

The University of Adelaide
Elder Conservatorium of Music
Faculty of Arts

The Application and Performance of Extended
Techniques and Interpretation of Descriptive Score
Annotations on Classical Guitar from 1970 to 2012: A
Portfolio of Recorded Performances and Exegesis

Submitted in partial fulfilment for the degree of
Master of Philosophy (Performance)

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Abstract

This study explores the technical and musical approaches taken to interpret and perform extended techniques called for in the chosen classical guitar repertoire. In identifying, analysing, and preparing these techniques for performance a distinction is made between prescriptive notation for non-standard performance techniques and text-based i.e. descriptive score annotations that composers use to evoke imagery or moods. This study will explore these two lines of inquiry i.e. the technical problems of extended techniques, and interpretative conundrums in relation to the realisation of descriptive score annotations. The repertoire performed and discussed includes solo works by Nikita Koshkin, Phillip Houghton, Brad Richter, and Richard Charlton as well as the duo composition *Casablanca* by Jaime Zenamon. This submission for the Master of Philosophy degree (Music Performance) at the Elder Conservatorium of Music, University of Adelaide consists of two recorded recitals supported by a 7,500-word exegesis.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

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Ethics Approval

Ethics approval for this study was granted on 12 October 2018 by the Low Risk Human Research Ethics Review Group (Faculty of Arts and the Faculty of the Professions) at the University of Adelaide. Participating composers all provided formal written permission prior to the interviews that were conducted. All data was handled in accordance with the University of Adelaide's ethics guidelines. See copy of the letter for Ethics Approval No. H-2018-225 in Appendix E.

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PART A: RECORDED RECITALS

A.1 – Recital One Video Recording

August 29th at the University of Adelaide, EMU, Schulz building

Title of Piece	Composer	Duration	Starting Times
Casablanca	Jaime Zenamon	12:03	00:44
Ophelia ... A Haunted Sonata	Phillip Houghton	10:57	15:18
I. <i>Fear ... and the angel</i>			15:18
II. <i>Suffering and madness ... am I but a dream of a shadow</i>			17:12
III. <i>Chant ... of the flower moon</i>			19:08
IV. <i>Water ... memories — halls of ghosts — wash away</i>			20:38
V. <i>Death ... with moons in your hair</i>			23:00
Three Little Nightmares	Brad Richter	6:20	27:48
I. <i>Clock Strikes Midnight</i>			27:48
II. <i>Stepping on a Spider</i>			29:46
III. <i>I Felt a Funeral in my Brain</i>			31:48
Usher Valse	Nikita Koshkin	6:07	35:04
The Prince's Toys	Nikita Koshkin	27:50	43:12
I. <i>The Mischievous Prince</i>			43:12
II. <i>The Mechanical Monkey</i>			45:53
III. <i>The Doll with the Blinking Eyes</i>			48:49
IV. <i>The Tin Soldiers</i>			53:58
V. <i>The Prince's Coach</i>			56:48
VI. <i>The Big Toy's Parade</i>			59:09
			Total playing time: 1:03:17

***For video recordings of this recital please refer to *Alexandra Shepherd*, a1644238, Masters Recital One in the University's storage system**

A.2 – Recital Two Video Recording

December 9th at the University of Adelaide, EMU, Schulz building

Title of Piece	Composer	Duration	Starting Times
Scacchi	Phillip Houghton	12:36	01:17
I. Pawn			01:17
II. Queen			02:54
III. Knight			05:01
IV. Bishop			07:09
V. Rook			09:10
VI. King			10:41
Serenades of the Unicorn	Einojuhani Rautavaara	7:31	14:58
I. A Nervous Promenade and Dance (with his own reflection)			14:58
II. Serenading a Pair of Giggly Nymphs (drunk of night)			17:17
III. Serenading the Beauty Unobtainable (too far in time)			19:11
IV. Having a Grand Time (with some Scythian Centaurs)			21:06
Piece with Clocks	Nikita Koshkin	13:30	23:21
The Labyrinth of Deadly Sins and Divine Virtues	Richard Charlton	24:55	39:18
<i>The Introduction into the 'Labyrinth'</i>			39:18
I. The first 'diligent' steps into the maze (Industria)			40:13
II. Envy (Invidia)			42:22
III. Sloth (Acedia)			43:49
IV. Pride (Superbia)			47:09
V. Humility (Humilitas)			48:30
VI. Gluttony (Gula)			50:54
VII. Temperance (Temperantia)			52:18
VIII. Greed and Charity (Avaritia/Caritas)			53:30
<i>A Brief Interlude of Courage</i>			55:22
IX. Lust (Luxuria)			56:03
X. Chastity and Purity (Castitas)			58:57
XI. Wrath (Ira)			1:00:19
XII. Kindness and Forgiveness (Humanitas)			1:02:24
A Whisper in the Desert	Brad Richter	15:08	1:06:23
I. Jumping Cholla			1:06:23
II. Something Softly out of Silence			1:11:31
III. Gila Monster			1:14:27
IV. Starry Night on the Beach (with Federales)			1:16:38
Total playing time: 1:15:50			

***For video recordings of this recital please refer to *Alexandra Shepherd*, a1644238, Masters Recital Two in the University's storage system**

PART B: EXEGESIS

1. Introduction

Extended techniques can be briefly defined as ‘ways of playing a traditional instrument that produce new and often unexpected sounds’ (Cherry 2009, p. 16). A more detailed definition of extended techniques will be provided under ‘key terms’. As early as some four hundred years ago composers such as Tobias Hume (1579–1645)¹ and Heinrich Ignaz Franz von Biber (1644–1704)² occasionally used extended techniques. However, in general composers and performers only gradually embraced extended techniques during the latter part of the 20th century. As extended techniques have since continued to provide composers with an increased range of sounds they have now become an important aspect of contemporary classical music.

The final decades of the 20th century were fertile in guitar composition, many of the works emerging from young guitarist/composers, who blended impressionism with unusual effects and virtuosity (Wade 2001, p. 173).

The classical guitar repertoire discussed here provides representative examples that demonstrate the increasing need for guitarists to familiarise themselves with extended techniques. Beyond the composers discussed in this study there are many other seminal classical guitar composers known for their use of extended techniques, such as Leo Brouwer (b. 1939),³ Roland Dyens (1955–2016)⁴ and Štěpán Rak (b. 1945).⁵ Some more recent examples include Gary Ryan (b. 1969),⁶ Paul Stanhope (b. 1969),⁷ Ludger Vollmer (1961),⁸ Francis Kleynjans (b. 1951)⁹ and Alan Thomas (b. 1967).¹⁰ Some of these composers not only utilise pitched and unpitched

¹ In *Harke, Harke No. 11* from the First Part of Ayres (1605) the tenor gambist strikes the chord with the back of the bow (Hume 2019)

² In *Battalia* (1673) snap pizzicato is employed on the violone strings to imitate the sound of a musket fire (Monosoff 2001).

³ E.g. in *La Espiral Eterna* (1973)

⁴ E.g. in *Libra Sonatine: Fuoco* (1986)

⁵ E.g. in *The Czech Fairy Tales* (1999)

⁶ E.g. in *Hot Club Francais* (2015)

⁷ E.g. in *Dance for the White Spirits* (2017)

⁸ E.g. in *Steadfast Against the Sun* (2002)

⁹ E.g. in *A L'aube Du Dernier Jour* (2009)

¹⁰ E.g. in *Out of Africa* (2008)

extended techniques but some also call for the use of electronics such as amplification, and tape recordings. This diverse range of extended techniques will be discussed further under 'literature review' and 'key terms'. Since the nineteenth century, repertoire employing descriptive score annotations on the other hand, have also become increasingly common. Composers such as Alexander Scriabin, and George Crumb for example, employed such annotations. Prominent contemporary guitar composer, the late Phillip Houghton (1954-2017) is known for using descriptive score annotations in many of his compositions. Selected works of Houghton will be used in the current study to illustrate these annotations. This study will therefore pursue two lines of inquiry; the technical problems of extended techniques, and interpretative conundrums in relation to the realisation of descriptive score annotations.

1.1 Literature Review

The Contemporary Guitar by John Schneider (1985) is an essential resource for guitarists and has been valuable in the development of this study. Schneider provides a concise overview of the guitar and compares the timbral qualities and tone production of both acoustic and electric guitars. He then goes on to discuss the technical and physical means of producing pitched sounds (dynamics, tone production, and articulation), unpitched sounds (imitating thunderclaps and explosions, animal sounds, screams and shrieks and whistles), and the use of electronics. These three categories can be used as an effective classifications system for extended techniques, as it categorises the techniques into timbral distinctions.

An alternative way of categorising extended techniques can be found in Robert Lunn's thesis (2010). Lunn categorises the extended techniques in his study into six categories; Left-hand, Right-hand, Percussive, With Objects, Borrowed From Other Traditions, and Miscellaneous. This however, combines timbral distinctions with technical factors, inevitably leading to ambiguity and overlap. To avoid this, the

extended techniques discussed in the current study will be categorised under pitched, unpitched, and electronics, which will be discussed in further detail later.

Bruno Bartolozzi's seminal book, *New Sounds for Woodwind* (1967) by far exceeds the current extent to which classical guitarists have researched the area of extended performance techniques. Bartolozzi argues that orchestral instruments, in particular woodwind had not yet reached their sonic potential and provides composers with a new array of compositional ideas and extended techniques for woodwind. Phillip Rehfeldt's *New Directions for Clarinet* (revised edition, 2003) is a valuable source for composers wishing to employ extended clarinet techniques. The popularity of this book can be linked to Rehfeldt's inclusion of composer and clarinetist, William O Smith's multiphonic index file for clarinet. This index file is a beneficial tool for composers, as it informs them on the timbre and dynamic range of each multiphonic as well as the difficulty level of each.

Mark Gaydon's PhD study (2012) deals with the challenges of performing the extended techniques in Luciano Berio's *Sequenza XII* (1995) for solo bassoon. Similar to the current study, Gaydon's text serves as a guide for performers. Through the lens of bassoon performance, he isolates and describes the twelve extended techniques within the *Sequenza* and provides instructions on how to execute them. Kathryn Moorhead's study (2012), to name a similar example, discusses the development of extended flute techniques since Luciano Berio's *Sequenza No 1* (1958). Moorhead explores the inconsistencies of notational practices of extended techniques and provides performers with strategies for overcoming these. Her four-step approach toward the mastery of extended techniques shown below, aided in the development of the pathways for the mastery of the extended techniques selected for the current study.

1. Researching the composer and any established knowledge about the piece.
2. Analysing the score away from the instrument to resolve any difficulties in notation or complexity.
3. Isolating and learning to produce difficult extended techniques.
4. Incorporating techniques into the piece as a whole and building endurance for performance (Moorhead, 2012, p. 68).

Kenneth Saxon's study (2000) explores the increased use of extended piano techniques in twentieth century repertoire from the music of Henry Cowell through to George Crumb. Saxon details the reasoning behind this compositional development and why extended techniques have become so popular amongst contemporary piano composers, a development most certainly seen in the area of classical guitar as well.

Benjamin Lougheed (2019) explores classical guitarist Roland Dyens' arrangements of *Nuages* by Django Reinhardt, *Round Midnight* by Thelonious Monk, *Over the Rainbow* by Harold Arlen, *Take the 'A' Train* by Billy Strayhorn, and *A Night in Tunisia* by Dizzy Gillespie. Lougheed aims to provide readers with an accurate interpretation of these pieces through an analysis of the harmony and structure followed by a discussion of possible solutions to the difficult passages and extended techniques used. For example, when referring to a particular passage in Reinhardt's *Nuages*, Lougheed states,

The solo in measure 53 (Example 2.9) begins with a tremolo-like ornament, which should be played quickly and lightly. Players can then briefly pause on the accented note for emphasis (2019, p. 15).

This idea of providing readers with solutions for overcoming technical challenges is adapted for the current study, however methods and pathways will be provided for effective execution of extended techniques in particular.

