question. High's conclusions about the use of contrabass trombone are correct, in that its use has since expanded and garnered more attention from the trombone community. High's primary point is that more trombonists are beginning to utilize the contrabass trombone in their various performance venues than in previous years.

Colomer and Thein

Javier Colomer and Heinrich Thein's *The World of the Contrabass Trombone* (2012) exposed the trombone-playing public to the contrabass trombone in a more public fashion than had previously existed.¹³ Though not an academic document, it contains a basic history

¹² High, *The Contrabass Trombone*, 60.

¹³ Javier Colomer and Heinrich Thein, *The World of Contrabass Trombone* (Cocentaina, Spain: Javier Colomer, 2012).

cataloging the highlights of the development of the contrabass trombone with plates and translations of some historical documents, such as *Syntagma Musicum* by Michael Praetorius. There is also discussion of the configuration of valves, repertoire, and fingering charts. The text was published in three languages (Spanish, English, and German), all in the same volume. Poor translation into English with some odd spacing of paragraphs diminishes the overall coherence of the text. The fingering charts and exercises greatly favor the valve tuning system that is more popular in Europe, and the description of the “American” style tuning system is inaccurate. Colomer discusses F/C/D-flat/B-flat, which is impossible, instead of F/C/D-flat/A, thus negating the ability to use any of the few included exercises. When the C and D-flat valves are both used on an F contrabass trombone, the resulting harmonic series is based on an A fundamental. The F/D/B-flat/A-flat valve tuning system is heavily favored with substantially more material than F/C/D-flat/A, and there is no instructional material constructed for an instrument with a tuning system other than these. The text includes many pictures of Colomer with various trombone artists or low brass sections and heavily favors Their Brass Instruments, as mostly their products are discussed. While the aim of *The World of the Contrabass Trombone* is congruent with the purpose of my study, it does not empirically examine the instrument’s usage. The text primarily focuses on Colomer’s personal opinions without the opinions of other musicians. In addition, heavy editing would have made his document more suitable as a resource for contrabass trombonists.

Appel and Kullman

Schule für Kontrabassposaune by Benjamin Appel and Harold Kullmann is not widely available in the United States but is possibly the most useful text for the aspiring contrabass

trombonist.¹⁴ Appel and Kullmann are both German orchestral bass and contrabass trombonists. Unique to this text are technical studies, concert etudes for the contrabass trombone, and printed excerpts. The majority of this text is constructed similarly to Eliezer Aharoni's *New Method for the Modern Bass Trombone*, employing a brief section where only the open horn or each valve or both valves are used.¹⁵ The scope of *Schule für Kontrabassposaune* is limited to two of the available tuning systems, excluding F/C/D-flat/A, which many contrabass trombonists prefer. The open horn and each individual valve and tuning are given a separate section, but nearly the same exercises are given for each valve.

The exercises for each valve extend into the upper portions of the overtone series, which is unnecessary as many of those notes are close enough on the slide to negate valve usage and impede the production of a high-quality sound. There is also a great amount of space dedicated to playing solely on each valve combination but very little given to playing the entire instrument and moving between valves. The technical studies encompass warming up, range studies, and scales and arpeggios. While it is generally assumed that the reader is fluent in all of these techniques from a musical and pedagogical standpoint, it is greatly helpful that the exercises are printed, and the reader learns to associate printed music with the instrument rather than learning more or less by rote. The concert etudes are challenging but tuneful such that the player can easily discern correct notes and intonation. Many contemporary styles are represented, such as jazz, rock, swing, and funk in addition to those that mimic more classical or lyrical styles.

¹⁴ Benjamin Appel and Harold Kullmann, *Schule für Kontrabassposaune* (Würzburg, Germany: Crescendo Brass, 2013).

¹⁵ Eliezer Aharoni, *New Method for the Modern Bass Trombone* (Jerusalem, Israel: Noga Music, 1996).

The printed excerpts are those most commonly required for European bass/contrabass trombone auditions. No direct explanations of each excerpt are included, but the authors have been very precise with the reprinting of the excerpts. Tempos, articulations, phrase marks, and stylistic indications are all clear and apparent. Contained in the appendices are a slide position chart for each tuning system and a four-week schedule for learning to play the contrabass trombone. The four-week schedule is a crash-course in contrabass trombone audition preparation. The reader is given a situation in which a live audition is four weeks away and must partially be played on contrabass trombone. The schedule guides the player through the book in an abbreviated manner, only covering what is absolutely necessary to achieve a strong but basic foundation on the instrument. This section includes the explanation of the orchestral excerpts. There are exercises meant to lead the player into playing the excerpts in the correct style. Hopefully this excellent resource can be expanded to include the F/C/D-flat/A tuning system and marketed in the United States in the future.

Everett

In 2014, Micah Everett published *The Low Brass Player's Guide to Doubling*.¹⁶ Dr. Jeffrey Cortazzo, retired bass trombonist of the US Army Blues, a component of The U.S. Army Band, "Pershing's Own," in Washington D.C., and bass/contrabass trombonist in the Washington Trombone Ensemble wrote the contrabass trombone portion of this text. Dr. Cortazzo's comments give great insight into learning to play the contrabass trombone. His ideas are simply stated and easily implemented. Everett's document is an examination of doubling or performing

¹⁶ Micah Everett, *The Low Brass Player's Guide to Doubling* (Flagstaff, Arizona: Mountain Peak Music, 2014).

well on more than one low brass instrument and serves that purpose specifically. The coverage of contrabass trombone is basic and brief, only meant to establish a fundamental understanding of the instrument and a base from which the reader can expand into further study.

Yeo

In 2017, as part of Encore Music Publishers' *The One Hundred* series of orchestral excerpt collections for low brass, Douglas Yeo wrote *The One Hundred: Essential Works for the Symphonic Bass Trombonist*.¹⁷ Contained in the 266 pages of this text are reprints and improved engravings of the one hundred most requested orchestral bass trombone audition excerpts, including some that are specified for contrabass trombone, and a short explanation of Yeo's opinion on the contrabass trombone's use in the symphonic or operatic orchestra. With Yeo's extensive orchestral career and the depth of his knowledge in historical low brass performance, his opinion here is entirely warranted. Yeo's commentary on contrabass trombone is limited to a single page and describes, briefly, the early versions of both cimbasso and contrabass trombone with detail pertaining directly to the issue of performance practice in the music of Verdi and Wagner.¹⁸ Yeo's book is essential to the orchestral bass trombonist, and, although the contrabass trombone commentary is limited to one page, there is enough useful information to begin study of the contrabass trombone in an orchestral setting. There are other excerpts where Mr. Yeo makes mention of contrabass trombone, such as *Eine Alpensinfonie* by Richard Strauss. Here, Yeo makes a point that, while many bass/contrabass trombonists perform this work on contrabass, it is not specified as a contrabass trombone part and, therefore, should not be

¹⁷ Douglas Yeo, *The One Hundred: Essential Works for the Symphonic Bass Trombonist* (Maple City, Michigan: Encore Music Publishers, 2017.)

¹⁸ *Ibid.*, 246.

performed on contrabass trombone.¹⁹ Other performers have expressed that this specific work, and others that do not specify contrabass trombone, work well on contrabass trombone and that it adds to the works. This will be explored further in Chapters 2 and 3.

The lack of detailed literature on the contrabass trombone supports the view that, at least until recent years, it has been an instrument that was used rarely and irregularly, especially prior to Bruce Tracy's dissertation in 1990. The recent publication of several of the sources reviewed for this document could be viewed as a response by those authors to an apparent increase in usage of the contrabass trombone. There are no examples of research into the changing use of the contrabass trombone over time or reference to specific factors in the growth in use of the instrument. By using primary and secondary research combined with qualitative methods to investigate the issue, this document aims to complement and add to the relatively limited literature on its usage.

The Internet and Social Media

Without the internet and social media, this study may not have happened. I might never have been introduced to the professional trombonists interviewed for this document. Without Facebook, I would not have known that Nick Schwarz performed with the Metropolitan Opera on contrabass trombone during the 2018-2019 season, which, prior to that season had not occurred in, at least, the last forty years. Much of the information gathering for interviews and for finding interview subjects has also come from social media. I was even able to ask fellow group members about works that include contrabass trombone and add to the lists that appear as appendices in this document. As of this writing, Facebook.com seems to host much of the

¹⁹ Ibid., 210.

trombone-related discussion within a few groups. The “Trombone Pedagogy” Facebook group was started on July 27, 2013 and as of January 2, 2020 has 8,150 members. The “Bass Trombone Appreciation Society” Facebook group was started on September 8, 2013 and as of January 2, 2020 has 9,963 members. The “Contrabass Trombone Appreciation Society” Facebook group was started on June 28, 2015 and as of January 2, 2020 has 1,795 members. Discussion in these groups ranges from simple questions about equipment choices to intense discussions of the many aspects of teaching, researching, and playing the trombone. Prior to these groups appearing on Facebook, primarily due to the capability of Facebook to host groups around the same time, there were several forums that could be found on the internet. The subreddit “r/Trombone” on Reddit.com was started on July 8, 2008 and as of January 2, 2020 has 10,510 members. Trombonechat.com was started in 2006 and, as of January 2, 2020, has 5,933 members. Trombonechat.com was started out of frustration with the reliability of tromboneforum.org, which had been operational since at least 2000, but has since stopped working and information about its creation or membership is not currently available. These pages, forums, and groups host discussion of all aspects of playing the trombone. This includes discussion of history, equipment, accessories, buying and selling, the business of music, and more. The largest area of difficulty in using the internet and social media as a resource is the reliability of information. Anyone can share their opinion and it can be read and accepted without peer review, although, with many forums and groups the peer review aspect is included via experts within the membership and moderators that police the groups and posts within them. Also included in “reliability” as a discussion is the ability of any given user to repeatedly find a resource. While the internet is continually monitored for new content by search engines, like Google, there seems to be little

interest in the archival of resources for research purposes. As sources on the internet age, finding them becomes increasingly difficult.

Research Methodology

Research was conducted through a series of interviews with professional trombonists who regularly perform on the contrabass trombone. Questions focused on how often they use the contrabass trombone and how they perceive that its use has changed over time. I interviewed thirteen professional orchestral musicians who play contrabass trombone frequently.

Interviews were conducted via telephone, email, direct message, Skype, or in person. Although I allowed for the discussion with each interviewee to have a conversational flow, the same questions were asked to all participants. Audio recordings were made of in person, telephone, or Skype conversations and transcribed later. Transcriptions were edited for readability and continuity where necessary, and in some cases rearranged to correspond to the ordering of the questions asked. Responses that were typed by the participant were only edited for format and spelling. Excerpts from these interviews are integrated throughout the next two chapters to highlight and support the reasons that were found to be the greatest contributors to the growth of the contrabass trombone.

Further, research was also conducted to examine any recent sources that could provide insight into the claim that the usage of the contrabass trombone has increased. For example, I looked at books that examine topics even tangentially related to contrabass trombone such as those concerning instrument doubling or orchestral performance. While mentioning contrabass trombone in a publication does not guarantee any increase in its use, it can corroborate other evidence.

Works calling for the use of contrabass trombone were gathered through extensive internet searches. Extant lists that I was able to verify for accuracy through music publisher's websites were helpful.²⁰ I focused on works that specify contrabass trombone in the score as at least an option, e.g. "bass trombone, optional contrabass trombone."

References to specific pitches are made according to Scientific Pitch Notation, as shown in figure 1 below:

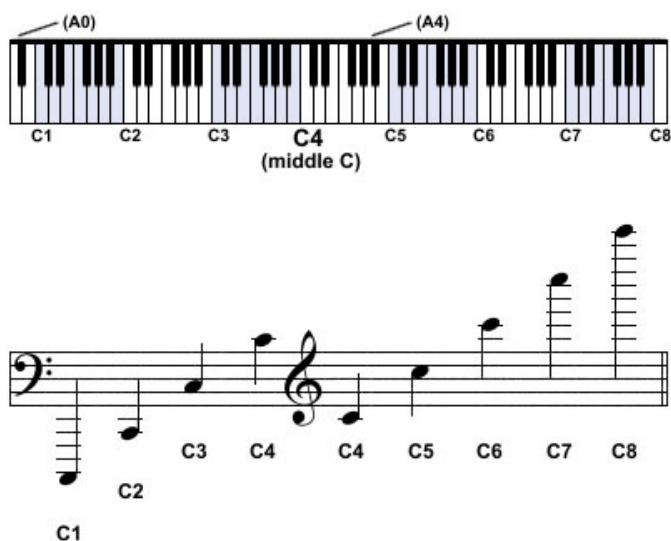


Figure 1 Scientific Pitch Notation.²¹

Significance of the Study

This dissertation examines changing attitudes toward the contrabass trombone and how recent shifts are having a major impact on its use. Through the use of interviews, as well as primary and secondary sources, this study intends to better understand how changes in

²⁰ Edward Solomon, "Contrabass Trombone Repertoire," <https://www.edwardsolomon.co.uk/2014/06/contrabass-trombone-repertoire.html>.

²¹ Brianne Lundberg, "An Easy Guide to Scientific Pitch Notation," <https://www.musicalbri.com/an-easy-guide-to-scientific-pitch-notation>, Accessed December 30, 2019.

production, design, and distribution and other factors have changed musicians' relationship with the contrabass trombone. The interviews conducted for this document illustrate an increase in the usage of the contrabass trombone. The research into the reasons for this increase has shown how a few factors that may, at first, seem only modestly related, when combined, can have a significant impact on how the appeal of an instrument can spread. This study reveals how, instead of through scholarly works, the proliferation of information about the contrabass trombone has come through the internet and, namely, through social media, where trombonists from all over the world can share their experiences and insights, and, of course, their new contrabass trombone. Overall, the more traction the contrabass trombone gets, the more it may continue to grow in appeal and use. It will be important to future academic research that contemporary trends and sources are thoroughly examined so that they can be verified or adjusted as new information becomes available.

CHAPTER 2

THE EFFECT OF DESIGN AND ACCESSIBILITY ON THE POPULARITY OF THE CONTRABASS TROMBONE

The primary limitation of the straight contrabass trombone was its length. The extant examples of early contrabass trombones stand between eight and nine feet tall on end and would have required at least three feet of clearance behind the player and up to eight feet of clearance in front of the player so that the slide could be extended fully (see figure 2). To play it would have been quite difficult and cumbersome. The contrabass trombone was based on the same B-flat harmonic series as a BB-flat tuba and had a bore size comparable to modern tenor trombones which would have resulted in difficulty getting enough air through the instrument to produce a quality sound while surmounting the resistance of the small tubing. Baines mentions that the end of the long slide of the B-flat contrabass trombone had to be “pushed along the ground or moved by a co-performer.”²²

²² Baines, *Brass Instruments*, 118.



Figure 2 Nicholas Eastop. Oller B-flat contrabass trombone built in 1639.

The first significant innovation in design, the intention of which was to improve the performing experience for the player, was the double slide (see figures 5 and 8). The double slide can be easiest explained as two complete slides with crossover tubes at the ends connecting them. This shortens the total travel of the slide by half, making it equal to that of the tenor trombone. There is no clear first mention of a double-slide contrabass trombone, and the sources that Baines (and then Tracy) mention are only suspected to be double-slide instruments. The earliest reference occurred in 1576 with a description of a “short double trombone.”²³ “Evidently the players did not like it,” is all that Baines gives the reader.²⁴ Their aversion may have been due to the lack of stockings on the inner slide tubes. Stockings are the area at the end of the inner tubes that have a slightly larger bore and thus the only part of the inner slide that touches the inside of the outer slide tubing. This decreases friction between the inner and outer slides and makes the slide easier to move between positions. Baines says stockings did not appear on

²³ Baines, *Brass Instruments*, 117.

²⁴ *Ibid.*, 117.

trombone slides until the mid-nineteenth century.²⁵ Also possibly contributing to increased friction on a double-slide contrabass trombone are the inherent difficulties in achieving the perfect, parallel alignment of four inner and four outer slide tubes in comparison with two of each.

Nuremberg bass trombones as a category typically have an extra loop of tubing in the bell section containing a long tuning slide (see figure 3). This tuning slide could be extended by the player via a rod extending forward and lengthening the instrument by a whole step. This extension ability allowed the quart-posaune to also be a quint-posaune in F or E-flat, depending on which set of positions might be easier or to allow for transposition between ensembles.²⁶ These extendable secondary slides were possibly the precursor to the whole-step valve on some modern contrabass trombone valve configurations.



Figure 3 Bass Sackbut. Ehe Model. Ewald Meisl.

The eighteenth century brought many changes for the trombone. Many composers only wrote for three trombones in B-flat but of varying bore and mouthpiece sizes according to the

²⁵ Baines, *Brass Instruments*, 111.

²⁶ *Ibid.*, 117.

part to be played.²⁷ Because of this, the written ranges for trombones ceased to extend as low as the C₁ and D₂ written by Haydn and Mozart. Beethoven and Schubert only wrote F₂ as their lowest notes for the bass trombone. Hector Berlioz wrote of the E-flat bass trombone:

...It must be said that ... the bass trombone is almost unknown in France. It is almost always confused with the third tenor trombone, which plays the lowest part and which is thus quite wrongly named 'bass trombone,' a very difficult instrument. ... The bass trombone is rare only because of the fatigue experienced by even the most robust players. It is the largest and therefore the lowest of all. It must be given quite long gaps for the player to rest in and only be used in a discreet and well justified manner.²⁸

In 1843, Hector Berlioz visited Berlin, Germany, where he heard two bass trombones in the opera orchestra. Of this experience, he wrote:

Parisian musicians refuse to play an instrument that is so tiring to the chest. Prussian lungs are evidently more robust than ours. Their combined volume of tone is so great as to obliterate the alto and tenor trombones playing the two upper parts. The aggressive tone of one bass trombone would be enough to upset the balance of the three trombone parts as written by composers nowadays. But there being no ophicleide at the Berlin Opera, they give the part to a second bass trombone. The effect of having two of these formidable instruments one above the other (the ophicleide part being frequently written an octave below the third trombone) is disastrous. You hear nothing but the bottom line; even the trumpets are all but drowned. When I came to give my concerts I found that the bass trombone was much too prominent—although in the symphonies I was using only one—and had to ask the player to sit so that the bell of the instrument was facing into his stand, which acted as a sort of mute, while the alto and tenor trombonists stood up to play with their bells pointing over the top of their stands. Only in this way could all three parts be heard.²⁹

²⁷ Baines, *Brass Instruments*, 242.

²⁸ Berlioz, and Macdonald. *Berlioz's Orchestration Treatise: A Translation and Commentary* (Cambridge: Cambridge University Press, 2002), 209.

²⁹ *Ibid.*, 213.



Figure 4 Bass Trombone in E-flat. Similar to those referred to by Berlioz.

The difficulty in performing on the bass and contrabass trombones and the fine line the player had to walk in keeping the balance acceptable stifled its use for nearly the next century.

However, the bass trombone in F continued to be used and produced in Germany well into the twentieth century.³⁰

For *Der Ring des Nibelungen*, Richard Wagner demanded that the fourth trombonist play a contrabass trombone descending to E₁. For the premier, Wagner had a B-flat contrabass trombone with double-slide constructed by C.W. Moritz of Berlin.

³⁰ Baines, *Brass Instruments*, 245.



Figure 5 Contrabass Trombone in C. Made by Boosey & Hawkes ca. 1896.

Although this instrument was specifically constructed for *Der Ring des Nibelungen*, and Boosey & Sons advertised a similar instrument in their catalog until 1905, the double-slide contrabass trombone remained unpopular. Especially unhelpful was that with the use of the G bass trombone with C valve and the modern double valve bass trombone the fourth part of *Der Ring* could be performed effectively without using the contrabass trombone.³¹ There are those that might argue that the timbre of the larger contrabass trombone is necessary to the texture of the operas, but weighed against the cost of the specialized instrument for a possible one-time use, the contrabass trombone lost.

The first instance of a contrabass trombone constructed in the modern, bass-contrabass fashion was a model created by August Sprinz as specified by Ernst Dehmel.³² This instrument had two valves, both operated by independent thumb levers. The first valve was in E-flat, the

³¹ Baines, *Brass Instruments*, 247.

³² Tracy, *The Contrabass Trombone*, 60.

inspiration for which might have come from the extendable slide seen in Nuremberg bass trombones. It also possible (and more likely) that the E-flat valve was used to compensate for a shortened slide. Sprinz built this contrabass trombone with a six-position slide instead of the normal seven positions. This shortened the slide by almost one foot and brought the maximum extended length of the slide into reach by the average person without the need for an extension handle. The lack of a seventh position was easily made up by using the E-flat valve and fifth position. The deletion of the slide extension handle alone drastically improved the agility of the slide. The second valve was in B-flat and mimicked the B-flat contrabass trombone, extending the range of the instrument into the register required of a contrabass trombone. This instrument was granted a patent in June of 1921.³³ This is the earliest instance of what is now considered “European tuning” on contrabass trombones.



Figure 6 Contrabass Trombone in F with E-flat and B-flat valves. Made by August Sprinz ca. 1930

In 1963 Hans Kunitz, in collaboration with Alexander Brass Instruments of Mainz, Germany, constructed an F contrabass trombone with a single slide and two valves.³⁴ The first valve, operated by the left thumb, was in C and was used similarly to the F valve on a modern B-flat symphonic tenor, or bass trombone. The second valve was operated by the left middle finger and was in D.

³³ Ibid.

³⁴ Baines, *Brass Instruments*, 247.



Figure 7 Alexander Contrabass Trombone in F with C and E-flat valves.

Combined, the valves produced the B-flat harmonic series of the double-slide B-flat contrabass trombone but retained the better agility and clarity of the F bass trombone in the situations where both valves were unnecessary. At this time, the Bayreuth Festival Orchestra was using an F bass trombone with one C valve. Even with the long slide and extension handle, this instrument could not play an F-sharp¹. With the second valve, the F-sharp could be reached and the instrument gained the full chromatic range enjoyed by the B-flat contrabass trombone—it was also much easier to play. This is the first instance of what is now considered (and misnamed) “American tuning” on contrabass trombones. Contrabass trombones were not produced in the United States outside of custom instruments until Kanstul Musical Instruments began manufacturing them in 2005-6 (except the B-flat contrabass trombones made by C.G. Conn in the early 1900s).

Also, in the 1960s, Miraphone began production of their B-flat contrabass trombone with double-slide and F valve (see figure 8). This instrument had a graduated bore through all four slide tubes, each tube being successively larger than the last, making the B-flat instrument much easier to use. This is also the instrument that an American might have noticed in the Miraphone catalog at their local music store at that time. Miraphone was already a popular brand of tuba in the United States and, in comparison with the price of high-quality tubas, the contrabass trombone might have been a justifiable novelty purchase. Interviewee, Phil Teele, a Los Angeles studio musician, told me that he had a Miraphone contrabass trombone, which he used for the first time on a film score for *Planet of the Apes* in 1968.³⁵



Figure 8 Miraphone Contrabass Trombone in B-flat.

Teele actually owned both of the previously mentioned contrabass trombones, as well, and used both in the studios in Los Angeles. He bought the Miraphone that he used on *Planet of the Apes* first. As he told me, the composers “didn’t really understand what that was, and they expected the same facility that any other instrument had. Since the positions were twice as long, you’re just not going to get that.”³⁶ So, I had to come up with something better. So, then I got the

³⁵ Phil Teele, telephone interview with the author, September 2014.

³⁶ Although a double slide reduces the length of change necessary for each slide position by half, the amount of tubing added is still consequential to the agility of the instrument. The added weight of the double slide also contributes to the difficulty.

Alexander.” Speaking further on the Alexander contrabass trombone, he noted: “That’s the one I showed to Toshiko [Akiyoshi] and said, ‘why don’t you write some pedals on the end of a ballad or something.’ The following week she hands me this piece of paper, which was *I Ain’t Gonna Ask No More*, where the first sixteen bars are by yourself and the first note is a pedal F.” *I Ain’t Gonna Ask No More* was recorded on Akiyoshi’s album *Tales of a Courtesan* in 1975, released in 1976. Phil, speaking about the Alexander contrabass trombone again, “That went pretty well but it was so hard to play because there was so much resistance.” Both of these instruments had a small initial bore size, giving the instrument a higher level of resistance than current contrabass trombones with larger bore sizes.

