05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

AN INVESTIGATION INTO THE BOWING TECHNIQUES IN PERFORMING THE SELECTED WORKS BY J.S. BACH,J.B. VANHAL AND G. BOTTESINI

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

WAN MARINA BINTI MOHD ZAINI

SULTAN IDRIS EDUCATION UNIVERSITY

2024

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

AN INVESTIGATION INTO THE BOWING TECHNIQUES IN PERFORMING THE SELECTED WORKS BY J.S BACH, J.B VANHAL AND G. BOTTESINI

WAN MARINA BINTI MOHD ZAINI

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

DISSERTATION PRESENTED TO QUALIFY FOR A MASTER OF MUSIC (RESEARCH MODE)

FACULTY OF MUSIC AND PERFORMING ARTS
SULTAN IDRIS EDUCATION UNIVERSITY

2024

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

UPSI/IPS-3/BO 32
Pind : 00 m/s: 1/1

UNIVERSITI PENDIDIKAN SULTAN IDRIS
SULTAN IDRIS EDUCATION UNIVERSITY

Sila tanda (√)

Kertas Projek	
Sarjana Penyelidikan	√
Sarjana Penyelidikan dan Kerja Kursus	
Doktor Falsafah	

INSTITUT PENGAJIAN SISWAZAH

PERAKUAN KEASLIAN PENULISAN

Perakuan ini telah dibuat pada ...11...(hari bulan).....Jun..... (bulan) 2024....

i. Perakuan pelajar :

Saya, WAN MARINA BINTI MOHD ZAINI, M 20172002360, FAKULTI MUZIK (SILA NYATAKAN NAMA PELAJAR, NO. MATRIK DAN FAKULTI) dengan ini mengaku bahawa disertasi/tesis yang bertajuk AN INVESTIGATION INTO THE BOWING TECHNIQUES IN PERFORMING THE SELECTED WORKS BY J.S BACH, J.B VANHAL AND G.BOTTESINI adalah hasil kerja saya sendiri. Saya tidak memplagiat dan apa-apa penggunaan mana-mana hasil kerja yang mengandungi hak cipta telah dilakukan secara urusan yang wajar dan bagi maksud yang dibenarkan dan apa-apa petikan, ekstrak, rujukan atau pengeluaran semula daripada atau kepada mana-mana hasil kerja yang mengandungi hak cipta telah dinyatakan dengan sejelasnya dan secukupnya

Tandatangan pelajar

ii. Perakuan Penyelia:

Saya, DR. HERRY RIZAL DJAHWASI (NAMA PENYELIA) dengan ini mengesahkan bahawa hasil kerja pelajar yang bertajuk AN INVESTIGATION INTO THE BOWING TECHNIQUES IN PERFORMING THE SELECTED WORKS BY J.S BACH, J.B VANHAL AND G.BOTTESINI (TAJUK) dihasilkan oleh pelajar seperti nama di atas, dan telah diserahkan kepada Institut Pengajian Siswazah bagi memenuhi sebahagian/sepenuhnya syarat untuk memperoleh Ijazah MASTERS IN MUSIC PERFORMANCE (SILA NYATAKAN NAMA IJAZAH).

DR. HERRY RIZAL DJAHWASI
Senior Lecturer DS 51
Faculty Of Music & Performing Art (FMSP)
Universiti Pendidikan Sultan Idris (UPSI)

25 MAC 2024
Tarikh

Tandatangan Penyelia

05-45068

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

UPSI/IPS-3/BO 31
Pind.: 01 m/s:1/1

UNIVERSITI PENDIDIKAN SULTAN IDRIS

INSTITUT PENGAJIAN SISWAZAH /
INSTITUTE OF GRADUATE STUDIES

BORANG PENGESAHAN PENYERAHAN TESIS/DISERTASI/LAPORAN KERTAS PROJEK
DECLARATION OF THESIS/DISSERTATION/PROJECT PAPER FORM

Tajuk / *Title*: AN INVESTIGATION INTO THE BOWING TECHNIQUES IN PERFORMING THE SELECTED WORKS BY J. S BACH, J.B VANHAL AND G. BOTTESINI

No. Matrik /*Matric's No.*: M 2017 200 2360

Saya / *I* : WAN MARINA BINTI MOHD ZAINI

(Nama pelajar / *Student's Name*)

mengaku membenarkan Tesis/Disertasi/Laporan Kertas Projek (Kedoktoran/Sarjana)* ini disimpan di Universiti Pendidikan Sultan Idris (Perpustakaan Tuanku Bainun) dengan syarat-syarat kegunaan seperti berikut:-
acknowledged that Universiti Pendidikan Sultan Idris (Tuanku Bainun Library) reserves the right as follows:-

1. Tesis/Disertasi/Laporan Kertas Projek ini adalah hak milik UPSI.
   The thesis is the property of Universiti Pendidikan Sultan Idris
2. Perpustakaan Tuanku Bainun dibenarkan membuat salinan untuk tujuan rujukan dan penyelidikan.
   Tuanku Bainun Library has the right to make copies for the purpose of reference and research.
3. Perpustakaan dibenarkan membuat salinan Tesis/Disertasi ini sebagai bahan pertukaran antara Institusi Pengajian Tinggi.
   The Library has the right to make copies of the thesis for academic exchange.
4. Sila tandakan (√) bagi pilihan kategori di bawah */ Please tick (√) for category below:-*

☐	**SULIT/*CONFIDENTIAL***	Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub dalam Akta Rahsia Rasmi 1972. / *Contains confidential information under the Official Secret Act 1972*
☐	**TERHAD/*RESTRICTED***	Mengandungi maklumat terhad yang telah ditentukan oleh organisasi/badan di mana penyelidikan ini dijalankan. / *Contains restircted information as specified by the organization where research was done.*
☑	**TIDAK TERHAD / *OPEN ACCESS***	

(Tandatangan Pelajar/ Signature)

Tarikh: 25 MAC 2024

DR. HERRY RIZAL DJAHWASI
Senior Lecturer DS 51
Faculty Of Music & Performing Art (FMSP)
University Pendidikan Sultan Idris (UPSI)
(Tandatangan Penyelia / *Signature of Supervisor*)
& (Nama & Cop Rasmi / *Name & Official Stamp*)

Catatan: Jika Tesis/Disertasi ini **SULIT @ TERHAD**, sila lampirkan surat daripada pihak berkuasa/organisasi berkenaan dengan menyatakan sekali sebab dan tempoh laporan ini perlu dikelaskan sebagai **SULIT** dan **TERHAD**.

Notes: If the thesis is CONFIDENTAL or RESTRICTED, please attach with the letter from the organization with period and reasons for confidentiality or restriction.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

ACKNOWLEDGMENTS

I would like to thank the following people who have helped me in various ways throughout this research process: My family, who instilled in me the love of music that has led me to this point: My parents, Mohd Zaini and Wan Zainab; my sisters, Azlina, Marlin, Salini and Hazlin; my nieces, Maisarah, Aina, Aliya, Marissa; and my nephew, Aneeq. My main supervisor, Dr. Herry Rizal Djahwasi, for his mentorship in helping and guiding me to ease my journey during this study. Without his presence, this study may have not been possible. Associate Prof Dr. Mohd Nizam as my second supervisor in this research study. My former double bass teachers, Dr.Tido Janssen, Professor Jan Urke and Andrheas Dehner in inspiring and moulding my skills as a double player for who I am today. Lim Jae Sern for his ears and witty criticisms during the preparation for my recital. Jo Yee for her beautiful piano accompaniment. Chia Cheng Kok for his generous gesture in accommodating his beautiful space – The Percussion Store. The hospitality he provided has eased the progress for my double bass recital. Many of my colleagues from the National Symphony Orchestra for their endless support during the preparation of my recital. To name a few, Nur Hazwin for her supportive role as a technical assistant during the double bass recital; Azizi, Ikhman, Hafeez, Izzywan, Zameelah, Sze Chiann, Joey Young and Yit Fei for their words of encouragement and support during the preparation for the double bass recital; Koay Paik Hoon for gladly to play the accompaniment part and sharing her musical ideas during our free time at our work place. Ahmad Aliff and Riny Fadil, for their support in many ways which includes Aliff's musical intelligence in the preparation of the music and as videographer skills they have provided during the double bass recital. UPSI's Faculty of Music for their inspiring educators and students who have indirectly involved in my journey in particular; Dr. Coleen Wong, Prof Dr. Mohd Hassan, Dr. Shafizan Sabri, Dr. Christine, Dr. Tham Horng Kent, Mr. Aiman Ikram, and Ainul Basyirah. I am also indebted to the kind assistance from Puan Athirah and Puan Che Farihan for their generous time and assistance during this study.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

ABSTRACT

Bowing technique is an important aspect of double bass playing because it affects the tone, articulation, and expression of the instrument. The ability to execute virtuosic solo works on a double bass demands a significant amount of practice in addition to a high level of competence. This study investigated the fundamental approach of the right-hand bowing technique in the musical selections of J.S Bach, J.B Vanhal and G. Bottesini which specifically include dynamic delivery and articulation. There are two outcomes of this study; (1) is in the form of the dissertation, while; (2) is in the form of two recitals that breaks down into two performances of Recital I and II. There are three research objective of this study. The first is to identify the bowing technical challenges in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini. The second is to develop bowing techniques in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini. The third is to perform the selected works in the form of Recital I and II. The methodology of this study is using an artistic research paradigm. The investigations of bowing techniques are being analysed through the score analysis and technical analysis perspective in which the finding are reported in the form of textual and video documentation. The findings of this study elaborates on the various bowing techniques on each selected work which reported in the form of artistic creative work dissertation and two recitals.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

KAJIAN TERHADAP TEKNIK GESEKAN DI DALAM MEMPERSEMBAHKAN KARYA TERPILIH OLEH J.S BACH, J.B VANHAL DAN G. BOTTESINI

ABSTRAK

Teknik gesekan adalah aspek yang penting di dalam permainan double bass kerana ia memberi impak pada kualiti ton, artikulasi dan luahan *(expression)* alat muzik ini. Keupayaan untuk mempersembahkan komposisi solo yang sukar memerlukan masa latihan yang banyak di samping kepakaran yang tinggi. Pembelajaran ini bertumpu kepada siasatan tentang teknik gesekan di dalam komposisi J.S Bach, J.B Vanhal dan G.Bottesini di mana pengkhususan kajian adalah termasuk kepada pelaksanaan dinamik dan artikulasi. Terdapat dua bentuk output daripada kajian ini di mana; (1) adalah dalam bentuk disertasi manakala; (2) adalah dalam bentuk persembahan Resital I dan Resital II. Terdapat tiga objektif kajian di dalam pembelajaran ini. Objektif pertama adalah untuk mengenal pasti teknik-teknik gesekan pada tangan kanan yang berkaitan pada komposisi terpilih oleh J.S Bach, J.B Vanhal dan G. Bottesini. Objektif kedua adalah untk menghasilkan teknik gesekan pada komposisi terpilih oleh J.S Bach, J.B Vanhal dan G. Bottesini. Objektif ketiga pula adalah untuk mempersembahkan komposisi terpilih di dalam bentuk Resital I dan II. Metodologi di dalam pembelajaran ini adalah menggunakan Kajian Artistik Paradigma. Pembelajaran untuk penyiasatan teknik gesekan adalah dianalisis melalui skor analisis dan teknikal analisis di mana dapatan kajian di laporkan dalam bentuk penulisan dan video. Dapatan kajian di dalam pembelajaran ini mengolah teknik gesekan pada setiap pilihan komposisi di mana kajian ini dilaporkan dalam bentuk penulisan kajian artistik dan dalam bentuk persembahan dua recital - Resital I dan Resital II.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CONTENTS

DECLARATION OF ORIGINAL WORK ii

DECLARATION OF DISSERTATION iii

ACKNOWLEDGMENTS iv

ABSTRAK v

ABSTRACT v

CONTENTS vii

LIST OF TABLES ix

CHAPTER 1 INTRODUCTION 1

1.0 Introduction 1

1.1 Inspiration/Background of Study 2

1.1.1 Inspiration 2

1.1.2 Background of Study 6

1.2 Problem Statement 17

1.3 Research Objectives 20

1.4 Research Questions 21

1.5 Repertoire Design 21

1.6 The Significance of study 23

1.7 The Limitation of the study 25

CHAPTER 2 LITERATURE AND ARTISTIC REVIEW 27

2.1 Bowing Techniques and Their Significance in Double Bass Performance 27

2.2 The Double Bass Bowing Technical Challenges 32

2.3 Performance Review 38

2.3.1 Bach Cello Suite No 2 38

2.3.2 Vanhal Double Bass Concerto 40

2.3.3 Bottesini Concerto No 2 46

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 3 METHODOLOGY (CONCEPT OF ARTISTICS) 52

3.1 Introduction 52

3.2 Phase of Investigations (Design) and Research Instruments 53

3.3 Data Analysis, Practice investigation 54

3.4 Critical Reflection 56

CHAPTER 4 FINDINGS AND DISCUSSIONS 59

4.0 Introduction 59

4.1 Bach Cello Suite No 2. Transposed to A minor 60

4.1.1 The Bowing Technical Challenges 60

4.1.2 Development of Practice 67

4.2 Vanhal Concerto in D Major 71

4.2.1 The Bowing Technical Analysis 72

4.2.2 Development of Practice 80

4.3 Bottesini Concerto in B minor 82

4.3.1 The Bowing Technical Analysis 83

4.3.2 Development of Practice 94

CHAPTER 5 CONCLUSION/REFLECTIONS/RECOMMENDATIONS 98

5.0 Introduction 98

5.1 Conclusion 99

5.1.1 What are the Bowing Technical Challenges in the Selected Work 100

5.1.2 How to Develop the Bowing Technical Challenges in the Selected work 102

5.2 Reflection 104

5.3 Recommendation 105

REFERENCES 106

APPENDIX

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

LIST OF TABLES

Table No.		Page
1.1	Repertoire Design 1	22
1.2	Repertoire Design 2	22
2.1	Movement I – Grouping of Phrases	41
2.2	Movement II – Grouping of Phrases	43
2.3	Movement III – Grouping of Phases	44
2.4	Movement I – Grouping of Phrases	47
2.5	Movement II - Grouping of Phrases	49
2.6	Movement III – Grouping of Phrases	51
3.1	Research Instruments Used based on the Research Objectives	54
4.1	Grouping of Phrases - Prelude	62
4.2	Grouping of Phrases – Movement I	73
4.3	Grouping of Phrases – Movement II - Adagio	72
4.4	Grouping of Phrases for Movement III – Allegro	73
4.5	Grouping of Phrases Movement I	84
4.6	Grouping of Phrases Movement II	85
4.7	Grouping of Phrases Movement III	85

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

LIST OF FIGURES

Figure No.		Page
2.1	Portato	35
2.2	Spiccato and Staccato Markings	36
2.3	Edicson Ruiz plays Bach Cello Suite No 2.	38
2.4	Bozo Paradzik plays Vanhal Concerto	41
2.5	Edicson Ruiz plays Bottesini Concerto No. 2	46
4.1	Detaché bow stroke	63
4.2	A contrast of indicated pianissimo dynamic marking	64
4.3	Succession of Chords	65
4.4	Bariolage effect	65
4.5	Legato Bow Strokes	68
4.6	Dynamic Contrast	69
4.7	Slurred two notes figures	75
4.8	Staccato articulation	75
4.9	Dynamic range at the end of exposition	76
4.10	Crescendo and Decrescendo Markings Over Short Phrases.	76
4.11	Arpeggios expression	77
4.12	Slur-staccato-slur articulation	86
4.13	Long Moving Legato Line	87
4.14	Accent Passages	87
4.15	Staccato Lines	88

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.16	Accent followed by two alternating strokes	88
4.17	Accented Passage	88
4.18	Accented Passage	89
4.19	Descending Natural Minor Scale	90
4.20	Ascending Arpeggio Figure	90
4.21	Phrasing of the Opening Bottesini Concerto	95
4.22	Portato Technique	96
4.23	Six Combinations of Bowings to Improve Right-hand Agility	98

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 1

INTRODUCTION

1.0 Introduction

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This study focuses on a double bass solo music performance. The discussion is based on the selected pieces which represent the period from Baroque, Classical to Romantic. This study investigates the fundamental approaches of the right-hand bowing techniques in the selected music of J.S Bach, J.B Vanhal and G. Bottesini. The investigations of these techniques are in relating to the right hand bowing techniques focuses on the deliverance of the dynamics and articulations demanded in these selected works. Quoting from the performer's former double bass instructor – Andrheas Dehner "A good double bass sound lies all in the right hand bowing". Moved by this thought this study is inspired to be focusing and investigating of the right hand bowing techniques required in performing these highly technical demand of the selected double bass pieces.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This study integrates two elements as a whole. One is the dissertation and two is a public recital that breaks down into two performances of Recital 1 and 2. This dissertation mainly focuses on the investigation of the right-hand techniques which shall deepen my personal understandings by documenting a detailed analysis using the techniques in the selected pieces. The considerations of the techniques adopted distinctively in each piece are also interrelated by its compositional and stylistically perspectives which I shall also briefly discuss in this research. I understand that good fundamentals of the right hand techniques measures one's technical ability in executing challenging musical meanings and expressions. This research shall contributes into striving for an enjoyment in my double bass recital.

1.1 Inspiration/Background of Study

1.1.1 Inspiration

Referring to my experience as a performer, the double bass seems to be more popular as an accompaniment instrument either to be seen in a jazz band setting or in a string section of a full orchestra. The ability to execute virtuosic solo works on a double bass demands a significant amount of practice in addition to a high level of competence. Even though very few people have been able to reach this level of mastery, there are still talented double bass soloists making their way up through the ranks of today's music landscape. Machado (2005) notes that despite advances in technology, the rarity of double bass soloists persists, and many people view them as an anomaly. This is despite the fact that there are more instruments available today than ever before.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

A common trait that I could perceive as I listened to the professional soloist double bassists such as Gary Karr, Joel Quarrington, Duncan Mctier, Edgar Meyer, Thomas Martin, Edicson Ruiz and many equivalent others, is that each one of them owns an intense projected sound that elevates their names as double bass soloists. This intense projected sound is what I refer to as a good tone quality. This good tone quality is being achieved when the double bass is resonating at its optimum due to the pressure imposed on the strings using the bow played by the right hand. The definition of a good tone quality is a process that one needs to develop to be conceptualized in their minds. As suggested by Moss (2006), "Stringed instrument performers and teachers have long advocated listening to singers, both live and on recordings, to gain an individual concept of sound in the mind of the student". (p.1). Therefore, we understand the conceptualized sound in one's mind may differ. The history of one's experiences and music listening shall shape the definition of a good tone quality in one's mind. Parallel to having a vivid conceptualized sound in one's mind, there are many other technical aspects that contribute to a good deliverance sound generation and good tone quality in one's playing.