The existing literature focussing on the compositional aspect of extended techniques for classical guitar is also worth mentioning. Robert Lunn's thesis (2010), for example aims to educate composers about the practice and notation of extended techniques. Similarly to the current study, Lunn provides examples of selected extended techniques utilised in published repertoire and explains how these extended techniques are executed. Gregory Budds' DMA thesis (2005) discusses the compositional development of Nikita Koshkin in specific solo works representing Koshkin's different stylistic periods. This discussion includes an exploration of the timbral effects used in the repertoire, an examination of Koshkin's musical and

programmatic intentions, and commentary about his music from interviews Budds conducted with the composer.

The first volume of Martin Lawrence Vishnick's two-volume PhD study (2014) is a valuable resource for composers. It explores the sounds produced by specific extended techniques and discusses existing research conducted on the notational practices of these techniques. The second volume, directed at performers is similar to the current study. Vishnick directs guitarists towards the mastery of extended techniques through an anthology of studies. The first twenty-eight studies focus on individual extended techniques, followed by further studies combining multiple techniques. These studies however, are discussed from a general point of view and the solutions provided will require modification when applying them to repertoire. The technical considerations and pathways in the current study however, are developed within the context of the selected repertoire and the solutions provided will therefore not require amendments.

While the extended techniques discussed in the current study are comparatively recent devices of musical composition, the concept of using performed sound to communicate emotion is not. During the Baroque era, *Affektenlehre*—translated into English as Doctrine of the affections was based on the idea that the seven basic affects namely, love, joy, hatred, sadness, wonder, desire and despair can be expressed through music. French philosopher, mathematician, and scientist René Descartes (1596–1650) believed that these affects could be represented visually or audibly (Henry 1963, p. 2). This leads to questions of interpretation and communication. The definition of musical interpretation, its conception and communication provided by FM Berenson (1993) directs the discussion of interpreting Houghton's distinctly elaborate score annotations in his programmatic work in chapter two.

As will be discussed in more detail under 'key terms' the distinction between prescriptive notation and descriptive score annotation must be made. Mieko Kanno's

definitions of these terms in his article *Prescriptive notation: Limits and challenges* (2007) will be applied here. Kanno defines prescriptive notation as ‘a notation system in which the composer specifies the method of making music’ (Kanno 2007, p. 235). ‘Prescriptive notation tells us what to do with the mind, body or instrument in order to produce the sound of a musical work’ (p. 235). Peter Böttinger’s understanding of prescriptive notation or what he coined as ‘action notation’ (Böttinger 1987, p. 8, as cited by Kanno 2007), also illustrates how the term will be applied to extended techniques in the current study.

Music of the 20th century has been marked by an ominous rift in the relationship between composers and performers. This has [partly] arisen from the dilemma as to whether music is to be notated as it should sound (the result of a performance), or whether one should notate how to produce the desired result (as action notation) (Böttinger 1987, p. 8).

The practice of prescriptive notation can be dated back to the 15th century, where it was used in Italian organ music to inform the organist of the organ’s ‘registration indications’, or—to name a more immediately relevant example—the well-documented use of lute and guitar tablature. Prescriptive notation informs performers of the physical execution of a certain technique.

Prescriptive notation can be compared to a kind of instruction manual. It tells us a series of steps which enables us to construct a complete whole. The follower of the instruction does not always know the function or implication of the individual steps, but the system or programme guides us eventually to achieve an (intended) conclusion (Kanno 2007, p. 235).

This explains why prescriptive notation in this sense is frequently associated with extended techniques. Composers therefore, need to provide instructions explaining how a performer should physically execute the extended technique. One example of this can be observed in Koshkin’s *The Mischievous Prince (The Prince’s Toys, 1992)*. The effect prescribed here is notated with ‘x’ note-heads accompanied by an instruction stating, ‘Quick arpeggios between the bottom of the bridge and the saddle with the index finger’ (Koshkin 1992, p. 3).

As the most common form of musical notation, descriptive notation on the other hand, can be thought of as ‘a visual equivalent of a recording: it contains most of the information required to identify the sound of the work. It allows us to imagine the music in our head’ (Kanno 2007, p. 232) without necessarily instructing the

performer on how to physically execute the music. This type of notation describes the pitch, rhythm, dynamics, and articulation (2007, p. 232). Common tempo markings such as *largo* and *allegro con brio* however, communicate further detail on how the music should sound. For example, the tempo marking *allegretto grazioso* in Matteo Carcassi's *Etude No 9* (Carcassi 2006, p. 10) instructs the performer to play the piece gracefully at a moderately fast tempo. Kanno goes on to explain that descriptive notation can also be annotated with descriptive texts and composers can add 'more and more descriptions in the notation to ensure that more information is conveyed to the performer' (p. 233). These descriptive texts are referred to in this study as 'descriptive score annotations'. As will be illustrated in further detail later, descriptive score annotations are prominent in the works of the late Phillip Houghton.

As composers continued to explore new concepts and genres score density and the use of additional score detail often increased. The prevalence of representational musical concepts in the repertoire discussed here suggests a brief retrospective. Hungarian composer, Franz Liszt (1811–1886) famously used the term programme music¹¹ to define a form of instrumental music, which directs the listener's imagination towards a specific image or emotion 'through an evocative title, a verbal programme, or both' (Bonds 2014, p. 212). When Liszt coined the term programme music, this compositional style had already been in use for over one hundred years. This new term however, allowed the style to become its own genre rather than a sub-genre. Previous to this, this compositional approach was referred to as,

either a subset of an existing genre (*symphonie à programme*, *charakteristische Symphonie*), or as a modified, more specialised category of music in general: depiction music, or more literally, "music that paints" (*malende Musik*), characteristic music (*charakteristische Musik*), or representational music (*schildernde Musik*) (Bonds 2014, p. 212).

Another form of programme music, the symphonic poem championed by Liszt was applied to his cycle of thirteen orchestral works, which depict a programmatic element, usually in one movement. A symphonic poem can be described as,

¹¹ A famous example of programme music is Hector Berlioz's *Symphonie Fantastique* (1830). This piece depicts a story of an artist's desire for a woman and the destruction this desire leads to.

An orchestral composition inspired by a literary, historical, or pictorial subject — or indeed, by anything which exists also outside music (a natural scene for instance) — and deriving its structure rather from the events or incidents or objects which it seeks to portray than from the inherited forms of the art of music itself. Whereas the motions and adventures of the themes in a symphony or a sonata are governed largely by the traditional structure, ... it is the order of events in the story that mainly prescribes the way in which the music of a symphonic poem is to go (Mendl 1932, p. 443).

The most obvious difference between programme music and a symphonic poem is the structure. A symphonic poem usually consists of only one movement, while programme music can contain multiple movements (The Oxford Companion of Music, 2011).

Absolute music on the other hand, a term coined by German composer Richard Wagner (1813–1883), has ‘no text to be sung, and no titles or accompanying descriptive terms that might in some way suggest what a particular work might be about’ (Bonds 2014, p. 1).

In stark contrast, the volume and degree of detail in Phillip Houghton’s unusually elaborate and evocative score annotations, understood here as ‘descriptive score annotations, requires an advanced level of interpretation. The interpretation of Houghton’s ‘technical extension’ is also reflected in his frequent technical specifications such as the use of the RH flesh¹² or nails¹³ or his creation of the term ‘mid’ stroke.¹⁴ This detailed use of RH positioning is even better exemplified in *God of the Northern Forest* (1989) where Houghton states, ‘RH shifts gradually up to about the 17th fret of the neck, so as to produce a delicate “bassoon-like” tone’ (Houghton 1989, p. 3).

In Göran Hermerén’s essay *The Full Voic’d Quire: Types of Interpretation of Music* (1993) Hermerén discusses specific problems regarding the interpretation of music. Some of these include the variety of interpreters i.e. the composer, performer, listener etc., requirements of interpretation and the possibility and tolerability of

¹² E.g. in bar 9 of *Deathless Deep ... She Wanders as a Mist (Gothica: Book of Spooks and Spectres, 2002)*

¹³ E.g. in bar 10 of *Dervish (Stélé, 1989)*

¹⁴ E.g. in *Kinkachoo, I love you (1998)*

incompatible interpretations of music. Hermerén also distinguishes between six possible bases of division for classifying types of interpretation, including the object of interpretation, the problem of interpretation, the material used in interpretation, the method of interpretation, the purpose of the interpretation, and the result of the interpretation. These bases help direct the performer toward various interpretative possibilities (Hermerén 1993, pp. 12–14) and will be explained in further detail under ‘key terms’. A selection of these will be adapted and applied as an approach toward the interpretation of descriptive score annotations.

Another source discussing the interpretation of music is Kenneth Cardillo’s dissertation (2008). This study bridges the gap between philosophical theories and semiotic analysis. The final chapter of Cardillo’s study discusses a threefold method for interpreting repertoire based on Deryck Cooke’s methodology in his seminal text *The Language of Music* (1959) as well as others such as Robert Hatten (2004) and Kofi Agawu (1991). Cardillo’s first level of interpretation is ‘intuitive’. This level focuses on understanding the basic aspects of a piece i.e. dynamics, key signatures, and rhythms. The second ‘semiotic’ level involves understanding the compositional style, and musical themes within the piece. The final level is ‘gestural’, which involves ‘higher analytical and performative interpretation’ (p. 125). This can consist of things such as employing various tonal colours to imitate certain sounds and understanding how the rhythmic and dynamic expressions the composer has used aid in bringing out the character of the piece.

Deryck Cooke’s *The Language of Music* (1959) is a valuable resource for composers and performers. This seminal text explores how the emotions depicted through music are the result of tonal tensions caused by specific scale degrees. For example, the melodic rise of the major triad (tonic, mediant, and dominant) expresses an ‘outgoing, active, assertive emotion of joy’ (1959, p. 115). Whereas, the descending dominant, mediant, supertonic, and tonic ‘conveys the feeling of a passionate outburst of painful emotion’ (p. 137-138). This methodology provides a practical solution for the interpretation of music.

While Cardillo and Cooke's methodologies are effective approaches to the interpretation of prescriptive notation they are not applicable to the interpretation of descriptive score annotations. As can be observed above, Cardillo and Cooke focus on interpreting the musical content of a piece rather than descriptive texts. Hermerén's study however, can be adapted and applied to the realisation of descriptive score annotations. Consequently, the current study will follow Hermerén's methodology, outlined in 'key terms'.

A fundamental technique resource for classical guitarists is Scott Tennant's *Pumping Nylon* (1995), which contains a broad range of concepts and exercises for overcoming technical issues associated with classical guitar performance. Some of these will prove helpful for the mastery of some of the extended techniques discussed in this study. For example, Tennant's idea of 'snapping' a finger onto a string utilising speed rather than force proved effective in executing clear string percussion in Brad Richter's *Jumping Cholla* (2005).

Il-Ryun Chung's ten *Studies for New Playing Techniques* (2019) focuses on specific extended techniques and is another valuable source for this study. Chung's *Study No 3* is particularly helpful in consolidating left-hand (LH) ascending slurs, referred to as a 'LH solo' by Koshkin (1992) and Chung (2019). *Study No 1* focuses on plucking behind a stopped note, a technique Richard Charlton uses in the third movement of *The Labyrinth of Deadly Sins and Divine Virtues* (2012). *Study No 2* is intended to improve a performer's percussive skills. The percussive effects Chung uses here are very similar to the ones used in the fourth movement of Koshkin's *The Prince's Toys*.

Extended techniques have been discussed in guitar methods since the nineteenth century where they were typically conceptualised in terms of timbral variety. Fernando Sor's *Method for the Spanish Guitar* (1832) discusses basic concepts of guitar technique such as how to hold the guitar, left and right hand technique, and tone production. Sor then goes on to provide detailed explanations of how to imitate

selected orchestral instruments on the guitar. For example, when referring to the imitation of the horns Sor states,

I should avoid producing a silvery and tinkling sound, and, in order to succeed, I take no note with the left hand on the strings to which it first belongs but, but on the following strings contiguous to it, so that I do not play any open strings (1832, p. 16).

