CONTEMPORARY DOUBLE BASS TECHNIQUES:
AN ADVANCED TECHNICAL APPROACH

Mariechen Meyer

Dissertation Prepared for the Degree of

DOCTOR OF MUSICAL ARTS

UNIVERSITY OF NORTH TEXAS

May 2018

APPROVED:

Jeff Bradetich, Major Professor
Clay Couturiaux, Committee Member
Susan Dubois, Committee Member
John Holt, Chair of the Division of Instrumental Studies
Benjamin Brand, Director of Graduate Studies in the College of Music
John Richmond, Dean of the College of Music
Victor Prybutok, Dean of the Toulouse Graduate School

Diverse practicing methods are evidence of the importance of applying creativity in our practice regimes. Regardless of a player's technique - traditional or modern - it must be regularly practiced and then applied. One of the most common ways to do that is through practicing technical exercises, which generally means the practice of scales, arpeggios and etudes. These exercises generally function as a warm-up regime for all musicians, but this regime doesn't necessarily provide enough reference for the player in the learning process of a new piece. Adapting exercises to address technical difficulties in a newly learned piece can provide the player with a wide range of practice methods to use, to be creative, to be more aware while practicing, and to build a solid technical foundation for the newly learned piece. Two well-known pedagogues who applied this approach are German bassist Ludwig Streicher and Czech violinist Otakar Ševčík. By implementing analytical studies and composing exercises based on the standard repertoire, Ševčík and Streicher became highly influential teachers in the 20th century. Their work serves as a model in achieving the purposes of this dissertation: the assessment of technical difficulties and compilation of a technique booklet based on six unaccompanied contemporary solo pieces written as required works for the solo competition of the International Society of Bassists' biennial convention since 2007.
Copyright 2018

by

Mariechen Meyer
ACKNOWLEDGEMENT

Writing this paper was only possible due to the incredible support I received from Mr. Jeff Bradetich, Dr. Susan Dubois, Dr. Clay Couturiaux, Evan Ziporyn, Tom Knifíc, Rufus Reid, Nicholas Walker, Evan Premo, François Rabbath, Madeleine Crouch, Johan Meyer and my loving husband, Jan-Hendrik Harley. Thank you.

To all double bassists who love and don’t love to practice.
# TABLE OF CONTENTS

ACKNOWLEDGEMENT ........................................................................................................................................ iii

PART I INTRODUCTION TO *PRACTICING CONTEMPORARY DOUBLE BASS* ............. 1

Chapter 1 The International Society Of Bassists .............................................................. 2
  Introduction ........................................................................................................................................ 2
  General Background ...................................................................................................................... 5
  The Required Pieces ..................................................................................................................... 7
    Hval – Evan Ziporyn (1959-), ISB 2007 – Oklahoma City, OK .................. 7
    The Muse and the Master – Tom Knific (1959-), ISB 2009 – State
    University, PA ........................................................................................................... 8
    Celestial Dance – Rufus Reid (1944-), ISB 2011 – San Francisco, CA .... 9
    Trombes d’eau – Francois Rabbath (1931-), ISB 2017 - Itchaca, NY .... 12

Chapter 2 Technique Exercises ......................................................................................... 14
  Function ........................................................................................................................................ 14
  Application ..................................................................................................................................... 16

Chapter 3 Design of the Booklet ....................................................................................... 19

Bibliography ............................................................................................................................. 22

PART II *PRACTICING CONTEMPORARY DOUBLE BASS* ............................................. 25

Preface ........................................................................................................................................ 26

How to Use This Booklet ........................................................................................................ 27
  Dynamics ..................................................................................................................................... 28
  Rhythm and Articulation .......................................................................................................... 29
  Tempo ........................................................................................................................................ 30
  Fingerings and Bowings ........................................................................................................... 31
  Music Notation/Engraving ....................................................................................................... 32
  Symbols ...................................................................................................................................... 33
  Text Notes .................................................................................................................................. 34
  *Hval* Exercises ....................................................................................................................... 35
Exercise 1: Microtones ................................................................. 35
Exercise 2: Simplification ............................................................. 38
Exercise 3: String Crossings Preparation and Practice .................. 40
Exercise 4: Microtones in Subdivision ......................................... 42
Exercise 5: Even Bow Changes .................................................. 44
Exercise 6: Dynamics ................................................................. 44
Exercise 7: Microtone Potpourri .................................................. 45
Exercise 8: Harmonics ................................................................. 47
Exercise 9: Polyrhythms ............................................................... 48
Exercise 10: Glissando Drill ......................................................... 50
Exercise 11: Nodal Glissandi and Pizzicati Coordination ............... 52
Exercise 12: Double Stop Combinations ..................................... 54
Exercise 13: Rhythm Jungle ......................................................... 57

The Muse and The Master Exercises ............................................. 59
Exercise 1: Arco vs Pizzicato ........................................................ 59
Exercise 2: Articulations and Dynamics ....................................... 60
Exercise 3: Pizzicato Rolls .......................................................... 61
Exercise 4: Major Sixths .............................................................. 62
Exercise 5: Double Stop Pizzicati ................................................. 62
Exercise 6: Fingering Patterns and Intonation .............................. 63
Exercise 7: Rhythm and Articulation .......................................... 64

Celestial Dance Exercises .......................................................... 69
Exercise 1: Double Stop Sustains .................................................. 69
Exercise 2: Intervals ................................................................. 70
Exercise 3: Rhythm and Articulation .......................................... 72
Exercise 4: Jazz Pizzicato ............................................................ 73
Exercise 5: Glissando Pizzicati .................................................... 75
Exercise 6: Double Voice Pizzicati .............................................. 76

Chorale Exercises ..................................................................... 77
Exercise 1: Introductory Double Stops ....................................... 77
Exercise 2: Double Stop Mobility .............................................. 78
Exercise 3: Rhythm ................................................................. 85
Exercise 4: Advanced Double Stops ........................................... 90
Exercise 5: Double-Voiced Pizzicato ................................................................. 93

Slip Gigue Exercises ............................................................................................ 97
Exercise 1: Double-Voiced Arco ........................................................................ 97
Exercise 2: Double Stop Intonation ................................................................. 99
Exercise 3: Meter and Pulse .............................................................................. 103
Exercise 4: Left-Hand Pizzicato ...................................................................... 105

Trombes d'eau Exercises ..................................................................................... 108
Exercise 1: A-string Glissandi .......................................................................... 108
Exercise 2: Duple vs Triple .............................................................................. 109
Exercise 3: Double Stop Intervals ................................................................... 109
Exercise 4: Rhythm and Articulation Workout .............................................. 111
Exercise 6: String Crossings and Sautillé ....................................................... 118
Exercise 7: Artificial Harmonics ...................................................................... 122

Conclusion ........................................................................................................ 126
PART I

INTRODUCTION TO PRACTICING CONTEMPORARY DOUBLE BASS
Chapter 1

The International Society Of Bassists

Introduction

For centuries double bass technique has been developing within a broad scope of new ideas, instruments, bows, methods, teachers and music culture. Various styles of technique were established from a diverse background range of double bass schools and teachers – each school applying a specific method and practice. All these methods have as their common goal the improvement of double bass playing through technical innovation – a trend that continues to this day.¹

Technique is “the formal or practical aspect of performance” or “the way of doing something”.² Extended technique implies the application of more uncommon concepts such as tremolo pizzicato, double-stop shifts, playing with the bow on the tailpiece, or tapping the shoulder of the bass with the left-hand fingertips. The meaning of the term “contemporary” with regards to music is complex and a topic of dispute in musicology. In the context of this dissertation the term “contemporary music” implies music written in the 20th and 21st centuries. It is also important to note that contemporary music does not apply only extended techniques, but also standard traditional and modern techniques. Thus, for the purpose of this dissertation the concept of “contemporary double bass technique” applies to any technique, both standard and extended, used to perform a contemporary piece.

The color palette of the double bass leaves the composer with an endless number of choices to work with, which explains the experimental sound qualities in some contemporary solo repertoire such as Hauta-aho Teppo’s *Kadenza*[^3] and Jacob Druckman’s *Valentine for Solo Double Bass*.[^4] Both pieces explore a variety of extended techniques such tremolo pizzicato, left-hand pizzicato, singing and speech, light tapping of the strings and tailpiece with a percussion mallet. However, if one compares *Valentine for Solo Double Bass* with Frank Proto’s *Carmen Fantasy*, it is clear that the *Carmen Fantasy* requires the use of more standard technique, whereas *Valentine* depends completely on the use of extended technique such as the application of percussive and speech effects by the player. Both pieces are contemporary, but require completely different techniques.