The quality of tone produced during a double bass recital contributes a great measure in the quality of a double bass recital. Achieving the concept of a good tone quality and good sound production in all selected repertoire is the main focus of this study. The good sound production is undeniably lies on the work of the right hand as mentioned by Moss (2006, p. 1) "and without the right hand, as string player makes no sound". Many university students and teachers have a lack of understanding in achieving a good sound production. Furthermore, Moss also described:

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

> String teachers and students immerse themselves in the verbiage of "an esoteric art," rather than relying on the inherent logic of the instrument and bow to develop systematically an expressive technique. In the absence of expressive technique, students and ensembles muddle through their repertoire without realizing that "sound is the easiest medium to use in a purely artistic way". (Moss, 2006, p. 5)

This lack of understanding of grasping the techniques required limits one's performing ability. In contrast, as elaborated by Karr (1970) "Mastering your right-hand technique will unquestionably lead you to new worlds of expressiveness and freedom" (p.14).

This research allows me to improve my comprehension skills discussing the problem areas in achieving the techniques required so that the repertoire can be delivered successfully. I aim to perform the complete movements of the selected works composed during the three different periods- from baroque, classical to romantic era. The processes in performing the selected works shall improve my understanding in the historical perspective of the instrument, as well as the understanding of the musical styles of the selected repertoire.

I personally chose the selected repertoire for one common trait, which is the elegance in its melodies for all the three masterpieces. In addition, managing to perform all the challenging musical phrases of each piece in a 60-minutes double bass recital enhances my skills as a double bass player. The Unaccompanied Bach's Cello Suite No.2, Vanhal Concerto in D Major and Bottesini Concerto in B Minor are widely played all over the world by university students and professionals. The rational for choosing the selected repertoire and transcription are as follows:

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.1.1.1 Bach Cello Suite No. 2

During my undergraduate years back in 2009, I used to play only the Prelude of this Cello Suite No. 2 which I personally transcribed to A Minor. This experience has urged me to perform this complete work of The Cello Suite No.2 in A Minor for my masters degree recital. Apart from contributing an alternative transcription of this Suite transposed to A minor for the future UPSI's students who wish to play this piece in the future, this study provides a detailed suggested fingerings and bowings to help students play this particular suite. This suite in addition represents the musical style of during the Baroque period in which the style of music that I wish to enhance my musical knowledge of.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.1.1.2 Vanhal Double Bass Concerto in D Major

The earliest concerto ever written for the double bass was found during the Classical period. The two concertos that has been famously representing the classical era, one from Dittersdorff and another from Vanhal. Between these two, I have decided to work on the Vanhal Concerto. In my opinion it carries a more elegance in its melodies on the double bass as a whole composition and it is a more famous concerto to be played for most professional orchestra auditions.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.1.1.3 Bottesini Concerto in B Minor

Another two famous concertos that represent the romantic era and widely played for orchestral auditions are one, Bottesini Concerto No. 2 and The Koussevitsky Double Bass Concerto No. 2. I have personally chosen the Bottesini Concerto No 2 in B minor to be played in my recital for its likeable melodious cantabile lines. This concerto demonstrates a virtuosic playing which comprises the techniques of the various thumb positions and harmonic in the upper half of the bass. The intense projected sound is the aim for this recital and the studies of the right hand bowing techniques shall in hope to contribute in achieving a good double bass tone.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.1.2 Background of Study

There have been several studies conducted on the repertoire and techniques of the double bass, which have explored the history, development, performance and compositional practices of the instrument's music. Some of these studies include:
"An analysis of Double Bass Vibrato" by James Paul Mick (2012): The paper examines the use of vibrato in double bass performance and provides an in-depth analysis of different vibrato techniques used by double bass players. The analysis provided data to help music educators to create more efficient and consistent ways in teaching vibrato to university students.

Overall, "An Analysis of Double Bass Vibrato" provides a valuable contribution to our understanding of double bass performance practice and technique, particularly

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

in the area of vibrato. The paper is well-researched and provides a detailed analysis of different vibrato techniques, making it a valuable resource for both students and professionals in the field.

One limitation of the study is that it focuses primarily on the Western classical tradition and does not explore vibrato techniques in other musical styles, such as jazz, folk, or popular music. This means that the study may not be applicable to double bass players who specialize in these genres. Another limitation is that the study is based primarily on existing literature and does not involve original empirical research.

Additionally, the study is limited in its scope, focusing primarily on vibrato technique and not exploring other aspects of double bass performance, such as bowing or finger techniques. While vibrato is an important aspect of double bass playing, it is just one component of a larger and more complex performance practice.

The methodology used in "An Analysis of Double Bass Vibrato" by James Paul Mick involves a combination of historical research, theoretical analysis, and practical examples. The historical research component involves a survey of existing literature on the use of vibrato in double bass playing, tracing the evolution of vibrato technique from the Baroque period to the present day. The theoretical analysis component involves an examination of the physical mechanics of vibrato, including the role of the fingers, hand, and arm in producing the vibrato sound. The practical examples component involves the use of musical examples to demonstrate different types of vibrato and their application in various musical contexts. This includes both written

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

music examples and recorded examples of performances by professional double bass players.

"Analysis and Performance Guide for Figment III By Elliot Carter" by Nahee Song (2012): This study discusses Carter's unique compositional tools that potentially highlights double bass as a solo and virtuosic instrument. This research discusses the compositional efforts that Carter took working closely with a professional bass player and a pedagogy. An analysis of Carter's modern approach of performance practice also being explored hereto provide as a valuable reference for players.

This study discusses the historical aspect of the instrument, the earliest recognized virtuoso players; like Sperger, Dittersdorf, Dragonetti and Bottesini, and major earlier composers who have contributed to double bass repertoire before the composer Eliott Carter. In addition, this research also includes a survey of transcribed works for double bass which presents The Bach's Cellos Suite and Schubert's "Arpeggione" Sonata. Apart from the mentioned, the main focus of this study is the presentation of the technical analysis Eliott Carter's compositon *Figment III* for double bass like the harmonic structure being used. Finally, this study also provides the performance guides discussing in briefs on the technical requirements employed for *Figment III.*

This study is significant in documenting the information thorough investigation and analysis of this modern work which may become as an important reference for future performers. However, the limitation of this study only focuses on the compositional analysis and technical analysis of *Figment III.*

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The method employs here based on an analysis of the compositional and technical aspects of the composition. In addition, a close interview was conducted with "Don Palma" who Eliott Carter has dedicated or written this composition for. This interview depicts a closer underlying justifications behind the composition.

"Experts and Excerpts : The application of Giovanni Bottesini's Complete Method for the Contra-Basse to the preparation of orchestral excerpts taken from the works of Giuseppe Verdi" by Alexandra Patricia Giller (2015): This study identifies separate technical and musical considerations in each excerpt of Verdi's, then applying the Bottesini's treatise *Complete Method for the Conte-Basse* to address the technical and musical issues identified.

05-4506832 Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah ptbupsi

This dissertation is significant in contributing to a more informed interpretation of double bass literature. In addition, another varied interpretation of the selected excerpts are being presented in this study.

This study only limits to the works of Giuseppe Verdi's using the treatise from Bottesini's Complete Method for the *Contre-Basse* as a tool to solve the identified musical issues. This may serve as an alternative structure if other works and other treatise to be used.

The methods being employed in this application are; first, to identify the separate technical and musical considerations in each excerpt taken; and then finding sections of the excerpt that may be used to work on each specific issue, or in which Bottesini has mentioned his approach based from his treatise.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

"The Double Bass in Recital : Some Practical Aspects of Solo Technique " by Jay Ronald Grauer (1961): This research discusses some of the practical aspects of solo technique from the literature of the Baroque, Classical, Romantic and Modern periods to provide a basis for a better understanding of the nature capabilities, and limitations of the double bass in recital.

This research also discusses on the distinct characteristic of the physical shape and the comparison of its tunings between a solo and an orchestral bass. This research also informs on the historical timeline of the solo tunings based on geographical locations since the 1750s to present. An informed tunings of double bassists virtuoso like Bottesini and Koussevitzky also been included here to provide a better understanding of the performance characteristics of these solo compositions were originated.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This study aims to provide a more informed analytical commentary on selected solo double bass compositions and transcriptions for public performance. This information is significant to aid a performer in selecting repertoire thus in accommodating to prepare for a double bass recital. This study contributes to a better understanding of the capabilities and limitations of the double bass in recital.

This research limits the discussion and commentary only constraint to the selected repertoire. The commentaries of the selected solo works are pertaining to its historical, analytical and practical characteristics of the pieces.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This dissertation compiles the selected solo repertoire dated from baroque, classical, romantic to modern as one of the methods of research to this study. Then, these solo pieces are studied from its historical perspective, compositional issues and technical aspect ; an analytical commentaries provide an adequate understanding in hope to contribute an insight to the many questions concerning the double bass and its solo literature.

"Favoured Sound Production Exercises of Selected Violin, Viola, Cello, and Double Bass Pedagogues : An Analysis and Adaptation" by Kirk D. Moss (2006) : This study identify and describe favoured sound production exercises of selected contemporary violin, viola, cello, and double bass studio teachers. The study focuses on developing a technique that can be used for school string class in developing the string player's right hand.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The significant of this study could help to lay the groundwork for a resource by collecting the favoured sound production exercises used by selected master pedagogues – these exercises could be used and adapted in the heterogenous string class.

This study does not receive consideration from a certain specified works and literature – e.g works from pedagogues who earned reputation through teaching children, work of string pedagogues who are researchers, work of string pedagogues known as group string teachers, specialized style of bowing or music etudes unless they pertain to specifically identified exercises, books or articles mainly addressing bowing proper, etudes or isolated repertoire and lastly lengthy exercises that consumes an entire class period to implement.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The method used to develop these exercises were developed based on the data of interviews collected with pedagogues, relevant documentary analysis and literature review. These exercises documented were being tested on a sample group of students and a structure follow-up interview were being conducted to understand on the effectiveness of these exercises.

"On Pedagogical Methods For Jazz Double Bass" by Alfred J. Polidoro (2018): This study explores the pedagogical literature for both classical and jazz double bass. It highlights the need for a more comprehensive method for jazz double bass playing and seeks to provide techniques that can be used to improve jazz double bass performance.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Specifically, the study suggests using pivoting, the use of the third finger, and the thumb techniques as advancements to classical techniques. These techniques are then applied to standard jazz melodic and excerpts taken from famous jazz solos. The study aims to limit the discussion of left-hand techniques to selected excerpts from the jazz repertoire.

The study's background highlights the importance of developing pedagogical methods that are specific to jazz double bass playing. While classical techniques are often used as a foundation for jazz double bass playing, there are also unique technical and stylistic demands in jazz that require a more comprehensive approach to pedagogy.

Overall, the background of the study emphasizes the importance of developing effective and comprehensive pedagogical methods for jazz double bass playing, with a

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

focus on techniques that are specific to the demands of jazz performance. The limitation of "On Pedagogical Methods For Jazz Double Bass" by Alfred J. Polidoro (2018) is that it only focuses on the discussion of left-hand techniques on selected excerpts from the jazz repertoire. This means that the study may not provide a comprehensive overview of pedagogical methods for jazz double bass playing and may not be applicable to all jazz performance contexts.

Additionally, the study may not provide a complete picture of the technical and stylistic demands of jazz double bass playing, as it only focuses on left-hand techniques. Other important aspects of jazz double bass playing, such as bowing techniques, rhythm, and improvisation, may not be covered in the study.

05-4506832 Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah ptbupsi

“Performance Practice Issues in the short solo works of Koussevitsky” by Maurice E. Kelly II (2006) : This study discusses on the performance practice issues in the four short solo pieces of double bass composed by Serge Koussevitsky. This study compares the original recordings of a double bass virtuoso – Koussevitsky’s dated back in 1900s to todays’ modern virtuoso’s recording of Gary Karr’s. This comparison provides performers with the tools necessary to produce a historically informed performances of all four pieces.

The background of study discusses the compositional aspects (tempo markings), technical interpretations (portamento and vibrato) as well as the improvisation section (cadenza) being interpreted by both virtuosos. This study only limits the comparison to Gary Karr’s recordings which constraint to a perspective of only one of today’s virtuoso’s prospect.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Finally, the methods being adopted in this study involve involves a combination of historical research and compositional interpretations. The segments chosen were being compared to both virtuosos and the comparisons provide new informed knowledge for future performers who wish to perform these pieces.

"Frederick Zimmermann : Double Bass Performer and Pedagogue" by Jay S. Blumenthal (1983) : This study investigates the life and works of Frederick Zimmermann in order to determine his contribution to the performance and pedagogy of the double bass.

The significance on this dissertation of Zimmermann's life is written in depth to provide: 1) a documentation of Zimmermann's contribution in the area of double bass pedagogy; 2) a rectification on neglected area of study for those interested in the double bass; 3) as a structure for similar studies in different instrumental area.

This research limits : 1) its findings to the first hand of the works of Zimmermann's artistic activites; 2) its interviews on the people who only had direct contact with Zimmermann, e.g., colleagues, students and family members.

This study uses a historical approach as the method for this study. The literature of the history uses the procedures as suggested by Louis Gottschalk which include: 1) the collection of the surviving objects and of the printed, written, and oral materials that may be relevant; 2) the exclusion of those materials or parts that are unauthentic. This study also adopts Roger Phelps guided questions in determining an item's authencity. These procedures helps to establish credibility in the research area of: 1) musically

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

pertinent details of the life of Frederick Zimmermann which include published and unpublished sources of his works and biographies ; 2) examining Zimmermann's approach to teaching and playing the double bass; 3) using the researched information to assess the contributions of Zimmermann to the teaching and playing of the double bass.

"The Art of the Bow – Towards Developing a pedagogy for arco Jazz Bass" Geoffrey Richard Saunders (2017) : This study investigates recorded examples of arco jazz bass performance in an effort to identify technical features that could serve as a starting point in developing a teaching pedagogy for arco jazz bass. Scholar publications relating to jazz bowing, method books on bowing technique and current performance practices employed by jazz bassists are examined. An informed history relating to solo works and solo bass players also discussed here. The techniques of prominent professionals who utilize bow in their music are analysed, pedagogical ideas are presented based on the elements of these performances. Common arco jazz technique are presented and analysed in order to gain a deeper understanding of the technique.

To date, there are not many resources explaining the pedagogical method for arco jazz performance. Jazz bass players without prior orchestral training are rarely introduced to the bow and its expressive possibilities. This study significantly varies the knowledge and literature of arco jazz playing. It contributes as a pedagogy method of arco jazz bass.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This study limits on identifying and analysing selected historical and contemporary jazz arco recordings from 1920's up to date (2017) in order to develop a pedagogy based on that research. It does not review any other genres pertinently to classical.

The method of this research compiles a discography of purposely selected samples that uses the bow in the recordings. From this compilation, researcher selects five notable recordings of arco jazz bass to be transcribed which focuses on contemporary recordings. Unique musical practices and techniques are identified. An informed transcription which include identification of bowings and analysis of techniques used are presented. Lastly, to construct a new method of pedagogy in jazz bowing requires a thorough investigation of existing knowledge and current pedagogies method. Comparing Goldsby's approach as a an existing knowledge to other current pedagogical method structures a development of performance pedagogy for a jazz bass bowing. This serves towards the development of pedagogy and add to the body of knowledge of arco jazz bass playing.

Overall, these studies have contributed to our understanding of the double bass repertoire and its significance within the wider context of classical and jazz music. There is still insufficient informed practices discussing right hand techniques from the style of Baroque to Romantic.

The right hand techniques are the essentials to an artistic performance. This research shall contribute to a better understanding of developing the techniques associated within the musical issues identified. This study also aims to provide a written

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

informative interpretation of the selected pieces for future double bass players who is interested to approach these pieces.

1.2 Problem Statement

The importance of double bass bowing technique has been explored in the previous study which are as follows:

1. Bowing technique is an important aspect of double bass playing because it affects the tone, articulation, and expression of the instrument. A strong and consistent bowing technique is required in a musical performance to produce a clear, resonant, and well-articulated sound, as well as to achieve smooth and expressive phrasing (Benfield, Warren, and James, 1973; Kwiatkowska, 2016)

   (Benfield, Warren, and James Seay Dean Jr. *The art of double bass playing*. Alfred Music, 1973).

   Kwiatkowska, M. (2016). TECHNICAL EXERCISES FOR DOUBLE BASS: A study of selected methods and their effect on the development of performance technique.

2. Zimmerman (2013) in his book which entitled *The Art of Double Bass Playing* offers advice on phrasing, dynamics, and articulation, and he includes a large number of musical examples to illustrate how these concepts are applied in real-world situations. The book's ability to provide clear and succinct explanations of bowing techniques, along with detailed instructions and exercises designed to assist players in the development of their skills, is one of the book's primary strengths. Zimmerman places a strong emphasis on the importance of proper bow technique in order to produce a full and resonant

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

sound, and he offers advice on the speed of the bow, the pressure applied to it, and the contact point.

3. George Vance's (2000) "Progressive Repertoire for the Double Bass: Volume 1" is a highly acclaimed resource for young double bassists wanting to develop a strong foundation in right hand bowing techniques. The book is intended to present a sequence of progressive exercises and musical pieces, allowing players to enhance their skills in a disciplined and progressive manner.

   The emphasis on establishing a solid foundation in bowing technique is one of the book's primary qualities. Vance includes thorough instructions on bowing technique, including bow speed, pressure, and contact point, as well as a variety of exercises and musical pieces meant to assist players in developing their talents in these areas. The book focuses on creating a nuanced and expressive approach to playing the double bass, in addition to providing technical training. Vance provides instruction on phrasing, dynamics, and articulation, as well as several musical examples illustrating their use. Entire, "Progressive Repertoire for the Double Bass: Volume 1-3" is an outstanding resource for double bassists wishing to improve their bowing technique and overall musicianship. Its sequence of graded exercises and musical pieces make it a great resource for musicians of all ability levels, from beginners to advanced players wanting to hone their abilities.

Meanwhile, Bach's Cello Suite No. 2, Bottesini's Concerto in B Minor, and Vanhal's Double Bass Concerto in D Major are the repertoires of this study. Bach's Cello Suite No. 2, Bottesini's Concerto in B Minor, and Vanhal's Double Bass Concerto in D Major are all significant works in the double bass repertoire. There are parallels

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

between these works, yet there are also notable distinctions. Each of these of selected compositions of this study employs virtuoso technique, requiring a high level of technical skill from the performer. Specifically, each of the three compositions contains parts that necessitate accurate bowing technique and a good ear for intonation. Yet, there are substantial contrasts between these works. Previous research as outlined below shows that there is a need to further investigate aspects of bowing technique in playing these works.