Pascuale Roch's *A Modern Method for the Guitar (School of Tarrega)* (1921) is another example for the early use of extended techniques. Roch explains not only how to imitate different instruments on the guitar such as a harp, bells, side-drum (snare drum effect), bass-drum (tambora effect), trumpet, trombone, and oboe, but also how to emulate unusual sounds.

Hubert Käppel's *The Bible of Classical Guitar Technique* (2016) is vital to the development of guitar technique. This book is divided into two parts. The first covers basic concepts such as practicing, holding the guitar, posture, positioning of the left and right hand, and tone production. The second part contains technical exercises supplementing these concepts. Käppel's ideas regarding the movements and positioning of the left hand will be utilised in the development of pathways for executing some of the extended techniques in chapter two.

Ricardo Iznaola's *Kitharologus: The Path to Virtuosity* (1997) is another significant resource for classical guitar technique. Rather than acting as a guitar method focusing on basic theoretical technical issues, this practical handbook provides a collection of graded exercises focusing on the development of technical precision. These exercises are supplemented with practice approaches and specific goals for the student to achieve.

The repertoire utilising extended techniques since the nineteenth century is extensive. In addition to the repertoire discussed in the case studies in chapter two, composers such as John Cage, Leo Brouwer, Alberto Ginastera, Nigel Westlake, Astor Piazzolla and Roland Dyens, to name a few, incorporate extended techniques. Examples of these as well as others will be discussed in detail under 'key terms'.

In Linda Candy and Ernest Edmonds' distinction between practice-based research and practice-led research (2018) their key argument is the separation between the attributes of 'research' versus those that define 'practice'. They define 'research' as 'a systematic investigation to establish facts, test theories, and reach new knowledge or new understandings' (Candy and Edmonds 2018 p. 64). 'Practice' on the other hand, is defined as 'the actual application or use of an idea, belief or method, as opposed to theories relating to it' (2018, p. 64). They thereby argue, 'if a creative artifact is the basis of the contribution to knowledge, the research is practice-based' (2018, p. 64). They also state, 'if the research leads primarily to new understandings about practice, it is practice-led' (2018, p. 64).

Informed by this paradigm the current practice-based and practice-led study will be guided by the following aims and research questions.

1.2 Key Terms

Extended techniques are here understood as non-standard performance techniques that are defined by either prescriptive notation or—as an extension of the common terminology—by descriptive score annotations that go beyond the traditional scope of expression markings. For the purpose of this study a differentiation between ‘standard’ and ‘extended’ technique must be made. Standard playing technique for classical guitar requires the performer to fret the notes using the left-hand (LH) while the nails of the right-hand (RH) pluck or strum the strings. The timbral parameters resulting from this, while standard to the classical guitar presents limitations to composers and performers. Per definition, extended techniques deviate from the standard technique expanding these parameters. For example, in Zenamon’s *Casablanca* (2002) for two guitars the performers attach strips of leather or micromesh to the blades of a pocket ventilator. These strips strike the strings emulating the sound of a helicopter. Another example is found in the third movement of Koshkin’s *The Prince’s Toys, The Mechanical Monkey*. Here, the performer uses the fingers of both hands to rapidly tap the designated strings, imitating the sound of the toy monkey’s springs breaking. There are also occasions where the performer applies a modified standard playing technique to execute extended techniques. This can be observed in the fourth movement of Koshkin’s *The Prince’s Toys, The Tin Soldiers*. Here the performer crosses two strings with the LH prior to strumming with the RH, imitating a soldier’s snare drum. As a sonic extension of standard modes of instrumental playing, extended techniques enable composers to employ unorthodox sounds. Katherine Jetter Tischhauser states,

An extended technique is devised when a composer creates a new notation in order to convey to the performers of his work his intention regarding a different timbre, special sound, or effect (2002, p. 2).

As previously discussed, some extended techniques can be dated back to the nineteenth century. This is where extended techniques are either ‘traditional’ or ‘innovative’. Traditional extended techniques such as the tambora and Bartok pizzicato have a long history and are commonly found in repertoire. Techniques such as attaching objects to strings, and strumming behind fretted notes are relatively new and are therefore recognised as innovative. Composers use both traditional and innovative extended techniques for a range of reasons, which include evoking a

certain image, mood or atmosphere or imitating a particular sound. The extended techniques discussed here are therefore distinguished by the degree in which they are represented by either prescriptive notation or descriptive score annotations.¹⁵

Extended techniques are most commonly associated with what is termed here as prescriptive notation as they inform the performer of the technical aspect of physically executing a particular effect. Cuban classical guitarist, composer and conductor, Leo Brouwer (b. 1939) is one of the most significant living guitarist composers to employ extended techniques. While his early works involved a more traditional style with strong Afro-Cuban influences, he later began to experiment with extended techniques. In his piece *La Espiral Eterna* (1973) for example, Brouwer incorporates many effects including scraping the strings with the fingernails, Bartok pizzicato and muting the strings with the LH while plucking normally with the RH (Brouwer 1973). Other examples of unconventional performance techniques are found in Tomás Marco's (b. 1942) *Albayalde* (1965),¹⁶ David Bedford's (1937–2011) *Nurse's Song with Elephants* (1971)¹⁷ and Luciano Berio's (1925–2003) *Sequenza XI* (1987–1988).¹⁸

The extended techniques discussed in this study utilising prescriptive notation will be grouped into the following three categories. As discussed in the literature review, these categories have been adapted from John Schneider's *The Contemporary Guitar* (1985).

1. Pitched sounds
2. Unpitched sounds
3. Electronics

¹⁵ Composers do in fact sometimes combine both notational devices; see for instance Richard Charlton's *Sloth (The Labyrinth of Deadly Sins and Divine Virtues)*, 2012, p. 5).

¹⁶ The performer slides a razor blade across the bass strings.

¹⁷ The performer rubs the back of the guitar using the palm of the hand 'with varying degrees of pressure', imitating the sound of a trumpeting elephant.

¹⁸ Tambora, alternating LH and RH slurs (tapping) and Bartok pizzicato.

Extended techniques producing pitched sounds include strumming behind the nut in Nikita Koshkin's *Piece with Clocks* (1997), two-fingered glissando in Nikita Koshkin's *The Tin Soldiers (The Prince's Toys)*, 1992), glissando with the RH in Leo Brouwer's *La Espiral Eterna* (1973), muting in Alberto Ginastera's *Scherzo* from *Sonata* Op. 47 (1976), LH and RH slurring i.e. tapping in Leo Brouwer's *Cuban Landscape with Bells* (1985) and Luciano Berio's *Sequenza XI* (1987–88) respectively, and the percussive-sounding effect 'tambora'. The idea of using the guitar as a percussive instrument 'historically stems from the guitar's association with flamenco' (Godfrey 2013, p. 80) and can be dated back to the nineteenth century where Spanish guitarist and composer Julian Arcas (1832-1882) used tambora, as well as other extended techniques in his piece *La Batalla*.¹⁹ Another well-known example of the early use of tambora is found in Arcas' student, Francisco Tárrega's solo work *Gran Jota* (1872). Here Tarrega utilises a slightly different effect called the 'tamburo effect' (Schneider 1985, p. 181)—later known as the snare drum effect where the performer crosses the fifth (A) and sixth (E) strings (Schneider 1985, p. 181).

A tambora is a drum, originating from Latin America and 'is made from a hollowed tree trunk and played with the bare left hand and a stick held in the right hand' (The Harvard Dictionary of Music 2003, p. 869). The tambora effect for guitar is executed by striking the strings near the bridge with the RH fingers or side of the RH thumb (Lunn 2010, p. 34). In its ever-increasing range of manifestations percussive techniques are today one of the most utilised categories of extended techniques and are common amongst many twentieth and twenty-first century composers, including Reginald Smith Brindle (1913–2003),²⁰ Astor Piazzolla (1921–1992),²¹ Roland Dyens (1955–2016),²² Paulo Bellinati (b. 1950)²³ and Gary Ryan (b. 1969).²⁴

Moving on to the second category, examples for unpitched sounds include scraping the nails along the strings in Siegfried Behrend's *Movimenti für Gitarre* (1969),

¹⁹ Thank you to Jonathan Paget for familiarising me with Arcas' *La Batalla*

²⁰ In *November Memories* (1975)

²¹ In *Tango Suite* (1991–1992)

²² In *Libra Sonatine* (1986)

²³ In *Jongo* (1978)

²⁴ In *Benga Beat* (2010)

strumming behind the saddle in and strumming behind the saddle in Nikita Koshkin's *The Mischievous Prince* (*The Prince's Toys*, 1992), and golpe. The golpe produces a percussive effect similar to the tambora (detailed above), however no pitch is produced. To execute a golpe the performer strikes various parts of the guitar with the nails, fingers or hand (Lunn 2010, p. 38). This can be heard in Piazzolla's *Tango Suite* (1991-1992), Roland Dyens' *Libra Sonatine* (1986), Paulo Bellinati's *Jongo* (1978) and Gary Ryan's *Benga Beat* (2010). Another significant example of unpitched sounds is 'prepared guitar'. Prepared guitar involves attaching objects to the guitar or the strings such as a clothespin²⁵ or 'interfering with the normal string vibration' (Schneider 1985, p. 179). Lunn states,

In the twentieth and twenty-first centuries composers have incorporated objects to alter the sound of the instrument. This includes preparing the guitar with various objects as well as using objects to activate the strings (2010, p. 43)

Eminent composer John Cage (1912–1992) invented the prepared piano in 1939 (Takahashi 1992, p. 87). His teacher, Henry Cowell (1897–1965) introduced Cage to unconventional piano techniques such as plucking and muting the piano strings and it was from these ideas that Cage's interest in prepared piano began. *Bacchanale* (1940) was the first known piece Cage wrote for prepared piano. In this piece, bolts and screws are placed between the piano strings in Cage's effort to evoke an African atmosphere (Saxon 2000). Subsequent to Cage's popularisation of prepared piano, the idea of prepared instruments has gained much popularity; see for example Brouwer's use of matchsticks in *Paisaje Cubano con Rumba* for four guitars (1985) and Vollmer's use of a kitchen whisk in *Steadfast Against the Sun* for flute and guitar (2002). Schneider (1985) suggests that a guitar is 'prepared' when an object interferes with the strings. This can be observed in Koshkin's *Piece with Clocks* (1997) where the performer weaves a matchstick through strings four, five and six. Another example of prepared guitar can be found in Haydn Reeder's *Draw Near to the Bell* (1980), Prepared guitar also includes 'the use of one of the six strings themselves to interfere with the other strings' (Schneider 1985, p. 179). Aligning with Schneider's statement, string crossing falls under the category of unpitched sounds. String crossing is executed by crossing one string over another. This can be dated back to the nineteenth century where Francisco Tárrega utilised a 'tamburo effect'

²⁵ In Richter's *Three Little Nightmares* (*I Felt a Funeral in my Brain*, 2005) a clothespin is attached to the sixth string.

(Schneider 1985, p. 181)—later known as the snare drum effect where the performer crosses the fifth (A) and sixth (E) strings (Schneider 1985, p. 181) in his solo guitar work *Gran Jota de Concierto* (1872).

The final category, use of electronics, is perhaps the least frequently utilised extended technique for classical guitar. However, among other examples some notable contemporary classical guitar composers who have written pieces calling for the use of electronics include Thea Musgrave (b. 1928),²⁶ Nigel Westlake (b. 1958),²⁷ John Metcalfe (b. 1964)²⁸ and Ken Murray (b. 1968).²⁹ Although there are many such examples for the use of electronics, the limited scope of this study does not allow for further investigation of this area of extended technique.

To illustrate categories one, and two in more detail the concepts of prescriptively notated extended techniques will be exemplified in chapter two.