The purpose of this dissertation is to analyze the difficulty level of the six unaccompanied contemporary solo pieces written as the required works for the solo competition at the biennial convention of the renowned International Society of Bassists, and on the basis of that evaluation create a companion study guide for performers of contemporary double bass repertoire in the form of a booklet. This booklet entitled, *Practicing Contemporary Double Bass*, will be a compilation of advanced technical exercises that will mainly focus on the specific technical difficulties a double bass player might encounter while learning these six specific unaccompanied pieces, hence acting as a functional guide to aid in the preparation of these works for performance. The technical exercises are not necessarily advanced because of their compositional content, but rather because of the appropriate practice method applied to address the difficulties identified in each piece. American pedagogue and bassist Henry Portnoi explains,

The sophisticated, advanced level of performance is no better than the foundation upon which it is built. An accomplished technique is mostly a matter of reflex behavior, that is, the involved parts of the body must act almost automatically. This is achieved in three steps. First, there must be a concept...second, it is necessary to have a complete understanding...the third step is the doing. This means training the involved muscles to act properly.\(^5\)

This approach to performance preparation places the emphasis on educating the broader bass community in lesser-known advanced techniques, which could encourage students to study and perform more 21st-century double bass repertoire. This could in turn stimulate the interest of composers, who might be double bass players themselves or not, to keep expanding the double bass repertoire.

Contemporary unaccompanied double bass music is a major component of the current innovative trends in the double bass world that have been raising technical standards not only among players but also composers.\(^6\) Many prominent contemporary double bass performers such as Edgar Meyer, Nicholas Walker, Rufus Reid, Craig Butterfield and Andres Martin are also composers who regularly add to the double bass repertoire list. As double bass performers, it is in our best interest to inspire non-double bass-playing composers to introduce different dimensions and compositional techniques into the double bass repertoire, even if these are potentially non-idiomatic.

Contemporary double bassist Bertram Turetzky suggests that it is a good idea “to introduce this almost ‘unknown’ instrument to composers and performers with the notion that they should unite and help each other. Bassists need literature and composers need performers and performances.”\(^7\) High-quality performances give composers added incentive to compose for

---


the double bass, refining their own compositional techniques in the process. This could ultimately prove to maintain a sustained interest in the double bass from composers.

General Background

The International Society of Bassists (ISB) is a global double bass community and organization that was established in 1967 by the eminent double bass virtuoso Gary Karr. He initiated the society with one sole purpose in mind: to perpetuate the love and growth of anything bass. The three thousand members of the ISB come from forty different countries; it is a diverse community that encourages learners, luthiers, pedagogues and performers to communicate and share their ideas.

The ISB celebrates the community with a biennial convention that assembles at several different locations in turn throughout the United States. This gives members the opportunity to meet each other in person, connect with new members, present research and have discussions, attend master classes and concerts, visit the makers’ exhibitions and also to attend the various rounds of the competition held during each convention.8

The competitions have five different divisions in the categories classical solo, orchestral and jazz, attracting participants who are representative of the top young performers internationally.9 International double bass soloist and pedagogue Jeff Bradetich established the competitions in 1988, with three prizes awarded in each division.10 Currently the solo division is

10 Paul Zibits, “Classical Solo Competition Finalists” (Convention Program, University of California, Los Angeles, August 23, 1988).
one of the major highlights in the international double bass competition calendar, and includes amongst its finalists some of the most notable artists and pedagogues of their time such as Edgar Meyer, David Murray, Mark Morton, DaXun Zhang and Gunar Upatnieks. It not only showcases highly skilled performers from around the world, but also promotes innovative contemporary classical and jazz composers who push the general technical boundaries of the double bass as a solo instrument. Competitors ranging from ages 19 to 30 have to prepare numerous works in different styles as well as a required work written by an established composer. Participants are given a time limit of three months to prepare the required piece, and a separate prize for best interpretation of this work is awarded. The required piece was added to the competition guidelines in 2003.

For each convention the ISB commissions an accomplished composer to write a short unaccompanied work that serves as the required piece for all the semi-finalists participating in the competition. It is written in the unique style of the commissioned composer and requires the utmost attention to detail, refined technical skills and musical sensibility. Therefore, the required pieces written for this competition could be considered the pinnacle of contemporary solo repertoire for the double bass, incorporating some of the latest trends in advanced techniques that one might expect from performers. For the purpose of this dissertation I decided to focus only on the required pieces written over the last decade, as the techniques featured not only encompass

---


all the standard advanced techniques used in contemporary double bass repertoire, but also provides the player with a manageable approach to some lesser-known extended techniques.

The Required Pieces

Hval – Evan Ziporyn (1959-), ISB 2007 – Oklahoma City, OK

Evan Ziporyn is an American composer and cross-culture specialist who hails from Chicago, Illinois. In Hval, Ziporyn experiments with a wide variety of contemporary colors such as the combination of natural harmonics, open strings and stopped tones. He specifically emphasizes the juxtaposition of these elements, which is the very aspect that reflects the title of the piece, the Icelandic word for “whale”.14

The work consists of two sections, each having its own character. The first section is a mixture of endless string-crossing patterns, nodal glissandi15, use of gradually added ponticelli16 and left-hand pizzicato. The repetitive string-crossing patterns entail a continuous alternation between an open string or stopped tone and a natural harmonic (see Fig. 1). The metronome indication for this passage of $\text{♩} = \text{88-100}$ might not seem fast, but to continuously change the weight of the bow arm and to navigate the changing pressure from the left-hand fingers makes it a complex technique to master.17

16 Russell Rolen, “To the Extreme,” Modern Cello Techniques, accessed February 17, 2018, http://www.moderncellotechniques.com/bow-techniques/ponticello-tasto/to-the-extremes/. Using ponticello is to play very close to the bridge giving the sound almost a harsh and screeching quality.
In the second section Ziporyn explores the technical possibilities of his compositional approach even further. Almost the entire section incorporates the use of double stops. This in itself is already a difficult exploit, considering the amount of stamina needed from the left-hand to play the whole section. Besides this difficulty, almost the whole of the second section uses unconventional double stops (see Fig. 2) – one note of the double stops is a harmonic and the other note a stopped tone. This has to be performed together with a challenging fluctuating rhythm and can be extremely difficult to play, especially if the implied harmonics are unusually high or are situated in the lower register of the double bass.18

The Muse and the Master – Tom Knific (1959-), ISB 2009 – State University, PA

Tom Knific is an American bassist and composer with a diverse musical background in jazz and classical bass. His compositional approach in the required piece, *The Muse and the*
Master, incorporates both sides of his training. As indicated by the title, the piece consists of two parts. Based on Knific’s art song Her Polish Soul, the ISB composition The Muse portrays the essence of a love song, focusing on the flow of the melody and harmony. The complex harmony uses a mixture of minor modes and scales.19 Despite a few technical difficulties, The Muse doesn’t require the performer to utilize any extreme techniques, whereas in comparison The Master is technically more demanding.

The Master was inspired by the 100th anniversary of the birth of the French composer Olivier Messiaen and combines a Brazilian rhythmic figure with one of the modes Messiaen uses in his masterpiece The Quartet for the End of Time.20 As the “glue”21 of this piece, the syncopated Brazilian rhythm persistently alternates with other rhythms and scale-like patterns. The constant fluctuation of rhythmic patterns, time signatures, accents and drive of the rhythmic double-stop figures towards the middle of the piece and articulation within the different time signatures demand great bow control and left-hand agility from the performer (see Fig. 3).22

![Figure 3. Tom Knific. The Master, mm 84-86](image)

Celestial Dance – Rufus Reid (1944-), ISB 2011 – San Francisco, CA

Rufus Reid is an internationally celebrated jazz bassist known for his great contribution to the pedagogy and repertoire of jazz. His innovative skills and passion for all jazz eras led to

19 Tom Knific, email message to author, February 11, 2018.
20 Tom Knific, The Muse and the Master (Dallas, TX: ISB Editions, 2008), 1-2.
21 Ibid.
22 Ibid., 3-4.
his numerous recording successes.\textsuperscript{23} The composition for solo double bass, \textit{Celestial Dance}, is based on the seventh song of the same name on Reid’s album \textit{The Gait Keeper}.\textsuperscript{24} The title refers to the ordered and harmonious movement of the heavens and, by listening to the work, it is possible to sense a heavenly ambience especially from the ringing double stops in the beginning, all \textit{pizzicato} sections and the harmonic notes at the end.\textsuperscript{25}

The compositional framework is made up of various small sections that alternate between \textit{arco} and \textit{pizzicato} to develop the thematic material. The main theme “is one of several themes adapted from a larger jazz ensemble work”\textsuperscript{26} that repeats itself in varied forms throughout the piece.\textsuperscript{27} In the stormy middle sections the performer is required to apply advanced pizzicato technique such as the simultaneous pizzicato of two nonadjacent strings (see Fig. 4) and two independent voices.\textsuperscript{28}

![Figure 4. Rufus Reid. Celestial Dance, mm 70-73](image)

**Chorale – Nicholas Walker (1972-), ISB 2013 – Rochester, NY**

Nicholas Walker is an American double bassist, music visionary and a fervent proponent of a wide variety of styles and genres, these aspects of his persona are also noticeable in


\textsuperscript{26} Rufus Reid, email message to author, October 25, 2017.

\textsuperscript{27} Rufus Reid, \textit{Celestial Dance} (Teaneck, NJ: Myriad Limited, 2010).

\textsuperscript{28} Ibid.
Chorale.29 Chorale is written in a light and jazzy style using beautiful tonal harmonies and melodies. There are three main sections, each highlighted by new unexpected material and timbres, which are then developed throughout the section. An example of this is the appealing double-stop harmonies in the first two measures of the opening section (see Fig. 5) that eventually develops into an extensive mixture of eccentric double-stop harmonies, which can be a potentially difficult section to master (see Fig. 6).30 The coordination between the left-hand finger pressures and use of bow weight and placement for each double stop is hard to manage within long double-stop phrases using harmonics.

Figure 5. Nicholas Walker. Chorale, mm 1-2

![Figure 5. Nicholas Walker. Chorale, mm 1-2](image)

Figure 6. Nicholas Walker. Chorale, mm 13-20

![Figure 6. Nicholas Walker. Chorale, mm 13-20](image)

Slip Gigue – Evan Premo (1985-), ISB 2015 - Denver, CO

American double bassist and composer Evan Premo is an exciting and creative musician on a grandiose scale. As co-founder and artistic director of Scrag Mountain Music, he is a great


30 Nicholas Walker, Chorale (Dallas, TX: ISB Editions, 2012).
advocate for performing and developing chamber music.\textsuperscript{31} He found his inspiration for \textit{Slip Gigue} in the gigue movement of Johann Sebastian Bach’s Suite for Violoncello No. 1.\textsuperscript{32} This is particularly evident in the opening of the piece, which gives a little twist to the dance character of a gigue.

Double stops are used throughout the piece, which not only makes intonation difficult, but also makes it difficult to sustain physical stamina until the end. There are four main sections, each denoted by a change in tempo. The first and third sections are slower and more lyrical, while the wild rhythmic pulse of the second and last sections truly define the “slip” of the \textit{gigue} (see Fig.7).\textsuperscript{33}

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{Slip_Gigue.png}
\caption{Figure 7. Evan Premo. Slip Gigue, mm 8-10}
\end{figure}

\textit{Trombes d’eau – Francois Rabbath (1931-), ISB 2017 - Itchaca, NY}

Francois Rabbath is a world-renowned Syrian-born double bass virtuoso, composer and pedagogue. His innovative contributions to the technique of the double bass led to a new method and school of playing also known as the “Rabbath method”.\textsuperscript{34} Several modernized features and

\begin{footnotesize}
\begin{enumerate}
\item “About Bach+Spring 2017,” Live Arts Maryland, accessed 31 October 2017, \url{http://liveartsmaryland.org/?p=5732}.
\item Evan Premo, \textit{Slip Gigue} (Dallas, TX: ISB Editions, 2014).
\end{enumerate}
\end{footnotesize}
techniques he promotes are the Rabbath endpin and the crab-and pivot left-hand technique which have grown to be very popular amongst double bassists around the world.35

Trombes d’eau translates as “waterspouts”.36 It opens with a melodious introductory section that floats on top of an open E-string drone (see Fig. 8). This passage might seem simple at first, but to match the intonation of the melodic A-string notes to the open E-string can be problematic in the higher register of the double bass. In structure Trombes d’eau is composed as a set of themes with variations. There are five themes in total, each with variations that intertwine with the first three measures of the introductory section at the end of every variation. The restless character of the second and third theme and variation sets requires the player to have a virtuosic bow arm and very precise coordination (see Fig. 9). 37

---


Function

How should one approach technique in the context of music performance? In learning a new piece it is not enough to only take into account proper mechanics, the study of the score and the interpretation of the music. As with many other crafts and skills, new ideas have to be practiced. For professional musicians it can be difficult to maintain their technique while having to prepare for one concert after another. With such time constraints the focus quickly shifts to practicing as effectively as possible. Does this imply only using repetition, though, or are there ways to bring creativity to the usual practice regime?

Dr. Shelley Tramposh, Associate Professor of Viola at the Crane School of Music at the State University of New York Potsdam, explains that, “by pairing my skills as an artist with the analytical skills of an engineer, I could practice more effectively.” She claims the first step in learning a new piece is to identify its musical meaning by taking into account aspects such as the music’s character and phrasing. This is a more productive approach, because we adapt our technique to the music’s expressive demands. Once the player has a better understanding of the music, he or she can start with refining the technical process. The research of this paper is more concerned with the latter process and its applied methods.

38 Jeff Bradetich, *Ultimate Challenge* (Moscow, ID: Music For All To Hear, Inc., 2009), 139.
40 Dr. Shelley Tramposh has suggested that if a piece is too difficult to play through, it might be necessary to simplify it. There are several ways of doing that: slower tempo, diminution of notes and rhythm, leaving out notes that repeat consecutively or only playing the main thematic material versus accompaniment figures. Shelley Tramposh, “How to Use Creativity and Logic to Help Your Practice,” *The Strad* (August 2014), accessed February 16, 2018, [https://www.thestrad.com/how-to-use-creativity-and-logic-to-help-your-practice/2947.article](https://www.thestrad.com/how-to-use-creativity-and-logic-to-help-your-practice/2947.article).
Traditional double bass technique is built upon a complex, extended history of methodology aimed at systemizing certain technical elements on a continuously evolving instrument – these would include drawing the bow in a straight line across the string, the application of practical left-hand fingering patterns, core sound production, left- and right-hand coordination and a general playing competency in all the registers of the bass. The use of the term ‘traditional’ can be confusing when we consider the unique journey each individual musician undertakes to master his or her instrument. Most accomplished players would ideally have explored at least two different methodologies, or at least have studied under teachers who offered them a broadening perspective regarding their approach to technique.

Traditional double bass methods started to progress after Czech double bassist Wenzel Hause published his double bass method and developed the first School for Double Bass at the Prague Conservatoire (1811). Many of his pupils, including Josef Hrabé, Anton Slama and Franz Simandl, helped to establish and standardize this traditional approach and way of playing the double bass in the orchestra. Traditional technique is developed largely on the basis of the role of the double bass in the orchestra, whereas the development of modern technique is more applicable to the current role of the double bass as a solo instrument. There is no distinct break between traditional and modern techniques; modern techniques could not have existed without the form and technical rules that teachers passed on to their students. Examples of notable performers and pedagogues advocating modern techniques are Bertram Turetzky, who promoted

the use of extended techniques, and Francois Rabbath, who developed the crab and pivoting left-hand technique.

Proper technique does not only suggest good intonation, sound and coordination, but also color, character and expression. However, within the numerous elements of practicing, there are certain areas of a performers’ playing that need regular attention such as intonation, coordination and sound projection. The most basic way to approach these areas is to practice technique exercises that are known to generally involve scale patterns, arpeggios, studies and etudes. All of the latter can be varied and adapted in numerous ways to isolate, practice and strengthen a specific technique.

Application

The compositional outline of an exercise is determined by its function, which can be decided on the basis of the qualities of three main categories: physique, technique and music. The ‘physique’ refers to the strength, flexibility and coordination of the player that can be developed with a variety of exercises, especially through applying physical workouts such as stretching the fingers and upper arms. The “technique” is indicative of numerous elements such as bow control, dynamics, articulation, tempo, intonation, vibrato etc. Both physique and technique determine the player’s security in a music performance. As an example, let us refer to the first two measures of Giovanni Bottesini’s Double Bass Concerto in B minor⁴⁴:

Figure 10. Giovanni Bottesini. Concerto No.2 in B minor, mm 1-2

If the player is in the process of preparing this phrase (see Fig. 10) and finds it difficult to practice because his or her vibrato is uncontrollably fast, the problem would be immediately addressed by developing technique. But, more than one might think, the problem can also be with the physique of the player. If so, not having enough strength or ability to use the right muscles will be the issue. If the arms and hands are not strong enough to press down the strings, the muscles start to overcompensate and lock, which is the cause of not being able to control the vibrato movement. Instead of struggling to get the left-hand motions stable, first try to incorporate the practice of trills, replacements fingerings or double stops within the phrase.\textsuperscript{45} Once the fingers are stronger, it will be easier for the player to use vibrato, find a good sound and be able to freely express his or her interpretation of the music. All three categories depend on each other. The relation between all these aspects is demonstrated in the following diagram (see Fig.11):

Proper identification of the problem will allow suitable application of exercises and practice to help fix the problem. This approach will teach the player to practice in a more concentrated and focused way, the consequences of which will unquestionably become evident in the performance. Two widely acclaimed 20\textsuperscript{th}-century pedagogues, Ludwig Streicher and Otakar Ševčík, developed the approach of practicing by combining technique exercises with the repertoire. Streicher wrote several method books describing step-by-step his approach to playing the double bass. Even though most of his study material includes scales, arpeggios and etudes, he also wrote several exercises in combination with standard double bass orchestra excerpts by adapting the excerpt material into the format of an exercise.\textsuperscript{46} Ševčík wrote several analytical


studies and exercises for the standard violin repertoire. The exercises he wrote use a variety of practice methods: simplification of chords and double stops, repetition, articulation and rhythmic permutation and alternating articulation. Both their practice methods serve as models for the technique booklet *Practice Contemporary Double Bass*.

---

Figure 11. Visual representation of the correlation between the three categories.

---

Chapter 3

Design of the Booklet

*Practicing Contemporary Double Bass* is structured on the personal identification of technical difficulties within the six pieces, and a subsequent application of practice methods. These two processes determined the layout of the booklet, which is comprised of eight components.

The preface provides a short introduction to the compilation and function of the booklet, while the second component, “How to Use the Booklet,” focuses on explaining how to approach the exercises in practice, clarifying specific details such as music notations and symbols. The ensuing exercises are presented chronologically for each piece and with increasing difficulty. Every exercise is introduced with bulleted text to clarify its function and offer hints towards approaching the exercise. There is a total of 41 exercises in the booklet.