1. According Speed, (1997) Bach Suite No. 2 was originally written for a Baroque instrument which was considerably different from the construction of today's cello. This solo piece that is often performed on the double bass utilizing similar stylistic quality to the cello. The notion of the bowing concepts like the bow speed, pressure and contact point can be adapted from the cello's understanding but somehow the execution on the double bass has its own distinctive challenges due to physical construction of the instrument and the weight of the bow itself.
2. According to Lavergne, (2021) Double Bass Concerto in D Major by Vanhal is a spectacular composition for double bass and orchestra written during the classical era. The work is remarkable for its vitality and vigour, as evidenced by its quick, staccato bowing and intense rhythmic parts. Meanwhile, Stowell, (2003) state that two concertos from the classical eras that famously required in the orchestra auditions are 1) J.B Vanhal 2) Dittersdorff concerto. Many professional recordings and masterclasses can be found on these two concertos. But, a written discussion on these two concertos are still yet to be explored.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

3. Bottesini's Concerto in B Minor which was written during the romantic period is a more virtuoso piece that showcases the double bass as a solo instrument accompanied by an orchestra (Vasilistov, 2013). The work is distinguished by its technical difficulties, which include fast scale sections, difficult arpeggios, and virtuosic bowing techniques. In addition to lyrical and expressive moments, the concerto demands an expressive musical meaning from the double bass as a solo instrument which seldomly discussed and written in full dissertations (Ramirez-Castilla, 2007).

Responding to the above statement, there is a need of study in regards to the bowing technical requirements in performing the selected double bass repertoires. This study of the right-hand bowing shall interdependent within its historical and stylistic perspectives; technical aspects and compositional views which yet need to be explored in presenting this technical study of the right hand bowing.

1.3 Research Objectives

The research objectives of this study are as follows:

1. To identify the bowing technical challenges in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini.
2. To develop bowing techniques in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

3. To Perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital.

1.4 Research Questions

The research questions of this study are as follows:

1. What are the bowing technical challenges in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini?
2. How to develop the bowing technical challenges in the selected works by J.S. Bach, J.B. Vanhal, and G.Bottesini?
3. How to perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital?

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.5 Repertoire Design

This submission integrates two elements as a whole. One is the dissertation and two is a public recital that breaks down into two performances of Recital I and II. The first recital was recorded due to the pandemic factor, and the 40-minutes repertoire programme is as follows:

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 1.1

Repertoire design 1

Bach Cello Suite No 2 transposed to A minor for double bass	
I - Prelude	4'35"
II – Allemande	4'05"
III- Courante	2'15"
IV – Sarabande	7'01"
V - Menuetto I & II	3'44"
VI – Gigue	2'53"
Total	**24' 33"**
Vanhal Double Bass Concerto in D Major	
I. Allegro Moderato	*5'06"*
II. Adagio	*6'43'*
III. Allegro	*4'32"*
Total	***16' 21"***
Grand Total Recital I	**38' 54"**

Recital II is a 60 minutes public performance which is a 20 minutes more extension of music from the Recital I and the repertoire programme is as follows :

Table 1.2

Repertoire Design 2

Bach Cello Suite No 2 transposed to A minor for double bass

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 1.2 *(continue)*

I - Prelude		4'35"
II – Allemande		4'05"
III- Courante		2'15"
IV – Sarabande		7'01"
V - Menuetto I & II		3'44"
VI – Gigue		2'53"
	Total	**24' 33"**
Vanhal Double Bass Concerto in D Major		
I. Allegro Moderato		*5'06"*
II. Adagio		*6'43'*
III. Allegro		*4'32"*
	Total	***16' 21"***
Bottesini Concerto for Double Bass in Bminor		
I. Allegro Moderato		7' 07"
II. Andante		5' 30"
III. Allegro		6' 00"
	Total	**18' 37"**
	Grand Total Recital II	**59' 31"**

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.6 The Significance of study

It is important to understand different bowing techniques in order to execute the selected works by J. S. Bach, J. B. Vanhal, and G. Bottesini. There are numerous reasons for this. First, it has the potential to offer a more in-depth comprehension of the technical requirements and expressive elements of these works, which, in turn, can

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

guide double bass players in their interpretation and performance of these selected pieces.

Second, the research has the potential to assist in the identification of recurring difficulties and technical requirements in the chosen works, with a particular emphasis on the application of bowing techniques. The creation of educational approaches for playing the double bass with a particular emphasis on improvement of bowing techniques can be informed by these information.

Lastly, the investigation into the relationship between bowing techniques and musical expressions can make a contribution to the larger field of research in music performance. This will be accomplished by focusing on how the two are related. This can help us gain a better grasp of how various bowing techniques can be applied to the music in order to portray a broad variety of feelings and dispositions, as well as how this ties to the overall interpretation of the piece.

In general, the investigation of bowing techniques in the performance of selected works by J. S. Bach, J. B. Vanhal, and G. Bottesini is significant for improving our understandings of the technical and expressive demands in these pieces, as well as contributing to the development of pedagogical methods for double bass playing and the broader field of research in music performance.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

1.7 The Limitation of the study

The study's reliance on a canon of works by a selected group of composers may reduce its transferability to different musical settings. In other words, the variety of bowing techniques investigated and the general representativeness of the sample may be constrained by the selection of repertoire.

Therefore, these constraints should be considered when trying to extrapolate the study's findings into other situations. Future studies can be expanded by these gaps by examining a broader range of repertoire and investigating additional factors that may influence bowing technique in double bass performance.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi
05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 2

LITERATURE AND ARTISTIC REVIEW

2.1 Bowing Techniques and Their Significance in Double Bass Performance

In the double bass, the term "bowing techniques" refers to the various methods that are used to produce sound by moving the bow across the strings of the instrument. These methods can include variations in the speed, pressure, and direction of the bow stroke, as well as the placement and angle of the bow on the strings. Bowing techniques are used to produce a wide variety of tones and sounds (Billeter & Mores, 2014; Zimmerman, 2013). These techniques can be used to create a wide range of tonal qualities, ranging from smooth and sustained notes to percussive and staccato articulations. They are an important aspect of developing expressive and nuanced performances on the instrument, and they can be used to create a wide range of tonal qualities (Mick, 2012; Vance, 2011). In the past, numerous aspects of double bass bowing techniques, such as the employment of different bow grips, the application of

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

pressure and weight, and the positioning of the bow on the strings, have been investigated in various pieces of written literature (Billeter & Mores, 2014; Zimmerman, 2013). In addition, research has been conducted to study the connection between different bowing techniques and musical expression, with a particular emphasis on the ways in which a broad spectrum of feelings and moods can be communicated through music using a variety of techniques (Mick, 2012; Vance, 2011).

In the term of compositional style, each periodisation has a difference characteristic of bowing. Baroque Period: During the Baroque period, double bassists frequently used fast and intricate bowing patterns, such as bariolage, to achieve virtuosic effects. Bariolage, according to Billeter and Mores (2014), is a technique that involves rapidly alternating between two or more strings, producing a quick and lively effect – this can also be referred to as strings crossing. Other common bowing techniques used during the Baroque period included staccato and legato strokes, as well as pizzicato for a light and delicate effect.

Classical Period: Double bass players used more balanced and harmonious bowing techniques, such as the *arpeggio*. This technique involves playing the notes of a chord in succession, creating a flowing and arpeggiated effect, according to Billeter and Mores (2014). Other common bowing techniques used during the Classical period include *detaché* strokes to produce a clear and articulate sound, as well as *spiccato* to produce a rhythmic and dynamic effect.

Romantic Period: During the Romantic period, double bass players frequently used expressive bowing techniques such as *portamento* and *vibrato* to create a singing

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

and emotional effect. *Portamento*, according to Mick (2012), is a technique that involves sliding the bow smoothly between two notes to create a smooth and flowing effect, whereas vibrato involves oscillating the pitch of a note to create a warm and expressive sound. Other common bowing techniques used during the Romantic period included *tremolo* for a shimmering and intense effect, and *martelé* for a powerful and dramatic effect.

Modern Period: Double bass players have continued to experiment with a wide range of bowing techniques in the modern era, frequently incorporating extended techniques such as *col legno* and *sul ponticello*. According to Zimmerman (2013), *col legno* is a technique that involves striking the strings with the wood of the bow to create a percussive and muted sound, whereas *sul ponticello* is a technique that involves bowing near the bridge of the instrument to produce a metallic and eerie sound. Harmonics, *glissandi*, and multiphonics are other common bowing techniques in modern music.

There are many bowing techniques used in double bass playing, and the objectives of each technique may vary depending on the specific musical context and artistic choices of the performer. The common bowing techniques and their objectives, based on previous literature:

1. *Detaché*: This is a basic bowing technique that involves separate and distinct strokes, with a slight pause between each note. The objective of this technique is to create a clear and articulate sound, and it is commonly used in fast or rhythmically complex passages (Zimmerman, 2013).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

2. *Legato*: This is a bowing technique that involves smooth and connected strokes, without any discernible pause between notes. The objective of this technique is to create a seamless and flowing sound, and it is commonly used in slow or lyrical passages (Billeter & Mores, 2014).
3. *Spiccato*: This is a bowing technique that involves bouncing the bow off the strings, producing a short and percussive sound. The objective of this technique is to create a rhythmic and dynamic effect, and it is commonly used in fast and energetic passages (Vance, 2011). This technique can also be used over indications of *staccato* markings on a music.
4. *Col legno*: This is a bowing technique that involves striking the strings with the wood of the bow, producing a percussive and muted sound. The objective of this technique is to create a special effect or color in the music, and it is commonly used in contemporary or experimental music (Mick, 2012).
5. *Martelé*: This is a bowing technique that involves using a heavy and accented stroke, producing a sharp and punctuated sound. The objective of this technique is to create a powerful and dramatic effect, and it is commonly used in bold and expressive passages (Zimmerman, 2013).
6. *Bariolage*: This is a bowing technique that involves rapidly alternating between two or more strings, creating a quick and lively effect. It was commonly used in the Baroque and Classical eras, and the objective was to create a virtuosic and showy effect (Billeter & Mores, 2014).
7. *Pizzicato*: This is a technique that involves plucking the strings of the instrument with the fingers, rather than using the bow. It was commonly used in the Baroque era, and the objective was to create a light and delicate effect (Zimmerman, 2013).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

8. *Portamento*: This is a bowing technique that involves sliding the bow smoothly between two notes, creating a smooth and flowing effect. It was commonly used in the Romantic era, and the objective was to create a singing and expressive effect (Mick, 2012).
9. *Tremolo*: This is a bowing technique that involves rapidly repeating the same note, creating a shimmering and intense effect. It was commonly used in the Romantic era, and the objective was to create a dramatic and emotional effect (Vance, 2011).
10. *Arpeggio*: This is a bowing technique that involves playing the notes of a chord in succession, creating a flowing and arpeggiated effect. It was commonly used in the Classical era, and the objective was to create a balanced and harmonious effect (Billeter & Mores, 2014). Arpeggio is indicated by succession of notes that forms a broken chord. It involves leaps on the left hand while controlling a consistent weight on the right-hand is important for successful effect.

Bowing techniques in double bass have evolved and changed over time, and different composers and musical eras have emphasized different techniques and styles. Baroque music often featured fast and intricate bowing patterns, such as *bariolage*, while Romantic music often used expressive techniques like portamento and vibrato to create a singing and emotional effect. In addition, different compositions within the same era may have different bowing requirements depending on the style and context of the piece. It is important for double bass players to be familiar with a wide range of bowing techniques and styles in order to effectively interpret and perform different musical works.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

2.2 The Double Bass Bowing Technical Challenges

Identifying double bass bowing technical challenges in a particular work may include factors such as the complexity of the bowing patterns, the use of extended techniques, the tempo and rhythm of the piece, and the musical context and style.

In the term of complexity of bowing patterns, the technical challenges refer to the difficulty of the bowing patterns in a particular work, such as the use of rapid string crossings, complex rhythms, or intricate articulations. According to Billeter and Mores (2014), the complexity of bowing patterns can be influenced by factors such as the composer's style, the period in which the work was written, and the technical demands of the instrument. The complexity of bowing patterns can be influenced by several factors, such as the composer's style, the period in which the work was written, and the technical demands of the instrument.

In Baroque music, double bass players were often required to perform fast and intricate bowing patterns, such as *bariolage*, to create virtuosic effects. In contrast, Classical music often emphasized more balanced and harmonious bowing techniques, such as the *arpeggio*. According to Billeter and Mores (2014), the *arpeggio* is a technique that involves playing the notes of a chord in succession, creating a flowing and arpeggiated effect.

In Romantic music, composers often used expressive bowing techniques to create a singing and emotional effect, such as *portamento* and *vibrato*. Portamento is a technique that involves sliding the bow smoothly between two notes, creating a smooth

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

and flowing effect, while vibrato involves oscillating the pitch of a note to create a warm and expressive sound. These techniques can require a high degree of control and precision from the double bass player, particularly in fast or complex passages.

In modern music, composers have continued to experiment with a wide range of bowing techniques, often incorporating extended techniques such as col legno and sul ponticello. According to Zimmerman (2013), col legno is a technique that involves striking the strings with the wood of the bow, producing a percussive and muted sound, while sul ponticello involves bowing near the bridge of the instrument to create a metallic and eerie sound. Overall, the complexity of bowing patterns in a particular work can pose significant technical challenges for double bass players, requiring a high degree of technical skill, control, and precision. It is important for double bass players to be familiar with a wide range of bowing techniques and styles in order to effectively interpret and perform different musical works.

In the term of extended techniques, the technical challenges refer to the utilization of non-traditional bowing techniques in a particular piece of work, such as sul ponticello, col legno, or harmonics. These techniques are examples of non-traditional bowing techniques. According to Zimmerman (2013), the employment of extended approaches can present the double bass player with distinct technical obstacles. Some examples of these challenges include altering the bowing pressure, angle, or speed to generate the effect that is intended.

One of the most commonly used extended techniques in double bass playing is the use of harmonics. Harmonics are produced by lightly touching a string in a specific

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

place while bowing, which creates a high-pitched, bell-like tone. Harmonics are used to add a unique color to a piece and are often found in contemporary music and experimental genres. It was also written in classical and romantic double bass solo works.

Another extended technique used in double bass playing is the use of sul ponticello. *Sul ponticello* involves bowing the string near the bridge of the instrument to create a metallic and sometimes an eerie sound. This technique is often used to create a sense of tension or to create an atmospheric effect.

Sul tasto on the other hand can be defined as a technique to be bowed over the fingerboard to produce a warm softer sound.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Col legno is another extended technique used in double bass playing. This technique involves striking the strings with the wood of the bow, rather than using the traditional hair. This creates a percussive sound that can be used to create a rhythmic effect.

Double stops is another example of extended technique which can be defined as playing two strings simultaneously by increasing the bow's weight and slowing down the speed of draw across the strings to get a consistent sound on the right hand. This technique was used by double bass composers in the cadenza part of double bass *concerto* since classical period to demonstrate virtuosity (Kepner, 2010).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Portato is another extended technique, which combines the technique of *detache* and *legato* over a single bow. The objective is to play slight breaks in between notes over a single bow to express musical meaning (Hughill, 2004).

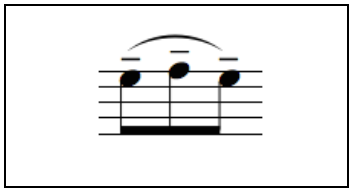


Figure 2.1.Portato

Other extended techniques used in double bass playing include *pizzicato*, which involves plucking the strings with the fingers, and tapping, which involves tapping on the body of the instrument to create a rhythmic effect.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

While extended techniques can add a unique dimension to a player's performance, they require a high level of technical skill and precision to execute effectively. Extended techniques are often used in contemporary and experimental genres, but they can also be found in classical and jazz music. It is important for double bass players to be familiar with a wide range of extended techniques and to practice them regularly in order to effectively incorporate them into their playing.

Staccato, Spiccato and Marcato on the other hand have one common trait which is to play the notes short. *Staccato* is to be played on alternate bow on the string. Indicated with dotted marks above the notes. *Spiccato* is to be played very short but, off the strings. Also defined as bounced bow. Indicated with a small triangle as shown

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

in the next figure. *Marcato*, literally means as “measured notes” notated with a verbal instruction to be played in the string (Hughill, 2004).

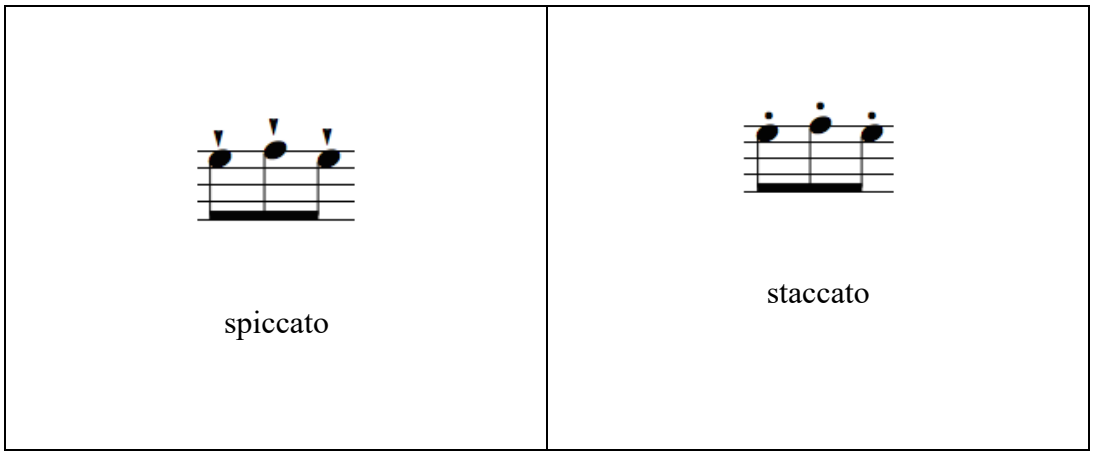


Figure 2.2. Spiccato and Staccato Markings

According to Mick (2012), faster tempos and complex rhythmic patterns can require a higher degree of technical precision and control, while slower tempos may require a greater focus on expressive techniques such as vibrato and portamento. The tempo and rhythmic intricacy of a composition can have a considerable impact on the required bowing methods, and the technical obstacles provided by different tempos and rhythms can vary considerably. The faster tempos and intricate rhythmic patterns may necessitate a greater degree of technical precision and control from the double bassist. To preserve clarity and precision at fast speeds, it is frequently required to employ swift and accurate bowing methods, such as spiccato or sautillé, in these situations. These approaches involve a highly developed sense of bow control as well as an in-depth comprehension of the piece's individual rhythms and musical context.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

In contrast, slower tempos may need a stronger emphasis on expressive techniques such as vibrato and portamento. The vibrato technique oscillates the pitch of a note to produce a warm and expressive tone. As previously stated, *portamento* entails gliding the bow smoothly between two notes to create a flowing effect. These techniques involve a great level of sensitivity and control, as well as an in-depth knowledge of the melodic phrase structure and dynamics of the composition.