As discussed earlier, the concept of descriptive score annotations can be dated back to the nineteenth century where it was used by Russian composer Alexander Scriabin (1872–1915). In bar 112 of *Piano Sonata No 6* (Op. 62) Scriabin writes, ‘L’épouvante surgit’ (Scriabin 1912, p. 8), which translates into English as ‘the terror rises’. Similarly, in bar 252 of his *Piano Sonata No 7* (Op. 64) Scriabin states, ‘avec une volupté radieuse, extatique’ (Scriabin 1947, p. 20), translating to ‘with radiant, ecstatic voluptuousness’. Another example can be found in the works of American composer George Crumb (b. 1929). Throughout all four volumes of *Makrokosmos* (1973-1979) Crumb employed a very descriptive style. In the ninth movement *The Abyss of Time* he provides the descriptive annotation ‘Dark, with a sense of profound mystery’ (Crumb 1974, p. 15). David Burge summarises it well when explaining his initial reaction to the score of Crumb’s *Makrokosmos*, volume one.

²⁶ In Musgrave’s *Soliloquy* (1969) the performer plays along with a tape recording.

²⁷ In Westlake’s *The Hinchinbrook Riffs* (2003) a digital recording is used to create an echo about half a second behind the guitarist.

²⁸ In Metcalfe’s *The Third Fire* (2006) the performer plays with a digital delay.

²⁹ In Murray’s *Loop Sonata* (2016) a loop pedal is used to record sections of the piece, which are then repeated while the performer plays along with it.

Its appearance was staggering, every page demanding the closest scrutiny, each new title calling forth reactions of a supramusical nature from all the senses (Burge 1975, as cited in Shuffett 1979, p. 20).

In contrast to the more predictable outcome of prescriptive notation however, the above illustrates how the tonal colour employed in performance as a result of descriptive score annotations can vary greatly. Bartolozzi (1967) suggests that due to the variety of timbres instruments can produce, notating the desired tonal colour is not possible, resulting in performers employing different tonal colours to what the composer intended.

Though it is possible to produce a variety of tone colours for each note, in many cases the almost excessive number of different tone colours prevents an adequate descriptive definition of each timbre. Some of these have only very slight differences, subtle shadings which can certainly be used for greater colouristic effect, but here it is necessary to indicate only one of those timbres which have the most definite characteristics and can be given an accurate descriptive term, thus leaving the performer to use other sounds of a slightly different colour as he [the composer] wishes (Bartolozzi 1967, p. 19–20).

This is where attention to the detail of descriptive score annotations is imperative to ensure the composer's desired extra-musical outcomes are communicated. As mentioned in the literature review, these annotations should not be confused with common expressive indications such as articulation, tempo, dynamics and phrase markings, which are more specific and instructive. Instead, the words and phrases associated with descriptive score annotations help the performer understand further the underlying narrative of the music and the moods and imagery to be evoked. In some cases such descriptive score annotations are additionally even supported by programme notes, which may make the music seem programmatic, thereby further expanding the scope of interpretative and timbral possibilities to be considered. It should be noted however, that these interpretive challenges are not unique to the realisation of descriptive score annotations. They are also relevant within the context of traditional notation, and even more so within twentieth century repertoire that employs an element of indeterminacy such as graphical scores and works with an element of improvisation.

A prominent exponent of such an approach to classical guitar composition is the late Australian guitarist composer Phillip Houghton (1954–2017), known for his highly imaginative score annotations and programme notes.

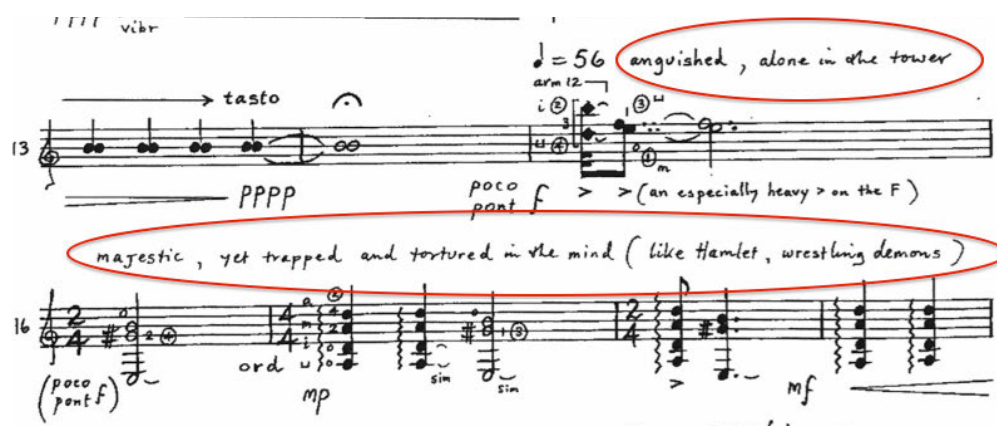


Figure 1—Phillip Houghton, *King*, descriptive score annotation

When it came to composing, Houghton did not like to be restricted by a framework or timeline. He preferred to wait until he ‘got the right inspiration, the right motivations, the right ideas and just go for it’ (Agostino, personal communication, 12 August 2020) and let his imagination direct him. ‘What he liked to do rather than try to notate things like slow down here, do that there and so on is try to get the music to sound with some sort of imagination as to what is the feeling that you are trying to portray to somebody’ (Agostino 2020). This unstructured and imaginative approach to composition is shadowed through his evocative works. For example, the chords in the beginning of *God of the Northern Forest* (1989) are to be played strong and heavy and rather than employing a standard expressive marking to indicate this, such as, ‘pesante’, he wrote ‘like an anvil’ (Houghton 1989, p. 2). Houghton’s descriptive instructions give the performer a deeper sense of what the sonic realisations of his score are meant to evoke. The resulting interpretation then needs to be communicated to the listener. Due to the scope and degree of nuance contained in Houghton’s descriptive score annotations, the performer is frequently challenged to explore the timbral limits of the guitar and such interpretative explorations can, at times even result in sonic effects reminiscent of extended techniques. The fastidious nature of Houghton’s descriptive score annotations can make their interpretation a challenging undertaking. Berenson states:

Interpretation focuses on bringing out what there is in the music, on what is perceived, on what there is to be discovered, rendered audible and to offer what has been understood about the music to the audiences (1993, p. 61).

Performers however, do not have to follow every one of Houghton's instructions exactly. 'He was great from the point of view that he knew exactly what he wanted. But he also quite ok if I didn't agree with something in particular as long as I had a valid point in doing something in a slightly different way' (Agostino 2020). For example, if Houghton indicates for a passage to be played with a certain RH fingering that is not comfortable to the performer, they can change the fingering without affecting Houghton's intended musical intentions.

Swedish philosopher, Göran Hermerén discusses six possible bases of division designed as a classification system for a distinction between different musical interpretations (Hermerén 1993, p. 12–13). As discussed earlier, each basis focuses on a separate element of interpretation directing the performer towards interpretative possibilities. Not all bases however, should be applied in all contexts. Hermerén states, 'there is no need to assume that these possible bases of divisions are equally interesting in all contexts. In some contexts, one of them may be more rewarding or illuminating than others, in others the situation may well be different' (Hermerén 1993, pp. 13-14). Consequently, the following three bases function as an effective tool for interpreting descriptive score annotations and communicating these interpretations in performance, which will be adapted and applied in the relevant Phillip Houghton case study in chapter two.

1. The object of interpretation
2. The problem of interpretation
3. The material used in interpretation

The object of interpretation is 'open and indeterminate ... it presents the interpreter with choices and possibilities' (Hermerén 1993, p. 16), which—in addition to the standard score elements such as pitch and rhythm—are descriptive score

annotations and the composer's programme notes. Such choices need to be based upon the performer's judgement of 'how the work is to be understood, or explained, what its meaning and significance is, how it is to be elucidated or explicated, and so forth' (Hermerén 1993, p. 16). For example, as the descriptive texts discussed in this study are not explicit in their meaning, the performer may be confused by the score or the text or there may be an underlying message within the text that is not clear (Hermerén 1993, p. 16). However, if it were not for the ambiguity of these descriptive score annotations they would not require interpreting.

... it should not be possible by direct inspection to settle these problems, otherwise the distinction between description and interpretation would break down' (Hermerén 1993, p. 16).

The problem of interpretation involves understanding the composition and knowing how to communicate it to the listener such as, 'What the composer intended? How contemporary readers or listeners understood the work? How it ought to be played and understood, given certain overriding normative concerns or interests?' (Hermerén 1993, p. 12). Here, the problem is the descriptive score annotations and the composer's programme notes. Realising the correlation between the two and how they relate to the underlying narrative of the music will help the performer understand the imagery and atmospheres to be evoked, directing the performer to interpretations that stay true to the composer's intended musical outcomes. As discussed earlier, the timbral nuances realised as a result of interpreting such descriptive score annotations can, at times, resemble processes applied to extended techniques.

The material used in interpretation is the type of evidence used to 'suggest, corroborate, or criticize proposed interpretations' (Hermerén 1993, p. 12). A valuable source of information beyond the printed score is an interview with either the composer (sadly Phillip Houghton passed away in September 2017) or someone who worked closely with the composer. Sydney-based guitarist and educator Raffaele Agostino knew Houghton very well and worked with him on many occasions. As discussed further in chapter two, the interview that was conducted with Raffaele Agostino for this study helps underpin our understanding of the way Houghton

intended his descriptive score annotations to be interpreted and communicated to the listener.

1.3 Aims

1. To demonstrate mastery of the extended techniques and effects used in the repertoire through the application of pathways and methods discussed.
2. To provide a discussion of the selected extended techniques and effects used in the chosen repertoire and how they aid in communicating the music.
3. To discuss and implement approaches for interpreting Phillip Houghton's descriptive score annotations.

1.4 Research Questions

1. What methods and pathways can be applied to overcome the technical challenges of the selected extended techniques and effects?
2. What extended techniques and effects are used in the selected repertoire and how do they assist in conveying to the listener, the story behind the pieces?
3. What approaches can performers use to ensure an accurate interpretation of Phillip Houghton's descriptive score annotations?

1.5 Methodology

A practice-based PhD is distinguishable from other kinds of PhD because the creative works arising from the research process are included in the submission. A full understanding of the significance and context of the research can only be obtained by experience of the works created as distinguished from using them as illustrations (Candy and Edmonds 2018 p. 65).

In this sense the two recitals as the core components of this submission are fundamental in demonstrating the mastery of the extended techniques and effects used in the selected repertoire. The accompanying exegesis aligns with the concept of practice-led research and is informed by the previously discussed concepts of Hermerén (1993) and Moorhead (2012). Moorhead's approach will be applied for the development of pathways toward a mastery of the discussed extended techniques associated with prescriptive notation. A selection of Hermerén's six bases of division for interpretation on the other hand, will be adapted and applied when interpreting and communicating descriptive score annotations. The current study therefore follows a five-step methodology:

1. Selection of representative repertoire that illustrates the use of extended techniques and descriptive score annotations in compositions for classical guitar;
2. Score Analysis
 - I. Analysing the scores of the chosen repertoire to identify the extended techniques and intended effects.
 - II. Exploring the ideas and inspirations behind each piece and identifying how the extended techniques and effects used assist in conveying these ideas and inspirations to the listener.
3. Identification of the technical challenges involved with extended techniques and effects and provision of methods and pathways that can be employed to overcome them;
4. Adaption and application of Hermerén's bases of division for interpretation;
5. Demonstration of the mastery of the extended techniques and effects through the two recitals.

1.6 Significance/contribution to discipline

As discussed above there is a considerable amount of research that has been conducted on extended techniques for other instruments. In the area of classical guitar, Lunn (2010) and Vishnick (2014) are examples for the comparatively small number of studies conducted so far. In response to this shortcoming the current study culminates in two recital videos that provide an aural and visual demonstration of the mastery of the selected representative repertoire. The accompanying exegesis discusses selected extended techniques and descriptive score annotations, identifies the technical challenges involved, and provides methods and pathways to overcome these.