In 1972, Heinrich Thein earned the title of Master Craftsman of Brass Instruments by creating an improved contrabass trombone.³⁷ Thein detailed this process in a two-part article published in the *Brass Bulletin* in 1978.³⁸ Thein found that there were many disadvantages in the construction of even the most admired contrabass trombones at the time. Those disadvantages were a result of the fact that the valve paddles were in an upright position, one above the other, and that they had a very long throw to activate the valves and were both operated by the left thumb. The instrument was difficult to play with both valves activated, and the wrap of the valve tubing made it difficult to remove condensation that collected while playing.³⁹ The primary improvements Thein made were changing the wrap of the valve tubing so that it eliminated as many bends as possible and making the bends as wide as possible to allow the best possible flow of air. The tubes were wrapped in such a way that all condensation collected in one place in each

³⁷ “Biography,” Heinrich Thein, Thein Brass, https://thein-blechblasinstrumente.de/74-heinrich_thein.php

³⁸ Heinrich Thein, *Die Kontrabassposaune*, Parts 1-2, *Brass Bulletin*, no. 22 (1978): 53-60; no. 23 (1978): 55-64.

³⁹ Thein, No. 23, 56.

valve and the open horn, and the instrument was easy to clear by pulling each of the three tuning slides. The valve paddles were separated to be activated independently by the thumb and middle finger and the action of the valve levers shortened. Another major improvement was reduction in bracing throughout the bell section. The main bell support between the slide connector and the bell was removed, and smaller, lighter supports were added between valve tubing sections to support the bell. This not only reduced the weight of the instrument but enhanced the response by removing the extra metal. Almost immediately after the publication of this article, Thein became a trusted name in contrabass trombones, which continues to this day.



Figure 9 Thein Contrabass Trombone. As featured in the Brass Bulletin no. 23, p. 64.

In 2016, I had the opportunity to interview both Max Thein, Heinrich Thein's younger brother and co-owner of Thein Brass. Max said:

Even back in the 1930s there were contrabass trombones. They were not really playable. That was a big problem for the players. They didn't want to play it, so the tuba player did it. The first time I saw a contrabass was my teacher, Joachim Mittellacher, who was bass trombone with the Bremen Philharmonic. The conductor asked him to play contrabass on the Ring Cycle. At that time, there were no contrabass trombones available that were good or playable. He had an old Kuhl from before WWII, made for the Berlin Philharmonic. He would try to make dents in it and see if it helped. If it made it more in tune or easier to play, he kept the dents. It was a mess. He said, 'I cannot play [this instrument], what should I do?' I was a student. We [Max and Heinrich] started working and built our first contrabass over many days and late nights. It was the beginning of

something fantastic. We made more and more. Other brands started to notice and began producing their own contrabasses. Lätzsch started making them shortly after us. So, everything always develops. Tastes change and we follow them. We as instrument makers are interested in working together with musicians. We follow what they need and come up with this (pointing to Zach Bond's contrabass).⁴⁰

The situation Max was talking about probably occurred in the mid-1970s, prior to his brother, Heinrich's, article in the Brass Bulletin in 1978 about the process of designing a better contrabass trombone. Significant to understanding this is that Joachim Mittellacher was a highly respected bass/contrabass trombonist in Germany and likely played many contrabass trombones looking for one on which he could perform at a high level. That a thirty to forty-year-old instrument was the best he could find must have been disappointing. Adding to that disappointment was that Mittellacher felt that making dents in the instrument might make it easier to play. This story spells out exactly what this document intends to convey about the necessity of design improvements in making the contrabass trombone playable at a high level. Max then describes the important relationship between artists and manufacturers to develop instruments that are easier to play, such as the Thein Universal contrabass trombone that Zach Bond helped Thein develop (see figure 10).

In 1992, Ben van Dijk became an endorsed artist for Thein. Ben is the bass/contrabass trombonist with the Rotterdam Philharmonic in Rotterdam, NL. Prior to that, he was the bass/contrabass trombonist for the Netherlands Radio Philharmonic. For over twenty-five years, Ben has worked with the Theins to improve the "Ben van Dijk" model bass and contrabass trombones in small and subtle ways to enhance the experience of playing them. Working with Ben, the Thein contrabass trombone has continually evolved into a more playable instrument

⁴⁰ Max Thein, interview with author, February 9, 2016.

beyond Heinrich Thein's initial innovations. Hagmann valves reduce the difference in resistance between the open instrument and the valves. Ben also suggested lengthening the E-flat valve to D, which reduced the distance and necessity for large, fast slide movements. More recently, the Theins have worked to develop a line of trombones that catered more to orchestral trombonists around the world and were less specifically German-style trombones. They call them "Universal" and worked with artists from around the world in their development. Zach Bond, then the bass/contrabass trombonist with the Malaysian Philharmonic, was enlisted to aid in the refinement of the Universal bass and contrabass trombones.



Figure 10 Thein Universal Contrabass Trombone in F with D and B-flat valves. Made by Thein Brass

In 2005 the Kanstul Musical Instrument Company in California developed their contrabass trombone. It is in F with C and D-flat valves that together produce A. This tuning system was promptly designated the "American" system, although it had been produced in Europe since at least the 1980s.⁴¹ The Kanstul contrabass trombone immediately became the instrument of choice in Los Angeles film and commercial studios, as used by Phil Teele and others. This instrument was also much more affordable than instruments special ordered from

⁴¹ Through personal correspondence with Peter van Klink, for whom the Lätzsch "Peter van Klink" Model is named, I learned that he, among others in Europe have been using the F/C/D-flat/A tuning system since "at least the 1980s," as he put it.

Europe. Many bass trombonists prefer the F/C/D-flat/A tuning system because it mimics the relative arrangement of slide positions and valve combinations, keeping familiar patterns accessible. It was also in 2005 that Michael Rath began production of contrabass trombones. Other manufacturers have started making contrabass trombones since that time as well. For example, Markus Leuchter has made approximately nineteen contrabass trombones from his one-man shop in Herzogenrath, Germany since 2013. Since Markus finished my personal contrabass trombone in 2014, his first with F/C/D-flat/A tuning and third overall, he said about half have had that tuning system and the other half were the “European” style of F/D/B-flat/A-flat.



Figure 11 Contrabass Trombone in F with C and D-flat valves. Made by Markus Leuchter. Owned by the author.

Growth as Assisted by Design Improvements

Adaptations that have improved the playability and the ease of learning to operate the contrabass trombone have greatly assisted in the growth of its use. Many of Eric High’s survey respondents mentioned that the contrabass trombone was difficult to play, and if it were more affordable, they would be more interested in owning one. Since they mentioned it was difficult to

play, one may assume that if it were also easier to play, more people would be interested in owning a contrabass trombone. The quality contrabass trombones on the market today are as easy to maneuver and produce a good sound on as a bass trombone. Contrabass trombones have also become more affordable and easier to learn about, test, and purchase than ever before due to the internet, social media, and the ever-expanding global community. Interviewee Zachary Bond offered his perspective on how improvements in design and functionality of an instrument can enhance the music: “So many people let the technique define the music. If it is hard, the music suffers. But we always have to make sure, especially with contra because it is so clumsy, less clumsy than it used to be, that the music defines the technique. You practice the instrument to make the music great. We don’t let the music suffer because the instrument is difficult or different.”⁴² What Bond described is how the interaction between players and manufacturers helps the player better produce the music they are playing. A performer might encounter a specific difficulty in a piece of music and work with the manufacturer to find solutions.

Speaking of accessibility, Max Thein told me: “Everything is changing. I remember 20 years ago we got a call from Frankfurt, which is about 300 miles from Bremen. He asked if we would be close to Frankfurt sometime since Bremen is so far away. Like it was at the end of the world. Now we get on the train or in the car and we are there in a few hours.”⁴³ Now people fly to Thein’s shop in Bremen from all over the world to try their instruments.

⁴² Zachary Bond, interview with the author, February 9, 2016.

⁴³ Max Thein, interview.

Pivotal Events Influencing Growth

A few key moments in the last fifty years have affected the trajectory of the growth in the use of the contrabass trombone. Possibly the most pivotal (and the first in a subsequent chain of events) was the 1992 International Trombone Festival held in Detmold, Germany. This was the first International Trombone Festival held outside of the United States. The event was organized by Heinz Fadle, and Ben van Dijk was asked to give a presentation about the contrabass trombone. He teamed up with Joachim Mittellacher, who was then the bass and contrabass trombone player with the Bayreuther Festspiele Orchester. Mittellacher was suffering from embouchure problems and could not play, so Mittellacher spoke and Ben played. The presentation went so well that Ben was invited to do several presentations across the United States over the next year with the trombone sections of the Chicago Symphony Orchestra, New York Philharmonic, and the Cleveland Orchestra. In my interview with him, Van Dijk said, “at that time in the US, nobody played the contrabass trombone.”⁴⁴ Because of these events, many performers and teachers from the United States were able to experience the contrabass trombone for the first time.

In 1968, during the recording of the score for *The Planet of the Apes*, Phil Teele asked Jerry Goldsmith if he could try out his Miraphone contrabass trombone on a few cues where he thought it might work nicely. Goldsmith agreed and the use of the contrabass trombone in film was born. Interviewee Bob Sanders noted that even in the 1980s, contrabass trombone in film music was quite rare.⁴⁵ Bob saw the need to own a contrabass trombone in the early 1990s and purchased an Alexander. In 1998, Bill Reichenbach, the top call LA bass and contrabass

⁴⁴ Ben van Dijk, Interview with the author, June 26, 2014.

⁴⁵ Bob Sanders, Facebook private message with the author, December 2017.

trombonist, discovered the Haag contrabass trombone at Frankfurt, Germany's annual Musikmesse. He purchased one of these instruments and brought it back to Los Angeles. Upon inspection, several other players purchased them and still use them.

In the early 2000s, low-brass heavy orchestras delivered powerful, impactful but less melodic scores and routinely included massive brass sections, such as the remake of *Planet of the Apes* in 2001, (see figure 12). *Planet of the Apes* in 2001 included up to fourteen trombonists, including up to three contrabass trombones at a time.⁴⁶



Figure 12 Trombones from *Planet of the Apes* (2001).⁴⁷

⁴⁶ "Planet of the Apes (2001)," Brass Section in Movies, <https://brasssectioninmovies.blogspot.com/2012/08/planet-of-apes-2001.html>, Posted May 27, 2017.

⁴⁷ "Planet of the Apes (2001)."

Hans Zimmer's score to *Gladiator* (2000) is an early example this style with a full brass section and impactful moments, but, unlike many brass heavy scores from the 1980s and 1990s, relies less on melodic or thematic content than timbral or harmonic diversity to communicate the emotional content of the film. Subsequent films that further demonstrated and developed the power of these brass-heavy scores were those for the *Pirates of the Caribbean* series of films (2003, 2006, 2007, 2011, 2017), and especially *Batman Begins* (2005), *The Dark Knight* (2008), *The Dark Knight Rises* (2012), and *Inception* (2010). Many of the recent Marvel and DC Comics films also draw heavily on this style. Also important at this time was the relatively new genre of video game scoring. Prior to the early 2000s, video game technology had not been capable of delivering a full orchestral score to the player during gameplay. The scores to video games like *Medal of Honor* (1999) and *Call of Duty* (2003) by Michael Giacchino stand out as early examples of a similar style in video game music. While it is not possible to be certain of the inclusion of contrabass trombone in all of the above films and games, one could assume it was included based on the frequency interviewees, Dave Ridge, Phil Teele, and Bill Reichenbach all reported. They all stated that they were using contrabass trombone on nearly every call for recording film and video game scores, and more sparsely earlier in their respective careers. Figure 13 also features Bill Reichenbach and Craig Gosnell with contrabass trombones during the recording of *Pirates of the Caribbean: Dead Men Tell No Tales* in 2017. Also notable in that photograph is that all six of the trombonists had bass trombones with them, as well as the tubists having brought cimbassi. With this increase in the number of brass players and instruments, and the way the brass sections were written for, the appeal of the contrabass trombone as the bass voice of the large trombone sections and as reinforcement in the low and loud writing became more noticed by those outside of the mostly unseen environment of the recording studios.

Bass Trombone Timbral Standard Change in the Late 2000s

In the late 2000s the bass trombone underwent a shift in the ideal concept of sound in the United States. This shift started, at least in part, when a newer generation of top-tier professionals, such as Denson Paul Pollard (Metropolitan Opera Orchestra 2007) and James Markey (New York Philharmonic 2007) were thrust into the spotlight after winning high-profile orchestral jobs in the United States. The lighter, more agile sounds of these two players stood out for being different than the heavy, dark sound that was typical at the time. This shift led to a more agile, and delicate sound for the bass trombone—a change from the darker, more diffuse sound of earlier years. Prior to this shift, bass trombonists tended toward the heavier, mellower sound that is more characteristic of the contrabass trombone.⁴⁸ Because of this, the contrabass trombone was seen to have little use when there was little difference, timbrally, between it and the more agile bass trombone, which could comfortably reach much of the same low range as the contrabass trombone. As the ideal bass trombone sound migrated toward light and compact, the darker sound that the contrabass trombone could bring was finally viewed as unique and necessary.

This shift also occurred around the same time that Joseph Alessi, principal trombone of the New York Philharmonic, and Edwards Instrument Company began creating a new tenor trombone model (bearing Alessi's name) that produced a lighter, more compact sound (development began in 2007 and production began in 2010). Edwards later worked with James Markey and Gerry Pagano to create new bass trombone models following the same trend. In an email conversation with James Markey (Bass Trombone Boston Symphony Orchestra 2012-

⁴⁸ High, "The Contrabass Trombone," 91, 94.

present, NY Philharmonic 2007-2012, Associate Principal NY Philharmonic 1997-2007) he elaborated on these changes:

By the time I entered the workforce in 1995, tenor trombones were well on their way towards going darker, with less “edge” or, as I like to say now, brilliance. My own first tenor was an Edwards with a 321CF bell, Thayer valve, and standard slide with a nickel, bass crook and sterling silver T2 leadpipe, and it’s on this horn that I recorded my first album, *Offroad*. Once again, however, the pendulum seemed to swing back again, beginning in the early to mid- 2000s. Around this time the Edwards T-396 (Alessi model) went into development, in an effort of Joseph Alessi to create both a warm and also somewhat more compact and clear sound, that could be more flexible to orchestral and solo repertoire.

Even though it would be another couple of years before the T-396 was completed, the die was cast in the Philharmonic’s search for a bass trombonist following Don Harwood’s retirement in 2007. The brass section — and the low brass section in particular — was looking for a big bass trombone sound, but also one that could work well in the section with tenor trombones. This played out in repertoire that I performed as part of my audition — Rimsky-Korsakov’s *Scheherazade*, and Hindemith’s *Symphonic Metamorphosis* and *Mathis Der Maler*, all of which would require a sound that would work well in the context of the tenor trombones.

With that said, my sound was (and is) a good deal leaner than that of my predecessor, Don Harwood. Shortly after I started, David Finlayson, the Philharmonic’s second trombonist, began looking for an instrument which would better match the leaner sound that both Mr. Alessi and I were making (especially following the completion of the T-396). With his move to a Yamaha, the low brass sound of the Philharmonic had made considerable changes in a relatively short amount of time.

Since I started playing bass trombone professionally 12 years ago, I’ve released two solo recordings and an album of orchestral excerpts with Denson Paul Pollard. Both Dr. Pollard and I believe in a sound that is warm, but also has some leanness to it. I can only suppose that these recordings and those released since my time in the Philharmonic and the BSO have helped put my own thoughts about what the bass trombone can sound like into the trombone community, much the same way that Charlie Vernon did the same for the instrument in the late 80s into the 2000s.⁴⁹

Mr. Markey’s ideas about the possibilities of the bass trombone sound have been well received within the bass trombone community and have helped produce a similar warm but lean sound as the ideal. It should be stated that, prior to preparing for and winning the New York Philharmonic audition on bass trombone, James Markey had been Associate Principal (tenor)

⁴⁹ James Markey, email correspondence with the author, June 19, 2019.

Trombone in the New York Philharmonic for twelve years. He mentions the specifications of the tenor trombone he was playing (an Edwards with a 321CF bell, Thayer valve, and standard slide with a nickel-bass crook and sterling silver T2 leadpipe). A 321 bell was a heavy gauge of metal, and coupled with a more massive Thayer valve and a more open bass crook at the end of the slide made for a heavy tenor trombone, producing a dense and dark sound, not too different from the type of sounds bass trombonists were going for at the time. Markey winning the New York Philharmonic audition and performing a bass trombone recital at the 2008 International Trombone Festival, almost as an outsider (he had only been playing bass trombone for about a year) among career bass trombonists, was somewhat a pivot point in the way a bass trombone should sound.

This shift was noted more specifically in my interview with Christian Griego, Director of Development and Marketing at Edwards Instruments. Griego told me about the state of bass trombone sound when he started with Edwards in 1998. It was a heavier concept of sound. Similar to what Markey described. At that time, many people that bought Edwards bass trombones had twenty-gauge bells, which are the thickest Edwards makes. Because of the thickness of the metal, those bells do not resonate as freely as thinner bells. By the time Griego started with Edwards, they were already seeing a shift to a lighter sound and therefore lighter equipment. At the time Edwards had become known for the heavy sound that some called “colorless.” Griego helped the company become more responsive and flexible during this shift. Christian also described the process of building the instrument that James Markey used to win his audition with the New York Philharmonic in 2007: “I got a call around Thanksgiving from Jim Markey. He was thinking about taking the New York [Philharmonic] bass trombone

audition.”⁵⁰ After some discussion, Griego sent two instruments for Markey to try. One was a more “traditional” assortment of parts and one that was significantly lighter and more in line with what Markey was trying to achieve. He chose the lighter instrument and won the audition with it. Griego explained,

“I think the panel heard something different. I always tell people when I’m doing fittings that they need to stand out from the rest. ... I think that was one of the things. All of the good players showed up to the New York audition. When Jim won that sounding different, I think it was a slap in the face to wake everybody up. Not a subtle shift. It was like, ‘we have got to change!’”⁵¹

Griego said that he was seeing a shift toward lighter equipment and sounds all the way back to 1998 when he started with Edwards, but the change was slow to take root. Markey winning the New York Philharmonic audition may have been enough of a “slap in the face”⁵² to force a quick move.

Interviewee Dr. Denson Paul Pollard (bass trombone, tenor trombone, bass trumpet Metropolitan Opera Orchestra 2007-present) mentioned that many of the bass trombonists that won high-profile jobs in the mid-2000s, himself included, tended toward a sound that ideally blended well with the tenor trombones rather than the previous model of trying to blend more with the tuba. He added that the heavy bass trombone sound reached a climax in the 1980s when people were using large mouthpieces without leadpipes and huge, heavy bells. Then players started winning auditions that did not use that equipment and, thus, did not have such a heavy sound. A contributing factor to this change was that several of the bass trombonists winning auditions around that time had been high-level players on tenor trombone or euphonium

⁵⁰ Christian Griego, interview with the author, June 27, 2019.

⁵¹ Ibid.

⁵² Griego, interview.

previously and switched to bass trombone later in their education or career. The new, more popular style of bass trombone sound stemmed from the lighter ideal held by tenor trombone and euphonium players.⁵³ This helps explain why James Markey's sound on bass trombone, after moving from tenor trombone was so different from other bass trombonists.

Bill Reichenbach spoke about this in my interview with him. Reichenbach mentions that he has had a lighter, more compact concept of sound for a long time, and that the same concept is coming back.

First, my concept of bass trombone sound is probably more compact than a lot of people. A lot of times I'm not able to do that because of the volume and size of the stuff they want us to play, but when it's just me on a solo or something I try to keep it sounding like a trombone instead of a euphonium with a slide. The bass trombone world is starting to find its way back to that. It (contra playing) has actually gotten a lot more prevalent. The way they're writing for low brass, the entire trombone section will frequently be doubling on bass trombone. Three or four bass trombones and one contra, sometimes two contras. It is a lot of fun. Sometimes it is really exhausting. I see a lot more parts that specifically say contrabass trombone.⁵⁴

At its heaviest, the standard concept of sound on bass trombone was close to that of contrabass trombone. With little timbral distinction between the two instruments, it is reasonable that a bass trombonist could not justify using the more challenging contrabass trombone when the bass trombone is a viable substitute. This was a comment made by a few of Eric High's respondents in his dissertation, that the difference in sound between contrabass and bass trombone was not enough to justify using the contrabass.⁵⁵ However, a shift toward less weight in the sound of the bass trombone has led to more of a distinction in sound between contrabass and bass trombone, justifying its use.

⁵³ Denson Paul Pollard, telephone interview with author, July 2, 2019.

⁵⁴ Bill Reichenbach, telephone interview with the author, December 18, 2017.

⁵⁵ High, *The Contrabass Trombone*.

Chinese Instruments

An influx of cheaply made Chinese brass instruments into the United States also occurred in the mid to late-2000s. Currently, the largest manufacturer of these instruments is Jinbao Musical Instrument Company in Tianjin, China. Their instruments, including contrabass trombones that were modeled directly from a Thein Ben van Dijk model contrabass trombone, can be produced and distributed with any company's logo engraved on the bell. Dillon Music of Woodbridge, NJ carries a Jinbao contrabass trombone "stenciled" under their own brand and sells it for under \$3000.⁵⁶ This is less than one-third of the price of German-made instruments that can also be purchased through Dillon Music.

Wessex Tubas was established in 2010 for the purpose of bringing inexpensive but high-quality, Chinese brass instruments to the rest of the world, first in the United Kingdom and then the United States. Until recently, Wessex distributed a stenciled Jinbao contrabass trombone but recently decided that the quality of the design was not in alignment with the standards under which the company was established. "Initially using standard designs, Wessex Tubas soon started branching out; customizing and designing their own instruments, whilst using professional artist's expertise to refine the sound quality of each new product."⁵⁷ At the 2018 International Trombone Festival, Wessex displayed their new model of contrabass and other trombones that had all been designed in-house. The new contrabass trombone model, PF588, is listed for \$3,070 and is vastly improved from its predecessor.⁵⁸ Instruments such as these, with a much more affordable price than a new Thein Universal model at \$17,728, give the average

⁵⁶ "Dillon Contra Bass Trombone," Dillon Music, Accessed July 9, 2019.

<https://www.dillonmusic.com/dillon-music-dillon-contra-bass-trombone.html>.

⁵⁷ "About Us," Wessex Tubas, Accessed July 9, 2019, <https://wessex-tubas.com/pages/about-us>.

⁵⁸ "Professional F Contrabass Trombone," Wessex Tubas, Accessed July 9th, 2019, <https://wessex-tubas.com/collections/trombones-and-sackbut/products/f-contrabass-trombone-pf588?variant=10963573178425>.

trombone player access to the contrabass trombone that has not previously existed.⁵⁹ While the contrabass trombones made by Thein are considered to be of the highest quality and craftsmanship, those that are willing to purchase a Wessex contrabass trombone are generally not in need of the capability and tradition that a Thein contrabass trombone brings.

The influx of Chinese instruments has helped the contrabass trombone go from merely a mythical, novelty instrument to one that many people outside of the bass trombone position in the top orchestras can justify purchasing. While the prices have gone up, the quality of Chinese instruments has improved drastically since they first came onto the market. It seems these manufacturers have noticed that they are able to improve quality without adding so much cost that they would lose their share of the market. Many companies can now find ways to produce even small parts of their instruments more efficiently and cheaply than ever before, and they are able to pass those savings on to the consumer, which, in turn, enables the manufacturer to sell more contrabass trombones.