In addition to pace and rhythm, the style and genre of the music can influence the bowing methods necessary for a given work. Baroque music frequently calls for a highly articulated and rhythmic approach, but Romantic music may call for a more lyrical and expressive manner.

The technical demands offered by tempo and rhythm in double bass playing need a high level of talent, precision, and musical comprehension. In order to perform varied tempos and rhythms effectively, double bassists must be well-versed in a variety of bowing styles and constantly practice them.

In the term of musical context and style, the technical challenges refer to the broader musical context and style of a particular work, which can influence the bowing technique required. For example, according to Vance (2011), works by Bottesini often require a more virtuosic and flashy style of bowing, while works by Bach may require a more restrained and controlled approach.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

2.3 Performance Review

The followings are the performance review of the selected works :

2.3.1 Bach Cello Suite No 2

The Bach Cello Suite No 2. consists of 6 different movements was composed during the baroque period is an unaccompanied piece - originally composed for cello during the baroque times which was different in construction as compared to today's modern cello. The artistic review of this piece is based on a recording of Edicson Ruiz, dated June 12, 2020 and was uploaded to the following youtube link

https://www.youtube.com/watch?v=BU3RalsC3zs

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

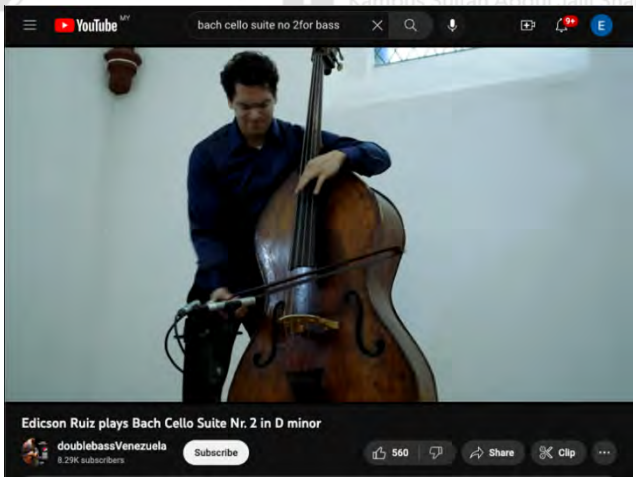


Figure 2.3. Edicson Ruiz plays Bach Cello Suite No 2.

Edicson Ruiz uses a German grip of a baroque bow in this recording. This bow is light allows an airy sound compared to a modern bow. Ruiz's detache' bowings has

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

resonating sound that does not completely silence in the end allows a more connected line, but is not completely legato at the same time. This can be heard in the first measure of the Prelude. Ruiz's emphasis a lot on the down beat of the 16th notes by employing a down bow of these notes, followed by a 3 notes slur on the followings example in measure 5. In measure 6, he uses a separate bow on the 16th notes, but it still sounds connecting that demonstrates a legato technique. Ruiz uses more bow strokes than what is indicated in most transcriptions. He execute this suite with employment of many legato techniques while using many separate strokes. In my opinion, this being done to maintain the sound, volume and strong moving bow strokes for a more connected sound in the Prelude. He maintains this concept throughout the Allemande in Movement II as it is also about the same tempo as the Prelude.

Courante – Movement III is the fastest movement of all the six movements. From measure 12 – 17 it requires technical execution similar to a bariolage technique. This demonstrates a virtuosic effect because it is played rapidly with alternating notes and strings. Ruiz also uses many separate bow strokes to maintain the intensity of the piece.

Sarabande – Movement IV is a very slow movement that showcases many trills and chords throughout. Ruiz prioritizes the deliverance of sound throughout his suite. He employs more bow strokes also in this movement rather than playing many notes over a bow. He maintains the connectiveness of the piece while maintaining the legato technique throughout.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Menuet I&II is written in a ¾ meter showcases legato technique with embellishments of chords throughout the movement. Ruiz plays this menuet a bit slower. It gives a focus on the deliverance of sound. In Menuet II, there is some detache' bow strokes and short staccato that intermittently stops the deliverance of legato technique.

Gigue – Movement VI is a more cheerful composition written in a joyful 3/8 meter. It has many 16th notes that keeps the moving line always rapid while maintaining the connectivity of the piece over legato strokes. Ruiz uses many fast full bow strokes throughout this movement. He also employs the left hand vibrato on the quarter notes on a repeated section. I think this is to show a variety of the performer's musical interpretation. Gigue employs many Bariolage technical demand throughout the movement. It is impressive to witness how Ruiz expresses the legato technique flawlessly throughout these movements and delivers a connecting and moving sound in all the movements of this Suite.

The use of double stops were employed throughout the movements except for movement III- courante. Ruiz, executed this technique flawlessly. The strings vibrate at its optimum as the right pressure were put to execute the double stops.

2.3.2 Vanhal Double Bass Concerto

The Vanhal Double Bass Concerto was written during the classical period. It demonstrates the classical style with many arpeggiated figures, bariolage, detache and

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

spiccato bowing techniques. The following is an artistic review of Bozo Paradzik performance which took place in Marionett Theater and uploaded on Aug 2nd, 2015 and can be found on the following youtube channel links for movement I to III respectively;

https://www.youtube.com/watch?v=s1gbyxx8ELc

https://www.youtube.com/watch?v=NYUuByF5vsg&t=9s

https://www.youtube.com/watch?v=WOMc7QnvzBk&t=26s

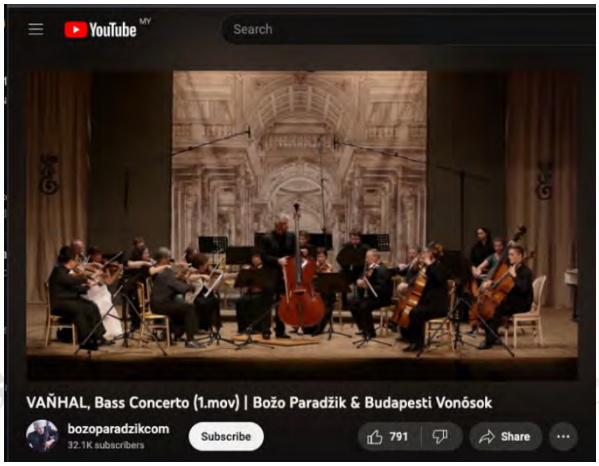


Figure 2.4. Bozo Paradzik plays Vanhal Concerto

The following table groups the big phrases in this movement I respectively :

Table 2.1

Movement I- Grouping of Phrases

I – Allegro Moderato	
Phrase 1	mm 21 – 31
Phrase 2	mm 32 - 39
Phrase 3	mm 39 - 43

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 2.1 *(continue)*

Phrase 4	mm 43 - 56
Phrase 5	mm 63 - 71
Phrase 6	mm 72 - 83
Phrase 7	mm 89 - 105
Phrase 8	mm 106 - 127
Cadenza	mm 130 - end

Bozo Paradzik uses separate bows in the opening phrase at measure 21. This allows him not to retake the bow to start with an up bow at the beat 4 of measure 22. This phrase 1 demonstrates legato and spiccato techniques as demanded in the musical meaning and expression. From measure 29-31 demands a moving line with staccato markings that crescendo, decrescendo, and the notes are repeating itself to another crescendo which is louder than the previous one and the phrase ends with an arpeggio of G Major. Here, Paradzik employs a staccato technique and also a bariolage to demonstrate the rapid strings crossings and the moving melodic line alternating with the open string as indicated in the music.

Phrase 2 and 3 can be combined to make a one larger phrase. Paradzik plays the repeating arpeggiated lines between two strings employing legato and detache' techniques. A musical figure that demands another bariolage technique as played by Paradzik can also be seen from measure 51-52 , measure 73, measure 76-80 and measure 124- 125. Measure 81 – 82 demands an alternation between a legato and spiccato technique while making a crescendo musical meaning. Here, Paradzik uses a left hand shifting on one string which then allows no strings crossing while executing this passage.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Phrase 7 from measure 89-98m Paradzik uses a legato technique to execute the beautiful elegant melodic line. Until Cadenza, Paradzik uses legato, detache'. Arpeggiated and bariolage techniques to execute the musical meaning. At measure 125, Paradzik retake to have a strong down bow in measure 125 beat 4 to allow the phrase ends with a down bow at measure 127. Paradzik plays and ends this movement with a cadenza published by a Hoffmeister edition. The use of double-stops technique can be seen throughout the cadenza.

Movement II – *Adagio* is a lyrical slow movement that employs compositional meanings to execute technical demands like *legato, detache', spiccato, bariolage* and *arpeggios* in this movement. The following is a table of phrases with corresponding measure numbers.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 2.2

Movement II – Grouping of Phrases

II – Adagio	
Phrase 1	mm 15 – 26
Phrase 2	mm 27 – 34
Phrase 3	mm 34 – 38
Phrase 4	mm 40 – 48
Phrase 5	mm 45 – 63
Phrase 6	mm 72 - 79
Phrase 7	mm 79 - 87
Phrase 8	mm 88 - 95
Phrase 9	mm 95 - 104

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The bow control and resistance are also prominent in delivering a good tone in this slow movement. It is evidence to see Paradzik's bow control and planning in executing each musical phrase. He uses full bow to execute forte sound which ends the musical phrase at measure 48. Paradzik uses a spiccato technique that interweaves with a legato as written in the music at measure 29 and 90. Here, Paradzik uses an up and down strokes instead of using a spiccato all in one bow as some times written in other editions. Spiccato to be played on one bow is harder to execute but it also allows a different interpretation and varied visualization. At measure 101 beat 2, Paradzik alternates a legato and two notes spiccato on one bow to execute the inversions of arpeggios as written here. Paradzik ends this movement at Phrase 9 without a cadenza

Movement III – *Allegro* is a rapid fast movement in 2 which demonstrates many arpeggiated figures that demands spiccato and strings crossing. The following is a table to describe its phrases and its corresponding measures.

Table 2.3

Movement III – Grouping of Phrases

III – Allegro	
Phrase 1	mm 20 – 28
Phrase 2	mm 28 - 35
Phrase 3	mm 35 - 57
Phrase 4	mm 59 - 65
Phrase 5	mm 65 - 74
Phrase 6	mm 74 - 94
Phrase 7	mm 95 - 107
Phrase 8	mm 122 - 130

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 2.3 *(continue)*	
Phrase 9	mm 130 - 152
Phrase 10	mm 160 - 174
Phrase 11	mm 175 - 189
Phrase 12	mm 190 - 197
Phrase 13	mm 199 - 206
Phrase 14	mm 206 – 214
Phrase 15	mm 214 – 234
Phrase 16	mm 235 - 240
Phrase 17	mm 241 – 255

Phrase 1, 2, and 3 makes a larger phrase that incorporates all the discussed techniques in movement I and II. The challenging part is this movement is in a much faster tempo. In phrase 1, *Paradzik* chose to stay in a separate bow at measure 27. In my opinion, this separate bow, sustains the tension and the strong energetic bow throughout phrase 1. The arpeggiated figures in measure 35 and 38, Paradzik chose to play starting with an upbow. This avoides a heavy accent on a downbow and on a downbeat thus gives a consistent volume throughout the arpeggiated figures. The arpeggiated figures in measure 96-103, *Paradzik* plays using in the middle of the bow in my opinion to avoid a heavy strokes on the downbeat. On the repeated theme in phrase 8, *Paradzik* maintains the same bow strokes as he did in the opening phrase. *Paradzik* maintains the energetic and strong arpeggiated stokes until the end of phrase 17. He also ends the piece without a cadenza.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

2.3.3 Bottesini Concerto No 2

The Bottesini Concerto No 2. is a standard repertoire that is widely played by double bass players in three different transpositions of A minor, B minor and Cminor. While these three transcriptions are all read in A minor, the tuning of the strings determine which transposition the sounding pitch is at and parallel key for the accompaniment is then required. Here, the artistic review of Edicson Ruiz's performance which was recorded on October 15th 2015 was released on December 21st 2015 can be found at the following link https://www.youtube.com/watch?v=F2ppGk-YqpQ is to be reviewed.

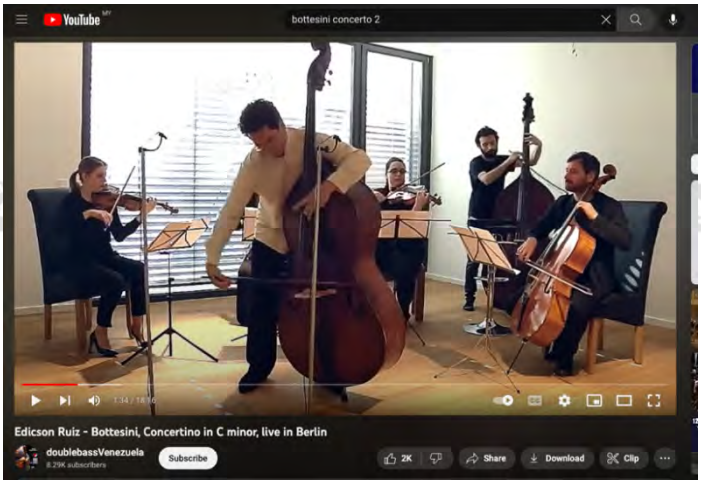


Figure 2.5. Edicson Ruiz plays Bottesini Concerto No. 2

Here, the transposition in C minor already portrays the bright and brilliance sound of which most double bass pieces are lacking. This particular performance is unique as it is in a much slower tempo compared to other recordings of this piece. Due to this slower tempo, Ruiz demonstrates an intense sound with a weighted bow control throughout the movement.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The following table is a grouping of phrases of how I can relate the bowing techniques that Ruiz employs in this Movement I – Moderato.

Table 2.4

Movement I : Grouping of Phrases

I – Moderato	
Phrase 1	mm 5- 12
Phrase 2	mm 13-20
Phrase 3	mm 21 - 38
Phrase 4	mm 40 - 42
Phrase 5	mm 44- 46
Phrase 6	mm 46 - 54
Phrase 7	mm47 - 58
Phrase 8	mm 59 - 61
Phrase 9	mm 62- 63
Phrase 10	mm 64 - 66
Phrase 11	mm 66 - 72
Phrase 12	mm 72 - 80
Phrase 13	mm80-86
Phrase 14	mm 86- 90
Cadenza	mm 94 - 115
Phrase 15	mm 116- 119
Phrase 16	mm 120-126
Phrase 17	mm 126- 129

Ruiz started the music on an up bow which allows a natural crescendo of a long note in the opening phrase of the movement I – *Moderato* from measure 5-12 (phrase 1). *Ruiz* employs a smooth *legato* technique while controlling the fast and slow speed to deliver dynamics and expressions in this famous melodic opening phrase. The theme

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

repeats in measure 13, but this time, *Ruiz* starts the phrase in measure 13 with a down bow. In my justification, this is to show a contra and variation in these phrases although it has the same opening notes.

It is interesting to see how *Ruiz* uses a *detache'* bow on these two written of F#4 to an A4 from measure 18 to 19 in the phrase 2. While many other bass players would play these notes on a separate bow to show separation, *Ruiz* demonstrated a beautiful *detache'* technique showing the separation of these two notes of a written F#4 to an A4 on one down bow stroke.

The opening phrase 3, indicates a *legato* phrasing in the music. Ruiz demonstrates a separate bowing on this opening notes of phrase 3 while employing a smooth legato technique. He executes a beautiful crescendo in measure 22 by controlling the speed of the bow from slow to fast in the first two beats of this measure. Another crescendo expression that was beautifully done by employing a slow to a fast bow stroke was done in measure 24. Until phrase 7, this movement demands a lot of legato technique throughout which was beautifully expressed by Ruiz.

In measure 54-56, a *martelé* bowing technique is required in the music by indicating accents on every note. *Ruiz* demonstrates beautiful accents but not a disconnected phrase which then delivers this *martelé* flawlessly in executing this prominent musical meaning in this phrase 7.

In measure 64, *Ruiz* chose to play these notes using the harmonics technique. The control of the right hand is important to deliver a sweet resonating harmonics by

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

using a moving right hand bowing and to be placed at the right vertical position between the fingerboard and the bridge.

In measure 71, *Ruiz* chose to deliver this descending arpeggio in a legato style while many other performers chose to deliver this passage in a separated spiccato bowing. Up until this phrase, *Ruiz* managed to hold the intensity of the music in a *legato cantabile* style which is the challenging demand of this *concerto*. *Ruiz* ends this movement with a virtuosic spiccato technique which also accelerates in tempo that is written in this music indicated from measure 120-126. The use of double-stops can be seen at the beginning of the *cadenza*.

Movement II – *Andante* is a slow melancholy melodic line that employs detailed planning of the right hand bowing techniques. The orchestral accompaniment demonstrates the *pizzicato* technique as played by the double bass player in the orchestral opening from measure 1-8. The following table is the grouping of the solo phrases to ease the review.

Table 2.5

Movement II – Grouping of Phrases

II – Andante	
Phrase 1	mm 9-16
Phrase 2	mm 18-19
Phrase 3	mm 20-26
Phrase 4	mm 26-37
Phrase 5	mm 38-44
Phrase 6	mm 45-53

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 2.5 *(continue)*	
Phrase 7	Mm 53-59
Phrase 8	mm 59 – 68

Ruiz played phrase 1(mm9-16) in a beautiful legato style while holding the intensity of the line without disconnecting any note in the melody. In measure 26-37, demands an ascending arpeggio line that moves from a low note up until the high registers with strings crossings and the phrase breaks into smaller phrases by ending each arpeggio with written harmonics. Here, Ruiz demonstrates the placing of the bow moving vertically from near the fingerboard up to the bridge to execute this musical meaning. When he needed to sustain the *Forte* dynamic, his right hand stays mostly near the bridge. He utilizes full bowing techniques to demonstrate an intense and moving expression in this movement. He demonstrates a flawless execution in the melodic lines as there is no accents can be heard in his bow changes despite the slow tempo of the music. He chose to end this movement with the A harmonic on the D string.