2. Case Studies

The following case studies are examples for a pathway from identifying challenges to designing and managing solutions leading to the mastery in performance. The repertoire selection for the following case studies is intended—within the word count limitations of this study—to illustrate the diverse range of extended techniques. As discussed earlier, Moorhead’s method of preparation along with Hermerén’s approach facilitated the development of these solutions. The extended techniques and effects selected range from prescriptive notation identifying non-standard performance techniques, to descriptive score annotations.

2.1 Brad Richter—From *A Whisper in the Desert: I. Jumping Cholla*

Jumping Cholla, a good example for string percussion, is based on a personal experience where Richter was stabbed by a barb of a cholla cactus. Due to how deep the needles had penetrated, and the hook-shaped barbs on the end of the needles, he could not pull them all out and had to wait for the needles to work their way out of his leg. The string percussion applied here occurs from bar 84–90.

This effect is notated with a regular note head accompanied by Richter’s instruction No 3 stating, ‘R.H. thumb striking the sixth string at the 19th fret and holding the string against the fretboard while the L.H. second finger strikes the sixth string at the sixth fret’ (Richter 2005, p. 12). Following the percussive strike of the RH thumb on the sixth (E) string, the LH second finger hammers onto the stopped sixth string at the sixth fret.

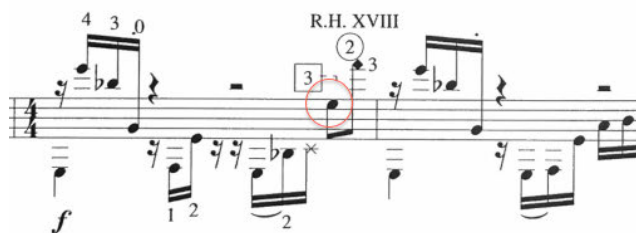


Figure 2—Brad Richter, *Jumping Cholla*, percussive effect

This technique is essentially an ascending slur (hammer-on) and clarity and audibility is key. Tennant's idea of 'snapping' the finger onto the string from approximately half an inch above the fretboard is a helpful illustration.

Don't think of bringing the finger up any further above the string than half an inch to an inch, or pressing down on the string any harder. The speed is what counts (Tennant 1995, p. 13).

When executing any kind of slur, a curved finger will help maintain efficiency. This ensures that the tip of the finger comes into contact with the string, minimising the required pressure level.



Figure 3—Curved finger

Keeping the LH wrist reasonably straight and ensuring the thumb is placed halfway down the back of the neck, behind the second finger 'allows for an even distribution of pressure throughout the hand' (Tennant 1995, p. 7), facilitating a secure LH. While aiming for a straight wrist is desirable, it is important to note that placing the LH fingers on the lower strings such as the low A and E will create more of an angle in the wrist if good curvature in the fingers is maintained. The two images below illustrate the LH positioning required for executing Richter's string percussion.



Figure 4—LH wrist angle, taken from Scott Tennant's *Pumping Nylon*, p.7

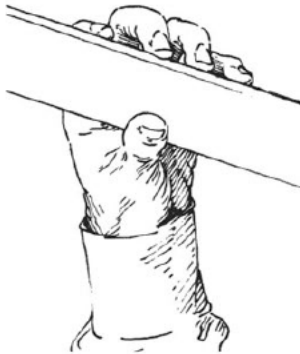


Figure 5—RH thumb position, taken from Scott Tennant's *Pumping Nylon*, p. 7

When learning this technique, I applied a simple, yet effective exercise. While holding the RH thumb on the sixth string at the nineteenth fret, the LH finger slurred onto the first fret on the sixth (E) string and moved up one fret at a time while maintaining a curved finger and monitoring wrist adjustments. This exercise can then be repeated on the remaining five strings.

Although quite a challenging technique, the harsh sound effect Richter prescribes here can effectively evoke the sharp barbs of the cholla cactus if executed accurately. See recording No 2 from 1:10:20 to 1:10:42.

2.2 Nikita Koshkin—From *The Prince's Toys: IV. The Tin Soldiers*

The Prince's Toys depicts a young prince playing cruel games with his toys, which come to life seeking revenge. Movement four, *The Tin Soldiers* portrays a battle between the soldiers and the prince (Budds 2005). The following three effects used in this section aid in creating an intense battle atmosphere and fall under categories one and two (pitched and unpitched guitar).

String Crossing

The Tin Soldiers begins with the soldiers' theme; consecutive perfect fourths played on crossed strings, imitating a soldiers' snare drum. Here the performer begins by crossing strings one (E) and two (B) in bars 1-9, followed by strings five (A) and six (E) from bar 56-65.

Czech guitarist, Vladimir Mikulka (b. 1950) premiered this piece in 1980 at The Grand Auditorium of Radio France, Paris and comments in the score,

With the help of the right hand pull the 2nd string down over the 1st one (Koshkin, 1992, p. 11).

There are two problems with Mikulka's method: the string noise created from the strings brushing together and the use of the RH when crossing the strings. The following three-step method eliminates these issues and provides an effective way for executing this effect.

1. Use the flesh of the LH index finger to pull the string that is located above the higher-pitched string away from the fingerboard.
2. Pull this same string further down over the higher-pitched string.
3. Use the LH index finger to hold down the now crossed strings on the fretboard.



Figure 6—String crossing: steps one, two and three

See recording No 1 from 53:58 to 54:14, 55:37 to 56:16 and 56:21 to 56:27.

Two-Fingered Glissando

Bar 36 contains two, two-fingered glissandi—the first on strings one (E) and three (G) and the second, on strings five (A) and three (G). Notated as a glissando this effect could perhaps be better described as a glissando trill as the first and second LH fingers continue to oscillate between frets eight and nine and later between frets seven and eight.

The challenge encountered here is shifting back and forth between the indicated frets at a high speed. This can be resolved by refining two technical adjustments. Firstly, the LH thumb must be taken off the back of the neck. Standard classical guitar technique requires the LH thumb to be placed halfway down the back of the neck, as it provides LH stability and control (Tennant 2003, p. 27). This however, restricts the fast movement required for the effect. It is also important to note that rather than relying solely on stretching the fingers to allow the shifts between frets, taking the thumb off the neck will shift the motion of the glissando from the fingers to the arm, allowing for easier and more secure shifting. As Hubert Käppel explains, ‘your upper and lower arms and wrist have to move so that your fingers have an easy job of it, i.e. they strain or stretch as little as possible’ (Käppel, 2016, p. 28).

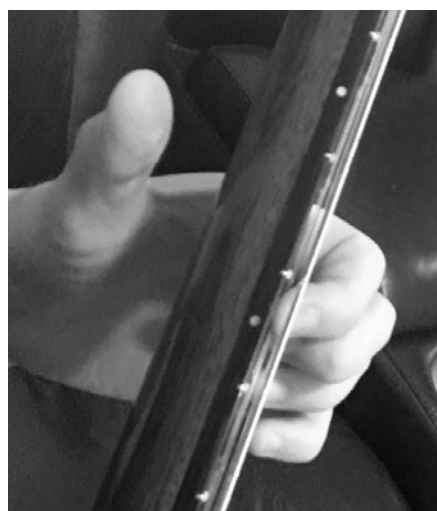


Figure 7—Thumb lifted off back of guitar neck

Secondly, applying minimal pressure to the fretboard will enable effective shifting. To realise the amount of pressure required the following exercise is very effective. This first step is to by lightly placing the first finger of the LH onto the sixth string at the fifth fret i.e. not applying any pressure to the string. While plucking with the RH, pressure can slowly be applied to the string with the LH. The first two or three notes will sound muted, the next couple will buzz and finally a clear note will be heard. It is helpful to then repeat this on frets six, seven and eight with the second finger. In addition to executing fast and secure shifting, this will also aid in alleviating any tension caused through excessive pressure. See recording No 1 from 55:01 to 55:04 to observe this effect in performance.

Two-Fingered Slurs

Bars 42–50 contain fast, continuous two-fingered slurs, and the challenge encountered here is eliminating finger tension. As previously discussed, minimising the amount of pressure when slurring is vital. To further elaborate on Tennant's 'snapping' idea, the sound of a hammer-on is produced by speed rather than the amount of pressure applied to the strings.

In the case of the slur, the finger must be snapped down onto the string with slightly greater speed. This is what produces the sound and creates our tone during a slur (Tennant 1995, p. 13).

Incorporating Tennant's 'speed over force' idea into the following exercise will help alleviate tension in the hand and wrist and improve precision. The performer begins by hammering fingers one and two on the sixth (E) and fourth (D) strings respectively, beginning at the ninth fret, moving down one fret at a time. This should be repeated on strings five and three (A and G), four and two (D and B) and finally three and one (G and E).

Il-Ryun Chung's study no 3 (2019) is also an effective exercise in increasing placement accuracy. Here, the i-finger holds down the third (G), fourth (D), fifth (A)

and sixth (E) strings at the nineteenth fret while the LH fingers slur onto the indicated notes.

Etüde Nr. 3 • Study No. 3
 Präparierte Gitarre I: die Linke Hand allein
 Prepared Guitar I: left Hand solo

⑥ = D ♩ = 60 ca. *molto cantabile, dolce e legato* *più fluido* Il-Ryun Chung (1999)

Figure 8—Il-Ryun Chung, *Study No 3*, score, first page

The two-fingered slurs in bars 42-50 of *The Tin Soldiers* can be heard on recording No 1 from 55:11 to 55:27.

2.3 Richard Charlton—*From The Labyrinth of Deadly Sins and Divine Virtues: V. Humility*

The Labyrinth of Deadly Sins and Divine Virtues tells the story of 13th century poet, Dante Alighieri's decent into hell, his ascent of Mount Purgatory and finally his arrival into Heaven. This piece is a fascinating addition to classical guitar repertoire. Various movements of this piece call for the performer to play two guitars simultaneously. One guitar remains in standard tuning while the second uses the following scordatura: C#, G#, D#, g#, b, e (6th to 1st string). For the purpose of this case study the guitar in standard tuning will be referred to as guitar one and the other as guitar two.

In movement five, *Humility* the performer plays guitar one in a standard playing position with guitar two placed on a stand within reach. In bar 32 the performer slurs a LH finger onto the low G# on the sixth string of guitar one while the RH thumb simultaneously strums the open fifth and sixth strings of guitar two.

Figure 9—Richard Charlton, *Humility*, simultaneous slur and strum

The challenge here is the synchronisation of the LH slur and the RH strum. The key to this is twofold; the timing of the RH shift from the harmonic at the seventeenth fret in bar 31 to the sound-hole of guitar two, and the coordination of the RH strum with the LH slur. Firstly, the plucking of the preceding note and the shift must become one motion. Secondly, subdividing the tempo into semiquavers will prepare the performer mentally and physically for the coordination of the strum and slur, i.e. the necessary internal means of accurately timing the shift. See recording No 2 from 50:24 to 50:26.

2.4 Brad Richter—From *Three Little Nightmares: III. I Felt a Funeral in my Brain*

The title of this movement is taken from nineteenth century poet Emily Dickinson's 1861 poem. In this piece Richter has attempted to evoke the sinister atmosphere of Dickinson's poem. In this piece a clothespin is attached to the sixth string (E), which rests on the fifth string (A). When the fifth string is plucked it bounces on the string emulating the eerie atmosphere of Dickinson's poem.

The challenge here is ensuring the clothespin doesn't fall off the sixth string when bouncing on the fifth. Using a clothespin that has a flat surface at the end, as shown below is important.



Figure 10—Flat surface of clothespin

This flat surface allows the performer to drill a small hole, which will help keep the clothespin in place. The size of the hole is crucial, as the clothespin must swing slightly on the sixth string. The hole must, therefore be big enough to accommodate this. However, if it is too big the clothespin will not bounce properly. I found that using a 1-millimetre drill bit to drill into the flat surface created the perfect sized hole. See recording No 1 from 31:40 to 34:08.