During personal study and analysis of each piece, a variety of technical problems arose. These problems were analyzed and then selected for inclusion in the booklet based upon the level of difficulty of the relevant piece, and how uncommon each problem is in comparison to standard technique, meaning that it has either not been covered in the form of exercises yet, or has not yet received proper attention in performance preparation. Since the duration and difficulty level of the pieces differ, the number and type of exercises for each piece also varies. Table 1 categorizes the different exercises written for each piece and gives an analysis of the variety of technical difficulties that determined the size and scope of the applied practice methods in the booklet.

Each technical problem is approached with a specific practice method. Several well-known practice methods are utilized in the exercises; these can be adapted easily, and if the
player wants to apply his or her own creativity, this is encouraged. As part of the introduction, the “How to use this Booklet?” component of the booklet reflects on the variety of practice methods applied to the exercises and offers some general notes on technique that players need to know before applying the exercises in the booklet.
Table 1. Categorization of the Individual Exercises

<table>
<thead>
<tr>
<th>Technical focus</th>
<th>Hval</th>
<th>The Muse and the Master</th>
<th>Celestial Dance</th>
<th>Chorale</th>
<th>Slip Gigue</th>
<th>Trombes d’eau</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength</td>
<td>1 (Microtones), 2, 7, 11, 12, 13</td>
<td>3, 7</td>
<td>2, 4</td>
<td>1, 2, 3</td>
<td>1, 2, 3, 4</td>
<td>3, 4, 8</td>
</tr>
<tr>
<td>Flexibility</td>
<td>1, 3, 4, 5, 8, 10, 11, 12, 13</td>
<td>1, 2, 3, 4, 6, 7</td>
<td>1, 2, 4, 5</td>
<td>3, 4, 5</td>
<td>1, 2</td>
<td>1, 3, 4, 5, 8</td>
</tr>
<tr>
<td>Coordination</td>
<td>1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13</td>
<td>1, 2, 3, 4, 5, 6</td>
<td>1, 2, 3, 4, 5</td>
<td>1, 2, 3, 4</td>
<td>1, 2, 3, 4, 5, 6, 7, 8</td>
<td></td>
</tr>
<tr>
<td>Bow control</td>
<td>3, 4, 5, 7, 8, 10, 11, 12, 13</td>
<td>1, 2, 6, 7</td>
<td>1, 3</td>
<td>1, 2, 3, 4</td>
<td>3, 4</td>
<td>3, 4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Dynamics</td>
<td>6</td>
<td>2</td>
<td>1, 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhythm and articulation</td>
<td>4, 5, 9, 11, 13</td>
<td>2, 5, 6, 7</td>
<td>3, 4, 6</td>
<td>4, 5</td>
<td>3</td>
<td>1, 2, 4, 5, 6, 7</td>
</tr>
<tr>
<td>Timbre</td>
<td>6, 8, 10, 11, 12</td>
<td>2, 3, 5</td>
<td>1, 4, 6</td>
<td>1, 2, 5</td>
<td>4</td>
<td>1, 7, 8</td>
</tr>
<tr>
<td>Vibrato</td>
<td></td>
<td>4</td>
<td>1, 5</td>
<td>5</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Intonation</td>
<td>1 (Microtones), 2, 8, 12</td>
<td>4, 5, 6</td>
<td>1, 2, 4, 5</td>
<td>1, 2, 3</td>
<td>1, 2, 4</td>
<td>1, 3, 4, 6, 8</td>
</tr>
<tr>
<td>Pizzicato</td>
<td>9, 11</td>
<td>1, 3, 5</td>
<td>4, 5, 6</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Virtuosity</td>
<td>9, 10, 11, 12, 13</td>
<td>7</td>
<td>1, 3, 4, 5</td>
<td>3</td>
<td></td>
<td>4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Expression</td>
<td></td>
<td>1, 2, 4</td>
<td>1, 3</td>
<td></td>
<td></td>
<td>1, 3, 4, 6, 8</td>
</tr>
<tr>
<td>Tonality</td>
<td>1 (Microtones), 4, 7, 8, 10</td>
<td>4, 6</td>
<td>2, 4, 5</td>
<td>1, 2, 3</td>
<td>1, 2, 4</td>
<td>1, 3, 4, 5, 6, 8</td>
</tr>
<tr>
<td>Music structure</td>
<td>2, 7, 8, 13</td>
<td></td>
<td></td>
<td>1</td>
<td>1, 2, 4</td>
<td></td>
</tr>
</tbody>
</table>
Bibliography


PART II

PRACTICING CONTEMPORARY DOUBLE BASS
Preface

This booklet serves as a preparatory guide for six advanced and unaccompanied contemporary solo pieces for the double bass. These works are the required pieces commissioned for the final rounds of the International Society of Bassists’ Solo Competitions between 2007 and 2017: *Hval*, *The Muse and The Master*, *Celestial Dance*, *Chorale*, *Slip Gigue* and *Trombes d’eau*.

The booklet guides the player with a diverse set of technical exercises, each pertaining to an identified technical difficulty or contemporary extended technique within the context of each piece. These technical exercises were conceived on the basis of my own experiences in performing advanced solo double bass repertoire and provide an example of how one might prepare the aforementioned pieces.

Proper preparation for musical performance entails a combination of several aspects, such as studying the score, researching the background and style of the music, and applying the appropriate technique to the interpretation of the music. Being technically unprepared can easily hinder a musician’s interpretation and mastery of the music, and it is therefore necessary to outline a focused practice regime that encompasses all of these aspects.

No musician practices in the same way as another musician. To prepare music, especially newly composed music, is a deeply personal and individual process. Even though two musicians might apply the same methodology in practicing a specific work, they will always have a distinctively personal perspective with regards to musical preferences such as tempo, articulation and dynamics, and will therefore apply different approaches in the practice and preparation of the same piece. There is, however, a fundamental preparatory step all performers have in
common: to identify and isolate technical difficulties through meticulous study of a piece. How to deal with these difficulties is exactly what this booklet will address.

How to Use This Booklet

*Practicing Contemporary Double Bass* set four goals for players, as outlined below.

1) Applying adaptable practice methods

There are six proposed practice methods:

- **Introduction practice method:** the introduction of a specific technique, tonality, music notation etc. This would be presented by applying a basic rudimentary approach in the exercises that might seem similar to what beginners might practice in learning a new position on the fingerboard (*Hval* exercises 1, p. 1-3).

- **Simplification practice method:** using simplification is to apply a form of reduction to the notes, rhythm or structure of a passage. This gives the player the opportunity to internalize a specific difficulty. It also allows for slow practice and individual focus of the left- and right-hand (*Hval* exercises 2, p. 4 and *Slip Gigue* exercise 1, p. 63).

- **Permutation practice method:** in contrast to simplification, the permutation practice method intentionally complicates the technical issue even further in order to widen the players frame of reference with regards to the difficulty, build left- and right-hand dexterity and overall comfort in playing (*The Muse and the Master* exercise 7, p. 30).

- **Subdivision practice method:** subdivision is the separation of time of a specific note value to help the player internalize a complex rhythmic structure (*The Muse and the Master* exercise 5, p. 28 and *Trombes d’eau* exercise 5, p. 82).

- **Pitch isolation practice method:** in general pitch isolation is the practice of intonation which can be done by practicing scales, arpeggios, etudes and so forth. In context of this booklet it will apply to the unusual intervals used in double stops, chromatic passages and specific shifts used within the required pieces (*Chorale* exercise 2, p. 44).

- **Extrapolation:** to extrapolate a difficulty is to practice it out of context by applying it into a progressive study or scale pattern. This method gives the player the opportunity to isolate one aspect at a time (*The Muse and the Master* exercise 2, p. 26 and *Celestial Dance* exercise 3, p. 38).
These practice methods can be used in a variety of combinations.

2) Building technical capability to execute extended contemporary techniques.

3) Identifying technical difficulties and isolate these difficulties in and out of context.

4) Improving your general practice regime.

There are seven fundamental elements to these exercises:

- Dynamics
- Rhythm and Articulation
- Tempo
- Left- and Right-hand
- Music Notations
- Symbols
- Text Notes

Each exercise uniquely combines a variety of these elements to serve the inherent function of the exercise. The way these elements should be approached is outlined below.

Dynamics

The practice of specific dynamics tends to be overlooked in general because of its ambiguous nature. This is sometimes evident by listening to recordings that players made of themselves during a rehearsal for evaluation. Properly differentiating between the dynamic levels in music helps emphasize the intention of the composer and conveys the essence of the piece to the listener. If the player is uncertain about his or her dynamic output, start by exploring with the different dynamic levels on one pitch. Consciously listen to and assess the volume of all the
dynamic levels, and while doing that, also take note of the bow placement on the string for each level. The six dynamics levels are \textit{pp, p, mp, mf, f} and \textit{ff}.

Rhythm and Articulation

Many contemporary double bass compositions feature exaggerated rhythm and articulation. This is largely because of the percussive sound quality the bow and pizzicato techniques can create. The exercises related to these elements are built upon specific practice methods such as subdivision and permutation, which require the player to practice with a metronome. It is important to start practicing at a deliberately slow tempo with ample repetition, as this does not only consolidate odd rhythmic patterns but also develops muscle memory.

In the exercises the extent of rhythmic complexities is broad and ranges from a Brazilian rhythmic figure (Fig. 12) to the use of polyrhythm in double-voiced sections (Fig. 13).

Figure 12. Tom Knific. \textit{The Muse and the Master}, mm 1

![Figure 12. Tom Knific. \textit{The Muse and the Master}, mm 1](image)

Figure 13. Evan Ziporyn. \textit{Hval}, mm 122

Certain rhythms are further emphasized with the use of unusual articulations, such as asymmetrical slurs and accents as well as accents in the middle of a slur (Fig. 14),

Figure 14. Nicholas Walker. \textit{Chorale}, mm 62

![Figure 14. Nicholas Walker. \textit{Chorale}, mm 62](image)
the percussive “chop”\textsuperscript{48} effect (Fig. 15),

Figure 15. Nicholas Walker. *Chorale*, mm 54

and the control of a ringing harmonic by sliding up a whole step from the nut with the left hand (Fig. 16).\textsuperscript{49}

Figure 16. Nicholas Walker. *Chorale*, mm 111-112

More standard articulations are also used throughout the booklet, such as *legato* (see *Hval* exercise 3, p. 6), *détaché* (*Celestial Dance* exercise 2, p. 36), *tenuto* (*The Muse and the Master* exercise 2, p. 26), *marcato* (*Celestial Dance* exercise 3, p. 38), *staccato* (*Trombes d’eau* exercise 5, p. 82) and *sforzando* (*Chorale* exercise 3.11, p. 55). Much as with the dynamic exercises, the player has to make sure his or her approach is clear and meticulous in finding all the different articulation colors. As a supplementary exercise, the player can measure his or her instinctive version of an articulation with an extreme version of it. Evaluate and find a middle ground between the two versions.

**Tempo**

The control of tempo is essential; it is therefore important to practice with a metronome. Once a technically demanding passage can be played in a stable manner and in the indicated tempo, elements such as *rubato* or *rallentando* can be expressed more freely. The metronome

\textsuperscript{48} Laurel Thompson, “Bowing Tips: Master the Chop (How to Play the Violin or Viola)” (video), April 23, 2005, accessed March 14, 2018, https://www.youtube.com/watch?v=OsWBs0Bu1Ag.

\textsuperscript{49} Nicholas Walker, *Chorale* (Dallas, TX: ISB Editions, 2012), 4.
marking at the beginning of each exercise provides the player with a range of options to practice. Some of the coordination exercises use a very slow metronome indication (see Fig. 17):

Figure 17. *Hval* Exercise 9

By practicing this slowly, the player has the opportunity to evaluate all the movements of and coordination between the left- and right-hand (see *Hval* exercise 11, p. 18). The simultaneous use of *arco* and *pizzicato* in triple and duple meters is especially tricky.

Fingerings and Bowings

In the booklet the indicated fingering patterns are based on the traditional tuning system of the double bass in fourths (E-A-D-G or F#-B-E-A). The fingerings are dependent on the flexibility and size of the left hand, but also on personal preference and technical ability, and should thus only serve as an informal guide to players learning the pieces. The booklet follows the standard double bass left-hand fingering notation for stopped and harmonic notes (see Fig. 18). For the harmonic notes lightly hover above the string with the indicated left-hand finger instead of pressing down the string.\(^\text{50}\)

Figure 18. Standard double bass left-hand fingering notation for stopped and harmonic notes.

Roman numerals are used to indicate the different strings in use (see Fig. 19).

<table>
<thead>
<tr>
<th>String Indications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>G string (first string)</td>
<td>I</td>
</tr>
<tr>
<td>D string (second string)</td>
<td>II</td>
</tr>
<tr>
<td>A string (third string)</td>
<td>III</td>
</tr>
<tr>
<td>E string (fourth string)</td>
<td>IV</td>
</tr>
</tbody>
</table>

Figure 19. Strings indicators.

For development of the right arm, it is ideal to practice as many different bowing variations possible. Many of the exercises start with the indication of a down (⎫) - and up (⎬) bow on the first note of each measure to suggest that the player should practice them starting both ways, as this promotes a form of practicing in extreme.

Music Notation/Engraving

By comparing the six pieces, it becomes apparent there are some differences in the way that the composers notate their music. Therefore, the notation of each exercise is adapted according to the engraving system used in the corresponding work. Overall, the notation of harmonics is the most diverse. There are two basic types of indications: a small circle at the top of a note or a diamond-shaped note head. This becomes more complicated when harmonics are used within double stops; however, the composers generally do clarify what they intend in the score (see Fig. 20):

Figure 20. Hval Exercise 2, The Muse and Master Exercise 1 and Chorale Exercise 1
The entire first section of *Hval* makes use of microtones; to master this technique it is essential to understand the notation of microtones and how to apply it. In general the label “microtone” refers to any interval smaller than a semitone, but for the purpose of this booklet it is best to understand that a microtone is situated more or less in the middle of one semitone. All microtones are notated with accidentals and measured in quarters. Therefore, two types of microtones can be recognized: a quarter tone and three-quarter tone. Both can be flattened or sharpened. To read microtones the player needs to understand the meaning of the specific accidental notation that indicates the relevant location of the microtones (see Fig. 21):

**Microtonal Indications**

<table>
<thead>
<tr>
<th>Microtonal Indication</th>
<th>( \uparrow )</th>
<th>( \uparrow \uparrow )</th>
<th>( \downarrow )</th>
<th>( \downarrow \downarrow )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter tone sharp</td>
<td>( \uparrow )</td>
<td>( \uparrow \uparrow )</td>
<td>( \downarrow )</td>
<td>( \downarrow \downarrow )</td>
</tr>
<tr>
<td>Regular sharp</td>
<td>( \uparrow \uparrow )</td>
<td>( \uparrow \uparrow \uparrow )</td>
<td>( \downarrow \uparrow )</td>
<td>( \downarrow \uparrow \uparrow )</td>
</tr>
<tr>
<td>Three-quarter tone sharp</td>
<td>( \uparrow \uparrow \uparrow )</td>
<td>( \uparrow \uparrow \uparrow \uparrow )</td>
<td>( \downarrow \uparrow \uparrow )</td>
<td>( \downarrow \uparrow \uparrow \uparrow )</td>
</tr>
<tr>
<td>Quarter tone flat</td>
<td>( \downarrow )</td>
<td>( \downarrow \downarrow )</td>
<td>( \uparrow \downarrow )</td>
<td>( \uparrow \downarrow \downarrow )</td>
</tr>
<tr>
<td>Regular flat</td>
<td>( \downarrow \downarrow )</td>
<td>( \downarrow \downarrow \downarrow )</td>
<td>( \uparrow \downarrow \downarrow )</td>
<td>( \uparrow \downarrow \downarrow \downarrow )</td>
</tr>
<tr>
<td>Three-quarter tone flat</td>
<td>( \downarrow \downarrow \downarrow )</td>
<td>( \downarrow \downarrow \downarrow \downarrow )</td>
<td>( \uparrow \downarrow \downarrow \downarrow )</td>
<td>( \uparrow \downarrow \downarrow \downarrow \downarrow )</td>
</tr>
</tbody>
</table>

Figure 21. *Hval* Exercise 1

For example, E quarter tone sharp is placed in the middle of E and F, and E three-quarter tone sharp is placed in the middle of F and F sharp. The quarter tone flats follow the same principle, except in reverse order.

Symbols

Music symbols are used to indicate a wide variety of sound effects, especially in contemporary music. In this booklet the exercises use symbols as indicated in the piece they are based upon (see Fig. 22):
In both *Hval* and *Slip Gigue* the composers made use of the left-hand pizzicato. It is therefore also used in some of the exercises, and indicated with the “+” symbol. The percussive “fiddle chop” is a type of sound texture or articulation used in the middle section of *Chorale*, and is indicated with an “x” symbol that requires the player to give a strong downward thrust of the bow hair into the strings. In some of the exercises it is also an indication for the player to lightly tap the left upper bout of the double bass with the left-hand or to vocalize the notes rhythmically, as is explained in the text box of each relevant exercise. The “*” symbol is used to explain any additional information from the composer or use of extended technique. For example, in *Chorale* it indicates to pluck the harmonic note and slide the resonating harmonic up a whole step from the nut.\(^{51}\) In *Trombes d’eau* it serves as a comment from the composer that says it is important to play the notes on the specific strings indicated in Roman numerals below the music stave.\(^{52}\)

**Text Notes**

Above every exercise is a concise explanation of the function of the exercise and a few general notes and ideas that can be applied to the exercise. Two symbols are used to indicate the nature of the text (see Fig. 23):

<table>
<thead>
<tr>
<th>Text Note Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>exercise function and description - *</td>
</tr>
<tr>
<td>general notes, hints and ideas - #</td>
</tr>
</tbody>
</table>

---


Exercise 1: Microtones

**HVAL EXERCISES**

based on *HVAL* for solo double bass by EVAN ZIPORYN

EXERCISE 1 - MICROTONES

* Introduce microtones as portrayed in *Hval*
* Use non-microtones as reference points for intonation
* Find suitable consistent fingering patterns
* In No. 1 - 2 the left-hand applies a standard semitone fingering pattern which serves as reference points in finding the microtones
* No. 3 focuses on finding the microtonal spacing of the left-hand fingers around the first note of each second measure

\[ \text{\textit{d} = 60 - 70} \]

1) \[ \text{III simile} \]

a) \[ \text{b) } \]

b) \[ \text{c) } \]

c) \[ \text{d) } \]

\[ \text{e) } \]

f) \[ \text{g) } \]

h) \[ \text{i) } \]

j) \[ \text{k) } \]
Exercise 2: Simplification

EXERCISE 2 - SIMPLIFICATION

* Outline and overview of Recal’s first string crossing section
* Set-up of practical fingering patterns
# Focus on the shape and contour of the phrases and how it affects the weight of the bow arm
# Clearly differentiate between all the different dynamic levels

\[ j = 60 - 70 \]

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

III IV III IV simile

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

\[ p \quad mp \quad p \quad mp \quad p \quad mp \]

\[ pp \quad mp \quad p \quad mp \quad p \quad mp \]
Exercise 3: String Crossings Preparation and Practice

EXERCISE 3 - STRING CROSSINGS PREPARATION AND PRACTICE

* Practice the right-arm motion when playing string crossings, specifically on the lower two strings
* Focus on legato crossings of strings
  # Practice applying different dynamics
  # Experiment with using different bow placements on the string
  # Prepare each string crossing by gradually guiding the bow hair towards the adjacent string ahead of time while playing the note before
  # Differentiate between the appropriate weight of the bow to play a stopped note versus a harmonic note

\( \dot{\text{\textit{j}}} = 80 - 200 \)

1)\[ \text{Diagram of musical notation} \]

2)\[ \text{Diagram of musical notation} \]
Exercise 4: Microtones in Subdivision

EXERCISE 4 - MICROTONES IN SUBDIVISION

- Practice microtones in using different subdivisions of a quarter
- Coordination between left- and right hand when switching between different subdivisions
- Essential to practice with a metronome
- Apply a consistent amount of bow on each separate note or subdivisions using slurs

\[ \text{Tempo: } 30 - 40 \]
Exercise 5: Even Bow Changes

**EXERCISE 5 - EVEN BOW CHANGES**

* Control bow changes within string crossings
# Apply least amount of motion from the right arm, but at the same time also smooth and evenly

\[ \text{\textbf{j} = 50 - 80} \]

1) \begin{align*}
\end{align*}
2) \begin{align*}
\end{align*}
3) \begin{align*}
\end{align*}
4) \begin{align*}
\end{align*}
5) \begin{align*}
\end{align*}
6) \begin{align*}
\end{align*}
7) \begin{align*}
\end{align*}
8) \begin{align*}
\end{align*}
9) \begin{align*}
\end{align*}
10) \begin{align*}
\end{align*}
11) \begin{align*}
\end{align*}
12) \begin{align*}
\end{align*}

Exercise 6: Dynamics

**EXERCISE 6 - DYNAMICS**

* Control of dynamics using a variety of bowings
# Evaluate the amount of bow needed for each crescendo and diminuendo
# Record yourself and listen back to evaluate

\[ \text{\textbf{j} = 50 - 100} \]

\textit{pp cresc.} \begin{align*}
\end{align*} \textit{ff dim.}

\textit{p cresc.} \begin{align*}
\end{align*}

\textit{f dim.} \begin{align*}
\end{align*}

\textit{mp cresc.} \begin{align*}
\end{align*}

\textit{mf dim.} \begin{align*}
\end{align*}

\textit{pp} \begin{align*}
\end{align*}
Exercise 7: Microtone Potpourri

EXERCISE 7 - MICROTONE POTPOURRI

1. Familiarity of microtones in context of its relative string crossing-drone
2. Left-hand placement and spacing
3. Workout practical fingerings
4. Use non-microtones as reference for intonation, especially harmonics
5. At first pause shortly on each microtone to assess the pitch, sound quality and placement of the note on the fingerboard

$\text{\textbf{J = 80 - 100}}$

1)

2)

3)

4)
bowing permutations

1) -------------------

2) -------------------

3) -------------------
Exercise 8: Harmonics

EXERCISE 8 - HARMONICS

* Placement of each harmonic
* Developing player’s understanding and reading of harmonic notations
# In the first four measures the harmonic series are written two octaves lower to help the player hear and memorize the pitches before playing it as harmonics
# Take note that the first note of each series slightly below the normal pitch is
# Search for proper bow placement, weight and speed on each harmonic note
# The upper stave notes are a different type of notation Zipoyin uses for harmonics in the last section of Heal

\[ \begin{align*}
\text{String IV} \\
&\text{(continued)} \\
\text{String III} \\
&\text{(continued)} \\
\text{String II} \\
&\text{(continued)}
\end{align*} \]
Exercise 9: Polyrhythms

EXERCISE 9 - POLYRHYTHMS

* Coordination between simultaneous left-hand pizzicato and bowing patterns
* Maximize ease of playing polyrhythms
* In Section A combine each number (1-3) with a single rhythmic left-hand pizzicato permutation (a-i)
* As a practice play one part (voice) while dictating the other voice with speech or sounds. This is particularly helpful for the triplet rhythms
* Practice rhythmic coordination without instrument by clapping hands or tapping on a hard surface
* Be concise and consistent with the amount of bow used for each note
* Focus on a strong LH pizzicato sound

Section A

1) \( \frac{j = 40 - 60}{10} \)

Right-Hand Arco

2)

Left-Hand Pizz

a)  

b)  

c)  

d)  

e)  

First or second finger pizz.

f)  

g)  

h)  

i)  

j)  

k)  

l)  

m)  

n)  

o)  

p)  

q)  

r)  

s)  

For Review Only
SECTION B

L.H. Pizzicato (first or second finger pizzicato)
Exercise 10: Glissando Drill

EXERCISE 10 - GLISSANDO DRILL

* Practice nodal glissando (uninterrupted glissando between the harmonic series notes as written in Hval mm121 - mm130)
* Coordinate the distances between harmonics
* Control L.H glissando speed

# Memorize the first note of each nodal glissando
# When sliding up and down the string, slide inside of the string on the right side
# Practice the nodal glissandos by placing the first note of each half note pulse with the metronome

# Memorize the speed of the glissando rather than trying to play each single note exactly in time - the effect of the nodal glissando is gestural

\[ \text{\textit{\textbf{d = 50 - 70}}} \]

1) \[ \begin{array}{c}
\text{\textbf{IV simile}}
\end{array} \]
Exercise 11: Nodal Glissandi and Pizzicati Coordination

EXERCISE 11 - NODAL GLISSANDI AND PIZZICATI COORDINATION

* Coordination between left- and right-hand rhythms
* Adjust l.h. speed when glissandi rhythm switches between different subdivisions
# At first, practice left- and right-hand separately. While doing so, dictate or pronounce the other part with speech.
# Make sure the placement of the first and third beat are together with the metronome beat.

\( \frac{\text{\textbullet}}{\text{\textbullet}} = 50 \)

1) arco \( \frac{\text{\textbullet}}{\text{\textbullet}} \)
   I
   \( \text{L.H. pizz.} \)
   II

2) arco \( \frac{\text{\textbullet}}{\text{\textbullet}} \)
   I
   \( \text{L.H. pizz.} \)
   II

3) arco \( \frac{\text{\textbullet}}{\text{\textbullet}} \)
   I
   \( \text{L.H. pizz.} \)
   II
Exercise 12: Double Stop Combinations

EXERCISE 12 - DOUBLE STOP COMBINATIONS

* Introduction of all the double stop variants using either one harmonic and a stopped note or both harmonic tones
* Improve coordination and intonation in the left-hand. The finger pressure on the string differs when playing a harmonic note versus a stopped note
* Search for optimal bow placement on each double stop
* Pitch the stopped note to its relevant harmonic note
* Apply the 6/4 rhythm in the second measure of each section to all the double stops
* The double stops are grouped according to the string on which the harmonic note is placed

\[ \text{\textbf{\textit{\text{\textit{j} = 60 - 80}}} \]

\[ \begin{align*}
\text{I} & \quad \text{\textbf{\textit{a)}}} \\
\text{II} & \quad \text{\textbf{\textit{b)}}} \\
\text{III} & \quad \text{\textbf{\textit{c)}}} \\
\text{IV} & \quad \text{\textbf{\textit{d)}}} \\
\end{align*} \]
Exercise 13: Rhythm Jungle

EXERCISE 13 - RHYTHM JUNGLE

- Development of meter and rhythmic transitions in the melodic line
- Shifting and intonation
- Preparation of string crossings
- Incorporate the fingerings as used within the double stop
- Practice rhythms without the instrument by tapping feet or clapping hands
- Mark all meter changes, clef signatures, repetitive patterns and thematic material
- Work from the end backwards to help find practical bowings

\( j = 60 \)
Exercise 1: Arco vs Pizzicato

THE MUSE AND THE MASTER EXERCISES

based on THE MUSE AND THE MASTER for solo double bass by TOM KNIFIGC

EXERCISE 1 - ARCO VERSUS PIZZICATO

* Practice the timing of the switch between arco and pizzicato
* Practice the proper placement of the bow for the harmonics and right-hand position on the strings for the pizzicati
# Search for optimal ringing of sound for each harmonic and pizzicato note

\[ \text{\textit{The Muse and The Master Exercises}} \]

Exercise 1: Arco vs Pizzicato

THE MUSE AND THE MASTER EXERCISES

based on THE MUSE AND THE MASTER for solo double bass by TOM KNIFIC

EXERCISE 1 - ARCO VERSUS PIZZICATO

* Practice the timing of the switch between arco and pizzicato
* Practice the proper placement of the bow for the harmonics and right-hand position on the strings for the pizzicati
# Search for optimal ringing of sound for each harmonic and pizzicato note

\[ \text{\textit{The Muse and The Master Exercises}} \]
Exercise 2: Articulations and Dynamics

**EXERCISE 2 - ARTICULATION AND DYNAMICS**

* Practice the applied articulation and dynamics written in *The Muse and the Master* on two relevant scales: D-Dorian and F-Aeolian
* This practice approach can also be applied to other parts in the piece (measures 39-44)
* On one pitch find the different bow strokes – legato, detaché and tenuto
* On one pitch find the different dynamic levels - *mp* and *mf*

1) \( \frac{\text{\textbf{\textit{j} = 60 - 70}}}{\text{\textbf{\textit{mf}}}} \)

\[\text{\textbf{\textit{mp}} \text{ \textbf{\textit{mf}} \text{ \textbf{\textit{mp}} \text{ \textbf{\textit{mf}}}}}\]

\[\text{\textbf{\textit{poco accel.}}} \quad \text{\textbf{\textit{poco rit. mp}}}

2) \[\text{\textbf{\textit{mf}}} \quad \text{\textbf{\textit{mp}}} \quad \text{\textbf{\textit{mf}}} \quad \text{\textbf{\textit{mp}}} \quad \text{\textbf{\textit{mf}}}

\[\text{\textbf{\textit{poco accel.}}} \quad \text{\textbf{\textit{poco rit. mp}}}

3) \[\text{\textbf{\textit{mf}}} \quad \text{\textbf{\textit{mp}}} \quad \text{\textbf{\textit{mf}}} \quad \text{\textbf{\textit{mp}}} \quad \text{\textbf{\textit{mf}}}

\[\text{\textbf{\textit{poco accel.}}} \quad \text{\textbf{\textit{poco rit. mp}}}

60
Exercise 3: Pizzicato Rolls

EXERCISE 3 - PIZZICATO ROLLS

* Control right-hand thumb during pizzicato rolls over two or three strings
* Secure left-hand placement and intonation
# Practice the rolls from the bottom to the top
# Experiment with the placement of the right-hand for pizzicato sound quality - for softer and rounder sound closer to the fingerboard and for sharper and more percussive sound closer to the bridge
# Decide beforehand if the bottom or top note of the rolling chords should be on the beat and be consistent with your decision
# Sustain the left-hand finger pressures on the strings for the duration of each double stop or chord note value as it allows for optimal ringing of sound

\[ \text{\textit{pizz}} \]

\[ \text{\textit{III II I II I I simile}} \]

\[ \text{\textit{III III II II}} \]
Exercise 4: Major Sixths

EXERCISE 4 - MAJOR SIXTHS

* Practice intonation
* Develop left-hand muscle memory of the distances between each shift
# Before shifting try to hear or sing the designated pitch ahead of time
# Practice with closed eyes

\[ \text{\textbf{j} = 50 - 60} \]

Exercise 5: Double Stop Pizzicati

* Practice double stop intonations
* Find proper plucking position of the right-hand for optimal sound ringing and quality
# Clearly mark the accents
# Experiment between using two right-hand fingering combinations for the pizzicati double stops:
thumb and index finger versus thumb and middle finger

\[ \text{\textbf{j} = 50 - 80} \]
Exercise 6: Fingering Patterns and Intonation

EXERCISE 6 - FINGERING PATTERNS AND INTONATION

* Practice chromatic intonation
* Develop coordination between left- and right-hand during the shifts
# Play the first seven measures an octave lower to memorize and hear the pitches without any interruption
# Sing the passage
# Experiment with a variety of fingering patterns before making a final decision

1) \( \frac{4}{4} \) = 50 - 70

2) \( \frac{4}{4} \)

3) \( \frac{4}{4} \)
Exercise 7: Rhythm and Articulation

EXERCISE 7 - RHYTHM AND ARTICULATION

* This exercise is divided into four parts. Each part combines a variety of elements to reinforce all the different rhythmic and articulation patterns used in The Master.
* Adjust comfortably between the different meters and articulations used.
* The single measures above the staves are indication of the measures being worked on.
* As a preparatory exercise apply the different bow strokes needed for exercise 7 on a single pitch.
* Practice without an instrument by dictating or clapping the rhythms on a hard surface.

$\frac{3}{4}$

\begin{align*}
1) & \quad \text{measure 1} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
2) & \quad \text{measure 2} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
3) & \quad \text{measure 3} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
4) & \quad \text{measure 4} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
5) & \quad \text{measure 5} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
6) & \quad \text{measure 6} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
7) & \quad \text{measure 7} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
8) & \quad \text{measure 8} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
9) & \quad \text{measure 9} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
10) & \quad \text{measure 10} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
11) & \quad \text{measure 11} \\
\end{align*}

$\frac{3}{4}$

\begin{align*}
12) & \quad \text{measure 12} \\
\end{align*}
Celestial Dance Exercises

Exercise 1: Double Stop Sustains

CELESTIAL DANCE EXERCISES

based on CELESTIAL DANCE for solo double bass by RUFUS REID

EXERCISE 1 - DOUBLE STOP SUSTAINS

* Intonation practice
* Control of dynamics
# Find the best ringing quality of sound for each double stop
# Connect the string crossing from one note of the double stop to the adjacent note as legato as possible
# Experiment with bowings. A different bowing for each double stop can give different character in sound

\[ \text{\( \text{\textit{LET RING}} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]

\[ \text{\( \text{\( \text{\textit{LET RING}} \)} \)} \]
Exercise 2: Intervals

EXERCISE 2 - INTERVALS

* Practice intonation and spacing between the intervals
* Develop left-hand dexterity
# Try to use bridged fingerings 2-1 or 3-2 to play fourth intervals across two adjacent strings
# Double check pitch when using replacement fingerings
# Experiment with the left-hand fingerings patterns for the larger shifts in the eighth-note measures, either on one string or across two strings
# Record and listen back to evaluate

\[ \text{\#} = 40 - 50 \]
Exercise 3: Rhythm and Articulation

EXERCISE 3 - RHYTHM AND ARTICULATION

* Focus attention on rhythmic and articulation elements, by isolating it on a scale
* Comfortably switch between eighth note triplets, quarter note triplets and quadruplets
# Get to the frog of the bow in measures 4-5 and 18 to sustain the bow during the long held notes (if necessary retake the bow after the tied slurs)
# Strive towards finding different sounds qualities from using a variety of articulations

\[ \text{j} = 70 - 90 \]
Exercise 4: Jazz Pizzicato

EXERCISE 4 - JAZZ PIZZICATO

* Develop a jazz style of playing pizzicato
* Intonation practice
* Strengthen left-hand finger articulation
* Use preparatory exercise to experiment with the different options of using right-hand fingers for pizzicato especially for string crossings
* Search for a percussive sharp sound relatively close to the end of the fingerboard
* Use a traditional walking bass pizzicato for the quarter note and the eight notes - using as much flesh from the index finger when executing the pizzicato
* With eight note triplets and sixteenth notes use the fingertips of the first and second fingers of the right-hand to execute the pizzicato
* In the triplet section pizzicato only the first note, then with the left-hand hammer on the second note and pull off the third note.

\[
\begin{align*}
\text{\textbf{Preparatory Exercise}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \quad \text{\( \text{\( } \text{f} \text{\( )} \)}} \\
\end{align*}
\]
40

3)
Exercise 5: Glissando Pizzicati

EXERCISE 5 - GLISSANDO PIZZICATI

* Practice the intonation, spacing and speed of the shifts
# Use vibrato to help the sound to ring
# Rearticulate both the departure and arrival notes
# Essential to practice with metronome to find proper speed for the glissandi
# Gradually speed up the glissando slide faster towards the arrival note for maximum effect of the glissando

\[ \text{crotchet} = 55-65 \]
Exercise 6: Double Voice Pizzicati

EXERCISE 6 - DOUBLE VOICE PIZZICATI

* Improve right-hand control and stability
* Apply all the rhythmic variations to each of the double stops a) through f)
* Develop control and strength of individual right-hand fingers when plucking two independent voices

# Experiment with the position of the right-hand relatively close to the end of the fingerboard
# Try all fingering possibilities of the right-hand for the double voice pizzicati. Most commonly used fingerings are middle and index finger, thumb and index finger and thumb and middle finger

\[ \text{\underline{rhythmic variations}} \]

J = 55-60
Chorale Exercises

Exercise 1: Introductory Double Stops

CHORALE EXERCISES

based on CHORALE for solo double bass by NICHOLAS WALKER

EXERCISE 1 - INTRODUCTORY DOUBLE STOPS

* General overview of the double stops using harmonics in Chorale
* Develop placement and fingerings for the double stops
  # Play the double stops on the indicated strings unless an alternate version is more efficient
  # Use the bowing permutations as practice to adjust the weight of the bow arm
  according to the harmonic note versus the stopped note (harmonics need less weight than stopped notes)
  # Find the balance in bow arm weight to play the harmonic and stopped note simultaneously
  # Adjust the pitch of the stopped note to the harmonic note
  # Apply each bowing permutation to every double stop

\[ \text{bowing permutations} \]

\[ \text{\( \frac{1}{2} \) - 70-80} \]

\[ \text{III} \quad \text{III} \quad \text{II} \quad \text{III} \quad \text{I} \quad \text{III} \quad \text{I} \quad \text{II} \quad \text{III} \]

\[ \text{IV} \quad \text{IV} \quad \text{III} \quad \text{IV} \quad \text{II} \quad \text{III} \quad \text{II} \quad \text{I} \quad \text{III} \]

\[ \text{\( \frac{4}{3} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{4}{3} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]

\[ \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \quad \text{\( \frac{1}{2} \) (b)} \]
Exercise 2: Double Stop Mobility

**EXERCISE 2 - DOUBLE STOP MOBILITY**

* Separate practice of the two double stop voices.
  * Secure placement of the fingerings of the left-hand and for the bow placement and weight of the right arm.
  * Practice the double stops in context of the phrase it originated from - the location of each phrase is indicated above each number.
  # Besides the difference in playing an harmonic note versus a stopped note also be aware of how the weight and speed of the bow might change according to different dynamics used.
  # Lean into the stopped note of the double stop with the weight of the bow.

\[=70-80\]

[VMM 3-4]

I)
Exercise 3: Rhythm

EXERCISE 3 - RHYTHM

* Each section focuses on one rhythmic unit of one to two measures that applies a specific practice method (permutation, subdivision, interchanging slurs, bowing and articulation variation)
* Proper execution of essential characteristic rhythmic patterns used in Chorale

# The first measure of each section is the original version of the rhythmic pattern about to be practiced
# Apply variety of tempos to your practice, especially for the subdivisions of 32nd notes
# Place bow closer to the bridge with fast notes under a slur, especially on the lower two strings
# Keep the character and style in which Chorale is written in mind while practicing these rhythmic sections

1) [MM4]

2) [MM8]

3) [MM54]
Exercise 4: Advanced Double Stops

EXERCISE 4 - ADVANCED DOUBLE STOPS

* Intonation practice
* Develops left-hand stamina and flexibility
* Coordination development between left and right hands
* Slow consistent practice advised
* Double check the pitch on the third of a major third double stop. It generally needs to be lower.

[MM 8]

1) a) b) c) d)

[MM 8]

2) a) b) c) d)

[MM 83]

3) a) b)
Exercise 5: Double-Voiced Pizzicato

EXERCISE 5 - DOUBLE-VOICED PIZZICATO

* Coordinate pizzicato dynamic between one melodic voice and one accompaniment voice
* Developing the placement of the left- and right-hand for each pizzicato voice
# Practice rhythms without the instrument
# After plucking the harmonic notes, lift left hand fingers immediately off the string - this helps the string to ring
# The indicated percussive notation stands for a light tap on the upper shoulder of the bass with the left hand, tapping a foot or dictating sounds by voice
# Practice using the dynamic indications

play arco first time through then repeat using pizzicato
Exercise 1: Double-Voiced Arco

SLIP GIGUE EXERCISES
based on SLIP GIGUE for solo double bass by EVAN PREMO

EXERCISE 1 - DOUBLE-VOICED ARCO

* Intonation practice
* Secure harmonic and rhythmic framework
# Practice with a dance character (gigue) in mind
# Slightly lean more into the melodic notes of the double stops with the weight of the bow

[MM 1-7]
Exercise 2: Double Stop Intonation

EXERCISE 2 - DOUBLE STOP INTONATION

* Secure and refine the intonation
* Be familiar with all the fingering patterns
# Combine rhythmic subdivision a) and b) with each number
# Pitch the moving voice to the note acting as pedal or drone

![Musical notation image]
Exercise 3: Meter and Pulse

EXERCISE 3 - METER AND PULSE

* Develop security in switching between variety of meters
# Use as variety of fingering patterns on scales G Major and E harmonic minor and C Major
# Use accents as guidance to the pulse of each meter
# Keep dynamic consistent
# As preparytory exercise practice without instrument

1)

2)
Exercise 4: Left-Hand Pizzicato

EXERCISE 4 - LEFT-HAND PIZZICATO

* Coordination between left- and right-hand
* Develop intonation in the bowed passages.
# Practice in variety of tempos, especially extreme tempos.
# Pitch the melodic line to the harmonic drone.

1.

2.

3.
Exercise 1: A-string Glissandi

**TROMBES D'EAU EXERCISES**

based on TROMBES D'EAU for solo double bass by FRANÇOIS RABBATH

**EXERCISE 1 - A-string GLISSANDI**

* Intonation
* Speed of glissandi
* Proper bow placement for each double stop chord

# Lean the bow arm weight towards the melodic note in the double stop
# Experiment with a variety of fingerings to use for the glissandi. Decide on a fingering that pertains to the best interest of the glissandi speed

\[ \text{\( J = 60 - 70 \)} \]

\[ \text{\( \begin{array}{cccc}
1 & 2 & 2 & 2 \\
1 & 1 & 1 & 1 \\
1 & 2 & 1 & 2
\end{array} \)} \]

- **a)**

- **b)**

- **c)**

- **d)**

- **e)**

- **f)**

108
Exercise 2: Duple vs Triple

EXERCISE 2 - DUPLE VERSUS TRIPLE

* Focus on the shift between the different meters and rhythms
# Essential to practice with metronome
# Focus on a smooth and sustained connection between the notes

Exercise 3: Double Stop Intervals

EXERCISE 3 - DOUBLE STOP INTERVALS

* Improve intonation
* Strengthen left-hand coordination and stamina
# As prepary exercise also practice one voice at a time using fingerings in context of the double stops
# Sustain the sound throughout each shift

FOR REVIEW ONLY

FOR REVIEW ONLY
Exercise 4: Rhythm and Articulation Workout

EXERCISE 4 - RHYTHM AND ARTICULATION WORKOUT

* Independent control of rhythm, articulation, intonation and sound
* Build coordination between left- and right-hand
# In a slow practice rearticulate the left hand on the fingerboard before the bow stroke to help emphasize the coordination between the two hands
# Articulate notes with the left-hand by applying a hammer-and-pull-off motion with the finger
# Apply percussive vocalisation to x-notehads

1) \( \frac{\dot{\text{b}}}{\ddot{\text{b}}} \) = 80-100

2) \( \frac{\dot{\text{b}}}{\ddot{\text{b}}} \)
Exercise 5: Pattern Build-Up

EXERCISE 5 - PATTERN BUILD-UP

* Coordinate left- and right-hand in shiftless thumbposition scales in combination with virtuoso bowing patterns
# Control the string crossings with minimal movement from the right arm and elbow
# As a slow preparatory practice slightly stop/pause before each bowed note by tapping the upcoming note with the left-hand finger on the fingerboard

1) \( \text{\textcolor{red}{\text{\textbf{I}}}} = 70 - 100 \)

1.1) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]

1.2) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]

1.3) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]

2) \( \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \)

2.1) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]

2.2) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]

2.3) \[ \text{\textcolor{red}{\text{\textbf{I}}}} ^{1} \text{\textcolor{red}{\text{\textbf{I}}}} ^{2} \text{\textcolor{red}{\text{\textbf{I}}}} ^{3} \text{\textcolor{red}{\text{\textbf{I}}}} ^{4} \text{\textcolor{red}{\text{\textbf{I}}}} ^{5} \text{\textcolor{red}{\text{\textbf{I}}}} ^{6} \text{\textcolor{red}{\text{\textbf{I}}}} ^{7} \]
EXERCISE 6 - STRING CROSSINGS AND SAUTILLÉ

1a)  \( \text{simile} \)

1b)

\( \text{sim.} \)

118
Exercise 7: Artificial Harmonics

EXERCISE 7 - ARTIFICIAL HARMONICS

* Improve intonation
* Control the different interval spacings of the artificial harmonics between the thumb and second or third finger of the left-hand
# The size and shape of each individual's hand is different. Use the indicated fingerings and strings only as a guide
It is important to experiment with your own fingerings
# Practice in short intervals. Applying this technique can be tenuous on the left-hand, especially on the thumb
# Adjust the bow placement, weight and speed according to the artificial harmonic's location on the fingerboard

$\frac{\text{d}}{\text{m}} = 50 - 60$

1) $\text{simile}$

2) $\text{simile}$
Conclusion

Ultimately, this booklet serves as an example of how to apply creativity to personal practice, since the best way to sustain focus in your practice will be to invest your own creativeness and instinct. By combining the technical practice with the music, one not only finds a more exciting way to practice, but it can also help the player to cultivate his or her musical ideas. As a performer it is essential to find the meaning and character of the music, especially with regards to newly composed contemporary music to which there is no reference material available.

The quality and standard of double bass technique would not have been where it is today if it wasn’t for the innovation of composers, inspired by good playing, and the eagerness of players to comply to these innovations by performing newly composed material. It is an interdependent relationship, and all the little bits and pieces of advice, knowledge, dedication and passion that is shared insures a continued collaboration and makes for a bright future in double bass repertoire.