The third movement – *Allegro* is a fast movement with rapid left hand notes running up and down the fingerboard. An equal agility demands on the right hand bowing so this movement to be executed efficiently. The following table is the grouping of the musical phrases in the following third movement.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 2.6

Movement III – Grouping of Phrases

III - Allegro	
Phrase 1	mm 18-33
Phrase 2	mm 34 - 57
Phrase 3	mm 59 - 69
Phrase 4	mm 71 - 85
Phrase 5	mm 85 - 105
Phrase 6	mm 107 - 112
Phrase 7	mm 113 - 123
Phrase 8	mm 123 - 131
Phrase 9	mm 132 -148
Phrase 10	mm 148 -171
Phrase 11	mm 173 -175
Phrase 12	mm 177 - 191
Phrase 13	mm 193 -195
Phrase 14	mm 197 – 199
Phrase 15	mm 201 - 226
Phrase 16	mm 227 - 231
Phrase 17	mm 234 - 243

Ruiz plays the opening phrase in a staccato style but still maintaining its legato and the connectiveness of the line. Measure 32 – 33 shows an ascending arpeggio line and Ruiz executed this arpeggiated line in a smooth legato and ends with detaché strokes of harmonic notes on measure 33. Ruiz also demonstrates even strokes on the upper bow without losing its intensity and sound in the phrase 2. He ends the phrase 2 in measure 56 with a beautiful martelé technique. Measure 123 – 131 demands

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

arpeggios and harmonics executions while maintaining some connecting legato lines. In measure 171, Ruiz executed a forte note that ends the phrase 10 with an upbow. This is seldom employed because it is harder to maintain a consistent forte dynamic on an upbow, but despite that Ruiz demonstrated this flawlessly. Measure 201-203 demands a strings crossing of harmonics at very high registers. In order to get the notes to speak flawlessly, an accurate placing of the left hand is required alongside with the right bow speed on the right hand in order to execute the notes beautifully. Ruiz maintains an energetic and beautiful legato strokes throughout these three movements and demonstrate a virtuosic performance.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi
05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 3

METHODOLOGY (CONCEPT OF ARTISTICS)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

3.1 Introduction

Methodology in art research refers to the approach, strategies, and techniques used by researchers to investigate artistic practices. It encompasses the methods and procedures used to collect, analyse, and interpret data related to art, including visual and material culture.

I have adopted the *practice-based research* as my creative research approach. I have developed methodologies in addressing the research questions in order to get substantial insights and relevant knowledge in this study of bowing techniques in the selected repertoire of J.S Bach, J.B. Vanhal and G. Bottesini. Object of this study is the score analysis to help identify and develop the bowing technical difficulties of the

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

right-hand that I have encountered along in this study. This discussion is based on my understandings and performing experience in working towards a production of an artifact which is in the form of live performance of double bass recital 1&2.

3.2 Phase of Investigations (Design) and Research Instruments

This study concerns with the technical bowings of the right hand and its articulations in the selected repertoire. The articulations of these techniques are practiced and emerged in a representation of double bass recital 01 and 02. The methodologies being employed here are the tools to serve the mentioned research objectives; (1) To identify the bowing technical challenges in the works of J.S. Bach, J.B. Vanhal, and G.Bottesini; (2) To develop bowing techniques in selected works by J.S. Bach, J.B. Vanhal, and G.Bottesini; (3) To Perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital.

The methodologies to serve these objectives of identifying and developing the bowing techniques are investigated distinctively in the selected compositions using score analysis method and based on my personal self-experience while executing the pieces. The score analysis can be looked at from three different aspects; (1) articulations and expressions as indicated by the respective composer; (2) compositional aspects that involves arpeggios, strings crossings and double-stops; and lastly (3) timbre required to play the phrases which involves dynamic range as indicated in the selected scores. The identified bowing technical challenges are also reflected based on the technical difficulties which I personally encountered while practicing the selected

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

pieces based on my personal audio, video recordings and personal observations and self-experience critical judgement.

The research instrument is a method used to collect data in achieving the purpose of this study. Referring to the research objectives of this study, the table below explains some of the instruments that will be applied throughout this research process.

Table 3.1

Research Instruments Used Based on the Research Objectives

No.	Research Objective	Research instrument
1	To identify the bowing technical challenges in the works of J.S. Bach, J.B. Vanhal, and G.Bottesini.	• Score analysis • Video Analysis
2	To develop bowing techniques in selected works by J.S. Bach, J.B. Vanhal, and G.Bottesini.	• Practice investigation • Critical reflection
3	To Perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital	• Recital 1 • Recital 2

3.3 Data Analysis, Practice investigation

In the context of this investigation, data analysis encompasses not only score analysis but also video analysis. The notation of these selected repertoire can be identified

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

through score analysis. Video analysis is a method that can be used to identify the characteristics of the right-hand bowing techniques. In order to determine the characteristics of the right-hand bowing expressions, as well as the technical and musical abilities involved in the investigation of the right-hand bowing techniques, an analysis of both the video and the score will be conducted.

When attempting to comprehend the practice investigation, according to Djahwasi and Saidon (2022), there are three significant aspects of the practice of investigation in the study of music performance that needs to be clarified. These aspects are as follows: (1) is to incorporate different facets of comprehension and practice into the scores and sounds; (2) purpose is to encourage the performer's intentionality and creativity in their work, and; (3) is to acquire knowledge of music performance on multiple levels.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Textual and non-textual documentation will be used to report on the findings of the investigation that was carried out for the purpose of this study. In the double bass solo performance and the accompanying music, the textual documentation will be presented in the form of a score. In the meantime, the creation of works shall involve with the expressions of non-textual documents through the use of video and audio practice. The creation in the form of double bass recital shall be broken down and explained using the two different types of documentation.

The creative process and design problem-solving can both be applied to musical performance. However, the design problem and creativity are both characterized by ill-definedness and open-endedness. This means that one could not complete a specified

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

design problem of creativity before beginning to conduct a research or experimentation in the field of knowledge or practice. In this scenario, designers are tasked with gradually refining both the problem specifications as well as the design solutions while practicing them simultaneously.

3.4 Critical Reflection

Self-reflection is an essential component of life-long learning and more importantly, a component of the self-regulation cycle (Zimmerman, 1998; Pajares & Urden, 2002). In this study, critical reflections will act as a marker of progress and improvement in both the creative process and performance practice.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Critical reflection is integral to the process of lifelong learning, especially in the context of self-regulated learning as advocated by Zimmerman (1998) and Pajares & Urden (2002). In this study, incorporating critical reflections is essential, as it not only serves as a benchmark for the researcher's progress but also enriches the creative and performance practices.

Expanding on this concept within the study, critical reflections offer a dual benefit. Firstly, they enable the researcher to continuously assess and refine bowing techniques, thus providing a real-time feedback loop. This is particularly crucial when dealing with the intricate nuances of double bass performance, where physicality and musicality intertwine. By reflecting critically on each rehearsal or performance, the

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

researcher can identify specific technical or expressive elements that may need further development or adjustment.

Secondly, critical reflections promote a deeper understanding of the interplay between historical knowledge and contemporary execution. As the researcher encounters challenges in bowing and articulation, reflecting on these experiences can lead to a more informed interpretation of the works, resonating with both historical authenticity and personal artistic voice. This reflective practice, therefore, does not merely record progress; it facilitates an ongoing dialogue between past practices and current artistic expression.

In practical terms, the study could incorporate a reflective journal or recording log where after each practice session or performance, the researcher notes observations, difficulties encountered, and the strategies employed to overcome them. This critical reflection ensures that learning becomes an active, conscious process, aligning with Zimmerman's cyclical phases of self-regulation: forethought, performance, and self-reflection.

Additionally, by sharing these reflections in discussions with mentors, peers, or through publications, the researcher contributes to the collective knowledge base of string pedagogy, offering insights that others may find beneficial. In the realm of performance, reflections help in adapting interpretation to the response of the audience and the acoustics of the performance space, further tailoring the expressive quality of the music.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 4

FINDINGS & DISCUSSIONS

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.0 Introduction

The findings of this chapter are referring to the mentioned research questions; (1) What are the bowing technical challenges in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini?; (2) How to develop the bowing technical challenges in the selected works by J.S. Bach, J.B. Vanhal, and G.Bottesini?; and finally, (3) How to perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital?

The technical and bowing analysis explains on how of the executions of the bowings are done in textual definitions based on the four aspects as described in the score analysis: (1) Phrasing; (2) articulations; (3) dynamics ; and (4) compositional aspects.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.1 Bach Cello Suite No 2. Transposed to A minor

The unaccompanied Bach Cello Suite No.2 transposed to A minor consists of six movements is based on Bernard Salles transcription in G minor. This composition was originally written for an unaccompanied cello. Bach's compositions are known for its progressive harmonic movements and rapid melodic movements making it a challenge to be played on the double bass. Therefore, reading a transcription written for double bass has omitted many more compositional issues because it has been simplified to be playable on the double bass. A selected transposition of this suite showcases on certain range of the instrument – therefore, I have transposed this suite to A minor to showcase the middle range of the instrument while taking the advantage of the many open strings associated in this piece as an anchor for synchronizing its tuning in this selected composition.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The unaccompanied Bach suite deals with many technical difficulties issues like unnatural left-hand fingerings and right-hand bowing technical issues. A detailed suggestions of the left-hand fingerings and right hand bowings are attached in the Appendix A1 for future UPSI students who wish to study and pursue this piece. The discussions of the right hand-bowing technical issues are as follows :

4.1.1 The Bowing Technical Challenges

The bowing technical challenges of the three major works in this study are interpreted using the score analysis and bowing analysis aspects which can be looked at from

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

four smaller perspectives ; (1) phrasing; (2) articulations; (3) dynamics); and (4) compositional aspects.

Phrasing breaks a whole composition into smaller musical units to be easily analysed and conveyed during a performance. It is also a way of how a musician shapes the expressions and musical meanings in a performance. This aspect demands a thorough understanding of a composition so to deliver musical passages that imitates a speech-like sentences. Phrases are marked using slur symbols  in the score.

Articulations are marked in the music scores by editors or composers in the music scores to give an idea to its performers on how a particular note should sound like.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Dynamics marks are indicated in the score using abbreviations in Italian like: *pianissimo, (pp)* very soft; *piano, p* (soft); *mezzo piano, mp* (moderately loud); *forte, f* (loud; literally, strong); *fortissimo, ff* (very loud). Continuous change from one degree of loudness to another may be specified by the terms crescendo (getting louder) and diminuendo or decrescendo (getting softer) or by the symbols  and , respectively.

Compositional aspects that can be looked at in these three major works are the use of arpeggios figure, repetitive notes thus demands a bariolage technique, manipulation of scale used and indication of chords that demands double stops.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The followings are the discussion of the score and bowing analysis relating to the work of J.S Bach Suite No. 2.

4.1.1.1 Score Analysis

Phrasing

Movement I – Prelude is a slow 8th note tempo but consists of many moving 16th notes melodic lines. I view this movement in two big phrases. Each big phrase can still be broken down into smaller phrases as described in the next table :

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.1

Grouping of Phrases for Movement I – Prelude

Phrase 1 (measure 1 – 48)	Phrase 1a (measure 1 – 4)
	Phrase 1b (measure 5 – 12)
	Phrase 1c (measure 13 – 24)
	Phrase 1d (measure 25 – 39)
	Phrase 1e (measure 40 – 41)
	Phrase 1f (measure 42 – 48)

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.1 *(continue)*

Phrase 2 (measure 49 – 63)	Phrase 2a (measure 49- 54)
	Phrase 2b (measure 54 – 59)
	Phrase 2c (measure 60)
	Phrase 2d (measure 61)
	Phrase 2e (measure 62)
	Phrase 2f (measure 63)
	Phrase 2g (measure 64)

Articulations

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Movement I – Prelude consists of indicated articulations that should be carefully looked at like a *detaché* bow stroke. The following figure describes the articulation that can be found in the score at measure 4.



Figure 4.1. Detaché bow stroke

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Dynamics

Movement I – Prelude contains an important dynamic marking that appears at the beginning of phrase 2 as shown in the following figure.

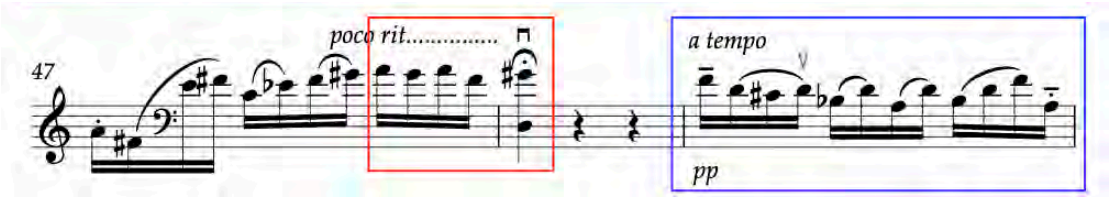


Figure 4.2. A contrast of indicated pianissimo dynamic marking

There is a contrast of dynamic range since the measure before is the end of phrase 1 which understood to end in a *forte* dynamic marking. There is not much indication of dynamic markings in the score from the this era, but it is understood for the performers to employ basic principles of ones understanding to use a crescendo marks at ascending notes while a decrescendo marking at descending notes. My interpretation of prominent notes after studying the score are mostly the top notes, dissonant notes not in the A minor scale and notes that hold 8th notes or longer values deserved to be played louder than other notes.

Compositional Tools

At the end of Movement I – Prelude, Bach wrote successions of chords to end the movement. When transcribed to double bass, some notes were omitted to suit the playability on this instrument as can be seen in the original transcription of Bernard

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Salles. This employment of chords in this composition requires some technical demand referring to as double stops.



Figure 4.3. Succession of Chords

Bach also includes a compositional tool that is adopted throughout this Suite where he writes rapid alternating ascending and descending lines while maintaining its bass notes. This displays a flashy virtuosic effect of strings crossings which requires another technical bowing difficulty known as the *Bariolage* shown in the next figure taken from Movement III – Courante.



Figure 4.4. Bariolage effect

4.1.1.2 Bowing Analysis

Bowing analysis is a textual description of how to execute the mentioned bowing interpretation as identified in the score analysis.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Phrasing

Movement I – Prelude consists of two big phrases as mentioned in Table 4.1. These big phrases can be broken down into smaller phrases as shown in the table. These phrases require a right-hand *legato* bowing technique throughout the movement. This technique demands a smooth and connected strokes, without any discernible pause between notes. In order to execute this technique, the bow resistance and weight needs to be carefully planned out. The crucial demand is during the bow changes where one needs to maintain the bow resistance and weight so to be able to execute this technique smoothly.

Articulations

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Figure 4.2 depicts a *detaché* articulation. This *detaché* stroke appears throughout this movement I – *Prelude to* indicate separate and distinct strokes, with a slight pause between each note. In interpretation of Bach's music, these detaché strokes are not completely silenced between notes, instead - the bow slightly leaves the string to let the note rings just enough before playing the next consecutive note using separate bow.

Dynamics

Figure 4.3 shows a contrast in dynamic markings at the beginning of the Phrase 2. Here, a bowing technique called Sul Tasto could be used which is to play on the fingerboard in order to execute a very soft and warm dynamic marking.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Compositional Tools

Figure 4.4 depicts a succession of chords at the end of the *Prelude*. This compositional tool requires a right-hand bowing technique known as the double stop. Double stop requires to play two notes from two adjacent strings simultaneously. The last chord in measure 63 of this prelude requires to play more than two notes simultaneously. A strong physical left-hand fingerings help to support the execution of the double stops. The right-hand bowing technique requires a balance distribution of weight and consistent bow speed in order to make good sound during a double stop.

Bariolage effect is displayed throughout the Suite where Bach adopted a rapid alternating ascending and descending lines while maintaining its bass notes. This effect requires excellent strings crossings technique (See Figure 4.5).

4.1.2 Development of Practice

Development of practice describes the problem solving or also known as artistic processes as I encounter in this study. The challenges were identified based on my own video and audio practice recordings that I have recorded earlier. The technical difficulties where I have stumbled are discussed here.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.1.2.1 Legato

Legato is a bowing technique that involves smooth and connected strokes, without any discernible pause in between notes. It is very important not to accent during bow changes. The opening of the prelude demands these legato strokes which needs to be maintained throughout the movement.



Figure 4.5. Legato Bow Strokes

The common problem that I encountered in executing this technique is mostly when there are leaps or moving notes involved on the left hand. I tend to put more focus on the left hand and forget to maintain the resistance and weight on the left-hand resulting in inconsistence tone. Therefore, I try to break down this issue, by practicing the left hand and right hand independently first. Singing the left hands notes while focusing on execution of consistent open strings help to improve the right hand deliverance of sound. Another focus is to minimize the silence between bow changes. This can be practiced by understanding the movements of the right hand arm and wrist. (Please refer to Appendix B1).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.1.2.2 Dynamic

Displaying a wide dynamic range in this Suite is another problem area that I had to give attention to. Without being able to execute dynamics, the music shall only sound plain and boring. This excerpt from measure 44-49 taken from the Prelude shows a wide dynamic contrast as displayed in the next figure 4.5. Measure 44 to 48 demands a very loud dynamic because the music is approaching at the end of the big phrase 1 reaching the climax of the *Prelude*. The next phrase at measure 49 starts with an indicated *pp (pianississimo).* The demand of this contra in dynamic range requires a detailed planning in executing it.

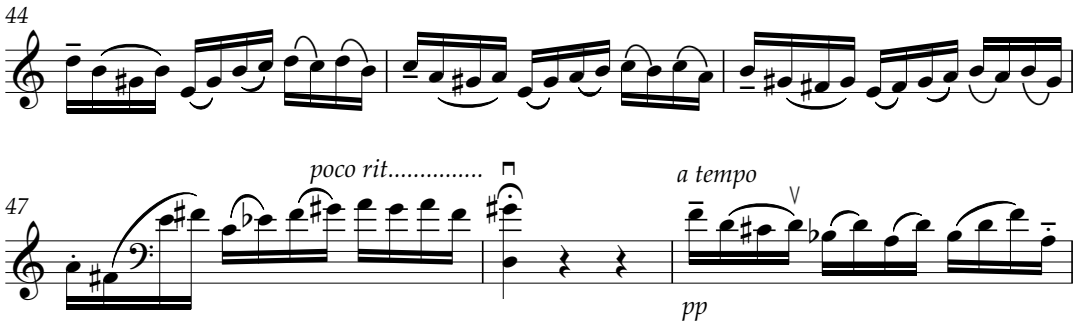


Figure 4.6. Dynamic Contrast

In order to deliver a forte dynamic range, using a full bow and a fast bow speed are the contributing factors. The challenge is to execute the forte dynamic on the single 16th note followed by slurred notes like in the 1st beat of measure 44, 45, 46 and 47. Here, using a full bow on every separate stroke is important to deliver the forte dynamic. An isolated practice in executing a fast down and up bow helps to execute this passage successfully. At measure 48, indicates the end of phrase 1 that

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

ends with a double stop. The challenge here is to arrive at the double stop with a similar loud volume as the measure before. The double stop figure requires a slightly slower bow speed because it demands more weight in executing it. At measure 49 is a pianissimo dynamic range. Here, I would place the bow nearer to the finger board using a Sul Tasto technique, which gives an airy soft dynamic range effect. (Please refer to Appendix B2).