Figure 11—Hole in clothespin

2.5 Phillip Houghton—*Ophelia ... A Haunted Sonata: V. Death ... with moons in your hair*

Phillip Houghton's *Ophelia ... A Haunted Sonata* focuses on a pictorial and literary subject, and is therefore a good example of programme music. This five-movement suite is based on the legend of Ophelia and her death as described by Queen Gertrude in the fourth act of Shakespeare's *Hamlet*. The titles of the first four movements evoke Ophelia's emotions in the moments leading up to her suicide. The fifth movement, *Death ... with moons in your hair* is based on the depiction in John Millais's painting *Ophelia* (1851-1852), which shows Ophelia's lifeless body drowning in a river surrounded by flowers.

In alignment with Hermerén's three bases of division for interpretation discussed in chapter one, the following case study is an example for interpreting and integrating into performance selected descriptive score annotations in *Death ... with moons in your hair*.

The Object of Interpretation

The final ten bars of *Death ... with moons in your hair* depict Ophelia slowly sinking to the bottom of the river. Here, the object of interpretation is the annotation, 'dying into total silence into the cold palm of the unknown' (Houghton 2007, p. 18), along with the accompanying programme notes,

Another powerful influence on me—and also inspired by Shakespeare's magnificent text—was the painting 'Ophelia' (1852) by Pre-Raphaelite artist John Millais. It shows Ophelia drowning in a river, surrounded by a garland of wildflowers ... a strangely calm, otherworldly scene' (Houghton 2007, p. 2).

The Problem of Interpretation

Understanding the correlation between descriptive score annotations and the programme notes will help the performer realise vital aspects of the music such as the atmosphere to be portrayed. For example, 'dying into total silence into the cold palm of the unknown' (2007, p. 18), can be perceived as Ophelia giving in to her loss and loneliness and letting the cool, peaceful water wash over her as she slowly sinks to the bottom of the river. Houghton describes Millais's painting of the lifeless Ophelia as 'a strangely calm, otherworldly scene' (Houghton 2007, p. 2). He then goes on to describe the death of Ophelia as it relates to the final movement,

'I have tried to convey Ophelia's pain and suffering and the sadness of her tragedy ... where it all cries out as a yearning for healing and peace. It is also about death ... of Ophelia, slowly sinking into the cold palm of the unknown (Houghton 2007, p. 2).'

The sonic realisation of the peaceful atmosphere implied here can be observed throughout the final movement in recording No 1 from 23:00 to 26:15.

As the following example illustrates, employing unusual interpretative nuances aid in conveying the composer's musical intentions to the listener.

Figure 12—Phillip Houghton, *Death*, descriptive score annotation, dynamic indications and instruction

The chords in the above figure are gradually ‘dying into total silence’, representing the lifeless Ophelia slowly sinking ‘into the cold palm of the unknown’. Translating this evocation into performance can be facilitated by a visual effect portrayed through the extreme decrescendo and diminution of notes of the chord. When the performer has reached the eighth and ninth chords in this decrescendo the sound is almost inaudible. Making a conscious effort to ensure the right arm is still moving as the strings are being strummed will give the listener the impression of a continuous sound, which is essential to evoke the image of Ophelia slowly sinking. This can be observed in recording No 1 from 25:34 to 26:15.

Reading the composer’s programme notes to the listener prior to performance is another powerful complementary means of communication, as doing so will allow the listener to understand exactly what the piece is about. See recording No 1 from 13:04 to 15:12 to hear the programme notes that accompany *Ophelia ... A Haunted Sonata*. Programme notes, however, are not always provided with scores and if this is the case a brief explanation of the piece will have to suffice.

The Material used in Interpretation

Sydney-based guitarist Raffaele Agostino worked closely with Phillip Houghton and drawing on his deep understanding of Houghton's descriptive score annotations has been immensely helpful. In an interview I conducted with Agostino we discussed how to approach Houghton's descriptive score annotations. The key here is imagination. Houghton made his annotations descriptive and detailed to allow performers to imagine how the music should sound and this is what will direct the performer toward an interpretation that stays true to Houghton's ideas. Houghton would have gone over these annotations many times and if the performer uses their imagination and analyses all the descriptive texts, there will be little question as to whether the interpretations are accurate or whether they will 'come across to the listener' (Agostino, personal communication, 12 August 2020). 'He knew exactly what he wanted' (Agostino 2020) and ensured the performer was given all the information required to understand the piece. He would 'write down as much as possible on the music to try and really capture the essence' (Agostino 2020). For example, in the final ten bars of *Death ... with moons in your hair*, the descriptive annotation and accompanying programme notes, 'slowly sinking into the cold palm of the unknown' (Houghton 2007) Houghton directs the performer's imagination to a calm scene of the lifeless Ophelia slowly sinking to the bottom of the river.

It is also important to be aware of Houghton's background in painting and to note that Houghton 'thought a lot in colour' (Agostino 2020). Deciding on which tonal colours to apply such as, *tasto*, *ponticello*, *free-stroke*, *mid-stroke*, *rest-stroke* etc. is therefore vital. These timbral nuances play an important role in evoking the imagery and moods of the music. 'The colour change quite often can be the difference between sounding so-so and sounding OK, or sounding really spectacular' (Agostino 2020). For example, when playing the chords associated with the annotation, 'dying into total silence into the cold palm of the unknown' (Houghton 2007) Houghton indicates for them to be played *ponticello* with the 'm' finger. The bright, metallic tonal colour produced through this instruction aids in evoking the 'strangely calm' (Houghton 2007, p. 2) atmosphere Houghton sought.

During a concert in June 2019 at the Kitchener-Waterloo Chamber Music Society in Ontario, Canada I applied Hermerén's three bases of division when performing *Ophelia ... A Haunted Sonata*. The feedback received from this concert demonstrated that the application of Hermerén's approach facilitated a successful interpretation and integration into performance of Houghton's descriptive score annotations. This led me to apply the same approach to Houghton's *Scacchi* for a concert at the WK United Mennonite Church in Waterloo, Ontario. Here, the feedback from the previous performance was echoed, consolidating the significance of Hermerén's approach.

3. Conclusion

This study explores the technical and musical approaches taken to interpret and perform extended techniques and descriptive score annotations called for in the selected classical guitar repertoire. In identifying, analysing and preparing these techniques and interpretive conundrums for performance a distinction is made between prescriptive notation for non-standard performance techniques and text-based i.e. descriptive score annotations that composers use to evoke imagery or moods.

The purpose of this project was to identify, analyse and apply selected extended techniques associated with prescriptive notation and descriptive score annotations. The chosen repertoire successfully captured the range of extended techniques associated with these notational devices. The exegesis is designed as an instructional guide for classical guitarists towards an effective mastery of the selected extended techniques. The development of methods and pathways for overcoming the technical challenges encountered were achieved through an iterative process of experimentation as well as the inclusion of Moorhead's pragmatic approach and various other existing technical resources. Hermerén's three bases of division for interpretation proved effective when interpreting and integrating descriptive score annotations. As can be observed from the outcome of this research project, the value of Hermerén's methodology for the interpretive processes involved in the performance of Houghton's compositions cannot be overstated. The recorded recitals provide a visual and aural demonstration of the mastery of the extended techniques. It is hoped that the recordings and supporting exegesis will provide classical guitarists with effective methods and pathways for mastering the discussed extended techniques associated with prescriptive notation as well as providing performers with the necessary tools for interpreting and integrating into performance descriptive score annotations.

Appendix A: Recital Programmes

Alexandra Shepherd – Classical Guitar
Masters Recital One
6:00 p.m., Thursday 29 August 2019
The University of Adelaide, EMU, Schulz Building

Programme

Casablanca (Guitar duo with Renae Attenborough) Jaime Zenamon (b. 1953)

Ophelia ... A Haunted Sonata Phillip Houghton (1954–2017)

1. *Fear ... and the angel*
2. *Suffering and Madness ... am I but a dream of a shadow?*
3. *Chant ... of the flower-moon*
4. *Water ... memories – halls of ghosts – wash away*
5. *Death ... with moons in your hair*

Three Little Nightmares Brad Richter (b.1969)

1. *Clock Strikes Midnight*
2. *Stepping on a Spider*
3. *I Felt a Funeral in my Brain*

Usher Valse Nikita Koshkin (b. 1956)

The Prince's Toys Nikita Koshkin (b. 1956)

1. *The Mischievous Prince*
2. *The Mechanical Monkey*
3. *The Doll with the Blinking Eyes*
4. *The Tin Soldiers*
5. *The Prince's Coach*
6. *The Big Toys Parade*

Alexandra Shepherd – Classical Guitar
Masters Recital Two
6:30 p.m., Monday 9 December 2019
The University of Adelaide, EMU, Schulz Building

Programme

Scacchi

Phillip Houghton (1954–2017)

1. *Pawn*
2. *Queen*
3. *Knight*
4. *Bishop*
5. *Rook*
6. *King*

Serenades of the Unicorn

Einojuhani Rautavaara (1928–20)

1. *A Nervous Promenade and Dance (With His Own Reflection)*
2. *Serenading a Pair of Giggly Nymphs (Drunk of Night)*
3. *Serenading the Beauty Unobtainable (Too Far in Time)*
4. *Having a Grand Time (With Some Scythian Centaurs)*

Piece with Clocks

Nikita Koshkin (b. 1956)

The Labyrinth of Deadly Sins and Divine Virtues
(Guitar solo for one player using two instruments)

Richard Charlton (b. 1955)

- ~ *The Introduction into the Labyrinth* ~
1. *The First Diligent Steps into the Maze*
 2. *Envy*
 3. *Sloth*
 4. *Pride*
 5. *Humility*
 6. *Gluttony*
 7. *Temperance*
 8. *Greed and Charity*
~ *A Brief Interlude of Courage* ~
 9. *Lust*
 10. *Chastity and Purity*
 11. *Wrath*
 12. *Kindness and Forgiveness*

A Whisper in the Desert

Brad Richter (b. 1969)

1. *Jumping Cholla*
2. *Something Softly out of Silence*
3. *Gila Monster*
4. *Starry Night on the Beach (with Federales)*

Appendix B: Programme Notes

Casablanca (2002)

Casablanca was inspired by two ideas. The first was a suggestion made by friend and guitarist, Thomas Kirchhoff who challenged him to compose a work incorporating a hand-held ventilator. The second was the movie, *Casablanca*. In this piece Zenamon cheekily quotes music from the movie. The ventilator is also creatively used to emulate the sound of the helicopter from the final scene of the movie.

Ophelia ... A Haunted Sonata (2007)

Ophelia ... A Haunted Sonata is influenced by two concepts. The first being the death of the character *Ophelia* in Shakespeare's *Hamlet* and the second is the 1852 painting by Pre-Raphaelite artist John Millais titled, *Ophelia*, depicting the lifeless Ophelia, floating in a stream surrounded by a garland of wildflowers.

Three Little Nightmares (2005)

Clock Strikes Midnight portrays a grandfather clock as it is striking midnight. Throughout the piece the clock strikes twelve times signifying 12 a.m. (the midnight hour). The piece ends with a final chime representing 1 a.m. signifying the end of the midnight hour.

Stepping on a Spider tells the story of Richter's pursuit of a black widow spider with shoe in hand and the fate with which the spider is ultimately met.

I Felt a Funeral in my Brain is borrowed from nineteenth century poet Emily Dickinson's poem. Richter has attempted to evoke with music the same sinister atmosphere that Dickinson created with words.

Usher Valse (1993)

Usher Valse is based on Roderick Usher, the main character from Edgar Allen Poe's story titled *The Fall of the House of Usher*. Usher suffers from hypersensitivity to light and sound, with the unusual types of waltzes he plays on his guitar being the only music Usher can tolerate. In contrast to a typical waltz, *Usher Valse* is fast and gradually increases in intensity, imitating the strange sounding waltzes Usher plays in the story.

The Prince's Toys (1992)

The Prince's Toys depicts a young prince playing cruel games with his toys. The prince decides to throw the toys into a fire, however just as he is about to burn them, the toys come to life and attempt to capture the prince seeking revenge. Each toy tries to catch him but is unsuccessful. The toys eventually decide to work together and finally the prince is captured and turned into a toy himself.

