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E-flat and Bass Clarinet Doubling in Chamber and Orchestral Music:

Implications for the 21st Century Clarinetist

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Musical Arts

by

Sierra Lynelle Allen

2022

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ABSTRACT OF THE DISSERTATION

E-flat and Bass Clarinet Doubling in Chamber and Orchestral Music: Implications for the 21st Century Clarinetist

by

Sierra Lynelle Allen Doctor of Musical Arts University of California, Los Angeles, 2022 Professor Jan Noelle Baker, Chair

In my research, I examine orchestral and chamber music calling for E-flat and bass clarinet doubling *to be performed by one clarinetist* and analyze pieces requiring the use of both clarinets. My argument is built through an analysis of fourteen scores calling for this doubling and an accompanying catalogue of chamber and orchestral pieces that require the doubling. I examine these fourteen pieces to determine the level of virtuosity a clarinetist should have on both auxiliaries. I also interviewed and surveyed composers and clarinetists to gain a better understanding of the expectations professionals maintain regarding both E-flat and bass clarinet performance. The knowledge gained from the clarinetists shows how their proficiency on both E-flat and bass clarinet has influenced careers over the past several decades. Similarly, composers' responses indicate their expectations for the performance of E-flat and bass clarinet by a single clarinetist in the 21st century. My research will show that the career benefits of playing both E-

flat and bass clarinet, the prevalence of the doubling repertoire, and the expectations of composers for doubling clarinetists results in a novel need for the inclusion of E-flat and bass clarinet pedagogy in institutions of learning.

The dissertation of Sierra Lynelle Allen is approved.

David Samuel Lefkowitz

Timothy D. Taylor

Kay Kyurim Rhie

Jan Noelle Baker, Committee Chair

University of California, Los Angeles

2022

This dissertation is dedicated to my family.

Thank you for always encouraging me.

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Х

Sierra Lynelle Allen

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Introduction

I was introduced to orchestral clarinet playing during high school while attending a music festival. By the end of the two weeks, I had done many things for the first time: I played an A clarinet, performed in a chamber group, and performed in an orchestra. I also understood that, if I were to become a professional clarinetist, then I would need to choose a clarinet on which to double.

My quick introduction to the world of orchestral clarinet performance impressed upon me the importance of learning either the E-flat or the bass clarinet. In many ways, my experience is typical of any young clarinetist. The expectation to learn a doubling clarinet is as natural to the idea of clarinet performance as it is to own both A and B-flat instruments. However natural this expectation may be, a lack of instruction on such instruments is also typical. I experienced this firsthand as well.

Upon beginning twelfth grade, I was determined to choose the smaller of the two auxiliary clarinets simply as a matter of convenience. Fortunately, my high school owned an Eflat clarinet, which I was handed upon receiving the book to the musical *Little Shop of Horrors*. I continued playing E-flat clarinet in my undergraduate university band. Later, I signed up to perform in the New Music Ensemble and was handed a bass clarinet to perform Jacob Druckman's *Come Round*. After only three years, I had been expected to perform E-flat and bass clarinet with little to no instruction.

While completing my first year of my master's degree, I received an email from a chamber music festival looking for a clarinetist to perform a part requiring B-flat, E-flat, and bass clarinet. I was confused, since I had been led to believe that I only needed to master one

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auxiliary clarinet. At this point, I was confident on the E-flat clarinet but not at all proficient on the bass clarinet. I could not take the job.

Although it has been a few years since that email exchange, I have found myself in situations requiring the performance of one or both auxiliaries. A professional orchestra called me for second clarinet, only for me to receive a bass clarinet part one week before the concert. I hurriedly borrowed an instrument and figured it out. A few months later, I took a substitute clarinet audition requiring excerpts for B-flat, A, E-flat, and bass clarinets. Furthermore, I was given an E-flat clarinet part in my first Hollywood studio recording session as principal clarinetist. In another job as a session player, I played B-flat, bass, and B-flat contrabass clarinets. Clearly, the demand for clarinet doubling is great.

Clarinet doubling has been previously defined as pertaining to the use of B-flat clarinet and E-flat clarinet, or B-flat clarinet and bass clarinet. Many young clarinetists are taught that it is not necessary to learn a doubling instrument; they may have been told that, if they desire to play principal in an orchestra, it is better not to double for fear of being placed on other parts. Or, on the other hand, students are encouraged to pick only *one* doubling clarinet for the advancement of their careers, given that few orchestral jobs open every year for just B-flat/A clarinet.

A few scholars have written about the importance of clarinetists playing E-flat or bass clarinet, given the "competition and demand increase in today's professional performing climate;"¹ in other words, given the jobs available for those who double. Jaqueline Gail Eastwood Redshaw examined chamber music involving doubling on the E-flat clarinet to "[add]

¹ Jacqueline Gail Redshaw, "Chamber Music for the E-flat Clarinet," (DMA diss., University of Arizona, Tuscon, 2007), RILM (2007-15657), 12.

to the store of clarinet repertoire which is catalogued at this time."² Similarly, Kathleen Gardiner created an annotated bibliography and appendix of further solo and chamber literature for E-flat clarinet.³ Daniel Arthur Paprocki catalogued approximately 1,000 chamber pieces calling for bass clarinet.⁴

Upon examining these catalogues, I discovered numerous pieces requiring the doubling of both E-flat and bass clarinet. However, no research existed advocating for the necessity of learning both E-flat and bass clarinet. Jennifer Beth Iles also identified this gap when she stated, "By including the study of auxiliary clarinets, particularly the bass clarinet, in the core curriculum, students can become more versatile and marketable musicians."⁵

I fully recognize the importance of learning both E-flat and bass clarinet for the performance of pieces using clarinet/E-flat or clarinet/bass clarinet doubling, or individual E-flat or bass clarinet parts. It goes without saying that learning both E-flat and bass clarinet would present numerous opportunities for the performance of one instrument without the other. However, I have focused my dissertation on situations in which one cannot avoid doubling on both E-flat and bass clarinet and found that they are worth exploring further.

Given the importance of remaining flexible in the competitive atmosphere of performance, and my own experience needing to perform both E-flat and bass clarinet, I began searching for more pieces calling for this particular doubling, the doubling of E-flat and bass

² Redshaw, "Chamber Music for the E-flat Clarinet," 12.

³ Kathleen Michele Gardiner, "An Annotated Bibliography of Twentieth-Century Solo and Chamber Literature for the E-flat Clarinet," (DMA diss., The Ohio State University, 2002), Proquest (305554689).

⁴ Daniel Arthur Paprocki, "Chamber Music with Bass Clarinet: A Bibliography of Works and a Correlation with the Emergence of the Virtuosic Orchestral Bass Clarinet," (DMA diss., Ohio State University, 2000).

⁵ Jennifer Beth Iles, "The Changing Role of the Bass Clarinet: Support for its Integration into the Modern Clarinet Studio," (DMA diss., University of Nevada, Las Vegas, 2015), 1.

clarinet, to determine composers' expectations for clarinetists in the 21st century. Given that the goal of many clarinetists is to become an orchestral musician, either full-time or freelance, and the importance of chamber music in this regard, I focus on orchestral and chamber music uses of this doubling to demonstrate composers' expectations for virtuosity on both instruments in the 21st century. The purpose of my research is to persuade institutions of learning to implement a pedagogy for both E-flat and bass clarinet to best equip students for successful and fulfilling careers, either as a full-time orchestral musician, or as a freelancer.

I did not feel it necessary to go into details about what this pedagogy ought to include, given that several authors have presented ideas for such a pedagogy for either the E-flat or the bass clarinet, and even advocated for its implementation, drawing from orchestral excerpts, chamber music, and solo repertoire. In recognition of the instruments' limited pedagogical resources, Jennifer Tinberg created a compilation of orchestral excerpts and B-flat clarinet repertoire that can be performed on E-flat clarinet for further study.⁶ Iles traced the increased use of the bass clarinet and developed recommendations for pedagogy, and Brian Thomas Ebert created exercises for bass clarinet doubling.⁷ Jennifer Tinberg, Thomas Aber, and other authors note that the solo repertoire for bass clarinet, and E-flat clarinet, has been increasing and that the pieces are well worth performing.⁸

⁶ Jennifer Michelle Tinberg, "Pedagogical and Performance Practices of the E-flat Clarinet: Teaching Methods and Solo Repertoire," (DMA diss., The Florida State University, 2015), Proquest (11759160759).

⁷ Iles, "The Changing Role of the Bass Clarinet" and Brian Thomas Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," (DA diss., University of Northern Colorado, 2012).

⁸ Tinberg, "Pedagogical and Performance Practices of the E-flat Clarinet" and Thomas Carr Aber, "A History of the Bass Clarinet as an Orchestral and Solo Instrument in the Nineteenth and Early Twentieth Centuries and an Annotated, Chronological List of Solo Repertoire for the Bass Clarinet from Before 1945," (DMA diss., University of Missouri-Kansas City, 1990).

Methods

The research of this dissertation is based on fourteen scores that require E-flat and bass clarinet doubling. Chapter One explores possible trends demonstrated by the catalogue I compiled of orchestral and chamber pieces requiring E-flat and bass clarinet doubling (which is included in the chapter, organized in chronological order), and Chapters Two through Four focus on fourteen scores that require E-flat and bass clarinet doubling. Chapter Two discusses seven orchestral pieces, and Chapter Three delves into chamber music, featuring another to seven pieces. Chapter Four discusses the demands of the E-flat and bass clarinet doubling parts of all 14 pieces selected, and the dissertation concludes with a chapter on the comments I collected from surveys and interviews regarding the performance of E-flat and bass clarinet. I have also included an appendix of the catalogue organized alphabetically by composer, as well as an appendix of the survey used to collect responses for Chapter Five.

The catalogue was formed from the many repertoire lists provided in dissertations of those previously listed, including those from Paprocki and Gardiner. I also accounted for all of the pieces in Daniel's Orchestral Music Online database that included clarinet, and I catalogued works that included E-flat and bass clarinet doubling. ⁹ Other pieces were discovered by browsing YouTube, emailing orchestral librarians, and delving into composers' websites. The version of the catalogue included in the publication of this dissertation is the most current at this point in time, but I expect to continually add to this catalogue in the future.¹⁰ Furthermore, it should be noted that the catalogue likely does not fully represent the number of pieces that have

⁹ Daniel's Orchestral Music Online, accessed 2019-2022, https://daniels-orchestral.com/.

¹⁰ This catalogue could be supplemented by distributing surveys to composers organizations, including SCI (Society of Composers, Inc.), CMS (College Music Society), ASMAC (American Society of Music Arrangers and Composers), and SCL (Society of Composers and Lyricists).

been composed with E-flat and bass clarinet doubling, as many of the existing catalogues I attempted to draw from do not include instrumentation.¹¹

The fourteen pieces featured in this study were selected because of their significance in demonstrating the level of virtuosity required to perform the E-flat and bass clarinet parts, as well as because of the historically significant period in which they were composed.

For example, Gustav Mahler's *Symphony No. 1 in D Major* was the first orchestral composition thus far discovered to require E-flat and bass clarinet doubling. However, Mahler did not call for the doubling until after extensively editing his score, which is discussed in Chapter Two.

The second orchestral piece with this doubling to be studied is Georges Enescu's *Symphony No. 2 in A Major, Op. 17*, which is significant both as one of the composer's momentous works for orchestra, and because he composed solo moments for E-flat and bass clarinet. Furthermore, Enescu's symphony was composed two years after one of the earliest instances of bass clarinet doubling in a chamber piece, Anton Webern's *Zwei Lieder, Op. 8* (1910), and in the same year as Arnold Schoenberg's *Pierrot lunaire*, both of which likely influenced the increased use of bass clarinet doubling.¹²

Tōru Takemitsu's *Green (November Steps II)* was composed in 1967. This piece drastically challenges the doubling clarinetist with demands for quick switches. For context, this piece was composed one year after Lawrence Moss' *Windows* (1966), which is, thus far discovered, the earliest chamber piece composed requiring E-flat and bass clarinet doubling.

¹¹ A few examples of catalogues to draw from in the future are the Contemporary Score Database (hosted by the UCLA Music Library), the Institute for Composer Diversity, American Society of Composers, Authors, and Publishers (ASCAP) ACE Database, and other composers' resources. These catalogues, and others, did not contain easily accessible instrumentation listings for the formation of my own catalogue, so they will need to be looked into at a later date.

¹² Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 19-20.

Windows features many similar challenges in the part-writing such as intervallic leaps and quick staccato articulation but does not include the quick switches as found in *Green*.

Two chamber pieces are included from the 1980s, representing the high amount of content during this decade, given the increase of doubling pieces during this time as identified in the catalogue.¹³ The first is Elliott Carter's *Triple Duo* (1982), selected because of the numerous times it has been performed over the years, and because of the complexity of the part. Erika Fox's *'Hungarian' Rhapsody* (1989) is also included as a piece from this period. The score includes challenging techniques such as glissandi and flutter-tonguing, and it was recently performed at Tanglewood in 2019. The performance at an institution of learning is significant for this research, given that the purpose of the research is to determine if a pedagogy should be implemented in institutions of learning.

Two pieces are included from the 1990s. A piece from 1993, Thomas Adès' *Living Toys*, *Opus 9*, requires extreme altissimo ranges from both E-flat and bass clarinet. An interesting shift takes place in the repertoire as the study continues. Shulamit Ran's *Legends* (1993) was composed with a specific performer in mind. In this case the clarinetist was John Bruce Yeh, the Assistant Principal and E-flat Clarinetist of the Chicago Symphony. The E-flat part is challenging because Ran knew that Yeh could perform the part per her expectations, and it also includes a bass clarinet double.¹⁴

Of course, the focus of this research is on the 21st century repertoire that requires E-flat and bass clarinet doubling. The first 21st century piece included in this study is John Williams' *Harry Potter and the Sorcerer's Stone: Suite for Orchestra*. The piece, composed in 2001, is

¹³ See this discussion in Chapter One.

¹⁴ Shulamit Ran, Zoom interview by author, 4 April 2022.

studied as a nod to studio clarinetists, of whom doubling is routinely expected. Intonation and balance are the main challenges of these parts.

Three more pieces are included from the first decade of the 21st century. In 2002, Esa-Pekka Salonen composed *Insomnia* for orchestra with a part for doubling clarinetist. The bass clarinet uses its extended lower range in sixteenth notes, and the E-flat clarinet is presented with challenging finger patterns. From 2003 through 2004 Carter Pann composed *Antares* for the Antares ensemble with only an E-flat clarinet doubling, but he published it with both bass clarinet and E-flat clarinet doubling (reminiscent of the edits Mahler made to his first symphony, about a century earlier). Another piece originally composed throughout the first decade of the 21st century is Unsuk Chin's *Gougalōn: Scenes from a Street Theatre*, composed in 2009 and revised in 2011. The piece requires glissandi and rapid articulation, as well as percussion doubles.

The final two pieces were composed in the second decade of the 21st century. The first is William Bolcom's *Ninth Symphony: A Short Symphony in One Movement* composed in 2012 for the orchestra at Rice University. As a piece composed for an institution of learning in the 21st century, it is important in setting expectations for the 21st century clarinetist.

The last piece studied is an unpublished clarinet duet also by Lawrence Moss. The piece requires doubling in the second clarinet part. *Shadowplay* was composed in 2013, 47 years after *Windows* (1966). The piece was written for students at New York University to perform with their teacher (specifically for the students to perform the second clarinet doubling part).¹⁵ He thus maintains his doubling expectations for professionals *and students*, even decades later.

¹⁵ Esther Lamneck, Email message to author, 8 and 25 March 2022.

The final aspect of this study is found in Chapter Five, where I discuss information gained from survey and interview responses from orchestrators, composers, and clarinetists. The interview and survey responses demonstrate how clarinetists' careers are affected by their ability to perform on both E-flat and bass clarinet, and they also show the expectations that composers have when writing such doubling parts. The interview and survey responses thus make it possible to infer future expectations and benefits of E-flat and bass clarinet doubling and performance. The surveys and interviews were conducted with University of California, Los Angeles North General Institutional Review Board approval. Surveys were distributed via Facebook clarinet groups, including CLARINETISTS, BassClarinetGroup, Clarinette, and CLARINETISTS ADVANCED CHAT. Surveys were also distributed via email. Interviews were completed via Zoom, email, and phone.

Chapter One: Catalogue Findings

Before delving into the trends demonstrated by the catalogue, it is important to understand the history of bass clarinet and E-flat clarinet use in orchestral and chamber music. First, the clarinet as a transposing instrument existed in multiple sizes for the purpose of performing in different keys.¹⁶ Thus, multiple clarinets were expected to be played by one performer since the clarinet's invention, though this was not necessarily expected within a single movement of a piece. The clarinet was also initially a woodwind doubling instrument; it was originally the responsibility of oboists to perform the clarinets in concerts.¹⁷ It was only in the end of the eighteenth century that the clarinet became a specialist instrument to be performed by a trained clarinetist, and the standard orchestra featured each woodwind instrument in pairs. This restricted the composer's ability to double clarinet and oboe, for example. "Orchestral music was to dominate the development of woodwinds playing throughout the next century, and these specified parts called for more highly specialized instrumentalists."¹⁸

With regards to orchestral clarinet doubling, Ebert writes that, "When composers began writing for these auxiliary clarinets, the task to play them usually fell to the principal clarinetist. ...In similar fashion, early orchestral bass clarinet solos...were usually performed by the principal clarinetist."¹⁹ However, "In the subsequent works of Meyerbeer (*Le Prophéte*) and Berlioz (*Te Deum*), the bass clarinet becomes the assistant player's responsibility. The origins of

¹⁶ Tinberg, "Pedagogical and Performance Practices of the E-flat Clarinet," 2.

¹⁷ Phil A. Thompson, "A Historical Survey of Woodwind Doubling and a Form/Style Analysis of Four Work for Doubler and Wind Ensemble, A Lecture Recital Together with Three Recitals of Selected Works by W.A. Mozart, A. Glazunov, P. Tate, A. Szalowski, A. Copland and Others," (DMA diss., University of North Texas, 1993), 9.

¹⁸ Ibid., 10.

¹⁹ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 13.

the modern clarinet section assignments can be seen in Berlioz's *La Damnation de Faust* [1846], where the third clarinetist is also required to double on bass clarinet."²⁰ Ebert pulls further evidence from Nikolai Rimsky-Korsakov's *Principles of Orchestration* (begun in 1873 and completed by Maximilian Steinberg in 1912): "Rimsky-Korsakov stated that principal players should not switch instruments and that either the second or third chair player should play the auxiliary instruments."²¹

However, a shift back towards expecting all clarinetists to double seems to be the present trend in both small orchestral and chamber pieces, as is evidenced in the catalogue when single clarinetists are asked to perform this doubling. Samuel Adler wrote in 1982: "Since all clarinets have the same fingering system, clarinetists are able to play all instruments in the family, regardless of their size or transposition."²² Given that many composers use orchestration texts such as Adler's, E-flat and bass clarinet doubling may well have been influenced by such statements, even to the point of asking solo clarinetists in orchestral or chamber music to double both E-flat and bass clarinet.

Nevertheless, the last chair player indeed performs most of the doubling in the orchestral pieces in the catalogue. One exception includes when only one clarinet part is composed. Another exception is: if both second and third clarinetists are doubling bass clarinet, then the second clarinetist will likely take the E-flat and bass clarinet doubling, with the third clarinetist doubling only on bass clarinet (and contrabass clarinet if written). Essentially, the higher doubling instrument is put on the higher part if more than one clarinetist is doubling on bass

²⁰ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 13.

²¹ Nikolay Rimsky-Korsakov, *Principles of Orchestration*, ed. Maximilian Steinberg, trans. Edward Agate, (Paris: Édition Russe de Musique, 1922), vii and Ebert, 13.

²² Samuel Adler, *The Study of Orchestration*, 3rd Ed., (New York: W.W. Norton & Co., 1982), 205.

clarinet. Of course, there are some exceptions to this trend, but the catalogue overwhelmingly demonstrates the doubling part as the last chair clarinetist in orchestral music.

Recognizing the influences on composers regarding their use of E-flat and bass clarinet is important to identify the trends displayed in the catalogue. In the nineteenth century, the bass clarinet was mainly associated with themes of grief and death and did not appear in non-programmatic music until the end of the century.²³ Richard Wagner used the bass clarinet for this purpose many times when he included bass clarinet parts in several of his operas.²⁴ He also used the D clarinet *Tannhäuser*, after which "...the D and E[-flat] clarinets were employed by an increasing number of composers, especially in Germany and Austria."²⁵ Ebert notes that: "Wagner's orchestrational influence was carried farther in the last half of the nineteenth century, through the symphonies and orchestral songs of Gustav Mahler [and other composers]."²⁶

Mahler is the first orchestral composer to require E-flat and bass clarinet doubling in my catalogue. He also included the doubling in his fifth symphony. Many composers followed suit and included E-flat and bass clarinet doubling in their scores. For example, Georges Enescu used the doubling in his first and second symphonies, as well as in his third orchestral suite. Noel Malcom writes that in Enescu's first symphony: "…there are touches of Mahler in the scoring…"²⁷ Thus, it is possible that Mahler had an influence on Enescu with regards to the doubling. Furthermore, it seems possible that there did exist multiple clarinetists with the ability

²³ Aber, "A History of the Bass Clarinet as an Orchestral and Solo Instrument in the Nineteenth and Early Twentieth Centuries," 5 in Ebert, "Integrated Exercises for Clarinet and Bass Clarinet, 6.

²⁴ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 6.

²⁵ Basil Tschaikov, "The High Clarinets," in *The Cambridge Companion*, ed. Colin Lawson (Cambridge: Cambridge University Press, 1995), 45.

²⁶ Ebert, 7.

²⁷ Noel Malcolm, *George Enescu: His Life and Music*, (London: Toccata Press, 1990), 103.

to double on both E-flat and bass clarinet for the performance of these pieces. Given the extent of Mahler's influence on composition today, it is possible that his music was a catalyst for E-flat and bass clarinet doubling in orchestration as well.

For instance, Mahler was one of Arnold Schoenberg's heroes.²⁸ Ebert writes, "The bass clarinet is an essential voice in Mahler's orchestral works, and perhaps its use in the music of the Second Viennese School owes much to that fact."²⁹ Schoenberg's *Pierrot lunaire* (1912) was one of the most influential pieces on chamber music. This piece is significant for this research because of the influence of the instrumentation of the ensemble and the use of doubling. *Pierrot lunaire lunaire* required the clarinetist to double on bass clarinet.

Christopher Dromey writes about the significance of *Pierrot lunaire*'s instrumentation and other developments in music history that created a shift towards the standardization of the ensemble:

Music for the 'broken consort,' to carry that term up from the Renaissance, or for a mixed group such as might play a Baroque chamber sonata, was not unheard of in the nineteenth century, but it was unusual....

The situation changes completely after 1912. New instruments, especially from the percussion family, move into prominence. And later, new means of sound production are invented—the tape recorder, the synthesizer. For various historical or musical reasons, composers begin to hear new timbres and new timbral combinations, which are as important to the new music of the twentieth century as the so-called breakdown of functional tonality or the inclusion of the voice or of literary or dramatic programs in the previously 'pure,' absolute genres of chamber music. Works that were new in many ways, such as Schoenberg's *Pierrot lunaire*, sounded that much newer, and were that much more important historically, because of their new sounds....

Schoenberg developed this ensemble not as a self-conscious gesture of modernism but because he heard these instruments in his mind's ear and needed them to tell his story....

The ensemble is treated as a real chamber ensemble, that is, as a group of potential soloists, not as a mass. Schoenberg does not write for the instruments as

²⁸ James McCalla, *Twentieth-Century Chamber Music*, 2nd Ed., (New York: Routledge, 2003), 74.

²⁹ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 15.

winds versus strings versus piano, for instance; rather, he exploits the varieties of colors. 30

In fact, composer John Harbison, former composer-in-residence of the Pittsburg Symphony and Los Angeles Philharmonic, remarks: "The Pierrot ensemble has replaced the string quartet as the standard denomination for chamber music in our time…"³¹ Many Pierrot ensembles formed in the early 1970s and increasingly influenced chamber music instrumentation from that point in time.

There are several Pierrot ensembles whose influence on the repertoire is important. Two of them include the Fires of London and the Da Capo Chamber Players (based in New York). These two ensembles performed *Pierrot lunaire*, but they also commissioned and performed many new works. Ebert notes that, "Throughout the twentieth century, small, eclectic chamber ensembles…were a popular choice for many composers. Clarinet doubling figured prominently in this new aesthetic and is associated with several well-known works from various genres."³² However, Ebert is referring to doubling with E-flat or bass clarinet, not necessarily both. Nevertheless, both of these Pierrot ensembles had pieces composed for them that required the doubling of E-flat and bass clarinet.

In my catalogue, chamber music calling for E-flat and bass clarinet doubling substantially increases in the 1980s. This appears to correspond to the above observations: composers were searching for new sounds in the 1960s, found them in the E-flat and bass clarinet in the 1970s with some experimentation in Pierrot ensembles, and the Pierrot ensemble with doubling became

³⁰ Christopher Dromey, *The Pierrot Ensembles: Chronicle and Catalogue 1912-2012*, (London: Plumbago Books and Arts, 2012), 103-104.

³¹ "John Harbison," Music and Theater Arts, Massachusetts Institute of Technology, accessed May 27, 2022, https://mta.mit.edu/person/john-harbison and Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 23.

³² Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 15.

much more mainstream in the 1980s. These doubling pieces seem to have dropped off beginning in the 1990s, although it is important to note that it may falsely appear this way because chamber pieces catalogued with instrumentation (including doubles) are difficult to find for the most recent chamber works. A substantial number of 21st century works are catalogued without instrumentation, or they are not catalogued at all. I was fortunate that Erika Fox was able to share the instrumentation of her pieces with me.

The following table shows the number of pieces per decade as thus far discovered and catalogued:

Decade	Number of Chamber Pieces	Number of Orchestral Pieces	Combined Number of Chamber and Orchestral Pieces	% of Total Pieces by Decade
1890	0	1	1	0.5%
1900	0	4	4	1.9%
1910	0	4	4	1.9%
1920	0	9	9	4.3%
1930	0	4	4	1.9%
1940	0	3	3	1.4%
1950	0	5	5	2.4%
1960	2	11	13	6.2%
1970	6	16	22	10.5%
1980	44	19	63	30.1%
1990	27	13	40	19.1%
2000	7	20	27	13.0%
2010	3	11	14	6.7%
2020	0	0	0	0.0%

Figure 1-1: Number of Pieces Requiring E-flat and Bass Clarinet Doubling Per Decade.³³

The Da Capo Chamber Players' Facebook page states that they were founded in 1970.³⁴

The ensemble premiered 26 works between 1971 and 1979, demonstrating many composer and

³³ Figure 1-1 contains the data from 209 orchestral and chamber ensemble pieces requiring the clarinetist to double E-flat and bass clarinet. The data was derived from the catalogue. The catalogue decades were selected by the earliest date if a piece crossed into a new decade. Mahler's first symphony was listed as 1890 due to the fact that the added E-flat clarinet part was likely added around 1896. Other pieces were composed earlier but orchestrated later, and the latter decade is that which is represented in the data.

³⁴ Da Capo Chamber Players, "The internationally acclaimed Da Capo Chamber Players is an American contemporary music 'Pierrot ensemble' founded in 1970," Facebook, About, Additional Information, https://www.facebook.com/DaCapoChamberPlayers.

ensemble collaborations during this decade. In the 1980s, the Da Capo Chamber Players premiered 36 new works. ³⁵ One of the pieces premiered in the 1980s was Nicholas Maw's *Ghost Dances: Imaginary Ballet for Five Players*, which is included in the catalogue, and thus demonstrates the possible relationship between the Pierrot ensemble and this doubling outlined above. The increased ability to explore the possible sounds of the Pierrot ensemble may have affected composers' desires for the E-flat and bass clarinet in these ensembles: as they became heard more frequently, more composers wrote for them. *Ghost Dances* was written for both the Da Capo Players and for the Nash Ensemble, thus demonstrating an expectation for E-flat and bass clarinet doubling in multiple settings.³⁶

The ensemble premiered 23 pieces in the 1990s, and they list 30 and 31 pieces premiered during the first and second decades of the twenty-first century, respectively. These premieres remain numerous, and although it is possible that none of them required E-flat and bass clarinet doubling, the decrease of doubling pieces in my catalogue during the last three decades may simply reflect the fact that it is difficult to catalogue recent pieces due to the lack of instrumentation listings for current repertoire.

In London, The Pierrot Players (as they were known before becoming the Fires of London) influenced many composers as they commissioned and premiered works. Even the first concert "...set the tone for the Pierrot Players by augmenting the Pierrot ensemble, scoring parts for clarinet in E[-flat] and alto flute – calling for tripled rather than doubled winds – and doing so theatrically."³⁷ Composers Harrison Birtwistle and Peter Maxwell Davies were especially

³⁵ "Chamber Music Written for the Da Capo Chamber Players," Da Capo Chamber Players, accessed May 21, 2022, https://www.dacapochamberplayers.org/copy-of-commissions.

³⁶ "Ghost Dances: Imaginary Ballet for 5 players," Faber Music, accessed 21 May 2022, https://www.fabermusic.com/music/ghost-dances-1222.

³⁷ Dromey, *The Pierrot Ensembles*, 114.

involved in this Pierrot ensemble; both composers have required E-flat and bass clarinet doubling.

Birtwistle required E-flat and bass clarinet doubling in one of the first pieces he composed for The Pierrot Players in 1967 entitled *Monodrama*, which is the subject of the quote above. According to Christopher Dromey, "*Monodrama* was Birtwistle's serious but unspecified source-tragedy."³⁸ Birtwistle further used E-flat and bass clarinet doubling in three of his orchestral pieces: *Earth Dances* (1985-1986), *Violin Concerto* (2009-2010), and *Deep Time* (2017). Although the catalogue shows a decrease of pieces in the 21st century, the fact that Birtwistle calls for this doubling twice in recent years is significant for 21st century clarinetists. By the 21st century, the influence of the doubling repertoire from decades past should have created more need for doubling clarinetists. After all, one of the (woeful) attributes of performances is that decades-old music is performed more often than pieces written within the last few years. This trend means that performers, if they wish to play pieces in the catalogue, must develop this skill, a skill on which Birtwistle is likely capitalizing in his recent symphonic works.

Maxwell-Davies required E-flat and bass clarinet doubling in one of his works: *Stone Litany: Runes from a House of the Dead*, Op. 57, an orchestral work composed in 1973. The Eflat and bass clarinet doubling in this orchestral work follows his experience with The Melos Ensemble in the mid-1960s, an early version of The Pierrot Players which was involved in the summer school he ran with Birtwistle.³⁹

³⁸ Dromey, *The Pierrot Ensembles*, 114.

³⁹ Ibid., 112.

Another composer influenced by the Fires of London was Elliott Carter. His *Triple Duo* was composed for and premiered by the Fires of London in 1983 in New York. This piece is discussed further in Chapters Three and Four of the dissertation.

Other pieces in the catalogue were also composed for Pierrot ensemble. The peak of chamber music requiring E-flat and bass clarinet doubling was in the 1980s. Of the 44 discovered and catalogued pieces of chamber music composed during this decade, 26 pieces (approximately 63%), were written for some variation of Pierrot ensemble instrumentation.

This peak may reflect the influence of bass clarinet doubling found in Schoenberg's *Pierrot lunaire* in 1912, combined with Paul Hindemith's E-flat clarinet doubling in his Quintet of 1923 and the rise of the bass and E-flat clarinets as specialist instruments. ⁴⁰ Schoenberg's *Pierrot lunaire* was particularly influential on chamber music, even though it was not the first instance of bass clarinet doubling in a chamber piece. Schoenberg's goal "to make new sounds from traditional resources" was met in *Pierrot lunaire* through the specific instrumentation, including bass clarinet doubling, and the piece in turn influenced the instrumentation of later chamber groups.⁴¹

Kathleen Gardiner explains that Hindemith's Quintet may have been heard by Czech composer Leoŝ Janáĉek in concert, who subsequently wrote for the E-flat clarinet himself. It's possible that Hindemith and Janáĉek may then have influenced others to use the E-flat clarinet in their works. Gardiner also notes that the repertoire calling for E-flat clarinet exploded from the 1970s onwards, and similarly, Bok observes a trend towards bass clarinet specialization from the

⁴⁰ Gardiner, "An Annotated Bibliography of Twentieth-Century Solo and Chamber Literature for the E-flat Clarinet," 40.

⁴¹ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 22.

1960s onwards.⁴² This effect likely (slowly) developed a new standard of E-flat *and* bass clarinet doubling in chamber music that first appears in the 1960s with Lawrence Moss's *Windows* (1966) and Birtwistle's *Monodrama* (1967). The advent of the Pierrot ensemble in the 1970s likely created ample opportunity to apply the doubling expectation of E-flat and bass clarinet in new compositions, which may be what is observed in the catalogue with such an increase of pieces in the 1980s, ten years later.

Additionally, it is possible that E-flat and bass clarinet improvements by instrument makers may have influenced the repertoire for the instruments. In his 1982 article published in *The Clarinet*, Peter Hadcock noted that orchestral auditions for an E-flat clarinet chair required increasingly higher standards for performance than twenty years earlier. He identified this trend in the difference between the 1960s to the 1980s.⁴³ This trend may point to higher expectations for E-flat clarinetists in repertoire and may also allude to better instrument design for performance.

Iles investigated bass clarinet development post-1960 by researching Selmer and Buffet instrument development. When contacted, Selmer stated the development was confidential, and Buffet was looking into their records at the time her research was published.⁴⁴ Iles researched the development of the bass clarinet by examining method books, fingering charts, and reviews of bass clarinets published by Clark Fobes.⁴⁵ In 1995, Fobes made a comment that two main models

⁴² Gardiner, "An Annotated Bibliography of Twentieth-Century Solo and Chamber Literature for the E-flat Clarinet," 14 and Henri Bok, "The Bass Clarinet," in *The Versatile Clarinet*, Ed. Roger Heaton, (New York: Routledge, 2006), 91 in Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," 7.

⁴³ Peter Hadcock, "Unkinking the E-flat Clarinet," *The Clarinet* 9, no. 2 (Winter 1982): 30.

⁴⁴ Iles, "The Changing Role of the Bass Clarinet," 43.

⁴⁵ Ibid.

of bass clarinets were the best quality for performance: the pre-1983 Selmer bass clarinets (later in the comment he stated that he owned a 1976 Selmer 33 model) and the Buffet "Prestige" bass clarinets designed in the 1990s.⁴⁶ It seems that bass clarinets were well-suited for the demands of high-level performance in the same decades that the catalogue shows an increase in the amount of doubling repertoire. It is possible that the higher quality of instruments influenced more composers to write for the bass clarinet, as well as more clarinetists to perform bass clarinet.

Some of the compositional trends pointed out by Dromey help illustrate the use of E-flat and bass clarinet throughout history. Dromey writes that: "...from the mid-1950s on, the leading composers were more open to simultaneous use of a wider variety of influences or methods."⁴⁷ He also states that "What we see in 'classical' music from the 1970s on appears to be a loosening of expectations which a composer is expected to meet. Few systemic requirements seem to exist, and certainly no overriding style of method of composition."⁴⁸ Dromey also notes that electronic music was also prevalent in the 1970s.⁴⁹ He continues: "In the last decade or so of the twentieth century, composers and performers have also brought into classical music the fruits of their interest and experience in rock, jazz, and world musics."⁵⁰ He concludes, "Thus, if one can make any sort of generalization about the most recent chamber music, it would seem to be an openness to the world…and an eagerness to join those worlds, across boundaries."⁵¹ It is possible that the

⁴⁶ Clark Fobes, comment, July 1995, on "Bass Clarinets," woodwind.org, The Clarinet Pages (forum), accessed December 23, 2014, http://www.woodwind.org/clarinet/Equipment/BassClarinets.html in Iles, 46.

⁴⁷ Dromey, *The Pierrot Ensembles*, xxiv.

⁴⁸ Ibid., xxvi.

⁴⁹ Ibid., xxvii.

⁵⁰ Ibid., xxi.

⁵¹ Ibid., xxvii.

influence of music from many genres and cultures has resulted in the desire for a new color scheme, resulting in more use of E-flat and bass clarinet.

Many nationalities are represented by the composers whose pieces are listed in the catalogue. However, the catalogue as a whole includes approximately 68% of pieces by composers from the United States and the United Kingdom. This is further reflected during the 1980s boom of chamber music requiring doubling, of which almost all the pieces were written by composers from the United States or United Kingdom (about 90%). However, there were a couple chamber pieces composed by Canadian, Australian, and Norwegian composers in the 1980s included in the catalogue as well.⁵² During the same decade, orchestral pieces were also mostly written by composers from the United States and the United States and the United Kingdom, although they do not hold quite as much of a majority (only about 58%). Other composers were from Sweden, Germany, Denmark, and Poland. This trend reflects the fact that the majority of the sources used in the formation of the catalogue were from the United States or the United States, and the catalogues delved into were also based in the United States. Additionally, sources regarding Pierrot ensembles tended to focus on those in the United Kingdom.

It is possible that the geographical trend of these chamber and orchestral pieces influenced the prevalence of doubling clarinetists, and that the doubling clarinetists influenced more composers to write such parts. Thus, although I have attempted to select pieces from multiple traditions for an in-depth look at doubling expectations, the majority of the pieces to be

⁵² Future research can expand upon these findings to include more composers and clarinetists from outside the United States and United Kingdom, such as by sending surveys to composers organizations aforementioned for the supplementation of the catalogue.

examined in Chapters Two through Four are by composers from the United States or United Kingdom. Chapter Five will examine survey responses more in-depth from multiple nations.