Summary

Any one of the above reasons alone may not have had any impact on the acceptance and usage of the contrabass trombone. In a way, the nearly simultaneous occurrence of these seemingly disparate elements were the perfect storm of influencing factors, leading to the level of use we see today. The contrabass trombone has been a fixture in European orchestras for decades. One event, Ben van Dijk's contrabass trombone presentation at the International Trombone Festival in 1992, brought contrabass trombone to a larger portion of the American

⁵⁹ "Thein Contrabass Trombone Universal Model with 2 Hagemann Valves," Houghton Horns, Accessed July 9, 2019, <https://houghtonhorns.com/shop/thein-contrabass-universal/>

trombone community. After only achieving novelty status in the United States, the contrabass trombone became a viable timbral possibility when the ideal sound of the bass trombone shifted toward light and lean. Even then, the cost-prohibitive nature of purchasing contrabass trombones limited their purchase to those who could truly justify such an expenditure. The influx of inexpensive, foreign brass instrument manufacturing lowered the cost-prohibitive barrier to entry in the purchase of a contrabass trombone from only serious professionals to hobbyists.

CHAPTER 3

PRESENT USAGE OF THE CONTRABASS TROMBONE

The contrabass trombone is now being heard more than in the past, because it is more accessible and easier to play. There are more contrabass trombonists willing to use it for more occasions beyond just the orchestra or trombone choir. The contrabass trombone has seen increased usage in orchestral, film, commercial, chamber, and solo music due to its increased affordability and accessibility. This chapter provides a description of how the contrabass trombone is being used today. Graphs showing compositions arranged by decade are available in Appendix E. The first chart shows total compositions in each decade and the second shows the distribution of type within the total number for each decade.

Orchestra

Many of Eric High's survey respondents noted that their orchestra had rented a contrabass trombone to use for one or a few occasions and very few orchestras owned an instrument. The primary reason for this was the cost of owning or even renting an instrument. Even in 2006, during High's research, there were no contrabass trombone manufacturers in the United States. An orchestra would have had to rent or purchase an instrument from a European manufacturer, and have it shipped, adding to the cost. It is due to these expenses that an orchestra would choose to have the part played on bass trombone or tuba instead. As of 2019, there were still fewer than one hundred works for orchestra that indicate the use of contrabass trombone. However, with the increased availability of instruments and musicians qualified to play them, professional orchestras have begun using contrabass trombones more frequently. Because

contrabass trombones are now more accessible and affordable, many orchestral bass trombonists are able to purchase one for themselves rather than relying on their orchestra to provide one.

Even with the increase in availability and usage of the contrabass trombone, it has met with some contention. Because of the previous absence of the instrument in many orchestras, some have accepted the substitution of tuba even though a contrabass trombone may now be available. This substitution also makes it more convenient to work with their contracted musicians versus having to hire an extra player.

Despite some remaining reluctance about using the contrabass trombone, trombonists are more frequently turning to it in their work. In my interview with Dave Ridge, [bass and contrabass trombonist for the San Francisco Opera and at Skywalker Sound] he told me that he was using contrabass trombone much more frequently in the San Francisco Opera and in recording at Skywalker Sound. In the opera orchestra, his primary need for the contrabass trombone is in the most standard works that call for it, such as Richard Wagner's *Der Ring des Nibelungen* and Richard Strauss' *Elektra*.⁶⁰ Interviewee Ben van Dijk, bass and contrabass trombonist with the Rotterdam Philharmonic in the Netherlands, lamented that he does not get to play contrabass trombone as often as he would like. A week before we met, he had played the music from the film *Gladiator*, and, although the score had not called for contrabass trombone specifically, he felt the need to use it. "Last week we played the score from *Gladiator*. It had four trombone parts and was the best contrabass trombone part I have ever played. It had pedal Cs and C-sharps (C1 and C-sharp1) and was big and open."⁶¹ Interviewee Zachary Bond noted that,

⁶⁰ Dave Ridge, Interview with the author, December 31, 2017.

⁶¹ Ben van Dijk, Interview with the author, June 26, 2014.

during his time with the Malaysian Philharmonic, the orchestra first rented a Thein contrabass trombone.

“Being mostly a European orchestra, they had previously flown people in to play contra. It was a good chance for me to show the orchestra that they needed to buy one. They have other good instruments, so why not a contrabass? I just asked, ‘how are we handling the contrabass part? Alpine [Symphony by Richard Strauss] has a part so how are we handling it?’ I left it with them. We ended up renting the instrument. We needed it again soon after for a movie music concert, some Wagner, and something else. Four or five times in one season. Finally, they just bought it.”⁶²

After renting the contrabass trombone for several performances in one season, the orchestra decided it would more cost effective to purchase an instrument.⁶³ They purchased a Thein Universal contrabass trombone, which is the model that Bond had been working on with Thein.

Unlike American orchestras and opera companies, in Europe, the contrabass trombone is most often expected as a secondary instrument for the bass trombonist and is often included in the audition process. Therefore, it is no surprise that Appel and Kuhlmann’s book, *Schule für Kontrabassposaune* includes a four-week course in preparing for an audition on contrabass trombone. The Leipzig (Germany) Gewandhaus Orchestra recently held a bass trombone audition where contrabass was required as a double for the winner. I sent an email to the orchestra office asking if the orchestra owned a contrabass trombone. They replied that the orchestra does own an instrument and the winner may use it for their time in the orchestra, but that each auditionee must secure an instrument for themselves to use for the audition.

More American orchestras are opting to purchase contrabass trombones for their trombonists to use. For example, Jim Nova, second trombone of the Pittsburgh Symphony,

⁶² Zachary Bond, interview.

⁶³ Ibid.

posted on social media that the orchestra had purchased a Thein contrabass trombone.⁶⁴ Many American orchestras have owned contrabass trombones for a long time, but since the quality of these instruments is low, in many situations the bass trombonist chose to play the part on bass trombone instead.

Another recent development in the orchestral realm is that Nick Schwartz of the New York City Ballet and Metropolitan Opera used contrabass trombone several times, including productions of Wagner's *Die Walküre*, *Das Rheingold*, *Siegfried*, *Götterdämmerung*, and Strauss' *Elektra* in the Metropolitan Opera Orchestra during the 2018-2019 season, after many years of strict opposition.⁶⁵ Steve Norrell, bass trombone with the Metropolitan Opera Orchestra, stated in his reply for High's dissertation that, (at that time) the sound of the contrabass trombone was not different enough to warrant its use. A major factor for Norrell was the sheer volume of performing he and his colleagues are required to do and that having to practice and switch between instruments would be too time consuming for no advancement in artistry.⁶⁶

While the composition of new orchestral works that include contrabass trombone has slowed over the last decade, players have been more willing and able to use it on works that call for it than ever before.⁶⁷ The most recent orchestral work was written in 2015, and only eight out of ninety orchestral or operatic works including contrabass trombone were written in 2010 or later.

⁶⁴ Jim Nova, <https://www.facebook.com/james.nova.3>, Posted to the group, "Contrabass Trombone Appreciation Society," December 8, 2018.

⁶⁵ Nick Schwartz, Facebook message with the author, November 23, 2019.

⁶⁶ High, *The Contrabass Trombone*, 91.

⁶⁷ According to the data presented in Appendix D, there were nine orchestral works specifying contrabass trombone composed 1990-1999, and fourteen composed 2000-2009, but only six composed 2010-2019.

Film and Commercial Music

Currently, the most frequent use of the contrabass trombone is in commercial music, namely in recording of film and video game scores, given that the top call bass/contrabass trombonists like Bill Reichenbach, Phil Teele, and Dave Ridge report using it on nearly every call for film or video game music.⁶⁸ Many bass trombonists working in the film industry have found it necessary to also play contrabass trombone. Some use it on nearly every recording session, although contrabass trombone is rarely called for specifically. In his interview, Phil Teele said that the first use of contrabass in film music was in Jerry Goldsmith's score for *Planet of the Apes* in 1968.⁶⁹ At that time, Teele was one of very few who played the contrabass trombone. As more composers heard it, they began to incorporate contrabass trombone into their scores. Prior to his retirement in 2016, Teele was requested as a contrabass trombonist for much of his film work in addition to bass trombone. Sometimes he was asked to only play contrabass trombone. In addition to Phil Teele, there are many others now that regularly use contrabass trombones in the film industry, including Bill Reichenbach, Craig Gosnell, and Steve Trapani. Figure 13 below shows Bill Reichenbach and Craig Gosnell holding their contrabass trombones during the recording of the score for *Pirates of the Caribbean: Dead Men Tell No Tales* in 2017. Behind them are three cimbassi and it is possible that all six trombonists play bass trombone during the recording of this score.

⁶⁸ Teele, Reichenbach, Ridge, interviews.

⁶⁹ Phil Teele, interview.



Figure 13 *Pirates of the Caribbean: Dead Men Tell No Tales* (2017).⁷⁰

Trombone Choir and Chamber Music

Traditionally, the contrabass trombone in chamber music has been used as an effect, rather than as a soloist or to enhance the orchestration. A prominent example is Edgard Varèse's *Intégrales*. Through the entire work, the contrabass trombone is used as a low, loud sound effect and has primarily long notes. The primary chamber setting for contrabass trombone at the time of this writing is one of opportunity rather than of requirement, often used because it is available rather than necessary. This style of use is both specified and unspecified in music. Many of the works for trombone choir specifying contrabass trombone are playable on bass trombone.⁷¹ There are also many works that are not specified as requiring a contrabass trombone but the use of one could add to the timbral variety of the piece. With this in mind, many university trombone studios are purchasing contrabass trombones for their students to use, examples include the

⁷⁰ Figure 11, Image of the scoring session for *Pirates of the Caribbean: Dead Men Tell No Tales* (2017), http://scoringsessions.com/sessions/20199/dsc_1683.jpg

⁷¹ Meaning the range of the part is not so low or difficult that it cannot be played on a bass trombone by a reasonably skilled player.

University of Iowa, Indiana University and Texas Christian University. As the contrabass trombone grows in popularity, more composers are able to hear it in a musical context and, thus, able to write music with its capabilities in mind. Indicative of this is Steven Verhelst's *Fragile* for four contrabass trombones. Verhelst is a Belgian bass trombonist and studied with Ben van Dijk at the Rotterdam Conservatory in the Netherlands. He is very well acquainted with the contrabass trombone and writes very specifically for it. Verhelst has written many works for trombone ensemble and only *Fragile* explicitly calls for contrabass trombone at all. With chamber music as well as orchestral music, composers cannot yet rely on an ensemble having access to contrabass trombones enough to specify its use in the score. However, as with film and commercial music, many composers rely heavily on the expertise of performers to use the instrument that sounds best for the music they have written. As Craig Gosnell put it: "The main focus is which instrument will sound best in the musical passage presented."⁷² This statement can be broadly applied to many situations where a contrabass trombone might be available and could be used but does not make the music better.

On some occasions, contrabass trombone is even used in big bands and brass quintets. Phil Teele performed and recorded *I Ain't Gonna Ask No More* on contrabass trombone with Toshiko Akiyoshi's big band in the 1970s.⁷³ It is possible to use contrabass trombone on some bass trombone parts in big band music or for the tuba or bass trombone part in brass quintet music, but it is still uncommon.

⁷² Craig Gosnell, interview with the author, January 9, 2018.

⁷³ Phil Teele, interview.

Solo Instrument

The solo repertoire for contrabass trombone is constantly increasing, although slowly. Commissions and premieres of new works for the contrabass trombone have increased outside of the orchestral realm, and the quality is improving. The contrabass trombone is evolving as a melodic instrument rather than only a novelty that can produce sound effects. Of the seventeen known solo works for contrabass trombone, only two were composed prior to 2000, four composed 2000-2009, and eleven after 2010.⁷⁴ Of the seventeen works, six are unaccompanied, seven have piano accompaniment, one has recorded sound (fixed media), and the remaining four are accompanied by various sizes of ensembles ranging from trombone ensemble to orchestra. As of this writing, two commissions are scheduled to premiere in 2019. Early works for solo contrabass trombone were non-melodic and somewhat aleatoric, such as Brian Fennelly's *Tesserae IV/V* or John Kenny's *Sonata for Contrabass Trombone*. Dr. Jeffrey Cortazzo's *Full Moon Ascending* is highly gestural and melodic in its depiction of the types of full moon as it ascends over the horizon. Inez McComas' *The Ticket for the Train* for contrabass trombone and recorded sound is depictive of the acceptance of death. The contrabass trombone is used to convey both fear and peace through the process of acceptance.

The primary venue for growth has been studio music for film and video games, including opportunities for orchestras to perform film music live in concert. In the category of studio music, new opportunities for contrabass trombone are being presented almost daily, as Phil Teele, Bill Reichenbach, and Dave Ridge all reported using the contrabass trombone on almost every call. Solo and chamber opportunities, while growing, are rare, and new orchestral

⁷⁴ A list of works written for solo contrabass trombone and various accompaniment can be found in Appendix 2.

compositions, including contrabass trombone, are virtually nonexistent. The musicians interviewed all seemed excited about the future of the contrabass trombone and echoed similar excitement from the composers they routinely work with.

Deciding When to Use the Contrabass Trombone

In many situations, the difficult choice must be made whether the music will benefit from the use of an early instrument or whether the predictability and ease of a modern instrument will effectively navigate the demands of the music. Due to the vastly increased playability of modern instruments, the lines have become blurred between situations where contrabass trombone is appropriate or inappropriate. Further, many situations may present the difficult choice of using contrabass trombone or not, whether it is specified or not. In many European orchestras, if the score calls for contrabass trombone explicitly and an instrument is available, it is used. Even then the player could decide against its use. The contrabass trombone has been largely neglected in the United States when it could be substituted for a smaller, more agile instrument. Essentially, there is no way to quantify what is an acceptable or unacceptable use of the contrabass trombone other than when it can be agreed upon by composers, conductors, players, and contractors. Similar to the relationship between composers, contractors, and instrumentalists in the film and video game recording industry, orchestral conductors and players are becoming more willing to try the contrabass trombone when attempting to interpret the composer's intentions for the music. Composers, conductors, and contractors seem to be willing to experiment with sounds and timbres within the music in order to achieve the best possible final product. All of those interviewed for this document seemed excited about the positive attitude of all involved in the

recording and performing process regarding the use of the contrabass trombone to expand the timbral palette of the orchestra. Strong examples of this are the orchestral works of Sofia Gubaidulina. All of the works composed by Gubaidulina listed in Appendix A specify contrabass trombone in the score and instrumentation list. Many of her compositions that call for contrabass trombone also require a large orchestra with many additional instruments, including alto flute, hecklephone, and bass clarinet.⁷⁵ A large orchestra with additional instrumentation was common across many of the listed works by other composers as well. Dave Ridge added: “When I get up to Skywalker [Sound] and they get to hearing the contra in their orchestration, they start wanting to use it in more of the music than when we first got there.”⁷⁶ As composers are able to hear the possibilities that the contrabass trombone brings to their compositions, they often want to use it more.

An ongoing, open discussion between composers, conductors, contractors, and players is necessary to determine if the sound of the contrabass trombone is desirable and/or appropriate for a composition. A prominent example of this type of decision is when approaching Richard Strauss’ *Eine Alpensinfonie*. It is not scored for contrabass trombone but for two tenor trombones and two bass trombones. Both Ben van Dijk and Zachary Bond mentioned having performed this work on contrabass trombone. The fourth trombone part is not overly difficult on either instrument, and both interviewees have not encountered opposition to performing it on contrabass trombone from music directors or colleagues. However, Douglas Yeo in *The One*

⁷⁵ “*The Light of the End* (2003),” Music Sales Classical, Sofia Gubaidulina, <http://www.musicsalesclassical.com/composer/work/2908/24061#>

⁷⁶ Dave Ridge, interview.

Hundred and Dave Ridge in his interview for this document suggest only using bass trombone for that work.

Other works call for switching between bass and contrabass trombone. For example, in the original fourth trombone part for Wagner's *Der Ring des Nibelungen*, there are instructions for when the player should switch between bass and contrabass trombones. This was necessary at the time because of the extreme difference in timbre between a B-flat bass trombone and a B-flat contrabass trombone, as well as the technical capabilities of each instrument. The timbre of the F contrabass trombone lies between the two instruments required by Wagner and is easily capable of playing everything written for both instruments. Some players perform the entire opera on contrabass trombone, while others perform solely on bass trombone, and others switch instruments as designated. There are clear indicators where the texture of the piece is changed by the change of instrument. As stated by Douglas Yeo in *The One Hundred* and by Dave Ridge of the San Francisco Opera Orchestra in my interview with him, when the tuba is acting as the bass voice of the trombone section, the bass trombonist should play bass trombone, and when the tuba acts as the bass voice of the Wagner Tuben, the contrabass should provide the bass voice to the trombone section.⁷⁷ The instruments fulfill different roles throughout the operas of Wagner, and both of these experts agree that these roles should be treated respectfully by being performed on the specified instrument. Again, though, there are many other examples of professionals performing these works entirely on bass or contrabass trombone with no switching between the

⁷⁷ Dave Ridge, interview.

two instruments. Consultation with section members and music directors is highly encouraged when deciding or entertaining the idea of performing a work on contrabass trombone.

Another example of orchestral literature that was originally written for contrabass trombone but is now rarely performed with it is Ottorino Respighi's *Pines of Rome*. Four trombone parts are notated in the score, although the actual printed fourth low brass part is labeled "Tuba."⁷⁸ The offstage *filicorni* parts were written for instruments that most closely resemble modern flugelhorns and euphoniums rather than trumpets and trombones as are normally utilized.⁷⁹ This specificity in the offstage parts suggests specificity in the onstage parts as well. A four-trombone section (tenor, tenor, bass, contrabass) would produce a homogenous sound and highlight the dense harmonies presented to the low brass.

Many of the trombone players interviewed said something similar to "I play the horn that I think sounds best on the part."⁸⁰ From major orchestras to film studios, the player is usually given the opportunity to choose the instrument on which they perform their part. This indicates trust between music directors, composers, contractors, and musicians to adhere to a high standard. Interviewee Zach Bond noted: "I think the master composers were not thinking about their present moment but of the future, knowing the music will develop over time."⁸¹ Max Thein added: "I think the composers had one version in their head and body. When they wrote it down, they made a compromise. When they gave the parts to the musicians, they made a compromise. And then another to bring it together."⁸²

⁷⁸ Yeo, *The One Hundred*, 159.

⁷⁹ *Ibid.*, 160.

⁸⁰ Bill Reichenbach, interview.

⁸¹ Zachary Bond, interview.

⁸² Max Thein, interview.

Summary

While the contrabass trombone is still not a widely accepted instrument in American orchestras, it is being utilized more frequently on works that specify it, where previously it had been overlooked or replaced. The primary reason for this is that the instruments are more accessible and cost effective than before. Currently, the contrabass trombone is being used most frequently in film and commercial music. More composers are including the option to use contrabass trombone in their trombone choir compositions. Also, because many universities have now purchased contrabass trombones, students have the opportunity to play it in trombone choir and even brass quintet. People are commissioning new works for the contrabass trombone, and several new works have appeared recently or are scheduled to appear soon that promote the contrabass trombone as a solo instrument in its own right. For example, *Cruise Elroy* by Kenyon Wilson was premiered at the 2019 International Trombone Festival. The contrabass trombone is seeing more use in solo, orchestral, commercial, and chamber music.

CHAPTER 4

CONCLUSION

The Contrabass Trombone Today

Throughout the history of the contrabass trombone, its greatest development and growth has occurred only in the last few decades. Although there has been a dramatic increase in the popularity of the contrabass trombone since High's dissertation, the number of articles, theses, and other publications on the subject has not grown significantly. While it is difficult to pinpoint a specific date or event that triggered an increase in the adoption of contrabass trombone, it can be attributed to advancements in manufacture and design as well as enthusiastic proponents. These proponents, with their improved instruments, are able to expand the reach of their advocacy through the internet, specifically, social media. Champions of the contrabass trombone, like Ben van Dijk, have posted videos and written about the contrabass trombone online. Los Angeles-based studio musicians post photos of themselves holding their contrabass trombones on social media. There is even a Facebook group called "The Contrabass Trombone Appreciation Society" where members share and discuss various aspects of playing the contrabass trombone.⁸³

Outspoken proponents of the contrabass trombone have been crucial to the rise in usage and popularity among the worldwide community of trombonists. While Ben van Dijk may have been the pivotal influence at just the right moment, many more trombonists have become influential in the rise of contrabass trombone. Some of these include Charles Vernon of the Chicago Symphony Orchestra, Brandt Attema of the Netherlands Radio Orchestra and the New

⁸³ As of December 1, 2019, this group has 1,724 members.

Trombone Collective, Javier Colomer, Zachary Bond, and Phil Teele and Bill Reichenbach, who work in film scoring studios in Los Angeles.

For the majority of its existence, the contrabass trombone was an anomaly. The contrabass trombone was difficult to use and, as desirable as it was to have its unique timbre in use as the bass voice of an ensemble, it was largely unnecessary. The physical limitations of the instrument outweighed its timbral contributions to the music in which it was included. This stigma lived with the contrabass trombone throughout its history until only relatively recently, when design improvements by manufacturers reduced the difficulty in handling the instrument and increased musician's ability to create a nuanced performance. Many notable manufacturers are currently producing contrabass trombones. Of these, Thein, Miraphone, Lätzsch, and Kühnl & Hoyer are some of the oldest that are still in production. Many German brass instrument manufacturers that were crucial in the development of the contrabass trombone through the 19th and 20th centuries, such as Heribert Glassl, have since closed. Due to increased demand, however, several manufacturers have begun production within the last twenty years, such as Michael Rath, Kanstul Musical Instrument Company, Jürgen Voigt, and Markus Leuchter.

Not only are more manufacturers producing the contrabass trombone, but it is increasingly easier for them to reach potential clients online. Manufacturers can collaborate with performers to tailor and enhance the playability of an instrument either via the internet or in-person. Once manufactured, a contrabass trombone can be shipped to the purchaser within a few days. Upon arrival, the purchaser can post a video of the unboxing and first notes on the contrabass trombone for a new enthusiast to view on social media. The instantaneous transfer of

information has aided in the ability of any one person to learn of the existence of the contrabass trombone and, from that, music as a field and as a creative pursuit certainly benefits.

Accessibility is a key factor in the increase of the use of the contrabass trombone.

Accessibility has two components that are equally important: 1) the ability to choose an instrument to purchase from a relatively large selection of possibilities, and 2) the ability to gain access to information about the contrabass trombone. Prior to the widespread use of the internet, and with no American-made options for contrabass trombones, the selection available to someone interested in purchasing one was very limited. The most likely manufacturer to have had their catalog in American music stores before the internet was Miraphone which has been a well-known European manufacturer and respected in the United States for their tubas for decades. It is possible that a customer perusing the catalog could have happened upon their double-slide, B-flat contrabass trombone. Now, through the internet, trombonists can see and hear the contrabass trombone in many ways. There are many ways to gauge the reach of particular ideas or artforms on the internet. YouTube provides easy metrics for quantifying the reach of a particular video. For example, on June 14, 2014, Andrew Bove (username BoveAudio) posted a video to YouTube entitled: “Epic Low Brass Game of Thrones Theme (Cover).”⁸⁴ As of December 1, 2019, this video has 1,707,475 views, over 18,000 likes and 953 comments. In the description, Bove lists six bass/contrabass trombonists, five bass trombonists, six tenor trombones, three tubists, and three tuba/cimbasso players, totaling twenty-three. As of

⁸⁴ Andrew Bove, “Epic Low Brass Game of Thrones Theme (Cover),” YouTube, accessed December 1, 2019, <https://youtu.be/vTDEVUICCIk>

December 1, 2019, the most viewed video for the search term “contrabass trombone”⁸⁵ was titled: “Less Common Instruments” and has 5,370,095 views.⁸⁶ It is a compilation of clips from several videos demonstrating many instruments that are not commonly heard. These two videos demonstrate the reach the internet can give to even a relatively uncommon instrument like the contrabass trombone.

Suggestions for Further Study

The contrabass trombone has appeared in brass band and wind band photos from the early twentieth century, including the “President’s Own” Marine Band, but little has been written about these occurrences. Further study could be done within the archives of the “President’s Own” Marine Band to discover the sources of existing photographs and perhaps purchase orders for instruments. Brass band records may be more difficult to procure, if they exist at all.