Scacchi (2003)

For many years Houghton had wanted to write a piece about chess – not specifically about the game itself, but more about the characters of each piece. In 1983 he made a chess set using Tolkien's *Lord of the Rings* as his inspiration and hoped to one day write music based on them. Years later, his friend, Australian guitarist Raffaele Agostino asked him to write a piece about chess. Finally in 2003 Houghton took this opportunity and wrote *Scacchi* (Houghton 2003).

Serenades of the Unicorn (1980)

Serenades of the Unicorn was written at a time when Rautavaara had moved away from serialism and taken an interest in melodic and evocative music. The extended techniques Rautavaara utilises in this suite aid in evoking his programmatic ideas.

Piece with Clocks (1997)

Piece with Clocks symbolises the time between midnight and 3 a.m. In Russian fairy-tales this is a time where dark and evil forces are awake. A constant pulse is kept throughout the piece symbolising the sustained progression of time. Near the beginning a chiming clock can be heard twelve times signifying midnight and towards the end the chime is heard three times, signifying 3 a.m.

The Labyrinth of Deadly Sins and Divine Virtues (2012)

The Labyrinth of Deadly Sins and Divine Virtues is based on 13th century poet, Dante Alighieri's collection of three poems titled *Inferno*, *Purgatorio* and *Paradiso*, known collectively as *The Divine Comedy*. In these poems Alighieri describes his descent into hell, his ascent of Mount Purgatory and finally his arrival into Heaven. Each movement within this piece represents the seven deadly sins Alighieri discovers on this journey and their related Heavenly virtues.

A Whisper in the Desert (2005)

This four-movement suite represent 'sounds and sights from the Sonoran Desert of Southern Arizona and Northern Mexico' (Richter 2005).

Jumping Cholla is based on the Jumping Cholla cactus found in the Sonoran Desert. This cactus is named for the way in which the barbs easily detach from the cactus and hook onto people passing by. The effects used in this movement emulate these sharp 'jumpy' barbs.

Something Softly out of Silence was written while Richter was composing out in the desert. A gust of wind blew through Richter's string and the resulting sound became the inspiration for this movement.

Gila Monster is based on the rhythmic push-ups of the venomous lizard native to the Sonoran Desert.

Starry Night on the Beach (with Federales) captures the contrasting atmospheres of Richter's relaxing evening with his wife and friends around a campfire on a beach in Mexico and their frightening encounter with Federales.

Appendix C: Composer Biographies

Phillip Houghton

Born in Melbourne, Australian composer Phillip Houghton (1954–2017) was known for his particularly evocative and imaginative writing as well as the high degree of detail contained in his published scores. Prior to pursuing a career in music he studied as an artist, however was strongly encouraged to study music and composition by pianist and music teacher, John Champ. After a year of studying classical guitar at the Melba Conservatorium of Music he began taking private lessons with Sebastian Jorgensen at Montsalvat in Victoria, later starting to teach himself to compose (Phillip Houghton 2017), and his artistic background undoubtedly informed his extra-musical references. Notable performers such as John Williams, the Australian Guitar Duo and the Los Angeles Guitar Quartet have performed Houghton's compositions nationally and internationally.

Nikita Koshkin

Born in Moscow, Russia classical guitarist and composer, Nikita Koshkin (b. 1956) has been influenced by a variety of musical styles, from the music of neo-classicist composers such as Igor Stravinsky and Dimitri Shostakovich through to rock bands including The Rolling Stones and Led Zeppelin (Budds 2005). This diverse range is evident in many of Koshkin's works, from his pieces, which use an extensive range of extended techniques through to his more conventional sounding works, like *The Ballads*.

Brad Richter

American classical guitarist and composer, Brad Richter (b.1969) was interested in guitar from an early age. Due to having no access to musical tuition where he lived in Enid, Oklahoma, he taught himself to play and compose for the guitar. When he was nineteen Richter received a scholarship to study at Chicago's American Conservatory of Music. He was later awarded his Masters degree from the Royal

College of Music in London. After completing his degree, he taught at the Chicago College of Performing Arts. Richter grew up in Oklahoma's Cherokee Strip region and has been exposed to Native American culture, music and history his entire life. This influence is reflected in many of his compositions, where extended techniques have been used to emulate Native American sounds and culture (Richter 2017).

Richard Charlton

Sydney-based classical guitarist and composer, Richard Charlton was born in the United Kingdom in 1955 and in 1962 he moved with his parents to Australia. His first exposure to the classical guitar was through listening to an album by John Williams (Nicolson 2015). Now, as one of Australia's most prominent guitar composers, Charlton's works are featured on more than thirty CD recordings and have been performed by many distinguished Australian and international musicians (Richard Charlton 2009). His compositions include guitar solo and chamber music, choral, and orchestral works. In addition to composing, Charlton 'is a founding member of the Sydney Guitar Trio, a passionate educator, and a driving force behind the Sydney Classical Guitar Summer School, which has been held in January for over 20 years' (Fartach-Naini 2017, p. 125).

Jaime Zenamon

South American classical guitarist and composer, Jaime Zenamon was born in 1953 in La Paz, Bolivia. He studied guitar performance and composition in Israel, Spain, Portugal and South America. From 1980–1992, Zenamon taught guitar at the University of Arts in Berlin (Hochschule der Künste, HDK). He currently lives in Brazil working as a composer, performer, and conductor and is 'one of today's most prolific guitarist-composers' (Fartach-Naini 2017, p. 105).

Einojuhani Rautavaara

Born in Helsinki, Finland, distinguished composer Einojuhani Rautavaara (1928–2016) started composing at seventeen years of age. Rautavaara wrote for many

instruments in a variety of musical settings including, symphonies, operas, vocal works and solo instrumental pieces. In the mid 1950s, after receiving a grant from the Koussevitsky Foundation he studied at the Sibelius Academy in Helsinki. In 1955, he won a competition with *A Requiem in Our Time*. This attracted the attention of Finnish composer, Jean Sibelius (1865–1957) who recommended him for a one-year scholarship to study at the Juilliard School where he studied with Aaron Copland and Roger Sessions. In the 1970s, Rautavaara adopted an increasingly programmatic approach to composition and many of his works are based on ‘political, environmental, social or spiritual’ concepts (Habermann 1997).

Appendix D: Interview Excerpts

Jaime Zenamon:

(JMZ—Jaime Mirtenbaum Zenamon; AS—Alexandra Shepherd)

AS: When writing 'Casablanca' what made you decide on using a hand-held ventilator?

JMZ: A great friend and Guitarist, Thomas Kirchhoff, called me up once and said, look I brought a small ventilator from Turkey, while fishing on the Bridge they use to cool themselves, maybe is a good idea if you could use this toy, you are the only crazy composer that I know and trust that will be able to figure something out. At night I thought and thought, and so at the ceiling of my room some shadows, that seemed to be ventilator, those who in some occasions during my trips so in some old hotel foyers, that remind me an old, in fact one of my favourite films of all times, Casablanca, and I knew immediately what I should do with this Toy. Also at the end of the film there is a scene where the couple waiting an aeroplane say goodbye to each other, so also once again I used the Toy to represent the ceiling ventilator as well as the aeroplane. At the middle of the piece I used the theme some of it, just some 2 bars, and wrote an impro, getting back to my piece after modulating from A major, to G seventh, F sharp Seventh and again to original B minor.

AS: What is the inspiration or story behind this piece?

JMZ: A place, a story and a Kiss, no happy ending, just unconditional love, happy to be in love with out being charged.

Richard Charlton:

(RC—Richard Charlton; AS—Alexandra Shepherd)

AS: How did you come to learn about/find out about extended techniques?

RC: Just through experimentation and also I had a, like colleagues show mw things. You pick up things from other players. I learnt how to do the teaspoon effect from Stepan Rak cause he uses it in one of his pieces. ... coins on the strings, that was Phil Houghton's idea. I don't know if he was the first to come up with it. I haven't used his technique of doing tuning forks on the guitar. Prepared guitar, I learnt that from a few places cause I've used it a long time ago. ... You just sort of try out stuff. I know that they're called extended techniques but they're just advanced techniques. I suppose you wouldn't call harmonics extended techniques but maybe you might call cascade harmonics extended. Crossing the strings to do the snare drum effect, those sorts of things.

AS: When you first heard extended techniques were you interested in them or did it develop over time?

RC: It depends to what use they're put to, like you know sometimes just making funny sounds for the sake of making funny sounds doesn't do anything musically, but when you hear it done in a way that brings the piece to life, or you think 'oh wow that's a great piece'. I remember when I first heard the piece *The Dawn of the Last Day* by French composer called Kleynjans and the door opening, the creaky door. I remember that blew my mind, I thought oh wow I must use that. So it really depends on the context, for me anyway. I mean I never use extended techniques unless there's a really good reason to do so, unless you can't do it by normal means.

AS: In your piece *The Labyrinth of Deadly Sins and Divine Virtues*, four movements out of there require the player to use two guitars at the same time and I was wondering what made you decide on doing this?

RC: I'd actually used the technique many, many years ago. I wrote a piece for a high school certificate student that I had who was a fairly weak student, but she was a good student, she couldn't play to a very, probably not more than a fourth grade level and I'm just trying to think, you know she had to do the obligatory Australian piece, all the stuff I could find was gonna be too hard for her, so I decided to write something and you sort of think 'well what's gonna look impressive, still be simple but look and sound impressive' so I thought 'well why not play two guitars' just sort of, I don't know how I came up with the idea, I just suddenly had the idea that she had a guitar on a stand next to her tuned you know to a certain way she can strum that and that can be a chord and then she could play a single line on her guitar, you know so its actually, once you show a kid how to do it its quite easy and it looks impressive, sounds good being not that technically difficult. I did that for her and she did quite well with that piece in the end you see, that was thirty years ago, so its been in the back of my mind that's its something I could develop, I mean she only used it in a very minimal way, just for strumming a chord and playing on her guitar so those notes were ringing. I really wanted to explore that sort of thing of being able to play two chords, one after another and have one over-ring, or last longer, you know so its mixed in with the sound of the second chord, that's the main idea behind that cause when you play two chords on the guitar you play one and you play the next but you can only play one at a time. You can't play two chords at once, or have them, you know mixed, so I wanted to, I've been wanting for a while to try that technique and then Raffaele Agostino sort of commissioned to write a piece in 2012 and he had the idea of doing a, something on the *Seven Deadly Sins*, so I sort of just took the opportunity to do it cause we experimented with it together and experimented on a tuning and so there was a little bit of ground work before we actually embarked on it and then I expanded it to the *seven deadly sins and divine virtues* so I could get some other things and it became a sort of major performance piece and it's the sort of piece it's a piece not really for listening although if it was recorded it would probably be for good but it's a piece for looking, it's a stage piece so what the player does is as much about the music as listening to the actual sound. The whole thing of you know, having one guitar and reaching out to strum the other and then swapping the guitars over and then plucking the strings on one guitar while your right hand

plucks it on the other one, you know that's sort of a dramatic, drama thing about it. So that was the idea behind that and I experimented with what can I do, 'I can tune this way, I can play this and this together, I can do this, or' you know, just sort of ideas come up as you set up the scenario and you set up, this is what the player will do and then you think 'oh they could do this, then they could swap guitars', yeah so the ideas just fell of each other.

AS: What is the inspiration or story behind this whole suite?

RC: Well as I said the *Seven Deadly Sins*. Raff's suggestion of a piece on this and at first I was a bit hesitant because, you know writing music about things like that is quite hard, you know how do you bring to light something like gluttony or lust or pride, you know how do you capture that in music? So the first thing was that's a challenge. You know I'm up for a challenge, I'm up for a push and there wasn't any sort of hard timeline so I had a lot of time to think about it Sometimes with a commission you have to write to a deadline. I mean there was a sort of deadline but it was like when the piece was written then you decide 'ok lets, I'll organise a concert to do it' you know it wasn't like it has to be ready by this date, so I had the luxury of being able to think about things. There were a few versions of it and we kept adding movements, tweaking them and things like that, it was very much a collaborative thing. SO it was mainly like the *Seven Deadly Sins*. I'd done a piece years and years ago called the *Divine Guitar* which was based on the divine comedy by Dante. Started off with hell. So mainly sort of to do with the *Seven Deadly Sins* as they relate to the divine comedy, it's a very famous work by Dante Alighieri who was an Italian poet where he puts all his friends into hell. It's the circles of hell and you sort of travel down through the circles of hell. So mainly sort of reading about things like that. It's a series of short movements, they're not very long but they're about fourteen short movements, so the piece is about twenty minutes in performance so it ended up being bigger than I imagined it was gonna be but that's how it happens sometimes.

You mentioned the thing about the sponge under the strings. I don't know who else has used it. We came up with that when we were in the Sydney Guitar Quartet

together cause we did a few pieces from the string orchestra repertoire like, Bartok fourth quartet, the pizzicato movement from the Brittan *Simple Symphony* so instead of holding your hand there to do pizzicato the whole time, you just get a sponge and cut it and slither a sponge under there. It makes it more, sound more like string pizzicato in a way and just means you can play normally without having to hold your hand down to continually damp the strings, and that movement *Gluttony* has a lot of, its meant to eat up notes. If you did it without the sponge it would probably sound ok but you'd get a lot of over-ringing, which you don't want because in order to play it you've got to use the open strings so when you've got a sponge under it, it has more of an effect like cello pizzicato.

Raffaele Agostino:

(RA—Raffaele Agostino; AS—Alexandra Shepherd)

AS: What was it like to rehearse with Phillip Houghton knowing that his musical style is very particular?

RA: I didn't do a great deal of rehearsing with him but I did some. He was great from the point of view that he knew exactly what he wanted. But he also quite ok if I didn't agree with something in particular as long as I had a valid point in doing something in a slightly different way because I did a CD of the music of Richard and Phillip's back in '98, which was all of the repertoire in the AMEB syllabus (not the current one, the one before that) so when I had to record that I went through all of these starting from the really simple ones to the more complex ones and it was very good, very helpful in suggesting ways to do things and how to overcome particular problems and so on. They weren't complex pieces but it was great rehearsing with him.

AS: How would you describe his teaching style?

RA: His teaching style from what I gather from having talked to lots of his students from the conservatorium, not so much my students, but Greg Pikler's students used to go and have lessons with Phillip and they would talk to me about things. Phillip was more into the concepts of music and the philosophy of guitar playing in general, not so much the specifics about, you know, you put this finger here and you put that finger there, that wasn't really what he was into for teaching. I imagine he would have had to that if he had some beginner students but because he was working with more tertiary students he could talk more about concepts and the psychology of music and so on and his own way of looking at things from aesthetics of playing rather than everyday technical problems. So he was more into the concepts of the philosophy of music. The students were very inspired by that.

AS: He was very fastidious in his descriptive score annotations and especially when it came to performing his music. How do you go about interpreting these annotations and communicating them to the listener?

RA: What I try to do with my own teaching when I'm teaching some of Phillip's music with my students is the first thing I say is look at all his instructions and try them because they obviously work because he would have tried every one of them several times over and everything works. Now that doesn't mean to say that you've got absolutely no leeway with doing different things, like for example I occasionally change some fingerings and things like that but basically if you do what he says it works out from the point of view of coming across I think he's got particular dynamics, colour, he thought a lot in colour so in other words the colour change quite often can be the difference between sounding so-so and sounding ok or sounding really spectacular. So basically just following everything that he's got, the intention will come across. And then of course a lot depends on how well you can do it yourself as a performer in the long run. But I try to follow everything that he's got and if I change something I want to have a good reason for it and that's what I encourage students to do. But you'll find that very often, as you've found playing some of his music if you play pretty much what he's got it will come across to the listener, it will come across in a performance.

AS: The concept of descriptive score annotations isn't new obviously. George Crumb for example utilised this style. Did Phillip discuss where he got his inspiration for using descriptive score annotations?

RA: No, we didn't discuss that at any stage but I suspected he actually didn't really get it from anywhere in particular because quite often he would use certain concepts not standard notation. You know like he might have something for example if you want something to sort of flow along in a gentle sort of way he might just put something down like floating down a slow moving river, or something like that. That's not standard notation. That's Phillip. He'll have things like that you know. What did he use in one piece with lots of notes on the up-beat, very gentle up-beat you know like playing as if trying to keep a balloon up in the air or something like that and that kind of thing. So what's good about it is that imagery that is not standard notation

you know so in standard notation you might write something like *leggero* which means lightly or *pesante* which means heavily and so on whereas Phillip would write in *God of the Northern Forest* you know playing the down-beat chords 'like an anvil' you know like you're hitting an anvil. Well that's pretty descriptive but it's not standard. I don't think he actually got them from anywhere except his own imagination. Although having said that, we never spoke about them directly. The one person that I would probably in a similar sort of way is probably Percy Grainger. You know or maybe Eric Satie. You know when they use their own way of saying things. But I'm pretty sure even then you know he might have been inspired by Percy Grainger but doesn't use any of the expressions that Percy Grainger did so it would have to be just Phillip's imagination I'm sure.

AS: The last question I have is did Phillip have his own method for his students or performers to follow when interpreting his descriptive score annotations? When you come across for example in the last movement of *Ophelia: Death with moons in your hair*, he's written 'dying into total silence into the cold palm of the unknown', examples like that, does he intend for his students or performers to interpret that in a specific way and if he did, did he have a method for how students should do it?

RA: I'm not sure that he did. What he liked to do rather than try to notate things like slow down here, do that there and so on is try to get the music to sound with some sort of imagination as to what is the feeling that you are trying to portray to somebody and what's the storyline you know. I think that probably what he was after more than just specific instructions as to how to actually play something from a physical point of view, like you know a *diminuendo* or a *crescendo* and all that sort of stuff or slowing down, speeding up and so on, just having imagery and in fact quite often you'll see that he writes along, in the chess set cause you play that a lot don't you? You know how he's got things all the way through written on top. You're not meant to say those things or anything like that but I think, like in the *Bishop* for example you know you've got all those descriptions of the Bishop and so on. So you're meant to sort of interpret that to convey a character of a person, you know what I mean, so its up to how you interpret your own imagination but I think his thing was just to write down as much as possible on the music to try and really capture the

essence of that character, in the chess piece in particular, like the character of the Bishop that sort of secretive, you know sinister, all that sort of stuff. All those descriptions all along the way, so that you've got something to latch onto and try and get that character across. That's what I try to do when I play it. I don't know that he would have had anything in particular to say, whether he would have added to that with his own students or not but I don't know that there would have been any secret interpretation or anything like that. I think that there's plenty on the music already. What I would say to that is that if somebody has never played any of Phillip's music and they came across something like that perhaps somebody who was used to playing just standard music like, say classical music they might be overwhelmed by all these things, like what do I do with them I mean you might be confronted like what the hell does all this mean but I think once you understand Phillip's music, once somebody's played a few pieces of Phillip's that you soon get the gist of where he's coming from, you soon get the inspiration, you know.

RA: A few things that I'll add although you haven't got them as specific questions but you might want to use, Phillip wrote a lot of music for a lot of people like a couple of things for me, lots of things for Guitar Trek some things for the Sydney Guitar Trio some pieces for Karin Schaupp. He wrote for various people and so on and John Williams of course. He never took commissions; he actually didn't like the concept of it. He could have actually earned some good money from that but he just wasn't interested in that. He never wrote to commissions for two reasons, one is that he didn't quite believe in the concept of it. Also he didn't like the pressure of deadlines. Whereas Richard Charlton for example is very much, he can do that and he thrives on that. In other words, if he has a deadline he's actually very good at delivering on that deadline. Whereas Phillip didn't actually like the idea so he'd never actually never wrote for commissions. We've tried to commission him, Tim Kain tried to commission him lots of times, John Williams tried to commission him to write a guitar concerto in fact and Phillip just wasn't responsive, wasn't interested. The other thing was that he also didn't like anybody giving him too much information about a piece, which someone like Richard loves. You know, Richard's quite happy to say ok the piece is gonna be about six or seven minutes long and maybe two movements or something like that, give him a framework, a guideline and he thrives

on that whereas Phillip didn't really like those restrictions. He liked to just wait till he's got the right inspiration, the right motivations, the right ideas and just go for it. More reliant on just his own inspiration rather than a structure, you know a framework to work to. What's really amazing is that both Richard and Phillip have created amazing works and although they're both Australian composers and there's similarities for the few similarities that we have there's probably more differences between them than there are similarities—the way they work, the way they function is completely different, different approach, completely different people. I think that's worth noting. Phillip waited for the right moment to come up with the inspiration and then run with it and that's why when he got the inspiration sometimes he would stay up nights on end writing music to the early hours of the morning and then do it again the next night. Whereas Richard doesn't do that, he just puts time aside and just composes when he puts time aside, you know, whereas Phillip just went with the flow of whatever inspired him at the time to take opportunity to do that you know. Having said that, when I say he didn't take any instructions from anybody, the idea of the chess set for example, is because he had this clay chess set that he made which is quite beautiful and I commented about it and we talked about it and that's when he said one day I'll write something and that's when he wrote the piece, so but it wasn't like I suggested you know write a piece about this long, this difficulty and so on, I did none of that. Whereas, with Richard we may have discussed it a lot more. What we did with the Deadly Sins for example that I played, we discussed it in a bit more detail about the whole concept of it, whereas Phillip was just like, just the idea of a piece called Scacchi, which is chess in Italian, and that's as far as it went, the discussion, the rest was just completely up to him and the least I said the better. So you see what I mean, its just completely different, so I knew Phillip well enough by that stage to just don't say anything cause you know that might have put him off the idea if I said too much about what sort of piece and how long and so on, it might have even discouraged him, whereas we just discussed the idea of the possibility of a piece using the name Scacchi and that was it. And then a couple of years later he wrote it. So it wasn't like we talked about it and then he wrote it in the next couple of weeks, it wasn't like that at all. Eventually he said 'I've written something' and he showed it to me.

Appendix E: Ethics Approval Letter



RESEARCH SERVICES
OFFICE OF RESEARCH ETHICS, COMPLIANCE
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Our reference 33172

12 August 2020

Dr Oliver Fartach-Naini
Elder Conservatorium of Music

Dear Dr Fartach-Naini

ETHICS APPROVAL No: H-2018-225
PROJECT TITLE: The Application and Performance of Extended Techniques on
Classical Guitar from 1970 to 2012: A Portfolio of Recorded
Performances and Exegesis

Thank you for the amended ethics application provided on the 2nd of July 2020 requesting an amendment to change the project title, change the supervisor team, and change your participant(s). The amendment has been approved.

The ethics amendment for the above project has been reviewed by the Low Risk Human Research Ethics Review Group (Faculty of Arts and Faculty of the Professions) and is deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research 2007 (Updated 2018)* involving no more than low risk for research participants.

You are authorised to commence your research on: 12/10/2018
The ethics expiry date for this project is: 31/10/2021

NAMED INVESTIGATORS:

Student - Postgraduate Masters Mrs Alexandra Lauren Shepherd
by Research:

Chief Investigator: Dr Oliver Fartach-Naini

Associate Investigator: Mr Stephen Whittington

Ethics approval is granted for three years and is subject to satisfactory annual reporting. The form titled Annual Report on Project Status is to be used when reporting annual progress and project completion and can be downloaded at <http://www.adelaide.edu.au/research-services/oreci/human/reporting/>. Prior to expiry, ethics approval may be extended for a further period.

Participants in the study are to be given a copy of the information sheet and the signed consent form to retain. It is also a condition of approval that you immediately report anything which might warrant review of ethical approval including:

- serious or unexpected adverse effects on participants,

- previously unforeseen events which might affect continued ethical acceptability of the project,
- proposed changes to the protocol or project investigators; and
- the project is discontinued before the expected date of completion.

Yours sincerely,

Dr Susan Hemer
Convenor

Ms Kellie Toole
Convenor

The University of Adelaide

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