The purpose of this dissertation is to demonstrate a need for E-flat and bass clarinet pedagogy in institutions of learning. I believe that the need for training is a reflection of the expectation composers have for clarinetists to be able to double on E-flat and bass clarinet. This expectation is evidenced by the substantial repertoire that already exists. Although I do not know how many 21st century works include parts with this doubling, the repertoire in my catalogue requires a new level of virtuosity with doubling E-flat and bass clarinet, as well as in the expectations for performance on each instrument. Thus, the level of performance is increasing, and students must be prepared to perform at this new level on both E-flat and bass clarinet.

My sentiments have been also stated by dissertation authors preceding me: Ebert writes, "Doubling is important not only in properly realizing a composer's music, but [also] in developing well-balanced instrumentalists who are both more technically and stylistically versatile. It is a skill that broadens the music-making experience and, in addition, makes one more marketable."⁵³ Tinberg states that, "Clarinetists playing E-flat clarinet in orchestral, band, or chamber settings would benefit from additional study outside of ensembles to truly master all of the skills required to successfully perform any of these parts."⁵⁴ Ebert also states, "Above all, musicians who double should approach each instrument as if it were their main focus."⁵⁵ I agree, although I believe Ebert's statement should now pertain to both the E-flat and bass clarinet. I believe the catalogue I have created demonstrates many instances of E-flat and bass clarinet

⁵³ Ebert, "Integrated Exercises for Clarinet and Bass Clarinet," ix.

⁵⁴ Tinberg, "Pedagogical and Performance Practices of the E-flat Clarinet," 27.

⁵⁵ Ebert, 24.

doubling and thus provides an impetus to implement E-flat and bass clarinet training in institutions of learning. The following chapters will examine specific repertoire to demonstrate that training is necessary, and to determine the level of proficiency and virtuosity required on E-flat and bass clarinet that the training should provide.

				Chamber Music Requiring Doubling or	Tripling with Eb and B	ass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
	Moss, Lawrence	Nov. 18, 1927-	USA	Windows	1966	bcl/Eb	bcl/Eb, flute/piccolo, double bass		Seesaw
Dromey	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Monodrama	1967	Bb/Ab/Eb/bcl	soprano/finger cymbals, speaker, fl/alto fl/pic, Bb/Ab/Eb/bcl, 2 perc, violin, cello		since withdrawn
aniel's	Carter, Elliott	Dec. 11. 1908-Nov. 5. 2012	USA	A Mirror on Which to Dwell	1975	1/Eb/bcl	1[1/Eb/bcl]	16'	AMP
Paprocki	Hill, Fred	1948-	England	Hungarian Shuffle: Being an Extemporization on the 1st Rumanian Christmas Carol (Colinde)/ Collected by Bela Bartok	1977	cl/Eb/bcl	cl/Eb/bcl, flute, pic, oboe, horn, bassoon	10	Australian Music Centre
Paprocki	Holloway, Robin	Oct. 19, 1943-	UK	The Rivers of Hell	1977	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, perc, piano, viola, cello		Boosey & Hawkes
Gardiner	Schwartz, Paul	1956-	USA	Trompe l'oeil	1977	Eb/bcl	Eb/bcl, pic/flute, perc, piano, violin, viola, cello	12'	American Music Center
Sardiner	Eberhard, Dennis J.	1943-May 25, 2005	USA	Visions of the Moon	1978	Eb/Bb/bcl	Eb/Bb/bcl, oboe/English horn, piano/celesta, violin/viola, soprano	16'	
Gardiner	Hekster, Walter	March 29, 1937-Dec. 31, 2012	Amsterdam, Netherlands	A Song of Peace	1979	Eb/Bb/bcl	Eb/Bb/bcl, alto sax, perc., cello, voice		Donemus
Gardiner	Blaustein, Susan	March 22, 1953-	USA	Commedia	1980	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, perc, violin, viola, cello, doublebass	14'	Verona, NJ: Subito Music Corp.
Gardiner	Retzel, Frank	1948-Dec. 19, 2018	USA	Amber glass: four songs of Thomas Merton	1980	Eb/bcl	Eb/bcl, alto flute, piano, violin, mezzo-soprano	21'	Verona, NJ: Subito Music Corp.
Gardiner	Barrett, Richard	Nov. 7, 1959-	Wales	Essay in Radiance	1981-1983	Eb/bcl	Eb/bcl, pic/bass flute, soprano/tenor sax, 1-2 perc, electric organ or synthesizer, violin/viola, cello	12'30"	London: United Music Publishers, Ltd
Paprocki	Hopkins, John E.	1949-	England	For the Far Journey	1981	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, harpsicord, violin, cello		Schirmer
Paprocki	Lloyd, Jonathan	Sept. 30, 1948-	UK	Waiting for Gozo	1981	cl/bcl/Eb	cl/bcl/Eb, alto flute/pic, oboe/English horn, bassoon/contra bassoon, horn, trumpet, trombone, 2 violin, viola, cello, double bass		Boosey & Hawkes
Paprocki	Osborne, Nigel	June 23, 1948-	England	The Cage	1981	cl/Eb/bcl	cl/Eb/bcl, ten, alto flute, oboe/oda, bassoon, horn, trumpet, violin, viola, cello		Universal/Kalmus
Paprocki	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti Lunatici	1981	cl/Eb/bcl	cl/Eb/bcl, sop. Flute/alto flute/pic, 2 perc, piano, violin, viola, cello	30'	Helicon/Kalmus
Gardiner	Carter, Elliott	Dec. 11, 1908-Nov. 5, 2012	USA	Triple Duo	1982	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, perc, piano, violin, cello	19'	Boosey & Hawkes
Gardiner	Rouse, Christopher	Feb. 15, 1949-Sept. 21, 2019	USA	Rotae Passionis	1982	Eb/Bb/bcl	Eb/Bb/bcl, flute/pic, perc, piano, violin, viola, cello	18'	European American Distributors
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Shir	1983	AcI/Eb/bcl	fl/alto fl/pic, ob/eng hn, Acl/Eb/bcl, bssn, hn, tpt, tenor/bass tbn, percussion, pno, 2 vlns, vla, cello, dbl bass	20'	Composer's Edition
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Quasi Una Cadenza	1983	Acl/Eb/bcl	Acl/Eb/bcl, horn in F, piano	12'	Composer's Edition
Gardiner	Lee, Hope	Jan. 1, 1953-	Taiwan/Canada	M-nabri	1983	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, marimba, harp, mandolin, guitar, violin, double bass	12'	Toronto: Canadian Music Centre
Daniel's	Mahler, Gustav; Schoenberg/Riehn reduction	July 7, 1860-May 18, 1911	Germany	Dan Liede von der Erde	1908-1909, orchestration begun 1921, completed 1983	1/Eb/bcl	1[1/Eb/bcl]	63'	Universal
	Morgan, David Robert	1933-1988	England	Voyage into Solitude, Opus 72	1983	Bb/A/Eb/bcl/cbcl/basset horn	Bb/A/Eb/bcl/cbcl/basset horn,vib/tam-tams/brass chimes/glock/suspended cymbals/bass drum/gong/mar/syl,/toms/triangle/hi-hat/tubular bell/finger cymbals/tubophone		Australian music centre
Paprocki	Nicholson, George	1949-	Durham England	Movements	1983	cl/Eb/bcl	cl/Eb/bcl, bassoon, horn, 2 violins, viola		BMIC
Daniel's	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti del Sole (small ensemble version)	1983-1984	1/Eb/bcl	1[1/Eb/bcl]	28'	Helicon
Paprocki	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti Del Sole	1983	cl/Eb/bcl	cl/Eb/bcl, ten, flute/pic/alto flute, trumpet, trombone, piano, 2 perc, violin, viola, cello, double bass	29'	Universal/Kalmus

Figure 1-2: Catalogue of Chamber Music Doubling Organized Chronologically⁵⁶

⁵⁶ Please note that the Los Angeles Philharmonic library does not necessarily own the scores listed in their database, nor does a listing necessarily mean that the piece has been performed by the orchestra. Additionally, as with all cataloguing ventures, it is possible that there exists an inaccuracy.

I hope that this catalogue will provide the impetus to institutions of learning in the effort to best educate and prepare the new generation of 21st century clarinetists for their careers with well-rounded training that includes E-flat and bass clarinet.

			·	Chamber Music Requiring Doubling or	Tripling with Eb and E	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Gardiner	Smalley, Roger	July 26, 1943-Aug. 18, 2015	Australia/Anglo-Australian composer	The narrow road to the deep north: a journey for baritone and six instrumentalists	1983	Eb/A/bcl	Eb/A/bcl, baritone voice, pic/flute/alto flute, perc, paino, violin, cello	40'	Australian Music Centre
Paprocki	Gosnall, Robin		UK	Wind Quintet	1984	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, bassoon, horn	10'	BMIC
Paprocki	Saxton, Robert	Oct. 8, 1953-	ик	The Sentinel of the Rainbow	1984	cl/bcl/Eb	cl/bcl/Eb, flute/alto flute/pic, perc, piano/celesta, violin/viola, cello		Chester
Paprocki	Elias, Brian	Aug. 30, 1948-	UK, lived in India	Geranos	1985	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, piano, perc, violin/viola, cello	21'	Chester
Gardiner	Erickson, Robert	March 7, 1917-April 24, 1997	USA	The Idea of Order at Key West	1985	Eb/bcl	Eb/bcl, flute, trumpet, viola, cello, soprano	11'	Smith Publications
Gardiner	Harris, Matthew	Feb. 18, 1956-	USA	As You Choose	1985	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, piano, violin, cello, soprano	31'	American Composers Alliance
Daniel's	Saxton, Robert	Oct. 8, 1953-	England	The Circles of Light: Chamber Symphony	1985-1986	1/Eb/bcl	1[1/Eb/bcl]	21'	Chester
Gardiner	Ayers, Lydia	Aug. 22, 1952-	USA	Photo	1986	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute/bass flute, sopranino/soprano/alto/tenor sax	5'-10'	New York: American Music Center
Paprocki	Hair, Graham	1943-	Australia	Concerto for Clarinettist & Double Ensemble	1986	cl/cbcl/bcl/Eb	cl/cbcl/bcl/Eb, flute, violin, viola, cello, kybrds, perc		Australian Music Centre
Gardiner	Packer, Randall	Jan. 23, 1953-	USA	Rose window	1986	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, 2 perc, piano, violin, cello		American Music Center
Gardiner	Sellers, James	Oct. 8, 1940-Feb. 26, 2017	USA	Return of the Comet	1986	Eb/Bb/A/bcl	Eb/Bb/A/bcl, pic/flute, electric piano, 2 violins, viola, cello, doublebass	24'30"	New York: American Music Center
Gardiner	Blaustein, Susan	March 22, 1953-	USA	To Byzantium	1987	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, pic trumpet/Bb trumpet, perc,		Verona, NJ: Subito Music
Gardiner	Brant, Henry	Sept. 15, 1913-April 26, 2008	Canada/USA	Invisible Rivers	1987	Eb/bcl	Eb/bcl, perc, piano, violin, viola, cello, doublebass, solo colloratura soprano	22'	Carl Fischer
Paprocki	Mason, Benedict	1954-	UK	Sonata Da Camera	1987	Eb/bcl	Eb/bcl, soprano sax/alto sax/perc, mar, violin cello, soprano		Chester
Gardiner	Moravec, Paul	Nov. 2, 1957-	USA	The Kingdom Within	1987	Eb/Bb/bcl	Eb/Bb/bcl, piano, violin, cello	18'	American Music Center
Gardiner	Shapey, Ralph	March 12, 1921-June 13, 2002	USA	Concerto Grosso for Woodwind Quintet	1987	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, oboe/English horn, bassoon/contrabassoon, horn	12'	Bryn Mawr, PA: Theodore Presser
Paprocki	Imbrie, Andrew	April 6, 1921-Dec. 5, 2007	USA	Pilgimage	1988	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, violin, cello, perc, piano	23'	C.F. Peters
Paprocki	Impett, Jonathan		UK	Cassation	c. 1988	Eb/bcl	Eb/bcl, trumpet, perc, piano, electronics		BMIC
Dromey	Maw, Nicholas	Nov. 5, 1935-May 19, 2009	Grantham England	Ghost Dances: Imaginary Ballet for 5 Players	1988	cl/Eb/bcl/kazoo/manjeera	cl/Eb/bcl/kazoo, flute/alto flute/pic, piano/kalimba, violin/strum-stick, cello	27'	Faber
Paprocki	Nordheim, Arne	1931-	Oslo Fjord	Tre Voci	1988	Eb/bcl	Eb/bcl, flute/pic, violin, cello, perc, piano, solo voices	16'	BBD20CM
Daniel's	Poulenc, Francis, orchd. by David Matthews	Jan. 7, 1899-Jan. 30, 1963	France	L'histoire de Babar, le petit (the Little Elephant)	1940-1945, arr. 1988	1/Eb/bcl	1/Eb/bcl	22'	Chester
Paprocki	Swayne, Giles	June 30, 1946-	Hertfordshire	Harmonies of Hell	1988	cl/bcl/Eb	cl/bcl/Eb, flute/alto flute/pic, oboe, bassoon, horn, 2 perc, 2 violin, viola, cello, double bass		Novello
Paprocki	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Hungarian' Rhapsody	1989	cl/Eb/bcl	cl/Eb/bcl, flute/alto flute, trumpet, piano	20'	BMIC
Paprocki	Holt, Simon	Feb, 21, 1958-	ик	Sparrow Night	1989	cl/Eb/bcl	cl/Eb/bcl, oboe, flute/pic, horn, harp, piano, violin, viola, cello, double bass	17'	Universal/Kalmus
Paprocki	Matthews, Colin	Feb. 13, 1946-	England	Cantata on the Death of Antony	1989	Eb/bcl	Eb/bcl, viola, cello, double bass, soprano	4'	Faber
Gardiner	Perle, George	May 6, 1915-Jan. 23, 2009	USA	Sonata a Cinque	1989	Eb/A/bcl	Eb/A/bcl, bass trombone, piano, violin, cello	15'	Hillsdale, NY: Boelke-Bomart
Paprocki	Vaughan, Mike		UK	Fracture Zones	1989	cl/bcl/Eb	cl/bcl/Eb, flute/pic, oboe/English horn, horn, piano, perc, violin, viola, cello, double bass		BMIC
Gardiner	Adams, John Luther	Jan. 23, 1953-	USA	Five Pieces from Coyote Builds North America	1990	Eb/bcl	Eb/bcl, 2 perc, perc/violin, perc/doublebass, storyteller, 2 dancers	21'	Fairbanks, AK: Taiga Press
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Letters and Notes	1990	Eb/Acl/bcl	Soprano, Eb/Acl/bcl, vla, cello	20'	
Paprocki	Matthews, Colin	Feb. 13, 1946-	England	Five Concertinos	1990	Eb/bcl	Eb/bcl, alto flute/pic, oboe, bassoon, horn	11'	Faber
Gardiner	Westlake, Nigel	Sept. 6, 1958-	Australia	Entomology	1990	Eb/bcl	Eb/bcl, pic/flute/alto flute, perc, piano, violin, cello, tape	15'	Australian Music Centre
Paprocki	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Meditation on "Sibyls"	1991	cl/Eb/bcl	cl/Eb/bcl, alto, bassoon, horn, violin, viola, cello	18'	BMIC
	Pritchard, Gwyn	1948-	England	Janus	1991	alto cl/bcl/Eb	alto cl/bcl/Eb, fl/afl/pic	13'	Camerata Editions
Gardiner	Ince, Kamran	May 6, 1960-	American composer of Turkish descent	Night Passage	1992	Eb/bcl	Eb/bcl, flute, trumpet, Roland R-70 Drum Machine, Korg T3 Synthesizer, electric bass, amplified violin, amplified cello	19'	European American Music Corp

Chamber Music Requiring Doubling or Tripling with Eb and Bass Clarinets									
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
	Keeling, Andrew	1955-	UK	Distant Skies, Mountains and Shadows	1992	Eb/bcl	Eb/bcl, flute, alto flute, bass flute, piano		BMIC
Paprocki	Kosvinar, David	1957-	South Africa	Trio	1992	cl/bcl/Eb	cl/bcl/Eb, flute, alto flute, bass flute, piano		BMIC
Daniel's	Adès, Thomas	March 1, 1971-	England	Living Toys, Op. 9	1993	1/Eb/bcl	1/Eb/bass	18'	Faber
Daniel's	Albert, Stephen	Feb. 6, 1941-Dec. 27, 1992	USA	TreeStone	1993	1/Eb/bcl	1/Eb/bcl	38'	Schirmer
							cl/Eb/bcl, flute/alto flute/pic, horn, perc, piano, 2 violins, viola,		
Paprocki	Cashian, Philip	1963-	UK	Shaking the Sky	1993	cl/Eb/bcl	cello, double bass	15'	BMIC
Dromey	Newland, Paul	1966-	UK	some like horrorshow music for a malenky bit of the old U.V. (Lament for the death of Linus)	1993	Bb/Eb/bcl	fl/alto fl/pic, Bb/Eb/bcl, piano, perc, violin, cello		
	Wilson, Ian	1964-	Ireland	In Extremis	1993	Eb/bcl	Eb/bcl, perc/tmp OR Eb/bcl, tape		CMCI
Paprocki	Cronin, Stephen	1960-	Australia	Blow	1994	cl/Eb/bcl	cl/Eb/bcl, cl/bcl, 2 horns in F, 2 bassoons	18'	Australian Music Centre
Daniel's	Matthews, Colin	Feb 13, 1946-	England	Through the Glass	1994	bcl/opt Eb	2[1.bcl/opt Eb]	16'	Faber
Paprocki	Woolrich, John	1954-	Cirencester UK	From the Shadows	1994	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, soprano sax, horn, trumpet, perc, piano, violin, viola, cello, double bass	7'	Faber
Paprocki	Brown, Christopher	1953-	USA	Brown the Bear	1995	cl/Eb/bcl/perc	cl/Eb/bcl/perc, bassoon/contrabassoon, horn, 2 violin, viola, cello/perc		BMIC
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Tuned Spheres	1995	cl/Eb/bcl	cl/Eb/bcl, trumpet, piano	10'	BMIC
Paprocki	Gribbin, Deirdre	May 14, 1967-	Belfast	Seven Visions of a Dream	1995	cl/Eb/bcl	cl/Eb/bcl, horn, 2 violin, viola, cello, double bass/finger, harp/tibetan bowl, harp		СМСІ
Gardiner	Hammer, Vincent Michael		USA	Ripples of Dissipation	1995	Eb/bcl	Eb/bcl, pic/bass flute, perc, piano,violin, cello		Thesis, State University of New York at Buffalo
Dromey	Vali, Reza	1952-	UK	Folk Songs (Set No. 15)	1995	Eb/bcl/cl	fl/alto fl/pic, Eb/cl/bcl, perc, violin, cello	20'	Hal Leonard
Paprocki	Ferneyhough, Brian	Jan. 16, 1943-	UK	Incipits	1996	Eb/bcl	Eb/bcl, viola, perc, pic/bass flute, 2 violin, cello, double bass	11'	Peters
Paprocki	Gyger, Elliott	1968-	Australia	La Mer Aux Miroirs Creves	1996	bcl/Eb	bcl/Eb, pic/flute/oboe/oboe d'amore, piano, harp, perc, violin, viola, cello	23'	Australian Music Centre
Paprocki	Woolrich, John	1954-	Cirencester UK	Caprichos	1997	Eb/bcl	Eb/bcl, pic/alto flute, soprano sax, horn, trumpet, trombone, perc, piano, violin, viola, cello, double bass	7'	Faber
Paprocki	Hayden, Sam	Dec. 9, 1968-	ик	Partners in Psychopathology	1998	bcl/Eb	bcl/Eb, alto flute/pic, perc, vibraphone, mar, piano, viola, violin	5'	BMIC
Gardiner	Heinrichs, William		USA	Trio for Seven Instruments	1998	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, piano		National Flute Assoc. Convention in Phoenix
Dromey and	Toovey, Andrew	Feb. 21, 1962-	UK	Music for the Painter Jack Smith: Versioni II	2001	Bb/Eb/bcl	fl/pic/alto fl/bass fl, Bb/Eb/bcl, piano/harpsichord, perc, violin,	2002	BMIC
Discovered:	Pann, Carter	Feb. 21, 1972-	USA	Antares	2003-4	Bb/bcl/Eb	Bb/bcl/Eb, violin, cello, pno	20'	Presser
LA Phil	Matheson, James	1970	USA	Songs Of Desire, Love, And Loss	2004	1/Eb/bcl	1/Eb/bcl		
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Café Warsaw 1944	2005	Acl/Eb/bcl	Acl/Eb/bcl, flute(s), violin, cello, piano, percussion (1 player)	15'	Composer's Edition
Daniel's	Canat de Chizy, Édith	March 26, 1950-	France	Vagues se Brisant Contre le Vent	2006	1/Eb/bcl	1[1/Eb/bcl]	17'	Lemoine
Daniel's	Chin, Unsuk	July 14, 1961-	South Korea	Gougalon (Scenes from a Street Theatre)	2009, rev. 2011	1/Eb/bcl	1[1/Eb/bcl]	24'	Boosey
Daniel's	Osborne, Nigel	June 23, 1948-	England	Rock Music	2009	1/Eb/bcl	1[1/Eb/bcl]	20'	UYMP
Dr. Esther Lamneck	Moss, Lawrence	Nov. 18, 1927-	USA	Shadowplay for 2 Clarinets	2013	Bb/Eb/bcl	2[1.2/Eb/bcl]		unpublished
	Boehler, Matt		USA	Marginalia	2018	Eb/bcl	soprano, mezzo soprano, tenor, Eb/bcl, cello, percussion	43'30"	
Survey	Lefkowitz, David S.	1964-	USA	Abstracts 2	2019	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto fl, vln, cello, pno, optional percussion	29'	Floating Point Music
Paprocki	Roe. Helen	1955-	UK	Ha		cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, violin, cello		BMIC

				Orchestral Music Requiring Doubling o	r Tripling with Eb and	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Mahler, Gustav	July 7, 1860-May 18, 1911	Germany	Symphony No. 1, D major (Titan)	1884-1888, 2nd rev. ca. 1906	3/bcl/Eb2	4[1.2.3/bcl/Eb2.4/Eb1]	53'	Breitkopf, Kalmus, Luck's, Universal
Daniel's	Mahler, Gustav	July 7, 1860-May 18, 1911	Germany	Symphony No. 5, C-Sharp Minor	1901-1902, rev. repeatedly	3/D/bcl also C in mvt 2; bass clt in A end of first mvt	3[1.2.3/D/bcl]	68'	Kalmus, Peters
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Symphony No. 1, Op. 13, E-flat major	1905	Eb/bcl	3[1.2.Eb/bcl]	36'	Boosey/Enoch/Kalmus
Daniel's	Bartók, Béla	March 25, 1881-Sept. 26, 1945	Hungary	Two Portraits, Op. 5 BB 48b (Két portré; Deux portraits)	1907-1911	2/bcl/Eb2	2[1/Eb1.2/bcl/Eb2]	12'	Boosey, EMB, Kalmus, Luck's
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Symphony No. 2 , Op. 19, B-flat major	1909-1910	3/Eb/bcl	3[1.2.3/Eb/bcl]	34'	PWM
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Impromtu, Op. 13	1911	Eb/bcl	3[1.2/Eb.Eb/bcl]	20'	EAM
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Suite, Op. 14 C minor	1911-1912	4/Eb/bcl	4[1.2.3/Eb.4/Eb/bcl]	29'	Bärenreiter
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Love Songs of Hafiz, Op. 26	1911-1914	Eb/bcl	3[1.2.Eb/bcl]	23'	PWM
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Symphony No. 2, Op. 17, A major	1912-1914	3/Eb/bcl	3[1.2.3/Eb/bcl]	58'	Salabert
Daniel's	Bartók, Béla	March 25, 1881-Sept. 26, 1945	Hungary	Four Orchestral Pieces, Op. 12 BB 64	1912, rev. (orchd.) 1921	3/Eb/bcl.4/Eb/bcl	4[1.2.3/Eb1/bcl1.4.Eb2/bcl2]	22'	Boosey
Daniel's	Pfitzner, Hans	May 5, 1869-May 22, 1949	Germany	Von Deutscher Seele, Op. 28 (Of the German Soul)	1921	Eb/bcl	4[1.2.3/Eb.Eb/bcl]	96'	Leuckart
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Harnasie, Op. 55	1923-1931	Eb/bcl	3[1.2.Eb/bcl]	38'	PWM
Daniel's	Glière, Reinhold	Jan. 11, 1875-June 23, 1956	Ukraine	The Red Poppy (Roter mohn): Suite	1927	3/Eb/bcl	3[1.2.3/Eb/bass]	27'	Russian
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Variations, Op. 24 (Calvary; Via Crucis; Křížová cesta)	1927-1928	Eb/bcl	3[1.2.Eb/bcl]	31'	Supraphon
Daniel's	Krenek, Ernst	Aug. 23, 1900-Dec. 22, 1991	American composer of Austrian birth	Kleine Symphonie, Op. 58	1928	2/Eb/bcl	3[1/Eb.2/Eb/bcl.3]	15'	Universal
LA Phil	Shostakovch, Dmitri	Sept. 12, 1906-Aug. 9, 1975	Russia	The Nose: Suite	1928	1/Eb/bcl	1/Eb/bcl		
Daniel's	Stravinsky, Igor	June 17, 1882-April 6, 1971	Russian composer, later of French (1934) and American (1945) nationality	Four Etudes for Orchestra (Quatre Études)	1928-1929	bcl/Eb* "Available scores are replete with error, to the point that it is difficult to be certain about what instruments are required."	3[1.2.bcl/Eb]	10'	Boosey
Daniel's	Zemlinsky, Alexander	Oct. 14, 1871-March 15, 1942	Austria	Symphonische Gesänge, Op. 20 (Symphonic Songs)	1929	Eb/bcl	3[1.2.Eb/bcl]	20'	Universal
Daniel's	Schmidt, Franz	Dec. 22, 1874-Feb. 11, 1939	Austria	Das Buch mit Sieben Siegeln (The Book with Seven Seals)	1935-1937	Dcl/bcl	3[1.2.Dcl/bcl] instructions for doubling parts, not instruments, would require one more clarinet	110'	Universal
Daniel's	Britten, Benjamin	Nov. 22, 1913-Dec. 4, 1976	England	Our Hunting Fathers, Op. 8	1936 (rev. 1961)	Eb/bcl	2[1.Eb/bcl]	27'	Boosey
Daniel's	Novák, Vítězslav	Dec. 5, 1870-July 18, 1949	Czech Republic	South Bohemian Suite, Op. 6	1936-1937	Eb/bcl	3[1.2.Eb/bcl]	31'	Breitkopf
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Suite No. 3, Op. 27, D major (Villageois; Săteasca)	1937-1938	bcl/Dcl	3[1.2.bcl/Dcl]	31'	Salabert
Daniel's	Novák, Vítězslav	Dec. 5, 1870-July 18, 1949	Czech Republic	Saint Wenceslas Triptych	1941, rev. orchd. 1942	Eb/bcl	3[1.2.Eb/bcl]	24'	Supraphon
Daniel's	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	Symphony No. 1 (Jeremiah)	1943	Eb/bcl	3[1.2.Eb/bcl]	25'	Boosey
Daniel's	Siegmeister, Elie	Jan. 15, 1909-March 10, 1991	USA	Sunday in Brooklyn	1946	Eb/bcl	3[1.2.Eb/bcl]	16'	Fischer
LA Phil	North, Alex (McGurty)	Dec. 4, 1910-Sept. 8, 1991	USA	Streetcar Named Desire, A: Suite For Orchestra (McGurty)	1951	3/Eb/bcl	3[1.2.3/Eb/bcl]		
LA Phil	Stravinsky, Igor	June 17, 1882-April 6, 1971	Russian composer, later of French (1934) and American (1945) nationality	Four Etudes For Orchestra (1952 Revision)	1952	Eb/bcl	3[1.2.Eb/bcl]		
Daniel's	Toch, Ernst	Dec. 7, 1887-Oct. 1, 1964	Austrian composer, naturalized American citizen from 1940	Symphony No. 2, Op. 73	1953	3/Eb/bcl	3[1.2.3/Eb/bcl]	33'	AMP, Fleisher
Daniel's	Alfvén, Hugo	May 1, 1972-May 8, 1960	Sweden	The Prodigal Son (Den Förlorade Sonen): Ballet Suite	1957	Eb/bcl	3[1.2.Eb/bcl]	19'	Suecia
Daniel's	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story: Overture	1957	2/Eb/bcl	2[1.2/Eb/bcl]	5'	Boosey, Luck's

Figure 1-3: Catalogue of Orchestral Music Doubling Organized Chronologically

	-			Orchestral Music Requiring Doubling or	r Tripling with Eb and	Bass Clarinets	-		
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Eben, Petr	Jan. 22, 1929-Oct. 24, 2007	Czech Republic	Concerto, Piano	1960-1961	3/Eb/bcl	3[1.2.3/Eb/bcl]	26'	Schott
LA Phil	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story (Complete - With Film): Overture	1961	Eb/bcl	2[1.2/Eb/bcl]	4'	
Daniel's	Britten, Benjamin	Nov. 22, 1913-Dec. 4, 1976	England	War Requiem, Op. 66 (complete ensemble)	1961	3/Eb/bcl	4[1.2.3/Eb/bcl.chmb1]	78'	Boosey
Daniel's	Karkoff, Maurice	March, 17 1927-Jan. 20, 2013	Sweden	Sette Pezzi per Grand Orch Op. 63 (Seven Pieces for Large Orchesetra)	1962	Eb/bcl	3[1.2.Eb/bcl]	18'	Suecia
Daniel's	Shostakovich, Dmitry	Sept. 12, 1906-Aug. 9, 1975	Russia	Symphony No. 13, Op. 113, B-flat major (Babi Yar)	1962	3/Eb/bcl	3[1.2.3/Eb/bcl]	59'	Russian, Sikorski
Daniel's	Lopatnikoff, Nikolai	March 16, 1903-Oct. 7, 1976	American composer of Russian origin	Concerto for Orchestra	1964	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Peters
Daniel's	Rochberg, George	July 5, 1918-May 29, 2005	USA	Zodiac	1964-1965	Eb/bcl	3[1.2.Eb/bcl]	13'	Presser
LA Phil	Bernstein, Leonard (M. Peress)	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story: Overture (Peress)	1965	2/Eb/bcl	2[1.2/Eb/bcl]	4'	Boosey
Daniel's	Takemitsu, Toru	Oct. 8, 1930-Feb. 20, 1996	Japan	Green (November Steps No. 2)	1967	3/Eb/bcl	3[1.2.3/Eb/bcl]	6'	Peters
Daniel's	Schurmann, Gerard	Jan. 19, 1924-March 24, 2020	British-Dutch composer, resident in the USA	Six Studies of Francis Bacon	1968	3/Eb/bcl	3[1.2.3/Eb/bcl]	31'	Novello
Daniel's	Martin, Frank	Sept. 15, 1890-Nov. 21, 1974	Switzerland	Erasmi Monumentum (Monument to Erasmus)	1969	Eb/bcl	3[1.2.Eb/bcl]	24'	Universal
Daniel's	Sessions, Roger	Dec. 28, 1896-March 16, 1985	USA	Concertino for Chamber Orchestra	1971-1972	1/Eb/bcl	1[1/Eb/bcl]	17'	Marks
Sparling	Ferneyhough, Brian	Jan. 16, 1943-	UK	Transit	1972-1975	Eb/bcl	1[Eb/bcl]	45'	Peters
Daniel's	Maw, Nicholas	Nov. 5, 1935-May 19, 2009	England	Odyssey	1972-1987	3/Eb/bcl the Eb part is sometimes in the 2nd part and other times in the 3rd; only one Eb at a time is required		95'	Faber
Daniel's	Maxwell Davies, Peter	Sept. 8, 1934-March 14, 2016	England	Stone Litany; Runes from a House of the Dead, Op. 57	1973	bcl/Eb	2[1.bcl/Eb]	20'	Boosey
Daniel's	Ginastera, Alberto	April 11, 1916-June 25, 1983	Argentina	Glosses Sobre Temes de Pau Casals	1976-1977	3/Eb/bcl	3[1.2.3/Eb/bcl]	18'	Boosey
LA Phil	Schuller, Gunther	Nov. 22, 1925-June 21, 2015	USA	Concerto No. 2 For Orchestra	1976	4/Eb/bcl	5[1.2.3.4/Eb/bcl.bcl/cbcl]	22'	Wise Music Classical
Daniel's	Wernick, Richard	Jan. 16, 1934-	USA	Visions of Terror and Wonder	1976	4/bcl/Eb	4[1.2.3/Eb.4/bcl/Eb]	28'	Presser
Daniel's	Argento, Dominick	Oct. 27, 1927-Feb. 20, 2019	USA	A Ring of Time (Preludes and Pageants for Orchestra and Bells)	1977	Eb/bcl	4[1.2.Eb.Eb/bcl]	28'	Boosey
Daniel's	Henze, Hans Werner	July 1, 1926-Oct. 27, 2012	Germany	Aria de la Folía Española	1977	1/Eb/bcl	1[1/Eb/bcl]	20'	Schott
Daniel's	Schwertsik, Kurt	June 25, 1935-	Austria	Concerto, Violin No. 1, Op. 31	1977	Eb/bcl	2[1.Eb/bcl]	20'	Boosey
Daniel's	Bennett, Richard Rodney	March 29, 1936-Dec. 24, 2012		Sonnets to Orpheus	1978-1979	2/Eb/bcl	2[1.2/Eb/bcl]	30'	Novello
Daniel's	Bolcom, William	May 26, 1938-	USA	Symphony No. 3	1979	cl/Eb/bcl	1[cl/Eb/bcl]	32'	Marks
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	Pied Piper Fantasy	1979-1981	3/Eb/bcl	3[1.2.3/Eb/bcl]	38'	Schirmer
Daniel's	Henze, Hans Werner	July 1, 1926-Oct. 27, 2012	Germany	Barcarola	1979	2/Eb/bcl.3/Eb/cbcl	3[1/Eb.2/Eb/bcl.3/Eb/cbcl]	20'	Schott
Daniel's Daniel's	Kilar, Wojciech Penderecki, Krzysztof	July 17, 1932-Dec. 29 2013 Nov. 23, 1933-March 29, 2020	Poland Poland	Exodus Symphony No. 2 (Christmas Symphony; Wigilijna; Weihnachtssinfonie)	1979-1981 1979-1980	4/Eb/bcl 3/Eb/bcl	4[1.2.3.4/Eb/bcl] 3[1.2.3/Eb/bcl]	23' 35'	PWM Schott
Daniel's	Bennett, Richard Rodney	March 29, 1936-Dec. 24, 2012	England	Concerto, Harpsichord	1980	2/Eb/bcl	2[1.2/Eb/bcl]	22'	Novello
Daniel's	Börtz, Daniel	Aug. 8, 1943-	Sweden	Symphony No. 5	1980-1981	3/Eb/bcl, 4/Eb/bcl	4[1.2.3/Eb/bcl.4/Eb/bcl]	22	Gehrmans
Daniel's	Killmayer, Wilhelm	Aug. 21, 1927-August 20, 2017		Im Freien	1980-1981	2/Eb/bcl	2[1.2/Eb/bcl]	10'	Schott
LA Phil	Williams, John	Feb. 8, 1932-	USA	Star Wars, Episode 5: The Empire Strikes Back (Complete Film)	1980	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl]	124'	Schore
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	Three Hallucinations	1981	3/Eb/bcl	3[1.2.3/Eb/bcl]	13'	Schirmer
Daniel's	Nørgård, Per	July 13, 1932-	Denmark	Symphony No. 4	1981	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Hansen
Daniel's	Schoenfeld, Paul (some sources write Schoenfield, but composer prefers the former)	Jan. 24, 1947-	USA	Four Parables	1982-1983	3/Eb/bcl	3[1.2.3/Eb/bcl]	28'	Schirmer
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Earth Dances	1985-1986	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]	38'	Universal
Daniel's	Shapey, Ralph	March 12, 1921-June 13, 2002		Symphonie Concertante	1985	11 soloists:cl/Eb/bcl	11 soloists:cl/Eb/bcl	29'	Presser

		•		Orchestral Music Requiring Doubling o	r Tripling with Eb and	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Balada, Leonardo	Sept. 22, 1933	Spain/Spanish-American composer	Zapata (Images for Orchestra)	1987	2/Eb/bcl	2[1.2/Eb/bcl]	19'	Subito
Daniel's	Glass, Philip	Jan. 31, 1937 -	USA	Concerto, Violin, No. 1	1987	bcl/Eb	3[1.2.bcl/Eb]	25'	Chester/Dunvagen
Daniel's	Harvey, Jonathan	May 3, 1939-Dec. 4, 2012	UK	Timepieces, for Orchestra with 2 Conductors	1987	2/Eb/bcl	2[1/Eb.2/Eb/bcl]	19'	Faber
Daniel's	Tertertian, Avet	July 29, 1929-Dec. 11, 1994	Armenia	Symphony No. 7	1987	Eb/bcl	3[1.2.Eb/bcl]	32'	Sikorski
Daniel's	Young, Kenneth	Nov. 11, 1955-	New Zealand	Symphony [No. 1]	1987	3/Eb/bcl	3[1.2.3/Eb/bcl]	41'	SOUNZ
Daniel's	Roter, Bruce Craig	June 2, 1962-	USA	Camp David Overture: Prayer for Peace	1988 rev. 1995	Eb/bcl	3[1.2.Eb/bcl]	12'	MMB
Daniel's	Turnage, Mark-Anthony	June 10, 1960-	England	Three Screaming Popes	1988-1989	1/Eb/bcl	3[1/Eb/bcl.2/bcl.3/bcl]	15'	Schott
Daniel's	Kernis, Aaron Jay	Jan. 15, 1960-	USA	Symphony in Waves	1989	1/Eb/bcl	1/Eb/bcl	38'	AMP
Daniel's	Lutoslawski, Witold	Jan. 25, 1913-Feb. 9, 1994	Poland	Chantefleurs et Chantefables	1989-1990	1/Eb/bcl	1[cl/Eb/bcl]	22'	Chester
Daniel's	Tippett, Michael	Jan. 2, 1905-Jan. 8, 1998	England	Byzantium	1989-1990	3[incl Eb, bcl]	3[incl Eb, bcl] Forsyths has 3[1.2.Eb/bcl]	25'	Schott
Daniel's	Carter, Elliott	Dec. 11, 1908-Nov. 5, 2012	USA	Concerto, Violin	1990	2/Eb/bcl	3[1.2/Eb/bcl.bcl]	26'	Boosey
Daniel's	Mason, Benedict	June 21, 1955-	England	Concerto, Viola Section	1990	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl	25'	Chester
Daniel's	MacMillan, James	July 16, 1959-	Scotland	Sinfonietta	1991	Eb/bcl	1[Eb/bcl]	19'	Boosey
LA Phil	Levinson, Gerald	June 22, 1951-	USA	Symphony No. 2	1992-1994	bcl/Eb2	5[1.2.Eb.bcl/Eb2,cbcl/3]	40'	Presser
Daniel's	Ran, Shulamit	Oct. 21, 1949-	American composer of Israeli birth	Legends	1992-1993, rev. 2001	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl]	20'	Presser
Daniel's	Ince, Kamran	May 6, 1960-	American composer of Turkish descent	Domes	1993	Eb/bcl	2[1.Eb/bcl]	12'	EAM
Daniel's	Rodríguez, Robert Xavier	June 28, 1946-	USA	Scrooge	1994	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Schirmer
Daniel's	Lazarof, Henri	April 12, 1932-Dec. 29, 2013	American composer of Bulgarian origin	Symphony No. 4 (In Celebration)	1996	3/Eb/bcl	3[1.2.3/Eb/bcl]	25'	Merion
Daniel's	Sheng, Bright	Dec. 6, 1955-	China/USA	Postcards	1997	cl/Eb/bcl	1[cl/Eb/bcl]	17'	Schirmer
LA Phil	Williams, John	Feb. 8, 1932-	USA	Saving Private Ryan: Excerpts	1998	3/bcl/Eb	3[1.2.3/bcl/Eb]		
LA Phil	Williams, John	Feb. 8. 1932-	USA	Saving Private Ryan: Hymn to the Fallen	1998	3/Eb/bcl	3[1.2.3/Eb/bcl]	6'	
Daniel's	Previn, André	April 6, 1929-Feb. 28, 2019	American composer of German birth	Diversions	1999	2/Eb/bcl	2[1.2/Eb/bcl]	24'	Schirmer
LA Phil	Williams, John	Feb. 8, 1932-	USA	For Seiji!	1999	3/bcl/Eb	3[1.2.3/bcl/Eb]	19'	
Survey	Dean, Brett	1961-	Australia	Pastoral Symphony	2000	Eb/bcl	2[Eb/bcl.bcl]	17'	Boosey
LA Phil	Williams, John	Feb. 8, 1932-	USA	Patriot, The: The Patriot	2000	3/Eb/bcl	3[1.2.3/Eb/bcl]	8'	Hal Leonard
Daniel's	Nyman, Michael	March 23, 1944-	England	The Draughtsman's Contract: Suite	2001, rev. 2014	Eb/bcl	3[1.2.Eb/bcl]	16'	Chester
Discovered:	Williams, John	Feb. 8, 1932-	USA	Harry Potter and the Sorcerer's Stone: Suite for Orchestra	2001	bcl/Bb/Eb	3[1.2/bcl.3/bcl/Eb]	16'26"	Hal Leonard
Daniel's	Paterson, Robert	April 29, 1970-	USA	Electric Lines	2002-2003, rev. 2004	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]	9'	Holab
Daniel's	Salonen, Esa-Pekka	June 30, 1958-	Finland	Insomnia	2002	2/Eb/bcl	3[1.2/Eb/bcl2.bcl1]	20'	Chester
LA Phil	Williams, John	Feb. 8, 1932-	USA	Harry Potter and the Chamber of Secrets Suite	2002	3/Bb cbcl/bcl/Eb	3[1.2/bcl.3/Bb cbcl/bcl/Eb]	13'30"	Hal Leonard
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	Mr. Tambourine Man; Seven Poems of Bob Dylan	2000, rev. (orchd.) 2003	3/Eb/bcl	3[1.2.3/Eb/bcl]	36'	Schirmer
LA Phil	Dun, Tan	Aug. 18, 1957-	China, USA	Paper Concerto For Paper Instruments And Orchestra	2003, 2005	Eb/bcl	2[1.Eb/bcl]	18'	Schirmer
Daniel's	Salonen, Esa-Pekka	June 30, 1958-	Finland	Wing on Wing	2003-2004	Eb/bcl	4[1.2.Eb/bcl.cbcl]	26'	Chester
Daniel's	Turnage, Mark-Anthony	June 10, 1960-	England	Scherzoid	2003-2004	Eb/bcl	3[1.2/bcl.3/Eb/bcl]	13'	Boosey
LA Phil	Williams, John	Feb. 8, 1932-	USA	Star Wars: Grand Suite, Hollywood Bowl 2003	ca. 2003	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]		
LA Phil	Chin, Unsuk	July 14, 1961-	South Korea	Alice in Wonderland	2004-2007	2/Eb/bcl	2[1.2/Eb/bcl]	120'	Boosey
Daniel's	Bates, Mason	Jan. 23, 1977-	USA	Liquid Interface	2007	3/Eb/bcl	3[1.2.3/Eb/bcl]	23'	Aphra
Daniel's	Mussorgsky, Modest (Smerti)	March 21, 1839-March 28, 1881	Russia	Songs and Dances of Death (arr. Plyaski Smerti, "orchd. by Alexander Raskatov who composed the 3 interludes inserted between the songs")	1875-1877, rev. (arr.) 2007	1/Eb/bcl	2[1/Eb/bcl, 2/bcl/cbcl]	28'	Sikorski
Daniel's	Rouse, Christopher	Feb. 15, 1949-Sept. 21, 2019	USA	Concerto for Orchestra	2008	3/bcl/Eb	3[1.2.3/bcl/Eb]	20'	Boosey
Daniel's	Schuller, Gunther	Nov. 22, 1925-June 21, 2015	USA	Concerto, Tuba No. 2	2008	3/Eb/bcl	4[1.2.3/Eb/bcl.4/cbcl]	20'	AMP
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Concerto, Violin	2009-2010	2/Eb/bcl, bcl/cbcl	3[1.2/Eb/bcl.bcl/cbcl]	31'	Boosey
Daniel's	Welcher, Dan	March 2, 1948-	USA	Symphony No. 5	2009	bcl/Eb	3[1.2.bcl/Eb]	28'	Presser

	Orchestral Music Requiring Doubling or Tripling with Eb and Bass Clarinets										
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published		
Daniel's	Bolcom, William	May 26, 1938-	USA	Symphony No. 9	2011	Eb/bcl	3[1.2.Eb/bcl]	18'	Marks		
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	One Sweet Morning	2011	3/Eb/bcl	3[1.2.3/Eb/bcl]	27'	Schirmer		
Daniel's	Abrahamsen, Hans	Dec. 23, 1952-	Denmark	Let Me Tell You	2012-2013	Eb/bcl	3[1.2.bcl/Eb]	33'	Hansen		
Daniel's	Zemlinsky, Alexander	Oct. 14, 1871-March 15, 1942	Austria	Lyrische Symphonie, Op. 18 [Heinisch reductioni]	1922-1923, arr. 2012	2/Eb/bcl	2[1.2/Eb/bcl]	48'	Universal		
Daniel's	Dorman, Avner	April 14, 1975-	Israel	Frozen in Time (Reduced Version)	2007, rev. 2013	2/Eb/bcl	2[1.2/Eb/bcl]	25'	Schirmer		
Daniel's	Nyman, Michael	March 23, 1944-	England	Symphony No. 5	2013	Eb/bcl	3[1.2.Eb/bcl]	22'	Chester		
Daniel's	Bates, Mason	Jan. 23, 1977-	USA	Anthology of Fantasic Zoology	2015	2/Eb/bcl	3[1.2/Eb/bcl.3]	30'	Aphra		
Daniel's	Moravic, Paul	Nov. 2, 1957-	USA	The Overlook Hotel Stuite (Based on the composer's opera The Shining)	2016	1/Eb/bcl	1/Eb/bcl	14'	Subito		
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Deep Time	2017	2/Eb/bcl, bcl/cbcl, bcl/cbcl	4[1.2/Eb/bcl.bcl/cbcl.bcl/cbcl]	20'	Boosey		
Survey	Boehler, Matt		USA	Marginalia	2018	cl/Eb/bcl	cl/Eb/bcl, soprano, mezzo soprano, tenor, cello, percussion	43'30"			
LA Phil	Cerrone, Christopher	March 5, 1984-	USA	Insects Became Magnetic, The	2018	3/Eb/bcl	3[1.2.3/Eb/bcl]	12'30"	Outburst-Inburst Musics		
LA Phil	Adès, Thomas	March 1, 1971-	England	Dante	2019-2020	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl/cbcl]	82'	Faber		

Chapter Two: Orchestral Compositions

Of the fourteen pieces to be analyzed in this study, seven are orchestral and seven are for chamber ensemble. In this chapter, the context of the orchestral pieces calling for E-flat and bass clarinet doubling is explored. When possible, the context will include the relevance to the study, the year the piece was composed, who commissioned it, who first performed it, identification of the relevant movements and instrumentation, and if there was a composer-clarinetist collaboration involved in the compositional process.⁵⁷

Gustav Mahler – Symphony No. 1 in D Major

"Often regarded as the last great composer in the Austro-Germanic tradition, Gustav Mahler (1860-1911) exerted a major influence on 20th-century music."⁵⁸ Mahler's first symphony was composed in 1888 and performed by the Budapest Philharmonic in 1889, but the score was not published until ten years later with the Weinberger publication in 1899.⁵⁹ The symphony was revised extensively throughout that decade; the première of the symphony had left Mahler discontented. Mahler recalled: "When, in my earlier years, I didn't know any better and worked less carefully and skillfully—as in my First Symphony—I paid for it dearly. What

⁵⁷ The pitches are provided transposed. On bass clarinet, all pitches will be notated in a major second transposition: what is a treble clef G_4 in scientific pitch notation will be described as a throat-tone G_3 according to the major second transposition for sounding pitches. In bass clef a throat G_3 will remain a throat G_3 . On E-flat clarinet, chalumeau C-sharp₄ is a sounding E₄.

⁵⁸ End Matter in Gustav Mahler, Gustav Mahler: Symphonies Nos. 1 and 2 in Full Score, (New York: Dover, 1987).

⁵⁹ Paul Banks, "Mahler – Symphony No. 1: Performances 1889-1911," The Music of Gustav Mahler: A Catalogue of Manuscript and Printed Sources, updated October 24, 2021, accessed February 3, 2022, http://mahlercat.org.uk/Pages/Symph1.htm.

came out was not what I wanted; what one heard was not nearly as transparent and perfect as it could and should have been, so that I had to rescore it later."⁶⁰

Specific revisions to the clarinet parts included: delegating the opening fanfare from the brass to the clarinets, adding a fourth clarinet in E-flat part, and adding E-flat clarinet to the third clarinet part.⁶¹ The movements were also changed: "Blumine" was removed, and the funeral march became the third movement.⁶² As Mahler grew more experienced, he better understood what he needed to change in order to obtain his sound concept. Tschaikov states that, "Mahler's First Symphony at once demonstrates how well he understands the small clarinets. …he uses two [E-flat clarinets] in their lower middle register to produce a totally different effect than could be achieved on the [B-flat]."⁶³ The two small clarinets (E-flat clarinets) are used in the funeral march as a duet after his revisions.

The symphony became the first to require E-flat and bass clarinet doubling, and Mahler edited the doubling part several times. The specific addition of the E-flat clarinet to the third clarinet part (for the E-flat clarinet duet in the funeral march) was made in the manuscript housed at the New York Public Library (NYPL). The E-flat clarinet duet (beginning in measure 45 of the funeral march in the NYPL manuscript) is edited with blue pencil, denoting the change to

⁶⁰ Natalie Bauer-Lechner, *Recollections of Gustav Mahler*, translated by Dika Newlin, edited by Peter Franklin, (London: Faber and Faber Ltd., 1980): 68 in Stephen McClatchie, "The 1889 Version of Mahler's First Symphony: A New Manuscript Source," Special Mahler Issue, *19th-Century Music* Vol. 20, no. 2 (Autumn 1996): 105-106.

⁶¹ Stephen McClatchie, "The 1889 Version of Mahler's First Symphony: A New Manuscript Source," Special Mahler Issue, 19th-Century Music Vol. 20, no. 2 (Autumn 1996): 112, 107.

⁶² Paul Banks, "Mahler – Symphony No. 1: Performances 1889-1911."

⁶³ Tschaikov, "The High Clarinets," 47.

two E-flat clarinets played by the third and fourth clarinetists.⁶⁴ Bass clarinet is written in blue pencil at the end of the movement.⁶⁵ The exact timeline of the revisions Mahler made is unclear. The revisions to the NYPL manuscript seem to have occurred after the concert at Weimar in June 1894, but it is unknown if they were completed in time for the Berlin performance in 1896.⁶⁶

Why not ask the first and second clarinetists to play the duet on E-flat clarinet? There are a few reasons. First, the substantial E-flat clarinet part in movements three and four that had been added to the first clarinet part in the Yale manuscript was changed in the NYPL manuscript to become a separate fourth clarinet part in E-flat.⁶⁷ Thus, the fourth clarinetist would surely be playing one of the E-flat clarinet duet lines. Second, the first and second clarinetists in B-flat are playing just seven measures before the first E-flat clarinet duet occurs in measure 45, and they play again three measures after the duet.⁶⁸ The switch to the second E-flat clarinet duet in measure 56 would be just two and one-half beats, followed by a three and one-half beat switch to C clarinet.⁶⁹ These switches to and from E-flat clarinet are nearly impossible. Thus, the third clarinetist is left with the duty of switching to E-flat clarinet for the duets.

However, if Mahler had wanted to ask the second and third clarinetists to switch parts for a portion of the movement, then the third clarinetist would not have needed to double on E-flat clarinet. Instead, the second clarinetist would pick up the E-flat clarinet for the duet with the

⁶⁴ Music Division, The New York Public Library, "Symphonie, no. 1, D major," unpublished manuscript, New York Public Library Digital Collections, The Bruno Walter Papers, Series 16: Manuscript Scores, 1893-1894, 134. accessed February 3, 2022.

⁶⁵ Ibid., 154.

⁶⁶ McClatchie, "The 1889 Version of Mahler's First Symphony," 102.

⁶⁷ Ibid., 108.

⁶⁸ Gustav Mahler, Symphony No. 1 in D Major, (Vienna: Universal Edition, 1906), 80-82.

⁶⁹ Ibid., 82.

fourth clarinetist (there would be six measures plus two beats to switch after measure 38, which is performed in B-flat clarinet, to arrive at measure 45 in E-flat clarinet for the first duet), and the third clarinetist would play the second clarinet part until completing measure 62.⁷⁰ The next entrance for the second clarinetist is measure 83, so there would be plenty of time to make the switch to B-flat clarinet for that entrance.⁷¹

This switch is certainly an option for contemporary performances today. However, the Eflat part in the third clarinet part is not too challenging; thus, it is a clarinet part that should be able to be performed with appropriate preparation. Whatever the current method of performance, it is clear that Mahler had other options for writing the E-flat doubling (albeit options that would require more editing), and he chose to include it in the third clarinet part. He thus expected the third clarinetist to be able to perform on both E-flat and bass clarinet.

Georges Enescu – Symphonie No. 2 in A Major, Op. 17

The D clarinet was a common high auxiliary clarinet used in the eighteenth century. Today, however, the instrument is not widely used. The majority of D clarinet performers are based in Germany and Austria.⁷² The details surrounding the D clarinet's decline are too numerous to include in this discussion, so it must suffice to say that the E-flat clarinet is the accepted substitute for any music composed for D clarinet. Hence, Georges Enescu's second symphony that calls for the doubling of D, B-flat, and bass clarinet in the third clarinet part effectively calls for doubling with E-flat, B-flat, and bass clarinet in contemporary performances.

⁷⁰ Gustav Mahler, Symphony No. 1 in D Major, 81.

⁷¹ Ibid., 84.

⁷² Redshaw, "Chamber Music for the E-flat Clarinet," 44, 48.

"...Enescu (1881-1955) sprang out of the depth of Romanian rural environment, and his artistic temperament and imagination had its strong, undeniable roots in the unspoiled natural beauty, in the very soil and folklore of his native country. He became a multifaceted genius of international fame, Romania's greatest musical force, and one of the most significant minds of the twentieth century...⁷⁷³ Enescu calls for E-flat and bass clarinet doubling in three pieces: his First Symphony, Second Symphony, and Third Suite for Orchestra. The First Symphony was first performed by the Colonne Orchestra in 1906. His Second Symphony was premiered by the Orchestra of the Ministry of Education in Buchareșt in 1915, and the Third Suite was first performed by the New York Philharmonic Orchestra in 1939.⁷⁴ The variety of personnel and locations suggests that Enescu's demands for D clarinet and bass clarinet doubling were not influenced by a specific performer or a specific orchestra's clarinet chair contracts.

The Second Symphony was composed from the years 1912 to 1914. Arnold Schoenberg's *Pierrot Lunaire*, composed in 1912 as well, was one of the most influential chamber pieces with regards to bass clarinet doubling. It is possible that both composers were influenced by several aspects of Mahler's compositions, including E-flat and bass clarinet doubling. It may be that the expectation for the third clarinetist to act as an auxiliary clarinetist continued through this heritage of pieces.

Enescu's Second Symphony is minimally edited, providing a unique opportunity to view the "crudest" form of his writing.⁷⁵ This allows for the discovery of the original intentions of and

⁷³ Lory Wallfisch, "Translator's Foreword," in Pascal Bentoiu, *Masterworks of George Enescu: A Detailed Analysis*, (Lanham, Maryland: Scarecrow Press, 2010), v.

⁷⁴ Malcolm, *George Enescu*, 271, 273, 275.

⁷⁵ Pascal Bentoiu, *Masterworks of George Ensecu: A Detailed Analysis*, trans. Lory Wallfisch (Lanham, Maryland: Scarecrow Press, 2010), 139.

necessity for the doubling from the published score, since the manuscript was not viewed by this author.

Another intriguing facet of the Second Symphony is that "there are people who declare this the absolute masterwork of the composer."⁷⁶ Enescu's compositional idiom relies heavily on timbral combinations: "The constantly changing orchestral colors, through the intermittent doublings, always modified, provide the particularly expressive phrasing and the uncommon sonorous relief of the Symphony."⁷⁷ Thus, the use of the E-flat and bass clarinet timbres is an important aspect to note, and because Enescu edited his manuscript sparingly, one can learn of Enescu's original expectations for the third clarinetist.

Enescu's Second Symphony uses the E-flat clarinet and bass clarinet for timbral affect in different instrument combinations, yet he also gives both specific moments featuring their unique timbres. Their timbres are used for many functions, such as gestures, doublings resulting in unique timbres, and as an independent solo voice.

Interestingly, it would have been possible for Enescu to place the E-flat clarinet into a different clarinet part. The bass clarinet is told to switch to E-flat clarinet in measure 72 (rehearsal number 70) of movement three for an entrance in measure 74.⁷⁸ The first and second clarinets release their note in measure 72 at the same time as the bass clarinet, but they re-enter on the downbeat of measure 73.⁷⁹ So, even if the E-flat clarinet part were placed in the first or second part, the bass clarinetist would still be switching to B-flat clarinet rather quickly. However, it is worth noting that clarinets one and two are in unison at this point, not becoming

⁷⁶ Pascal Bentoiu, *Masterworks of George Ensecu*, 139.

⁷⁷ Adrian Rațiu quoted in Pascal Bentoiu, Masterworks of George Ensecu, 157.

⁷⁸ Georges Enescu, Symphonie No. 2 in La Majeur, Op. 17, (Buchareşt: Editura Muzicală, 1968), 207-208.

⁷⁹ Ibid.

divisi until beat two of measure 74, so if the switch were completed in measure 74 it would then become comparable to the bass clarinetist's original switch.

Thus, it seems that Enescu considered the third clarinet player to be an auxiliary clarinet performer, especially considering the direct switch from bass clarinet to E-flat clarinet. This means that Enescu either thought of the third clarinet as an auxiliary chair, he knew the third clarinetist's abilities, or he simply was not aware of the demands of the part, of which the latter conjecture is unlikely given his experience in composition at this stage in his life.

Tōru Takemitsu – Green (November Steps II)

Tōru Takemitsu (1930-1996) was, "...the leading Japanese composer of the twentieth century."⁸⁰ The entirety of Takemitsu's *Green* is based on timbral combinations, in a manner similar to that of Debussy. The piece was written during the same timespan as *November Steps* (fall 1967), which is why *Green* is often listed as *Green (November Steps II)*. The work "presents an unassuming blend of radically fragmented orchestral textures with a much gentler, more diatonic theme..."⁸¹ Takemitsu noted that this work was "composed from a wish to enter into the secrets of Debussy's music, which never ceases to exercise a strong influence on my music."⁸² Thus, the colors and timbres he creates must be performed as written, on the instruments for which the parts were composed.

The treatment of the third clarinetist as an auxiliary player is similar to the treatment of the other auxiliary woodwind parts in the score. It seems that the first and second woodwind

⁸⁰ James Siddons, "Toru Takemitsu," in *Music of the Twentieth-Century Avant-Garde: A Biocritical Sourcebook*, ed. Larry Sitsky, (London: Greenwood Press, 2002), 508.

⁸¹ Tōru Takemitsu, *Arc, Green*, with Rolf Hind (piano), with the London Sinfonietta, conducted by Oliver Knussen, Recorded October 28, 1998, Sound Intermedia SINF CD3-2006, compact disc liner notes, 2.

parts were designed for the standard instrument (with the exception of first and second flautists who both also double on piccolo). The third flautist doubles piccolo and alto flute, the third oboeist doubles English horn, and the third clarinetist doubles E-flat and bass clarinets. This seems to Takemitsu's intentions for these players as auxiliary performers; thus, it seems that if a clarinetist played E-flat clarinet, then they would be expected to play bass clarinet as well.

Takemitsu's *Green* is an important piece for this study due to the use of E-flat and bass clarinet doubling in performance; the switches are nearly impossible and the writing is quite challenging. These aspects of the piece will be discussed in Chapter Three.

Shulamit Ran – Legends

Shulamit Ran (b. 1949) was born in Israel and now resides in Chicago. She received the Pulitzer Prize in 1991 and was Composer-in-Residence at the Chicago Symphony Orchestra from 1990 to 1997. Her "…music is best described…as freely atonal or pantonal, though, as she has explained, it usually has tonal points of reference."⁸³ Ran's *Legends* is the first piece included in this study to place the E-flat and bass clarinet doubling in the second clarinet part. The first clarinet part does not contain any doubling, but the third clarinet part doubles B-flat and bass clarinet. The piece is two movements long, and it is important for the study because the second clarinet doubling part was composed for a specific clarinetist. This division of parts stems from the personnel of the Chicago Symphony Orchestra, the orchestra that commissioned the piece.⁸⁴

⁸³ "Shulamit Ran," Artists, Milken Archive, accessed June 7, 2022, https://www.milkenarchive.org/artists/view/shulamit-ran/.

⁸⁴ Shulamit Ran, *Legends*, (Malvern, PA: Presser, 1993), published online 2015, cover.

At the time of its premiere (1993) the clarinet section of the Chicago Symphony Orchestra included Larry Combs, Lawrie Bloom, and John Bruce Yeh, the Assistant Principal and E-flat Clarinetist. Yeh was appointed bass clarinetist in 1977 and was given his current position in 1979.⁸⁵ Ran knew of Yeh's abilities on both instruments and that he would perform the second part. She composed the doubling part, and specifically the E-flat clarinet part, for his virtuosity on the instrument.⁸⁶

In an April 2022 interview, Ran stated, "I knew that I had these three wonderful players... I knew that I could really take [Yeh's] parts to...the heights[:] ...the E-flat clarinet...has really many...important moments. There's one moment in particular in *Legends* that is...a pivotal point in the second movement...in how the second movement flows into this moment and how...the second movement is juxtaposed with the first movement... That moment [is] this sort of a pinnacle of the pinnacle."⁸⁷

When speaking of the E-flat clarinet throughout the piece, she says, "...there is a constant shift between moments when it is part of an ensemble, and an important part of the ensemble...And [there are] many moments where [the E-flat clarinet] sprouts out of the ensemble and becomes its own solo, smaller or larger, but nevertheless becomes a solo." These moments will be further discussed in Chapter Three.

⁸⁵ "John Bruce Yeh: Assistant Principal Clarinet and E-flat Clarinet," Chicago Symphony Orchestra Musicians, Chicago Symphony Orchestra, accessed March 9, 2022, https://cso.org/about/performers/csomusicians/woodwinds/e-flat-clarinet/john-bruce-yeh/.

⁸⁶ John Bruce Yeh, Zoom interview by author, 23 March 2022.

⁸⁷ Shulamit Ran, interview.

John Williams - Harry Potter and the Sorcerer's Stone: Suite for Orchestra

John Williams (b. 1932) is one of the most well-known composers, and he "has also served as America's quasi-official composers, regularly summoned to provide music for... landmark national events..."⁸⁸ As primarily a film composer, his music is free to include instrumental auxiliaries, as the musicians hired for the sessions play on all clarinets at a professional level. The Harry Potter film was released in November of 2001. According to Hal Leonard, Williams prepares his scores for publication, so the doubling in this suite is what Williams expected of the clarinetists in live performance.⁸⁹ The live orchestral suite of the film is an important aspect of E-flat and bass clarinet doubling because film cues can require anyone in the session to double or triple on instruments.

The Harry Potter suite calls for three clarinetists. The first clarinetist doubles B-flat and A clarinet, the second doubles B-flat, A, and bass clarinet, and the third clarinetist doubles B-flat, E-flat, bass clarinet, and an optional E-flat contrabass (contra alto) clarinet. The third clarinetist is the auxiliary clarinetist throughout, except where the second clarinetist performs bass clarinet in order to allow the third clarinetist time to switch from E-flat contrabass clarinet back to bass clarinet in measures five through twelve of the second movement.⁹⁰

This application of the third clarinet auxiliary part to the upper woodwind section is a large identity of the part. It appears that the third clarinetist is used as a flexible voice for many different situations, while the first and second clarinetists typically form the basis of the clarinet

⁸⁸ Emilio Audissino, "Introduction," in *John Williams: Music for Films, Television and the Concert Stage*, ed. Emilio Audissinoi, Vol. 1, *Contemporary Composers*, ed. Massimiliano Locanto and Massimiliano Sala, (Lucca, Italy: Brepols, 2018), xiv.

⁸⁹ Hal Leonard, Email message to author, 27 May 2022.

 ⁹⁰ John Williams, *Harry Potter and the Sorcerer's Stone: Suite for Orchestra*, (Milwaukee: Hal Leonard, 2001), 38-39.

section itself. One example of this occurs in measures 117 through 124, where the first and second clarinetists perform eighth note triplets while the third clarinetist (on B-flat clarinet at this point) performs sixteenth note triplets with the other woodwinds.⁹¹ This function sheds light on the use of the E-flat and bass clarinet in the score; they color and support other woodwinds. Of course, there are moments when the third clarinet part joins the clarinet section, but the third clarinet part seems to function with its own purpose, both inside and outside of the clarinet section.

Esa-Pekka Salonen – Insomnia

Esa-Pekka Salonen (b. 1958) is a Finnish musician "…known as both a composer and conductor…"⁹² *Insomnia*, composed in 2002, is another 21st century work that requires the use of E-flat and bass clarinet doubling. The piece has three clarinet parts: the first clarinet, the second on B-flat, E-flat, and bass clarinet, and the third on bass clarinet. The piece was composed between March and November of 2002.⁹³ The "world premiere [occurred] on 1st December 2002 in Suntory Hall, Tokyo, Japan, by the NHK Symphony Orchestra conducted by Esa-Pekka Salonen. [The] European premiere [occurred] on 21st March 2003 at the Hamburg Musikhalle, by NDR Sinfonieorchester conducted by Christoph Eschenbach."⁹⁴ These performances demonstrate that clarinetists around the world are expected to be able to perform E-flat and bass clarinet doubling.

⁹¹ Williams, Harry Potter and the Sorcerer's Stone, 72-73.

⁹² "Esa-Pekka Salonen," Wise Music Classical, accessed June 7, 2022, https://www.wisemusicclassical.com/composer/1357/Esa-Pekka-Salonen/.

⁹³ Esa-Pekka Salonen, Insomnia, (London: Chester Music, 2002), ii.

⁹⁴ Ibid.

Much has been written about the night, and Salonen's *Insomnia* tackles the subject from a dark perspective. As he states,

From early in the composition process, I realized that this music was somehow about the night..., but not in an idyllic, nocturnal way. I was more drawn towards the demonic, 'dark' aspects of the night: the kind of persistent, compulsive thoughts that run through the mind when lying hopelessly awake in the early hours.

The musical processes in *Insomnia* have a lot in common with the psychology of a sleepless night: some thoughts become prison cells we cannot escape; others keep coming back, again and again. Towards the end of *Insomnia* the music finally calms down to an *Adagio*, dominated by the mellow sounds of the horns and the Wagner tubas. At the very moment we think that we have finally arrived at the gates of sleep, the sun rises in its full glory. A new day begins, exultantly.⁹⁵

In Insomnia, it is possible to have the first clarinetist take responsibility for one of the

doubles, even though it was not written in the part. Salonen may have been influenced by a particular clarinetist in the commissioning organization, or he may have been simply organizing the parts from high instruments doubles to low instrument doubles, with the principal clarinet not doing any doublings. Or, he simply expected a clarinetist anywhere to be able to perform E-flat and bass clarinet doubling, which is the most likely scenario, given that a composer writes their pieces to be accessible to many orchestras for multiple performances.

William Bolcom - Ninth Symphony: A Short Symphony in One Movement

William Bolcom (b. 1938) is a composer who "has been tweaking the musical establishment since his student days, and his evolving style includes a mind-boggling array of influences and directions."⁹⁶ His orchestral works have called for clarinet doubling multiple

⁹⁵ Salonen, *Insomnia*, ii.

⁹⁶ Melinda Bargreen, *Classical Seattle: Maestros, Impresarios, Virtuosi, and Other Music Makers*, (Seattle: University of Washington Press, 2016), 242, 245.

times, including in his Violin Concerto, third and ninth symphonies, and Songs of Innocence and

Experience, a massive work "three hours in length and containing forty-six songs..."⁹⁷

The Ninth Symphony is a short, one-movement work that was composed for the

Shepherd School Symphony Orchestra in celebration of the Rice University Centennial on

October 12, 2012.⁹⁸ The fact that the piece was composed for a university orchestra is significant

because it demonstrates the expectation for a university student to play both E-flat and bass

clarinet.

Bolcom writes an endnote in the score of the symphony, stating:

If the Ninth has a subject (if music indeed ever really has one) it would be this: Ours is both a dark and a hopeful time. I needn't enumerate the darknesses [sic] and conflicts we suffer; we are living in the midst of an apocalyptic and antipodal war between creation and destruction, progression and intransigence, which threatens to destroy our world.

But that is everyday news. The hopeful part is that these same forces also hold the key to our future if we only strive to understand and embrace them both – William Blake's central message – and learn to make the progression and energy generated by these contraries work in favor of our planet's and our own continuing. And we need to communicate with each other to learn to do this.

But today our greatest enemy is our inability to listen to each other, which seems to worsen with time. All we hear now is shouting, and nobody listening because the din is so great (the late Studs Terkel marveled at the plethora of communicating devices we now possess which provide no real communication). Yet there is a 'still, small voice' that refuses to disappear though often drowned out, that requires us to listen for us. I pin my hope on that voice – I search for it daily in life and in music – and possibly the Ninth Symphony is a search for that soft sound.⁹⁹

The Ninth Symphony calls for three clarinets: the third clarinet part is solely for bass and

E-flat clarinet, so the switches are always directly from one extreme to the other.

⁹⁷ Bargreen, *Classical Seattle*, 245.

⁹⁸ William Bolcom, *Ninth Symphony*, (Wilton, CT: Edward B. Marks Music Company, 2015), 1.

⁹⁹ Ibid., 53.

Chapter Three: Chamber Music

In this chapter, the context of the chamber music calling for E-flat and bass clarinet doubling is explored. When possible, the context will include the relevance to the study, the year the piece was composed, who commissioned it, who performed it, identification of the relevant movements and instrumentation, and if there was a composer-clarinetist collaboration involved in the compositional process.¹⁰⁰

Lawrence Moss – Windows

Lawrence Moss (b. 1927) received his doctorate from the University of Southern California and taught composition at Mills College, Yale University, and the University of Maryland at different points in time. His works have been performed by many ensembles in the United States and abroad, including the Baltimore Symphony and Speculum Musicae, as well as by individual performers such as Harry Sparnaay and Esther Lamneck.¹⁰¹ *Windows*, a singlemovement work for a trio of flute/piccolo, E-flat clarinet/bass clarinet, and contrabass, was composed in 1966 for Bert and Nancy Turetzky, a contrabassist and flautist, respectively.¹⁰² It is unknown if the clarinet part was composed for someone in particular, or if Moss simply wanted the flexibility and contrasts that the E-flat and bass clarinet could provide in a trio, which is indeed what occurred in his later composition calling for this doubling, *Shadowplay*, to be discussed at the end of this chapter.

¹⁰⁰ The pitches are provided transposed. On bass clarinet, all pitches will be notated in a major second transposition: what is a treble clef G_4 in scientific pitch notation will be described as a throat-tone G_3 according to the major second transposition for sounding pitches. In bass clef a throat G_3 will remain a throat G_3 . On E-flat clarinet, chalumeau C-sharp₄ is a sounding E₄.

¹⁰¹ "Lawrence Moss Bio," Lawrence Moss, accessed June 7, 2022, http://lawrencemosscomposer.com/bio.php.

¹⁰² Lawrence Moss, *Windows*, (Verona, NJ: Seesaw Music Corp., 1971), 1.

Windows is the first chamber piece thus far discovered to require E-flat and bass clarinet doubling. Moss required virtuosity from the clarinetist on both instruments.

The title of *Windows* is meant literally. The score is published by Seesaw Music Corporation in single sheets, with boxes of varying shapes delineated with thin black lines meant to be cut out. Once the arts and crafts project is complete, the score is compiled, one sheet on top of the other, so that each page is consecutive with page two on the top of the stack, on the right side of the stand. Page one is placed on the left. Immediately, the reason for the title is apparent. The window in page two shows a flute passage from page three that the bass clarinetist must play.¹⁰³

Lawrence Moss had to carefully craft the design of each page, considering the location of lines and individual transpositions as well as page turns in order for the score to function. Each instrumentalist (flute/piccolo, bass clarinet/E-flat clarinet, and contrabass) has a copy of their own score in performance. Thus, each line (part) in the score is marked with individual page turns.

For instance, on page two the flautist's page turn occurs immediately after measure 13, but the bass clarinetist's page turn is placed immediately after measure 16, after the music viewed through the window has been performed.¹⁰⁴ No instrumentalist can turn the page before they have performed their window, so Moss designed each page turn accordingly.

¹⁰³ Moss, Windows, 1-3.

¹⁰⁴ Ibid., 2.

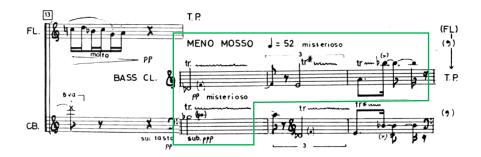


Figure 3-1: Window in the score: mm. 13-16, page 2.

Elliott Carter – Triple Duo

Elliott Carter (1908-2012) "...is internationally recognized as one of the most influential American voices in classical music, and a leading figure of modernism in the 20th and 21st centuries."¹⁰⁵ *Triple Duo*, composed in 1982, was commissioned by the British Broadcasting Corporation for the Fires of London. The ensemble first performed *Triple Duo* in 1983 in New York City.¹⁰⁶ The performers in the Fires of London performance were Philippa Davies (flute/piccolo), David Campbell (clarinet/E-flat/bass clarinet), Stephen Pruslin (piano), Gregory Knowles (percussion), Rosemary Furniss (violin), and Jonathan Williams (cello).¹⁰⁷ The single-movement piece is composed for the six musicians divided into three groups of two: flute and clarinet, violin and cello, and piano and percussion. The flute and clarinet parts subdivide in triplets throughout the piece, the piano and percussion in quintuplets, and the violin and cello in

¹⁰⁵ "Biography," Elliott Carter, The Amphion Foundation, Inc., accessed June 7, 2022, https://www.elliottcarter.com/biography/.

¹⁰⁶ Elliott Carter, *Triple Duo*, (New York: Boosey & Hawkes, 1983), i.