Despite with the works listed in “Related Literature,” there is little literature available to the new contrabass trombonist. Many etude collections are useful to the contrabass trombonist, but there is a lack of information on how these can be successfully adapted for the contrabass trombone and used to further the proficiency of the player on the instrument. There are not currently any materials that were conceived specifically for the contrabass trombone without regard to the valve system. Such materials would promote facility on the whole instrument without favoring or avoiding any musical device or passage that might present as more or less

⁸⁵ Search includes quotation marks to include both words together as a single search term.

⁸⁶ User: desircampbell, "Less Common Instruments," YouTube, accessed December 1, 2019, <https://youtu.be/v62YjjV-Roo>

difficult when performed on one valve system or another. Extant literature offers no discussion of the role of contrabass trombone or how its sound fits into the greater context of an ensemble or as a solo instrument. The few existing studies geared toward the acquisition of skill on the contrabass trombone are incomplete or directed toward a very small portion of the performance opportunities available to the contrabass trombone. A broad scope method aimed at building a completely capable player does not currently exist.

Significance

This study has demonstrated that, since the early 2000s, as was mentioned as a concern in High's survey, the contrabass trombone has become more affordable and more readily available, and the number of people using them has increased. There are several factors at play that have made this trend possible. Beginning in the middle of the twentieth century, the use of the contrabass trombone grew, largely due to improvements in the design of the instrument that improved its playability. Pivotal events, like the 1992 International Trombone Festival in Detmold, Germany and Ben van Dijk's contrabass trombone presentation brought the contrabass trombone to the attention of many American trombonists. The shift of the timbral standard for bass trombone, away from being like a contrabass trombone, to a lighter ideal, allowed the timbre of the contrabass trombone to be viewed as different from the bass trombone. Moving into the twenty-first century, the primary driver for this growth has been accessibility. Inexpensive Chinese instruments have lowered cost as the barrier of entry to purchasing a contrabass trombone. Trombone enthusiasts have access to contrabass trombones like never before. The internet has brought knowledge of the contrabass trombone to the attention of

trombone players that may have never heard of it otherwise. Documenting the available knowledge and sources that depict this growth and its origin is vital to trombonists of the future.

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APPENDIX A

ORCHESTRAL WORKS INCLUDING CONTRABASS TROMBONE

Sorted by Composer

Composer	Date	Title
Abrahamsen, Hans	2004	Four Pieces for Orchestra
Bach, Johann Sebastian/ Arr. Sir Henry Wood	1935	Tocatta and Fugue in d minor
Berg, Alban	1925	Wozzeck
Birtwistle, Harrison	1991	Gawain
Boulez, Pierre	1960	Pli Selon Pli
Boulez, Pierre	1970	Éclat/Multiples
Brian, Havergal	1927	Symphony No. 1 in d minor ("The Gothic")
Brian, Havergal	1932	Symphony No. 3
Brown, Earle	1962	Available Forms II
Butting, Max	1956	Symphony No. 9
Cage, John	1981	Thirty Pieces for Five Orchestras
Cerha, Friedrich	1968	Spiegel I
Cerha, Friedrich	1988	Monumentum Für karl Prantl
Cerha, Friedrich	1980	Netzwerk
Cerha, Friedrich	1963	Spiegel V
Cerha, Friedrich	1972	Spiegel VII
D'Indy, Vincent	1903	Symphony No. 2
D'Indy, Vincent	1906	Souvenirs, Op. 62
D'Indy, Vincent	1918	Symphony No. 3 (Sinfonia Brevis de Bello Gallico), Op. 70
D'Indy, Vincent	1921	Poème des Rivages, Op. 77
D'Indy, Vincent	1926	Diptyque Méditerranéenne, Op. 87
D'Indy, Vincent	1905	Jour d'été à la Montagne, Op. 61
Elfman, Danny	2004	Serenada Schizophrana
Goebbels, Heiner	1991	La Jalousie - Geräusche aus einem Roman
Gubaidulina, Sofia	1999	Two Paths
Gubaidulina, Sofia	2003	The Light of the End
Gubaidulina, Sofia	1994	Figures of Time
Gubaidulina, Sofia	2005	The Deceitful Face of Hope and Despair
Gubaidulina, Sofia	2001	Risonanza

Gubaidulina, Sofia	1999	St. John Passion
Gubaidulina, Sofia	2003	Under the Sign of Scorpio
Henze, Hans Werner	1993	Requiem
Henze, Hans Werner	1984	Symphony No. 7
Henze, Hans Werner	1997	Symphony No. 9
Henze, Hans Werner	2002	Symphony No. 10
Hillborg, Anders	2010	Cold Heat
Hillborg, Anders	2006	Eleven Gates
Hillborg, Anders	2002	Exquisite Corpse
Holbrooke, Joseph	1907	Symphony No. 1
Holbrooke, Joseph	1910	Dylan (Opera)
Krenek, Ernst	1922	Symphony No. 2
Ligeti, György	1965	Requiem
Ligeti, György	1977	Le Grand Macabre
Maxwell Davies, Peter	1998	Roma Amor
Norgard, Per	1999	Symphony No. 6 ("At the End of the Day")
Puccini, Giacomo	1926	Turandot
Puccini, Giacomo	1896	La Bohème
Puccini, Giacomo	1900	Tosca
Raskatov, Alexander	2011	A White Night's Dream
Raskatov, Alexander	2014	Missa Byzantina
Raskatov, Alexander	2015	Green Mass
Respighi, Ottorino	1924	Il Pina di Roma
Respighi, Ottorino	1932	Belkis, Regina di Saba
Reznicek, Emil Nicolaus	1931	Der Gondolier des Dogen
Ropartz, Joseph Guy	1911	Symphony No. 4 in C Major
Schoenberg, Arnold	1913	Gurrelieder
Sorabji, Kaikhosru Shapurji	1951	Symphony Jami
Stockhausen, Karlheinz	1957	Gruppen
Strauss, Richard	1909	Elektra
Stravinsky, Igor	1956	Canticum Sacrum
Szymanowski, Karol	1916	Symphony No. 3
Trojahn, Manfred	2011	Orest
Trojahn, Manfred	1998	Was ihr wollt

Trojahn, Manfred	2004	Symphony No. 5
Trojahn, Manfred	2009	Two Pieces for Orchestra
Trojahn, Manfred	2010	Five Dreams for Eusebius
Trojahn, Manfred	2010	Autumn Music
Trojahn, Manfred	2007	The Tomb of Paganini
Trojahn, Manfred	2010	Moderato
Trojahn, Manfred	2004	Four Pieces for Orchestra
Trojahn, Manfred	2007	Occhi Mie for High Voice and Orchestra
Tyberg, Marcel	1943	Symphony No. 3
Varèse, Edgar	1927	Arcana
Varèse, Edgar	1925	Intégrales
Varèse, Edgar	1927	Amériques
Varèse, Edgar	1968	Nocturnal
Verdi, Giuseppe	1887	Otello
Verdi, Giuseppe	1893	Falstaff
Verdi, Giuseppe	1898	Quattro Pezzi Sacri (Stabat Mater,
Wagner, Richard	1869	Das Rheingold
Wagner, Richard	1870	Die Walküre
Wagner, Richard	1876	Siegfried
Wagner, Richard	1876	Götterdämmerung
Webern, Anton	1909	Sechs Stücke (not 1928 rev.)
Winbeck, Heinz	1988	Symphony No. 3 "Grodek"
Woolrich, John	1999	The Old Year
Zimmerman, Bernd Alois	1965	<i>Die Soldaten</i>
Zimmerman, Bernd Alois	1970	<i>Ich wandte mich und sah an alles Unrecht, das geschah unter der Sonne</i>
Zimmerman, Bernd Alois	1970	<i>Stille und Umkehr</i>
Zimmerman, Bernd Alois	1965	Dialog - Concerto for Two Pianos

Sorted by Date

Composer	Date	Title	Symphonic Orchestra	Opera
Wagner, Richard	1869	<i>Das Rheingold</i>		X
Wagner, Richard	1870	<i>Die Walküre</i>		X
Wagner, Richard	1876	<i>Siegfried</i>		X
Wagner, Richard	1876	<i>Götterdämmerung</i>		X
Verdi, Giuseppe	1887	<i>Otello</i>		X
Verdi, Giuseppe	1893	<i>Falstaff</i>		X
Puccini, Giacomo	1896	<i>La Bohème</i>		X
Verdi, Giuseppe	1898	<i>Quattro Pezzi Sacri (Stabat Mater)</i>		X
Puccini, Giacomo	1900	<i>Tosca</i>		X
D'Indy, Vincent	1903	Symphony No. 2	X	
D'Indy, Vincent	1905	<i>Jour d'été à la Montagne</i> , Op. 61	X	
D'Indy, Vincent	1906	<i>Souvenirs</i> , Op. 62	X	
Holbrooke, Joseph	1907	Symphony No. 1	X	
Strauss, Richard	1909	<i>Elektra</i>		X
Webern, Anton	1909	<i>Sechs Stücke</i> (not 1928 rev.)	X	
Holbrooke, Joseph	1910	<i>Dylan</i>		X
Ropartz, Joseph Guy	1911	Symphony No. 4 in C Major	X	
Schoenberg, Arnold	1913	<i>Gurrelieder</i>	X	
Szymanowski, Karol	1916	Symphony No. 3	X	
D'Indy, Vincent	1918	Symphony No. 3 (Sinfonia Brevis de Bello Gallico), Op. 70	X	
D'Indy, Vincent	1921	<i>Poème des Rivages</i> , Op. 77	X	
Krenek, Ernst	1922	Symphony No. 2	X	
Respighi, Ottorino	1924	<i>Il Pina di Roma</i>	X	
Berg, Alban	1925	<i>Wozzeck</i>		X
Varèse, Edgar	1925	<i>Intégrales</i>	X	
D'Indy, Vincent	1926	<i>Diptyque Méditerranéenne</i> , Op. 87	X	
Puccini, Giacomo	1926	<i>Turandot</i>		X
Brian, Havergal	1927	Symphony No.1 in d minor ("The Gothic")	X	
Varèse, Edgar	1927	<i>Arcana</i>	X	
Varèse, Edgar	1927	<i>Amériques</i>	X	
Reznicek, Emil Nicolaus	1931	<i>Der Gondolier des Dogen</i>		X
Brian, Havergal	1932	Symphony No. 3	X	

Respighi, Ottorino	1932	<i>Belkis, Regina di Saba</i>		Ballet
Bach, Johann Sebastian/ Wood	1935	Toccatina and Fugue in d minor	X	
Tyberg, Marcel	1943	Symphony No. 3	X	
Sorabji, Kaikhosru Shapurji	1951	Symphony Jami	X	
Butting, Max	1956	Symphony No. 9	X	
Stravinsky, Igor	1956	<i>Canticum Sacrum</i>	X	
Stockhausen, Karlheinz	1957	<i>Gruppen</i>	X	
Boulez, Pierre	1960	<i>Pli Selon Pli</i>	X	
Brown, Earle	1962	Available Forms II	X	
Cerha, Friedrich	1963	Spiegel V	X	
Ligeti, György	1965	<i>Requiem</i>	X	
Zimmerman, Bernd Alois	1965	<i>Die Soldaten</i>		X
Zimmerman, Bernd Alois	1965	Dialog - Concerto for Two Pianos	X	
Cerha, Friedrich	1968	Spiegel I	X	
Varèse, Edgar	1968	Nocturnal	X	
Boulez, Pierre	1970	<i>Éclat/Multiples</i>	X	
Zimmerman, Bernd Alois	1970	<i>Ich wandte mich und sah an alles Unrecht, das geschah unter der Sonne</i>		X
Zimmerman, Bernd Alois	1970	<i>Stille und Umkehr</i>	X	
Cerha, Friedrich	1972	Spiegel VII	X	
Ligeti, György	1977	<i>Le Grand Macabre</i>		X
Cerha, Friedrich	1980	<i>Netzwerk</i>	X	
Cage, John	1981	Thirty Pieces for Five Orchestras	X	
Henze, Hans Werner	1984	Symphony No. 7	X	
Cerha, Friedrich	1988	<i>Monumentum Für Karl Prantl</i>	X	
Winbeck, Heinz	1988	Symphony No. 3 "Grodek"	X	
Birtwistle, Harrison	1991	Gawain		X
Goebbels, Heiner	1991	<i>La Jalousie - Geräusche aus einem Roman</i>	X	
Henze, Hans Werner	1993	<i>Requiem</i>	X	
Gubaidulina, Sofia	1994	Figures of Time	X	
Henze, Hans Werner	1997	Symphony No. 9	X	
Maxwell Davies, Peter	1998	<i>Roma Amor</i>	X	
Trojahn, Manfred	1998	<i>Was Ihr Wollt</i>		X
Gubaidulina, Sofia	1999	Two Paths	X	
Gubaidulina, Sofia	1999	St. John Passion	X	

Norgard, Per	1999	Symphony No. 6 ("At the End of the Day")	X	
Woolrich, John	1999	The Old Year	X	
Gubaidulina, Sofia	2001	<i>Rizonanza</i>	X	
Henze, Hans Werner	2002	Symphony No. 10	X	
Hillborg, Anders	2002	Exquisite Corpse	X	
Gubaidulina, Sofia	2003	The Light of the End	X	
Gubaidulina, Sofia	2003	Under the Sign of Scorpio	X	
Abrahamsen, Hans	2004	Four Pieces for Orchestra	X	
Elfman, Danny	2004	Serenada Schizophrana	X	
Trojahn, Manfred	2004	Symphony No. 5	X	
Trojahn, Manfred	2004	Four Pieces for Orchestra	X	
Gubaidulina, Sofia	2005	The Deceitful Face of Hope and Despair	X	
Hillborg, Anders	2006	Eleven Gates	X	
Trojahn, Manfred	2007	The Tomb of Paganini	X	
Trojahn, Manfred	2007	Occhi Mie for High Voice and Orchestra	X	
Trojahn, Manfred	2009	Two Pieces for Orchestra	X	
Hillborg, Anders	2010	Cold Heat	X	
Trojahn, Manfred	2010	Five Dreams for Eusebius	X	
Trojahn, Manfred	2010	Autumn Music	X	
Trojahn, Manfred	2010	Moderato	X	
Raskatov, Alexander	2011	A White Night's Dream	X	
Trojahn, Manfred	2011	<i>Orest</i>		X
Raskatov, Alexander	2014	<i>Missa Byzantina</i>	X	
Raskatov, Alexander	2015	Green Mass		X

APPENDIX B

TROMBONE ENSEMBLE WORKS INCLUDING CONTRABASS TROMBONE Sorted by Composer

Composer	Date	Title	Ensemble Size
Bourgeois, Derek	2005	Osteoblast	8
Bowie, Gordon	1999	Tromvision	6
Bowie, Gordon	1998	Festival Prelude	6
Brito, José	2005	Der Fünfte Himmel	8
Crespo, Enrique	1996	Bruckner Etude for Low Brass	6
DiLorenzo, Anthony	2013	Full Tilt	8
Koetsier, Jan	1994	Concerto Grosso	8
Mackey, John	2012	Hymn to a Blue Hour	1+8
Peperkamp, Rick	2012	Through the Core	6
Peperkamp, Rick	2014	Journey of a Thousand Miles	8
Peperkamp, Rick	2014	The Lost Cathedral	8
Verhelst, Steven	2017	Fragile	4 contras
Wagner Arr. Ben van Dijk	2004	Wagner for Five Bass Trombones	5

Sorted by Date

Composer	Date	Title	Ensemble Size
Koetsier, Jan	1994	Concerto Grosso	8
Crespo, Enrique	1996	Bruckner Etude for Low Brass	6
Bowie, Gordon	1998	Festival Prelude	6
Bowie, Gordon	1999	Tromvision	6
Wagner Arr. Ben van Dijk	2004	Wagner for Five Bass Trombones	5
Bourgeois, Derek	2005	Osteoblast	8
Brito, José	2005	Der Fünfte Himmel	8
Mackey, John	2012	Hymn to a Blue Hour	1+8
Peperkamp, Rick	2012	Through the Core	6
DiLorenzo, Anthony	2013	Full Tilt	8
Peperkamp, Rick	2014	Journey of a Thousand Miles	8
Peperkamp, Rick	2014	The Lost Cathedral	8
Verhelst, Steven	2017	Fragile	4 contras

APPENDIX C

SOLO WORKS FOR CONTRABASS TROMBONE

Sorted by Composer

Composer	Date	Title	Unaccompanied	Piano	Other
Cortazzo, Jeffrey	2017	Full Moon Ascending		X	
Deemer, Rob	2010	Brobdingnag	X		
Fennelly, Brian	1980	Tesserae IV/V	X		
Kenny, John	2004	Sonata for Contrabass Trombone	X		
Kruglik, Vyacheslav	2014	Winnie-the-Pooh and the Bees			Eleven trombones
Luis, Ingo	2014	Despite All Spirits			Brass & Perc
Mantynen, Harri	2001	<i>Duelli</i>			Wind ensemble
McComas, Inez	2015	Ticket for the Train			Recording
Pagán-Pérez, William	2013	Short Piece		X	
Peperkamp, Rick	2015	Hammer It!	X		
Plog, Anthony	1992	Statements		X	
Sweden, John	2007	Waltz - <i>La Souterraine</i>		X	
Tortosa, Gaspar	2012	<i>Etiam Concierto</i>			Band, Orchestra
Warburton, Jonathan	2014	Boblix	X		
Wilson, Kenyon	2018	Cruise Elroy		X	
Wroblenski, Micky	2002	Elegy for Contrabass Trombone and Piano		X	
Zaragozá, Miguel	2015	<i>Castillejo</i>		X	

Sorted by Date

Composer	Date	Title	Unaccompanied	Piano	Other
Fennelly, Brian	1980	Tesserae IV/V	X		
Plog, Anthony	1992	Statements		X	
Mantynen, Harri	2001	<i>Duelli</i>			Wind ensemble
Wroblenski, Micky	2002	Elegy for Contrabass Trombone and Piano		X	
Kenny, John	2004	Sonata for Contrabass Trombone	X		
Sweden, John	2007	Waltz - <i>La Souterraine</i>		X	
Deemer, Rob	2010	Brobdingnag	X		
Tortosa, Gaspar	2012	<i>Etiam Concierto</i>			Band, Orchestra
Pagán-Pérez, William	2013	Short Piece		X	
Kruglik, Vyacheslav	2014	Winnie-the-Pooh and the Bees			Eleven trombones
Luis, Ingo	2014	Despite All Spirits			Brass & Perc
Warburton, Jonathan	2014	Boblix	X		
McComas, Inez	2015	Ticket for the Train			Recording
Peperkamp, Rick	2015	Hammer It!	X		
Zaragozá, Miguel	2015	<i>Castillejo</i>		X	
Cortazzo, Jeffrey	2017	Full Moon Ascending		X	
Wilson, Kenyon	2018	Cruise Elroy		X	

APPENDIX D

ALL WORKS INCLUDING CONTRABASS TROMBONE

Composer	Date	Title	Symphonic Orchestra	Opera	Ensemble Size	Unacc.	Piano	Other
Wagner, Richard	1869	<i>Das Rheingold</i>		X				
Wagner, Richard	1870	<i>Die Walküre</i>		X				
Wagner, Richard	1876	<i>Siegfried</i>		X				
Wagner, Richard	1876	<i>Götterdämmerung</i>		X				
Verdi, Giuseppe	1887	<i>Otello</i>		X				
Verdi, Giuseppe	1893	<i>Falstaff</i>		X				
Puccini, Giacomo	1896	<i>La Bohème</i>		X				
Verdi, Giuseppe	1898	<i>Quattro Pezzi Sacri (Stabat Mater)</i>		X				
Puccini, Giacomo	1900	<i>Tosca</i>		X				
D'Indy, Vincent	1903	Symphony No. 2	X					
D'Indy, Vincent	1905	<i>Jour d'été à la Montagne, Op. 61</i>	X					
D'Indy, Vincent	1906	Souvenirs, Op. 62	X					
Holbrooke, Joseph	1907	Symphony No. 1	X					
Strauss, Richard	1909	<i>Elektra</i>		X				
Webern, Anton	1909	<i>Sechs Stücke (not 1928 rev.)</i>	X					
Holbrooke, Joseph	1910	<i>Dylan</i>		X				
Ropartz, Joseph Guy	1911	Symphony No. 4 in C Major	X					
Schoenberg, Arnold	1913	<i>Gurrelieder</i>	X					

Szymanowski, Karol	1916	Symphony No. 3	X					
D'Indy, Vincent	1918	Symphony No. 3 (Sinfonia Brevis de Bello Gallico), Op. 70	X					
D'Indy, Vincent	1921	Poème des Rivages, Op. 77	X					
Krenek, Ernst	1922	Symphony No. 2	X					
Respighi, Ottorino	1924	<i>Il Pina di Roma</i>	X					
Berg, Alban	1925	<i>Wozzeck</i>		X				
Varèse, Edgar	1925	<i>Intégrales</i>	X					
D'Indy, Vincent	1926	Diptyque Méditerranéenne, Op. 87	X					
Puccini, Giacomo	1926	<i>Turandot</i>		X				
Brian, Havergal	1927	Symphony No. 1 in d minor ("The Gothic")	X					
Varèse, Edgar	1927	<i>Arcana</i>	X					
Varèse, Edgar	1927	<i>Amériques</i>	X					
Reznicek, Emil Nicolaus	1931	<i>Der Gondolier des Dogen</i>		X				
Brian, Havergal	1932	Symphony No. 3	X					
Respighi, Ottorino	1932	<i>Belkis, Regina di Saba</i>		Ballet				
Bach, Johann Sebastian/ Wood	1935	Tocatta and Fugue in d minor	X					
Tyberg, Marcel	1943	Symphony No. 3	X					
Sorabji, Kaikhosru Shapurji	1951	Symphony Jami	X					
Butting, Max	1956	Symphony No. 9	X					

Stravinsky, Igor	1956	<i>Canticum Sacrum</i>	X					
Stockhausen, Karlheinz	1957	<i>Gruppen</i>	X					
Boulez, Pierre	1960	<i>Pli Selon Pli</i>	X					
Brown, Earle	1962	<i>Available Forms II</i>	X					
Cerha, Friedrich	1963	Spiegel V	X					
Ligeti, György	1965	<i>Requiem</i>	X					
Zimmerman, Bernd Alois	1965	<i>Die Soldaten</i>		X				
Zimmerman, Bernd Alois	1965	Dialog - Concerto for Two Pianos	X					
Cerha, Friedrich	1968	Spiegel I	X					
Varèse, Edgar	1968	<i>Nocturnal</i>	X					
Boulez, Pierre	1970	<i>Éclat/Multiples</i>	X					
Zimmerman, Bernd Alois	1970	<i>Ich wandte mich und sah an alles Unrecht, das geschah unter der Sonne</i>		X				
Zimmerman, Bernd Alois	1970	<i>Stille und Umkehr</i>	X					
Cerha, Friedrich	1972	Spiegel VII	X					
Ligeti, György	1977	<i>Le Grand Macabre</i>		X				
Cerha, Friedrich	1980	<i>Netzwerk</i>	X					
Fennelly, Brian	1980	<i>Tesserae IV/V</i>				X		
Cage, John	1981	Thirty Pieces for Five Orchestras	X					
Henze, Hans Werner	1984	Symphony No. 7	X					
Cerha, Friedrich	1988	<i>Monumentum Für Karl Prantl</i>	X					