4.1.2.3 Double Stop

This technique is displayed throughout this Suite. One of the prominent challenging figures is taken from the last 5 measures of the Movement I – Prelude (Please refer to Figure 4.3) . To execute these double stops often result in inconsistency of execution. Sometimes, only one string is sounding or unintended louder volume than the other. These problem areas needed extra attention in executing them.

Whenever harmonic note is possible, I take this advantage to use it. It is easier to make sound of a harmonic note, because lesser effort on the left hand is required. I use both down and up bow to play these double stops to deliver a strong loud dynamic range. Planning a suitable contact point of each figure is important. I do not place the bow too close to the bridge, because this will make harder to find the right balance of the bow. The final chord is played simultaneously with a down and up bow stroke. An equal weight needs to be imposed on both of the down and up bow stroke to deliver consistent sounding of the chords (Please refer to Appendix B3).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.1.2.4 Bariolage

Bariolage technique discussed here is taken from the Movement III - *Courante* demands an excellent strings crossings (Please refer to Figure 4.4).

Usually this effect is written in a way to be played in a fast tempo. Usual problem is to be playing this figure in messy strings crossings. Unintended sound of more than one strings occurs as a problem. An equal weight and fast bow speed helps to be able in executing this effect. At the same time, a clear understanding of which strings crossing are involved helps to play *bariolage* figure more effectively. The flexibility of the wrist and arm helps to display an effective flowy sound. (Please refer to Appendix B4)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.2 Vanhal Concerto in D Major

The Vanhal Double Bass Concerto is based on a standard concerto form in the style of early classical period which starts with a virtuosic fast tempo in the first movement followed by a melancholy second movement and ends with a rapid third movement. This concerto requires its performers to demonstrate proficiencies and agility to move both fluently horizontally the fingerboard and vertically across the strings.

This concerto is an edition transcribed by Freidrich Hoffmeister that uses solo strings (solo scordatura) for the double bass. The written part for double bass is being read in C Major, but it is sounding a whole tone higher since it is using the solo strings.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Therefore, the piano accompaniment is written and sounding in D Major to match the double bass tonality. For the purpose of analysis and discussion, the double bass part is discussed in its written key which is in C Major. The suggested left-hand fingerings and right hand bowings are enclosed (Please refer to Appendix B4).

4.2.1 The Bowing Technical Analysis

As explained earlier, again, the bowing technical challenges of this piece are interpreted using score analysis and bowing analysis aspects which can be looked at from four smaller aspects as mentioned; (1) phrasing; (2) articulations; (3) dynamics); and (4) compositional aspects.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.2.1.1 Score Analysis

<u>Phrasing</u>

Vanhal Concerto is a standard concerto form which uses the expositional, development and recapitulation as its standard form. Here, we understand that each movement shall consist of 3 big phrases where these phrases can be grouped into smaller phrases as explained in the following tables.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.2

Grouping of phrases for Movement I – Allegro Moderato

I – Allegro Moderato		
Phrase 1 (Exposition)	Phrase 1a	mm 21 – 31
	Phrase 1b	mm 32 - 39
	Phrase 1c	mm 39 - 43
	Phrase 1d	mm 43 - 56
Phrase 2 (Development)	Phrase 2a	mm 63 - 71
	Phrase 2b	mm 72 - 83
Phrase 3 (Recapitulation)	Phrase 3a	mm 89 - 105
	Phrase 3b	mm 106 - 127
Cadenza		mm 130 - end

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.3

Grouping of Phrases for Movement II - Adagio

II - Adagio		
Phrase 1 (Exposition)	Phrase 1a	mm 15 – 26
	Phrase 1b	mm 27 – 34
	Phrase 1c	mm 34 – 38
Phrase 2 (Development)	Phrase 2a	mm 40 – 48
	Phrase 2b	mm 45 – 63
Phrase 3 (Recapitulation)	Phrase 3a	mm 72 - 79
	Phrase 3b	mm 79 - 87
	Phrase 3c	mm 88 - 95
	Phrase 3d	mm 95 - 104

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.4

Grouping of phrases for Movement III – Allegro

III – Allegro		
Phrase 1	Phrase 1a	mm 20 – 28
Table 4.4 (continues)	Phrase 1b	mm 28 - 35
	Phrase 1c	mm 35 - 57
	Phrase 1d	mm 59 - 65
	Phrase 1e	mm 65 - 74
	Phrase 1f	mm 74 - 94
	Phrase 1g	mm 95 - 107
Phrase 2	Phrase 2a	mm 122 - 130
(Development)	Phrase 2b	mm 130 - 152
Phrase 3	Phrase 3a	mm 160 - 174
	Phrase 3b	mm 175 - 189
(Recapitulation)	Phrase 3c	mm 190 - 197
	Phrase 3d	mm 199 - 206
	Phrase 3e	mm 206 – 214
	Phrase 3f	mm 214 – 234
	Phrase 3g	mm 235 - 240
	Phrase 3h	mm 241 – 255

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Articulations

Vanhal Concerto consists of many slurred notes in groupings of two and staccato articulations that can be seen throughout the movements. This is known to become its articulation demand for this concerto as is shown in the next figures below.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

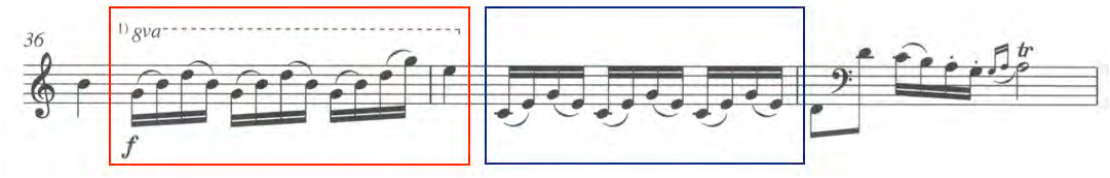


Figure 4.7. Slurred two notes figures

The two-notes slurred figures has become its thematic feature in this concerto. Many similar figures can be seen in the following movements as well.

Another widely written articulation that can be seen from the score analysis perspective is the staccato figures. These staccato figures are often written over ascending or descending scales as shown in the next figure taken from movement I – *Allegro Moderato* (measure 29 – 31).



Figure 4.8. Staccato articulation

Dynamics

Figure 4.9 shows a dynamic indication from *piano (p) to a forte (f)* dynamic over 6 measures long. Measure 55-56 indicates the end of exposition/phrase 1 and therefore, the the forte (f) dynamic is indicated to sustain over 4 measures long from measure

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

53-56. Here, I would choose to end the phrase at its loudest because it indicates the end of a big phrase 1.



Figure 4.9. Dynamic range at the end of exposition

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Another dynamic indication that is widely indicated in the score is in movement II-Adagio, a crescendo and decrescendo marking over short phrases . This indications suggest to its performers to shape these small phrases in order to deliver a better musical meaning since this is a slow movement as shown in the next figure.



Figure 4.10. Crescendo and Decrescendo Markings Over Short Phrases.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Compositional Tools

Vanhal uses interesting compositional tools that demands specific bowing technical to execute these musical meanings. For example, arpeggios figure. There are widely recurring arpeggios figures written throughout movement I, II and movement III. These arpeggio figures demands a certain kind of bowing techniques to execute them depending on which register or range it is written. An example of these similar arpeggios is shown in the next figure taken from movement I.



Figure 4.11. Arpeggios expression

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.2.1.2 Bowing Analysis

The bowing analysis here is to provide textual explanation on the described technical issues as mentioned in the score analysis.

Phrasing

This concerto is using the standard concerto form comprises of exposition, development and recapitulation. These standard from represent big phrases of 1,2 and 3 as described in Table 4.2, Table 4.3 and Table 4.4. It is important to maintain the

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

intensity of the music within each big phrase. This is being done by controlling and maintaining the sound of the right-hand bowing in between the big phrases while having a relaxed and focus breathing so to execute more organic phrases. To maintain a good sound is to maintain a good amount of weight in to the right-hand bow arm.

Articulations

The slurred two notes figures are considered as one of the recurring articulation reappearing throughout the movements. These slurred two notes figures as shown in Figure 4.7 demands equal bow weight on down and up bow strokes. The placement of the contact points can be considered at which registers the left-hand placement of the notes at. When the notes are written at the half of the fingerboard, it is naturally easier to place the bow between the lower middle half up to the middle point of the bow. Where else, when the left-hand note placements are played at the lower registers, it is preferably to place the bow nearer to the frog because at this point the bow has a natural heavier weight which is favourably to respond better.

Staccato indications are written consistently throughout the movements. One of the staccato examples that can be found in the first movement as shown in Figure 4.8 , are indicated to play these notes short. Staccato does not require the bow to be jumping off the strings, but the right amount of bounciness into the strings can still be felt on the right-hand to be executing the staccato figures effectively.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Dynamics

There is quite wide range of dynamic indicated in the score analysis as shown in Figure 4.9. Here, the dynamic range demands a *piano (p)* dynamic crescendo to a *forte (f)* from measure 51-56. These dynamic can be executed while planning how much bow usage is used. At the *piano (p)* dynamic, lesser and lighter bow is used, while at the *forte (f)* dynamic more and heavier bow is used to execute these dynamic demand effectively.

Another *crescendo* and *decrescendo* dynamic demands over small phrases are to be found in movement II – *Adagio* as shown in Figure 4.10. Here, the distribution of arm weight is important in order to execute these dynamic expressions. During the *piano (p)* dynamic crescendo to a forte (f), a lighter weight can be imposed on a fast moving bow to have a flowy effect of the crescendo expression. A heavier arm weight can also be gradually imposed to create a crescendo expression. Vice versa, a decrescendo expression demands a gradual lift of arm weight from the fast moving bow to create a flowy decrescendo expression.

Compositional Tools

Vanhal employs many of arpeggios figures throughout the three movements. These arpeggios demand a certain kind of bowing techniques. For example, referring to Figure 4.11, measure 36 shows a written arpeggio that demands a harmonic technique on both the left-hand and right-arm in order to execute these written notes. To play

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

such figure demands fast moving right-hand bows while placing the contact point nearer to the bridge so to deliver a clear quality of harmonics.

Interestingly, the arpeggio figure in measure 37 (refer to Figure 4.11), demands a bariolage technique which involves rapid strings crossing. Here, all the factors like the right placement of contact point, imposing right amount of right-arm into the bow and choosing the right speed of the bow influence the effectiveness of the execution of this technique.

4.2.2 Development of Practice

The followings are the difficult bowing techniques I encountered as I work on this piece.

4.2.2.1 Staccato

Staccato technique is to play the notes short but still in the string. This means that the bow does not jump off the strings. Referring to Figure 4.8, this passage needs an isolation of practice so to execute this passage effectively. Isolation of practice was to carry out this staccato technique separately. Or else, the transition into this technique would not have come out successfully. The problem here is to choose the right values of shortness of the notes. Not to be too short resulting the bow to jump off the strings

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

but not too long which is not enough to define this as staccato articulation (Please refer to Appendix B5).

4.2.2.2 Dynamic Range

A wide dynamic range is demanded throughout this piece. This technique has been explained earlier (Please refer to Appendix B2), and this similar understanding can be applied for similar situations throughout this concerto.

A crescendo - decrescendo dynamic range is another execution that needed to be given equal attention to as I progress in my practice (Please refer to Figure 4.10). Without a careful planning, an effective deliverance of musical meaning is difficult to achieve. I tend to feel that I was doing this expression, but when I referred to my personal recordings I found that often it was not executing effectively. This expression demands a fast moving bow but begins with a *piano (p)* dynamic. This is harder to achieve, because with a *piano (p)* dynamic, is always natural to use less bow. But, in this situation, I would start with a lighter moving bow into a heavier moving bow to execute this expression of *crescendo – decrescendo* dynamic range (Please refer to Appendix B6).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.2.2.3 Arpeggios

Arpeggios are employed throughout this music. Ironically, not all arpeggios use a similar right-hand bowing technique. Referring to the example of Figure 4.11 , this arpeggio figure demands different contact point placement. In measure 36, this arpeggio figure demands a harmonic bowing technique. I find that the placement of the contact point nearer to the bridge helps to project this musical expression more clearly. If the contact point were to be placed upper nearer to the fingerboard, the harmonics won't be played successfully. On the other hand, another arpeggio figure in the next measure 37 prefers a contact point slightly up nearer to the fingerboard to have a better projection of sound (Please refer to Appendix B7).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.3 Bottesini Concerto in B minor

The Concerto No 2. is described as "one of the best knowns of all Bottesini's works and is far more compact, musically speaking, than the first" (Slatford, 1982, editor's notes). Martin (1994) reiterated "Virtuosity serves musical ends throughout and the *Concertino* is considered by many to be his finest composition for double bass. The three movements are marked *Allegro Moderato, Andante* and *Allegro"*(p. 3).

There is no evidence when the concerto was written as Trumpf (1985) explained that the editions available today are the urtext editions based on autographs deposited in the Palatina Library situated in Parma, Italy where Bottesini used to serve as a director at the conservatorium until he passed away in 1889 (Trumpf, 1985).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

However, the Concertino in C minor is also known as the Concerto No. 2 for Double Bass and Orchestra both are similar compositions except they are in different keys. I have chosen the edited version by Klaus Trumpf for this study which is written in B minor but to be read in A minor - since the double bass employs solo tuning for all the works in this study.

The suggested left-hand fingerings and right hand bowings are enclosed (Please refer to Appendix A3).

4.3.1 The Bowing Technical Analysis

The followings are the bowing technical analysis that has been studied from the perspectives of score and bowing analysis.

4.3.1.1 Score Analysis

Phrasing

The form of a standard romantic concerto retains some of its general features of from the classical era. *Bottesini* did not follow the traditional Sonata form for its movements. Instead, this concerto has a more of free form structure typical of many concertos from the Romantic era. The music during this era contains more longer lyrical and dramatic passages as compared to the concerto from the classical era.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

I have grouped the phrases of Movement I using the standard Sonata form consists of three main sections exposition-development-recapitulation. The Movement II and III contains elements of various musical forms and thematic variations. These movements are not adhere to a strict sonata form. Therefore, I have grouped these phrases based on different themes and variations.

Table 4.5

Grouping of phrases for Movement I – Moderato

I – *Moderato*		
Phrase 1 (Exposition)	Phrase 1a	mm 5- 12
	Phrase 1b	mm 13-20
	Phrase 1c	mm 21 - 38
Phrase 2 (Development)	Phrase 2a	mm 40 - 42
	Phrase 2b	mm 44- 46
	Phrase 2c	mm 46 - 54
	Phrase 2d	mm47 - 58
Phrase 3 (Recapitulation)	Phrase 3a	mm 59 - 61
	Phrase 3b	mm 62- 63
	Phrase 3c	mm 64 - 66
	Phrase 3d	mm 66 - 72
	Phrase 3e	mm 72 - 80
	Phrase 3f	mm80-83
	Phrase 3g	mm 84 - 85
	Phrase 3h	mm 86- 90
Cadenza		mm 94 - 115
Phrase 4 (Recapitulation)	Phrase 4a	mm 116- 119
	Phrase 4b	mm 120-125
	Phrase 4c	mm 126- 129

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.6

Grouping of phrases for Movement II - Andate

II – Andante		
Phrase 1		mm 9-16
Phrase 2	Phrase 2a	mm 18-19
	Phrase 2b	mm 20-25
	Phrase 2c	mm 26-30
	Phrase 2d	mm 31 - 33
	Phrase 2c	mm 34 - 37
Phrase 3		mm 38-44
Phrase 4	Phrase 4a	mm 45-53
	Phrase 4b	Mm 53-59
	Phrase 4c	mm 59 – 68

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.7

Grouping of Phrases for movement III - Allegro

III - Allegro		
Phrase 1		mm 18-33
Phrase 2		mm 34 - 57
Phrase 3		mm 59 - 61
Phrase 4	Phrase 4a	mm 63 – 65
	Phrase 4b	mm 67 - 69
	Phrase 4c	mm 71- 73
Phrase 5	Phrase 5a	mm 73 – 77
	Phrase 5b	mm 77 - 80
	Phrase 5c	mm 81 - 85
	Phrase 5d	mm 85 - 85
	Phrase 5e	mm 85 - 105

(continue)

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Table 4.7 *(continue)*

Phrase 6	Phrase 6a	mm 107 - 112
	Phrase 6b	mm 113 - 123
	Phrase 6c	mm 123 - 131
Phrase 7	Phrase 7a	mm 132 -148
	Phrase 7b	mm 148 -171
Phrase 8	Phrase 8a	mm 173 -175
	Phrase 8b	mm 177 - 191
Phrase 9	Phrase 9a	mm 193 -195
	Phrase 9b	mm 197 – 199
	Phrase 9c	mm 201 – 203
Phrase 10	Phrase 10a	mm 201 – 212
	Phrase 10b	mm 213 – 218
	Phrase 10c	mm 219 – 226
	Phrase 10d	mm 227 - 230
	Phrase 10e	mm 231 – End

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Articulations

A reappearing articulation that can be seen throughout the movement I – *Allegro moderato* is a slur-staccato-slur figure as shown in the next figure taken from the opening measure 5. This articulation reappears in different variations throughout movement I.



Figure 4.12. Slur-staccato-slur articulation

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This concerto is known for its lyrical passages and is composed in a singing style mimicking an opera singer. Therefore, it is common to see long moving lines in a legato style as displayed in the next figure.

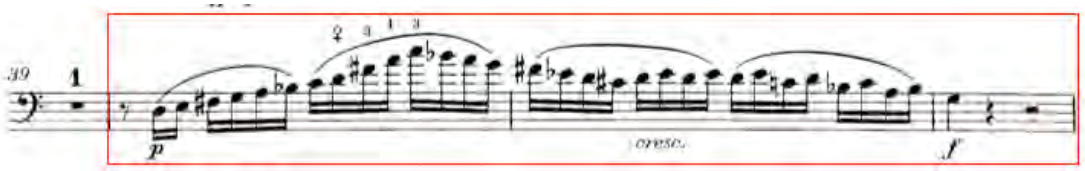


Figure 4.13. Long Moving Legato Line

Another distinct articulation that shall require bowing technical analysis involves accent passages. This was written in a way to display robustness and majestic characteristic. This indication is as displayed in the next figure taken from measure 54 – 56 from movement – I.