¹⁰⁷ "Triple Duo," Elliott Carter, Amphion Foundation, Inc., accessed April 18, 2022, https://www.elliottcarter.com/compositions/triple-duo/.

sixteenths: "Each of these pairs has its own repertory of ideas and moods. This free fantasy involves various contrasts, conflicts, and reconciliations between the three duos."¹⁰⁸

The piece is useful to this study because it has been performed and recorded several times in recent years. A few video examples in which the doubling can be viewed on YouTube include recordings by Ensemble Linea at Festival Musica in Strasbourg 2012 (Yuko Fukumae, clarinets); ¹⁰⁹ Talea Ensemble at the IV St. Petersburg International New Music Festival (Marianne Gythfeldt, clarinets); ¹¹⁰ MDI Ensemble at la Biennale di Venezia in 2013 (Paolo Casiraghi, clarinets); ¹¹¹ and others. These performances demonstrate that *Triple Duo* is becoming more regularly performed and will require more clarinetists who double E-flat and bass clarinet.

Carter also composed for E-flat and bass clarinet doubling in his pieces *A Mirror on Which to Dwell* (1975) and his *Violin Concerto* (1990). *A Mirror on Which to Dwell* is a song cycle that was composed for Speculum Musicae and premiered by them in February 1976.¹¹² The *Violin Concerto* was dedicated to Herbert Blomstedt and Ole Bøhn, and the piece was premiered by them in May 1990.¹¹³ These pieces demonstrate that the expectation of clarinet doubling existed in several applications over time.

¹¹³ "Violin Concerto," Elliott Carter, Amphion Foundation, Inc., accessed April 18, 2022, https://www.elliottcarter.com/compositions/violin-concerto/.

¹⁰⁸ Carter, *Triple Duo*, ii.

¹⁰⁹ "Ensemble Linea – Elliott Carter – *Triple Duo*," Ensemble Linea, video, 19:58, recorded at Strasbourg, Musica Festival September 27, 2012, accessed April 18, 2022, https://www.youtube.com/watch?v=kdVd1jwt12w.

¹¹⁰ "Elliott Carter: Triple Duo," reMusik.org, video, 20:05, recorded May 25, 2016, accessed April 18, 2022, https://www.youtube.com/watch?v=yJegfhp6g94.

¹¹¹ "MDI Ensemble Plays *Triple Duo* by Elliott Carter," Simone Beneventi, video, 21:55, recorded live at la Biennale di Venezia 2013, accessed April 18, 2022, https://www.youtube.com/watch?v=A9_lp_B0X9M.

¹¹² "A Mirror on Which to Dwell," Elliott Carter, Amphion Foundation, Inc., accessed April 18, 2022, https://www.elliottcarter.com/compositions/a-mirror-on-which-to-dwell/.

Erika Fox - 'Hungarian' Rhapsody

Erika Fox's (b. 1936) "…highly distinctive musical style is a result of a childhood suffused with music of Eastern European origin; Chassidic music, liturgical chant embellished with heterophony, [and] modal ancient melodic lines that have much in common with the folk music of Eastern Europe."¹¹⁴ She "…studied with Birtwistle…" and was "…involved with the Fires of London [in the 1970s]."¹¹⁵ Fox's *'Hungarian' Rhapsody* is a three-movement work for alto flute/flute, oboe/English horn, clarinet in A/bass clarinet/E-flat clarinet, trumpet in C/B-flat/Flugelhorn (with varying mutes), and piano. The piece was composed in 1989 for the ensemble Sounds Positive.¹¹⁶ The ensemble commissioned another piece from Fox that required the use of E-flat and bass clarinet doubling, so their influence on repertoire calling for the doubling is to be appreciated.

Other pieces Fox composed that include the doubling are: *Shir* (1983), first performed by the 20th Century Ensemble at the Royal College of Music in London; *Quasi Una Cadenza* (1983), commissioned by Lontano and premiered by them, *Letters and Notes* (1990), commissioned by Gemini; *Meditation on "Sibyls"* (1991), commissioned by Capricorn; *Tuned Spheres* (1995), commissioned by Sounds Positive for the Purcell Tercentenary; and *Café Warsaw 1944* (2005), commissioned for the Bromsgrove Concerts and performed by the New Music Players.

'Hungarian' Rhapsody is important to the study, first as it includes a demanding clarinet part, but also because the piece was performed at Tanglewood in 2019 under the direction of

¹¹⁴ "Erika Fox: Composer," Erika Fox, accessed June 7, 2022, http://www.erikafox.co.uk/.

¹¹⁵ Ibid.

¹¹⁶ Erika Fox, 'Hungarian' Rhapsody, (Chipping Norton, UK: Composers Edition, 1989), i.

Thomas Adès, meaning that the doubling was expected to be performed at an institution of learning. This fact is important because it demonstrates the need for students to perform E-flat and bass clarinet at a high standard of virtuosity.

The piece is based on melodic, horizontal development, demonstrating the Chassidic influence found in Fox's music: "I think horizontally rather than vertically, always kind of thinking in...melody as though...something is sung even though, of course,...not everything can be sung."¹¹⁷ Timbral combinations play an especially important role throughout the piece. Fox is especially fond of drama, stating,

I think of instruments as being characters... And so regarding the dramatic:...It is quite dramatic to have something very low just juxtaposed with something very high, in the same way as loud and softer; there're all kinds of contrasts... The bass clarinet has a very distinctive character...it is...very, very low without being 'growly,' and then the E-flat clarinet, of course, can soar very, very high and very loudly...without being strident... I suppose those are the reasons why I've used those instruments quite a lot in my work.¹¹⁸

Fox noted that 'Hungarian' Rhapsody was supposed to be performed in 2020, again

directed by Thomas Adès, but the concerts were cancelled due to the Covid-19 pandemic.

Thomas Adès – Living Toys, Op. 9

Thomas Adès (b. 1971) is "...[renowned] as both composer and performer..." He has composed operas and orchestral works, and "His compositions also include numerous celebrated chamber and solo works."¹¹⁹ Adès' *Living Toys*, Op. 9 is a piece for fourteen performers composed in 1993. The piece is important for the study because it is performed around the world,

¹¹⁷ Erika Fox, interview.

¹¹⁸ Ibid.

¹¹⁹ "Biography," Thomas Adès, accessed June 7, 2022, http://thomasades.com/bio/.

thus requiring clarinetists from different locations to perform the doubling part.¹²⁰ The fourteen parts are for flute, oboe, clarinet, bassoon, horn, trumpet, trombone, one percussionist, piano, two violins, viola, cello, and double bass. The woodwind players each double: flute/piccolo, oboe/English horn/sopranino recorder, clarinet (B-flat)/E-flat clarinet/bass clarinet, and bassoon/contrabassoon. The trumpet (in B-flat) also doubles on piccolo trumpet (in B-flat). An unusual doubling occurs in the brass section, with the horn player doubling on whip.¹²¹

Adès is conscientious about switches, marking several places in the score that can be omitted should the player need more time to switch instruments. He also includes instructions to "take [instrument] quickly" if the switch must occur within the (sometimes short) time provided. Sometimes, the instruction for a quick change is also followed by a few bars for omission if necessary.¹²²

Living Toys was commissioned by the Arts Council of Great Britain for the London Sinfonietta, and it was premiered by them in 1994.¹²³ The piece was inspired by the following quote:

When the men asked him what he wanted to be, the child did not name any of their own occupations, as they had all hoped he would, but replied: "I am going to be a hero, and dance with angels and bulls, and fight with bulls and soldiers, and die a hero in outer space, and be buried a hero." Seeing him standing there, the man felt small, understanding that they were not heroes, and that their lives were less substantial than the dreams which surrounded the child like toys.¹²⁴

¹²⁰ "Past Performances," Living Toys – 1993, Thomas Adès, accessed April 18, 2022, http://thomasades.com/compositions/living_toys.

¹²¹ Thomas Adès, *Living Toys*, Op. 9, (London: Faber Music Ltd., 1996), ii.

¹²² For example, see the horn part in Adès, *Living Toys*, Movement II, measures 154-155, page 25.

¹²³ Adès, Living Toys, i.

¹²⁴ "Programme Notes," Living Toys, Faber Music, accessed April 18, 2022, https://www.fabermusic.com/music/living-toys-2373.

Living Toys is eight continuous sections: "The child/hero's dream-adventures form the five 'figurative' sections, offset by three more volatile, dynamic paragraphs: painting versus film, perhaps."¹²⁵

Carter Pann – Antares

Carter Pann (b. 1972), an American composer, studied with Samuel Adler, Bright Sheng, and William Bolcom, among others.¹²⁶ His works have been performed by ensembles around the world, including the London Symphony, Seattle Symphony, and the Takács Quartet, as well as by soloist Richard Stolzman.¹²⁷ *Antares* (2003-2004) by Pann is a quartet of clarinet, violin, cello, and piano composed for the ensemble of the same name. The four movements of the piece are named after each of the members, and they are "surrounded by [two] outer movements presenting the ensemble as a single entity [creating six sections total]. The name Antares refers to the super giant star in the Scorpio constellation. The music here is celestial, often evoking a cosmic sense, and a feel of stellar beauty and stagnancy."¹²⁸

The published clarinet part is composed for clarinet in B-flat, bass, and E-flat. The bass clarinet occurs solely in the second movement, and similarly, the E-flat clarinet is only

¹²⁵ Faber Music, "Programme Notes."

¹²⁶ "Carter Pann (Composer)," Sheet Music, Presto Music, accessed June 7, 2022, https://www.prestomusic.com/sheet-music/composers/19541--pann-c.

¹²⁷ "Carter Pann," College of Music, University of Colorado Boulder, accessed June 7, 2022, https://www.colorado.edu/music/carter-pann.

¹²⁸ "Antares," Composed by Carter Pann, Theodore Presser Company, accessed April 12, 2022, https://www.presser.com/114-41291-antares.html.

performed in the fourth movement. The second movement features the bass clarinet for the length of the movement, but the E-flat clarinet is only featured for fourteen measures.¹²⁹

Interestingly, the composer has included two *ossia* parts to replace both auxiliary clarinets in the published clarinet part if necessary. The bass clarinet replacement *ossia* is for clarinet in A, and the B-flat clarinet is the instrument of choice for the E-flat clarinet's replacement *ossia*. The E-flat and A clarinet parts for movements four and two, respectively, were performed by the clarinetist of the Antares ensemble in their recording. Garrick Zoeter, the clarinetist of the Antares ensemble, recalled that the A clarinet in the second movement was the instrument in the orchestration when he performed the piece.¹³⁰

This presents an intriguing situation: the published score and parts clearly denote the bass clarinet as the preferred instrument in the second movement. The bass clarinet acts as the bass accompaniment and countermelody for the cello singing in its upper range throughout the movement, and the A clarinet simply cannot replicate that function.

Similarly, the E-flat clarinet is the favored timbre and character for the end of the fourth movement. The inclusion of bass clarinet in the second movement may reflect Pann's changing expectations for the clarinetist in modern ensembles, while still recognizing that not all clarinetists are proficient on bass or E-flat clarinet by including the *ossia* parts. The *ossia* parts may also reflect many clarinetists' lack of access to auxiliary instruments. This point will be further discussed in Chapter Five.

¹²⁹ Carter Pann, clarinet part to Antares, (Malvern, PA: Presser, 2004), 9, 13.

¹³⁰ Garrick Zoeter, survey by author, 9 April 2022.

Unsuk Chin – Gougalon: Scenes from a Street Theatre

Unsuk Chin (b. 1961) "...was born in Seoul, studied with Ligeti in Hamburg, and is now a resident in Berlin."¹³¹ Her "[music] is modern in language, but lyrical and non-doctrinaire in communicative power."¹³² Chin composed *Gougalon* for 15 performers in 2009, revising the score in 2011.

...[The work] was commissioned in the context of the music project 'into...', which was jointly organised [sic] by the Ensemble Modern and the Siemens Arts Program in collaboration with the Goethe Institute. Seventeen composers were invited to spend a month in one of four megacities – Istanbul, Dubai, Johannesburg and the Pearl River Delta – and to compose a work that reflected their impressions for Ensemble Modern. [Chin] was sent to the Pearl River Delta.¹³³

During the composition process, Chin drew from memories of her first trip to China,

remembering the juxtaposition of old and new. The experience was parallel to Seoul "...after the

Korean War and before the radical modernisation [sic]."134 One of Chin's most persistent

memories was of a "troupe of entertainers I saw a number of times as a child in a suburb in

Seoul." However, Chin notes that:

Gougalōn does not refer directly to the dilettante and shabby music of that street theatre. It would also be an error to believe that this piece is 'about' Korea or 'about' a certain era – I doubt that music is able [to] express anything other than itself. The memories described above merely provide a framework, just as the movement headlines are not intended to be illustrative. *Gougalōn* is an 'imaginary folk music' that is stylised [sic], broken within itself, and only apparently primitive.¹³⁵

135 Ibid.

¹³¹ "Unsuk Chin," Composer Index, Boosey & Hawkes, accessed June 7, 2022, https://www.boosey.com/composer/Unsuk+Chin.

¹³² Ibid.

¹³³ Unsuk Chin, Gougalon: Scenes From a Street Theater, (London: Boosey & Hawkes, 2009, 2011), ii.

¹³⁴ Ibid.

The score calls for doubling in all sorts of forms. The wind players double typical auxiliaries as well as percussion instruments. For example, the flautist doubles piccolo and alto flute as well as metal block, three triangles, harmonica, maracas, and vibraslap. The clarinetist (in B-flat) doubles E-flat and bass clarinets and also performs the sistrum, finger cymbals, harmonica, and flexatone.¹³⁶

The six-movement piece has been performed numerous times. The first performances occurred in October 2009 by Ensemble Modern with Johannes Kalitzke conducting. The final, revised version was commissioned by Ensemble intercontemporain and performed in January 2012 with Susanna Mälkki conducting.¹³⁷ Several performances are also available on YouTube from various groups, including a 2013 performance by KammarensembleN; ¹³⁸ a 2014 performance by Ensemble Linea; ¹³⁹ and a 2017 performance by Ensemble Intercontemporain.¹⁴⁰ These performances demonstrate that the 21st century clarinetist should be able to double on both E-flat and bass clarinet.

Lawrence Moss – Shadowplay for Two Clarinets

It is fitting to return to a work by Moss (the composer of *Windows* in 1966) for the final chamber piece to be studied, wrapping up with a composer whose expectations for the

¹³⁶ Unsuk Chin, *Gougalon*, iii.

¹³⁷ Ibid., i.

¹³⁸ "Gougalon Unsuk Chin," KeNChannel, video, 23:52, accessed April 18, 2022, https://www.youtube.com/watch?v=iPa4jSOUKTo.

¹³⁹ "Ensemble Linea – Unsuk Chin – Gougalon," Ensemble Linea, video, 23:12, accessed April 18, 2022, https://www.youtube.com/watch?v=VggulLZJceM.

¹⁴⁰ "Unsuk Chin, Gougalon – Ensemble Intercontemporain," Ensemble Intercontemporain, video, 21:50, accessed April 18, 2022, https://www.youtube.com/watch?v=Gp-dm9OS10M.

professional clarinetist has not diminished over the span of decades, specifically pertaining to Eflat and bass clarinet doubling. Moss's unpublished clarinet duet, *Shadowplay for Two Clarinets* (2013), requires the second clarinetist to double on B-flat, E-flat, and bass clarinets.¹⁴¹ The first part remains on B-flat clarinet for its entirety. The duet was commissioned by Esther Lamneck as a duet to play with her students at New York University. Lamneck did not request the doubling; Moss chose to write for the instruments because he wanted to be able to explore clarinet colors more in the duet. Lamneck, who noted that she does not perform on either auxiliary clarinet, said that many of the students at NYU play multiple instruments because of a culture of performance that includes many musicals and orchestral pieces requiring auxiliary instruments.¹⁴² *Shadowplay* consists of five movements, of which the E-flat clarinet performs in movements two and three, and the bass clarinet performs in movement four.¹⁴³

¹⁴¹ Lawrence Moss, *Shadowplay for Two Clarinets*, score, 2013.

¹⁴² Esther Lamneck, Email messages to author, 8 and 25 March 2022.

¹⁴³ Moss, *Shadowplay*.

Chapter Four: Expectations for Virtuosity in Orchestral and Chamber Works

The purpose of this chapter is to explore the composers' expectations for clarinetists and their ability to perform both E-flat and bass clarinet. As John Bruce Yeh noted, many clarinetists' E-flat and bass clarinet lessons are shaped by the repertoire they are about to perform.¹⁴⁴ How virtuosic does one need to be in order to perform the part well? What training would this require?¹⁴⁵

Gustav Mahler - Symphony No. 1 in D Major

The original performance of Mahler's first symphony featured the opening fanfare in four horns and two trumpets.¹⁴⁶ Thomas Peattie notes that "the calls were first assigned to the clarinets in the *Stichvorlage* (that is, in or just before 1898)."¹⁴⁷ The *Stichvorlage* is the manuscript used to create the first published score; it is the NYPL manuscript that can be viewed online.¹⁴⁸

Mahler reportedly said: "If I want to produce a soft, subdued sound, I don't give it to an instrument that produces it easily, but rather to one which can get it only with effort and under

¹⁴⁴ Yeh, interview.

¹⁴⁵ The pitches are provided transposed. On bass clarinet, all pitches will be notated in a major second transposition: what is a treble clef G_4 in scientific pitch notation will be described as a throat-tone G_3 according to the major second transposition for sounding pitches. In bass clef a throat G_3 will remain a throat G_3 . On E-flat clarinet, chalumeau C-sharp₄ is a sounding E₄.

¹⁴⁶ McClatchie, "The 1889 Version of Mahler's First Symphony," 112.

¹⁴⁷ Thomas Peattie, "The Expansion of Symphonic Space in Mahler's First Symphony," *Journal of the Royal Music Association* Vol. 136 no. 1 (2011): footnote, 79.

¹⁴⁸ Paul Banks, "Symphony No. 1 - Manuscripts," The Music of Gustav Mahler: A Catalogue of Manuscript and Printed Sources, last edited November 6, 2020, accessed February 3, 2021. http://www.mahlercat.org/uk/Pages/Symph1/Symph1mss.htm

pressure – often by forcing itself and exceeding its natural range.¹⁴⁹ Peattie states that, "the decision to assign the clarinets to a weak register further...reveals Mahler's penchant for dramatizing sound through its deformation."¹⁵⁰ This fact is significant, because it seems that Mahler viewed the clarinets as bringing the edge of his sound concept to this moment, and he finalized the third clarinet part fully expecting performance proficiency, even while recognizing that the part would be challenging.

Mahler asked the third clarinetist to play both bass clarinet and E-flat clarinet in his first symphony, in addition to the A and C clarinets. The third clarinetist begins the first movement on bass clarinet, joining the fanfare with first and second clarinets.¹⁵¹ There are several instances where the bass clarinet part would be challenging for an inexperienced bass clarinetist, one of which is this opening fanfare.

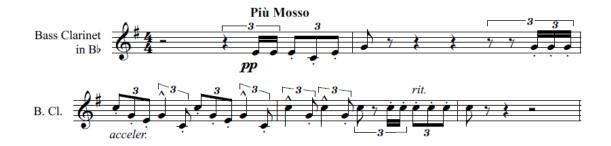


Figure 4-1: Third Clarinet, Bass Clarinet Part: Movt. I, opening fanfare mm. 9-13, page 1.

¹⁴⁹ Natalie Bauer-Lechner, *Recollections of Gustav Mahler*, translated by Dika Newlin, edited by Peter Franklin, (London: Faber and Faber Ltd., 1980): 160 in Thomas Peattie, "The Expansion of Symphonic Space in Mahler's First Symphony," *Journal of the Royal Music Association* Vol. 136 no. 1 (2011): 80.

¹⁵⁰ Peattie, "The Expansion of Symphonic Space in Mahler's First Symphony," 80.

¹⁵¹ Mahler, *Symphony No.* 1, 3.

The articulation in the beginning (measure nine) is difficult for the bass clarinetist because it is easy to overblow the twelfth. The bass clarinetist is expected to enter with rapid articulation in measures nine, ten, and twelve. Additionally, the eighth note triplets in measure 11 are marked staccato and jump over the 'break' of the bass clarinet, from clarion C_4 back down to throat-tone G_3 . If the third clarinetist were picking up the bass clarinet for the first time, this fanfare would be disheartening to play, at best.

The untrained bass clarinetist would likely struggle with octave leaps and beginning chalumeau notes cleanly throughout the symphony. For example, there is a slurred octave leap from throat-tone G_3 to clarion G_4 at measure 152 of movement three at a *pianissimo* dynamic.¹⁵² Obtaining a smooth transition to the upper register, especially on the more resistant note clarion G_4 , requires patient practice.

One instance of challenging chalumeau is the two-note bass clarinet solo from chalumeau B_2 down to chalumeau F_2 in measure 26 of movement one.¹⁵³ The inexperienced bass clarinetist would feel hard-pressed to not overblow the chalumeau F_2 .



Figure 4-2: Third Clarinet, Bass Clarinet Part: Movt. I, interval chalumueau B₂ to chalumeau F₂, mm. 26-27, page 1.

¹⁵² Mahler, Symphony No. 1, 93.

¹⁵³ Ibid., 5.

The third E-flat clarinet has a range from C-sharp₄ to upper clarion C-natural₆ for the Eflat clarinet duets. The untrained E-flat clarinetist would find it difficult to maintain the lower dynamic markings in the part; the first E-flat clarinet duet is a healthy *mezzo forte*, but it ends at a *pianissimo* dynamic.¹⁵⁴ The second E-flat clarinet duet is marked *piano*, which is all the more difficult because the third E-flat clarinetist must perform a C₆ in-tune and at the dynamic.¹⁵⁵



Figure 4-3: The third E-flat clarinet duet part: Movt. III, mm. 45-49, page 3.



Figure 4-4: The third E-flat clarinet duet part: Movt. III, mm. 56-60 page 3.

The notes above clarion A_5 tend to be quite sharp on the E-flat clarinet, and performing at a lower dynamic level only accentuates the problem. The response of those notes at *piano* may also necessitate alternate fingerings. For example, the upper clarion C_6 can be played with the

¹⁵⁴ Mahler, Symphony No. 1, 81.

¹⁵⁵ Ibid., 82.

three fingers of the right hand down over the tone holes. This fingering adds more resistance to the C_6 and also brings down the pitch. However, it can be a difficult fingering to use in this situation, since more resistance makes the interval from the preceding clarion D_5 all the more difficult.

Georges Enescu – Symphonie No. 2 in A Major, Op. 17

Georges Enescu's Symphonie No. 2, composed 1912-1914, requires the third clarinetist to play D clarinet, bass clarinet, and A clarinet. (The D clarinet part would be performed on Eflat clarinet in locations other than Germany and Austria, as noted in Chapter One.) Each clarinetist becomes a soloist at differing points in the symphony. For the third clarinetist, this type of soloistic writing applies to each of the doubling clarinets to be performed. It may be a challenge to feel comfortable and confident performing such solos when the performer's attention may be focused on performing the bass or E-flat clarinet part well.

On bass clarinet, the most prominent solo occurs in the third movement, measures 53 through $61.^{156}$ Although the bass clarinet has many featured moments in the second and third movement, the above measures feature a thinned orchestration to allow the chalumeau range of the bass clarinet to be heard. The bass clarinetist performs steady eighth note triplets throughout the first measures of the solo, which are then followed by held notes and instances of gestural eighth note triplets. The solo is written up to clarion A₄ in measure 55, which can be one of the most resistant and challenging notes to voice correctly, depending on the particular model of the instrument. The ascending solo line is marked *diminuendo molto*, with the final clarion A₄

¹⁵⁶ Enescu, Symphonie No. 2, 200.

marked *piano*. These dynamics add to the challenge of response in this range; the bass clarinetist will not be able to sustain the triplets without proper air support. Furthermore, the required lefthand dexterity to perform the winding line suggests that a clarinetist new to the bass clarinet would struggle with the passage due to unfamiliarity with the location of the keys. Finally, the note immediately following the clarion A_4 is a throat E-flat₃ marked *poco sforzando*, which can be difficult to voice without accidently popping to the upper register.



Figure 4-5: Bass clarinet solo: Movt. III, mm. 53-55, page 200.

Just like Mahler's first symphony, Enescu's second symphony asks for the doubling clarinetist to switch from bass clarinet to the piccolo clarinet¹⁵⁷. This particular switch (in either direction) is most demanding for the clarinetist, as the embouchure is quite loose for bass clarinet and quite firm for E-flat clarinet. The voicings are different, as are the transposition of the instruments, so the clarinetist needs to hear and voice the correct pitch. Furthermore, the size of the instruments is drastically different, and the E-flat clarinet rings and open tone-holes can be difficult to immediately play with correct hand and finger position after having played a plateau-keyed bass clarinet. The clarinetist also needs to ensure that the E-flat clarinet stand does not

¹⁵⁷ See the discussion in Chapter Two describing that, although Enescu composed for the D clarinet, most performers only play E-flat clarinet in contemporary performances.

stick to the bell of the E-flat clarinet when attempting to quickly switch instruments. A regular B-flat clarinet stand may do so, and it can either make a crash landing on the stage after being picked up, or it can simply remain stuck in the bell for the duration of the part. If there is no other option, a regular B-flat clarinet stand can be used if the clarinetist places a foot on one of the legs of the stand and wiggles the E-flat clarinet side to side until it is free. There are plenty of E-flat-specific stands; it is best to find one that works for the individual. Finally, the act of putting the bass clarinet onto a bass clarinet stand in a rush without damaging the lower rods is a bit of tricky, quick choreography.

Enescu expects a bass clarinet to E-flat clarinet switch in the third movement of the symphony. The clarinetist is told to switch to E-flat clarinet part in measure 72 (rehearsal number 70) of movement three.¹⁵⁸ There are a little more than seven beats to make the switch at tempo *un poco lento, marziale* (which is about half note equals 60 beats per minute: a total of about seven seconds). The challenge with this switch is the time in which to complete it; the clarinetist needs enough time to pick up the instrument and prepare the voicing and air for the entrance in measure 74. The first entrance of the E-flat clarinet is on a written upper clarion C₆ that provides timbral color to the flutes, piccolo, oboes, English horn, clarinets, and even first bassoon. These instruments are all marked solo/soli for the purpose of bringing out the parts from the orchestral texture.¹⁵⁹ The E-flat clarinetist must make the switch with enough confidence that the upper clarion C₆ blends with the woodwinds. This requires the utmost familiarity and control of the instrument.

¹⁵⁸ Enescu, Symphonie No. 2, 207.

¹⁵⁹ Ibid., 208.

The use of the E-flat clarinet, when not exposed, is typically to double high voices in the orchestration. The E-flat clarinet is asked to play up to an altissimo A_6 , which is quite challenging to play in-tune (the tendency is to go flat). It is also important to note that the E-flat clarinet is smaller; thus, for clarinetists not used to the instrument, it is easier to for the fingers to miss a tone hole and cause a squeak or chirp. The unmarked solo in measure 362 (rehearsal number 110) is a good example of the technical skill the third clarinetist needs in order to play the part with confidence.¹⁶⁰



Figure 4-6: E-flat clarinet unmarked solo: Movt. IV, m. 362, page 357.

Tōru Takemitsu – Green (November Steps II)

Tōru Takemitsu's *Green* (composed in 1967) challenges the ability of the third clarinetist to switch instruments quickly. Not only does the clarinetist need to have the coordination and set-up to put instruments down and pick them up quickly, but the clarinetist also needs to be exceedingly comfortable on those instruments in order to perform the part correctly.

The first switch of the piece occurs during measures four and five. The third clarinetist plays on the B-flat clarinet until beat four of measure four. The instruction to change to piccolo

¹⁶⁰ Enescu, Symphonie No. 2, 357.

clarinet immediately follows in the score, and in measure five the E-flat clarinet performs an altissimo D_6 to E-flat₆ a little after beat two.¹⁶¹ The tempo is eighth note equals 96 to 112.



Figure 4-7: B-flat to E-flat clarinet switch: mm. 4-5, page 2.

The challenge with this switch is twofold. First, the amount of time to change instruments is negligible: just over one second. It might be necessary to keep the B-flat and E-flat clarinets on one's lap for the duration of the performance. However, this position would make it difficult to lean forward to pick up the bass clarinet. Furthermore, some clarinetists place the bass clarinet between their knees to play; thus, it may not be possible to place a clarinet on the lap. At the very least, the clarinet stands should be placed within easy reach.

Second, the first note on the E-flat clarinet is altissimo D_6 , for which several fingerings exist. The clarinetist needs to know which one will respond correctly, play in tune, and blend with the rest of the section, all while voicing the note correctly after having played with a B-flat clarinet embouchure. For instance, performing the D_6 with an overblown throat G_4 fingering (no fingers down) would likely bring the pitch down, but may result in a harsher start to the note than the marked *pianissimo* implies. If the pitch needed to be brought down further, the overblown G_4 fingering can be sustained with the three right-hand fingers down, although that adds significant

¹⁶¹ Takemitsu, *Green*, (New York: C. F. Peters Corporation, 1969), 2. It should be noted that measure four is in 4/8 time, and measure five is in 5/16 time, so each beat in measure four is an eighth note, and each beat in measure five is a sixteenth note. However, in an effort to account for the tempo marking, the beats described above are regarded as constantly in eighth notes.

resistance to the note. Another option is to use the full-fingered D_6 (left-hand two, three, and right-hand one and E-flat key), but this may be exceedingly sharp at the *pianissimo* dynamic. A compromise would be to hold down the B pinky key while fingering the full D_6 to ensure proper response, but the pitch would still likely be high. Or, the full-fingered D_6 could also be used without any pinky keys, which creates more resistance but lowers the pitch.

To make matters more challenging, the clarinetist needs to think ahead to the following altissimo E-flat₆ in the part. The E-flat₆ fingering needs to match resistance with the D₆ fingering in order to prevent loudly popping the note. The clarinetist needs to apply the right amount of embouchure and air adjustments between these notes in order to perform them musically and blend with the rest of the ensemble.

The speed with which the switches in the piece need to be completed is remarkable. As mentioned, the timing of the first switch is just over one second.¹⁶² The switch back to B-flat clarinet is much more generous: the third clarinetist has one 2/8 plus 5/16 bar, one 4/8 bar and the first two eighth rests of the next 5/8 bar to enter, of which the latter eighth rest changes to 72 beats per minute.¹⁶³ Altogether the clarinetist has about 4.5 seconds to make the switch. The next switch is to bass clarinet, which the third clarinetist has 8.25 eighth note beats at 60 to 72 beats per minute to complete.¹⁶⁴ The return to B-flat clarinet is quick: only a little over three eighth note rests at 48 to 60 beats per minute.¹⁶⁵ In measure 22 the clarinetist is to switch to piccolo clarinet.¹⁶⁶ There is a fermata on a rest in the last beat of the measure, but it would likely be

- ¹⁶³ Ibid., 3.
- ¹⁶⁴ Ibid., 4.
- ¹⁶⁵ Ibid., 6.
- ¹⁶⁶ Ibid., 7.

¹⁶² Takemitsu, *Green*, 2.

against concert protocol to move during that moment. Either way, there is plenty of time to get to the E-flat clarinet entrance in measure 27.¹⁶⁷ The switch back to B-flat clarinet is also generous, allowing five measures at eighth note equals 48 to 60 beats per minute to switch.¹⁶⁸ The penultimate switch to E-flat clarinet is two measures long at eighth note equals 60 beats per minute.¹⁶⁹ There are five varying measures to switch back to the B-flat clarinet by measure 53. The switches require practice. They also require an absolutely perfect idea of the pitches and their appropriate voicings to be performed immediately after picking up the instrument.

In general, the E-flat clarinet is used more than the bass clarinet. The E-flat clarinet part mostly features the upper clarion register, so it is not technically difficult. The challenging aspect of the part is intonation on these notes, which tend to be quite sharp, as well as getting a good response after switching from B-flat clarinet, sometimes extremely quickly. The bass clarinet part features articulation in the lower chalumeau range, which can be tricky to do without accidentally jumping into the upper register, especially for those who are new to the instrument.

Shulamit Ran – Legends

Ran composed the second clarinet part to *Legends* (1993) specifically for John Bruce Yeh's abilities on E-flat clarinet. The E-flat clarinet writing in this piece demonstrates the added challenges Ran felt musically free to compose. Ran stated, "...the E-flat [clarinet] really goes very, very high after...several big runs, and I just knew that this is a part that is totally suited to that brilliant, brilliant John Yeh, and indeed, he delivered every time that the work has been

¹⁶⁷ Takemitsu, *Green*, 9.

¹⁶⁸ Ibid., 10-11.

¹⁶⁹ Ibid., 15-16.

performed, and that was a great joy. ...he was very much on my mind as I was writing this work."¹⁷⁰

The main E-flat clarinet feature Ran mentioned occurs in measures 32 through 43 of movement two.¹⁷¹ The score is not particularly dense when the E-flat clarinet plays, so the part is clearly audible.¹⁷² The range of the E-flat clarinet is pushed upwards in measure 39, arriving on an altissimo D_6 for the instrument. By this point the penetrating tone of the E-flat clarinet ensures its ability to be heard over the thickening orchestral texture. The climax occurs in measure 42 at the culmination of an accelerando. The E-flat clarinet continues to play *fortissimo* on altissimo thirty-second notes. After a quarter note, the E-flat clarinet is featured on three solo altissimo notes: D-sharp₆, A_6 , and E_6 . These notes are challenging and high.



Figure 4-8: E-flat clarinet climax: Movt. II, mm. 41-43, page 61.

¹⁷⁰ Ran, interview.

¹⁷¹ Ran, *Legends*, 57-61.

¹⁷² Ibid., 57.

Other challenges in the E-flat clarinet part include perfecting the intonation on the instrument in its full range. For example, in measures 112 through 118 in movement one she writes the E-flat clarinet part in unison with B-flat clarinets, oboes, flutes, and piccolo. The E-flat clarinet performs in a range from altissimo D-sharp₆ (measure 118) down to clarion E_5 (measure 115), all of which are notes that require focused attention for pitch.¹⁷³ Furthermore, the E-flat clarinet plays an altissimo F-sharp₆ in measures 173 through 174 of movement one.¹⁷⁴ This note is a challenge, especially when playing with all the upper woodwinds. In this case, it is in unison with the clarinet one, piccolo, flute one and two, oboe one, and in octaves with the second oboe.

¹⁷³ Ran, Legends, 30.

¹⁷⁴ Ibid., 47.

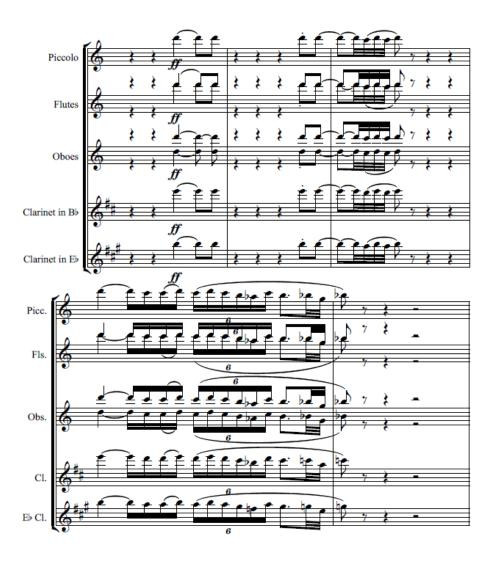


Figure 4-9: E-flat clarinet in unison with woodwinds: Movt. I, mm. 112-115, page 30.

The bass clarinet is performed only once in the second clarinet part, and it occurs because Ran wanted two bass clarinets to perform similar gestures as a duet. The bass clarinet entrance occurs in measure 43 of movement one, so there are five measures to switch: three 4/4 and one 3/4 bar at quarter note equals 88 beats per minute (plus a quarter note and eighth note rest), and one 2/4 bar at 54 beats per minute.¹⁷⁵ The first entrance on bass clarinet requires a series of eight

¹⁷⁵ Ran, *Legends*, 11.

grace-notes to be performed on the downbeat, while the third bass clarinet performs a rhythm of a sixteenth note followed by eight thirty-second notes and finally a dotted eighth tied to a quarter note.¹⁷⁶

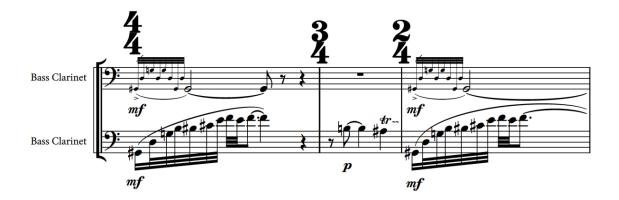


Figure 4-10: Bass clarinet duet: Movt. I, mm. 43-45, page 11.

The inexperienced bass clarinetist might struggle with the first pitch, which is a chalumeau G-sharp₂ in bass clef. The notes in the chalumeau range of the bass clarinet are quite easy to overblow, resulting in a squeak. Beyond this, the bass clarinet part of the second clarinet part is not technically demanding.

John Williams - Harry Potter and the Sorcerer's Stone: Suite for Orchestra

The Harry Potter suite was composed for the first film of the Harry Potter series and prepared as an orchestral concert suite in 2001. Much of the third auxiliary clarinet part in the Harry Potter suite doubles another instrument in the score. The biggest challenges are to maintain good intonation in all registers of the specific auxiliary instrument, and to listen and blend with whichever instrument it doubles.

¹⁷⁶ Ran, *Legends*, 11.

The first entrance of the third clarinetist on the bass clarinet occurs on beat four of measure 147.¹⁷⁷ It doubles with the first and second bassoon, English horn, first through fourth horns, and celli. Approximately two measures later, the bass clarinet and bassoon parts are labeled as a soli in measure 150.¹⁷⁸ The first and second clarinets, as well as strings, perform triplets with the bass clarinet and bassoon in measure 150, but are not marked soli. However, the dynamic marking for all the parts is the same at *mezzo forte*. This is the first entrance for the bass clarinet, yet it is already in unison with the bassoons and cellos; thus, it is imperative that the intonation be excellent.

Listening for intonation in the lower range of the bass clarinet may be especially challenging for a clarinetist unaccustomed to playing in that register. The clarinetist also may not be comfortable with adjusting pitch for intonation purposes; the clarinetist may find that the pitch is much easier to alter on bass clarinet than on B-flat clarinet using embouchure or special fingerings. For instance, adding side keys or pinky keys can adjust pitch dramatically, and sometimes more so than needed. In this first entrance, the clarinetist may find that the bass clarinet's throat G_3 is a little flat. Adding the two right-hand side keys will bring up the pitch. Or, depending on the specific bass clarinet instrument, the throat A_3 might be sharp, for which one may use a resonance fingering typical to those on the B-flat clarinet, or, if it is exceedingly sharp, the bass clarinetist can press the left-hand thumb key to significantly bring down the pitch.

The bass clarinet part uses the upper register quite a bit in this score, the highest note an altissimo D_5 in measure 154.¹⁷⁹ The melody in measures 158 through 161, for example, uses a

¹⁷⁷ Williams, *Harry Potter*, 23.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid., 24.

range of clarion C_4 to upper clarion C_5 .¹⁸⁰ The bass clarinet doubles the upper woodwinds, glockenspiel, and celeste on this melody. When doubling any instrument in the orchestra, the bass clarinet needs to lend its smooth timbre and tone, and sometimes its abilities to perform at extremely quiet dynamic levels. In this instance, it acts as a member of the upper woodwind section.

Bass Clarinet
in Bb
$$ff$$
 brilliante sfz

Figure 4-11: Bass clarinet in clarion range: Movt. I, mm. 158-161, page 25.

The bass clarinet also performs as a member of the string section; an example of this occurs in measures 174 through 175, when the bass clarinetist is alone with the celli.¹⁸¹ The bass clarinet part is marked *mezzo forte*. The cello part does not have a dynamic marking, but the violas and following contrabass entrance is also marked *mezzo forte*, so it would seem to be the same for the celli as well. The timbre and intonation of the bass clarinet must lend itself to the cello section. Adding the bass clarinet darkens and deepens the timbre of the measure. The following measure presents the same idea with regard to the combination of bassoons and contrabasses; they blend to create a unique color as an aid to understanding the narrative on the screen, in the original context of the music. The bass clarinetist must gain an understanding of bowings and the corresponding articulation style of the passage, in addition to playing with good

¹⁸⁰ Williams, Harry Potter, 25.

¹⁸¹ Ibid., 28.

intonation. Applying the articulation to the bass clarinet may require additional practice to prevent accidental jumps into the clarion register.

The E-flat clarinet is used in the first and fourth movements. Its first entrance occurs in measure 189 of movement one, where it performs with the other upper woodwinds on the melody.¹⁸² The range in this entrance is low for the E-flat clarinet: it features the throat tone range until the second part of measure 190, where it jumps to the altissimo.¹⁸³ The upper clarion and low altissimo are the featured range until the end of the movement, with the exception of measures 208 through 209, in which the E-flat clarinet plays in the chalumeau register.¹⁸⁴ Performing in the altissimo has already been discussed as a potential challenge for the inexperienced player.

In the fourth movement, the E-flat clarinet is used as half of the piccolo part beginning in measure 53.¹⁸⁵ The two instrument parts together create a cohesive, bright line of music. There are a few possible explanations for the part being written in this manner. First, it could be to simplify the part for the ease of the performer. Another reason might be to avoid some of the higher range of the E-flat clarinet. However, it should be noted that some of the notes the piccolo covers are descending triplets, so the piccolo is not always used when the range of the line is at its highest. Nevertheless, the E-flat clarinet is easily played in such a way that overwhelms the other instruments. Thus, it very well could be written this way to create moments of specific timbre while preventing too much sound underneath the action on the screen.

183 Ibid.

¹⁸² Williams, *Harry Potter*, 31.

¹⁸⁴ Ibid., 36.

¹⁸⁵ Ibid., 62.

Another example later in the score, measure 183 of the same movement, seems to present a similar situation.¹⁸⁶ An *ossia* octave higher portion is provided in the E-flat clarinet part, even though the highest note (if performed an octave higher) would be a clarion A_5 : something not extreme for the E-flat clarinet. It may be that the prevention of popping out of the texture is the reason for these instances. It is important that the inexperienced player gain graceful control of the notes so as to be prepared to play them in either register.

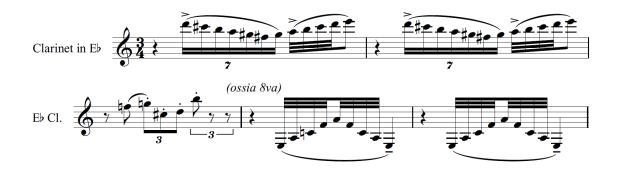


Figure 4-12: Ossia for E-flat clarinet: Movt. IV, mm. 180-184, page 83.

Other moments of the score do not shy away from making use of the E-flat clarinet's altissimo range. Measure 61 features the arrival of the E-flat clarinet on an altissimo F_6 .¹⁸⁷ This particular moment is an arrival point, so the use of the E-flat clarinet's range here provides extra sparkle and volume. Another arrival point occurs measure 152, which also features the E-flat clarinet's upper range, this time arriving on an altissimo F-sharp₆.¹⁸⁸ The challenge with these moments is to remain impeccably in-tune on the correct note, and listening to release the note

¹⁸⁶ Williams, Harry Potter, 83.

¹⁸⁷ Ibid., 64.

¹⁸⁸ Ibid., 77.

with the orchestra. Performing this part in the session would require absolute confidence in the voicing, fingering, and intonation. Nothing less is expected of anyone performing the concert suite.

Esa-Pekka Salonen – Insomnia

Salonen's piece, *Insomnia*, was composed in 2003. The bass clarinet part and E-flat clarinet part are about average difficulty in Salonen's *Insomnia*. Nevertheless, they are both treated as full-fledged members of the clarinet family, with Salonen composing for them in much a similar manner as a B-flat clarinet solo would be written. This fact means that it is necessary for the clarinetist to be equally comfortable and confident on all the clarinets.

The bass clarinetist may find some challenges in the second bass clarinet part (and the first bass clarinet part, for that matter). First, the bass clarinets dovetail sixteenths, with the second bass clarinetist entering on beat three of measure 178.¹⁸⁹ The second bass clarinetist must be comfortable going over the break smoothly at a tempo of quarter note equals 126.¹⁹⁰ Going over the break requires finger/hand dexterity and familiarity with the instrument in order to reach the appropriate keys quickly, without accidentally accenting or overblowing notes.

The sixteenths also require the use of the extended lower range, in this case to chalumeau D_2 beginning measure 179 in the second bass clarinet part.¹⁹¹ This range requires the use of additional pinky keys which, to clarinetists, is a new technique. Once again, familiarity must be practiced so the performer knows exactly where the left or right low D keys are. It is also important to practice with ergonomic hand positions in order to prevent performance injury.

¹⁸⁹ Salonen, Insomnia, 38.

¹⁹⁰ Ibid., 30.

¹⁹¹ Ibid., 38-39.

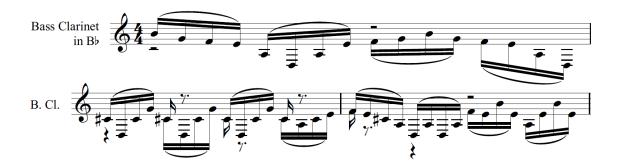


Figure 4-13: Bass clarinet dovetailing: mm.180-182, page 39. The second bass clarinet notes are those with stems down.

The second bass clarinetist is also expected to perform up to an altissimo E_5 in measure $210.^{192}$ Many first-time attempts at the upper range of the bass clarinet will end in disappointment and frustration for those new to the bass clarinet. A new bass clarinetist might not realize that, in order to use the typical altissimo fingerings, one must half-hole (or, in the case of the bass clarinet, simply not cover the hole) of the left-hand first-finger key. Even when one does use the correct bass clarinet fingering, the voicing is so different and open from the B-flat clarinet that the note might not speak at first.

Some bass clarinetists, this author included, prefer to use overblown fingerings for altissimo notes. For example, overblown throat G_3 is altissimo D_5 , overblown throat G-sharp₃ is altissimo D-sharp₅, and overblown throat A_3 is altissimo E_5 There are numerous fingerings to choose from for bass clarinet altissimo: see Phillip Rehfeldt's book *New Directions for Clarinet* for more information.¹⁹³ The sixteenth note run in measure 209 that arrives on altissimo E_5 in measure 210 is probably best fingered with overblown fingerings.¹⁹⁴ If the bass clarinetist

¹⁹² Salonen, Insomnia, 46.

¹⁹³ Phillip Rehfeldt, *New Directions for Clarinet*, (Berkeley: University of California Press, 1977), 32-38.
¹⁹⁴ Salonen, *Insomnia*, 46.

struggles with keeping the altissimo E_5 in the correct octave, the following fingering may work: left-hand fingers one, two, and three, plus the throat G-sharp₃ key and thumb and register key. This fingering provides an easy-blowing response.

Finally, the last challenging aspect of the second bass clarinet part is quick articulation written beginning measure 233.¹⁹⁵ The tempo is quarter note equals 84, but the bass clarinets, first and second bassoons, contrabassoon, the timpani, bass drum, piano left-hand, and first violins all perform four thirty-second notes on the downbeat. This kind of quick articulation has been noted as being difficult on bass clarinet; it can be a challenge to not overblow the note.

The E-flat clarinet part features fingering patterns which would present a challenge on Bflat clarinet as well. For instance, in measure 112 the E-flat clarinet has a clarion G-sharp₅ trilling to A-sharp₅.¹⁹⁶ A fake trill fingering may be used (lifting just the first finger of the left hand to trill), but an inexperienced player may struggle with the evenness of the trill on a smaller instrument. Another instance of fingerings to practice occurs beginning measure 126. The tempo is quarter equals 144, so the sixteenth note intervals will be quick. The first interval is from clarion D₅ up to clarion A₅. A change in measure 127 on beat two lands in a new interval on beat three: a clarion E₅ down to throat G-sharp₄.¹⁹⁷ This latter interval isn't as challenging as the former, where the clarinetist may discover that the left hand third finger lags and causes an extra note to be heard.

A specific E-flat clarinet challenge arises in measure 155, when the E-flat clarinet plays altissimo E_6 to altissimo D-sharp₆ and back several times in sixteenths at quarter equals 126.¹⁹⁸

¹⁹⁵ Salonen, *Insomnia*, 51.

¹⁹⁶ Ibid., 23.

¹⁹⁷ Ibid., 26.

¹⁹⁸ Ibid., 33, 30.

The dynamic is *piano* with a crescendo until measure 158.¹⁹⁹ The E-flat part also ascends in measure 157, at a peak of altissimo A-flat₆. It can be difficult to play the altissimo range of the E-flat clarinet in tune; many players tend to go flat when playing these notes. It is best to pick a sharp fingering and voice down, rather than pick a flat fingering and bite to bring the pitch up.

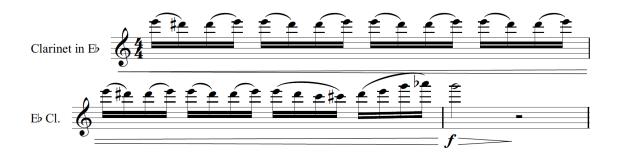


Figure 4-14: E-flat clarinet range: mm. 156-158, page 34.

An interesting use of the E-flat clarinet occurs at the end of the piece, specifically noted in measure 464. An asterisk is in the score and the corresponding note says: "Wind players should stagger breathing between unison pairs..."²⁰⁰ The E-flat clarinet is paired with second flute, and the first clarinet is paired with third oboe.²⁰¹ Performing in unison, as noted above, means the E-flat clarinetist must pay special attention to intonation. The clarinetist also needs to be aware of blending with the specific instrument in order to not allow the penetrating E-flat clarinet timbre to overwhelm the instrument with which it is paired. In this case, the staggered breathing must be worked out as well.

¹⁹⁹ Salonen, *Insomnia*, 34.

²⁰⁰ Ibid., 108.

²⁰¹ Ibid.

William Bolcom - Ninth Symphony: A Short Symphony in One Movement

The Ninth Symphony by Bolcom was composed in 2011 for the orchestra at Rice University. The bass clarinet part in Bolcom's ninth symphony poses a few challenges. In general, the part provides the lower octave as support for the clarinet section. In fact, this is how the bass clarinet is used in its first entrance in measure 16.²⁰² In other moments the bass clarinet functions as a member of the bassoon section, as in measures 42 through 43.²⁰³ Sixteenth notes in the beginning of the part are not especially challenging given that the tempo is quarter note equals 84 beats per minute. The tempo does increase to quarter equals 106 beats per minute at measure 79, however.²⁰⁴ The first sixteenth notes to occur at this new tempo would challenge the dexterity of the left hand; it would certainly require practice to achieve smooth results.²⁰⁵ The sixteenth notes in measure 120 pose a similar challenge, with the added difficulty of an accelerando.²⁰⁶ The final challenge with quick notes occurs in measure 279 through 280 with sixteenth notes at quarter note equals 124 where the left-hand is challenged once again.²⁰⁷

Additionally, although the range of the bass clarinet extends to the clarion register, and thus entails traversing over the 'break' of the instrument, it never calls for anything higher than a clarion A-sharp₄ (measures 124 through 126).²⁰⁸ Nevertheless, a clarion A-sharp₄ would be challenging for someone new to the bass clarinet given its difficult resistance in the voicing.

²⁰⁶ Ibid., 17.

²⁰² Bolcom, Ninth Symphony, 2.

²⁰³ Ibid., 6.

²⁰⁴ Ibid.,11.

²⁰⁵ Ibid., 13.

²⁰⁷ Ibid., 41.

²⁰⁸ Ibid., 19.

The E-flat clarinet part present several challenges. In the E-flat clarinet's first sixteenth notes in measures 55 through 57, the E-flat clarinetist performs up to an altissimo E-sharp₆.²⁰⁹ The third clarinetist must ensure the intonation on these notes is exact and must also be comfortable performing with the bell up, as the score calls for in measure 144.²¹⁰ It can be challenging to replicate the angle of the mouthpiece for the embouchure, so the clarinetist must be certain they are able to re-create the correct angle, by lifting the head up and back, or by leaning backwards a bit. Of course, this kind of position would make it difficult to read the sheet music, so the part would either have to be memorized, or the clarinetist would place the bell up to the side in order to read the page by looking at an angle.



Figure 4-15: E-flat clarinet bell up: mm. 144-148, page 22.

Later, the E-flat clarinet is challenged with some of its high altissimo notes. For instance, in measure 159 the E-flat clarinet plays an altissimo A_6 and holds it for a little more than two measures, after which it rearticulates the A_6 several times through measure 166.²¹¹ The highest note for the E-flat clarinetist occurs in measure 303 with an altissimo B-flat₆.²¹² This B-flat₆ is especially tricky because its duration is only one eighth note. It would be quite easy to obtain the

²⁰⁹ Bolcom, Ninth Symphony, 8-9.

²¹⁰ Ibid., 22.

²¹¹ Ibid., 24-25.

²¹² Ibid., 47.

"grunt" or "undertone" of the B-flat₆ with such a short note. In a piece with this kind of range, it is important not to use too soft of a reed. A soft reed requires much more effort to produce the notes in this range. However, a harder reed can pose a problem for endurance. Thus, it is important to have a hearty, yet responsive reed for this piece on E-flat clarinet.



Figure 4-16: E-flat clarinet altissimo A_6 held: mm. 163-166, page 25.

The E-flat clarinetist in this piece needs to be confident and technically savvy in order to perform the solos written for the instrument. The first solo begins in measure 235 and is marked *mezzo piano*.²¹³ It features sixteenth notes and thirty-second notes. The range is from a throat E_4 to altissimo D-sharp₆. The tempo beginning measure 235 is quarter note equals 60 beats per minute, so it is not too quick, although the thirty-second note patterns could make use of some 'fake fingerings' for the altissimo, also known as overblown notes. The altissimo D-sharp₆ can be fingered with everything open except for the left-hand first finger. The altissimo D-sharp₆ in measure 239 can be played with an overblown throat G-sharp₄ fingering.²¹⁴ The easiest fingerings for the altissimo F_6 in measure 253 is likely either full-fingered F_6 , or with fingers two, three, and chalumeau C-sharp₄/clarion G-sharp₅ pinky key.²¹⁵

²¹³ Bolcom, *Ninth Symphony*, 32.

²¹⁴ Ibid., 33.

²¹⁵ Ibid., 35.



Figure 4-17: E-flat clarinet solo: mm. 235-239, pages 32-33.

The solo is extremely exposed and may be especially intimidating to a new E-flat clarinetist. Confidence in hearing the pitches before playing is key. The clarinetist also needs to be comfortable with the tone-hole positions on the E-flat clarinet for the solo to be performed smoothly. The upper clarion register the E-flat part is written in from measure 267 until 269 requires special attention to intonation.²¹⁶ Many E-flat clarinets have uneven twelfths resulting in poor intonation comparably in each register. Many go incredibly sharp in the upper clarion register. One way to fix this is to use different fingerings. For example, the upper clarion B₅ in measure 268 could be fingered as thumb, register key, first finger, and third finger of the left hand. Finally, the E-flat clarinet has trills in measures 286 through 292.²¹⁷ The trills are all marked s*forzando*, which is not difficult to do on E-flat clarinet. However, what is difficult on the E-flat clarinet is maintaining the correct high note. The best trill fingering to avoid dropping to the lower partial from altissimo F₆ to altissimo G₆ is to finger F₆ as left hand two, three,

²¹⁶ Bolcom, Ninth Symphony, 39.

²¹⁷ Ibid., 43-44.

chalumeau C-sharp₄/clarion G-sharp₅ pinky key, and use the bottom right trill key to trill up to altissimo G₆.

Lawrence Moss – Windows

Advanced techniques on both clarinets are used in *Windows*, the trio for flute/piccolo, Eflat clarinet/bass clarinet, and contrabass composed in 1966. This piece is the earliest piece of chamber music requiring E-flat and bass clarinet doubling thus far discovered during research. The first example for bass clarinet is the use of staccato quintuplets at a low dynamic level. These quintuplets occur in the bass clarinet beginning measure 17 when the tempo is quarter note equals 84.²¹⁸ The written dynamic is *pianissimo*, only increasing in volume after the quintuplets. Measure 21 features quintuplets at *forte*, but measures 22 through 24 reduce the volume to *pianississimo*.²¹⁹ The quintuplets at measure 17 features the throat and chalumeau register of the bass clarinet. The upper clarion and low altissimo register is featured in the quintuplets occurring in measure 21. Thus, an expert level of light articulation at every dynamic and register is required for the piece.

Another challenging aspect of the bass clarinet part is the dexterity the intervals require. Measure 17 foreshadows this with intervals just beginning to cross over the break, but the real challenge begins in measure 35, when some of the larger intervals require jumping from throat tone to upper clarion and even lower altissimo in the span of a sixteenth note at a tempo of quarter note equals 84.²²⁰

²¹⁸ Moss, Windows, 2.

²¹⁹ Ibid.

²²⁰ Ibid., 3.



Figure 4-18: Bass clarinet staccato intervals: mm. 35-38, page 3.

The intervals demand dexterity of voicing and of fingers. They also require a perfectly functioning bass clarinet. The voicing of each interval must be practiced in order to understand the distance between notes. The dexterity of the fingers is mostly focused in the left hand; a focus on the left-hand wrist motion might prevent finger or hand injury by allowing the wrist to rotate and/or lift slightly to be in a more ergonomic position to depress keys, especially if the clarinetist has smaller hands.

Finally, the bass clarinetist must be comfortable with the altissimo range on the instrument. The highest note in *Windows* is an altissimo F-sharp₅ first found in measure 41 during another instance of intervallic sixteenths.²²¹ The altissimo F-sharp₅ is held in measures 43 through 44, and occurs again as the climax of a sextuplet run in measure 55.²²² In Rehfeldt's book, there are two fingering options; the bass clarinetist should experiment to find what works for their instrument and set-up.²²³

Immediately upon the first entrance on E-flat clarinet, the clarinetist is presented with similar challenges. The first entrance for E-flat clarinet occurs measure 69, and features staccato, *pianissimo* quintuplet-sixteenths.²²⁴ The E-flat clarinet is the only moving voice in this measure,

²²¹ Moss, Windows, 4.

²²² Ibid.

²²³ Rehfeldt, New Directions, 36.

²²⁴ Moss, Windows, 5.

so all ears are upon it. The articulation must be precise, light, and quick, and the intervals must be voiced and fingered with the utmost care. One good thing about the part is that it does not require intervals quite so extreme when considering the break of the clarinet; the intervals jumping to altissimo start from the clarion register. The range of the E-flat clarinet is also a bit more modest, only calling for an altissimo D_6 at the highest, although one of the D_6 's is trilled up to an E_6 in measure 92.²²⁵



Figure 4-19: E-flat clarinet staccato intervals: mm. 69-72, page 5.

Elliott Carter – Triple Duo

As the title references, the piece (composed in 1982) is for three duos: flute and clarinet, violin and cello, and piano and percussion. The B-flat/bass/E-flat clarinet part is composed with rhythms and intervals that are challenging. It is thus essential to be a performer of the highest caliber, just in the sense of maintaining tempo and rhythm alone. To this end, it is imperative that the clarinetist know the bass and E-flat clarinet well, to the point where every note is an automatic, effortless voicing and fingering. The E-flat and bass clarinet must feel as comfortable as the B-flat clarinet in order to focus on the notes and rhythms.

In addition to rhythm, the bass clarinetist is asked to play in a high range. An altissimo Fsharp₅ is featured at the end of a *decrescendo* to a *mezzo forte* in measure 461, and two measures

²²⁵ Moss, Windows, 7.

later (measure 463) the bass clarinetist performs sextuplets up to an altissimo G_5 .²²⁶ Interestingly, this G_5 is also placed at the end of a *decrescendo*, but this one only quiets to a *forte* from a *fortissimo*. Carter was not afraid to showcase the incredible range of the bass clarinet, and the performer must be able to voice the notes correctly in order to play them as intended.

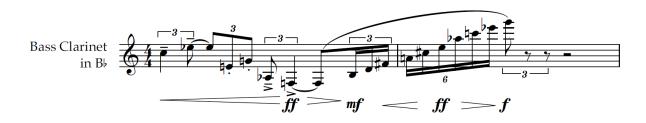


Figure 4-20: Bass clarinet high range: mm. 462-463, page 63.

Flutter-tonguing is required on the bass clarinet in measures 256 through 257 on a lower clarion B_3 .²²⁷ It is accented, marked *fortepiano*, and is held for about two and one-half beats at tempo half note equals 50 beats per minute. Learning extended techniques such as flutter-tonguing is important for the performance of bass clarinet and E-flat clarinet today.

Finally, the E-flat clarinet part features some of the throat and chalumeau tones on the instrument. One instance of throat register use occurs measures 328 through 336, when the E-flat clarinet has a range of throat E_4 to lower clarion B_4 , only traversing above lower clarion B_4 to clarion E_5 in the last measure.²²⁸ The E-flat clarinet can be quite out-of-tune in this range, so it is important for the clarinetist to be familiar with the E-flat clarinet to understand how to perform with good intonation in the register.

²²⁶ Carter, *Triple Duo*, 62-63.

²²⁷ Ibid., 37-38.

²²⁸ Ibid., 45-46.

Erika Fox – 'Hungarian' Rhapsody

Fox's *'Hungarian' Rhapsody* (composed in 1989) is melodically based and performed in an improvisatory style, resulting in advanced, expressive parts for the ensemble made up of doubling flute, oboe, clarinet, trumpet, and (non-doubling) piano. The bass clarinetist has several prominent moments, the first one occurring after its first entrance in measure 65 of movement one, performing a solo with only piano in measures 66 through 67.²²⁹ The solo requires excellent control of the chalumeau register in several techniques such as articulation, finger dexterity, glissando, and flutter tonguing. In the solo, the glissando from chalumeau G₂ to throat F₃ is not particularly easy, even on the B-flat clarinet. In this range the embouchure can only create a little flexibility in the pitch. Flutter-tonguing is called for just a few notes later on throat F₃.



Figure 4-21: Bass clarinet solo: Movt. I, mm. 66-67, page 10.

The E-flat clarinet is featured at an arrival point in movement III, in measures 15 through 16, using vibrato on the instrument. The instrument's timbre triumphantly fills the space left by the other wind performers in measure 16, and it effectively continues its role through measure 20 as the excited harbinger of change and passion fitting of the movement's title, "Rhapsody."²³⁰ In

²²⁹ Fox, 'Hungarian' Rhapsody, 9-10.

²³⁰ Ibid., 33-34.

fact, it does its job so well that the rest of the ensemble (with the exception of the trumpet) joins the E-flat clarinet on its next excited ascension in measure 23.²³¹

The squiggly line following notes is Fox's notation for exaggerated vibrato. This occurs twice in the main E-flat clarinet solo, once on a throat A₄ and again on the arriving altissimo C-sharp₆. Vibrato is difficult to control on the smaller clarinet; it is easy to lose the voicing and descend a partial. Clarinetists must practice each note using vibrato to ensure they know how to maintain overall control without losing the center of the pitch. Even more challenging is the fact that the dynamics change dramatically throughout the course of the note.



Figure 4-22: E-flat clarinet solo with exaggerated vibrato: Movt. III, mm. 15-16, page 33.

Thomas Adès – Living Toys, Op. 9

The clarinet part in *Living Toys*, a piece for fourteen performers composed in 1993, is quite challenging on each clarinet doubled. On both the E-flat and bass clarinet, the clarinetist is faced with a large range which must be performed with precision.

On E-flat clarinet, the highest note is altissimo A-sharp₆. This note is a minor third above what clarinetists typically practice as the top of their range on any clarinet before entering university studies. This range is thus even more challenging on the E-flat clarinet for the

²³¹ Fox, 'Hungarian' Rhapsody, 35.

inexperienced clarinetist. Providing multiple fingerings for the note in his book *New Directions for Clarinet*, Rehfeldt even states that the altissimo A-sharp₆ is the "limit for E[-flat] sopranino."²³² This note occurs multiple times in the piece: in measures 9, 28, and 70.²³³



Figure 4-23: E-flat clarinet high range: Movt. I, mm. 64-70, page 11.

The range on the bass clarinet is a challenge as well. The bass clarinet range is stretched quite high, into a realm that most composers only ask for in solo pieces. In measure 305 Adès writes an extremely high C-sharp₆ (one octave above altissimo C-sharp₅) on the bass clarinet.²³⁴ Adès is particular about this note in this range, marking the note with an asterisk and providing the following comment: "...this note is on the instrument. No alternative pitch should be played. If the note is too unreliable it is better to omit it."²³⁵ Thus, the clarinetist should not switch to another clarinet to perform the pitch. This extremely high C-sharp₆ is quite feasible on the bass clarinet, but the bass clarinetist must have a knowledge of the fingering as well as confidence in the voicing. Rehfeldt provides fingerings for this note in his book.²³⁶ Another difficulty of this note is the absolute precision in response at the marked dynamic of *sfffz*.

²³⁴ Ibid., 48.

²³² Rehfeldt, New Directions, 30.

²³³ Adès, *Living Toys*, 2, 4, 11.

²³⁵ Ibid.

²³⁶ Rehfeldt, New Directions, 37.



Figure 4-24: Bass clarinet C-sharp₆: Movt. III, mm.305, page 48.

Finally, the bass clarinet also performs in a more regular range, although it is still high for the instrument on an altissimo A_5 . In measure 161 the A_5 is written in sixteenth notes at *pianissimo*, alternating between altissimo A_5 and altissimo G_5 .²³⁷ Again, finding the right fingering is essential, as is practicing to ensure the voicing is correct, especially at this quiet dynamic level.

Carter Pann – Antares

The quartet composed in 2003-2004 for violin, cello, clarinet, and piano requires the clarinetist to double on bass and E-flat clarinet. The bass clarinetist acts as the bass voice in the second movement. Listening to intonation in the range lower than the B-flat clarinet can be a new challenge to a clarinetist.

In measure 12, the second measure of the bass clarinet entrance, the bass clarinetist must ensure that the voicing continues to be flexible yet firm so as not to be flat as they cross down "over the break" from clarion B_3 to throat A-sharp₃ and throat A_3 .²³⁸ Additionally, the bass clarinetist begins phrases a couple times on a chalumeau E_2 . This chalumeau E_2 is difficult for an

²³⁷ Adès, Living Toys, 26.

²³⁸ Carter Pann, clarinet part to Antares, (Malvern, PA: Presser, 2004), Movement II. measure 12, page 9.

inexperienced bass clarinetist because the voicing must be firm enough to form the note but loose enough to prevent over-blowing.



Figure 4-25: Bass clarinet beginning on chalumeau E_2 and crossing down over the 'break': Movt. II, mm. 11-15, page 9.

The E-flat clarinet part features similar intonation concerns. First, the altissimo F_6 's need to be practiced with drones and a tuner in order to learn which fingerings play in tune on the specific instrument. It would be best to study the pitch on a cold instrument, since it will have just begun playing in the piece.



Figure 4-26: E-flat clarinet pinky-key repeat: Movt IV, mm. 166-171, page 13.

Second, the E-flat clarinet part features a clarinet-specific pinky-key repeat. The E-flat clarinet part in measure 168 is a clarion G-sharp₅ down to a clarion C-sharp₅, back up to clarion D-sharp₅ and then E-sharp₅.²³⁹ If the E-flat clarinet does not have the alternate chalumeau A-

²³⁹ Carter Pann, clarinet part to Antares, 9.

flat/clarion E-flat key, then it will be necessary to perform that note through pinky finger alternation. The clarion G-sharp₅ requires the use of left pinky, so the resulting pinky pattern is left, left, right because the clarion D-sharp₅ must be performed by the right hand. Although the clarinetist may be accustomed to performing these keys in this manner, the difference in key sizes and distances on the E-flat clarinet must be practiced.

Unsuk Chin – Gougalon: Scenes from a Street Theatre

The E-flat and bass clarinet are played less frequently in Chin's piece for 15 performers (composed in 2009), but their demands are no less than in the previous scores studied. Performers need experience on rapid articulations, glissandi, and control of dynamics.

The E-flat clarinet part presents two challenges. The first is rapid articulation. In measures 58 through 61, the E-flat clarinetist is instructed to articulate as quickly as possible.²⁴⁰ Single- and/or double-tonguing may be implemented to perform this part. Quick articulation requires a light tongue and focused, confident voicing on the E-flat clarinet, especially when intervals occur, no matter which type of articulation is used. Double-tonguing on E-flat clarinet is typically only feasible below the altissimo register. Thus, the top notes of the intervals are likely too high to include in a double-tonguing pattern. Nevertheless, it would be possible to implement a doubling-tonguing and single-tonguing combination in which the single-tongue is applied to the higher notes of the intervals.

²⁴⁰ Chin, *Gougalōn*, 61-62.



Figure 4-27: E-flat clarinet articulation as fast as possible: Movt. III, mm. 58-60, page 61.

The second challenge for the E-flat clarinetist is the glissandi used throughout the piece in this part. The E-flat clarinetist performs extended glissandi, first occurring in measures 67 through 72, traversing up and down the upper range of the instrument, the lowest note being a clarion B₄ and the highest being whatever pitch the performer deems to be the highest note possible on the E-flat clarinet.²⁴¹ The glissando is mainly controlled in the back of the throat, so it is essential for the E-flat clarinetist to have a thorough understanding of the voicings required at the starting and ending pitches, as well as any "breaks" that need to be traversed in between them.



Figure 4-28: E-flat clarinet glissandi: Movt III, mm. 67-72, pages 64-65.

Finally, the bass clarinetist needs to be quite comfortable in all aspects of its range in all dynamics. Beginning in measure 50 of movement V, the bass clarinet part includes long-tones to

²⁴¹ Chin, Gougalon, 64-65.

be performed according to detailed dynamics.²⁴² Many of the crescendos range from *piano* to *forte* over lengths of time varying from approximately two beats to around five beats.



Figure 4-29: Bass clarinet dynamics: Movt. V, mm. 52-54, page 84.

Lawrence Moss – Shadowplay for Two Clarinets

Shadowplay is a colorful clarinet duet composed in 2013 by Moss that uses the E-flat and bass clarinets in the second clarinet part. Each instrument requires careful control of response and pitch. The E-flat clarinet part begins on an altissimo D_6 in measure two of movement II, which can be tricky to perform in-tune. The regular altissimo D_6 fingering without the E-flat pinky key might work, or it would also be possible to simply overblow throat G_4 to obtain an altissimo D_6 that is not too sharp.²⁴³

Similarly, in measures 11 through 13 the E-flat clarinet is in the altissimo range, but this time for articulated notes and trills at *forte*, followed by notes marked a quiet dynamic level.²⁴⁴ The articulated altissimo note is an E_6 followed by D_6 . These can be articulated with either overblown or regular fingerings, but they must be practiced to ensure that they do not overpower the B-flat clarinet in that moment. The control of the trill from altissimo E_6 to F-sharp₆ in measure 13 is tricky and requires strong air support in order to prevent an incorrect partial from

²⁴⁴ Ibid., 7.

²⁴² Chin, Gougalon, 84.

²⁴³ Moss, *Shadowplay*, 6.

being performed.²⁴⁵ Another challenging, quiet entrance for the E-flat clarinet occurs in measure 22 on an upper clarion B_5 . This note may require some pitch adjustments. However, whenever one is adjusting pitch, the clarinetist must be sure to continue to use embouchure and voicings properly in order to get the next upper clarion B_5 to respond.²⁴⁶ In the third movement the E-flat clarinetist must precisely perform "chirps" of altissimo notes throughout the movement.²⁴⁷



Figure 4-30: E-flat clarinet altissimo: Movt. II, mm. 11-12, page 7.

The bass clarinet part in movement four is quite similar to the E-flat clarinet part in terms of difficulty. First, it begins on the lowest chalumeau C_2 and then traverses to the upper register of the instrument.²⁴⁸ The second low chalumeau C_2 is marked flutter-tongue. Many of the upper notes can be overblown or played with their "real" fingering (remembering the half-hole for notes in the upper register). An especially large interval from throat-tone A-flat₃ up to upper clarion B-natural₄ occurs in measure seven.²⁴⁹

One performance practice issue that comes up in the bass clarinet part is that it switches between bass and treble clefs. In movement four, the bass clarinet begins with the lowest

²⁴⁵ Moss, *Shadowplay*, 7.

²⁴⁶ Ibid., 8.

²⁴⁷ Ibid., 9-10.

²⁴⁸ Some bass clarinets do not extend to low C. In orchestral and chamber music, as well as studio work, the low C bass clarinet is required.

²⁴⁹ Moss, *Shadowplay*, 12.

chalumeau C_2 notated in bass clef and changes to treble clef after beat four. While bass clarinet parts may be written in either treble clef or bass clef, switching between clefs may present difficulties because clarinet parts are never written in the bass clef.

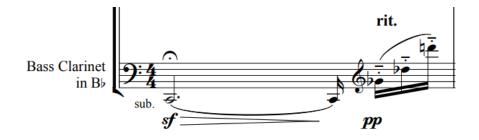


Figure 4-31: Bass clarinet entrance: Movt. IV, m. 1, page 11.

When bass clef is used *in a bass clarinet part*, it is either German notation or "Confusing Notation" (term coined by Harry Sparnaay). In German notation, bass and treble clef are used, and the notes in the clarinet part are written a major second above their sounding pitch. However, this is typically quite confusing for bass clarinetists, because in order to read German notation and produce the sounding pitch, bass clarinetists need to play everything in treble clef up one octave.²⁵⁰ The "Confusing Notation" is a combination of German and French notation (French notation being entirely in treble clef, fingering notes as if they were on the regular B-flat clarinet). When this notation provides notes in bass clef, it functions the same as German notation. In treble clef, this notation functions the same as French notation.²⁵¹ *Shadowplay* is written in the "Confusing Notation." It is important for any bass clarinetist to be aware of the three types of notation and to be able to read each seamlessly.

²⁵⁰ Harry Sparnaay, *The Bass Clarinet: A Personal History*, (Barcelona: Periferia, 2010): 42.

²⁵¹ Ibid., 47.

Conclusion

The discussion of performance challenges in the E-flat and bass clarinet doubling parts in this chapter illustrates the need for training in institutions of learning. These parts demonstrate the demands composers require of clarinetists. The similarities between the demands of solo E-flat clarinet parts and the E-flat clarinet parts found in these scores are many, and the same is true of bass clarinet parts. It is significant that the demand on E-flat clarinet playing is so high when the bass clarinet is also required in the performance, and vice versa. Training is necessary to help the clarinetist learn performance practices on both E-flat clarinet and bass clarinet. Based on the examples discussed, training should include use of air, proper voicing, techniques for articulation, multiple fingerings, and tips for intonation adjustments. Finally, contemporary and extended techniques such as glissandi and extreme altissimo notes should be taught. Multiphonics, slap-tonguing, quarter-tones, and other techniques should be taught on E-flat and bass clarinet as well. Even though not all extended techniques were demonstrated in these examples, they will assuredly arise at some point in the clarinetist's career.

Chapter Five: Surveys and Interviews

This chapter examines the 41 responses from survey and interview participants to explore their reasons for playing E-flat and bass clarinet, what kind of training they received, and what they had to say about the effect of their ability to play both E-flat and bass clarinet on their careers.²⁵²

Several careers are represented by the participants. Numerous participants are orchestral and freelancing musicians, several teach at universities or in public schools, and many are Hollywood studio musicians.

The participants represent a variety of experience-levels with B-flat/A clarinet as well as E-flat and bass clarinets. The following tables show the breakdown of the number of years each participant has been playing each instrument. This table shows the length of time participants have been playing B-flat/A clarinet, which consequently provides some information about age and experience. Many of the participants are comfortably in their careers, having played their main B-flat/A clarinet for decades, yet eight participants are just beginning their careers and are already doubling on E-flat and bass clarinet. This number of younger clarinetists represents 19.5% of the total participants. It seems that a significant percentage of young clarinetists are performing on both E-flat and bass clarinet. Of course, the sample for this survey was not particularly large, nor does it represent clarinetists worldwide, so the results must be read as only a preliminary look into how clarinetists are performing today.

²⁵² I collected 48 survey responses, but only 41 of the responses were from clarinetists who performed both E-flat and bass clarinet. These seven responses are not included in the analysis in order to have a clearer look at clarinet doublers as defined in this research. Although it is common for clarinetists to choose only one auxiliary clarinet on which to double, many other dissertations, including those identified in the introduction and first chapter, have explored the auxiliary clarinets in the singular kind of doubling; thus, I did not feel it necessary to delve into this discussion at this point in time. I have already stated that I recognize the importance of learning E-flat clarinet and bass clarinet as they can be applied to many performance situations individually. The purpose of this chapter is to examine how learning *both* E-flat and bass clarinet can affect one's career.

Number of Years Playing B-flat/A Clarinet	Number of Participants
10-19	8
20-29	8
30-39	4
40-49	12
50-59	2
60-69	6

Figure 5-1: Participants' Length of Experience on B-flat/A Clarinets

Places of residence include: Southern California, Northern California, Chicago, Toronto, Arizona, Virginia, Maine, New York, Pennsylvania, North Carolina, Florida, Alabama, Arkansas, Indiana, Washington (state), the United Kingdom, France, Switzerland, Australia, Finland, Qatar, and Japan. Of these locations, the highest number of participants lived in Southern California, with ten living in Los Angeles and two in other Southern California cities. The high number of participants from Los Angeles is due to the fact that I am based in Los Angeles; many of the participants I reached out to were from the city. Additionally, four participants lived in New York. Three of the participants were from Australia, representing three different areas of the country: Perth, New South Wales, and Tasmania. Two were from the United Kingdom.

There does not appear to be a pattern of doubling with regards to years of experience in specific locations, but again, the sample for this survey is not large enough to make any conclusions. What is clear, is that many clarinetists of varying years of experience work in Los Angeles. It is possible the same trend would be noticed in other locations if the sample was larger. This trend would mean that the jobs in these locations have required E-flat and bass doubling for more than one generation. However, it is important to note that there is no information regarding how often the musicians have moved places of residence.

E-flat Clarinet Responses – Why Choose the E-flat Clarinet?

One of the first questions on the survey asked why the individual chose to learn E-flat clarinet. The reasons for picking up the instrument varied, but they included learning for employment opportunities, being assigned in school, and simply being interested in the E-flat clarinet:

Many participants began playing the E-flat clarinet in order to become more hirable. Sara Marsh stated this as the reason she began playing E-flat clarinet six years ago as a freelancer in Los Angeles.²⁵³ Hannah Lee, "...an active clarinetist, woodwind doubler, and teacher based in New York City" who has been playing E-flat clarinet for six years, wrote: "I was about to start graduate school, and I thought I should get some experience on as many clarinets as I could." ²⁵⁴ David H. Evans of Arkadelphia, who has "...played in musicals and stage band through college and as a professional..." wrote that he was "Interested in the instrument and repertoire/auditioning for gigs" and has been playing E-flat clarinet for ten years.²⁵⁵ Similarly, Steve Fox, who "...is heard regularly on concert stages in the Toronto area playing clarinet[,] saxophone[,] and historical clarinets in professional orchestras and chamber ensembles...", began playing E-flat clarinet 43 years ago because of "Greater opportunities in concert band (first) and orchestra (later)."²⁵⁶ Paul Kenward of the UK also wrote that orchestral opportunities prompted him to play E-flat clarinet; he has been playing it for 20 years.²⁵⁷

²⁵³ Sara Marsh, Online survey by author, 2 February 2022.

²⁵⁴ "About," Hannah Lee, Clarinet, https://hannahleeclarinet.com/about/ and Hannah Lee, Online survey by author, 18 January 2022.

²⁵⁵ David H. Evans, Online survey by author, 17 January, 2022.

²⁵⁶ "Biography," Stephen Fox, accessed May 27, 2022, http://www.sfoxclarinets.com/bio.html and Steve Fox, Online survey by author, 18 January 2022.

²⁵⁷ Paul Kenward, Online survey by author, 19 January 2022.

Principal clarinet of the Los Angeles Chamber Orchestra and Hollywood studio musician, Joshua Ranz also wrote that the E-flat clarinet "Gives you more opportunities."²⁵⁸ He has been playing E-flat clarinet for 30 years. Jonathan Sacdalan's experience with E-flat is similar: "I chose to double on [E]-flat clarinet (and later bass clarinet) to deepen my connection to the clarinet repertoire, but also to access performance opportunities that I otherwise would not have experienced."²⁵⁹ He is an orchestral and studio musician in Los Angeles and has been playing Eflat clarinet for 22 years.²⁶⁰ Finally, Dan Higgins, who has "…worked on 700 motion picture scores…" wrote that the E-flat clarinet is "Necessary for work."²⁶¹ He has been playing E-flat clarinet for 45 years.

Others were made to or asked to play the E-flat clarinet originally and have continued to perform it. This is what happened to Gil Agababa-Shaked, principal clarinetist of the Jyväskylä Symphony Orchestra in Finland since 2016, who has been playing E-flat clarinet for 10 years now.²⁶² Heidy Huwiler "…had to play [E-flat clarinet for] an orchestra project for study and…liked it."²⁶³ She "…is a Freelance Musician and Instrumental Teacher for Clarinet" in Switzerland and has been playing E-flat clarinet for 17 years.²⁶⁴ Simone Zanacchi of Qatar was

²⁵⁸ "Joshua Ranz," Herb Alpert School of Music, University of California, Los Angeles, accessed May 27, 2022, https://schoolofmusic.ucla.edu/people/joahua-ranz/ and Joshua Ranz, Online survey by author, 25 February 2022.

²⁵⁹ Jonathan Sacdalan, Online survey by author, 28 February 2022.

²⁶⁰ "Jonathan Sacdalan," Los Angeles Inception Orchestra, accessed May 27, 2022, https://www.inceptionorchestra.org/jonathansacdalan.

²⁶¹ "Dan Higgins," Dan Higgins, Biography, accessed May 27, 2022, http://www.danhiggins.net/biography.html and Dan Higgins, Online survey by author, 23 February 2022.

²⁶² "Biography," Gil Agababa-Shaked, accessed May 26, 2022, https://gilshaked.com/ and Gil Agababa-Shaked, Online survey by author, 17 January 2022.

²⁶³ Heidy Huwiler, Online survey by author, 19 January 2022.

²⁶⁴ "Heidy Huwiler, Clarinet," Beirut Chants Festival, accessed May 27, 2022, https://www.beirutchants.com/biography-december-12-2.

asked to play the E-flat clarinet by his band director and has been playing it for 30 years now.²⁶⁵ Furthermore, Helen Hamlin, clarinetist in New South Wales, Australia, needed to learn E-flat clarinet in college as her "second study" during her third year of school. She has now been playing E-flat clarinet for eight years.²⁶⁶ Ashley Oliveto, based in Japan, also was assigned to Eflat clarinet in ensembles and has played it for 10 years.²⁶⁷ Chuck Jarrett of Arizona played E-flat for an orchestra concert as an undergraduate and has been playing E-flat for the last 50 years.²⁶⁸ Similarly, Alexander Tu was "…assigned E-flat in ensembles" and has been playing it for four years.²⁶⁹

Andrew Lowy, second and E-flat clarinetist of the Los Angeles Philharmonic "...got assigned in college to play E-flat [clarinet] and felt immediately at home and have enjoyed playing it ever since."²⁷⁰ He also states that he "...was drawn to its quirky voice and fun solos."²⁷¹ He has been playing E-flat clarinet for 15 years. David Howard, bass clarinetist of the Los Angeles Philharmonic, was asked to play the E-flat clarinet in a youth orchestra, and has been playing it for 45 years.²⁷²

²⁶⁵ Simone Zanacchi, Online survey by author, 18 January 2022.

²⁶⁶ Helen Hamlin, Online survey by author, 19 January 2022.

²⁶⁷ Ashley Oliveto, Online survey by author, 17 January 2022.

²⁶⁸ Chuck Jarrett, Online survey by author, 18 January 2022.

²⁶⁹ Alexander Tu, Online survey by author, 23 January 2022.

²⁷⁰ "Andrew Lowy," Los Angeles Philharmonic, accessed May 27, 2022, https://www.laphil.com/musicdb/artists/3242/andrew-lowy and Andrew Lowy, Online survey by author, 24 February 2022.

²⁷¹ Lowy, survey.

²⁷² David Howard, Online survey by author, 28 February 2022.

Several needed to learn to play E-flat clarinet for specific pieces. Garrick Zoeter, the clarinetist of the Antares ensemble, wrote that this was why he learned E-flat clarinet. He has been playing E-flat for 24 years now.²⁷³ Ronald Miller of the Bay Area of California also wrote that "It was needed in a piece my orchestra was to perform..." and has been playing E-flat for 30 years.²⁷⁴

Ken Lagace of Pennsylvania picked up the E-flat clarinet under slightly unusual circumstances: "Kal Opperman, my teacher, said I had to buy a Selmer E[-flat] he had in a paper bag for \$250." He has been playing E-flat clarinet for 55 years.²⁷⁵

Other clarinetists noted that they chose the instrument because it was interesting. Jacob Freiman, a student at the University of California, Los Angeles, began the E-flat clarinet eight years ago because of this.²⁷⁶ Principal clarinetist of the Los Angeles Philharmonic Boris Allakhverdyan also said that he "Love[d] the character of the instrument."²⁷⁷

Donald Foster began playing the E-flat clarinet because of circumstances and experiences. He stated that he "Was intrigued at an early age, and then became the E[-flat] fellow for the Aspen Music Festival."²⁷⁸ Foster is second clarinetist of the Los Angeles Opera and is a frequent Hollywood studio musician, and he has been playing e-flat clarinet for 35 years.²⁷⁹

²⁷³ Garrick Zoeter, Online survey by author, 9 April 2022.

²⁷⁴ Ronald Miller, Online survey by author, 15 February 2022.

²⁷⁵ Ken Lagace, Online survey by author, 18 January, 2022.

²⁷⁶ Jacob Freiman, Online survey by author, 9 April 2022.

²⁷⁷ "Boris Allakhverdyan," Los Angeles Philharmonic, accessed May 27, 2022, https://www.laphil.com/musicdb/artists/267/boris-allakhverdyan and Boris Allakhverdyan, Online survey by author, 1 March, 2022.

²⁷⁸ Donald Foster, Online survey by author, 21 March 2022.

²⁷⁹ "Donald T. Foster: Clarinet," Los Angeles Opera, accessed May 27, 2022, https://www.laopera.org/about-us/artists-2/la-opera-orchestra/orchestra-musicians/donald-t-foster/.

Similarly, Philip Everall began performing the E-flat clarinet "on and off for 20 years...Mainly as required by performance."²⁸⁰ Everall is a Lecturer and Head of Woodwind[s] at the Western Australia Academy of Performing Arts.²⁸¹

John Bruce Yeh first played the E-flat clarinet as a teenager in the American Youth Symphony when he volunteered to perform it on Ravel's *Bolero*. He played E-flat clarinet during his collegiate studies once, but did not begin performing the E-flat clarinet regularly until the opportunity arose in the Chicago Symphony for the position of assistant principal and E-flat.²⁸²

It is clear that the participants experienced similar circumstances surrounding the reasons to play E-flat clarinet, even as clarinetists in a variety of locations and representing different ages and levels of experience. The similarities point to an understanding of the usefulness of doubling E-flat in a clarinet performance career; in short, the instrument provides more opportunities for jobs.

E-flat Clarinet Responses – What Kind of E-flat Clarinet Training Was Received?

Of these 41 survey participants, only 15 received formal E-flat clarinet training. This means that only 36.6% of the surveyed clarinetists who play E-flat clarinet received formal training on the instrument. Some clarinetists received a few lessons while working on specific repertoire, but the majority did not receive training. These clarinetists were left to their own devices to discover how to perform the E-flat clarinet. Of those who received training, the following is a selection of what they experienced:

²⁸⁰ Philip Everall, Online survey by author, 18 January 2022.

²⁸¹ "Dr. Philip Everall," Western Australia Academy of Performing Arts, Edith Cowan University, accessed May 27, 2022, https://www.waapa.ecu.edu.au/about/our-staff/profiles/music/classical-performance/dr-philip-everall.

²⁸² Yeh, interview.

Yeh first received help from Gary Gray for his first performance on E-flat clarinet with the American Youth Symphony. Then, after working in the Chicago Symphony, he decided to move up to the chair of assistant principal and E-flat. Yeh worked with Larry Combs to prepare for this job.²⁸³

Roger Garcia of Washington state received E-flat training as "an extension of my private lessons as a student."²⁸⁴ Jacob Blackwell of Alabama had a similar experience as he "…received [an] extra weekly lesson in college with [the] professor/graduate students."²⁸⁵ Lagace wrote: "…[The E-flat clarinet] was used as a B[-flat clarinet;] the lesson was prepared on B[-flat] and E[-flat].²⁸⁶ Many others had lessons as well; some of the specific techniques taught included "Learn[ing] how to play in tune up to super C," and "…helpful [tips for]…airflow and intonation."²⁸⁷

Sacdalan's training on the E-flat clarinet began in high school under William Wellwood but was then paused until his collegiate graduate studies with Gary Gray. He described his E-flat clarinet training as including: "1. Tongue position and voicing technique, particularly in the strident upper register of the instrument; 2. Alternate altissimo fingerings; and 3. Equipment guidance including the use of the [B]-flat clarinet reeds on the [E]-flat clarinet mouthpiece."²⁸⁸

²⁸³ Yeh, interview.

²⁸⁴ Roger Garcia, Online survey by author, 17 January 2022.

²⁸⁵ Jacob Blackwell, Online survey by author, 17 January 2022.

²⁸⁶ Lagace, survey.

²⁸⁷ Paul Bambach, Online survey by author, 17 January 2022 and Heidy Huwiler, Online survey by author, 19 January 2022.

²⁸⁸ Sacdalan, survey.

Others had to teach themselves. Joanne Peters of New York had to do so, writing: "Every teacher I had before college had never played [an E-flat clarinet]. I bought the E[-flat] excerpt book and used it like a Bible. By the time I got to college, I had played for [four] years in bands and orchestra and figured out most of what I needed."²⁸⁹ Interestingly, Andrew Lowy, E-flat clarinetist of the Los Angeles Philharmonic, also did not receive formal training. He did receive a few lessons though. He wrote, "…I had some excerpts coaching by Tom Martin, my teacher who plays E-flat clarinet in the Boston Symphony."²⁹⁰

Several trends can be drawn from the survey responses. First, the skills taught included voicing, alternate fingerings, and intonation: all of which were mentioned as essential skills for the repertoire examined in Chapter Three. However, none of the comments mentioned studying techniques such as flutter-tonguing or glissandi on the instrument, which were also skills required in the repertoire examined in Chapter Three. These techniques need to be included in current training. Additional skills that should be taught include multiphonics and microtone fingerings to ensure that the clarinetist is capable of performing any of the techniques required in contemporary music.

Second, the reasons for learning E-flat clarinet surround circumstances in schools, jobs, and gig opportunities worldwide. The fact that such a variety of experiences is represented by the responses of this survey supports the likelihood of clarinetists encountering the need to perform on the E-flat clarinet at some point in their career.

²⁸⁹ Joanne Peters, Online survey by author, 17 January 2022.

²⁹⁰ Lowy, survey.

Bass Clarinet Responses – Why Choose the Bass Clarinet?

The participants' responses describing why they chose to play the bass clarinet are similar to their answers for their E-flat clarinet playing: school assignments were made, employment opportunities are better, and some needed to learn the instrument for specific orchestras or performances.

Many clarinetists gained their first experiences on bass clarinet in school as ensemble assignments were made. Huwiler (Switzerland) wrote that the bass clarinet was her "Variant instrument during study" and has been playing bass clarinet for 17 years.²⁹¹ Marsh (Los Angeles) was assigned the bass clarinet during her undergraduate study and has since been playing it for 15 years.²⁹² Similarly, Agababa-Shaked (Finland) "…had to [study the bass clarinet] as part of the studies in Germany" 15 years ago.²⁹³ Allakverdyan (Los Angeles) was also "Assigned [the bass clarinet] at school orchestra." He played bass clarinet for one year.²⁹⁴ Oliveto (Japan) and Tu (Los Angeles) were also assigned the bass clarinet in ensembles and have been playing the instrument for 14 years and five years, respectively.²⁹⁵

Many of the survey participants wrote that they needed to know the bass clarinet for auditions and ensemble opportunities. Evans (Arkadelphia) began playing the bass clarinet 15 years ago when he "Was auditioning for orchestras and interested in it."²⁹⁶ Glen Sargent, a woodwind doubler in Maine performing with big bands and musicals stated, "I would not have

²⁹¹ Huwiler, survey.

²⁹² Marsh, survey.

²⁹³ Agababa-Shaked, survey.

²⁹⁴ Allakhverdyan, survey.

²⁹⁵ Oliveto, survey and Tu, survey.

²⁹⁶ Evans, survey.

passed [the] audition for orchestra without both [E-flat and bass clarinet]."²⁹⁷ Another woodwind doubler, Sinclair McLaren from Dunedin, stated that the bass clarinet is "Required as a woodwind doubler." He has been playing bass clarinet for 15 years.²⁹⁸

Lagace stated his reason to learn the bass clarinet 26 years ago: "It was needed in the symphony, so I bought one."²⁹⁹ Zanacchi (Qatar) "…was asked [to play bass clarinet] by the manager where I was playing as [a] freelancer." He has been playing bass clarinet for 28 years.³⁰⁰ Howard also began playing bass clarinet due to performance in an orchestra, saying: "I was asked to play bass in a summer music festival." He has now been playing bass clarinet for 45 years.³⁰¹ Jarrett (Arizona) also learned the bass clarinet for a "job in the Evansville, [Indiana] Philharmonic" 48 years ago.³⁰² Yeh began playing the bass clarinet when he volunteered for a part in the American Youth Symphony as a teenager. He played it at Aspen and auditioned and won his first orchestral job as bass clarinetist of the Chicago Symphony. He stated, "…I always tell people that the bass clarinet opened all my doors."³⁰³

The bass clarinet was recognized by many participants as an instrument that makes one more hirable. Andrew Seymour began playing the bass clarinet 24 years ago "To expand my playing and make me more versatile."³⁰⁴ He was a freelance musician in Melbourne, Australia

²⁹⁷ "Glen Sarget, M.M.," School of Performing Arts, The University of Maine, accessed May 26, 2022, https://umaine.edu/spa/faculty/glen-sargent/ and Glen Sargent, Online survey by author, 17 January 2022.

²⁹⁸ Sinclair McLaren, Online survey by author, 17 January 2022.

²⁹⁹ Lagace, survey.

³⁰⁰ Zannachi, survey.

³⁰¹ Howard, survey.

³⁰² Jarrett, survey.

³⁰³ Yeh, interview.

³⁰⁴ Andrew Seymour, Online survey by author, 17 January 2022.

and is currently principal clarinet with the Tasmanian Symphony Orchestra, a position he has held since 2012.³⁰⁵ Sacdalan wrote: "The bass clarinet provided me access to the most career opportunities to date, so much that I often refer to bass clarinet as the 'opportunity maker'. …I bought my first Buffet Prestige with an extended range to low written [C] shortly before graduate school to audition for an opening for principal chair bass clarinet with the [Young Musicians Foundation] YMF Debut Orchestra—a position I held through four concert seasons.³⁰⁶

In Los Angeles, studio work influences many clarinetists to learn the auxiliary clarinet. Foster wrote, "Wanting to become a studio clarinetist in Los Angeles, I knew early on that I would have to be well-versed in all of the clarinets."³⁰⁷ Higgins also alluded to this fact when he wrote that the bass clarinet is "Necessary for work."³⁰⁸

Everall had a unique experience among the participants with bass clarinet as his primary instrument during his undergraduate study. He wrote, "I then studied in the Netherlands with Harry Sparnaay and Erik van Deuren at the Conservatorium van Amsterdam, then two years at the Manhattan School of Music with Michael Lowenstern. I also hold a PhD focusing on bass clarinet from the West Australian Academy of Performing Arts."³⁰⁹ Yeh also experienced highly specific bass clarinet training at Juilliard as a bass clarinet major.³¹⁰

³⁰⁵ "Andrew Seymour," University of Tasmania, accessed May 26, 2022, https://www.utas.edu.au/profiles/staff/creative-arts/andrew-seymour.

³⁰⁶ Sacdalan, survey.

³⁰⁷ Foster, survey.

³⁰⁸ Higgins, survey.

³⁰⁹ Everall, survey.

³¹⁰ Yeh, interview.

Sometimes performers need to learn the instrument for a specific piece in performance. This is what happened to Zoeter.³¹¹ Hamlin also had this experience when she had to learn the bass clarinet in order to "…play reed 2 in a local production of Les [Misérables]."³¹² Miller (California) experienced this need for bass clarinet as well "…in a show I was playing in." He has been playing bass clarinet for 60 years.³¹³

The responses of the participants demonstrate the range of circumstances that can propel a clarinetist into performing the bass clarinet. Just as with the E-flat clarinet, the fact that participants worldwide, of varying ages and experience, encounter similar situations with the bass clarinet seems to point to a future of clarinetists highly likely to perform the bass clarinet at some point in their career.

Bass Clarinet Responses – What Kind of Bass Clarinet Training Was Received?

A similar number of participants received formal training on the bass clarinet as on the Eflat clarinet, with only 16 receiving formal bass clarinet training. Thus, 39% of the surveyed clarinetists received formal training on the bass clarinet. Several description of that training were provided:

Training sometimes began after the clarinetist had been playing the bass clarinet for a bit. Tu said that he did not receive training until "...most recently. A teacher recommended I get extra instruction in an auxiliary instrument before I graduate."³¹⁴

³¹¹ Zoeter, survey.

³¹² Hamlin, survey.

³¹³ Miller, survey.

³¹⁴ Tu, survey.

Training on bass clarinet differed from that received on E-flat clarinet for some participants. Freiman wrote, "I spent about 10 lessons of my undergraduate [studies] playing bass clarinet[;] this education was much more formal than my education on E[-flat] clarinet. There was much talk about the differences in embouchure, air support, and finger technique. It felt more like I was learning how to play a new instrument than play the same instrument but bigger/smaller than I was used to, as was the case with E[-flat] for me."³¹⁵

Of those who received training on the bass clarinet, many received such training while in school. Interestingly, Foster pointed out that "…one semester of bass clarinet was required during my undergraduate studies [at University of Southern California]." He was taught by David Howard.³¹⁶ Ranz received lessons during his studies from "Dennis Smylie at Yale and Aspen." Lisa Kohorn described her training as "play[ing] excerpts during lessons."³¹⁷ Agababa-Shaked also had detailed lessons: "[I] had lessons at the Sibelius Academy in Helsinki. These lessons were very helpful in mastering the specifics of the instrument and learning from very experienced players...although [I] already had some experience learning and playing on my own before."³¹⁸ Lee wrote that her experience was "…several private lessons on bass clarinet throughout college or graduate school."³¹⁹ Garcia wrote that his bass clarinet training was "Just an extension of my private lessons as a student."³²⁰ Blackwell received lessons on the bass

³¹⁵ Freiman, survey.

³¹⁶ Foster, survey.

³¹⁷ Lisa Kohorn, Online survey by author, 17 January 2022.

³¹⁸ Agababa-Shaked, survey.

³¹⁹ Lee, survey.

³²⁰ Garcia, survey.

clarinet "...through middle, high school[,] and college and attended summer music festivals to play bass clarinet."³²¹

Several bass clarinet techniques were described as being included in lessons. Sacdalan wrote, "My instruction on bass clarinet included training in embouchure flexibility, low reed voicing and tongue position technique, as well as alternate fingerings in the altissimo register." He received training from several different instructors while in college. ³²² These concepts are similar to those that Seymour was taught. Seymour wrote that he had "Some [training,] mainly as I never felt comfortable on the instrument. Approaching it with a different concept of sound, learning altissimo fingerings, and again, excerpts, were the main areas of focus."³²³

These skills taught included those mentioned in Chapter Three; namely, proper voicing and altissimo fingerings. Extended techniques such as flutter-tonguing, and the extreme high range of the bass clarinet should be included in pedagogy as well, as demonstrated by the repertoire in Chapter Three. Additionally, although not demonstrated by the repertoire in this dissertation, multiphonics and microtone fingerings should be incorporated in study, as was mentioned with the E-flat clarinet above.

Playing Both E-flat and Bass Clarinet

Of course, the purpose of this study is to examine the effects of the ability to double Eflat and bass clarinet on the careers of the participants. Numerous participants stated that being able to play both E-flat and bass clarinet provided them with many opportunities for work. Steve

³²¹ Blackwell, survey.

³²² Sacdalan, survey.

³²³ Seymour, survey.

Fox wrote, "I'd guess it has increased my opportunities as a freelancer by at least 50%." He also wrote, "I would advise composers/arrangers not to hesitate to use either or both instruments, with the caveat that the E-flat requires a dedicated player to avoid a one-dimensional sound and pitch issues in chamber music."³²⁴ Similarly, Tu stated, "They open up more opportunities by roughly 25-35%. It fluctuates but having the ability to play and say yes comfortably definitely increases my general performance opportunity."³²⁵

The ability to double E-flat and bass clarinet is beneficial in circumstances where the instruments double each other and also when either E-flat or bass clarinet is an individual double. Kenward of the UK wrote that he chose to double to "Widen employment prospects, but usually [on] one or the other, or both but in different pieces."³²⁶ Lee wrote that, "It has given me the ability to accept more gigs. I've especially found it much easier to find bass [clarinet] gigs than B[-flat]/A since the market is so much less saturated. It has also been very useful for musical theater gigs."³²⁷ Janice Lipson of North Carolina stated, "I have played at least 30 years of professional theatre, doubling on clarinets, saxophones, and flutes. I have only played the E[-flat] clarinet in public [two] or [three] times because I prefer the lower parts."³²⁸

In Australia, Everall wrote,

Having to switch between E[-flat] and [bass] doesn't come up often for me, but going from B[-flat]/A to either bass or E[-flat] is a frequent occurrence for clarinet players. Being able to do both, I find, helps. To be honest, almost all of my clarinet colleagues can play these three main clarinets proficiently- in professional settings, and fairly regularly at that. I do have a deep level of

³²⁴ Fox, survey.

³²⁵ Tu, survey.

³²⁶ Kenward, survey.

³²⁷ Lee, survey.

³²⁸ Janice Lipson, Online survey by author, 17 January 2022.

specialization on bass, but the reality is that I need to play and teach all the clarinets (also contra and [basset horn]!).³²⁹

Some participated noted that they did need to play both E-flat and bass clarinet for a specific job. Sargent wrote, "I would not have passed [the] audition for orchestra without both [E-flat and bass clarinet]."³³⁰ Peters said, "I play in many pits that require both. Orchestras in our area [Endicott, New York] seem to only use [two] players for [bass] and E[f-lat]. I have had tremendous [orchestra] opportunities playing E[-flat]....with orchestras for 50 plus years. I have played B[-flat] and E[-flat] in concert bands for 55 years."³³¹ Juan Gallegos said that doubling is helpful "Not [in] chamber or orchestral repertoire but definitely in a studio setting. [The last] time I performed this combination was for a recording of student film composers and ASCAP members."³³² Agababa-Shaked said that doubling is not her specialty, but:

It definitely improves any chances of winning an orchestral job, since less players will apply to an audition with a side instrument. I won a temporary job with [bass] and my current (permanent) job has both side instruments in contract (though [I] mostly would play E[-flat]). For chamber music and especially new music the side instruments are a must. Many composers like to experiment and pick the specific sounds of those instruments and it enriches us to be able to play different kinds of music on different instruments.³³³

Paul Bambach of Santa Barbara, California described one moment specifically where knowing both was beneficial: "My professional experience being hired in the Columbus Symphony [Ohio] was based on my E[-flat] experience. One summer I agreed to play bass – [the] conductor was Morton Gould – [the concert] featured his [*Guaracha*] – [a] big bass

³²⁹ Everall, survey.

³³⁰ Sargent, survey.

³³¹ Peters, survey.

³³² Juan Gallegos, Online survey by author, 17 March 2022.

³³³ Agababa-Shaked, survey.

[clarinet] solo! He loved it! He came into the orchestra and shook my hand at the concert!"³³⁴ Clearly, being willing to play both E-flat and bass clarinet can lead to some memorable opportunities.

Other participants did not clarify what kind of doubling they encounter, but still recognized that their ability is an asset to their work. Blackwell said, "It has greatly increased the opportunities I had to play in multiple ensembles in college and to make my way into our top ensembles as an early undergraduate and has increased my calls for freelance work since leaving school."³³⁵ Seymour wrote, "I've definitely had opportunities because of my ability to play each instrument that I wouldn't have otherwise been given."³³⁶ Evans wrote that he has "…played in musicals and stage band through college and as a professional; [I] wanted to be versatile for job opportunities…"³³⁷ Dillon Acey of Florida said, "I feel that some of my past conductors/music directors were able to have the freedom to pick material that isn't accessible to all groups due to the ability to double."³³⁸

Ranz wrote, "For both orchestra and studio work it really helps. In the studios it's essential. [It's also helpful] for teaching so I can show students specific ideas for both instruments."³³⁹ Foster stated,

...this happens fairly frequently in the studios, and I cannot with any certainty say that the composer orchestrated this knowing I personally would be covering the part. Every instrument [on which] one can achieve proficiency expands your ability to be able to cover those instruments. My reputation at being adept at ALL

³³⁴ Bambach, survey.

³³⁵ Blackwell, survey.

³³⁶ Seymour, survey.

³³⁷ Evans, survey.

³³⁸ Dillon Acey, Online survey by author, 17 January 2022.

³³⁹ Ranz, survey.

clarinets (E[-flat], B[-flat], A, C, Alto Clarinet, Basset, Bass, ContraAlto and ContraBass) has helped get me performance opportunities in numerous Southern California Orchestras (LA Phil, San Diego Symphony), and of course, one cannot be a regular studio player without access to all of these instruments (perhaps some exception can be made for the Alto and Basset clarinets).³⁴⁰

Higgins emphasized this fact in Los Angeles by writing, "All professional clarinetists in LA play all [three]."³⁴¹

For those with full-time orchestral positions, doubling on E-flat and bass clarinet may not be as important for their career, but they still recognize that their ability serves the orchestra well. Lowy wrote, "I'm known more for playing E-flat, but being comfortable on auxiliaries has allowed me to step in for most anything that is thrown my way."³⁴² Similarly, Howard stated, "In my situation it simply enables me to play whatever programming is required in the LA Phil."³⁴³

Even for those that haven't seen a direct impact on their career yet, they expect to be able to use their ability to their advantage in the near future. Huwiler wrote that she had not experienced performance opportunities because of her ability to double just yet, but she also noted: "...my composer friends know about my versatility and will consider that in the future." This is likely a budding example of the cycle of this doubling, with a performer's ability and the subsequent composer's expectations for doubling.

One participant even noted the importance of playing both E-flat and bass clarinet in the amateur settings in which she performs. Hamlin wrote that playing "...provides more

³⁴⁰ Foster, survey.

³⁴¹ Higgins, survey.

³⁴² Lowy, survey.

³⁴³ Howard, survey.

opportunities. I didn't pursue music professionally though, but [there are] plenty of amateur

opportunities."344

Sacdalan provided the most thorough description of the benefits of playing both E-flat

and bass clarinet:

I feel that clarinet doubling keeps my clarinet tone production, voicing, and embouchure technique fresh, as it provides me the opportunity to revisit these concepts every time I pick up and play these instruments.

...Knowing [E]-flat and bass clarinet has granted me access to many career opportunities I would not otherwise have experienced including playing auxiliary chairs with several local professional orchestras as well as being helpful in achieving my first breaks into the TV and film scoring industry. For those who are part of LA's film scoring community..., clarinet doubling will continuously be a part of our profession as orchestra instrumentations will vary with each new project.

Clarinet doubling has also been instrumental in getting my foot through the door in LA's new music scene with series such as Jacaranda, Hear Now Music Festival, Helix Collective, among others. There is a growing trend within the last ten years for chamber music including clarinet doubling parts.

I think today's job market stresses an even greater importance on clarinet doubling in orchestras, opera[,] and musical theater pits, and especially in LA's diverse music scene. It seems to make the most sense that today's students be encouraged to learn the auxiliary clarinets while in college to prepare for our modern industry demands.³⁴⁵

Emphasis on the new music scene was also provided by Andrew Sparling, who

performed in the new music scene of Great Britain pre-pandemic and was the clarinetist in a recording of Erika Fox's *Shir*. He stated, "If you wanted to freelance in…new music ensembles, then E-flat and bass were both absolutely essential." Sparling said, "…there are more amateur players doing bass and E-flat now than there were [in the 1970s], so I got to play Shostakovich symphonies and all sorts of things that I wouldn't have got to play if I [hadn't]."³⁴⁶ Although he

³⁴⁴ Hamlin, survey.

³⁴⁵ Sacdalan, survey.

³⁴⁶ Andrew Sparling, Zoom interview by author, 15 April 2022.

has performed parts requiring E-flat and bass clarinet doubling, he also stated that, as an editor, he would place E-flat parts in the second part and bass clarinet parts in the third clarinet part.³⁴⁷

Sparling's last comment leaves two avenues to explore. First, composers' and orchestrators' expectations for clarinetists need to be examined. Second, an exploration of what clarinetists currently teach their students on E-flat and bass clarinet can provide this study a sampling of the teaching that is already taking place. This sampling should help direct the understanding of the training that should take place in the future at universities and institutions of learning.

Sparling's division of parts among orchestral scores is certainly seen in publications of orchestral and even chamber music today. I recognize that E-flat and bass clarinet doubling will not be present in all works, but the ability to perform well on E-flat remains useful in pieces requiring E-flat, and the same application applies to the bass clarinet as well. The fact remains that the clarinetist is most flexible and hirable as an E-flat and bass clarinet doubler; the participants' comments have demonstrated this in multiple avenues of performance, including orchestras, musicals, studio work, and new music performances.

Sparling also experienced a combining of doubling parts in Carl Off's *Carmina Burana*. He stated that he performed it as a teenager and was not ready to play E-flat or bass clarinet professionally, so his teacher took those parts and performed them himself. This left Sparling's part without any doublings. Later, Sparling got to perform the modified doubling part when a clarinetist younger than him (unable to perform professionally yet on E-flat or bass clarinet) performed the piece with him.³⁴⁸

³⁴⁷ Sparling, interview.

³⁴⁸ Ibid.

Composers' Thoughts on E-flat and Bass Clarinet Doubling

Several composers continue to write parts for E-flat and bass clarinet doubling, and thus maintain this expectation for clarinetists. William Bolcom, upon hearing my desire to study this topic, wrote,

...the practice of E-flat and bass clarinet doubling in a 2nd clarinet part is...very, very common. ... In today's orchestra, certainly in the U.S., I'd guess most 2nd-clarinet players are aware and hip to this development and are prepared to confront it in recent scores, from the 20th century forward. ...It means probably that as we've composed, we [composers] found we wanted more of the clarinet sound in the orchestration than one soprano in B-flat affords.³⁴⁹

David S. Lefkowitz wrote that he composed a piece (*Abstracts #2*) with E-flat and bass clarinet doubling for "color, feasibility, [and] range." He said that the piece has not often been performed yet, but this is "…not because of doubling issues." After all, he is based in Los Angeles and knows several clarinetists who double on E-flat and bass clarinet. He wrote, "It's important for clarinetists to develop facility on all clarinets, and to own high quality clarinets of all sizes."³⁵⁰

The expectations of the composers in the fourteen pieces studied have already been outlined in previous chapters, but it is worth examining studio scores more closely at this point. John Williams' *Harry Potter and the Sorcerer's Stone: Suite for Orchestra* was included in the study because of the high demand for doubling in the Los Angeles recording studios. The surveys reflected this reality, and I personally experienced this in a session for *The Orville* with Sacdalan. He performed a clarinet part that required B-flat, E-flat, and bass clarinet. He listed

³⁴⁹ William Bolcom, Email message to author, 4 April 2022.

³⁵⁰ David S. Lefkowitz, Online survey by author, 30 May 2022.

this part as one of several times he had been asked to double E-flat and bass clarinet in the recording studios.³⁵¹

In the interest of learning orchestrator's expectations for clarinetists, I interviewed Jeff Atmajian and Philip Klein, both orchestrators with years of experience. Klein noted that, "...generally these days everything I work on, there is not a specific chair...that's always thought of as the auxiliary or the doubler; they all come in with doubles available."³⁵² Atmajian stated, "...in film, sometimes when we use [the E-flat clarinet] we want the principal player on it..."³⁵³ Klein further explained this point: "...traditionally it's always been the second or third chair [as] the auxiliary chair...I think in John Williams is definitely more of the old, traditional orchestration approach. ...the third [chair] was generally the acrobat; they would go from every part if needed..."³⁵⁴ Regarding current writing for studio orchestras, Klein said, "...there is no limitation to what you can write in those parts [the cues] from a technical standpoint; it's just assumed that you would be able to play all those. ...[It] would be [the contractor's] responsibility [to make sure they] found the player that...had all those instruments and proficiently plays them all."³⁵⁵ Klein and Atmajian also both noted a trend toward the low instruments in score writing currently, meaning that bass clarinet usage is high.

With regards to composing E-flat and bass clarinet doubling concert music, Klein said he would "ask the specific orchestra manager if the player was a doubler just to make sure, but....if it's the New York Philharmonic I'm not going to worry about it because they play all the

355 Ibid.

³⁵¹ Sacdalan, survey.

³⁵² Philip Klein, Zoom interview by author, 19 March 2022.

³⁵³ Jeff Atmajian, Zoom interview by author, 16 March 2022.

³⁵⁴ Klein, interview.

literature in the world."³⁵⁶ Thus, expectations for doubling, even for clarinetists who hold fulltime orchestral positions, are maintained even across the differences between studio and concert music.

Doubling Conclusions for the Future – Trends and Teaching

In the introduction, I stated that pedagogy would not be suggested given other existing research that provides exercises for the learning of these instruments. However, I do think that it is worth noting what ought to be included in pedagogy, as described in the survey responses and in Chapter Four. I also wish to point out that teaching the E-flat and bass clarinet is dependent on circumstances of the teacher and the student. The teacher may not have students who want a career in clarinet performance and thus does not teach them the E-flat or bass clarinet. Or, the students may not have access to working instruments. However, given the responses above, and the amount of repertoire requiring E-flat and bass clarinet doubling, I believe it is the duty of institutions of learning to provide these opportunities to students. Institutions of learning should recognize the demand for clarinetists who can double on E-flat and bass clarinet. The institutions of learning should provide opportunities for performance and learning, such as in performance ensembles and lessons.

In our interview, Yeh said the following regarding teaching both E-flat and bass clarinet:

Usually [the teaching is based on] what they program in the school orchestra...and in the school wind ensemble. And I always confer with the conductors of those ensembles and I say: Well, this student needs experience on the bass clarinet, so you should assign that part. Or, this student needs experience on the E-flat and loves to play the E-flat, so we'll assign that part. And so the students will, in the course of study, indicate their preference or their desire to do whatever instrument they would like. ...Sometimes it's by necessity because we

³⁵⁶ Klein, interview.

need somebody to play the part and nobody volunteers [so] we'll just have to assign one... Other times it's by...desire, so the student will come in and say that. Other times a student will...say, 'No, I don't feel like I ever want to play bass clarinet,' and that for me is enough of a challenge to say, 'We're going to have you play bass clarinet on the next wind ensemble concert...just so you can get...experience...I think every good educational program should provide the students with those opportunities and not withhold them, even if the student...protests. I would say there is a way to positively and gently ease them into the knowledge of these important instruments.³⁵⁷

Others also teach based on university ensemble repertoire. For example, Foster wrote that he typically does not teach bass clarinet to students, "...but when students are asked to cover bass parts, we spend time on it." ³⁵⁸ Zoeter wrote that he teaches E-flat clarinet "...on an asneeded basis. There is often one [E-flat] player in clarinet choir and then of course in wind ensemble and sometimes orchestra. It is most beneficial to learn the auxiliary instruments as a way of opening up more performing and employment possibilities."

Regarding bass clarinet, Zoeter wrote: "Often these days there are students that play exclusively the bass [clarinet]. This is a new phenomenon that I saw starting to happen about 10 years ago.... These students are very accomplished on bass before they even begin their university studies....I do my best to help students that already perform on bass at a very high level."³⁵⁹ In Los Angeles, Marsh encountered some of the same phenomenon. She wrote, "Most of my students [learning bass clarinet] have had little experience on the B[-flat], so comparing it to that isn't necessarily helpful to them. So, I teach the bass clarinet as [its] own instrument [–] separate from the B[-flat]. All the students I've taught bass to have [not been] learning the instrument as an auxiliary – the bass was their main instrument."³⁶⁰ Lipson wrote, "I don't teach

³⁵⁷ Yeh, interview.

³⁵⁸ Foster, survey.

³⁵⁹ Zoeter, survey.

³⁶⁰ Marsh, survey.

my B[-flat] clarinetists the bass [clarinet] unless they ask about it. I do have students that play bass exclusively. The bass has a character all its own. Each register sounds, and should sound, different. We search for evenness of tone [across] the registers of a soprano clarinet....I do of course, give instruction on good embouchure, air, technique[,] and articulation.³⁶¹ Likewise, Blackwell wrote, "I have several students who play exclusively bass clarinet currently. I treat it like regular clarinet in learning scales and [R]ose etudes and other standard clarinet rep.³⁶² There are thus several instances of students performing the bass clarinet as their primary instrument.

The bass clarinet is taught more frequently than the E-flat clarinet among the participants of this survey, perhaps because of the above phenomenon, or because of trends yet to be determined. I have also taught bass clarinet at university to a student performing the instrument in the ensemble. I have encouraged the performance of E-flat clarinet, but the school only had one instrument that was already being used by another clarinetist not taking lessons (which, ironically, confirms that many students must figure out how to play the instrument on their own). Thus, teaching the E-flat clarinet was not an option.

Some participants describe their teaching as heavily excerpt-based. Lowy also teaches Eflat clarinet: "I do teach those students who want to learn, but the teaching tends to be excerpt focused. I think it's extremely important...to make sure that the student has a setup that will work—in particular I always make sure that the setup will allow playing in the extreme altissimo (high G) with ease. I do find it helpful to spend some time discussing fundamentals, with intonation and E-flat specific fingerings being an important focus. Otherwise, I teach from the

³⁶¹ Lipson, survey.

³⁶² Blackwell, survey.

excerpts that the students bring in."³⁶³ Howard teaches both E-flat and bass clarinet excerpts to students: "I teach them orchestral excerpts on E[-flat] as needed. They need to know the excerpts for auditions." Regarding bass clarinet, he wrote: "…I teach fundamentals, particularly for players recently switching to bass clarinet. I also coach them in orchestral excerpts."³⁶⁴

Some techniques and topics taught include equipment recommendations, fingerings, and tricks for better intonation. Kenward of the UK wrote that, "You have to spend a lot of time on set up, voicing, and alternative fingerings to play both in tune throughout the range."³⁶⁵ Peters wrote, "If I have a student who wants to [play E-flat clarinet], I have taught them. Mostly, I teach fingerings for pitch, tongue style[,] and when not to play." She also wrote, "Practice each. The embouchures are not the same."³⁶⁶

Many stated that they teach the E-flat and bass clarinet as individual instruments. Ranz wrote that he does not teach E-flat clarinet often, but he teaches a lot of bass clarinet. He said, "I teach them how to play with a proper embouchure and make sure the equipment is working well. I find it extremely beneficial for [clarinet students] because there are significant differences between playing clarinet and bass clarinet. All too often I hear clarinet players trying to play the bass clarinet like they play the clarinet[;]...they never got formal instruction specific to the [bass clarinet]." He also said that, "It's good to just practice going back and forth [between the doubling instruments]. Pretend to play along with a recording (like Mahler 5)."³⁶⁷

³⁶³ Lowy, survey.

³⁶⁴ Howard, survey.

³⁶⁵ Kenward, survey.

³⁶⁶ Peters, survey.

³⁶⁷ Ranz, survey.

Gallegos has also taught E-flat and bass clarinet to students. For E-flat clarinet, he wrote, "I teach fundamentals mostly (scales/arpeggios) for embouchure discovery, intonation/ear training, and alternate fingering development." Bass clarinet teaching includes "…long tones chromatically through the low extension at Fortissimo volume, short bursts of sound with a metronome (chromatically), and fundamentals over all registers." He also wrote, "If performing this combination, practice the doubling. I don't mean practice the music, I mean practice the switching. Develop muscle memory to the point where the E-flat/Bass is one, if that is the goal."³⁶⁸

Foster also said something similar regarding his approach to the doubling: "One literally has to approach the concept not as 'I'm switching "clarinets".' It truly has to be 'I am switching INSTRUMENTS.' Switching from E[-flat clarinet] to [bass clarinet] should be approached the same way mentally that one might approach switching from [clarinet] to [banjo]."³⁶⁹

Sacdalan wrote the following pertaining to the benefits of students learning E-flat

and bass clarinet:

I hold off on teaching clarinet doubling until a student has achieved a good technical foundation on the [B]-flat clarinet. I have occasionally taught [E]-flat clarinet to very young students who cannot play the [B]-flat clarinet because of their hand size. As soon as students become proficient on the [B]-flat clarinet, I find that teaching clarinet doubling on both the [E]-flat and bass clarinet can have a positive influence on their [B]-flat clarinet playing. Students who double on [E]-flat clarinet tend to have better finger dexterity and an improved clarity to their upper register voicing on the [B]-flat clarinet. Those who play [E]-flat clarinet in wind bands are usually rewarded with exciting parts that are independent from the rest of the [B]-flat clarinet section. Often, they double agile flute and oboe lines in more challenging key signatures—which is why I believe that [E]-flat clarinet is good for finger dexterity. Likewise, teaching students bass clarinet could have a

³⁶⁸ Gallegos, survey.

³⁶⁹ Foster, survey.

profound influence on their breathing, tone production, embouchure, and voicing flexibility.³⁷⁰

He had specific examples of how he teaches the bass clarinet:

I do teach students to play bass clarinet, although there are few opportunities due to its high entry price for a satisfactory starter model. I like to start students on necks that are similar in angle to the [B]-flat clarinet, though some clarinetists are divided in preference between the steeper Buffet neck angles and the lower vintage Selmer.

The first thing I establish is a good embouchure, which is a variation of the [B]-flat clarinet embouchure, the difference being a slightly relaxed bottom lip and less pressure on the reed. With the mouthpiece being larger, it is important for the student to find the correct contact point on the facing which is further down in comparison to the [B]-flat clarinet. Next, I like to get a reading of the fundamental pitch on just the mouthpiece and reed setup alone. I feel that this is a good indicator of whether the student will place too much pressure on the reed, or if the student's voicing is incorrect. The embouchure and voicing both need to accommodate the rich harmonics of the lower register of the bass clarinet. Depending on the mouthpiece, this can be somewhere around concert pitch b-flat.

If a student struggles with embouchure flexibility, I like to do a chromatic interval exercise on just the mouthpiece and reed to strengthen the upper lip, which I feel is a good counterbalance in freeing up a potentially pinching jaw. Next, we move on to slow scales on the instrument, then voicing exercises paying very close attention to the more resistant clarion G, A, and B. It is important to remind a student to not drop the tongue arch in this area and use good breath support. My tongue position is higher in the clarion register, and lower in the chalumeau to accommodate the lower harmonics. A student should be able to move a larger volume of air through the instrument—which is why I believe that bass clarinet playing is beneficial for tone production on the [B]-flat clarinet.

As bass clarinet music can be notated both in treble clef and bass clef, I like to accompany any treble clef etudes...with selections from Bach's Cello Suites in its original notation in bass clef. Lastly, I like to teach alternate fingerings as soon as a student is comfortable playing in the altissimo register.³⁷¹

Many participants noted the difficulties faced by students trying to learn E-flat and bass

clarinet. Oliveto said that she does not teach E-flat or bass clarinet unless the student has a desire

to do so because of the financial barrier the instrument can pose.³⁷² Freiman stated, "I wish that I

³⁷⁰ Sacdalan, survey.

³⁷¹ Ibid.

³⁷² Oliveto, survey.

had been encouraged to learn the auxiliaries sooner, instead of discouraged from trying them in the first place. I know a lot of people who have been interested in learning either/both and it has not been possible due to institutions not having enough/any working auxiliaries, or personal financial situations preventing people from owning their own."³⁷³ Zanacchi wrote that he teaches bass clarinet only when someone asks. He wrote, "Generally the pupil has…B[-flat] clarinet previous experience, so I teach...the differences in blowing, articulation, voicing, fingerings and so on." These points again raise the issue of accessibility for students pursuing a career in clarinet performance; learning the E-flat and bass clarinet needs to be a part of the standard training of 21st century clarinetists in order to broaden their skills and create more opportunities for them.

Overall, the surveys and interviews demonstrate that clarinetists who double on both Eflat and bass clarinet have more opportunities for employment in orchestras, chamber ensembles, new music scenes, musicals, concert and stage bands, and film/tv studio work. In fact, many musicals and studio session cues require clarinetists who double E-flat and bass clarinet. However, it is also clear that many orchestral and chamber music opportunities have arisen for those who can perform on both instruments, even if they do not necessarily require the instruments at the same time. The composers interviewed make it clear that E-flat and bass clarinet doubling is incorporated into scores without qualms regarding the ability to find a clarinetist to perform the parts.

Training on these clarinets is essential to prepare students for these opportunities in their own careers. The examples of what is currently being taught are already greatly benefitting students. In the future, training must include all of the contemporary techniques identified in

³⁷³ Freiman, survey.

Chapter Four. References for training can include the research of those mentioned in the introduction, including Tinberg, Iles, and Ebert, and can also be developed at a later date using pieces that require E-flat and bass clarinet doubling.

Conclusion

The impetus for including E-flat and bass clarinet pedagogy in institutions of learning is demonstrated by this research of fourteen pieces that require E-flat and bass clarinet doubling. The clarinetist of the 21st century is expected to perform at a virtuosic level on both E-flat and bass clarinet in these pieces, which require training to perform well. The E-flat and bass clarinets have come into their own since the 1960s, becoming more soloistic in chamber and orchestral music and being expected to perform more contemporary techniques. They have timbres and ranges composers can use to many effects in the 21st century, and as such they seem to be less auxiliary and more individual and soloistic instruments. Clarinetists must be trained to perform them as such.

Composers have made their expectations for clarinets clear, both in the form of statements as presented by the surveys and interviews, but also in the fact that they could have composed the parts differently. It was shown in Mahler and Enescu's scores that one of the doubling instruments could have been placed in a different part. Composers placing E-flat and bass clarinet in one part today continue in the expectation of virtuosity on both instruments. This point is especially clear when one considers that composers never want their piece to be performed only once; they thus must assume that clarinetists in numerous orchestras and ensembles are able to perform this doubling at a virtuosic level.

Some composers are influenced by a specific performer, as in the case of Ran. This influence could certainly become more prevalent. As a composer writes for a specific clarinetist and the piece is performed by multiple orchestras and ensembles, these performances create a larger pool of clarinetists who double on E-flat and bass clarinet. The cycle would repeat again

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as a composer writes a doubling part for one of these new doubling clarinetists. The doubling would become more common as composers continue to explore sounds, colors, and range.

It should be noted that some pieces in this study were composed for or performed by university students, such as Bolcom's symphony, Fox's chamber piece, and Moss's duet. These pieces further the expectation for young clarinetists to gain the skill of E-flat and bass clarinet doubling. Furthermore, many pieces are being frequently performed by top ensembles, such as Carter's and Chin's chamber pieces. These performances assist in the expectation for virtuosic doubling clarinetists.

It is worth mentioning that there are more genres that utilize this doubling, such as film music and musicals. Film compositions are a huge aspect of this doubling that was mentioned briefly during discussion of Williams' suite. Many of the clarinetists freelancing in Los Angeles are studio musicians required to perform with virtuosity on all clarinets. Furthermore, many of the clarinetists who responded to the survey listed several musicals requiring the doubling. Musicals are another important aspect of this doubling, but the genre of pit orchestras fell slightly outside the scope of this research. Both genres would be worth pursuing in future research.

Specific skills include control of response and articulation in all registers of the instruments, intervallic control and response, the ability to adjust for intonation, mastery of extreme ranges (on the high end especially on bass clarinet), flutter-tonguing, glissandi, and vibrato, as well as other contemporary techniques such as slap-tonguing, multiphonics, and microtones. A knowledge of transposition is also useful when one encounters parts for bass clarinet in A or clarinet in D. Additionally, one must understand the three types of bass clarinet

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notation. Finally, the ability to switch clarinets with confidence and absolute precision in entrances is a skill that requires patient training and practice.

Institutions of learning must provide clarinetists training in these skills on E-flat and bass clarinet to ensure that each clarinetist meets the expectations of performance careers in the 21st century.

Appendix A: Catalogue

The alphabetically organized catalogues are included here. There is a separate section at the end of the orchestral catalogue that includes scores which do not seem to require doubling. Scores not requiring the doubling are highlighted in light green, and scores which list "[incl. Eb, bcl]" are highlighted in light grey to demonstrate that I was not able to discover if there is E-flat or bass clarinet doubling. The highlighted pieces were not included in the calculations of Figure 1-1. However, they are listed here in the catalogue for future research purposes.

Other genres of music that require this doubling frequently are musicals and film scores. A good source for musicals is the catalogue by Bret Pimental.³⁷⁴ More research would be needed to determine the number of film scores that require E-flat and bass clarinet doubling.

³⁷⁴ "All Shows," Woodwind Doubling in Musicals, Bret Pimental, accessed April 19, 2022, https://shows.bretpimentel.com/.

				Chamber Music Requiring Doubling or	Tripling with Eb and I	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Gardiner	Adams, John Luther	Jan. 23, 1953-	USA	Five Pieces from Coyote Builds North America	1990	Eb/bcl	Eb/bcl, 2 perc, perc/violin, perc/doublebass, storyteller, 2 dancers	21'	Fairbanks, AK: Taiga Press
Daniel's	Adès, Thomas	March 1, 1971-	England	Living Toys, Op. 9	1993	1/Eb/bcl	1/Eb/bass	18'	Faber
Daniel's	Albert, Stephen	Feb. 6, 1941-Dec. 27, 1992	USA	TreeStone	1993	1/Eb/bcl	1/Eb/bcl	38'	Schirmer
Gardiner	Ayers, Lydia	Aug. 22, 1952-	USA	Photo	1986	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute/bass flute, sopranino/soprano/alto/tenor sax	5'-10'	New York: American Music Center
Gardiner	Barrett, Richard	Nov. 7, 1959-	Wales	Essay in Radiance	1981-1983	Eb/bcl	Eb/bcl, pic/bass flute, soprano/tenor sax, 1-2 perc, electric organ or synthesizer, violin/viola, cello	12'30"	London: United Music Publishers, Ltd
Dromey	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Monodrama	1967	Bb/Ab/Eb/bcl	soprano/finger cymbals, speaker, fl/alto fl/pic, Bb/Ab/Eb/bcl, 2 perc, violin, cello		since withdrawn
Gardiner	Blaustein, Susan	March 22, 1953-	USA	Commedia	1980	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, perc, violin, viola, cello, doublebass	14'	Verona, NJ: Subito Music Corp.
Gardiner	Blaustein, Susan	March 22, 1953-	USA	To Byzantium	1987	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, pic trumpet/Bb trumpet, perc, violin, cello, doublebass, soprano		Verona, NJ: Subito Music Corp.
	Boehler, Matt		USA	Marginalia	2018	Eb/bcl	soprano, mezzo soprano, tenor, Eb/bcl, cello, percussion	43'30"	
Gardiner	Brant, Henry	Sept. 15, 1913-April 26, 2008	Canada/USA	Invisible Rivers	1987	Eb/bcl	Eb/bcl, perc, piano, violin, viola, cello, doublebass, solo colloratura soprano	22'	Carl Fischer
Paprocki	Brown, Christopher	1953-	USA	Brown the Bear	1995	cl/Eb/bcl/perc	cl/Eb/bcl/perc, bassoon/contrabassoon, horn, 2 violin, viola, cello/perc		BMIC
Daniel's	Canat de Chizy, Édith	March 26, 1950-	France	Vagues se Brisant Contre le Vent	2006	1/Eb/bcl	1[1/Eb/bcl]	17'	Lemoine
Daniel's	Carter, Elliott	Dec. 11, 1908-Nov. 5, 2012	USA	A Mirror on Which to Dwell	1975	1/Eb/bcl	1[1/Eb/bcl]	16'	AMP
Gardiner	Carter, Elliott	Dec. 11, 1908-Nov. 5, 2012	USA	Triple Duo	1982	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, perc, piano, violin, cello	19'	Boosey & Hawkes
Paprocki	Cashian, Philip	1963-	UK	Shaking the Sky	1993	cl/Eb/bcl	cl/Eb/bcl, flute/alto flute/pic, horn, perc, piano, 2 violins, viola, cello, double bass	15'	BMIC
Daniel's	Chin, Unsuk	July 14, 1961-	South Korea	Gougalon (Scenes from a Street Theatre)	2009, rev. 2011	1/Eb/bcl	1[1/Eb/bcl]	24'	Boosey
Paprocki	Cronin, Stephen	1960-	Australia	Blow	1994	cl/Eb/bcl	cl/Eb/bcl, cl/bcl, 2 horns in F, 2 bassoons	18'	Australian Music Centre
Gardiner	Eberhard, Dennis J.	1943-May 25, 2005	USA	Visions of the Moon	1978	Eb/Bb/bcl	Eb/Bb/bcl, oboe/English horn, piano/celesta, violin/viola, soprano	16'	
Paprocki	Elias, Brian	Aug. 30, 1948-	UK, lived in India	Geranos	1985	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, piano, perc, violin/viola, cello	21'	Chester
Gardiner	Erickson, Robert	March 7, 1917-April 24, 1997	USA	The Idea of Order at Key West	1985	Eb/bcl	Eb/bcl, flute, trumpet, viola, cello, soprano	11'	Smith Publications
Paprocki	Ferneyhough, Brian	Jan. 16, 1943-	UK	Incipits	1996	Eb/bcl	Eb/bcl, viola, perc, pic/bass flute, 2 violin, cello, double bass	11'	Peters
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Shir	1983	Acl/Eb/bcl	fl/alto fl/pic, ob/eng hn, Acl/Eb/bcl, bssn, hn, tpt, tenor/bass tbn, percussion, pno, 2 vlns, vla, cello, dbl bass	20'	Composer's Edition
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Quasi Una Cadenza	1983	Acl/Eb/bcl	Acl/Eb/bcl, horn in F, piano	12'	Composer's Edition
Paprocki	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Hungarian' Rhapsody	1989	cl/Eb/bcl	cl/Eb/bcl, flute/alto flute, trumpet, piano	20'	BMIC
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Letters and Notes	1990	Eb/Acl/bcl	Soprano, Eb/Acl/bcl, vla, cello	20'	
Paprocki	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Meditation on "Sibyls"	1991	cl/Eb/bcl	cl/Eb/bcl, alto, bassoon, horn, violin, viola, cello	18'	BMIC
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Tuned Spheres	1995	cl/Eb/bcl	cl/Eb/bcl, trumpet, piano	10'	вміс
Erika Fox's Website	Fox, Erika	Oct. 3, 1936-	Vienna/emigrated England 1939	Café Warsaw 1944	2005	Acl/Eb/bcl	Acl/Eb/bcl, flute(s), violin, cello, piano, percussion (1 player)	15'	Composer's Edition
Paprocki	Gosnall, Robin		UK	Wind Quintet	1984	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, bassoon, horn	10'	BMIC
Paprocki	Gribbin, Deirdre	May 14, 1967-	Belfast	Seven Visions of a Dream	1995	cl/Eb/bcl	cl/Eb/bcl, horn, 2 violin, viola, cello, double bass/finger, harp/tibetan bowl, harp		СМСІ
Paprocki	Gyger, Elliott	1968-	Australia	La Mer Aux Miroirs Creves	1996	bcl/Eb	bcl/Eb, pic/flute/oboe/oboe d'amore, piano, harp, perc, violin, viola, cello	23'	Australian Music Centre

Figure A-1: Catalogue of Chamber Music Doubling Organized Alphabetically

				Chamber Music Requiring Doubling of	r Tripling with Eb and B	lass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Paprocki	Hair, Graham	1943-	Australia	Concerto for Clarinettist & Double Ensemble	1986	cl/cbcl/bcl/Eb	cl/cbcl/bcl/Eb, flute, violin, viola, cello, kybrds, perc		Australian Music Centre
Gardiner	Hammer, Vincent Michael		USA	Ripples of Dissipation	1995	Eb/bcl	Eb/bcl, pic/bass flute, perc, piano,violin, cello		Thesis, State University of New York at Buffalo
Gardiner	Harris, Matthew	Feb. 18, 1956-	USA	As You Choose	1985	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute, piano, violin, cello, soprano	31'	American Composers Alliance
Paprocki	Hayden, Sam	Dec. 9, 1968-	ик	Partners in Psychopathology	1998	bcl/Eb	bcl/Eb, alto flute/pic, perc, vibraphone, mar, piano, viola, violin	5'	BMIC
Gardiner	Heinrichs, William		USA	Trio for Seven Instruments	1998	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, piano		National Flute Assoc. Convention in Phoenix
Gardiner	Hekster, Walter	March 29, 1937-Dec. 31, 2012	Amsterdam, Netherlands	A Song of Peace	1979	Eb/Bb/bcl	Eb/Bb/bcl, alto sax, perc., cello, voice		Donemus
Paprocki	Hill, Fred	1948-	England	Hungarian Shuffle: Being an Extemporization on the 1st Rumanian Christmas Carol (Colinde)/ Collected by Bela Bartok	1977	cl/Eb/bcl	cl/Eb/bcl, flute, pic, oboe, horn, bassoon		Australian Music Centre
Paprocki	Holloway, Robin	Oct. 19, 1943-	UK	The Rivers of Hell	1977	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, perc, piano, viola, cello		Boosey & Hawkes
Paprocki	Holt, Simon	Feb, 21, 1958-	UK	Sparrow Night	1989	cl/Eb/bcl	cl/Eb/bcl, oboe, flute/pic, horn, harp, piano, violin, viola, cello, double bass	17'	Universal/Kalmus
Paprocki	Hopkins, John E.	1949-	England	For the Far Journey	1981	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, harpsicord, violin, cello		Schirmer
Paprocki	Imbrie, Andrew	April 6, 1921-Dec. 5, 2007	USA	Pilgimage	1988	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, violin, cello, perc, piano	23'	C.F. Peters
Paprocki	Impett, Jonathan		UK	Cassation	c. 1988	Eb/bcl	Eb/bcl, trumpet, perc, piano, electronics		BMIC
Gardiner	Ince, Kamran	May 6, 1960-	American composer of Turkish descent	Night Passage	1992	Eb/bcl	Eb/bcl, flute, trumpet, Roland R-70 Drum Machine, Korg T3 Synthesizer, electric bass, amplified violin, amplified cello	19'	European American Music Corp
	Keeling, Andrew	1955-	UK	Distant Skies, Mountains and Shadows	1992	Eb/bcl	Eb/bcl, flute, alto flute, bass flute, piano		BMIC
Paprocki	Kosvinar, David	1957-	South Africa	Trio	1992	cl/bcl/Eb	cl/bcl/Eb, flute, alto flute, bass flute, piano		BMIC
Gardiner	Lee, Hope	Jan. 1, 1953-	Taiwan/Canada	M-nabri	1983	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, marimba, harp, mandolin, guitar, violin, double bass	12'	Toronto: Canadian Music Centre
Survey	Lefkowitz, David S.	1964-	USA	Abstracts 2	2019	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto fl, vln, cello, pno, optional percussion	29'	Floating Point Music
Paprocki	Lloyd, Jonathan	Sept. 30, 1948-	UK	Waiting for Gozo	1981	cl/bcl/Eb	cl/bcl/Eb, alto flute/pic, oboe/English horn, bassoon/contra bassoon, horn, trumpet, trombone, 2 violin, viola, cello, double bass		Boosey & Hawkes
Daniel's	Mahler, Gustav; Schoenberg/Riehn reduction	July 7, 1860-May 18, 1911	Germany	Dan Liede von der Erde	1908-1909, orchestration begun 1921, completed 1983	1/Eb/bcl	1[1/Eb/bcl]	63'	Universal
Paprocki	Mason, Benedict	1954-	UK	Sonata Da Camera	1987	Eb/bcl	Eb/bcl, soprano sax/alto sax/perc, mar, violin cello, soprano		Chester
LA Phil	Matheson, James	1970	USA	Songs Of Desire, Love, And Loss	2004	1/Eb/bcl	1/Eb/bcl		
Paprocki	Matthews, Colin	Feb. 13, 1946-	England	Cantata on the Death of Antony	1989	Eb/bcl	Eb/bcl, viola, cello, double bass, soprano	4'	Faber
Paprocki	Matthews, Colin	Feb. 13, 1946-	England	Five Concertinos	1990	Eb/bcl	Eb/bcl, alto flute/pic, oboe, bassoon, horn	11'	Faber
Daniel's	Matthews, Colin	Feb 13, 1946-	England	Through the Glass	1994	bcl/opt Eb	2[1.bcl/opt Eb]	16'	Faber
Dromey	Maw, Nicholas	Nov. 5, 1935-May 19, 2009	Grantham England	Ghost Dances: Imaginary Ballet for 5 Players	1988	cl/Eb/bcl/kazoo/manjeera	cl/Eb/bcl/kazoo, flute/alto flute/pic, piano/kalimba, violin/strum-stick, cello	27'	Faber
Gardiner	Moravec, Paul	Nov. 2, 1957-	USA	The Kingdom Within	1987	Eb/Bb/bcl	Eb/Bb/bcl, piano, violin, cello	18'	American Music Center
	Morgan, David Robert	1933-1988	England	Voyage into Solitude, Opus 72	1983	Bb/A/Eb/bcl/cbcl/basset horn	Bb/A/Eb/bcl/cbcl/basset horn, vib/tam-tams/brass chimes/glock/suspended cymbals/bass drum/gong/mar/syl,/toms/triangle/hi-hat/tubular bell/finger cymbals/tubophone		Australian music centre
	Moss, Lawrence	Nov. 18, 1927-	USA	Windows	1966	bcl/Eb	bcl/Eb, flute/piccolo, double bass		Seesaw
Dr. Esther Lamneck	Moss, Lawrence	Nov. 18, 1927-	USA	Shadowplay for 2 Clarinets	2013	Bb/Eb/bcl	2[1.2/Eb/bcl]		unpublished
Dromey	Newland, Paul	1966-	ик	some like horrorshow music for a malenky bit of the old U.V. (Lament for the death of Linus)	1993	Bb/Eb/bcl	fl/alto fl/pic, Bb/Eb/bcl, piano, perc, violin, cello		
Paprocki	Nicholson, George	1949-	Durham England	Movements	1983	cl/Eb/bcl	cl/Eb/bcl, bassoon, horn, 2 violins, viola		BMIC
Paprocki	Nordheim, Arne	1931-	Oslo Fjord	Tre Voci	1988	Eb/bcl	Eb/bcl, flute/pic, violin, cello, perc, piano, solo voices	16'	BBD20CM

				Chamber Music Requiring Doubling or	Tripling with Eb and E	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Paprocki	Osborne, Nigel	June 23, 1948-	England	The Cage	1981	cl/Eb/bcl	cl/Eb/bcl, ten, alto flute, oboe/oda, bassoon, horn, trumpet, violin, viola, cello		Universal/Kalmus
Daniel's	Osborne, Nigel	June 23, 1948-	England	Rock Music	2009	1/Eb/bcl	1[1/Eb/bcl]	20'	UYMP
Gardiner	Packer, Randall	Jan. 23, 1953-	USA	Rose window	1986	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, 2 perc, piano, violin, cello		American Music Center
Discovered:	Pann, Carter	Feb. 21, 1972-	USA	Antares	2003-4	Bb/bcl/Eb	Bb/bcl/Eb, violin, cello, pno	20'	Presser
Gardiner	Perle, George	May 6, 1915-Jan. 23, 2009	USA	Sonata a Cinque	1989	Eb/A/bcl	Eb/A/bcl, bass trombone, piano, violin, cello	15'	Hillsdale, NY: Boelke-Bomart
Daniel's	Poulenc, Francis, orchd. by David Matthews	Jan. 7, 1899-Jan. 30, 1963	France	L'histoire de Babar, le petit (the Little Elephant)	1940-1945, arr. 1988	1/Eb/bcl	1/Eb/bcl	22'	Chester
	Pritchard, Gwyn	1948-	England	Janus	1991	alto cl/bcl/Eb	alto cl/bcl/Eb, fl/afl/pic	13'	Camerata Editions
Paprocki	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti Lunatici	1981	cl/Eb/bcl	cl/Eb/bcl, sop. Flute/alto flute/pic, 2 perc, piano, violin, viola, cello	30'	Helicon/Kalmus
Daniel's	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti del Sole (small ensemble version)	1983-1984	1/Eb/bcl	1[1/Eb/bcl]	28'	Helicon
Paprocki	Rands, Bernard	March 2, 1934-	American composer of English birth	Canti Del Sole	1983	cl/Eb/bcl	cl/Eb/bcl, ten, flute/pic/alto flute, trumpet, trombone, piano, 2 perc, violin, viola, cello, double bass	29'	Universal/Kalmus
Gardiner	Retzel, Frank	1948-Dec. 19, 2018	USA	Amber glass: four songs of Thomas Merton	1980	Eb/bcl	Eb/bcl, alto flute, piano, violin, mezzo-soprano	21'	Verona, NJ: Subito Music Corp.
Paprocki	Roe, Helen	1955-	UK	Ha		cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, violin, cello		BMIC
Gardiner	Rouse, Christopher	Feb. 15, 1949-Sept. 21, 2019	USA	Rotae Passionis	1982	Eb/Bb/bcl	Eb/Bb/bcl, flute/pic, perc, piano, violin, viola, cello	18'	European American Distributors
Paprocki	Saxton, Robert	Oct. 8, 1953-	UK	The Sentinel of the Rainbow	1984	cl/bcl/Eb	cl/bcl/Eb, flute/alto flute/pic, perc, piano/celesta, violin/viola, cello		Chester
Daniel's	Saxton, Robert	Oct. 8, 1953-	England	The Circles of Light: Chamber Symphony	1985-1986	1/Eb/bcl	1[1/Eb/bcl]	21'	Chester
Gardiner	Schwartz, Paul	1956-	USA	Trompe l'oeil	1977	Eb/bcl	Eb/bcl, pic/flute, perc, piano, violin, viola, cello	12'	American Music Center
Gardiner	Sellers, James	Oct. 8, 1940-Feb. 26, 2017	USA	Return of the Comet	1986	Eb/Bb/A/bcl	Eb/Bb/A/bcl, pic/flute, electric piano, 2 violins, viola, cello, doublebass	24'30"	New York: American Music Center
Gardiner	Shapey, Ralph	March 12, 1921-June 13, 2002	USA	Concerto Grosso for Woodwind Quintet	1987	Eb/Bb/bcl	Eb/Bb/bcl, pic/flute/alto flute, oboe/English horn, bassoon/contrabassoon, horn	12'	Bryn Mawr, PA: Theodore Presser
Gardiner	Smalley, Roger	July 26, 1943-Aug. 18, 2015	Australia/Anglo-Australian composer	The narrow road to the deep north: a journey for baritone and six instrumentalists	1983	Eb/A/bcl	Eb/A/bcl, baritone voice, pic/flute/alto flute, perc, paino, violin, cello	40'	Australian Music Centre
Paprocki	Swayne, Giles	June 30, 1946-	Hertfordshire	Harmonies of Hell	1988	cl/bcl/Eb	cl/bcl/Eb, flute/alto flute/pic, oboe, bassoon, horn, 2 perc, 2 violin, viola, cello, double bass		Novello
Dromey and BMIC	Toovey, Andrew	Feb. 21, 1962-	ик	Music for the Painter Jack Smith: Versioni II	2001	Bb/Eb/bcl	fl/pic/alto fl/bass fl, Bb/Eb/bcl, piano/harpsichord, perc, violin, cello, doublebass	2002	BMIC
Dromey	Vali, Reza	1952-	UK	Folk Songs (Set No. 15)	1995	Eb/bcl/cl	fl/alto fl/pic, Eb/cl/bcl, perc, violin, cello	20'	Hal Leonard
Paprocki	Vaughan, Mike		UK	Fracture Zones	1989	cl/bcl/Eb	cl/bcl/Eb, flute/pic, oboe/English horn, horn, piano, perc, violin, viola, cello, double bass		BMIC
Gardiner	Westlake, Nigel	Sept. 6, 1958-	Australia	Entomology	1990	Eb/bcl	Eb/bcl, pic/flute/alto flute, perc, piano, violin, cello, tape	15'	Australian Music Centre
	Wilson, Ian	1964-	Ireland	In Extremis	1993	Eb/bcl	Eb/bcl, perc/tmp OR Eb/bcl, tape		CMCI
Paprocki	Woolrich, John	1954-	Cirencester UK	From the Shadows	1994	cl/Eb/bcl	cl/Eb/bcl, flute/pic/alto flute, soprano sax, horn, trumpet, perc, piano, violin, viola, cello, double bass	7'	Faber
Paprocki	Woolrich, John	1954-	Cirencester UK	Caprichos	1997	Eb/bcl	Eb/bcl, pic/alto flute, soprano sax, horn, trumpet, trombone, perc, piano, violin, viola, cello, double bass	7'	Faber

Figure A-2:	Catalogue of	Orchestral Music	Doubling	Organized	Alphabetically

				Orchestral Music Requiring Doubling o	r Tripling with Eb and	Bass Clarinets	·		
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Abrahamsen, Hans	Dec. 23, 1952-	Denmark	Let Me Tell You	2012-2013	Eb/bcl	3[1.2.bcl/Eb]	33'	Hansen
LA Phil	Adès, Thomas	March 1, 1971-	England	Dante	2019-2020	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl/cbcl]	82'	Faber
Daniel's	Alfvén, Hugo	May 1, 1972-May 8, 1960	Sweden	The Prodigal Son (Den Förlorade Sonen): Ballet Suite	1957	Eb/bcl	3[1.2.Eb/bcl]	19'	Suecia
Daniel's	Argento, Dominick	Oct. 27, 1927-Feb. 20, 2019	USA	A Ring of Time (Preludes and Pageants for Orchestra and Bells)	1977	Eb/bcl	4[1.2.Eb.Eb/bcl]	28'	Boosey
Daniel's	Balada, Leonardo	Sept. 22, 1933	Spain/Spanish-American composer	Zapata (Images for Orchestra)	1987	2/Eb/bcl	2[1.2/Eb/bcl]	19'	Subito
Daniel's	Bartók, Béla	March 25, 1881-Sept. 26, 1945	Hungary	Two Portraits, Op. 5 BB 48b (Két portré; Deux portraits)	1907-1911	2/bcl/Eb2	2[1/Eb1.2/bcl/Eb2]	12'	Boosey, EMB, Kalmus, Luck's
Daniel's	Bartók, Béla	March 25, 1881-Sept. 26, 1945	Hungary	Four Orchestral Pieces, Op. 12 BB 64	1912, rev. (orchd.) 1921	3/Eb/bcl.4/Eb/bcl	4[1.2.3/Eb1/bcl1.4.Eb2/bcl2]	22'	Boosey
Daniel's	Bates, Mason	Jan. 23, 1977-	USA	Liquid Interface	2007	3/Eb/bcl	3[1.2.3/Eb/bcl]	23'	Aphra
Daniel's	Bates, Mason	Jan. 23, 1977-	USA	Anthology of Fantasic Zoology	2015	2/Eb/bcl	3[1.2/Eb/bcl.3]	30'	Aphra
Daniel's	Bennett, Richard Rodney	March 29, 1936-Dec. 24, 2012	England	Sonnets to Orpheus	1978-1979	2/Eb/bcl	2[1.2/Eb/bcl]	30'	Novello
Daniel's	Bennett, Richard Rodney	March 29, 1936-Dec. 24, 2012	England	Concerto, Harpsichord	1980	2/Eb/bcl	2[1.2/Eb/bcl]	22'	Novello
Daniel's	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	Symphony No. 1 (Jeremiah)	1943	Eb/bcl	3[1.2.Eb/bcl]	25'	Boosey
Daniel's	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story: Overture	1957	2/Eb/bcl	2[1.2/Eb/bcl]	5'	Boosey, Luck's
LA Phil	Bernstein, Leonard	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story (Complete - With Film): Overture	1961	Eb/bcl	2[1.2/Eb/bcl]	4'	booky, racks
LA Phil	Bernstein, Leonard (M. Peress)	Aug. 25, 1918-Oct. 14, 1990	USA	West Side Story: Overture (Peress)	1965	2/Eb/bcl	2[1.2/Eb/bcl]	4'	Boosey
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Earth Dances	1985-1986	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]	38'	Universal
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Concerto, Violin	2009-2010	2/Eb/bcl, bcl/cbcl	3[1.2/Eb/bcl.bcl/cbcl]	31'	Boosey
Daniel's	Birtwistle, Harrison	July 15, 1934-April 18, 2022	UK	Deep Time	2017	2/Eb/bcl, bcl/cbcl	4[1.2/Eb/bcl.bcl/cbcl.bcl/cbcl]	20'	Boosey
Survey	Boehler, Matt	July 15, 1554 / pin 16, 2022	USA	Marginalia	2018	cl/Eb/bcl	cl/Eb/bcl, soprano, mezzo soprano, tenor, cello, percussion	43'30"	boosey
Daniel's	Bolcom, William	May 26, 1938-	USA	Symphony No. 3	1979	cl/Eb/bcl	1[cl/Eb/bcl]	32'	Marks
Daniel's	Bolcom, William	May 26, 1938-	USA	Symphony No. 9	2011	Eb/bcl	3[1.2.Eb/bcl]	18'	Marks
Daniel's	Börtz, Daniel	Aug. 8, 1943-	Sweden	Symphony No. 5	1980-1981	3/Eb/bcl, 4/Eb/bcl	4[1.2.3/Eb/bcl.4/Eb/bcl]	24'	Gehrmans
Daniel's	Britten, Benjamin	Nov. 22, 1913-Dec. 4, 1976	England	Our Hunting Fathers, Op. 8	1936 (rev. 1961)	Eb/bcl	2[1.Eb/bcl]	24	Boosev
Daniel's		Nov. 22, 1913-Dec. 4, 1976 Nov. 22, 1913-Dec. 4, 1976	v.	· · · ·	1961	3/Eb/bcl	4[1.2.3/Eb/bcl.chmb1]	78'	Boosey
Daniel's	Britten, Benjamin Carter, Elliott	Dec. 11, 1908-Nov. 5, 2012	England USA	War Requiem, Op. 66 (complete ensemble) Concerto, Violin	1981	2/Eb/bcl	3[1.2/Eb/bcl.bcl]	26'	
LA Phil					2018			12'30"	Boosey
	Cerrone, Christopher	March 5, 1984-	USA	Insects Became Magnetic, The		3/Eb/bcl	3[1.2.3/Eb/bcl]		Outburst-Inburst Musics
LA Phil	Chin, Unsuk	July 14, 1961-	South Korea	Alice in Wonderland	2004-2007	2/Eb/bcl	2[1.2/Eb/bcl]	120'	Boosey
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	Pied Piper Fantasy	1979-1981	3/Eb/bcl	3[1.2.3/Eb/bcl]	38'	Schirmer
Daniel's Daniel's	Corigliano, John Corigliano, John	Feb. 16, 1938- Feb. 16, 1938-	USA	Three Hallucinations Mr. Tambourine Man; Seven Poems of Bob Dylan	1981 2000, rev. (orchd.) 2003	3/Eb/bcl 3/Eb/bcl	3[1.2.3/Eb/bcl] 3[1.2.3/Eb/bcl]	13' 36'	Schirmer
Daniel's	Corigliano, John	Feb. 16, 1938-	USA	One Sweet Morning	2011	3/Eb/bcl	3[1.2.3/Eb/bcl]	27'	Schirmer
Survey	Dean, Brett	1961-	Australia	Pastoral Symphony	2000	Eb/bcl	2[Eb/bcl.bcl]	17'	Boosey
Daniel's	Dorman, Avner	April 14, 1975-	Israel	Frozen in Time (Reduced Version)	2000 2007, rev. 2013	2/Eb/bcl	2[1.2/Eb/bcl]	25'	Schirmer
LA Phil	Dun, Tan	Aug. 18, 1957-	China, USA	Paper Concerto For Paper Instruments And Orchestra	2003, 2005	Eb/bcl	2[1.2/E0/bCl]	18'	Schirmer
Daniel's	Eben. Petr	Jan. 22, 1929-Oct. 24, 2007	Czech Republic	Concerto, Piano	1960-1961	3/Eb/bcl	3[1.2.3/Eb/bcl]	26'	Schott
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Symphony No. 1, Op. 13, E-flat major	1905	Eb/bcl	3[1.2.Eb/bcl]	36'	Boosey/Enoch/Kalmus
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Symphony No. 2, Op. 17, A major	1912-1914	3/Eb/bcl	3[1.2.3/Eb/bcl]	58'	Salabert
Daniel's	Enescu, Georges	Aug. 19, 1881-May 4, 1955	Romania	Suite No. 3, Op. 27, D major (Villageois; Săteasca)	1937-1938	bcl/Dcl	3[1.2.bcl/Dcl]	31'	Salabert
Sparling	Ferneyhough, Brian	Jan. 16, 1943-	UK	Transit	1972-1975	Eb/bcl	1[Eb/bcl]	45'	Peters
Daniel's	Ginastera, Alberto	April 11, 1916-June 25, 1983	Argentina	Glosses Sobre Temes de Pau Casals	1976-1977	3/Eb/bcl	3[1.2.3/Eb/bcl]	18'	Boosey
Daniel's	Glass, Philip	Jan. 31, 1937 -	USA	Concerto, Violin, No. 1	1987	bcl/Eb	3[1.2.bcl/Eb]	25'	Chester/Dunvagen
Daniel's	Glière, Reinhold	Jan. 11, 1875-June 23, 1956	Ukraine	The Red Poppy (Roter mohn): Suite	1927	3/Eb/bcl	3[1.2.3/Eb/bass]	27	Russian

	Orchestral Music Requiring Doubling or Tripling with Eb and Bass Clarinets												
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published				
Daniel's	Harvey, Jonathan	May 3, 1939-Dec. 4, 2012	UK	Timepieces, for Orchestra with 2 Conductors	1987	2/Eb/bcl	2[1/Eb.2/Eb/bcl]	19'	Faber				
Daniel's	Henze, Hans Werner	July 1, 1926-Oct. 27, 2012	Germany	Aria de la Folía Española	1977	1/Eb/bcl	1[1/Eb/bcl]	20'	Schott				
Daniel's	Henze, Hans Werner	July 1, 1926-Oct. 27, 2012	Germany	Barcarola	1979	2/Eb/bcl.3/Eb/cbcl	3[1/Eb.2/Eb/bcl.3/Eb/cbcl]	20'	Schott				
Daniel's	Ince, Kamran	May 6, 1960-	American composer of Turkish descent	Domes	1993	Eb/bcl	2[1.Eb/bcl]	12'	EAM				
Daniel's	Karkoff, Maurice	March, 17 1927-Jan. 20, 2013	Sweden	Sette Pezzi per Grand Orch Op. 63 (Seven Pieces for Large Orchesetra)	1962	Eb/bcl	3[1.2.Eb/bcl]	18'	Suecia				
Daniel's	Kernis, Aaron Jay	Jan. 15, 1960-	USA	Symphony in Waves	1989	1/Eb/bcl	1/Eb/bcl	38'	AMP				
Daniel's	Kilar, Wojciech	July 17, 1932-Dec. 29 2013	Poland	Exodus	1979-1981	4/Eb/bcl	4[1.2.3.4/Eb/bcl]	23'	PWM				
Daniel's	Killmayer, Wilhelm	Aug. 21, 1927-August 20, 2017	Germany	Im Freien	1980	2/Eb/bcl	2[1.2/Eb/bcl]	10'	Schott				
Daniel's	Krenek, Ernst	Aug. 23, 1900-Dec. 22, 1991	American composer of Austrian birth	Kleine Symphonie, Op. 58	1928	2/Eb/bcl	3[1/Eb.2/Eb/bcl.3]	15'	Universal				
Daniel's	Lazarof, Henri	April 12, 1932-Dec. 29, 2013	American composer of Bulgarian origin	Symphony No. 4 (In Celebration)	1996	3/Eb/bcl	3[1.2.3/Eb/bcl]	25'	Merion				
LA Phil	Levinson, Gerald	June 22, 1951-	USA	Symphony No. 2	1992-1994	bcl/Eb2	5[1.2.Eb.bcl/Eb2,cbcl/3]	40'	Presser				
Daniel's	Lopatnikoff, Nikolai	March 16, 1903-Oct. 7, 1976	American composer of Russian origin	Concerto for Orchestra	1964	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Peters				
Daniel's	Lutoslawski, Witold	Jan. 25, 1913-Feb. 9, 1994	Poland	Chantefleurs et Chantefables	1989-1990	1/Eb/bcl	1[cl/Eb/bcl]	22'	Chester				
Daniel's	MacMillan, James	July 16, 1959-	Scotland	Sinfonietta	1991	Eb/bcl	1[Eb/bcl]	19'	Boosey				
Daniel's	Mahler, Gustav	July 7, 1860-May 18, 1911	Germany	Symphony No. 1, D major (Titan)	1884-1888, 2nd rev. ca. 1906	3/bcl/Eb2	4[1.2.3/bcl/Eb2.4/Eb1]	53'	Breitkopf, Kalmus, Luck's, Universal				
Daniel's	Mahler, Gustav	July 7, 1860-May 18, 1911	Germany	Symphony No. 5, C-Sharp Minor	1901-1902, rev. repeatedly	3/D/bcl also C in mvt 2; bass clt in A end of first mvt	3[1.2.3/D/bcl]	68'	Kalmus, Peters				
Daniel's	Martin, Frank	Sept. 15, 1890-Nov. 21, 1974	Switzerland	Erasmi Monumentum (Monument to Erasmus)	1969	Eb/bcl	3[1.2.Eb/bcl]	24'	Universal				
Daniel's	Mason, Benedict	June 21, 1955-	England	Concerto, Viola Section	1990	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl	25'	Chester				
Daniel's	Maw, Nicholas	Nov. 5, 1935-May 19, 2009	England	Odyssey	1972-1987	3/Eb/bcl the Eb part is sometimes in the 2nd part and other times in the 3rd; only one Eb at a time is required	3[1.2/Eb.3/Eb/bcl]	95'	Faber				
Daniel's	Maxwell Davies, Peter	Sept. 8, 1934-March 14, 2016	England	Stone Litany; Runes from a House of the Dead, Op. 57	1973	bcl/Eb	2[1.bcl/Eb]	20'	Boosey				
Daniel's	Moravic, Paul	Nov. 2, 1957-	USA	The Overlook Hotel Stuite (Based on the composer's opera The Shining)	2016	1/Eb/bcl	1/Eb/bcl	14'	Subito				
Daniel's	Mussorgsky, Modest (Smerti)	March 21, 1839-March 28, 1881	Russia	Songs and Dances of Death (arr. Plyaski Smerti, "orchd. by Alexander Raskatov who composed the 3 interludes inserted between the songs")	1875-1877, rev. (arr.) 2007	1/Eb/bcl	2[1/Eb/bcl, 2/bcl/cbcl]	28'	Sikorski				
Daniel's	Nørgård, Per	July 13, 1932-	Denmark	Symphony No. 4	1981	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Hansen				
LA Phil	North, Alex (McGurty)	Dec. 4, 1910-Sept. 8, 1991	USA	Streetcar Named Desire, A: Suite For Orchestra (McGurty)	1951	3/Eb/bcl	3[1.2.3/Eb/bcl]						
Daniel's	Novák, Vítězslav	Dec. 5, 1870-July 18, 1949	Czech Republic	South Bohemian Suite, Op. 6	1936-1937	Eb/bcl	3[1.2.Eb/bcl]	31'	Breitkopf				
Daniel's	Novák, Vítězslav	Dec. 5, 1870-July 18, 1949	Czech Republic	Saint Wenceslas Triptych	1941, rev. orchd. 1942	Eb/bcl	3[1.2.Eb/bcl]	24'	Supraphon				
Daniel's	Nyman, Michael	March 23, 1944-	England	The Draughtsman's Contract: Suite	2001, rev. 2014	Eb/bcl	3[1.2.Eb/bcl]	16'	Chester				
Daniel's	Nyman, Michael	March 23, 1944-	England	Symphony No. 5	2013	Eb/bcl	3[1.2.Eb/bcl]	22'	Chester				
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Impromtu, Op. 13	1911	Eb/bcl	3[1.2/Eb.Eb/bcl]	20'	EAM				
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Suite, Op. 14 C minor	1911-1912	4/Eb/bcl	4[1.2.3/Eb.4/Eb/bcl]	29'	Bärenreiter				
Daniel's	Ostrčil, Otakar	Feb. 25, 1879-Aug. 20, 1935	Czech Republic	Variations, Op. 24 (Calvary; Via Crucis; Křížová cesta)	1927-1928	Eb/bcl	3[1.2.Eb/bcl]	31'	Supraphon				
Daniel's	Paterson, Robert	April 29, 1970-	USA	Electric Lines	2002-2003, rev. 2004	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]	9'	Holab				
Daniel's	Penderecki, Krzysztof	Nov. 23, 1933-March 29, 2020	Poland	Symphony No. 2 (Christmas Symphony; Wigilijna; Weihnachtssinfonie)	1979-1980	3/Eb/bcl	3[1.2.3/Eb/bcl]	35'	Schott				

				Orchestral Music Requiring Doubling o	r Tripling with Eb and	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Pfitzner, Hans	May 5, 1869-May 22, 1949	Germany	Von Deutscher Seele, Op. 28 (Of the German Soul)	1921	Eb/bcl	4[1.2.3/Eb.Eb/bcl]	96'	Leuckart
Daniel's	Previn, André	April 6, 1929-Feb. 28, 2019	American composer of German birth	Diversions	1999	2/Eb/bcl	2[1.2/Eb/bcl]	24'	Schirmer
Daniel's	Ran, Shulamit	Oct. 21, 1949-	American composer of Israeli birth	Legends	1992-1993, rev. 2001	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl]	20'	Presser
Daniel's	Rochberg, George	July 5, 1918-May 29, 2005	USA	Zodiac	1964-1965	Eb/bcl	3[1.2.Eb/bcl]	13'	Presser
Daniel's	Rodríguez, Robert Xavier	June 28, 1946-	USA	Scrooge	1994	2/Eb/bcl	2[1.2/Eb/bcl]	20'	Schirmer
Daniel's	Roter, Bruce Craig	June 2, 1962-	USA	Camp David Overture: Prayer for Peace	1988 rev. 1995	Eb/bcl	3[1.2.Eb/bcl]	12'	MMB
Daniel's	Rouse, Christopher	Feb. 15, 1949-Sept. 21, 2019	USA	Concerto for Orchestra	2008	3/bcl/Eb	3[1.2.3/bcl/Eb]	20'	Boosey
Daniel's	Salonen, Esa-Pekka	June 30, 1958-	Finland	Insomnia	2002	2/Eb/bcl	3[1.2/Eb/bcl2.bcl1]	20'	Chester
Daniel's	Salonen, Esa-Pekka	June 30, 1958-	Finland	Wing on Wing	2003-2004	Eb/bcl	4[1.2.Eb/bcl.cbcl]	26'	Chester
Daniel's	Schmidt, Franz	Dec. 22, 1874-Feb. 11, 1939	Austria	Das Buch mit Sieben Siegeln (The Book with Seven Seals)	1935-1937	Dcl/bcl	3[1.2.Dcl/bcl] instructions for doubling parts, not instruments, would require one more clarinet	110'	Universal
Daniel's	Schoenfeld, Paul (some sources write Schoenfield, but composer prefers the former)	Jan. 24, 1947-	USA	Four Parables	1982-1983	3/Eb/bcl	3[1.2.3/Eb/bcl]	28'	Schirmer
LA Phil	Schuller, Gunther	Nov. 22, 1925-June 21, 2015	USA	Concerto No. 2 For Orchestra	1976	4/Eb/bcl	5[1.2.3.4/Eb/bcl.bcl/cbcl]	22'	Wise Music Classical
Daniel's	Schuller, Gunther	Nov. 22, 1925-June 21, 2015	USA	Concerto, Tuba No. 2	2008	3/Eb/bcl	4[1.2.3/Eb/bcl.4/cbcl]	20'	AMP
Daniel's	Schurmann, Gerard	Jan. 19, 1924-March 24, 2020	British-Dutch composer, resident in the USA	Six Studies of Francis Bacon	1968	3/Eb/bcl	3[1.2.3/Eb/bcl]	31'	Novello
Daniel's	Schwertsik, Kurt	June 25, 1935-	Austria	Concerto, Violin No. 1, Op. 31	1977	Eb/bcl	2[1.Eb/bcl]	20'	Boosey
Daniel's	Sessions, Roger	Dec. 28, 1896-March 16, 1985	USA	Concertino for Chamber Orchestra	1971-1972	1/Eb/bcl	1[1/Eb/bcl]	17'	Marks
Daniel's	Shapey, Ralph	March 12, 1921-June 13, 2002	USA	Symphonie Concertante	1985	11 soloists:cl/Eb/bcl	11 soloists:cl/Eb/bcl	29'	Presser
Daniel's	Sheng, Bright	Dec. 6, 1955-	China/USA	Postcards	1997	cl/Eb/bcl	1[cl/Eb/bcl]	17'	Schirmer
LA Phil	Shostakovch, Dmitri	Sept. 12, 1906-Aug. 9, 1975	Russia	The Nose: Suite	1928	1/Eb/bcl	1/Eb/bcl		
Daniel's	Shostakovich, Dmitry	Sept. 12, 1906-Aug. 9, 1975	Russia	Symphony No. 13, Op. 113, B-flat major (Babi Yar)	1962	3/Eb/bcl	3[1.2.3/Eb/bcl]	59'	Russian, Sikorski
Daniel's	Siegmeister, Elie	Jan. 15, 1909-March 10, 1991	USA	Sunday in Brooklyn	1946	Eb/bcl	3[1.2.Eb/bcl]	16'	Fischer
Daniel's	Stravinsky, Igor	June 17, 1882-April 6, 1971	Russian composer, later of French (1934) and American (1945) nationality	Four Etudes for Orchestra (Quatre Études)	1928-1929	bcl/Eb* "Available scores are replete with error, to the point that it is difficult to be certain about what instruments are required."	3[1.2.bcl/Eb]	10'	Boosey
LA Phil	Stravinsky, Igor	June 17, 1882-April 6, 1971	Russian composer, later of French (1934) and American (1945) nationality	Four Etudes For Orchestra (1952 Revision)	1952	Eb/bcl	3[1.2.Eb/bcl]		
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Symphony No. 2 , Op. 19, B-flat major	1909-1910	3/Eb/bcl	3[1.2.3/Eb/bcl]	34'	PWM
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Love Songs of Hafiz, Op. 26	1911-1914	Eb/bcl	3[1.2.Eb/bcl]	23'	PWM
Daniel's	Szymanowski, Karol	Oct. 3, 1882-March 29, 1937	Poland	Harnasie, Op. 55	1923-1931	Eb/bcl	3[1.2.Eb/bcl]	38'	PWM
Daniel's	Takemitsu, Toru	Oct. 8, 1930-Feb. 20, 1996	Japan	Green (November Steps No. 2)	1967	3/Eb/bcl	3[1.2.3/Eb/bcl]	6'	Peters
Daniel's	Tertertian, Avet	July 29, 1929-Dec. 11, 1994	Armenia	Symphony No. 7	1987	Eb/bcl	3[1.2.Eb/bcl]	32'	Sikorski
Daniel's	Tippett, Michael	Jan. 2, 1905-Jan. 8, 1998	England	Byzantium	1989-1990	3[incl Eb, bcl]	3[incl Eb, bcl] Forsyths has 3[1.2.Eb/bcl]	25'	Schott
Daniel's	Toch, Ernst	Dec. 7, 1887-Oct. 1, 1964	Austrian composer, naturalized American citizen from 1940	Symphony No. 2, Op. 73	1953	3/Eb/bcl	3[1.2.3/Eb/bcl]	33'	AMP, Fleisher
Daniel's	Turnage, Mark-Anthony	June 10, 1960-	England	Three Screaming Popes	1988-1989	1/Eb/bcl	3[1/Eb/bcl.2/bcl.3/bcl]	15'	Schott
Daniel's	Turnage, Mark-Anthony	June 10, 1960-	England	Scherzoid	2003-2004	Eb/bcl	3[1.2/bcl.3/Eb/bcl]	13'	Boosey
Daniel's	Welcher, Dan	March 2, 1948-	USA	Symphony No. 5	2009	bcl/Eb	3[1.2.bcl/Eb]	28'	Presser
Daniel's	Wernick, Richard	Jan. 16, 1934-	USA	Visions of Terror and Wonder	1976	4/bcl/Eb	4[1.2.3/Eb.4/bcl/Eb]	28'	Presser

				Orchestral Music Requiring Doubling of	r Tripling with Eb and	Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
LA Phil	Williams, John	Feb. 8, 1932-	USA	Star Wars, Episode 5: The Empire Strikes Back (Complete Film)	1980	2/Eb/bcl	3[1.2/Eb/bcl.3/bcl]	124'	
LA Phil	Williams, John	Feb. 8, 1932-	USA	Saving Private Ryan: Excerpts	1998	3/bcl/Eb	3[1.2.3/bcl/Eb]		
LA Phil	Williams, John	Feb. 8, 1932-	USA	Saving Private Ryan: Hymn to the Fallen	1998	3/Eb/bcl	3[1.2.3/Eb/bcl]	6'	
LA Phil	Williams, John	Feb. 8, 1932-	USA	For Seiji!	1999	3/bcl/Eb	3[1.2.3/bcl/Eb]	19'	
LA Phil	Williams, John	Feb. 8, 1932-	USA	Patriot, The: The Patriot	2000	3/Eb/bcl	3[1.2.3/Eb/bcl]	8'	Hal Leonard
Discovered:	Williams, John	Feb. 8, 1932-	USA	Harry Potter and the Sorcerer's Stone: Suite for Orchestra	2001	bcl/Bb/Eb	3[1.2/bcl.3/bcl/Eb]	16'26"	Hal Leonard
LA Phil	Williams, John	Feb. 8, 1932-	USA	Harry Potter and the Chamber of Secrets Suite	2002	3/Bb cbcl/bcl/Eb	3[1.2/bcl.3/Bb cbcl/bcl/Eb]	13'30"	Hal Leonard
LA Phil	Williams, John	Feb. 8, 1932-	USA	Star Wars: Grand Suite, Hollywood Bowl 2003	ca. 2003	3/Eb/bcl	3[1.2/Eb.3/Eb/bcl]		
Daniel's	Young, Kenneth	Nov. 11, 1955-	New Zealand	Symphony [No. 1]	1987	3/Eb/bcl	3[1.2.3/Eb/bcl]	41'	SOUNZ
Daniel's	Zemlinsky, Alexander	Oct. 14, 1871-March 15, 1942	Austria	Symphonische Gesänge, Op. 20 (Symphonic Songs)	1929	Eb/bcl	3[1.2.Eb/bcl]	20'	Universal
Daniel's	Zemlinsky, Alexander	Oct. 14, 1871-March 15, 1942	Austria	Lyrische Symphonie, Op. 18 [Heinisch reductioni]	1922-1923, arr. 2012	2/Eb/bcl	2[1.2/Eb/bcl]	48'	Universal

				Chamber and Orchestral Music Requiring Dou	bling or Tripling with	Eb and Bass Clarinets			
Source	Composer: Last, First	Dates	Nationality	Title	Year Composed	Clarinet Doubling/Tripling	Instrumentation	Length	Published
Daniel's	Anrold, Malcolm does not include tripling, verified by Alexander Street Novello/Bernstein score	Oct. 21, 1921-Sept. 23, 2006	UK	The Bridge on the River Kwai	1957	3[incl Eb, bcl]	3[incl Eb, bcl]	24'	Novello
Daniel's	Aschaffenburg, Walter	May 20, 1927-2005	Germany/American composer	Three Dances for Orchestra, Op. 15	1972	4[incl Eb, bcl]	4[incl Eb, bcl]	13'	Presser
Daniel's	Berio, Luciano	Oct. 24, 1925-May 27, 2003	Italy	Allelujah	1955-1956	4[incl Eb, bcl]	4[incl Eb, bcl]	10'	Zerboni
Daniel's	Bloch, Ernest	July 24, 1880-July 15, 1959	Switzerland/Swiss-US composer	Symphony, C-sharp Minor, B.29	1901-1902	Eb/bcl	3[1.2.Eb/bcl] was original listing, which is possible. IMSLP lists 3[1.2/Eb.3/bcl]	55'	Kalmus, Leuckart
Daniel's	Bolcom, William	May 26, 1938-	USA	Songs of Innocence and of Experience	1956-1981	3[incl Eb, bcl]	3[incl Eb, bcl]	160'	Marks
Daniel's	Bolcom, William	May 26, 1938-	USA	Concerto, Violin	1984	1[incl Eb,bcl]	2[incl Eb,bcl]	23'	Marks
Daniel's	Brant, Henry	Sept. 15, 1913-April 26, 2008	Canada/USA	Desert Forests (Spatial Panoramas)	1983	4[incl Eb, bcl]	4[incl Eb, bcl] Listed on Performers Music Chicago as separate parts, but unknown for sure.	15'	Fischer
Daniel's	Chávez, Carlos	June 13, 1899-Aug. 2, 1978	Mexico	Concerto, 4 Horns	1937-1938, rev. 1964	4[incl Eb, bcl]	4[incl Eb, bcl]	23'	Belwin, Kalmus
Daniel's	Converse, Frederick Shepherd	Jan. 5, 1871-June 8, 1940	USA	California; Festival Scenes for Orchestra	1927	4[incl Eb, bcl]	4[incl Eb, bcl]	13'	Presser
Daniel's	Crumb, George	Oct. 24, 1929-	USA	Variazioni	1959	4[incl Eb, bcl]	4[incl Eb, bcl]	23'	Peters
Daniel's	Diamond, David	July 9, 1915-June 13, 2005	USA	Concerto, Violin, No. 3	1967-1968	4[incl Eb, bcl]	4[incl Eb, bcl]	23'	Peer
Daniel's	Dohnányi, Ernö [Ernst von]	July 27, 1877-Feb. 9, 1960	Slovakia	Ruralia Hungarica, Op. 36b	1924	3/Eb/bcl	3[1.2.3/Eb/bcl] is 1, 2/Eb, 3/bcl in Hathi Trust	25'	EMB
Daniel's	Ginastera, Alberto does not include doubling - verified Barry publication from Hathi Trust and Alexander Street	April 11, 1916-June 25, 1983	Argentina	Panambí: Suite, Op. 1a	1934-1936	4/Eb/bcl	4[1.2.3.4/Eb/bcl]	13'	Barry
Daniel's	Lewis, Robert Hall	April 22, 1926-March 22, 1996	USA	Three Movements on Scenes of Hieronymous Bosch	1989	3[incl Eb, bcl]	3[incl Eb, bcl]	23'	Presser
Daniel's	London, Edwin	March 16, 1929-Jan. 25, 2013	USA	A Hero of Our Time	1992	4[incl Eb, bcl]	4[incl Eb, bcl]	17'	Peters
Paprocki	MacMillan, James	1959-	UK, Scottish composer	Three Dawn Rituals	1983	Just Bb/Eb	bcl/Eb, alto flute/pic, bassoon, horn, perc, vib, piano, violin, cello Boosey lists clarinet as Eb only	10'	Boosey & Hawkes
Daniel's	Mahler, Gustav (Carpenter)	July 7, 1860-May 18, 1911	Germany	Symphony No. 10 (Carpenter)	1910	5[incl Eb, bcl]	5[incl Eb, bcl]	66'	AMP
Daniel's	Mahler, Gustav (Mazzetti)	July 7, 1860-May 18, 1911	Germany	Symphony No. 10 (Mazzetti)	1910	5[incl Eb, bcl]	5[incl Eb, bcl]	75'	AMP
Daniel's	Mahler, Gustav; (Wheeler)	July 7, 1860-May 18, 1911	Germany	Symphony No. 10 (Wheeler)	1910	5[incl bcl, 2Eb]	5[incl bcl, 2Eb]	74'	AMP
Daniel's	Melby, John	1941-	USA	Symphony No. 1	1993	4[incl Eb, bcl, cbcl]	4[incl Eb, bcl, cbcl] According to Melby's website: 4[Eb.1.2/cbcl.bcl]	41'	Merion
Daniel's	Messiaen, Olivier	Dec. 10, 1908-April 28, 1992	France	La Transfiguration de Notre-Seigneur Jésus- Christ	1965-1969	5[incl Eb, bcl]	5[incl Eb, bcl] Score lists as separate	110'	Leduc
Daniel's	Messiaen, Olivier	Dec. 10, 1908-April 28, 1992	France	Des Canyons Aux Étoiles (From the Canyons to the Stars)	1971-1974	4[incl Eb, bcl]	4[incl Eb, bcl] LA Phil program lists as separate	92'	Leduc
Daniel's	Nabokov, Nicolas	April 17, 1903-April 6, 1978	American composer of Russian birth	Symphony No. 2 (Biblical)	1941	3/bcl/Eb?	4[1.2.3/bcl/Eb]? Likely 4[1.2.3/bcl.Eb]	38'	Belaiff
Daniel's	Schuman, William	Aug. 4, 1910-Feb. 15, 1992	USA	Symphony No. 7	1960	optional additional instruments: 5[incl Eb, bcl]	optional additional instruments: 5[incl Eb, bcl]	29'	Merion
Daniel's	Shapey, Ralph	March 12, 1921-June 13, 2002	USA	Concerto Fantastique	1991	3[incl bcl, 2Eb]	3[incl bcl, 2Eb] Fischer does not list a bcl part	54'	Presser
Daniel's	Sowerby, Leo	May 1, 1895-July 7, 1968	USA	From the Northland: Impressions of the Lake Superior Country	1923	4[incl Eb, bcl]	4[incl Eb, bcl]	19'	Schirmer
Daniel's	Starer, Robert	Jan. 8, 1924-April 22, 2001	American composer of Austrian birth	Symphony No. 3	1969	4[incl Eb, bcl]	4[incl Eb, bcl]	21'	MCA
Daniel's	Still, William Grant	May 11, 1895-Dec. 3, 1978	USA	Black Bottom	1922	3[incl Eb, bcl]	3[incl Eb, bcl]	10'	WGS
Daniel's	Still, William Grant	May 11, 1895-Dec. 3, 1978	USA	The Black Man Dances	1935	4[incl Eb, bcl]	4[incl Eb, bcl]	11'	WGS
Daniel's	Svoboda, Tomás	Dec. 6, 1939-	American composer of Czech descent	Symphony No. 3, Op. 43 for Organ and Orchestra	1965	5[incl Eb, bcl, cbcl]	5[incl Eb, bcl, cbcl]	28'	Stangland
Daniel's	Svoboda, Tomás	Dec. 6, 1939-	American composer of Czech descent	Symphony No. 5, Op. 92 (In Unison)	1978	4[incl Eb, bcl]	4[incl Eb, bcl]	33'	Stangland
Daniel's	Takemitsu, Toru	Oct. 8, 1930-Feb. 20, 1996	Japan	Visions	1990	4[incl Eb, bcl, & cbcl]	4[incl Eb, bcl, & cbcl]	13'	Schott
Daniel's	Varèse, Edgard does not include tripling	Dec. 22, 1883-Nov. 6, 1965	American composer of French birth	Déserts	1950-1954, rev. 1960-61	2/bcl/Eb	2[1.2/bcl/Eb]	24'	Ricordi
Daniel's	Welcher, Dan	March 2, 1948-	USA	Night Watchers (Symphony No. 2)	1994	3[incl Eb, bcl]	3[incl Eb, bcl]	29'	Elkan-Vogel
Daniel's	Wuorinen, Charles	June 9, 1938-March 11, 2020	USA	Movers and Shakers	1984	3[incl Eb, bcl]	3[incl Eb, bcl]	27'	Peters

Appendix B: Survey

In the survey distributed to participants via a google form, bold questions were marked as required.

Questions:

Email:

Full Name (first and last):

Home Base/Current Area of Residence: (Just a city, state, or country if you are comfortable sharing this information to provide geographical data)

Years playing B-flat/A clarinet:

Years playing E-flat clarinet:

Why did you choose to play E-flat clarinet?

Did you receive formal instruction on E-flat clarinet? If yes, please explain what constituted this instruction.

Do you teach your students the E-flat clarinet? If yes, please explain how you teach and if/how you feel this focused instruction is beneficial.

Years playing bass clarinet:

Why did you choose to play bass clarinet?

Did you receive formal instruction on bass clarinet? If yes, please explain what constituted this instruction.

Do you teach your students the bass clarinet? If yes, please explain how you teach and if/how you feel this focused instruction is beneficial.

Have you ever performed a part in chamber or orchestral music that requires both E-flat and bass clarinet to be performed by one clarinetist? (May include other clarinets as well.)

Yes No

If yes, could you list the pieces to the best of your memory? When was the last time you performed the piece(s)? Do you have any upcoming performances of the piece(s)?

If yes, what was the experience like? (How did you feel switching, performing, etc.)

Are there any pieces of which you are aware but have not performed that require both bass and E-flat clarinet to be performed by one clarinetist? If yes, please list them to the best of your memory.

Have you ever composed or arranged a piece of chamber or orchestral music that requires both E-flat and bass clarinet to be performed by one clarinetist?

Yes No

If yes, please list the piece. Please explain why. Were there specific circumstances (such as finances, ensemble size, specific clarinetists) that influenced this decision to include both E-flat and bass clarinet in one clarinet part?

If yes, how often are these pieces performed? Have you been concerned about finding a clarinetist to perform the piece?

Is there anything else you would like to share about those pieces of music?

Have any pieces been composed specifically for you and your ability to play both E-flat and bass clarinet? Please list the title, composer, year composed, clarinet part (for example, second clarinet), and any other relevant details such as program notes. How often have you performed each piece?

Please explain how knowing both E-flat and bass clarinet have affected your performance opportunities.

Are you aware of any solo (accompanied and/or unaccompanied) pieces that require both E-flat and bass clarinet to be performed by one clarinetist? If yes, please list those pieces. If applicable, please share your experience performing the pieces (how did you feel switching, performing, etc.).

Is there anything else that you would like to share pertaining to the use, performance, or composition of parts for both E-flat and bass clarinet?

Do you know anyone else who plays both E-flat and bass clarinet proficiently? If so, please consider listing their name here, and/or please let them know about this survey. I would love to hear from them.

Appendix C: Living Catalogue

I expect to continue to update the catalogue after the publication of this dissertation,

when possible. The catalogue will be posted on the following website:

sierraclarinet.com

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