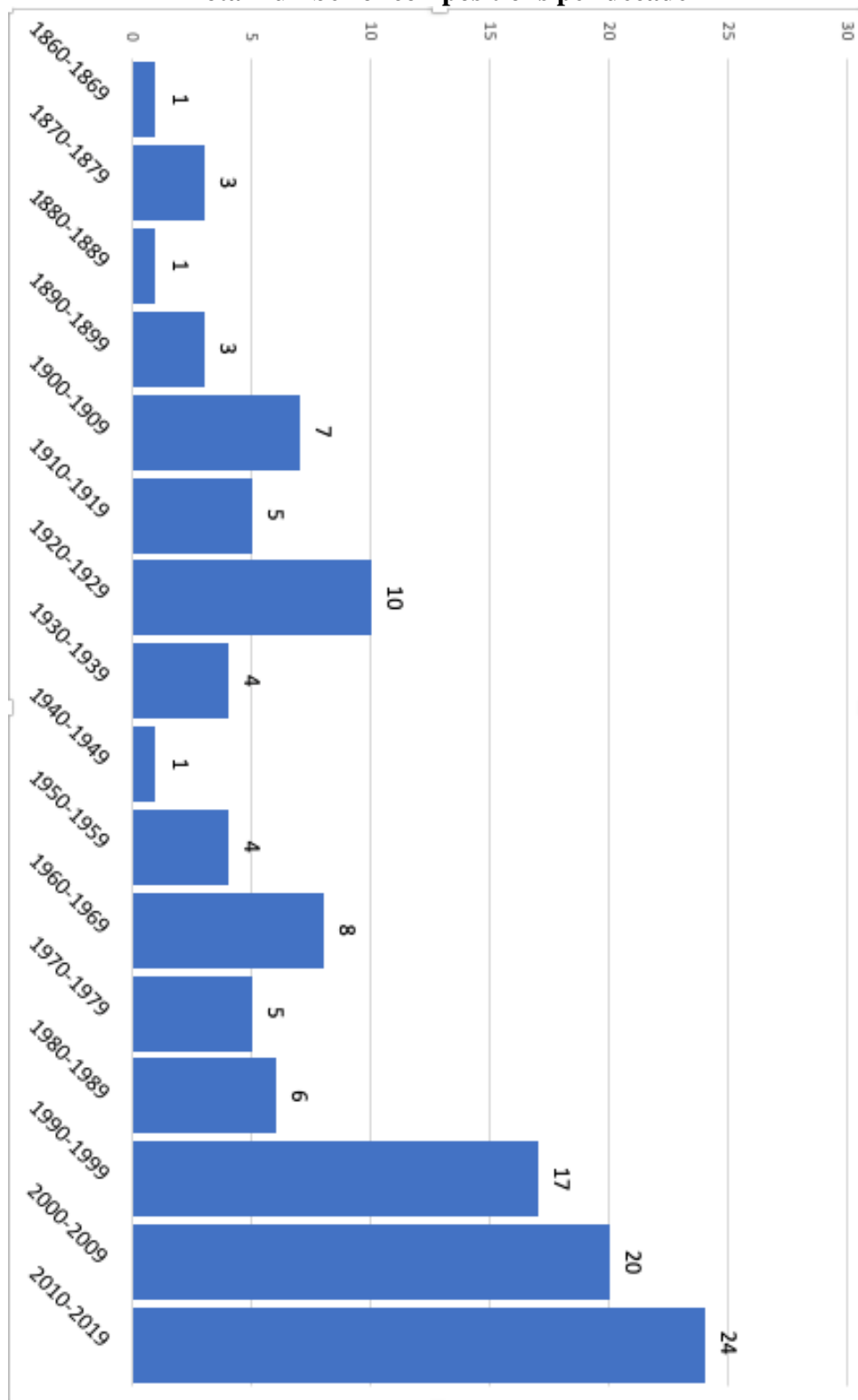
Winbeck, Heinz	1988	Symphony No. 3 "Grodek"	X					
Birtwistle, Harrison	1991	<i>Gawain</i>		X				
Goebbels, Heiner	1991	<i>La Jalousie - Geräusche aus einem Roman</i>	X					
Plog, Anthony	1992	<i>Statements</i>					X	Wind ensemble
Henze, Hans Werner	1993	<i>Requiem</i>	X					
Gubaidulina, Sofia	1994	<i>Figures of Time</i>	X					
Koetsier, Jan	1994	<i>Concerto Grosso</i>			8			
Crespo, Enrique	1996	Bruckner Etude for Low Brass			6			
Henze, Hans Werner	1997	Symphony No. 9	X					
Maxwell Davies, Peter	1998	<i>Roma Amor</i>	X					
Trojahn, Manfred	1998	<i>Was Ihr Wollt</i>		X				
Bowie, Gordon	1998	<i>Festival Prelude</i>			6			
Gubaidulina, Sofia	1999	<i>Two Paths</i>	X					
Gubaidulina, Sofia	1999	<i>St. John Passion</i>	X					
Norgard, Per	1999	Symphony No. 6 ("At the End of the Day")	X					
Woolrich, John	1999	<i>The Old Year</i>	X					
Bowie, Gordon	1999	<i>Tromvision</i>			6			
Gubaidulina, Sofia	2001	<i>Rizonanza</i>	X					
Mantynen, Harri	2001	<i>Duelli</i>						
Henze, Hans Werner	2002	Symphony No. 10	X					
Hillborg, Anders	2002	<i>Exquisite Corpse</i>	X					

Wroblenski, Micky	2002	Elegy for Contrabass Trombone and Piano					X	
Gubaidulina, Sofia	2003	<i>The Light of the End</i>	X					
Gubaidulina, Sofia	2003	<i>Under the Sign of Scorpio</i>	X					
Abrahamsen, Hans	2004	Four Pieces for Orchestra	X					
Elfman, Danny	2004	<i>Serenada Schizophrana</i>	X					
Trojahn, Manfred	2004	Symphony No. 5	X					
Trojahn, Manfred	2004	Four Pieces for Orchestra	X					
Wagner Arr. Ben van Dijk	2004	Wagner for Five Bass Trombones			5			
Kenny, John	2004	Sonata for Contrabass Trombone				X		
Gubaidulina, Sofia	2005	<i>The Deceitful Face of Hope and Despair</i>	X					
Bourgeois, Derek	2005	<i>Osteoblast</i>			8			
Brito, José	2005	<i>Der Fünfte Himmel</i>			8			
Hillborg, Anders	2006	<i>Eleven Gates</i>	X					
Trojahn, Manfred	2007	<i>The Tomb of Paganini</i>	X					
Trojahn, Manfred	2007	Occhi Mie for High Voice and Orchestra	X					
Sweden, John	2007	<i>Waltz - La Souterraine</i>					X	
Trojahn, Manfred	2009	Two Pieces for Orchestra	X					
Deemer, Rob	2010	<i>Brobdingnag</i>				X		
Hillborg, Anders	2010	<i>Cold Heat</i>	X					
Trojahn, Manfred	2010	<i>Five Dreams for Eusebius</i>	X					

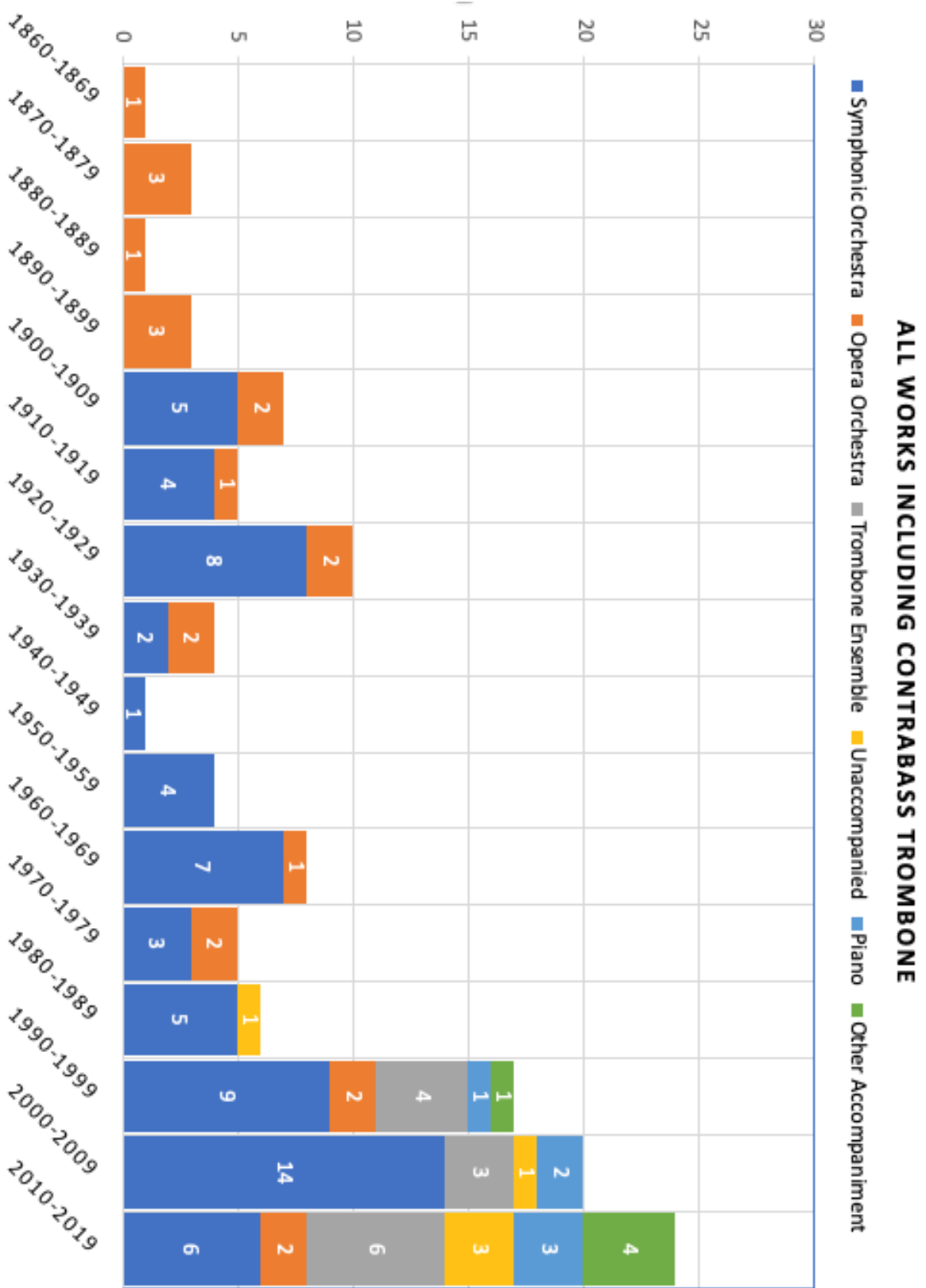
Trojahn, Manfred	2010	<i>Autumn Music</i>	X					
Trojahn, Manfred	2010	<i>Moderato</i>	X					
Raskatov, Alexander	2011	<i>A White Night's Dream</i>	X					
Trojahn, Manfred	2011	<i>Orest</i>		X				
Mackey, John	2012	<i>Hymn to a Blue Hour</i>			1+8			
Peperkamp, Rick	2012	<i>Through the Core</i>			6			
Tortosa, Gaspar	2012	<i>Etiam Concierto</i>						Band, Orchestra
DiLorenzo, Anthony	2013	<i>Full Tilt</i>			8			
Pagán-Pérez, William	2013	<i>Short Piece</i>					X	
Raskatov, Alexander	2014	<i>Missa Byzantina</i>	X					
Peperkamp, Rick	2014	<i>Journey of a Thousand Miles</i>			8			
Peperkamp, Rick	2014	<i>The Lost Cathedral</i>			8			
Kruglik, Vyacheslav	2014	<i>Winnie-the-Pooh and the Bees</i>						Eleven trombones
Luis, Ingo	2014	<i>Despite All Spirits</i>						Brass & Perc
Warburton, Jonathan	2014	<i>Boblix</i>				X		
Raskatov, Alexander	2015	<i>Green Mass</i>		X				
McComas, Inez	2015	<i>The Ticket for the Train</i>						Recording
Peperkamp, Rick	2015	<i>Hammer It!</i>				X		
Zaragozá, Miguel	2015	<i>Castillejo</i>					X	
Verhelst, Steven	2017	<i>Fragile</i>			4 contras			
Cortazzo, Jeffrey	2017	<i>Full Moon Ascending</i>					X	
Wilson, Kenyon	2018	<i>Cruise Elroy</i>					X	

APPENDIX E
CHARTS DEPICTING INCREASING GROWTH IN CONTRABASS TROMBONE
REPERTOIRE

Total number of compositions per decade



Number of compositions by ensemble or accompaniment type



APPENDIX F

ANSWERS TO INTERVIEW QUESTIONS ARRANGED BY INTERVIEWEE

Bill Reichenbach

How often do you get to play contra?

It really depends on what is happening. On a big feature film, I'll always have both horns (bass and contrabass) and I will probably be playing some contra. It probably averages out that I am playing it at least a little every week. When I say average, that's what it is. Some weeks I won't play it, but some weeks I'll play it every day. That is the nature of freelancing.

Do you bring your contra with you regardless of what is specified by the contractor?

Quite often, I do. Especially depending on who the composer is and what knowledge I might have of them. For example, I don't take it when I'm working with John Williams because I know that he does not use contra. He will write bass trombone parts down to about pedal F and that is basically where he stops.

Phil Teele would be a much better reference for composers and their use of contra. I think he was one of the first guys to play contra out here. There might have been a few others, probably playing those BBb Miraphones. They're almost unplayable. Those were around because Miraphone had some sort of production facility out here (LA) for a while. They were never very easy to play. They were basically a bad copy of the Conn that Roger Bobo had. I bought it from Roger and owned it for a year, then sold it back to Roger. I couldn't play that horn either. He had that horn at Eastman. I went to Eastman. I remember seeing pictures of Remington's studio and Bobo playing contra in the trombone choir. I thought "that's the coolest thing I've ever seen!" I actually bought it from him. The double slide is tough. I don't know if there is some way to develop it to where it will actually play. Maybe make all four slide tubes an increasing bore size.

Robb Stewart built me a contra with a double slide in Eb. I sold it to Brandon Moody. I had the slide built long enough that it could have eight positions. Basically, the positions are like alto trombone. There was enough room to add an extra position on the slide. It was basically an experiment. I don't know that much about the slide bore works so I just had some slide tubes drawn at .600 bore down at Kanstul and we built it around that.

I'm talking to some guys down at Schilke, because they bought Greenhoe, about developing a contra. It would probably be an F contra based on an enlarged version of the Greenhoe bass trombone.

How do you decide to play bass trombone or contrabass trombone on a given piece of music?

I've been asked this by an orchestrator. I think his goal was to trick us into an answer so we wouldn't have to charge for the double. This is the same guy that has told the tenors that they should be able to just use a tenor with an f attachment and not call it a bass trombone, because that's the way the guys in England do it. Then we found out that isn't how they do it.

I play the horn that I think sounds best on the part.

Some notes sound better as pedals on bass trombone than as trigger notes on contra. Sometimes it could be the opposite. It really depends on the context and the sound that best fits with what else is going on.

Generally speaking, the sound of the contra is just bigger throughout the lower range. In the studio, with the way they set up the microphones, you don't necessarily have to be blowing everything flat out, shockingly loud in order to get it on the recording and have it sound good. Unfortunately, a lot of times composers are intent on getting this crunchy, edgy sound. Basically trying to recreate the sounds they have in their sample library (that can be held indefinitely). There is a lot of buzz on those notes and they're playing it so loud that it can be impractical to play it on bass trombone. So that can justify playing it, then it just comes down to whether you can get a reasonable sound on the contra.

What are you playing on right now?

I have a Haag. It has Thayer valves. It was one of the early ones. Back then he only made them with Thayer valves. Now he has some options. F/C/Db/A.

I'm not a big fan of the Thayer valves. They're noisy and heavy.

If I designed a contra it would have enlarged rotary valves because they're more efficient. I've never had a bass trombone with Thayer valves on it either. I've just never been in that school of thought.

I first tried the Haag at the ITF when it was in Austria. All I had with me was my Minick bass trombone mouthpiece (1 1/4G ish) and what surprised me was that it played so well even with that mouthpiece.

How do you distinguish the ideal sound of bass vs. contrabass?

First, my concept of bass trombone sound is probably more compact than a lot of people. A lot of times I'm not able to do that because of the volume and size of the stuff they want us to play, but when it's just me on a solo or something I try to keep it sounding like a trombone instead of a euphonium with a slide. The bass trombone world is starting to find its way back to that.

My idea of sound on contra really just comes from playing it a lot. There aren't many other people to listen to to form your sound. It's just a slightly larger version of my bass trombone sound. I don't want it to sound like a tuba with a slide. I want it to sound like a low trombone with a slightly wider sound by percentages.

I played a few other contras that I felt missed that. They get caught up in that big, broad, almost woofy sound. That's not what I want to do at all.

With recording, the more center you have to the sound, the better you are going to sound through the microphone. That's why, through the years, out here in the studio business, in all the commercial stuff and even in the film scores, all the guys played 2B's and small Bachs. George Roberts played that single trigger Conn. They're all conservative, middle of the road, tight horns. The microphone, if you're using it right, will end up capturing more of that sound than a sound that spreads. When the sound spreads, you're missing the microphone and you aren't getting the bang for the buck that you're putting into the horn. A funny thing about George Roberts is that, sitting next to him, you may not be able to hear him play, but on the playback, you couldn't hear yourself. His sound was so focused it was just doing what it had to do. That was what I was always trying to do.

Has the frequency of being asked to play contra changed in recent years?

It (contra playing) has actually gotten a lot more prevalent. The way they're writing for low brass, the entire trombone section will frequently be doubling on bass trombone. Three or four bass trombones and one contra, sometimes two contras. It is a lot of fun. Sometimes it is really exhausting.

It has definitely increased. I see a lot more parts that specifically say contrabass trombone. For a long time, I was sitting next to Phil Teele, and because of his seniority in the business I would be playing the upper part while he was on contra. Sometimes we would be playing the same notes, but I would be on bass and Phil on contra. I ended up starting to take a contra and sometimes we would both play contra.

I ended up doing a TV show this year, it was just on last night, a live action production of "The Christmas Story." We had several days of recording. The call was actually bass and contrabass trombone. Strangely, the parts they had written for contra, I would have normally thought would be tuba parts. One and three oompas like a traditional tuba part and they had it on contrabass trombone. That's what they wanted. It was a lot of fun but some of it was quite difficult. A lot of it was in five sharps. It was a bit of a mind twister. They were in a hurry on top of that while we're sightreading this stuff in these weird keys on F trombone. One thing that Phil and I have laughed about a lot is that sometimes you're going along and you forget which horn you're playing. There's just enough the same to get them confused every once in a while. It was nice to get to play it for three days solid. I don't really get to play it all the time and I don't really practice it at home. It was nice to get to work out some of my demons on it.

To answer your question: I'm seeing more contra parts and I think they're writing more parts for contra specifically. Now I'm sort of doing what Phil was doing. He's not as busy in the studios at this point so I'm sitting in that chair now.

One thing that happened around the same time as the introduction of contra was cimbasso. Really, it is just a valve contrabass trombone. I think a big part of cimbasso getting on the scene was Tommy Johnson, who was the first call tuba player out here for many years. He was a pretty aggressive salesman for it. He could play it really well and it's funnier looking than a contrabass trombone. He would have the composers and orchestrators come over and he would show it to them. At the same time, Phil Teele might be sitting right next to Tommy Johnson playing contrabass trombone and Phil is really quiet. Phil wasn't going to demonstrate or any of that, so, for a while, cimbasso got a stronger foothold. Even now, it seems like cimbasso is still a little more present than contrabass trombone. When I go in and I'm on one of these big, loud science fiction movies, I take the contra. Doug Tournquist is usually playing tuba and cimbasso. When he's playing cimbasso and we're playing related parts, I'll play contra because I think it works better. You might call that politics within the business or just the way it developed. I've been doing "The Simpsons" for about five years now, even with the new composer. Usually, the third book is bass trombone and tuba. All of a sudden, one time I got a call for cimbasso. I don't have a cimbasso. I called up the contractor and told him I don't have one and I probably won't have time to borrow one. He told me to talk to the composer. They got a tuba player that had a cimbasso, but when that guy had to pick up the bass trombone and play it, it wasn't so good. The next time it came up, I said, "contrabass trombone and cimbasso are basically the same except for the valve arrangement, and I assure you, when it comes to an intonation issue, with a slide you can fix it immediately." I did it once and that was it.

Usually, they just write what they want and it is up to us to decide what to play. A couple of my orchestrator friends know that I will be the one playing it. Like on the Transformers movies and The Fast and the Furious movies. Bryan Tyler usually writes stuff that goes super low. Steve Jablonski writes that way, too for the Transformers movies. Also, the Pirates of the Caribbean movies always have at least one contra, maybe two. They usually also have three tubas. So, you're really bathing in the colors of all of those low instruments. We record the brass parts separately from the rest of the orchestra. Sometimes the parts are barely playable. That's a problem with film music sometimes is that sometimes the part goes beyond what the instrument can do, and you have to make it seem like you're doing it. A lot of times they just want the notes to be too long for human lungs to produce. When we did Captain Phillips the brass section was 6 french horns and 8 trombones. They had to add a ninth trombone so we could have two contras. The contra part was so sustained and they were being so picky about hearing the breaths that one person just couldn't do it. They had to hire another contrabass trombone so we could cover each other breathing. It wasn't all that loud but they could hear every breath. We literally had to work out every note so we could fade out and breathe quietly, then fade back in in time for the other one to breathe. We knew who was going to breathe where. We had to build shape into it so they couldn't hear the notes stopping or starting. They were listening that close. Each breath took a little longer because we had to be so quiet. A lot of the time, on contra, you aren't holding notes longer than a few beats, especially on low notes. I remember the movie seemed to be in d minor or something. There were a lot of pedal D's. Probably a few C's and B's and Bb's and it seems like, when you're that low, the air seems to move through the horn pretty quickly.

Having spent this much time playing contra, what do you still find difficult?

The mechanics are different. How far you have to move. A good, Rochut legato is still difficult for me. It's probably because I don't practice it that way much, but they're not asking for that. With all of my training on bass trombone and all of that smooth legato playing I did, and do, on bass trombone, I miss feeling like I can do that well. It's harder and the distances on the slide are greater. Then sometimes they write stuff that's way out there on the slide with both triggers, like F#. That's where I wish I had an ascending valve, to make that easier.

Steve Trapani

How often do you get to play contra?

As often as my schedule allows. If I'm working on it that week or if something is coming up, then I'll play it every day. For me there are other doubles such as tuba and tenor trombone that also need to be maintained, not to mention my teaching studio at Long Beach State.

Do you bring your contra with you regardless of what is specified by the contractor?

It depends on the situation. Most of the time you'll know beforehand from the contractor or the principal of the section whether or not you'll need it. When in doubt I'll bring it and leave it in the car.

How do you decide whether to play contra or bass on a given piece of music?

Tricky question. In my humble opinion, contra sounds the best on pedals, and anything below pedal F really sounds better on contra than on bass. This seems to be the point at which most of my colleagues will put the bass down and pick up the contra. For me, basically anything below the staff can be played on contra. Anything in or above the staff is almost always going to sound better on bass. In studio settings I follow the rule of “play it on the horn that’s going to make it sound the best” that I’ve heard from studio trumpeter, Dave Washburn. This seems to be what Bill Reichenbach does when I’ve played with him although I’ve never discussed it with him.

When I play contra in classical settings, such as with the LA Phil, I generally do the same thing if I am given the choice, although sometimes if it says contra on the part you play contra, period. The Phil is really great about this, but the issue comes down to whether or not the people in charge are willing to pay the double or not. In a perfect world that means if it says contra on the top of the page, you get paid to bring and play contra and can choose to use it when you believe it will sound the best. Sometimes they (the people in charge) don’t want to pay a double, though, and regardless of whether you brought the horn or not, and whether it says contra or not on the top left, you are forced to play everything on either bass or on contra. I’ve been paid to play Eb’s above the staff on contra and pedal C’s on bass.

How do you distinguish the ideal sound of bass vs. contrabass?

Generally anything below the staff is fair game for contra, but many times technique will be the limiting factor. I’m usually going to have more technique on bass than contra, so I will tend to favor bass if there are fast notes. Below pedal F, however, there aren’t many occasions where you’re asked to play with too much technique. It does happen, however. The latest Pirates of the Caribbean movie was basically a contra concerto for Bill Reichenbach, although not much made it to the surface on the final cut of the movie. If it’s just sound that is the determining factor then I’ll wait to pull out the contra until low C or below, because in general I’m probably going to sound better on bass up to that point (so to speak).

Has the frequency of being asked to play contra changed in recent years?

For me, yes. I’m relatively new to the film scene, but I haven’t been asked to play contra anywhere, except for the last 6-7 years. My opinion is that the composers have some really amazing tools, such as the Vienna Philharmonic sound library, which have trombone samples that sound really good. They can match that brassy/edgy quality that we get on real trombones, but the difference is that the samples can sustain those notes indefinitely. Think of any superhero, horror, or suspense movie or trailer that you’ve heard in the last several years and they all have that “holy cow” kind of trombone section sound that you used to only be able to hear for a second or two on recordings of Strauss, Mahler, or Wagner if the mic-ing and mixing was correct. They’ve isolated and distilled that sound now and can sustain it indefinitely. They can also crescendo or diminuendo it in a way that is very difficult to pull off with a live section. When determining the difference between live trombones and samples the articulations and releases are still key, however, and I think it’ll still be a while before a sample will be able to match a human in those areas.

To get back to your question, however, I think those composers are hearing things that are possible on those relatively new samples that sound really amazing. Things they’ve never heard before because they’re not really possible with human lungs, and they’re trying to recreate those

things with 6-12 member trombone sections with multiple contrabass trombones. Not to mention F and sometimes CC cimbassos!

Is there anything else I need to know about the contrabass trombone's role in the film industry? Beyond what I've already said, I think that others, such as Bill Reichenbach or Phil Teele would be in the best position to answer this question.

Who else should I talk to? Including composers/arrangers? Definitely Bill Reichenbach. Alex Iles, Bill Booth, Steve Holtman, and Alan Kaplan can also give you historical context. Steve and Alan also play contra.

Bruce Fowler is a trombone player/arranger who would have some good insight. Other LA players to talk with would be Phil Teele, Craig Gosnell, Phil Keen, George Thatcher, and Ken Kugler. A discussion of contrabass trombone in recording would be incomplete without also talking with Dave Ridge from the SF Opera. He has a particularly amazing pedal register on bass or contra and is the main guy in the Skywalker Studios recording scene. There's a YouTube clip from the session for "Hellboy" that you might want to check out with some juicy pedal Db's.

Alex Iles

How often do you get to play contra?

I'm actually not the best person to ask. I have a contra and started working on it, but I don't accept calls for it. So your first few of questions don't really apply to my situation.

Do you bring your contra with you regardless of what is specified by the contractor?

It seems like the contra players choose it when the parts are way low for extended periods. Or if the piece demands especially strong low notes. Most of them have it in the car for most film scoring calls.

How do you decide whether to play contra or bass on a given piece of music?

Very often, they choose contra themselves although several composers and orchestrators request it specifically.

How do you distinguish the ideal sound of bass vs. contrabass?

To me, the "ideal" sound matches the demands of the music which is often an extension of the sound effects or sound design of the film. Flexibility is extremely important. Bass and Contra players often have to put out a lot of sound, but I like it when players apply musical common sense to their job?!

Has the frequency of being asked to play contra changed in recent years?

Contra is pretty common. More tenor/bass players are doubling on it too. I'm kind of slow to jump on board, but I think I will be playing it more in the next year or so!!

Who else should I talk to?

Alan Kaplan or Steve Holtman would have more to say for sure. They are primarily tenor players but are fantastic bass and Contra "doubblers".

Could you elaborate on how common contra is becoming?

To be honest only about 4 or 5 bass trombone players in LA play Contra with any regularity and of those maybe 2-3 really play it more than once or twice a month for work on average. Phil Teele really introduced it to composers in the 70's. He and Bill Reichenbach were the primary contra players for 20 years. Then about 3-4 more players started playing it too [usually subbing for one of those guys].

I would say that it is most important for an "up and coming" bass trombonist to really focus on the bass and start to pick up the contra as a fun secondary instrument.

Alan Kaplan

How often do you get to play contra?

I probably get called to play contra about once every month or two. However, since I need to be prepared to play it at any time, I practice it everyday. I generally am called for higher chairs but often enough I will be hired to play bass trombone, contra, or even tuba.

Do you bring your contra with you regardless of what is specified by the contractor?

I don't bring the contra unless I'm specifically asked to do so. Same goes for tuba and euphonium. I always bring large, medium, and small-bore tenors along with bass trombone to every job. The lines between tenor and bass have become quite blurred so it's always best to have both options there.

How do you decide whether to play contra or bass on a given piece of music?

I always prefer to hear the bass trombone whenever possible. Even in the best of hands a contra can get woofy and pitchy in the staff and above. When the music specifies loud and accented pedal notes the contra is certainly more effective. The challenge is that there can be all those pedals and then some melodic lines going into the staff on the same piece of music. If there is time to switch horns it's fine but if not, it requires a judgement call. In those cases I usually opt for bass trombone. Most of us can play pretty loud pedals on bass.

Has the frequency of being asked to play contra changed in recent years?

The contra was only used sparingly when I started working in the 70's. It was the advent of the cimbasso in the 80's that brought the contra into prominence. The tuba players were suggesting the cimbasso for more edge on the low notes. As composers began to write more and more low sound effects from the brass, the bass trombone players started bringing contra more.

Is there anything else I need to know about the contrabass trombone's role in the film industry?

Since more and more music is being composed electronically, the demands on the contra and really all low brass have become at times unreasonable. The requirements for breathing aren't often considered. Luckily there are usually more than one player so we can figure ways to spell each other. I've been on many movie sessions where there were four of us playing contras.

You said you practice contra every day. What do you do? Do you have a set “routine” or a few things to pick from? I’d also be interested to know about how you touch on each horn to keep them all familiar and comfortable.

I generally like to start my practice sessions on tuba. Then I go to the contra. And work my way up through the horns until I get to the small tenor last. I play a combination of exercises, etudes, and some excerpts from various Studio sessions I've done on all the instruments. I've kept a collection of all the difficult things that I've come across in my career to keep me sharp and to present to students at masterclasses.

I sort of feel that muscle memory can almost take the place of strength. If I touch on every instrument that I play particularly every different mouthpiece size, I can stay strong on pretty much all of them. I like I multitask too by practicing tonguing on any of the instruments I happen to be playing so that I don't have to spend time doing that on every single instrument.

What kind of contra do you have? What mouthpiece do you use?

Yes, I am still using a Jinbao contrabass trombone and the custom Warburton mouthpiece.

I’m curious about the Warburton contra mouthpiece. What are the specs, if you know them? Or what is it similar to? What do you like about it? What lead you to that decision?

My Warburton is their 26D tuba rim and cup with basically a copy of my JK 2A. It's a pretty good combination but I'm still looking for something that might be better.

What does a “normal” studio day look like?

I can't really describe a typical studio day. They can be vastly different. It can be cartoons involving lots of mutes and styles, it can be very orchestral, it could be a big band and strings for a singer, or just about anything. I just try to be prepared and have the ability and the accessories I need for whatever I might need to play.

Bob Sanders

How often do you get to play contra?

For starters, I am retired presently, so my perspective is not current.

Contra use has changed over the years. In the 80s contra in film music was fairly rare; I certainly didn't have one. Don Waldrop & Phil Teele were the primary purveyors. Now there are, I would guess, more than a dozen folks playing contra.

These days, contras and cimbassi are ubiquitous and frequently in multiples.

The role of low brass in film in general would appear to be: if something bad is happening, trombones play loud; if something bad is imminent, trombones play soft. Contras amplify this effect. Also, low frequencies don't compete with dialogue. In a bygone era, the trombone would be used to score the occasional love scene – “trying to play a fifth too high” (thank you, Lloyd Ulyate).

As to how often: when I started, it was once in blue moon; before I retired it became about 30% of the time on film calls; it may be more now - ask the current crop.

Do you bring your contra with you regardless of what is specified by the contractor?

Yes, I would always bring the contra and a tenor to work. (I would also have a tuba or two in the trunk.) If contra was specified there was no question.

How do you decide whether to play contra or bass on a given piece of music?

Otherwise, if it looked to be a contra part, I would ask if the composer would like to hear the part on contra (first asking the contractor's opinion). Economics/budget were always part of the calculus; some leaders/contractors were pretty laissez-faire about paying for doubles, others not so much.

How do you distinguish the ideal sound of bass vs. contrabass trombone?

I like the contra to sound like a bigger, "fatter" bass trombone – different from a tuba and different from a cimbasso. Despite the fact that a cimbasso is a valve contrabass trombone, it has a vastly different color and "weight" – particularly the big CCs that some of the tuba players use on movies.

I would definitely talk to Phil Teele who was one of the contra pioneers. Pretty much any bass trombone player who does film work today would be worth talking to.

Would you mind elaborating on the difference between contra and cimbasso a bit more? With regard to color and weight?

Cimbassi are usually played by tuba players (although, as a tuba owner/operator, I owned a CC cimbasso for a while) with tuba-ish mouthpieces; contras are usually played by trombonists with (larger) trombone-ish mouthpieces; cimbassi are usually larger bore. All that results in a difference in timbre and "weight," as one might imagine. Also, cimbassi are valve, not slide, contrabass trombones; that makes a timbral difference, too. In opera pits out here, I have seen mostly F cimbassi; in the studios, frequently I saw the CCs – bigger and heavier. Most contras these days seem to be in F. Occasionally, BBbs of both appear.

You said you didn't have a contra in the 80's. When did you break down and get one? What did you get? What do you have now?

I bought an Alexander contra sometime in the mid 90s. It was OK. In 1998 several of us purchased Haag contrabasses after Bill Reichenbach tried one at Musikmesse in Frankfurt. They are simply great! I can discern no faults - they sound like a really big trombone - no hint of tuba. There are many fine contras made today.

Can you think of any films or specific composers that you might consider "pivotal" in the growth of contra in the studios?

As to pivotal composers, Phil Teele can address that better than I; he got to the party well ahead of me (Waldrop is no longer with us, sigh). However, there are several contras and cimbassi in evidence in the giant brass sections in Joel McNeely's score to *Soldier* and Danny Elfman's score to *Planet of the Apes*. Most big brass scores these days seem to use both - when something blows up real good!

Craig Gosnell

How often do you get to play contra?

With the different films I've gratefully been called for, I'd estimate I play contra on about half of them. During those films, I think I play it about 1/3 of the time. There's also the rare call for it in situations outside of film music.

Do you bring your contra with you regardless of what is specified by the contractor?

I like to at least bring my contra with me in the car. If I am sitting lower in the trombone section, I will bring the instrument into the studio, but it might not ever leave its case. I find that it's good to be prepared in the event the instrument is needed.

How do you decide whether to play contra or bass on a given piece of music?

Besides the obvious situation of where the arranger/orchestrator/composer specifies exactly where he/she wants either instrument played, a number of factors have to be considered. While there is some overlap in the ranges of the bass and contra, each instrument will sound better in different situations. While its possible for a contra to play a fast-moving line, it might not be as nimble as a bass. Does the musical passage require a volume level on certain notes that would be easier to play on an instrument that needs to use valves to play them versus one that doesn't? What about tone color? A contra can be very useful when a particularly dark sound is required (a villain is revealed) or when very low pitches need to bark out with high energy (a chase scene or something with high action). Higher notes on contra, especially above F at the bottom of the bass clef start to be more "woofy" sounding as you continue to ascend in range. I compare it to a bass singer that is required to sing high in his range. The bass trombone could be a better choice then. The main focus is which instrument will sound best in the musical passage presented.

How do you distinguish the ideal sound of bass vs. contrabass?

There can be definite similarities between the two instruments. I feel like the contra is a lower extension of the bass, and it should have a darker and more robust tone quality. It's physically a larger instrument and should reflect that in its sound. It can be pushed to brightness with louder dynamics and be a bit like the bass's "evil power tool" big brother, yet can also be played softly and become the velvety cushion upon which the other trombones are stacked.

Has the frequency of being asked to play contra changed in recent years?

I think there has been a slow and steady increase in how often the contra is used, especially in film genres like action, horror, and sci-fi/fantasy.

Is there anything else I need to know about the contrabass trombone's role in the film industry?

Who else should I talk to? Including composers/arrangers?

I like to think of Bill Reichenbach as the definitive contrabass trombone guru in the film music scene today, at least here in the U.S. He has an incredible amount of experience and virtuosity on the instrument and would be an excellent source of information. Though mostly retired, Phil Teele is also a fantastic musician that has done a lot of masterful contra playing over his career.

Bruce Fowler has been using contra in his orchestrations for quite some time now and employs it very well!

Steve Holtman

Player questions

How often do you get to play contra?

I have only been playing contra semi-regularly somewhat recently, so I'm not really thought of in that role by many people yet... I have been playing it regularly on the new [Star Trek](#) TV show.

Do you bring your contra with you regardless of what is specified by the contractor?

Most of the time, now, but if I know I'm playing a really low chair then I might have it in the car...

How do you decide whether to play contra or bass on a given piece of music?

Most of the time it is because there are a lot of pedal notes.

How do you distinguish the ideal sound of bass vs. contrabass?

Not really sure what the question means... if you mean tone when I think it has to do with what the music is asking for.

Has the frequency of being asked to play contra changed in recent years?

It seems that many composers are using contra samples in their mock ups, then it is a little more common.

Composer questions

Do you write for contrabass trombone?

Most of the stuff I am composing wouldn't really need that element but sometimes.

What distinction(s) do you make when writing a low trombone part for contrabass vs. bass trombone?

Would probably only need contrabass if the music is needing something powerful and low

Could you describe your concept of the difference in the sound of bass and contrabass trombones?

Contrabass is usually for loud barky stuff but occasionally it is OK for soft passages but only because the notes that are written are pretty low.

How do you write differently for a low trombone vs. tuba? More specifically, contrabass trombone vs. tuba if there is a difference?

Tuba is a darker sound but contrabass trombone in unison with tuba is a nice combination.

Bruce Fowler

First of all, I'm really a tenor trombone player, with just a little bass trombone work under my belt, so I'll skip all those questions---I would refer you to Phil Teele, who's the best, in my opinion. I can give him your email, if you want.

As an orchestrator, I've written for contra for many years.

I let the players decide whether to use contra or bass, partly because there are so many different contras around.

I just think of the contra as a continuation of the bass trombone range.

As far as cimbasso, that's a tuba double, as you know.

I think of it as the bazooka of the tuba family. I use it to get the edgy sound. Usually somebody dies in the picture.

All these instruments are good for war and monster movies.

APPENDIX G

COMPILED ANSWERS TO INTERVIEW QUESTIONS SORTED BY QUESTION

How often do you get to play contrabass trombone?

Phil Teele: Just about every movie I do, I play both. Bass and contra. Just about every job. Sometimes, what is happening now and is really weird, they'll call me just to play contra alone and it's a scary idea because you don't know what they are going to write for it. And, like I said, most of the people they're bringing in now are pretty inexperienced.

Bill Reichenbach: It really depends on what is happening. On a big feature film, I'll always have both horns (bass and contrabass) and I will probably be playing some contra. It probably averages out that I am playing it at least a little every week. When I say average, that's what it is. Some weeks I won't play it, but some weeks I'll play it every day. That is the nature of freelancing.

Bob Sanders: For starters, I am retired presently, so my perspective is not current. Contra use has changed over the years. In the 80s contra in film music was fairly rare; I certainly didn't have one. Don Waldrop & Phil Teele were the primary purveyors. Now there are, I would guess, more than a dozen folks playing contra. These days, contras and cimbassi are ubiquitous and frequently in multiples. As to how often: when I started, it was once in blue moon; before I retired it became about 30% of the time on film calls; it may be more now.

Alan Kaplan: I probably get called to play contra about once every month or two. However, since I need to be prepared to play it at any time, I practice it everyday. I generally am called for higher chairs but often enough I will be hired to play bass trombone, contra, or even tuba.

Alex Iles: I'm actually not the best person to ask. I have a contra and started working on it, but I don't accept calls for it. So your first few of questions don't really apply to my situation.

Steve Trapani: As often as my schedule allows. If I'm working on it that week or if something is coming up, then I'll play it every day. For me there are other doubles such as tuba and tenor trombone that also need to be maintained, not to mention my teaching studio at Long Beach State.

Craig Gosnell: With the different films I've gratefully been called for, I'd estimate I play contra on about half of them. During those films, I think I play it about 1/3 of the time. There's also the rare call for it in situations outside of film music.

Steve Holtman: I have only been playing contra semi-regularly somewhat recently, so I'm not really thought of in that role by many people yet... I have been playing it regularly on the new [Star Trek](#) TV show.

Dave Ridge: This year, I'm doing a lot. We had Strauss' *Elektra*, and we have *The Ring Cycle* coming up. And there have been a lot of things up at Skywalker Sound where I've been using it. Generally, any time I'm up at Skywalker, they're asking for contra. It's very prevalent in the orchestrations. I actually play contra a lot here in San Francisco. We just played *Elektra*. I play it on a lot of stuff. There's some Janacek. *Le Grand Macabre* by Ligeti. Of course, the Ring Cycle. I use it extensively on that. It has gotten a lot more popular in Film. The composers down in LA have fallen in love with both the contra and cimbasso.

Do you bring your contra with you regardless of what is specified by the contractor?

Phil Teele: I certainly do. And if they ask me to play Cimbasso, I bring my BBb cimbasso and lay it on the floor. Then I play it all on contra. 'Cause it's the same axe, just one's got a slide and the other has valves.

Bill Reichenbach: Quite often, I do. Especially depending on who the composer is and what knowledge I might have of them. For example, I don't take it when I'm working with John Williams because I know that he does not use contra. He will write bass trombone parts down to about pedal F and that is basically where he stops.

Bob Sanders: Yes, I would always bring the contra and a tenor to work. (I would also have a tuba or two in the trunk.)

Alan Kaplan: I don't bring the contra unless I'm specifically asked to do so. Same goes for tuba and euphonium. I always bring large, medium, and small bore tenors along with bass trombone to every job. The lines between tenor and bass have become quite blurred so it's always best to have both options there.

Steve Trapani: It depends on the situation. Most of the time you'll know beforehand from the contractor or the principal of the section whether or not you'll need it. When in doubt I'll bring it and leave it in the car.

Craig Gosnell: I like to at least bring my contra with me in the car. If I am sitting lower in the trombone section, I will bring the instrument into the studio, but it might not ever leave its case. I find that it's good to be prepared in the event the instrument is needed.

Steve Holtman: Most of the time, now, but if I know I'm playing a really low chair then I might have it in the car...

Dave Ridge: I always ask. I don't want to ever give the impression that I'm just trying to get a double. With the contractor, we usually have pretty good lines of communication before we get there about what instrumentation they are going to need. Generally, though,

when you let them know that you have the contra and you're adept at it, you're asked to bring it. I'm always very careful. I let them know that I have it and I can play it, and they usually want it. You don't just use it on film scores for low or loud stuff. If you look at Strauss' writing in *Elektra*, there are some gnarly licks. Really highly technical licks for the contra. In film scores, you might just be holding low notes forever. *Das Rheingold* calls for everything to be played on the contra, so I do. There are some places in the score where you are supposed to play bass, then switch to contra. I play contra on *The Ride of the Valkyries*.

When I get up to Skywalker and they get to hearing the contra in their orchestration, they start wanting to use it in more of the music than when we first got there.

How do you decide whether to play contra or bass on a given piece of music?

Phil Teele: If I see something in the music that is 2nd space C [C3] to middle C [C4], I'll play it on the bass trombone because it works better with the other trombones. I like the contra, usually from low F [F2] on down. That's where I think it sounds best. But, sounding best has to do with the amount of time you put in on the thing, because it does require your attention.

Jerry [Goldsmith] had just written a few pedal C's and stuff like that [on *Planet of the Apes*]. There was another movie called, *The Secret of Santa Victoria*. George [Roberts] was on bass and I was playing contra. Sometimes it's frightening. Sometimes, since they don't exactly know how to write [for contrabass trombone], they write a lot of extra notes. The lower you go, the simpler it should get. So with movies, I just look for the impact places, where there's gonna be a hit.

Example given: Two pedal notes with a quick triplet in between he'll leave out the triplet and make sure the long impact notes get the impact they need.

Bill Reichenbach: I play the horn that I think sounds best on the part.

Some notes sound better as pedals on bass trombone than as trigger notes on contra. Sometimes it could be the opposite. It really depends on the context and the sound that best fits with what else is going on.

Generally speaking, the sound of the contra is just bigger throughout the lower range. In the studio, with the way they set up the microphones, you don't necessarily have to be blowing everything flat out, shockingly loud in order to get it on the recording and have it sound good. Unfortunately, a lot of times composers are intent on getting this crunchy, edgy sound. Basically trying to recreate the sounds they have in their sample library (that can be held indefinitely). There is a lot of buzz on those notes and they're playing it so loud that it can be impractical to play it on bass trombone. So that can justify playing it, then it just comes down to whether you can get a reasonable sound on the contra.

Bob Sanders: If contra was specified there was no question. Otherwise, if it looked to be a contra part, I would ask if the composer would like to hear the part on contra (first asking the contractor's opinion}. Economics/budget were always part of the calculus; some leaders/contractors were pretty laissez-faire about paying for doubles, others not so much.

Alan Kaplan: I always prefer to hear the bass trombone whenever possible. Even in the best of hands a contra can get woofy and pitchy in the staff and above. When the music specifies loud and accented pedal notes the contra is certainly more effective. The challenge is that there can be all those pedals and then some melodic lines going into the staff on the same piece of music. If there is time to switch horns it's fine but if not, it requires a judgement call. In those cases I usually opt for bass trombone. Most of us can play pretty loud pedals on bass.

Alex Iles: It seems like the contra players choose it when the parts are way low for extended periods. Or if the piece demands especially strong low notes. Most of them have it in the car for most film scoring calls. Very often, they choose contra themselves although several composers and orchestrators request it specifically.

Steve Trapani: Tricky question. In my humble opinion, contra sounds the best on pedals, and anything below pedal F really sounds better on contra than on bass. This seems to be the point at which most of my colleagues will put the bass down and pick up the contra. For me, basically anything below the staff can be played on contra. Anything in or above the staff is almost always going to sound better on bass. In studio settings I follow the rule of “play it on the horn that’s going to make it sound the best” that I’ve heard from studio trumpeter, Dave Washburn. This seems to be what Bill Reichenbach does when I’ve played with him although I’ve never discussed it with him.

When I play contra in classical settings, such as with the LA Phil, I generally do the same thing if I am given the choice, although sometimes if it says contra on the part you play contra, period. The Phil is really great about this, but the issue comes down to whether or not the people in charge are willing to pay the double or not. In a perfect world that means if it says contra on the top of the page, you get paid to bring and play contra and can choose to use it when you believe it will sound the best. Sometimes they (the people in charge) don’t want to pay a double, though, and regardless of whether you brought the horn or not, and whether it says contra or not on the top left, you are forced to play everything on either bass or on contra. I’ve been paid to play Eb’s above the staff on contra and pedal C’s on bass.

Craig Gosnell: Besides the obvious situation of where the arranger/orchestrator/composer specifies exactly where he/she wants either instrument played, a number of factors have to be considered. While there is some overlap in the ranges of the bass and contra, each instrument will sound better in different situations. While its possible for a contra to play a fast-moving line, it might not be as nimble as a bass. Does the musical passage require a volume level on certain notes that would be easier to play on an instrument that needs to use valves to play them versus one that doesn’t? What about tone color? A contra can be very useful when a particularly dark sound is required (a villain is revealed) or when very low pitches need to bark out with high energy (a chase scene or something with high action). Higher notes on contra, especially above F at the bottom of the bass clef start to be more “woofy” sounding as you continue to ascend in range. I compare it to a bass singer that is required to sing high

in his range. The bass trombone could be a better choice then. The main focus is which instrument will sound best in the musical passage presented.

Steve Holtman: Most of the time it is because there are a lot of pedal notes.

How do you distinguish the ideal sound of bass vs. contrabass trombone?

Phil Teele: First, it has to blend with the other instruments. The contrabass trombone is about power. It has to have a powerful sound. So, like, when you're playing a movie and you have to play a pedal C [C1], you could scare little children with it. It's a magnificent instrument and so powerful.

Bill Reichenbach: First, my concept of bass trombone sound is probably more compact than a lot of people. A lot of times I'm not able to do that because of the volume and size of the stuff they want us to play, but when it's just me on a solo or something I try to keep it sounding like a trombone instead of a euphonium with a slide. The bass trombone world is starting to find its way back to that.

My idea of sound on contra really just comes from playing it a lot. There aren't many other people to listen to to form your sound. It's just a slightly larger version of my bass trombone sound. I don't want it to sound like a tuba with a slide. I want it to sound like a low trombone with a slightly wider sound by percentages.

I played a few other contras that I felt missed that. They get caught up in that big, broad, almost woofy sound. That's not what I want to do at all.

With recording, the more center you have to the sound, the better you are going to sound through the microphone. That's why, through the years, out here in the studio business, in all the commercial stuff and even in the film scores, all the guys played 2B's and small Bachs. George Roberts played that single trigger Conn. They're all conservative, middle of the road, tight horns. The microphone, if you're using it right, will end up capturing more of that sound than a sound that spreads. When the sound spreads, you're missing the microphone and you aren't getting the bang for the buck that you're putting into the horn. A funny thing about George Roberts is that, sitting next to him, you may not be able to hear him play, but on the playback you couldn't hear yourself. His sound was so focused it was just doing what it had to do. That was what I was always trying to do.

Bob Sanders: I like the contra to sound like a bigger, "fatter" bass trombone – different from a tuba and different from a cimbasso. Despite the fact that a cimbasso is a valve contrabass trombone, it has a vastly different color and "weight" – particularly the big CCs that some of the tuba players use on movies.

I would definitely talk to Phil Teele who was one of the contra pioneers. Pretty much any bass trombone player who does film work today would be worth talking to.

Alex Iles: To me, the "ideal" sound matches the demands of the music which is often an extension of the sound effects or sound design of the film. Flexibility is extremely important. Bass and Contra players often have to put out a lot of sound, but I like it when players apply musical common sense to their job?!

Steve Trapani: Generally anything below the staff is fair game for contra, but many times technique will be the limiting factor. I'm usually going to have more technique on bass than contra, so I will tend to favor bass if there are fast notes. Below pedal F, however, there aren't many occasions where you're asked to play with too much technique. It does happen, however. The latest Pirates of the Caribbean movie was basically a contra concerto for Bill Reichenbach, although not much made it to the surface on the final cut of the movie. If it's just sound that is the determining factor then I'll wait to pull out the contra until low C or below, because I'm probably going to sound better on bass up to that point.

Craig Gosnell: There can be definite similarities between the two instruments. I feel like the contra is a lower extension of the bass, and it should have a darker and more robust tone quality. It's physically a larger instrument and should reflect that in its sound. It can be pushed to brightness with louder dynamics and be a bit like the bass's "evil power tool" big brother, yet can also be played softly and become the velvety cushion upon which the other trombones are stacked.

Steve Holtman: I think it has to do with what the music is asking for.

Dave Ridge: I'm an outlier. The bass trombone is just a big trombone. There's this idea of the "classic" bass trombone sound that is big and tuba-ish. It should sound like a trombone. The bass trombone needs to sit right between the tenor trombones and tuba and bridge that gap, blend them together. Then, when I play the contra it can be a different sound. Where the bass trombone gives way to the tuba sound as the true bass voice of the low brass, the contra provides the bass voice to the trombone section. For that reason, I like that the mouthpiece is pretty different. I don't need to have the same rim, because they're different instruments. Different instruments have different mouthpieces. I try to keep it separate and different.

Has the frequency of being asked to play contra increased in recent years?

Phil Teele: Sometimes, what is happening now and is really weird, they'll call me just to play contra alone and it's a scary idea because you don't know what they are going to write for it.

Well I first heard about them when I was in high school. I thought, "one day I'll have a custom-made one." Years and years later, when I was on staff at 20th Century Fox, there was a movie, *Planet of the Apes*, with Jerry Goldsmith. So I asked Jerry, "you know, I've got this contra." Then I had a Mirafone BBb. It was okay for that. I could see, though, that a lot of composers didn't really understand what that was, and they expected the same facility that any other instrument had. And since the positions are twice as long, you're just not going to get that. So I had to come up with something better. So then I got the Alexander. I traded the Mirafone for the Alexander. That's the one I showed to Toshiko [Akioshi] and said, "why don't you write some pedals on the end of a ballad or something." So the following week she hands me this piece of paper which is, *I Ain't Gonna Ask No More* where the first 16 bars are by yourself and the first note's a pedal F.

Bill Reichenbach: It (contra playing) has actually gotten a lot more prevalent. The way they're writing for low brass, the entire trombone section will frequently be doubling on bass trombone. Three or four bass trombones and one contra, sometimes two contras. It is a lot of fun. Sometimes it is really exhausting.

It has definitely increased. I see a lot more parts that specifically say contrabass trombone.

For a long time, I was sitting next to Phil Teele, and because of his seniority in the business I would be playing the upper part while he was on contra. Sometimes we would be playing the same notes but I would be on bass and Phil on contra. I ended up starting to take a contra and sometimes we would both play contra.

I ended up doing a TV show this year, it was just on last night, a live action production of "The Christmas Story." We had several days of recording. The call was actually bass and contrabass trombone. Strangely, the parts they had written for contra, I would have normally thought would be tuba parts. One and three oompas like a traditional tuba part and they had it on contrabass trombone. That's what they wanted. It was a lot of fun but some of it was quite difficult. A lot of it was in five sharps. It was a bit of a mind twister. They were in a hurry on top of that while we're sightreading this stuff in these weird keys on F trombone. One thing that Phil and I have laughed about a lot is that sometimes you're going along and you forget which horn you're playing. There's just enough the same to get them confused every once in a while. It was nice to get to play it for three days solid. I don't really get to play it all the time and I don't really practice it at home. It was nice to get to work out some of my demons on it.

To answer your question: I'm seeing more contra parts and I think they're writing more parts for contra specifically. Now I'm sort of doing what Phil was doing. He's not as busy in the studios at this point so I'm sitting in that chair now.

One thing that happened around the same time as the introduction of contra was cimbasso. Really, it is just a valve contrabass trombone. I think a big part of cimbasso getting on the scene was Tommy Johnson, who was the first call tuba player out here for many years. He was a pretty aggressive salesman for it. He could play it really well and it's funnier looking than a contrabass trombone. He would have the composers and orchestrators come over and he would show it to them. At the same time, Phil Teele might be sitting right next to Tommy Johnson playing contrabass trombone and Phil is really quiet. Phil wasn't going to demonstrate or any of that, so, for a while, cimbasso got a stronger foothold. Even now, it seems like cimbasso is still a little more present than contrabass trombone. When I go in and I'm on one of these big, loud science fiction movies, I take the contra. Doug Tournquist is usually playing tuba and cimbasso. When he's playing cimbasso and we're playing related parts, I'll play contra because I think it works better. You might call that politics within the business or just the way it developed. I've been doing "The Simpsons" for about five years now, even with the new composer. Usually, the third book is bass trombone and tuba. All of a sudden, one time I got a call for cimbasso. I don't have a cimbasso. I called up the contractor and told him I don't have one and I probably won't have time to borrow one. He told me to talk to the composer. They got a tuba player that had a cimbasso, but when that guy had to pick up the bass trombone and play it, it wasn't so good. The next time it came up, I said,

“contrabass trombone and cimbasso are basically the same except for the valve arrangement, and I assure you, when it comes to an intonation issue, with a slide you can fix it immediately.” I did it once and that was it.

Usually, they just write what they want and it is up to us to decide what to play. A couple of my orchestrator friends know that I will be the one playing it. Like on the Transformers movies and The Fast and the Furious movies. Bryan Tyler usually writes stuff that goes super low. Steve Jablonski writes that way, too for the Transformers movies. Also the Pirates of the Caribbean movies always have at least one contra, maybe two. They usually also have three tubas. So you’re really bathing in the colors of all of those low instruments. We record the brass parts separately from the rest of the orchestra. Sometimes the parts are barely playable. That’s a problem with film music sometimes is that sometimes the part goes beyond what the instrument can do and you have to make it seem like you’re doing it. A lot of times they just want the notes to be too long for human lungs to produce. When we did Captain Phillips the brass section was 6 french horns and 8 trombones. They had to add a ninth trombone so we could have two contras. The contra part was so sustained and they were being so picky about hearing the breaths that one person just couldn’t do it. They had to hire another contrabass trombone so we could cover each other breathing. It wasn’t all that loud but they could hear every breath. We literally had to work out every note so we could fade out and breathe quietly, then fade back in in time for the other one to breathe. We knew who was going to breathe where. We had to build shape into it so they couldn’t hear the notes stopping or starting. They were listening that close. Each breath took a little longer because we had to be so quiet. A lot of the time, on contra, you aren’t holding notes longer than a few beats, especially on low notes. I remember the movie seemed to be in d minor or something. There were a lot of pedal D’s. Probably a few C’s and B’s and Bb’s and it seems like, when you’re that low, the air seems to move through the horn pretty quickly.

Alan Kaplan: The contra was only used sparingly when I started working in the 70's. It was the advent of the cimbasso in the 80's that brought the contra into prominence. The tuba players were suggesting the cimbasso for more edge on the low notes. As composers began to write more and more low sound effects from the brass, the bass trombone players started bringing contra more.

Alex Iles: Contra is pretty common. More tenor/bass players are doubling on it too. I'm kind of slow to jump on board, but I think I will be playing it more in the next year or so!! To be honest only about 4 or 5 bass trombone players in LA play Contra with any regularity and of those maybe 2-3 really play it more than once or twice a month for work on average. Phil Teele really introduced it to composers in the 70's. He and Bill Reichenbach were the primary contra players for 20 years. Then about 3-4 more players started playing it too [usually subbing for one of those guys].

Steve Trapani: For me, yes. I’m relatively new to the film scene, but I haven’t been asked to play contra anywhere, except for the last 6-7 years. My opinion is that the composers have some really amazing tools, such as the Vienna Philharmonic sound library, which have trombone samples that sound really good. They can match that brassy/edgy quality that we get on real trombones, but the difference is that the samples

can sustain those notes indefinitely. Think of any superhero, horror, or suspense movie or trailer that you've heard in the last several years and they all have that "holy cow" kind of trombone section sound that you used to only be able to hear for a second or two on recordings of Strauss, Mahler, or Wagner if the mic-ing and mixing was correct. They've isolated and distilled that sound now and can sustain it indefinitely. They can also crescendo or diminuendo it in a way that is very difficult to pull off with a live section. When determining the difference between live trombones and samples the articulations and releases are still key, however, and I think it'll still be a while before a sample will be able to match a human in those areas.

To get back to your question, however, I think those composers are hearing things that are possible on those relatively new samples that sound really amazing. Things they've never heard before because they're not really possible with human lungs, and they're trying to recreate those things with 6-12 member trombone sections with multiple contrabass trombones. Not to mention F and sometimes CC cimbassos!

Craig Gosnell: I think there has been a slow and steady increase in how often the contra is used, especially in film genres like action, horror, and sci-fi/fantasy.

Steve Holtman: It seems that many composers are using contra samples in their mock ups, then it is a little more common.

Dave Ridge: Yes. It's a lot more. When I first started up at Skywalker in 1992, playing film scores, I hardly ever played contra. Now almost every call I get is for contra. Especially in the video games. The video games really want that wider range of colors. Like I said, you're going to be playing the game for 40 hours typically. They loop it so as you get deeper in the game, it adds complexity.

Pooh's Grand Adventure (1997) and a lot of those were just on bass trombone, then we got into *Hellboy* (2004) and I was definitely playing contra. Stuff like *Jurassic Park*. Now almost every film score I play, they're asking for contra. The frequency is much, much higher. We could go into a deeper discussion of "where is the recording industry going or symphonic industry" but I can easily say, as a working musician, contra is getting asked more and more frequently. I even get calls from other opera companies because they know I play contra here. All of Puccini was written for contra. Not for tuba. Orchestras do that because that's what they have but it really should be three tenors and a bass trombone. The parts on Wagner and Strauss really lie better on contra than they would on bass. They really knew what they were writing for.

Is there anything else I need to know about the contrabass trombone's role in the film music industry? Or other relevant statements.

Phil Teele:

Well, you know, I understand being in your position. I've picked everyone's brain. When I was at FOX I was only 22. I got to pick the brains of the greatest brass players I'd ever seen. Like Vince De'Rosa. My God. That guy was amazing. He was the first horn. Dick Nash. He was my teacher and got me in. There were also really great writers. That was

the best part. It was a golden age. Now it's totally different. Everybody is experimenting, like they don't know what they're doing. "Let's try this. Let's try that." You know you're supposed to have your sh*t together before you show up, right?

I've put in 50 years of that. Now I'm playing in 3 different jazz bands that I really enjoy playing with, and I'd rather do that anyway.

You don't even know what it is anymore.

There's a guy in the booth getting paid more than the whole orchestra. The ProTools guy. You know, this business has totally changed. Nothing like it used to be. It has turned into a factory job. We don't record together. They have the strings during the day, then woodwinds and brass at night. It's just not like we used to go in like, with Jerry Goldsmith or Alex Norms(?) or John Williams. Everything was perfect from the first note. We'd run it down and make, like, one or two takes (except for John Williams) and that would be it. Now, they'll spend days. Once on King Kong they spent two hours on four bars.

What they do now is they hire second year harmony students, because they're cheaper. So you don't have any super-great composers here anymore. So it isn't anything you'd want to do. Here's another example, you know the one where the tanker got hijacked by the Somalis? [Capitan Phillips] That guy. That composer. He came out and said, "you guys think you could sound a little more like the samples?" You see? It's over for real instruments. These guys have grown up with drum machines and computers, and they have no idea about acoustic instruments. They don't even know we have to breathe. It's that bad. So the whole Hollywood work situation... Hollywood is number 4 in films now. It used to be number 1. But it's all over the place now. They record in New Zealand and Australia and Bratislava and London and Scotland and Seattle and Arkansas. It's all over the place. I don't think it will ever be like it was.

Bill Reichenbach: Phil Teele would be a much better reference for composers and their use of contra. I think he was one of the first guys to play contra out here. There might have been a few others, probably playing those BBb Miraphones. They're almost unplayable. Those were around because Miraphone had some sort of production facility out here (LA) for a while. They were never very easy to play. They were basically a bad copy of the Conn that Roger Bobo had. I bought it from Roger and owned it for a year, then sold it back to Roger. I couldn't play that horn either. He had that horn at Eastman. I went to Eastman. I remember seeing pictures of Remington's studio and Bobo playing contra in the trombone choir. I thought "that's the coolest thing I've ever seen!" I actually bought it from him. The double slide is tough. I don't know if there is some way to develop it to where it will actually play. Maybe make all four slide tubes an increasing bore size.

Robb Stewart built me a contra with a double slide in Eb. I sold it to Brandon Moody. I had the slide built long enough that it could have eight positions. Basically the positions are like alto trombone. There was enough room to add an extra position on the slide. It was basically an experiment. I don't know that much about the slide bore works so I just had some slide tubes drawn at .600 bore down at Kanstul and we built it around that.

I'm talking to some guys down at Schilke, because they bought Greenhoe, about developing a contra. It would probably be an F contra based on an enlarged version of the Greenhoe bass trombone.

Bob Sanders: The role of low brass in film in general would appear to be: if something bad is happening, trombones play loud; if something bad is imminent, trombones play soft. Contrabass amplify this effect. Also, low frequencies don't compete with dialogue. In a bygone era, the trombone would be used to score the occasional love scene – “trying to play a fifth too high” (thank you, Lloyd Ulyate).

Would you mind elaborating on the difference between contra and cimbasso a bit more? With regard to color and weight?

Cimbassi are usually played by tuba players (although, as a tuba owner/operator, I owned a CC cimbasso for a while) with tuba-ish mouthpieces; contrabass are usually played by trombonists with (larger) trombone-ish mouthpieces; cimbassi are usually larger bore. All that results in a difference in timbre and “weight,” as one might imagine. Also, cimbassi are valve, not slide, contrabass trombones; that makes a timbral difference, too. In opera pits out here, I have seen mostly F cimbassi; in the studios, frequently I saw the CCs – bigger and heavier. Most contrabass these days seem to be in F. Occasionally, BBbs of both appear.

Can you think of any films or specific composers that you might consider “pivotal” in the growth of contra in the studios?

As to pivotal composers, Phil Teele can address that better than I; he got to the party well ahead of me (Waldrop is no longer with us, sigh). However, there are several contrabass and cimbassi in evidence in the giant brass sections in Joel McNeely's score to *Soldier* and Danny Elfman's score to *Planet of the Apes*. Most big brass scores these days seem to use both - when something blows up real good!

Alan Kaplan: Since more and more music is being composed electronically, the demands on the contra and really all low brass have become at times unreasonable. The requirements for breathing aren't often considered. Luckily there are usually more than one player so we can figure ways to spell each other. I've been on many movie sessions where there were four of us playing contrabass.

You said you practice contra every day. What do you do? Do you have a set “routine” or a few things to pick from? I'd also be interested to know about how you touch on each horn to keep them all familiar and comfortable.

I generally like to start my practice sessions on tuba. Then I go to the contra. And work my way up through the horns until I get to the small tenor last. I play a combination of exercises, etudes, and some excerpts from various Studio sessions I've done on all the instruments. I've kept a collection of all the difficult things that I've come across in my career to keep me sharp and to present to students at masterclasses.

I sort of feel that muscle memory can almost take the place of strength. If I touch on every instrument that I play particularly every different mouthpiece size, I can stay strong on pretty much all of them. I like I multitask too by practicing tonguing on any of the

instruments I happen to be playing so that I don't have to spend time doing that on every single instrument.

What does a “normal” studio day look like?

I can't really describe a typical studio day. They can be vastly different. It can be cartoons involving lots of mutes and styles, it can be very orchestral, it could be a big band and strings for a singer, or just about anything. I just try to be prepared and have the ability and the accessories I need for whatever I might need to play.

Dave Ridge: I've got a somewhat unique perspective on contrabass trombone. It has become much more popular. A lot of guys have contras now. They have become more available and affordable now that Kanstul has started making theirs. A lot of guys play the Haag because it's easy to double. It plays very similarly to a bass trombone. Being an opera player, I have a different perspective because we use it in literature. The Metropolitan Opera, Steve Norell does not play anything on contra. I actually play contra a lot here in San Francisco. We just played *Elektra*. I play it on a lot of stuff. There's some Janacek. *Le Grand Macabre* by Ligeti. Of course, the Ring Cycle. I use it extensively on that. We currently have a Thein. One of the reasons for that is that it is a German instrument and gets the right sound for this literature. If you look in the Wagner scores, it's interesting, in the *Valkyrie*, Hundig is the Wagner tuben and the bass voice of that choir is the tuba. I'm on the contra at that point and the contra becomes the bass voice of the trombone choir as opposed to the tuba. So I really want one that fulfills that role and gets a thick, rich bass sound. I think it shouldn't sound like a bass trombone, it should be something different. I use the Thein mouthpiece and it's basically the diameter of a tuba mouthpiece.

It has gotten a lot more popular in Film. The composers down in LA have fallen in love with both the contra and cimbasso. It really depends on the composer when we're at Skywalker, how he writes for it. Some are really specific about what they want, and others, like Tim Davies, will just leave it to me to decide. So many people think that the contra allows you to play lower and that just isn't the case. You could play it all on bass trombone but the sound is just so completely different. I'm a big fan of contra, especially in recording. Some of the brass sections for the video games are much bigger than for the films. One reason is that you record up to three times more music for a video game than you do a film. Typically, a video game is going to be played for about 40 hours where a film is only a couple of hours and a lot of the music is under dialogue.

For *God's War* we had alto, three tenors, bass, and contrabass. There were euphoniums and the tubas, of course, with cimbassos and the whole horn section doubling on wagner tuben. Huge brass section! The contrabass trombone really gets to shine in the dramatic moments.

The trombone was really a sacred instrument until Mozart. He used it in the graveyard scene of *Don Giovanni* and in *The Magic Flute*. Then there was Beethoven, he used it in his 5th, 6th, and 9th symphonies.

It's interesting in the opera world. Verdi really didn't like the tuba. In early scores there would be serpent or bombardino, then he actually used the tuba in his *Requiem*. There are letters from him where he said he wanted four like-sounding instruments. He had an instrument created called the “Bass Trombone Verdi,” which is like our modern

cimbasso. All the trombones at that time had valves. This was a valve instrument like our cimbasso so they could all sound the same. I think *Othello* may actually say contrabass trombone [actually says “Trombone Basso”]. We think of contrabass trombone as a modern instrument but if you look at renaissance pavaues they had contrabass sackbuts that were used with a handle. It was always part of the instrument choir that really mimics the human voice.

Wagner changed so many things. He was the first one to use Leitmotifs, and the first one to put the orchestra under the stage and turn the lights down on them. He used the intermingling of the families of instruments like no one else had, so, naturally, the contrabass trombone became an important part of Wagner’s scoring.

Wagner and Verdi had very specific sounds in mind when writing for trombones and other instruments. That’s a big issue for me, because now everybody plays modern instruments and, even in auditions, they want everything to sound basically the same. We’re talking about music from vastly different time periods and styles. For example, dynamics are musical markings, not decibel markings. Triple-forte in Verdi would be on all small instruments, so it wouldn’t be hard to get that exciting sound as it is on modern instruments. That’s why I think you have to play contra in Wagner’s works. He wanted that bass sound. It isn’t just about low notes, it’s about the sound. Like I said, when the tuben are playing, the tuba is the bass voice of that choir, and the contra becomes the bass voice of the trombone choir. It needs to be separated from their sound a little bit to provide that true bass voice. You have to be very aware that they knew what they were writing for and orchestrating for it. The same thing in film scores, they want to hear something that mimics their synthesizers. That low metallic rattle. The big monster movies, the big dramatic moments, having that in mind when you play contra for that is important.

APPENDIX H

BEN VAN DIJK INTERVIEW TRANSCRIPT

How did you first become interested in playing the contrabass trombone?

It was during my time with my former orchestra, the Netherlands Radio Orchestra. I started there when I was 19 and played there for 23 years, then I became the bass trombone of the Rotterdam Philharmonic. We had already played the *Gurrelieder*. It has a quite interesting contrabass trombone part, but I didn't play it. A tuba player here in Holland who had a contrabass trombone played it. I think he did a great job, but I was thinking it didn't sound like a trombone. He was playing on a Thein but he was playing it as a tuba player. At a certain point, our chief conductor came to us with the idea of playing the entire *Ring des Nebulungen*. Of course, looking through the score and knowing a little bit about the history of trombone, I saw that there should be contrabass trombone. I talked with the conductor and mentioned that it is scored for contrabass trombone and we do not have a contrabass trombone. He said the orchestra will buy an instrument. I knew that that tuba player had a Thein so I looked into that. I did not go to Bremen at that time but I told them I would like to have a contrabass trombone from them. They sent one and I got it probably six months before we started *Das Rheingold*. That was the start of my career on contrabass trombone. That must have been around 1986.

Tell me about the first time you played the contrabass trombone?

My first notes on the contrabass were actually quite catastrophic. I was not in to switching. I started as a tenor trombone and switched to bass when I got the job at the Radio Philharmonic. I decided then that I was a bass trombonist and I was not going to play tenor or anything else. When the contrabass came, I asked Thein what people use for mouthpieces. They told me and sent me some. I saw it and tried it and decided that was not possible for me. I am a European, not an American so my equipment is quite a bit smaller than most Americans. If I play Schilke 59, most Americans will probably play Schilke 60. I thought, since the contrabass is a little bit bigger than my bass and I play a Schilke 59, I will put in a Schilke 60 and it will work. Like I said, at first it was quite dramatic. But I had to do it so I started working. Now what to do? I started taking it with me to my lessons and mostly played Rochut vocalises. I didn't immediately go to the super low register because I saw in the score that it was not terribly low. I played a lot with my father, who was a professional trombonist. We played duets together all the time anyway, so I brought it with me and we played scales, Rochuts, duets, lots of things together. I played parts of *Das Rheingold* with the tuba player. When we actually performed it, though, I can say that I was a very limited player on the contrabass. I could play *Rheingold* and that was about it. It was okay, I was very nervous. I was lucky though, my first time playing it was in the Concertgebouw, one of the most beautiful halls in the world, on stage. I wasn't in the pit. I could just blow and it sounded wonderful in the hall.

The sound in the hall became something special, especially in combination with the two tenors and bass trombone and tuba. I was nervous but it went quite well.

How often do you get to play contrabass trombone and in what ways?

I got to play it quite often in the Radio Philharmonic. I've been in Rotterdam 16 years now. I started with *Seigfried* here where I used it but since that time, not very much. Not often enough. I'm not a part of an ensemble, like Brandt Attema, where he gets to play it quite often. My contrabass trombone is always on its stand. I like to pick it up and play it. Sometimes I don't. Sometimes for a long time, I don't play it. You are one week too late. Last week we played the score from *Gladiator*. It had four trombone parts and was the best contrabass trombone part I have ever played. It had pedal C and C-sharp (C1 and C-sharp1) and was big and open. It was really amazing. It was so much fun. It made my heart happy because I love the contrabass trombone. Although differently than Brandt. I am not a soloist on the contrabass trombone. In 1991 we played the Ring and we didn't have a bass trumpet player. We didn't have a trumpet or trombone player that could play bass trumpet. I was already a member of the ITA, one of the presidents at the time was Heinz Faddle. He was a trombone player before becoming professor in Detmold. He played in the Hamburg Staatsoper and he was the bass trumpet with Bayreuther Festspiele Orchester. I asked our orchestra to ask him to play. So, he came. In 1991 he organized one of the first International Trombone Festivals outside of the US. After our final performance of the Ring, he asked me if I could do a contrabass trombone presentation at the festival. I said YES! I came home and asked myself why I said yes. I knew the Ring; I could play the Ring. Not much else. Of course, I knew some other things but not that much. Ohh my goodness, a contrabass trombone presentation, IN GERMANY??? At that time, I was really the first Dutch bass trombone player that seriously started to play the contrabass trombone. So, after about six weeks of rough sleep, I started to visualize all the ways this could go badly. I telephoned Heinz and told him this was not a good idea. He said, don't worry, you don't have to do it. I will ask Joachim Mittellacher. He was actually the first bass trombone player of the German Brass. He was the contrabass trombone player with the Bayreuther Festspiele Orchester on the famous recording with Boulez conducting. He was, at that time, an amazing bass and contrabass trombone player. He played Thein first and then Lätzsch. He was going to do the presentation. Heinz told me to come to the festival and meet people and play with the international ensemble. Six weeks before the festival Heinz phoned me and told me that Mittellacher cannot play. It was actually the end of his career. He had big embouchure problems. (Dystonia?) But he really wanted a contrabass trombone presentation on his festival. I said, how about this, can Mittellacher tell the story of the contrabass trombone and give examples in the history, and we can get a section to play the examples. That is what happened. I will not say I am friends with him, but we are okay. He was not so nice. He was very German; he didn't speak English. My German is okay but it is still a foreign language. In the weeks before, I asked if I could get the material he was going to cover in the presentation. I got nothing. At that time, the Radio Philharmonic had one of the biggest libraries of music so I started collecting everything I could that was for contrabass trombone. I met Mittellacher one day before the festival and he showed me what he had with a cadenza from Ligeti. He came with this short but virtuosic cadenza. He gave me a big smile and said you can play this. I don't think so. I asked him for six weeks before and he gave it to me one day before. I was angry. The good thing was that the anger took away my nerves. It was a good festival. The presentation was good and full, I remember Roger Bobo was also there. I know I played really well. People remembered my playing more than his talking. I know this because I was asked directly to do this same thing the next year in the United States. That was 1992 and in 1993 I was in Cleveland doing the same presentation. At that time in the US, nobody played the contrabass trombone. Perhaps already in the movie world.

I played with the Chicago section and it was amazing. Those guys were famous to me. Big names. Jeff Reynolds was playing contrabass before I studied with him. His Alpine Symphony under Zubin Mehta was amazing. G contrabass trombone made by Larry Minick.

Have you played ensemble works on contrabass that you had previously played on bass trombone?

I played the fourth part on Alpine Symphony several times on bass trombone before contrabass. Salomé, the opera is another one. For a long time, it was normal here to play the fourth part on the bass trombone. Then I started to play things like that on the contrabass. The *Gurrelieder* I played three times. The first, I played the contrabass part on bass, then we had the tuba player play contrabass, then I played the contrabass myself. I played the quartets on Nana on contrabass when I had played them many times previously on bass.

How did your colleagues feel about the change?

I have been incredibly lucky. I have never gotten a complaint about it. Last week I wasn't sure what the conductor wanted so I took my bass and my contrabass on stage. I played the first half of rehearsal on contrabass trombone. No reaction from the conductor. I played the second half on contrabass trombone. No reaction. I spoke to him after the rehearsal and mentioned that it wasn't scored for contrabass but works well. He, excitedly, told me to play it!

I never forget a masterclass of Roger Bobo at my conservatory with one of my students. He played well but it was a little too big. Roger said, "Watch out, bass trombone is no weapon!" I always try to remember that.

I always try, on bass and contrabass trombone to keep my concept of sound like a voice. It is always like a pyramid.

We were having exams yesterday at the conservatory. Sometimes we talk about a student's performance after they leave the room. One tenor trombone player played very well but there was something in the sound that might prevent him from winning an audition. I tell my bass trombone students this and I try to operate this way myself, to look for the tenor trombone in the bass trombone sound. I told the student to look more for the bass trombone in your tenor trombone sound.

How do you decide to use contra on a piece of music that does not specify contrabass trombone?

I usually get about three weeks with parts before we start rehearsals. I look around to see what other orchestras have done. With *Gladiator*, it had been played in Switzerland a few weeks before, so I checked to see what they did with it. Even before we get the actual music, we get a sheet that lists the instrumentation. Before that, we played *Lord of the Rings*, and it was really heavy. It was like playing Bruckner Symphony 7, 8, and 9 on the same concert. It was one of the heaviest things I have ever played on bass trombone. I know some about how the guys in the studios play for the film scores. Low and loud all day long. It is difficult in the hall trying to fill the whole place. My ambition is always to show the possibilities. The parts finally came, and I went to look at them. "Wow, this is low." Of course, I could play it all on my bass trombone, but listening to it, there was more depth than the bass trombone can provide. The contra can give that depth. So I took the contra and played it but I had by bass trombone with me in case the conductor did not like the contra.

I always put my contrabass trombone on the stand. If I practice at home six times in a week, I will play the contrabass trombone every time. Sometimes it is just five minutes on the contrabass trombone. Just to feel it. Then when I want to have fun or tackle some problems, a little longer. It is usually not a long session of practice.

What do you play when you practice contra?

Fundamentals. I have to get the instrument to respond the way I want. It has to respond to my input. That is what I am checking when I play the contrabass trombone. I am paying attention to stability and consistency. Making sure every note is equal.

Reflecting on your initial experience, how would you guide someone through learning the contrabass trombone?

I have done this many times. Many times, it is a random thing. It is not something I force my students to do. We have a beautiful instrument at the conservatory and several good examples around. Not just me but Brandt Attema and the Collective and several others. “What do I do?” Then I tell them how I started. I tell them not to worry about how loud or low they can play. I tell them steps like we have already talked about and what material they can use. One of the successes with this class is that we let the students do a lot of things on their own. It is not a four-month, dogmatic process. I have them bring it to their lesson and we play scales together in unison or in octaves. Big long notes. Luckily, they have many ensemble opportunities. I tell them to take something and play the part on contrabass in studio class. Try it. Don’t be afraid to make a mistake. I want them to learn mostly on their own. I want them to find things to play.

Tcherepnin for bass trombone is great on contrabass trombone.

You don’t need to play Schnyder on contrabass trombone to play a good *Ring des Nebulung*. You need good sound, good intonation, and good response.

At what stage is it appropriate to introduce someone to the contrabass trombone?

It depends a little bit on the physics of the player. Actually, when someone enters the conservatory, they are usually good enough of a player on bass trombone that I will not say no if they ask in the first year. Because, after my own experience with the contrabass trombone over twenty years and the experience of my students, it can make the bass trombone playing better. Things like air, articulation, intonation that we don’t pay as much attention to very often on bass trombone become relevant again when learning a new instrument. Sometimes I might have a student wait while we sort out some issues. One student we had to put it away for a bit because it was causing problems to his bass trombone playing.

What challenges are involved in doubling on bass and contrabass trombones?

Now, after so many years, it is not so difficult going between. Do I prefer to play one before the other? It doesn’t really matter.

What I do when I practice is pick up whichever one I am going to play and just blow air through it. Just blow air. It will tell me what it needs so I can give it.

I can say in the beginning it was a big challenge to go between two mouthpieces that were too close to each other in size. Now, my contrabass trombone mouthpiece is much more different, so my face doesn’t get as confused.

Describe your concept of the ideal contrabass trombone sound.

First, look for the sound of a trombone. It is a trombone. It is not a tuba. It is a big trombone. All I see from alto trombone through contrabass trombone is just the size. They are all still trombones. It is the bottom of the section so it has to set a foundation with the sound, but it also has to have the bass trombone in the sound as it ascends. It has to be part of a section. It has to blend. Even on the bass trombone, people sometimes sound too much like a tuba. I see myself as the center of the tuba sound and we create a new low sound for the orchestra.

Dynamically, I want to be able to play very softly.

You have to imagine the sound. Develop it in your mind first.

APPENDIX I

ZACHARY BOND AND MAX THEIN INTERVIEW TRANSCRIPT

Shelby: How did you become interested in the contrabass trombone?

Zach: Actually, Max [Thein] was kind of pushing me into it.

S: Yeah, tell me how a bass trombonist has to be pushed into playing the contra.

Z: We were really focused on the Thein Universal bass trombone. Every once in a while, when I was in the shop, they would have [a contra] and I would play it. We would change some things here and there. So just playing it more and more. Then I convinced my orchestra to buy one.

Then I was really able to learn it. I learned it all by myself. I went to something I already knew, like Rochut etudes. I already knew what I wanted it to sound like in my head and I wanted it to sound great on the contra, also. So, instead of learning something new or starting with exercises, I decided I would just start with music. That being said, obviously there's a little bit of figuring out where the positions are, so I just took it phrase by phrase slowly, until I could play an entire etude. When I could play about three or four whole etudes, I figured I could play just about anything.

S: I'm sure, you like so many of us, have played those to exhaustion already. So you can tell when something isn't right. When you're out of tune a little bit. You don't have to know where everything is exactly to be able to fix things.

Z: Exactly. I also used "Cello Drones" on Spotify a lot. I would just put in my headphones and play against the drone to find things. That way I was not just looking at a tuner or at my right hand. Doing everything by ear. That way, I could unlock it. I don't like having the step where I'm thinking about where something is on bass trombone, then where it is on contra. I want to have it be a new instrument so I can skip all of those steps.

S: I convinced the University of Iowa to buy a Kanstul contrabass and during the time when they were building the horn, I was excited to get busy. I made a fingering chart and figured out the harmonic series on staff paper so I could have an idea of where things should be once I got it. Probably the most time-wasting step I took was playing Rochut etudes up a fourth [P4] on bass trombone so the positions would be the same. That is what I am trying to avoid. I am trying to guide people around those steps that are not beneficial.

Z: For me it is about not thinking about the bass trombone. The sound is important. Getting used to the sound and the resonance of a bigger mouthpiece and bigger instrument. The concepts of air and vibration and resonance are all similar with the bass trombone. I am 100% not thinking about the bass trombone when I am playing contrabass. If I do, I'm too slow to play unlocked, mentally. I think I played through the whole Rochut book 1 in a week and it wasn't awesome. I wanted to get through a lot of music in one week to where I was just sight-reading. I had the metronome on, not fast, but on so that I would have to get the positions and move in time.

S: Forcing your brain to move quickly.

Z: Yeah. Also, before playing the contra every day, I would buzz the mouthpiece with the piano. Just making sure I could get a good resonant buzz, then transfer that to the instrument. I started on a smaller mouthpiece for about six months before I switched to a bigger, more normal sized contrabass mouthpiece.

S: What are you playing on now?

Z: This is a Thein MCFL. I think it's the same one Ben van Dijk uses. I think it's a fairly new mouthpiece.

Max: We are always developing. Always making things better. This mouthpiece is three generations in.

S: I had a struggle with mouthpieces. My normal bass trombone mouthpiece is big. Griego .25. I tried it on the Kanstul and it just didn't work right because that isn't what it was meant for. The Kanstul came with their copy of a Josef Klier 2A. I was not a fan of that one either. The rim size was good, but it was almost sucking the air out of me and not giving me an even sound through the horn. I liked the resistance of my bass trombone mouthpiece. So, I ordered a JK 2B which is the same rim size but with a smaller throat and shallower cup. It gave me the resistance and evenness that I was looking for.

Z: What do you have now?

S: This is a Bruno Tilz 2.5. I also have a Tilz 2, which is about the same size as the JK 2B.

Z: With the mouthpiece size, my bass trombone mouthpiece is not that big, but I don't play with a leadpipe. It's unusual. So, playing the contra, in some ways, is more resistant for me than the bass, even though it's a bigger instrument. I played the smaller mouthpiece for 6 months until I hit a point where it was too resistant on some of the bigger repertoire my orchestra played. Max happened to be in town and had brought this mouthpiece with him, as well as our conductor and a few others. So, we tried it and it gave me what I was looking for. Less resistance, greater dynamic contrast. It was stepwise for me. It also depends on what you are going to be doing with the instrument. If you are going to be playing solos, or Schönberg, it's all different. This mouthpiece is really comfortable for me now, though. I hardly have to warm up on it anymore. Going from bass to contra is really easy. I actually have a tougher time going from contra to bass. I always feel like it's a little bit flat for a while, so I really have to keep the pitch up. It's fine but a little difficult for a few minutes. I like to have a brilliant, even bright sound on bass trombone. It's just a little difficult to get the sound I want on bass right away.

S: My bass always feels a bit like a toy after playing contra.

Z: It does feel a bit like a toy.

In the end, I feel like it makes the bass a lot better. More of the song in your head goes through the horn. Just the resonance of the mouthpiece. It goes back to all the Arnold Jacobs stuff. Song and Wind. F tuba is a lot different though. So is Cimbasso. I've played cimbasso in the orchestra, too, and it is a lot different blow. Even the contra has a learning curve. To make it sound so natural, like Brandt Attema, is a real achievement.

S: I want to know about the first time you played it. You already talked about what you played, but I want to know about how it sounded and felt the first time.

Z: The first time was at ITF in Helsinki, Finland in 2003. That was before I had a Thein instrument. Before I really knew Max and Heinrich. I think they had both an F and B-flat contrabass there. I remember trying both and thinking, "this really is not that easy." That was right after I had graduated from Curtis [Institute of Music]. I remember being really amazed at the Thein instruments. I was going around and trying all of the instruments. Being American, that is what I was used to. Shires and Edwards were the big thing from the US. I remember seeing all of the German style instruments and talking with Heinrich about all the snakes and all of the different things on the horns and he said it was all about the sound. I remember being completely overwhelmed by all of the information. I don't think I played one again until I started working with Max about two years ago [~2014].

20:00

M: The Malaysian Philharmonic was having Zach play bass trombone and hiring a contrabass player to come in. They started playing many big programs while we were testing the Universal Bass Trombone and we had the contrabass there, too. Bass trombone and contrabass trombone belong together.

Even back in the 1930s there were contrabass trombones. They were not really playable. That was a big problem for the players. They didn't want to play it so the tuba player did it.

Z: Actually in 2000 Brandt Attema came to the US and stayed on my couch for about three weeks while he was travelling around taking lessons. This was when he was studying in Rotterdam, or he had possibly just won a job. He came to Philadelphia to take lessons with Blair Bollinger, then went to New York to take lessons with Alessi. I think he even went to Chicago to take some lessons with Charles Vernon. Then he came back for a while. We played together a few times. That was the first time I ever saw a Thein. I noticed that it sounded much different. There was a different concept of sound there.

Max can probably comment on this more, but I feel like the face of Thein is changing. They started with very traditional German instruments. Now they are German instruments, built in Germany but made to blend German and American characteristics and be versatile.

S: It is starting to seem like there is becoming a more global view of trombone sound. A blending of all of the unique regional ideas of trombone sound into something that is merging rather than dividing. What do you think about that?

Z: It is definitely merging more now.

M: Everything is changing. I remember 20 years ago we got a call from Frankfurt, which is about 300 miles from Bremen. He asked if we would be close to Frankfurt sometime since Bremen is so far away. Like it was at the end of the world. Now we get on the train or in the car and we are there in a few hours.

S: I took the ICE train from Berlin to Bremen. 200km/hr. It was amazing.

M: This is all so much easier, the world becomes much closer. Also, when we look to the music, how you blow the instrument is much different so why should the instruments be the same, all the same style? We want colors, interesting sounds, something following this style of blowing. Today it is much easier. There are more, better players than 20, 30 or 40 years ago. That means the education gets better. The first time I saw a contrabass was my teacher, Joachim Mittellacher, who was bass trombone with the Bremen Philharmonic. The conductor asked him to play contrabass on the Ring Cycle. At that time, there were no contrabass trombones available that were good or playable. He had an old Kuhl. From before WWII, made for the Berlin Philharmonic. He would try to make dents in it and see if it helped. If it made it more in tune or easier to play, he kept the dents. It was a mess. He said, "I cannot play, what should I do?" I was a student. We started working (Max and Heinrich) and built our first contrabass over many days and late nights. It was the beginning of something fantastic. We made more and more. Other brands started to notice and began producing their own contrabasses. Lätzsch started making them shortly after us. Also, the bass trombone was not size 5, it was size 4. Size 1, 2 and 3 are tenors and size 4 was bass trombone. Today bass trombone is size 5.

So everything always develops. Tastes change and we follow them. We as instrument makers are interested in working together with musicians. We follow what they need and come up with this (pointing to Zach's contrabass).

Z: It is two-fold. The players get better, so the instruments get better. Because the instruments get better, the players can get better. An endless cycle.

M: Eventually, you see contrabass is not only for Wagner or Strauss. You see today what you can do with it. Film music, trombone choir, in a set of 10 players, it can be there. Contrabass is now a real instrument in the family. Before, it was a dream. Wagner was a creator of ideas and those ideas became true. He had a lot of vision

Z: I was a little resistant, with the contrabass trombone, at first. I felt like it was a bit of a novelty. I've always been focused on being on the path to gainful employment, success as an artist and as good a musician as I could possibly be. Especially being an American, where contrabass is only now becoming popular. As all these universities and people are getting them, still it isn't played in the Metropolitan Opera (NYC). Steve Norrell said as long as he is alive, there will not be a contrabass trombone played in the opera.

As I got to know and work with the Theins, Ben, Brandt, Christoph Schwarz more, I started to learn that contrabass trombone was important. My orchestra in Malaysia doesn't have many Malaysians in it, it's mostly European. Even though the brass section is mostly American, the strings and woodwinds are mostly European. People want more of a European sound. So, I had to adapt. Max kept pushing me to play contra.

S: Not interested?

Z: It wasn't that I was not interested.

S: It didn't fit into the life you were trying to create for yourself.

Z: Exactly. Now I love it. I play it all the time in the orchestra. Even Bartok's Concerto for Orchestra. I can get the low B on the slide.

S: That's a seven-position slide?

Z: Yeah. With a handle. We played it with a Hungarian conductor who works with the Budapest Festival orchestra and he said it's the first time he had heard the glissando. He stopped the whole orchestra and asked how I did it. Also, the low B's in the last movement are really haunting on contra.

S: That area, just under the staff is totally different between bass and contra. On bass the timbre can stick out really easily, but on contra it blends really well.

Z: There is not much musically going on in Malaysia. We are the only classical music organization in the country. I teach at the university there so I have a creative outlet with that but we have to do a lot on our own within the orchestra section. A section member and I just finished an overdub project where I played bass, contrabass and bass trumpet and he played alto and tenor. It was great to hear and feel the colors possible with all of those instruments.

S: We're having a great conversation and I'm trying to let it just go wherever it goes but for the sake of academia, I need to make sure I cover my questions.

Tell me about the first time you performed with the orchestra on contrabass.

Z: I think the first time was Alpine Symphony. We've played it several times though. It's hard to pick out and remember individual performances. The orchestra rented an instrument from Thein a couple of times. Thein doesn't usually do that, but they had one available and it worked out. Then the orchestra ended up buying that instrument later.

S: Had you previously played Alpine on bass then this time chose to play it on contra?

Z: No. I had played it in other orchestras on bass and that was my first time with Malaysia and on contra. Being mostly a European orchestra, they had previously flown people in to play contra. It was a good chance for me to show the orchestra that they needed to buy one. They have other good instruments, so why not a contrabass? I just asked, "how are we handling the

contrabass part? Alpine has a part so how are we handling it?" I left it with them. We ended up renting the instrument. We needed it again soon after for a movie music concert, some Wagner and something else. Four or five times in one season. Finally, they just bought it.

The first time, though, was Alpine Symphony. I think I got the instrument about 10 days before the concert. It went well. I played contra for about 3 hours each day for those 10 days. Bill Thomas flew in to play the other bass part. He came three or four days early and we just played a lot of the stuff together so I could get it down. It was really helpful to play with other people.

It's different because the bell is further away. You lose perspective of how loud you are actually playing. You have to learn how it is projecting when the whole orchestra is playing loud.

The section thought it was great. Playing with Bill ahead of time really made the difference.

I think it adds a whole new dimension to the sound of the orchestra. Alpine especially, with two tubas, is really bottom heavy. The orchestration is such that you can really feel where you lie in the "sandwich." There is a clear bridge from bass trombone through contrabass trombone and bass tuba to the contrabass tuba. There are other pieces where that bridge isn't there. There are a couple of movie scores where it jumps from contra to 2nd trombone and it feels weird. The 2nd trombone has to make big adjustments to fit between 1st trombone and contrabass.

We also played a lot of Bach chorales as a section when I was on the contra. You want them to ring and be resonant. It's something I would have played on bass many times so I knew how it should sound. Then you play them on contra and you already have an idea of the phrasing and the balance and just add that color to the mix.

So many people let the technique define the music. If it is hard, the music suffers. But we always have to make sure, especially with contra because it is so clumsy, less clumsy than it used to be, that the music defines the technique. So, you practice the instrument to make the music great.

We don't let the music suffer because the instrument is difficult or different.

S: Do you know Gabe Langfur?

He had a post on the trombone pedagogy Facebook group that provoked some thought. He talked about how "technique equals freedom." I spent a lot of time thinking about that. Usually, in school and so on, you think technique is this little box I have to stand in. (Sarcastically) "I have to have good technique. I have to hold the slide this way and move it this way. I have to play this piece this way and do so many things a certain way called technique." Then, once you get through that or get over that hill, you come to the realization that the horn is no longer in your way to produce the music. I tell my students that all the tedious things I have them work on will eventually enable the music in their head to come out of the bell without their having to worry about trombone technique. I think that is what Thein is trying to accomplish on the physical side with their instruments. I think that is what Zach is trying to do in pushing the instrument as far as it can go. Then you meet in the middle and it is all the same goal.

S: How do you decide when to use the contra and when not to use it?

Z: Most of the time if it is traditionally a contrabass trombone, I'll use it. I even played the fourth movement of Symphony Fantastique on contra once and the conductor loved it. Generally, I am more of a purist. If it doesn't specify contrabass, I usually will not play it. I use it on Bartok's Concerto for Orchestra mainly to solve the impossible question of the glissando.

M: You have to remember that the old bass trombone was in F. Remember that they were writing for an F instrument. Bass trombone is now in B-flat for reasons of convenience when an instrument in F was the only way to play the part. I think we have to experiment and try things to see what fits.

S: Something I think about is that not one of us would want to touch the contrabass trombone Wagner had built to play his music, so is there really an argument that somehow performing on an inferior instrument is better? Or is it just idealism?

Z: There is a quote from Mahler. Something about how he was writing music for 50 years in the future. He was such a forward thinker. There is no way his symphonies were performed at as high a level when he wrote them as they are now. I think the master composers were not thinking about their present moment but of the future, knowing the music will develop over time.

M: I think the composers had one version in their head and body. When they wrote it down, they made a compromise. When they gave the parts to the musicians, they made a compromise. And then another to bring it together.