Figure 4.14. Accent Passages

Another technical demand that is indicated in the score analysis, requires rapid staccato figures. This figure, appears at the end of development section before is one of the main theme that was written in this music as shown in the next figure. These staccato figures appears in phrase 3g and 4f as indicated in Table 4.5 above.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



Figure 4.15. Staccato lines

Another distinct articulation that has been written is described in the next figure shows an accent followed by two separate notes figure. This figure is recognized as one of the articulation characteristic demanded in this music.



Figure 4.16. Accent followed by two alternating strokes

Finally, Bottesini also wrote accented passages at the end of development in Movement I and Movement III. This accented passages demands careful attention and analysis in executing it. One of the prominent accented passages is as shown below



Figure 4.17. Accented Passage

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Dynamics

There are plenty of dynamic demands in the works of these movements. These dynamic markings are imitating the singing style and to deliver a dramatic musical expressions. These similar dynamics indication has been discussed in the previous work of Vanhal's.

In additional to the previous discussion, based on the score analysis in the work of Bottesini's, there is one distinct dynamic demand which was not found in the previous discussed repertoire. For example, a *sforzando (sf)* dynamic marking is indicated in a few places of the movement I and movement III as display in the next following figure.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



Figure 4.18. Accented Passage

Compositional Tools

Investigating from this perspective, an interesting descending A natural minor scale that has intervallic structure in thirds became one of the challenging technical demand of this piece. This figure recurs in measure 120 – 123 of movement I.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



Figure 4.19. Descending Natural Minor Scale With Leaps in Thirds

Interestingly, arpeggio figures are also a challenge based on the score analysis. Variations of arpeggio figures demand distinctively different technical demand of the right-hand bowing. This challenging musical expression is found to be in the slow tempo of movement II. This ascending arpeggio figures that are written on upper registers which involve alternation between closed notes and harmonics.



Figure 4.20. Ascending Arpeggio Figures

4.3.1.2 Bowing Analysis

The bowing analysis here is to provide textual explanation on the described technical issues as mentioned in the score analysis.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Phrasing

The phrasings in Bottesini Concerto No 2, were written in long lyrical musical phrases. These phrasings require the most intensity and energy in executing these passages. The group of phrases allows a performer to understand and deliver the shape of the phrases as described in Table 4.5 , Table 4.6 and Table 4.7.

These phrases demand high stamina, flexibility and strong right-hand bowings. An isolated practice just concentrating on various right-hand bowing exercises like long tones, detaché strokes, fast alternating 16th notes and slurred bowings help to build the flexibility and great stamina in playing this big work of Bottesini's Concerto.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Articulations

A slur-staccato-slur articulation as described in Figure 4.12, is a recurring motive that can be seen throughout the music. This opening is a powerful introduction that requires a combination of articulations. Somehow, in this work of Bottesini, the staccato figure is not being played short and disconnected. It is interpreted to be played short but still connected mostly expressing like a legato expression. This interpretation is mostly influenced by the character of an opera singer.

Thus, for this figure, it is important to be playing this motive in the string. This way it more possible to express a legato singing gesture. A small gesture at the staccato notes can be executed just by using the wrist. The three connected slur notes

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

that comes after the staccato notes should be played by using the movement of the whole right arm.

Next, a long moving legato line as mentioned in the score analysis (Please refer to Figure 4.13) demands an independent movements of both left and right hand. It is crucial to be naturally play all the fast moving notes on the left hand so the execution of the legato expression can become flawless. The right-hand bowing needs to be steady and in control while playing the fast moving figures in the left-hand. Practicing this musical expression on the right and left hand separately improves a better coordination and musical execution.

The demand of staccato articulation is prominent in this work. This identified challenging similar passages can be referred to Figure 4.15. Here, the execution of the 16^{th} notes are a challenge due to the leaps of third on the left-hand. Again, a fluent coordination of both left and right hand are equally important. In order to improve the efficacy of the execution, a combination of bowings could be practiced out on the right-hand to improve agility.

Next, the identified score analysis of this work involves with an accent and two separated down and up bow strokes as shown in Figure 4.16. This motive reappears a few times in Movement III. The challenging part of executing this articulation is to have a consistent volume during the down and up bow strokes which indicated with the accent markings on top of the notes. Putting more weight during the up bow stroke balances the volume with the prior down bow stroke. The gesture of executing the up bow accent can be done by pressing with the right hand index

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

finger into the bow and thus, giving more pressure into the bow allowing a heavier weight imposed to get equal volume as the prior down stroke.

Finally, the identified bowing technical in the score analysis involves with accented passages which can be found in Movement I and Movement III (Please refer to Figure 4.17). This accented showcases dramatic effect which Bottesini wanted to highlight the end of development phrase.

This accented bowing technique is also recognized as a *martelé* bowing technique that involves using a heavy and accented stroke, producing a sharp and punctuated sound. The objective of this technique is to create a powerful and dramatic effect. To effectively execute this passage, an isolated practice of fast bow playing a scale for example helps to improve stamina, energy and a powerful execution of this defined articulation.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Dynamic

The identified dynamic in the score analysis section involves with *sforzando (sf)* dynamic marking (Please refer to Figure 4.18). These markings portray the dramatic effect that characterizes the concertos from this era. To execute a *sforzando (sf)* dynamic demands a fast full bow. Practicing this bowing technique separately shall ease the process of executing when requires. A fast full bow demands high stamina, force and energy.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Compositional Tools

An identified descending natural minor scale with leaps in thirds demands a fluent right hand bowing technique. Due to the fast 16th notes passage, an agility of movement of the left-hand ease the execution of this passage (Please refer to Figure 4.19). A good coordination and synchronization of timing between left and right-hand delivers the execution of the passage. Exercises of different permutation of fast down and up strokes increases the agility and command of the right-hand bowing.

Another common compositional tool often used is the employment of arpeggio. Interestingly, the discussion of arpeggio figures demand distinct techniques in each previous discussed works of – Bach Suite and Vanhal Concerto. In this work of Bottesini, an interesting arpeggio figure in movement II (Please refer to Figure 4.20) demands a challenging technique. The first arpeggio requires to be played using the harmonics on the A string. This focuses on the placement of contact point on the right hand bow. The bow placement cannot be too high near the fingerboard at the beginning of the motive. But the bow placement can gradually moves up as the arpeggio ascends. The second and third arpeggio demand clean strings crossings. A consistent of arm weight into the bow helps to deliver this arpeggio better.

4.3.2 Development of Practice

The followings are the difficult bowing techniques I personally encountered as I progress in this work.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.3.2.1 Phrasing

The opening of this concerto demands a lyrical singing style passage between measure 5-12. This style is the trait of this concerto and therefore it is vital to conquer the technique. I have been working on this opening for so many years just to understand to deliver this musical passage efficiently. The issue has always been with a various techniques demanded just in the execution of this opening as shown in the next following figure.



Figure 4.21. Phrasing of the Opening Bottesini Concerto

One of the trait techniques demanded is the *legato*. It is a challenge because it has to sustain over a long passage of 7 measures. Despite the *staccato* articulation indication, this passage still demands a *legato* technique due to the style of the music that demands a lyrical execution. Good distribution of arm weight helps to execute this musical expression and dynamic. Good control of bow speed improves the technical demand of the l*egato* expression. This opening phrase demands all the

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

challenging techniques and is explained verbally in more detail (Please refer to Appendix B8).

4.3.2.2 Portato Technique

A *portato* technique is a separation of sound over a single stroke. This *Portato* technique is indicated in movement I and II. The following figure displays the demand of the *Portato* technique evidence in movement I.



Figure 4.22. Portato Technique

The challenging issue here is in relating to the division of bow. There are five notes to be executed under one down bow stroke. I often find I'm out of bow. This is not only due to the many notes to be executed under one bow, but I realized it is also relating to the smoothness of the right-hand command. I practiced a lot of right hand isolation just concentrating in executing the five notes consecutively. The action of bouncing the wrist into the string executes the separation of notes which defines as the *portato* technique (Please refer to Appendix B9).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.3.2.3 Martelé

In Movement I, this martelé effect is found in measure 54 – 56 (Please refer to Figure 4.17). This is indicated at the end of the development section. This technique marks a dramatic section of the music approaching the end of development phrase.

Martelé is a challenging technique to be executed in this passage. Inadequate stamina and energy may result in an ineffective effect. My problem is due to lack of stamina and this passage is approaching at the end of phrase which demands a high intensity in execution of bowings. Isolated practice helps to improve the execution of this technique. A fluent left-hand technique should be fully prepared so to be able to execute this martelé bowing technique (Please refer to Appendix B10).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

4.3.2.4 Descending Staccato

The descending staccato that was written at the end of Movement I is a very challenging passage due to its technical demand (Please refer to Figure 4.15). This passage contains fast moving scale descending with leaps of thirds. This figure demands a left-hand agility in executing this passage. A fluent synchronization between left and right-hand helps to play this passage better.

In order to play this passage more fluently on the right-hand, I have practiced a combination of right hand bowing to improve fluency o the right-hand. This combination involves alternating and using different set of bowings every time.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

There are six combinations of right hand bowings that I have practiced to achieve fluency on the right-hand (Please refer to Appendix B11). The next following figure displays the combination of bowing that I have practiced out.

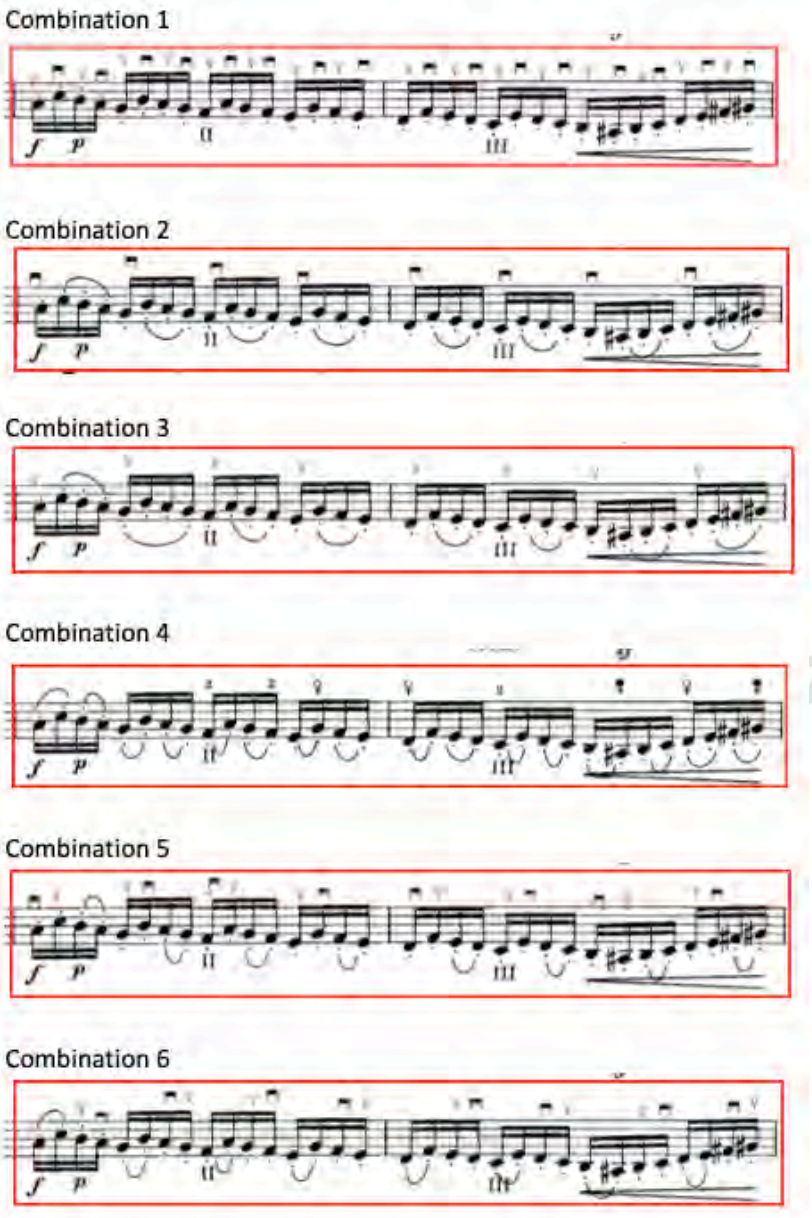


Figure 4.23. Six Combinations of Bowings to Improve Right-hand Agility

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

CHAPTER 5

CONCLUSION/REFLECTIONS/RECOMMENDATIONS

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

5.0 Introduction

This final chapter summarizes; (1) the main research findings of this study; (2) How these findings contribute into knowledge and finally; (3) how these findings can be developed in future research.

The followings are what has been known regarding the bowing techniques:

1. Bowing techniques are used to produce a wide variety of tones and sounds (Billeter & Mores, 2014; Zimmerman, 2013)
2. Bowing techniques are to be viewed as an important aspect in developing expressive and nuanced performances on the instrument, and they can be used to create a wide range of tonal qualities (Mick, 2012; Vance, 2011).

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

3. Research has been conducted to study the connection between different bowing techniques and musical expression, with a particular emphasis on the ways in which a broad spectrum of feelings and moods can be communicated through music using a variety of techniques (Mick, 2012; Vance, 2011).

The bowing technical challenges of the three major works in this study are interpreted using the score analysis and bowing analysis aspects which can be looked at from four smaller perspectives; (1) phrasing; (2) articulations; (3) dynamics); and (4) compositional aspects.

5.1 Conclusion

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

This study finds that the selected works contain distinctive and interdependent aspects of right-hand technical bowings within its historical context of stylistic expressive figuration and compositional views that can be found in displaying the works from baroque to romantic period. The finding of this study meticulously explores the bowing technical challenges, development strategies, and performance practices for the selected works of J.S. Bach, J.B. Vanhal, and G. Bottesini. This investigation illuminates the previously identified gaps in research and pedagogical resources regarding right-hand bowing techniques for the double bass. The investigation of this study aims to answer the following research questions :

1. What are the bowing technical challenges in the selected works of J.S. Bach, J.B. Vanhal, and G.Bottesini?

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

2. How to develop the bowing technical challenges in the selected works by J.S. Bach, J.B. Vanhal, and G.Bottesini?
3. How to perform the selected works of J.S Bach, J.B Vanhal, and G.Bottesini in the form of Recital?

The reasoning in answering to the research questions in the correspondence selected works are as described below :

5.1.1 What are the Bowing Technical Challenges in the Selected Work of J.S Bach, J.B Vanhal, and G.Bottesini

For research question 1, "What are the bowing technical challenges in the selected works?", the document delves into intricate details of bowing challenges such as phrasing, articulations, dynamics, and compositional aspects, addressing how these elements present difficulties specific to double bass performance, notably in transcriptions of works not originally composed for the instrument.

The findings underscore the technical challenges arising from the inherent discrepancies between the original instrumentation and the double bass. For instance, the study highlights issues such as the adaptation of Bach's cello suite to the double bass, considering the differences in physical construction and bow weight. This resonates with the problem statement that calls for an expanded understanding of bowing techniques tailored to the double bass’s unique characteristics.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Based on musical analysis of Bach Cello Suite No 2 , this study found that *Movement I – Prelude* is a slow 8th note tempo but consists of many moving 16th notes melodic lines. Groups of phrases has been analysed to support the identification and execution of the bowings. This cello suite demands many *legato* bow stroke to demonstrate the continuation of phrases. Prominent articulation in this suite is a *detachè* bow stroke. A contrast dynamic range between a *forte* and *piano* demanded to show the end and start of phrases. This dynamic range requires bowing technique like a *Sul Tasto* to execute a very soft warm dynamic. A *bariolage* bowing technique was also written in this composition to showcase some virtuosity. In the aspect of articulation, this study found that *Detaché* and *legato* bow strokes dominated the bow stroke technique in this movement.

On The Vanhal Concerto , groups of phrases similarly important to support the execution of bowings. Articulation that is prominent in the concerto is the *staccato* bowing technique, where Vanhal has indicated in this composition. A rapid slurred 2-notes figures could also be a technical bowing issue that has been discussed. Execution of wide dynamic range is also one of the issues that is demanded in this concerto. *Arpeggio* figures seemed to be a more popular technique demanded in this composition.

Bottesini Concerto demands virtuosic right and left hand techniques in performing this piece. Lyrical and dramatic passages are more to be found in the phrases of Bottesini's concerto. A mixed of slur and *staccato* articulations are widely demanded in this concerto. A long moving intense *legato* line is also prominent in this concerto. Accented passages are also indicated in this concerto to display a dramatic effect which is identified as *martelè* bowing technique. Wide dynamic range similar to the previous

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

discussed works are also thoroughly demanded. Rapid leaps of thirds also became one of the compositional tool written to display some virtuosic effect.

Addressing the first research question, the findings underscore the technical challenges arising from the inherent discrepancies between the original instrumentation and the double bass. For instance, the study highlights issues such as the adaptation of Bach's cello suite to the double bass, considering the differences in physical construction and bow weight. This resonates with the problem statement that calls for an expanded understanding of bowing techniques tailored to the double bass's unique characteristics.

5.1.2 How to Develop the Bowing Technical Challenges in the Selected work of J.S Bach, J.B Vanhal, and G.Bottesini

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The second research question focuses on developmental strategies for bowing techniques. Here, the document transcends theoretical analysis and steps into the practical domain, providing specific practice regimens derived from the author's own experiences. This approach not only corroborates the necessity for a detailed technical study as cited in the problem statement but also delivers tangible methodologies to conquer the stated challenges.

On Bach Cello Suite No 2, *Legato* bowing technique is achieve by isolating the practice of left and right hand to achieve independency. The distribution of bow weight helps to achieve the wide dynamic range that is demanded in this Suite. The execution of double stop requires a sweet spot of the contact point of the bow placement. Taking advantage of harmonics helps in a better executions. *Bariolage* technique that requires

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

strings crossings demands a flexibility of arm and wrist movements. Understanding the anatomy of the hand is important to execute this technique.

Meanwhile, Vanhal concerto show *Staccato* is one of the bowing technique demanded where a performer needs to decide how long or short to be executed on the value of notes so the bow does not jump too much off from the strings. A wide dynamic range is similarly demanded in this concerto that requires the right amount of distribution of weight when executing each dynamic. The execution of arpeggios demands the right spot of the contact point on the string.

An intense *legato* phrases is the special trait demanded in this concerto which requires high amount of weight and resistance in order to develop the musical passage. This concerto demands a *portato* technique which is to execute a few separated notes in one bow. This technique demands the smoothness of the right hand command while adequately divide the amount of the right hand bowings on the separated notes. *Martelè* bowing that requires fast bow strokes needed to be practiced separately to develop a strong stamina and energy when playing this concerto. Combination of right hand bow strokes was suggested to improve agility in the fast staccato passages.

Finally, Bottesini works show phrasing, and *portato* articulation is crucial elements in the technical demands of bowing techniques. These identified technical challenges are derived from both the score and bowing analysis methods. The identified challenges in each repertoire are identified and a verbal instructional video in implementing these techniques are explained in the designated appendix section.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The findings based on the musical analysis emphasized on the variety of bowing techniques in the selected above works. These findings are in line with Billeter & Mores, (2014) and Zimmerman, (2013). The finding of this study show the bowing techniques are an important aspect of developing expressive and nuanced performances on the instrument, and they can be used to create a wide range of tonal qualities (Mick, 2012; Vance, 2011).

5.2 Reflection

Understanding the technical issues of each selected repertoire using the score and bowing analysis methods helps the performer to deepen the understanding of the various demanded expressions and articulations of the distinct works. This improved understanding helps to deliver a better musical meaning in a double bass recital.

Critically, the study bridges the historical and stylistic perspectives with hands-on technical considerations, embodying a comprehensive response to the problem statement. It advances the discourse on double bass performance by incorporating both scholarly research and empirical findings, thereby enriching the performance practice literature for these cornerstone compositions.

In essence, this conclusion synthesizes the findings that directly address the outlined research questions and validates the problem statement's claim that a study of right-hand bowing techniques in the double bass repertoire is not only warranted but also crucial for enhancing performance standards and pedagogical approaches.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

The implications for recital performance are insinuated through the extensive discussion on bowing articulations, dynamics, and phrasing. Although not explicitly detailed as performance instructions, the depth of analysis provided forms a quasi-instructional guide for performers. This relates to the problem statement by offering a practical framework for the artistic process of bringing these compositions to life in a recital context, fulfilling the need for a study with both historical, theoretical depth and practical applicability.

5.3 Recommendation

The exploration of different bowing techniques and the overall inclusiveness of the samples might be limited due to the chosen repertoire. Hence, it is important to acknowledge these limitations when attempting to apply the findings of the study to other contexts. To address these gaps, future research can expand by incorporating a wider variety of repertoire and exploring additional factors that can impact bowing technique in double bass performance.

This study has the potential for expansion from multiple angles. Firstly, it can be critically examined from a left-hand perspective to gain a comparable level of understanding in similar or distinct musical compositions, thereby enhancing future performances. Secondly, the fundamental framework of methodologies and findings can be extrapolated to analyze other analogous works by the same or different composers.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

REFERENCES

Billeter, J. B., & Mores, R. M. (2014). *Double Bass Bowing Basics*. Belmont Press, Waltham, Massachusetts.

Candy, Linda, and Ernest Edmonds. "Practice-Based Research in the Creative Arts: Foundations and Futures from the Front Line." *Leonardo*, vol. 51, no. 1, 2018, pp. 63–69., https://doi.org/10.1162/leon_a_01471.

De la Fuente, M. (2019). Methodology in Art Research: Charting through the Labyrinth. Journal of Art Historiography, 20, 1-23.

Djahwasi, Herry Rizal, and Zaharul Lailiddin Saidon. "Artistic Research: Artistic as Research vs Artistic as Method." *International Journal of Academic Research in Business and Social Sciences*, vol. 10, no. 11, 2020

Elliott, Cathy, director. *Portato Bow Technique for Double Bass : Upright Double Bass Tips and Techniqques*. *You Tube*, European String Teacher's Association, The Hidersine Company, Barnes & Mullins Ltd., 21 Nov. 2012, https://www.youtube.com/watch?v=YZCg_tBA6Xc. Accessed 29 Apr. 2023.

Gray, Carole, and Julian Malins. *Visualizing Research: A Guide to the Research Process in Art and Design*. Ashgate Publishing Limited, 2004.

Hughill, Andrew. *The Orchestra : A User's Manual*, Philharmonia Orchestra, 2004, https://andrewhugill.com/OrchestraManual/basses.html.

Kepner, Evan. "Double Stops on The Upright Bass." *No Treble*, Facebook, 28 Oct. 2010, https://www.notreble.com/buzz/2010/01/28/double-stops-on-the-upright-bass/. Accessed 28 Apr. 2023.

Lavergne, P. J. (2021). *The Origin and the Evolution of the Double Bass*. Louisiana State University and Agricultural & Mechanical College.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Leavy, Patricia. *Method Meets Art: Arts-Based Research Practice*. 2nd ed., The Guilford Press, 2015.

Machado, Marcos Pereira. "Francois Rabbath Applied: An Analysis of His Technique for a Successful Performance of Frank Proto's Music." *Univeristy of Illinois at Urbana-Champaign*, 2005.

Mick, J. P. (2012). *A Dissection of the Vibrato Used in Double Bass*. Journal of Research in Music Education, sixty-third volume, number three, pages 296-313.

Ramirez-Castilla, J. (2007). *Musical Borrowings in the Music for Double Bass by Giovanni Bottesini: A Reconsideration Beyond the Operatic Paraphrases* (Doctoral dissertation, University of Cincinnati).

Smith, Hazel, and Roger T Dean. *Practice-Led Research, Research-Led Practice in the Creative Arts*. Edinburgh University Press, 2009.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Speed, Christa A. *A Contrast: The Idiomatic Development of the Cello From the Eighteenth to the Twentieth Centuries as Shown by the Prelude and Sarabande of Johann Sebastian Bach's Suite No.2 in D Minor for Unaccompanied Cello, BWV 1008 Amd Dmitri Shostakovich's Sonata in D Minor for Cello and Piano, Op. 40.* University of Nebraska at Omaha, 1997.

Stowell, R. (Ed.). (2003). *The Cambridge companion to the string quartet*. Cambridge University Press.

Vance, G. (2011). *Progressive Repertoire for the Double Bass: Volume 1.* Pacific, MO: Vance Music Studios.

Vance, G., & Costanzi, A. (2000). *Progressive repertoire for the double bass* (Vol. 1). C. Fischer.

Vasilistov, D. (2013). A MASTER'S RECITAL IN DOUBLE BASS.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Zimmerman, M. (2013). *The technique of playing the Double Bass*. Located in Van Nuys, California: Alfred Music.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX A : SUGGESTED LEFT-HAND FINGERINGS AND BOW MARKINGS

APPENDIX A1 : Suggested Left-Hand Fingerings to Play Bach Cello Suite No 2 Transposed to A minor.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Suite No 2 in Aminor
I - Prelude



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

II - Allemande



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

III - Courante



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

IV - Sarabande



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

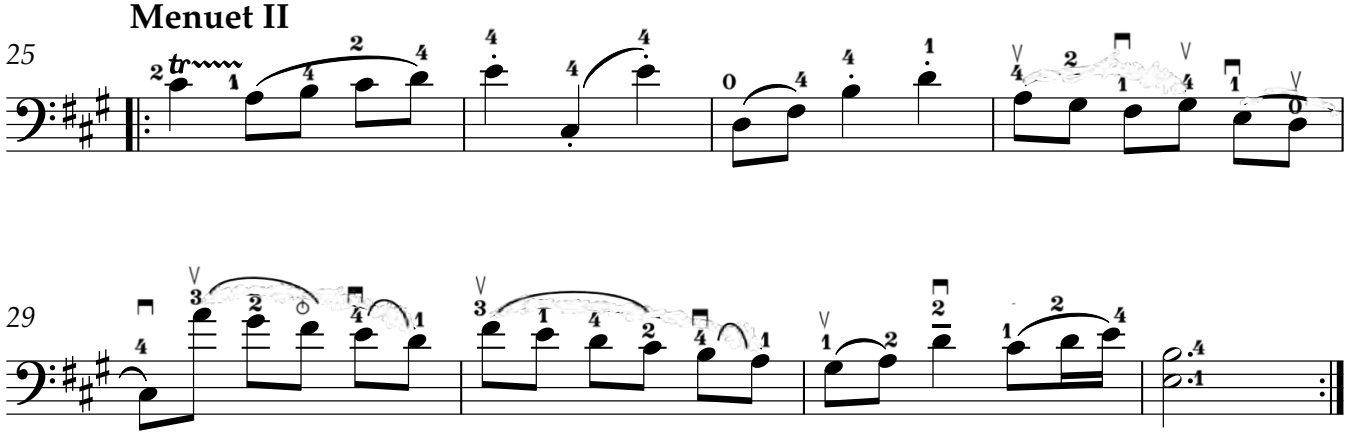
V - Menuet

Menuet I

Allegro Moderato

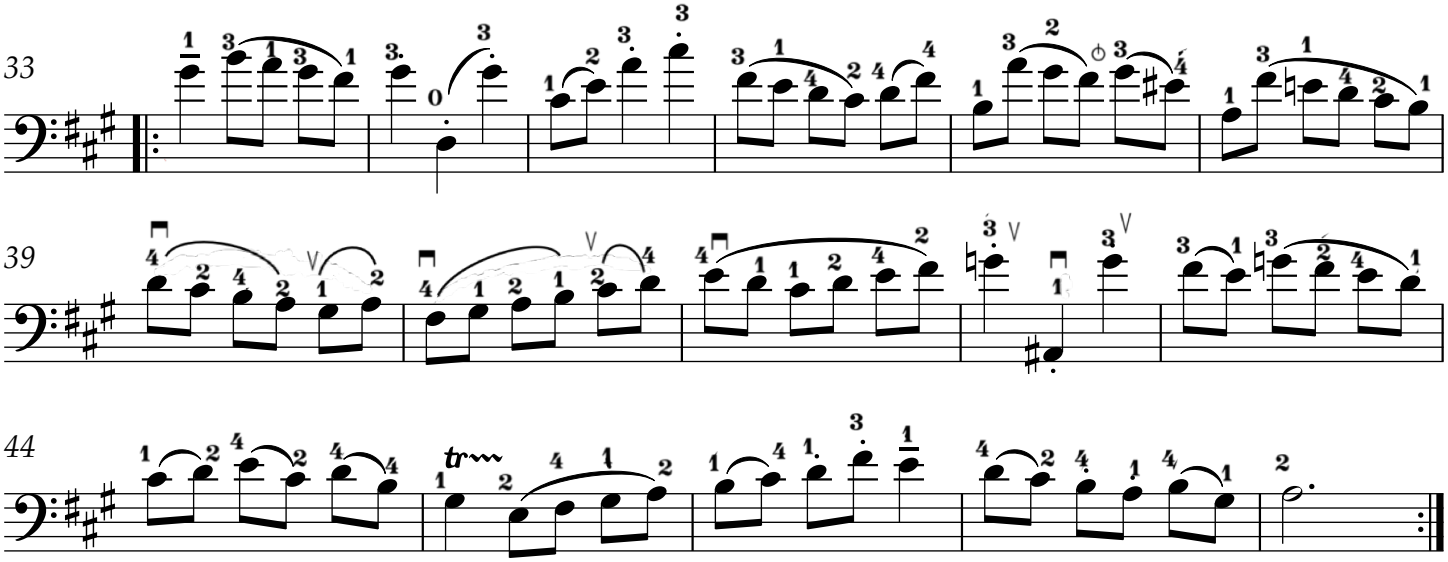


Menuet II



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



Menuet I da capo

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

VI - Gigue



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX A2 : Suggested Left-Hand Fingerings to Play Vanhal Concerto in D Major.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Kontrabaß

Konzert D-Dur

für Kontrabaß und Orchester

Stimmung:



Jan Křtitel Vaňhal (1739-1813)
Einrichtung: Klaus Trumpf

Allegro moderato



1) vgl. Faksimile

© 1995 by Friedrich Hofmeister Musikverlag, Leipzig

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) ⊖ - ⊖ ad lib.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) Kadenz von Johann Matthias Sperger, vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Kadenz[1)]



FINALE

Allegro



1) s. Fußnote S.5

2) vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) vgl. Faksimile

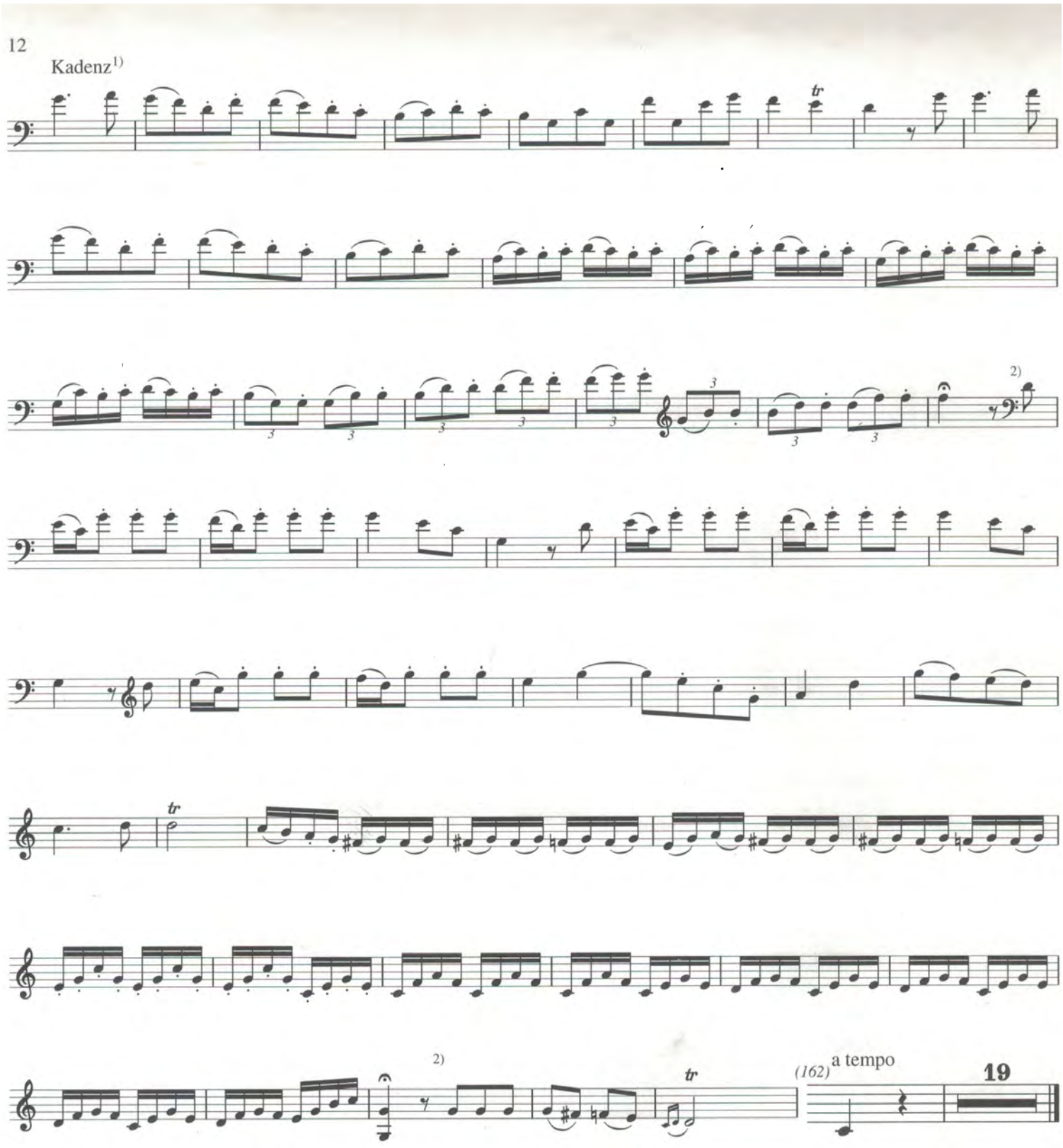
05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



1) s. Fußnote S.5

2) vgl. Faksimile

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX A3 : Suggested Left-Hand Fingerings to Play Bottesini Concerto in B minor.

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

Konzert

für Kontrabass und Orchester

h-moll

Kontrabass

Giovanni Bottesini
herausgegeben von Klaus Trumpf

Stimmung des Kontrabasses:



Allegro moderato



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

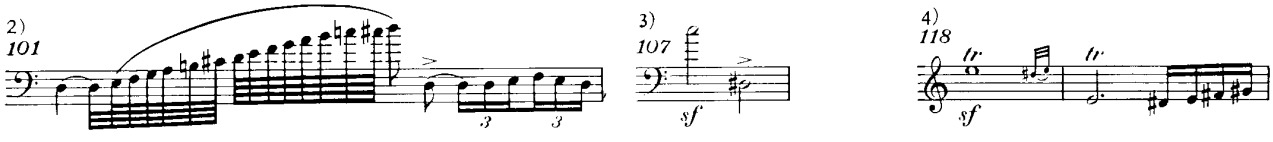


05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



im Autograph notiert / noted in the autograph



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi



*siehe Vorwort / see preface

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX B : YOUTUBE LINKS TO VIDEO RECORDINGS

APPENDIX B1 : Legato Bow Strokes of Bach Cello Suite No 2 opening phrase

https://www.youtube.com/watch?v=cM-CNbg0a8g

APPENDIX B2 : Dynamic Range

https://www.youtube.com/watch?v=bP68W1X5g2I

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX B3 : Double Stop Technique

https://www.youtube.com/watch?v=k7iZcViicEA

APPENDIX B4 : Bariolage Effect

https://www.youtube.com/watch?v=W3sesifPjIk

APPENDIX B5 : Staccato Technique

https://www.youtube.com/watch?v=K1rL0gD2p0E

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX B6 : Cresecendo – Decrescendo Expression

https://www.youtube.com/watch?v=5vJb4xYLyCM

APPENDIX B7 : Bow placement for arpeggios execution

https://www.youtube.com/watch?v=SN496UWmX68

APPENDIX B8 : Phrasing (Opening of Bottesini Concerto)

https://www.youtube.com/watch?v=L6SIILREfsM

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi

APPENDIX B9 : Portato Technique

https://www.youtube.com/watch?v=UZfbXnqESTQ

APPENDIX B10 : Martelé Technique

https://www.youtube.com/watch?v=cQLqnmz82XE

APPENDIX B11 : Fast Staccato Technique

https://www.youtube.com/watch?v=84lH2Goy7TQ&t=3s

05-4506832 pustaka.upsi.edu.my Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbupsi