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Jazz Guitar**

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Exploring a Modified Fifths Tuning as a Vehicle for Composition for Jazz Guitar

Vol. 1

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*Submitted in fulfilment of the requirements of the degree of
Doctor of Musical Arts*

August 2017

I hereby certify that this work is original and has not previously been submitted in whole or part by me or any other person for any qualification or award in any university. I further certify that to the best of my knowledge and belief, these research papers contain no material previously published or written by another person except where due reference is made in the papers themselves.

Andrea Vocaturo, August 2017

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Abstract

Throughout the history of the guitar, alternate tuning configurations have been extensively used as a creative vehicle in both performance and composition across a variety of musical genres, styles, and settings. This research examines the influence of a modified fifths tuning (MFT) on the compositional practice of a jazz guitarist and composer. Through musical analysis, this study aims to highlight how the idiosyncratic sonorities of the proposed tuning have been exploited to create original works with distinctive sound and resonance, thus contributing to the expansion of the tonal and harmonic palette of the guitar. The technical advantages and disadvantages of MFT and comparisons with standard guitar tuning are also addressed during the examination of individual compositions. By revealing the implications of a specific alternate tuning on the author's creative processes and overall approach to composition and performance, this doctoral project intends to provide insights on the possible musical transformation this path can produce on any musician who is willing to take this approach to discover new sonic possibilities for the guitar and new models for composition. The appendices that accompany this dissertation have been compiled to provide other guitarists with a set of basic musical vocabulary, in the form of chord shapes, scales, and arpeggios, to enable them to navigate through the inner workings of MFT and other fifths-based configurations.

Chapter One: Introduction

This exegesis documents the use of an alternate guitar tuning as a creative stimulus for my compositional practice. Functioning as a brand-new canvas at my disposal, the proposed modified fifths tuning (MFT) has allowed me to create unique sonorities, textures, and harmonic landscapes for the guitar. This study imposed the challenging task of relearning an extensive musical vocabulary on a different tuning layout in order to enable the production of original works. As a consequence, this process has been the catalyst for a profound transformation in regards to the conceptualization of musical ideas and the scope of my artistic aspirations. The effectiveness and practicality of using MFT as a compositional device could not be predicted or verified a priori; therefore, the investigation of the process, discovery of the implications, and the resulting creative outputs represent authentic research in and through music. MFT has marked the beginning of a new creative phase in my artistic development and will certainly continue to inspire my search for idiosyncratic sonorities and musical forms. Beyond the immediate associations and implications of such a compositional method, preliminary discussions will also focus on the aesthetics and artists that have influenced this investigation and on the extra-musical ideas that contributed to shape my compositions. By means of its artistic premises, field of study, description of *modus operandi*, analysis of creative works, and conclusions, this exegesis aims to give a comprehensive and honest account of three and a half years of music-making.

The CD that accompanies this doctoral research is entitled *Vikāra*, which is a Sanskrit word meaning *change*, *change of mind*, and *change of form*. The recorded works contain the embedded knowledge my investigation has produced and symbolize the personal transformation this course of study has encouraged. The material is multi-genre in nature and includes three distinct musical settings: solos, duets, and songs. While recording the two songs examined in Chapter 6, I decided to allow freedom of interpretation to both singers in order to enhance my compositions with their unique taste and style. The slight discrepancies between the scores and the recorded music have not been accounted for during the analyses presented in this exegesis.

The initial chapter of this dissertation will give an overview of alternate tunings and their application across a variety of musical genres. Next, it will offer a description of MFT's fundamental tuning characteristics. Finally, it will illustrate the author's motivations for choosing an experimental compositional path and put forward the research questions this doctoral project aims to postulate and answer.

Chapter Two will provide a detailed description of the methodology employed during the course of this doctoral study. Through the exposition of the *modus operandi* followed in my practice-

based research, it will offer insights on how the different stages and modes of investigation have contributed to the creation of knowledge embedded in the creative works presented with this study.

Chapter Three will concentrate on the literature review relevant to this project. Influential guitarists and composers that have directly influenced this research will be examined to better comprehend the musical aesthetics at the core of my artistic practice. It will also elaborate on the specific extra-musical elements that are at the foundation of this doctoral project and that are manifest in the music. Particularly, attention will be given to the influence of nature on my artistic practice.

Chapters Four, Five, and Six will examine the music that accompanies this exegesis. Each analysis will highlight specific sources of inspiration, artistic decisions, and extra-musical factors that have shaped the conception and development of my portfolio. The pieces under scrutiny will offer insights on the implications of using MFT as a creative device in the following areas: compositional processes, harmonic progressions, chordal design, resonance, range, tonalities, textural qualities, and effects. Score extracts will demonstrate how the idiosyncratic sonorities of the chosen alternate tuning layout have been employed as the building blocks of original works and used to convey the metaphorical and philosophical assumptions the music intends to convey. This will be particularly relevant in those pieces that were conceived as a depiction of natural phenomena. In loco considerations on the technical advantages and disadvantages, fingerings, performance implications, and comparisons with standard guitar tuning will also be presented.

The final chapter will postulate some important conclusions on the knowledge I have accumulated in relation to MFT's functionality and unique features. In addition to offering a more exhaustive understanding of the advantages and disadvantages of alternate tunings in composition and performance, final discussions intend to evaluate the influence of MFT on the creative processes intrinsic to my music-making. The existing literature on alternate tunings does not provide extensive musical analysis and reflections on the transformative nature of this creative paradigm: it is mostly limited to providing transcriptions of composed material or introductory guides for chord shapes and other basic musical material. This research intends to offer a more in depth description of this interesting artistic investigation and give a different perspective and guidance to other musicians that are interested in pursuing these experimental artistic paths.

The appendices that accompany this exegesis were compiled to provide other guitarists with an introductory set of musical data to use for composition and performance. Fundamentals such as

scales, triads, arpeggios, and chord shapes are presented to offer a basic understanding of MFT's logical infrastructure that I initially derived from this research. Moreover, special chord configurations and idiosyncratic sonorities such as poly-chords are presented to appreciate the complex sonorities that can be derived from MFT. This additional content gives further insight into the inner functionality of this tuning and demonstrates how it necessitates a different approach to guitar playing.

Historical Background

Tuning adaptations have been an integral part of the history of the guitar within a variety of musical idioms and genres. Although tuning modifications of the guitar and guitar-like instruments have contributed to define the traits of many and diverse ethnic musical traditions, the scope of this overview is to identify some of the genres and composers that have informed my compositional practice during this project and to establish my work as the continuation of a common artistic trajectory within guitar practices. Simultaneously, it validates my intended course of action by making reference to remarkable applications of such creative methods.

The Italian word *scordatura* is used to describe the act of changing the pitch of one or more strings on a stringed instrument. According to Partridge (2014) this:

“ . . . offered novel colours, timbres and sonorities, alternative harmonic possibilities and, in some cases, extension of an instrument's range. It could also assist in imitating other instruments, and facilitate the execution of whole compositions or make possible various passages involving wide intervals, intricate string crossing or unconventional double stopping” (para. 1).

As far as the guitar is concerned, the word *scordatura*, or more commonly referred to as ‘alternate tuning’, implies that there is a canonical status assigned to the current guitar tuning which consists of E2, A2, D3, G3, B3, E4 (low to high strings).

Early Guitar and Classical Music

Tuning experimentations and adaptations were common practices in the initial stages of the guitar's development until the instrument reached its modern design and canonical tuning around the end of the 18th century. Tyler states that “the early guitar employed *scordatura* during the same period as the lute, and its variant tunings were even more complicated than the lute's due to the re-entrant¹ stringings and octave dispositions, which the guitar normally employed”

¹ A term used to describe the tuning of string instruments in which successive strings are tuned not to successively higher pitches but to a pattern of rising and falling intervals (Wade, 2017).

(2017, online). The five courses of the Baroque guitar, while maintaining the same pitches of the modern guitar, displayed several combinations of octaves or unisons; in addition, different re-entering layouts existed simultaneously in Italy, France, and Spain (Rowe and Jensen, 1981). The musical nuances of tuning variations were showcased in early guitar compositions by Foscarini, Corbetta, Kremberg, Campion, Carre, Derosier, and De Visee (Rowe and Jensen, 1981; Tyler, 2017).

Tunings variations continued to appear in different eras as the following few examples from the classical guitar repertoire attest:

J.S. Bach: drop D tuning on the *BWV 997* and *BWV 1004*;

Fernando Sor: low E string raised to F in *Troisième fantaisie, Op. 10*;

Augustin Mangore' Barrios: low E and A strings dropped by a whole tone in *Un sueño en la foresta* and *Choro de saudade*;

Carlo Domeniconi: open C sharp minor tuning in *Koyunbaba* (rare example of a scordatura involving all the six strings);

Toru Takemitsu: 6th and 2nd strings dropped by a semitone in *Equinox*.

Blues

Beyond the sphere of classical traditions, these practices also accompanied the emergence of other genres where the guitar plays a leading musical role. For example, tuning variations were common among Delta blues musicians as the case of Robert Johnson exemplifies. Besides his recognition as one of the most influential guitarists and bluesmen of all time, Johnson was a key figure in the establishment of alternate guitar tunings as a vehicle to provide rich and innovative accompaniment to the voice. Through the use of open E, D, and G tunings as displayed in songs such as *Crossroads Blues*, *Walkin' Blues* and *Ramblin' On My Mind*, he was able to deliver a forceful rhythmic accompaniment in conjunction with harmonic depth and melodic embellishments (Aledort, 2015). In addition, Breeze states that, within blues traditions, “some players used open tunings to improve the response of the guitar and compensate for tempered fretting [...] slight adjustments of pitch were made because they sound better, and conveyed more feeling” (2010, p. 14). This consideration hints at the emotional nuances intrinsic to tuning variations besides their immediate technical and musical implications.

Folk and Acoustic

The rise of folk music during the 1950s and '60s both in England and North America contributed to the development of alternate tunings among singer-songwriters and acoustic

guitarists. Following the traditions of Celtic music, musicians such as Davey Graham, Martin Carthy, John Renbourn, and Bert Jansch explored new pathways for alternate and open tunings and were crucial in the popularization of this practice. According to Simmons “[They] used alternate tunings to present more challenging guitar arrangements and push the limits of commonly accepted steel string guitar technique for the right hand as well” (2004). Particularly, Davey Graham popularized the use of DADGAD, which has become one of the most used alternate guitar tunings, having been successfully employed by historical and contemporary artists such as Jimmy Page, Nick Drake, Pierre Bensusan, and Andy McKee.

In the United States, the pioneering work of John Fahey in the realm of alternate tunings pushed the boundaries of finger style guitar playing and influenced many other musicians who came after him. Simmons states that “reaching back for the strong right hand techniques used by pioneering Delta blues players and coupling them with alternate tunings, he created a style previously unheard” (2004). Among the many tunings he used, Fahey composed some of his most iconic pieces, such as *Sunflower River Blues* and *Funeral Song for Mississippi John Hurt*, using an open C tuning, which consists of CGCCGE (Orkin, 2017). William Ackerman has used alternate tunings exclusively throughout his extensive career (Ackerman, 2017). One of the most illustrious cases of this artistic experimentation is Joni Mitchell’s extensive use of unique tuning configurations throughout her career. Rodgers describes the innovative sonorities intrinsic to Mitchell’s idiosyncratic use of tunings in the following statement:

“Her guitar doesn’t really sound like a guitar: the treble strings become a cool-jazz horn section; the bass snaps out syncopations like a snare drum; the notes ring out in clusters that simply don’t come out of a normal six-string” (1996).

Among these innovators, Michael Hedges certainly ranks as the most prolific alternate tuning practitioner with a catalogue of more than 130 unique configurations showcased in original compositions (Stropes, 2014). Nowadays, many solo acoustic guitarists, for example John Gomm and Andy McKee, utilize distinctive tunings as a vehicle for composition and performance thanks to the innovations of Hedges (Raitt, 2011). His entire discography represents a milestone for experimentation with alternate guitar tunings. This practice allowed him to create effective sound landscapes, new tonal possibilities, extended ranges and unique percussive and rhythmic effects (Raitt, 2011).

Rock

Many other examples of the use of alternate tuning layouts are found in rock music. Flowers states that “Led Zeppelin, The Doobie Brothers, Neil Young, and many other artists have used

double dropped D tuning (DADGBD) in their respective genres” (2015). Keith Richards of Rollins Stones has written many iconic guitar riffs (*Honky Tonk Women*, *Gimme Shelter*, and *Happy*) using an open G tuning (Drozdzowski, 2014). Jimmy Page has investigated the possibilities of the DADGAD configuration in compositions such as *Kashmir*, *White Summer*, and *Black Mountain Side* (Aledorf, 2017). In addition, alternative rock band Sonic Youth has pioneered some unorthodox tuning configurations that defy any logic or system to create their unique sound (Lawrence, 2014).

All-Fifths Tuning Variations and MFT

It is important to mention the rare examples of practitioners who have previously employed guitar tunings that were derived from a consecutive-fifths approach. Robert Fripp’s new standard tuning (NST) is a variation of the perfect fifths tuning involving an irregular minor third interval between the 1st and 2nd strings (from highest pitch). Fripp developed a program called *Guitar Craft* to teach this unique tuning to other guitarists. He also founded an ensemble called The League of Crafty Guitarists, which focused on composing, recording and performing music written with the NST (Tamm, 1990).

Most importantly, jazz guitarist Carl Kress was known for the use of a modified all-fifths configuration throughout his career. Like other guitarists of his time, he adapted and expanded the tuning of the tenor banjo to the guitar (Sallis, 1996). As Lieberson stated, this tuning “extended a diminished fifth below the range ... permitting full, lush chords and bass lines” (cited in Sallis, 1996, p. 92). MFT is a slight variation of Kress’ layout and its re-entering quality (see Figure 1) derived from an involuntary mistake I made when restringing my guitar. Kress, in fact, switched the dropped A note in the first string to the second string’s slot in order to maintain the sequence of ascending pitches. Other sources claim that Kress’ tuning was a combination of consecutive fifths in the low three strings (B^b-F-C) and an open G major triad on the top three (G-B-D) in the manner of the banjo’s layout (Gruhn, 2013). In Kress’s original composition *Peg Leg Shuffle* (1938), the extended low range of the guitar is featured in a passage that seems to imitate a bass solo. Other pieces such as *Sutton Mutton* (1939), *Helena* (1939), and *Afterthoughts* (1938) displayed masterful arrangements for solo guitar with a complex interplay of bass lines, sequences of sophisticated chords, melodic flair, and double-stops.

These general considerations and specific examples gave evidence of the presence of tuning experimentation that encompasses a variety of musical genres throughout the history of the guitar. Further discussions on the compositional processes inherent to this practice will occur throughout this exegesis thanks to the insights I have gained through this research. Without

doubt, this study is a continuation of a well-established creative method that thrives on the discovery of new musical language and technical possibilities for the instrument by altering its underlying tuning organization. The following section will give an introductory explanation of the most salient features of MFT, strictly from a tuning perspective.

The table below describes how the pitches of the open strings are distributed in this layout. The comparison with standard guitar tuning helps to comprehend the radical divergence between these two configurations.

STRINGS	MODIFIED FIFTHS TUNING	STANDARD GUITAR TUNING
First	A3	E4
Second	D4	B3
Third	G3	G3
Fourth	C3	D3
Fifth	F2	A2
Sixth	B♭1	E2

Figure 1: Comparison between the pitches of open strings in MFT and standard guitar tuning

MFT's underlying features are:

- The extension of the low range of the instrument by a diminished fifth;
- A series of consecutive fifths starting from the 6th string and terminating on the 2nd string;
- A single open string shared with standard tuning (G3);
- An interruption of the ascending distribution of notes found in the first string, commonly referred to as re-entrant tuning;
- The reduction of the high range of the instrument by potentially (depending on the fingerboard/instrument), a perfect 5th;
- An unusual major second interval occurs between the 3rd and 1st string.

The re-entrant quality of MFT is a common feature in other string instruments such as ukuleles, lutes, tenor guitars, banjos, and many more. In the proposed layout, the 1st string should have originally continued the sequence of fifths intervals and reached an A4 pitch. After several failed attempts with a variety of string gauges and set-ups on two different instruments, I decided to opt for the more practical re-entrant solution. The following passage offers an interesting insight on how the issue of breaking strings was addressed during the development

of the theorbo's tuning in the Baroque era and allows a reflection on these practices in Western music:

“...starting with a bass lute, they restrung it at a much higher pitch, to gain a brighter, stronger sound. When its top strings broke under the strain, they simply replaced them with thicker strings tuned to the same note names but an octave lower. This resulted in one of the main characteristics of the theorbo, its peculiar tuning, which is called 're-entrant' “ (Sayce, 2014).

It is also important to notice that the lowest string in MFT does not produce a fully resonant and clear tone at times, particularly when notes are fretted in higher positions of the fretboard. This is due to the overall length of the guitar neck, which is not designed to handle such low pitches. Nonetheless, I decided to start the chosen MFT layout from the note B₁ as it seemed a substantial departure from standard guitar tuning in terms of range, overall resonance, and underlying implied tonalities. Alternatively, the option of tuning the guitar to higher pitches would have created excessive tension in the treble strings, thus causing the strings to break easily. Ideally, an instrument should be specifically built to accommodate the MFT's extended bass range and to improve the overall sonic balance to compensate the different tensions of individual strings.

Throughout the course of this exegesis, the musical implications that arise from MFT's unique layout will be examined and discussed within the context of my original compositions and artistic practice. The following section discusses the personal motivation that inspired me to undertake this specific course of action.

Rationale: Why Alternate Tuning?

“When you change the tuning your universe is wiped away” (Hedges, n.d.).

This quote perfectly describes the impact this creative path produces on any guitarist's approach to performance and composition. Tuning modifications activate an exciting process of rediscovering the instrument and, as a result, deeply affect one's musical language and style.

Firstly, my intention to test a new layout blossomed from a feeling of on-going stagnation of my creativity and an overall dissatisfaction with the guitar's sonic possibilities within the parameters of my knowledge and technical abilities. I had reached a point where my modes of musical expression felt limited and predictable. After I had the opportunity to set up one of the instruments at my disposal in the MFT configuration, I immediately became fascinated with its overall resonance and intrigued by its potentials. This urged me to make its investigation the

focus of my doctorate and one of the main creative stimuli behind my artistic research. In addition, MFT inspired me to undertake a brand-new study on the guitar from a completely different perspective and to venture into a journey of personal and musical discovery.

Secondly, this inquiry arose from my desire to move away from pre-existing creative patterns and to push my endeavours towards new musical forms and settings. The use of a new tuning encouraged me to find ideas through aural and intuitive paradigms rather than starting from theoretical and analytical frameworks. As a result, I partly abandoned the jazz-oriented compositional method I had been employing and shifted towards a more adventurous approach to writing music. Rather than solely through harmonic and melodic design, my compositions started to unfold from more abstract concepts such as texture, ambience, unusual sonorities, and shapes. In addition, stepping away from the over-analytical method I relied on previously allowed the identifications of influential non-musical factors such as imagery, natural phenomena, and intentions. These components will be examined in Chapter 3 in the discussion on the creative influences on this project; in addition, their connections with the music will be revealed during the analysis of my portfolio.

Finally, MFT strengthened the aspect of my practice that deals with the discovery of new ways of creating colourful and idiosyncratic harmonies on the guitar. Even within the context of traditional structures and progressions, I always strove to find unique depictions of the underlying harmony of a musical piece. The use of MFT appeared to be the perfect vehicle to find different sonorities on the guitar due to its intervallic discrepancy with standard tuning. This layout pushed me towards discovering a whole new palette of chords and harmonic structures that have infused my compositions with distinctive flavours and unique resonance. The fact that these sonorities can be difficult to describe with conventional harmonic nomenclature (chord symbols) is both evidence of the experimental nature of this project and of the shift from the analytical paradigm previously employed in my compositional approach. The above rationale for implementing MFT as the main creative stimulus for this practice-based research has set the foundations for this artistic quest and allows the proposal of the emerging questions relating to this investigation.

Research Question

What impact does the exploration of sonic and structural opportunities afforded by MFT have on my compositional and performance practice?

Sub-questions

How has MFT impacted my artistic practice and contributed to the communication of non-musical factors behind my music?

What are the advantages and disadvantages of applying MFT to composition and performance?

To what extent does this research contribute to unlocking some of the underlying creative processes inherent to alternate tuning practices?

Chapter Two: Methodology

As with most practiced-based research, the creative act, i.e. composition in the case of this specific study, was the main tool of investigation to verify the premises and answer the questions put forward at the beginning of this dissertation. Borgdorff emphasizes the significance of the creative process in art-based research: “artistic research centers on the practice of making and playing. Practicing the arts (creating, designing, performing) is intrinsic to the research process. And artworks are partly the material outcomes of the research” (2008, p.123). The graphic below illustrates the main components of the methodology I employed to shape the portfolio that accompanies this research.

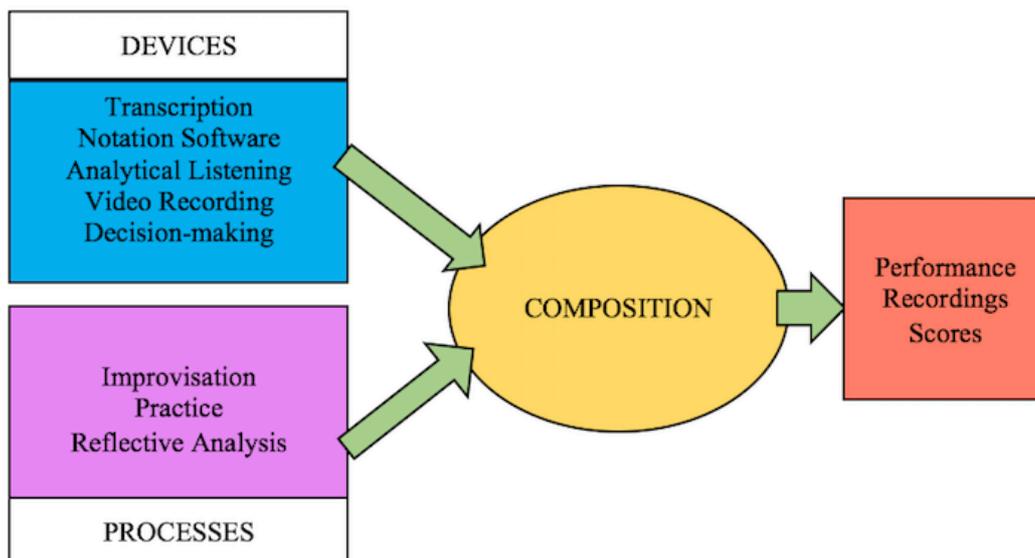


Figure 2: Illustration of the methodological structure of my research

The continuous interaction among these activities was crucial in the discovery of original ideas and internalization of the specific sonorities of MFT. This organic procedure established itself as an effective stimulus for creativity as my research unfolded over time and underpinned the development of the entire portfolio of composition. As Maxwell states:

“... design in qualitative research is an ongoing process that involves ‘tacking’ back and forth between the different components of the design, assessing the implications of goals, theories, research questions, methods, and validity threats for one another. It does not begin from a predetermined starting point or proceed through a fixed sequence of steps, but involves interconnection and interaction among the different design components” (2009, p. 3).

The *devices* and *processes* that aided the compositional act are discussed in the following section of this chapter.

Transcription

The transcription of selected ideas was a fundamental phase in the compositional process that enabled the transferring of music from video sources to actual scores. As with all the other phases of the proposed creative design, transcription allowed me to comprehend the inner workings of MFT on a deeper level and to internalize the execution of specific musical passages. Aural recognition is particularly important when dealing with the challenges of a new tuning system that produces novel and unfamiliar sonorities. Transcribing has become an engrained learning method within my artistic practice thanks to the vast and diverse collection of music I have written down or memorized by ear over the years. In the larger picture of “improvisation as real-time composition” (Rose and MacDonald, 2012, p.187), the transcription of improvised performances is a powerful way to crystallize the material that emerges from this creative activity and turn it into actual musical pieces. This process blossoms from trusting the ‘instrumental impulse’ mentioned earlier and allowing the body and physical gestures to generate material for composition. As Rose and MacDonald state “the body knows what to [...] this is a very important aspect to improvisation ... allowing the body to lead” (2012, p. 196).

Notation Software

The final stage of my compositional method involved notating the music into the Guitar Pro 6 software. Thanks to its functionality and specific features to accommodate music written with and for the guitar, I was able to alter the built-in tuning function to suit the exact pitches of MFT’s open strings. By simply writing down my original compositions in the tablature, the software instantly generated the corresponding notation, thus sparing the long procedure of translating all the material I was discovering on MFT into notated scores. The visual dimension of tablature was very useful to read and memorize the music composed with MFT. In fact, notation functions well with standard tuning but it does not provide a clear representation of how the music unfolded on MFT’s fretboard in virtue of the misplacements of notes caused by the alternate tuning layout. Relying on the visual dimension of the instrument both for composition and for generating musical scores demonstrates how alternate tuning practices require a different approach to music-making altogether. In addition, not being able to imagine the notated music from what I played and composed on the guitar removed the analytical connection between sound and written music even further. I know the sound of what I have written with MFT but I do not necessarily know all the nuances of the music from a score perspective. This represent a novelty in terms of the relationship I have developed with my

instrument and the compositional act. Finally, Guitar Pro 6 allowed me to build compositions by entering individual ideas or sections into the program. This system was essential in shaping the overall structure of extended compositions; having a clear picture of the material I was using; and verifying the connectivity among the sections. Entering the music into the software and having access to a somewhat definitive version of a piece also allowed me to make changes on structural design, length, tempos, and discard or improve existing material.

Analytical listening

On the micro-level, critical observation of the recorded music allowed me to single out individual fragments of an improvisation that showed interesting and coherent features from a sonic perspective. Once the selection of one idea was made, in-depth aural and technical analysis enabled the recognition of which parameters needed improvement or modification. For example, I would encounter material with rhythmic inaccuracy; harmonic structures that did not continue a chord progression in a consequential and graceful manner; a passage that required different dynamics or articulation; or a melodic motif that did not accord with the underlying tonality. The meticulous procedure of correcting mistakes caused by spontaneous performance and refining ideas involved my embedded knowledge and aesthetics more dynamically as it conjured up personal preferences in relation to fundamental musical elements such as rhythm, melody, and harmony. On a macro-level, analytical listening allowed me to get a sense of how a composition's design and trajectory were taking shape at later stages of the creative process. Shifting the attention to the structural coherence and balance of a piece enabled modifications in overall length, different arrangements of structural parts or sections, and the elimination of redundant passages. As these descriptions certainly attest, the act of creativity "is best described as a drawn-out process" rather than progressing "instantaneously" (Lee Katz, 2012 p. 175).

Video recording

Documenting my practice and improvisation sessions by video recording was essential in the collection of musical data. Due to the novelty of melodic patterns and harmonic structures on MFT's configuration, seeing what I was playing aided the recognition of how and in which position on the fretboard specific physical gestures were generating the music. The observation of both hands was also crucial to break down the musical ideas that unfolded during improvisation. Through visual learning, I was able to deepen my understanding of the new tuning's arrangement and slowly strengthen my aural connection with its sonic properties. In addition, the expanding database of video recordings constituted a continuous source of ideas and concepts that I could mix and match to create original works. For example, watching a particular video would highlight germinal ideas that I would then isolate, practice, and refine

into musical motifs or models for composition. Rose and McDonald affirm that “recording musical ideas by different means contributes to the creative process of composition” and “learning becomes synonymous with the activity of improvisation, creating real-time composition” (2012, p. 189). This statement perfectly describes the dynamic process I employed and stresses the importance of gaining knowledge and accumulating useful musical data through the recording of improvisation and practice sessions. At times, one single improvised performance became the only source from which the totality of an extended composition has been fleshed out, as the analysis of the piece *Storms* will reveal in Chapter 5.

Decision-making

The decision-making process that allowed the creation of original works was driven both by deliberate choices and intuitive strategies. When musical ideas blossomed from specific sonorities, chord shapes, or fingerings that were intrinsic to MFT’s tuning characteristics, the process of developing the new-found vocabulary into thematic elements or entire sections of a composition happened quite intuitively. Moreover, the sonic novelty of MFT contributed to the absence of analytical evaluation that would have occurred at the discovery of a new idea in standard tuning, because I was not able to discern the theoretical specifications of the idea itself with accuracy.

On the other hand, deliberate choices occurred at specific moments of the creative process. When a specific musical device or gesture had exhausted their potentials, or exceeded my sense of time within the larger picture of an entire composition, I had to take action to either modify some of their characteristics or steer the original ideas in a completely different direction. These deliberate decisions were driven by both my embedded knowledge of musical and compositional structures and personal aesthetics which enable me to evaluate the circumstances, single out specific problems, and finally make changes. This procedure encompassed the melodic, rhythmic, harmonic and structural dimensions of individual compositions and allowed me to manipulate their overall design or trajectory.

Improvisation

Besides the musician’s technical abilities and command over his or her instrument of choice, improvisation requires knowledge of ‘idiomatic’ musical language (Bailey, 1992, p. xi). Starting this research on a brand-new tuning layout eliminated the array of musical vocabulary I had accumulated over years of experience of playing and composing in standard tuning. As a consequence, MFT shifted the act of improvising radically towards physical gestures and ‘non-idiomatic’ (p. xi) or free improvisation techniques. This was a significant shift to the way I have

developed my improvisational vocabulary prior to this point, which involved a dependence on scales, modes, bebop vocabulary, chord structures, chromaticism, and intervallic techniques. In pointing out the difference between vocal and instrumental music, Bailey describes the ‘instrumental impulse’ as “one of the underlying processes in free improvisation” and “an agile movement of the hands”; he also states that “quick motion is not merely a means to a musical end but almost an end in itself which always connects with the fingers, the wrists, and the whole of the body” (p. 97). Throughout my research, I extensively employed this ‘instrumental impulse’ to adapt my embedded guitar technique to a new tuning layout and learn how to play it in a fluid way. Thanks to activities that resembled free improvisation, I stumbled on a great deal of musical data by testing out, in the spur of the moment, multiple fingering possibilities in different positions of the fretboard and by exploiting both the horizontal and vertical dimensions of the instrument. Both muscle memory and spontaneous physical movements became fundamental paths to produce musical vocabulary. Simultaneously, this process allowed me to formulate strategies to use MFT as a powerful compositional tool by selecting sonorities that sounded fascinating and fresh to my ears. As Rose and MacDonald perfectly sum up: ‘improvisation is employed as a specific device to aid the development of written compositions within the bigger picture of improvisation’ (2012, p.195).

Practice

The first step towards familiarizing myself with MFT’s arrangement was the memorization of basic data such as triads, seventh chords, and arpeggios. This musical material contributed to reveal MFT’s inner logic and was fundamental in crafting musical ideas employed in several original works, as the analysis section will address extensively. For Sullivan, “practice-led research implements methodologies which move from the unknown to the known”, rather than more traditional research methodologies which move from the “known to the unknown” (cited in Smith and Dean, 2009, p. 28). He also emphasizes processes of “data creation” rather than “data collection”. Rather than continuing to map and code musical data through analytical processes grounded in music theory, I preferred to rely on improvisation to discover ideas and create the many idiosyncratic sonorities that infuse the music in my portfolio. This course of action also enabled me to develop a strong aural connection with the new tuning, which at first sounded quite alien to my ears. Some interesting considerations need to be addressed on the meaning and role of improvisation within this particular research project.

Reflective practice

Reflective practice encompassed and informed my compositional process as its cyclical structure repeated itself over time. According to Dowling, “reflexivity can be broadly described

as qualitative researchers' engagement of continuous examination and explanation of how they have influenced a research project" (2008). Besides musical choices that were exclusively driven by personal preferences or technical problems, the importance of reflecting on the content and trajectory of individual pieces was particularly relevant for those works that drew from extra-musical domains for inspiration. In my attempt to depict natural phenomena through sound, metaphors were used "to connect information within and between domains" (Lee Katz, 2012, p. 174). As the analysis of *Laniakea* and *Storms* will illustrate in Chapter 5, attending to and reflecting upon the non-musical sources that inspired these pieces was a direct way to strengthen the connection between separate domains and infuse the music with evocative imagery. According to Gruger and Davis, metaphor is "a syntheizing agent" and "a conduit for connecting and mapping concepts onto another in which an aspect of the initial domain is preserved when considered in the context of the larger domain" (as cited in Lee Kats, 2012 p.175).

As this chapter illustrates, the methodology I developed for this artistic research gravitated on the interaction of several devices and processes to aid the production of original compositions. Each element contributed to the different stages of my creative practice and allowed the following activities to unfold: discovery of vocabulary; selection and refinement of musical ideas; deliberate choices vs intuitive strategies; design of extended compositions; solving the problems related to notating music composed with an alternate tuning configuration; and incorporation of extra-musical elements in the original works. The next chapter focuses on the description of the creative influences that informed my artistic practice during this doctoral endeavour.

Chapter Three: Creative Influences

As mentioned in Chapter 1, this investigation blossomed from a stagnation of my creativity. It symbolizes a new beginning in my musical journey driven by a desire to discover new modes of expression. Artistic endeavours are fuelled by a complex web of interactions between personal, external, and universal spheres. This chapter discusses a range of creative influences on the author (other than the study of MFT itself) that have helped inform and shape the project. Particular attention will be given to key influential artists and the role of nature in inspiring my works.

Posing the questions, “Are composers even aware of the factors that influence their work?” and “If composers do employ non-musical models as they compose, what is the role of this material in their work?”, Lee Kats recognizes that there has been “little investigation on the factors that inspire composers or about how the initial ideas are synthesized as compositions develop” (2012, p. 171). To fully comprehend the aesthetics behind a creative work, it is important to trace the precise coordinates of the environment artists are operating from. Firstly, this includes musical styles and aesthetics intrinsic to their practices. Composers learn pre-existing models of expression by study, imitation, and appropriation. The assimilation of the practices and techniques used in previous traditions provides them with the tools and concepts to forge their own idiosyncratic style. These ‘schemas’ or ‘mental structures’ (Kozbelt, 2012) are “used to perceive or act effectively by anticipating the organization of what the person apprehends or does, so the person needn’t function as much from scratch” (Perkins, p.173, as cited in Kozbelt, p. 38). This statement clearly asserts the existence of established operational models within the artist’s imagination, that are running at a subconscious level during the creative act.

Secondly, non-musical elements also constitute fundamental factors that contribute to shaping the composer’s work. As Coessens, Crispin, and Douglas assert “artists do not live exclusively in a secluded ‘artistic’ world. They partake of the world of ideas and embed it idiosyncratically in their practice” (2009, p. 77). In discussing the concept of research space and the multi-disciplinary facets of Portuguese composer Emmanuel Nunes’ practice, these authors also point out the presence and importance of “a richness of thought that merges in and with his personal experience”. Nunes himself used the expression “the interiorisation of the close environment” in establishing the fundamental element that guarantees “musical unity within composition” (cited in Coessen, Crispin, Douglas, 2009 p. 77-78). It is clear that composers are not only dealing with a “complex process of ill-defined problem-solving and decision-making” (Kozbelt, 2012, p. 37) to produce new musical pieces, but they are also involved in a delicate act of synthesizing many external components with their own personal sphere, which is a collection of life

experiences, emotions, interpersonal relationships, and philosophical views on the environment surrounding them. This calls for both a “permeability with the world and a crucial point where exterior influence crosses the membrane of the artistic self” (Coessens, Crispin, and Douglas, 2012, p. 77-78). Artists live in a unique environment where musical, non-musical, and personal domains are continually exchanging information with each other. In the case of American minimalist John Adams, this connectivity is manifested by the merging of art with his spiritual and emotional side, as the following insightful statement expresses:

Composing became associated in my mind with my development as a human being with the deepest aspects of psychological and spiritual growth [...] creative work is the mirror of my spiritual evolution. But I have never been tied to one essential way of expressing myself, and my work can be not only earnest but also ironic and raucous and vulgar. (cited in McCutchan, p.64)

By virtue of these preliminary considerations, the remaining part of this chapter firstly focuses on delineating the major artists that have influenced my musical environment and the trajectory of this doctoral project. Some are practitioners who use alternate guitar tunings and others are composers from the classical and jazz traditions. Other important musical influences will be examined in the musical analysis chapters. Secondly, it addresses the topic of the impact of natural phenomena on my artistic practice to understand non-musical factors that are at work during my creative activities.

Influential Artists

Kurt Rosenwinkel

One of the key figures that inspired the direction of this doctoral study is jazz guitarist Kurt Rosenwinkel. In his album entitled *The Next Step* (2001), he showcased a unique tuning (low to high string: B \flat -G-D \flat -A \flat -B \flat -E \flat) in compositions such as *Zhivago*, *Use of Light* and *A Shifting Design*. According to Rosenwinkel, this approach of ‘voluntary self-sabotage’ was led by the desire to step away from known patterns and discover new harmonic and melodic possibilities by ear (cited in Dover, 2000). The most fascinating aspect of his work is that he developed a fluent and innovative improvisational style on this alternate tuning. In a video found on his forum, Rosenwinkel talks about writing in a different tuning and says that he didn’t know what the chords were exactly. He used a chromatic tuner to find out each note and then worked out the underlying harmony of the sounds he discovered. He then talks about relearning all the modes and scales on this new configuration in order to improvise over the pieces he had written. He states, “No longer did I have this intellectual relationship with it, it was just pure sound and discovery” (2013). Rosenwinkel’s groundbreaking work was a direct and logical consequence

of his use of an alternate tuning in his composition and improvisation practices. His style and musical language went through a major transformation that allowed him to become one of the most influential jazz musicians of his generation.

Joni Mitchell

Mitchell's unique use of alternate guitar tunings is a defining element of both her compositional and performing style, as her extensive discography testifies. Throughout her career, she has employed approximately fifty different tunings and has developed her own system to remember each particular configuration (Russel, 1998). When I discovered her music, I was immediately captured by the unusual sonorities her guitar playing was creating and by her knack for sophisticated harmonies and unusual chord progressions. Sonenberg states that "Mitchell's unique system of alternate guitar tunings has defined both her style on the instrument and her approaches to harmony and texture over the course of her career" (2011, p. 769). In describing her harmonic approach to song-writing, she states that "it's closer to Debussy and to classical composition, and it has its own harmonic movement which doesn't belong to any camp" (cited in Rodgers, 1996). Mitchell's ability to manipulate the guitar's tonal possibilities by using the full resonance of alternate tuning configurations has certainly influenced my approach to songwriting as the analyses of two of my original songs will illustrate in Chapter 6.

Wayne Shorter

Among the many jazz musicians that have triggered my imagination and shaped my own style, Wayne Shorter certainly ranks among the most influential composers thanks to his ability to use harmony and chord progressions in unique and unpredictable ways. His style displays an effortless blend of different harmonic techniques as structural elements, from diatonic keys and modalities to seemingly unrelated chordal sequences. According to Julien, in Shorter's original works each 'harmonic region', or 'plateau', "influences the structure of the composition" and "may be established either through a conventional, functional progression or through another means of prominence (such as duration or architectural position as a starting or ending sonority)" (2011, p.163). She also states that "a plateau is not a key area with attendant and expected functional chord and pitch associations (although such associations may provide one means of establishing a plateau) and it is not obligated to take its place in the composition as a key area related in a functionally meaningful way to other key areas of a piece" (2011, p. 166). Similar techniques have been widely employed across the original portfolio and form one of the most distinctive harmonic devices I have employed. Particularly, this approach is encountered in the compositions that display harmonic landscapes within a specific duration in time and with

unique tonal quality and ambience (see analyses of *Arpeggio Etude No.1* in Chapter 4 and both pieces examined in Chapter 5).

Maurice Ravel

The piano music of Ravel has had a strong impact in expanding the use of harmonic strategies and colouristic sounds as powerful and expressive compositional tools in my practice. In addition, his approach served as an inspiration in my attempt to convey imagery of non-musical elements through my pieces. In reference to Ravel's work *Miroirs*, Bruhn states that "a piece of music may be understood as a mirror of sorts, particularly in the case of objects and events so elusive that they may otherwise be perceived only in the subconscious, never emerging to the surface of our attention" (1997, p. xxvii). Ravel's characteristic use of the piano to depict sounds of water in compositions such as *Jeux d'eau* and *Une barque sur l'océan* represents one of most fascinating musical expression I have ever encountered. The way Ravel masterfully depicts water effects through sounds has deeply influenced my artistic practice. Specific references and techniques will be addressed in more details during the analyses of *Arpeggio Etude No.1* in Chapter 4 and *Storms* in Chapter 5.

The Influence of Nature

The intersection between music and the cosmos is an ancient concept that dates back to the postulation of 'the theme of the musical universe' and 'the music of the spheres' found in Pythagoras' and Plato's works (James, 1996). Rappenglueck states that "Pythagoras and Plato established the basic ideas of the Occidental theory of 'cosmic music': the relations between intervals of music and numbers, the character of the scales and their influence in nature and society, the harmony of the planetary spheres, etc" (2005).

Beyond the connection between music and celestial bodies, nature itself has had a powerful impact on many historical figures in music such as Beethoven, Wagner, Mahler, Messiaen, Debussy, Ravel, and Vivaldi and many more. It is important to mention Liszt's expression 'programme music', coined in 1885, to "describe instrumental music suggesting a pictorial scene or narrative description" (Taylor and Hurley, 2015). One of the most fascinating aspects related to the process of 'wiping away my universe' through the investigation of a new tuning layout is the unlocking of previously unknown and unconscious connections that occur between my creative practice and the natural world.

My original works *Laniakea* and *Storms* are examples of how I have attempted to convey non-musical imagery that was inspired by the natural world. Since my teenage years, I have been

fascinated and puzzled by the magnificence of the cosmos. The impenetrable harmony that exists within its immeasurable vastness and the beauty of all its celestial formations always left me overwhelmed with a mixed sense of awe and mystery. Particularly, *Laniakea* was inspired by images of galaxies and stars, which I have translated into musical ideas and structural models for composition. In her analysis of several composers' creative practices, Lee Kats (2012) concludes that some of them draw "inspirations from content domains characterized by strong visual elements which are identified as providing a structural roadmap for their composition" (cited in Collins, p. xxii).

On the other hand, *Storms* was inspired by the interconnection between the heavy downpours I experienced during an early summer night in the city of Brisbane and the musical material I was discovering on MFT at that time. The sub-tropical climate that characterizes South East Queensland exposed me to weather conditions I had never experienced while growing up in Italy. The magnitude and fury of the deluges that occur during the storms season are an astonishing display and reminder of nature's power and unpredictability. Simultaneously, torrential rainfalls produce complex and mesmerizing walls of sounds and rhythms that have certainly stimulated my creativity. Detailed descriptions on the sources of inspiration, compositional processes and parallels between music and natural phenomena occurring in both *Laniakea* and *Storms* will be found in Chapter 5.

These preliminary considerations have described some of the most important elements involved in the creative act, such as learned techniques, musical aesthetics, personal and emotional domains, and extra-musical factors. In the following passage, Harvey perfectly summarizes the topics discussed in this chapter:

'The moment at which a composer's experience is projected on his unconscious mind is an archetypal encounter of external and internal, of 'life' and 'art': this encounter is experienced in its most concentrated form within the process of composition itself, where the composers' 'innate' inspiration collides with his 'learned' technique'. (1999, p. 71).

Both influential artists and non-musical elements that have contributed to shape the original portfolio of compositions that accompanies this dissertation will be discussed in detail in the following three chapters dedicated to the musical analysis.

Chapter Four: Analysis

This chapter begins the musical analysis of my original portfolio by examining two pieces that developed from the interaction of MFT's idiosyncratic sonorities with compositional techniques and models borrowed from specific musical sources. This analysis will give a deeper understanding of the creative processes inherent in using an alternate tuning layout in conjunction with personal aesthetics and embedded knowledge. It also aims at verifying the functionality of MFT within the context of solo guitar performance and expanding on the technical implications inherent to this particular musical setting.

Arpeggio Etude No.1

This piece was conceived as a specific investigation on some of the harmonic possibilities of MFT. Particularly, I was interested in developing sophisticated chord structures around two fundamental triadic shapes involving the bottom three strings of the guitar (detailed explanation will follow at Pg. 25). While I was envisioning and developing the idiosyncratic harmonies that characterize *Arpeggio Etude No.1*, I realized that these colourful chords would be complemented by a sweeping arpeggio pattern in the right hand, similarly to Villa-Lobo's *Etude No. 1*. Concurrently, I wished to evoke the harmonic sophistication and beauty found in Ravel's piano music. The following and preliminary discussion will identify the specific aesthetics and underlying musical references employed in *Arpeggio Etude No.1*.

Villa-Lobos' *Etude No.1* from his *Twelve Studies for Guitar* is constructed around a repetitive right-hand plucking pattern, or *moto perpetuo*, in conjunction with changing chord structures executed by the left hand. Despite its nominal purpose as a study to develop efficiency and speed in the right-hand technique, *Etude No.1* exploits the guitar's resonance effectively and showcases a developmentally balanced design with sophisticated chords and tonal variety. Despite the lack of a distinct theme in conjunction with the unfolding of these sequential harmonies, each arpeggio also functions in a melodic sense and delivers full and beautiful textures. Moreover, Villa-Lobos shows great economy in the use of a 'planing technique' (Becker, 2012) between bars 12-23 of the piece, where an identical diminished shape is moved down chromatically from ninth to first position. In combination with the constant pitches of the open low and high E strings ringing throughout, "this idiomatic passage destabilizes the traditional tonal context by responding to the previous E minor tonality with an uninterrupted stream of chromaticism" (Becker, 2012). For these reasons, *Etude No. 1* has become an iconic piece for the guitar and has been influential in the development of my musical taste and my harmonic approach to the instrument.

The other fundamental source of inspiration for this composition is the distinctive ambience and harmonic finesse and complexity found in Ravel's *Une barque sur l'océan*, from his five-movement suite for solo piano 'Miroirs'. This piece is a great example of Ravel's idiosyncratic use of the piano to convey non-musical imagery and produce mesmerizing beauty, harmonic sophistication, and melodic lyricism. Cooney states that, with 'Miroirs', Ravel entered a new harmonic phase marked by "a more venturesome and even jazzy language" which "is especially manifest in the way the chords are voiced and extended" (2002). In addition, *Une barque sur l'océan* displays an exceptional use of compositional techniques to convey non-musical imagery of water, turbulent waves, and the unpredictability of the ocean (Bruhn, 1997). In my work, I tried to replicate through imagery the ambience and symbolism of Ravel's masterpiece by using similar tonalities, sweeping arpeggios, harmonic sophistication, melodic design, tempo changes and parallel movements of chord structures. These stylistic elements will be largely discussed in the analysis of the individual sections of this composition.

In this piece, I strived to create idiosyncratic harmonies by expanding two triadic shapes with colour tones and extensions. The choice of a repetitive plucking pattern in the right hand compelled me to achieve variety by following these techniques: a) using contrasting chord qualities; b) varying the duration of each harmonic landscape; c) creating single-line runs to break the incessant flow of the chordal arpeggios; and d) employing fermatas, rallentandos, and accelerandos. Without having a pre-planned path for the structure of this piece, I let the natural flow of the music dictate how the sequence and length of individual sections should have unfolded. This approach was guided by my embodied musical knowledge and personal aesthetics.

Arpeggio Etude No. 1 is a moving and challenging solo guitar composition of approximately four-and-a-half minute duration. It features a floating and simple melody of two notes supported by a repetitive pattern of fast-moving and wide-ranging right-hand arpeggios that outline lush and idiosyncratic harmonies. Gradual increases of tempos mark the beginning of each section, while long fermatas, which occur after harp-like single-note runs, temporarily interrupt their fluctuating and incessant flow; accelerandos and rallentandos are also common in the second half of the piece. Figuratively, these devices portray the variable speed, height, and frequency of waves. The A section mainly dwells on minor tonalities and is characterized by a nostalgic mood. Each harmonic centre is treated modally by virtue of its distinct emotional and tonal qualities. Melodic variations contribute to emphasize specific pitches of the underlying implied modality, thus delivering different shades of the same harmonic palette. The C section introduces new material with a stronger emphasis on major tonalities, while maintaining a similar melodic design; it also moves to a higher register of the guitar where textural variety, unexpected modulations, and wide tessituras are employed to create a lighter and joyful

atmosphere. Suddenly, a sequence of descending and dissonant variants of a G dominant chord alters the piece's mood and stirs it towards a slow and meditative section characterized by idiomatic voicings in a C Dorian modality. Finally, the composition returns to the opening tonality of F # minor where, after a gradual accelerando, the original melody is quickly restated before culminating into a high-pitched chord inversion that closes this work with a feeling of nostalgia and unsettledness caused by a gradual decrescendo and rallentando.

The graphic illustration below delineates the harmonic scheme of *Arpeggio Etude No.1* divided by its constituent parts. Coloured cells are used to distinguish chords by their quality or to mark similar structural ideas, such as the fermatas at the end of the first three sections; the numbers in parenthesis indicate how many measures each configuration is played for and no number denotes a single measure. In each section, individual cells should be read left to right and then down to the next row to grasp the consequential progression of chords in the piece.

A Section		B Section		C Section	
17 bars		20 bars		15 bars	
F #mi9 (8)	Emi9 (4)	F #mi9 (7)	Emi9 (4)	Amaj7 (6)	Gmaj7 (4)
C #mi11 (3)	Cadenza	Dmaj7 (4)	C #mi9 (3)	Dmi9 (3)	Cadenza
Fermata		Cadenza	Fermata	Fermata	

D Section		E Section		F Section
30 bars		15 bars		23 bars
Amaj7 (6)	G #7alt (2)	C Dorian (12)		F #mi9 (23)
Eb7alt (2)	A bmi9 (4)			
F #mi9 (4)	A bmi9 (4)	C #7alt (2)	Melody pick-up	
G #7alt (8)				

Figure 3: Structural design and harmonic content of *Arpeggio Etude No.1*

This scheme clearly identifies the substantial frequency of minor tonalities (marked in blue) throughout the piece, with particular emphasis on F #. Twelve individual portions are minor chords, four are altered dominant, and three are major. In the first section, only minor keys are used, while in the second there is a short occurrence of the first major centre. Next, the process is reversed with major tonalities becoming more predominant. The fourth section is the longest and more varied harmonically; despite the start in A major again, it follows up with a fairly equal presence of minor and altered dominant sonorities. The last two section are exclusively in minor keys except for a brief appearance of a C # altered that leads back to the opening F # in the coda.

of this piece shown above, I realized that the use of a capo² on the second fret would create a structure remarkably similar to the sonority that opens *Une barque sur l'océan*. Bruhn states that “all notes in both hands derive from the F #mi^{9th} chord (F #-A-C #-E-G #), a chord formation Ravel is known to have used throughout his work in early years of the twentieth century” (1997, 81). In addition, I moved the same opening structure down a tone from F#mi^{9th} to Emi^{9th}, thus following the French composer’s idea of parallel movements and Villa-Lobos’ concept of ‘planing’ verbatim; but rather than continuing in this fashion one step further to the key of D minor as in Ravel’s work, the progression terminates with a C #mi^{11th}. In virtue of their extensions, these three harmonic centres deliver slightly different pitch content that contribute to tonal variety and unpredictability. Additionally, this effect is reinforced by occasional tonal shift and modal interchange, such as the introduction of the major 6th in the F # minor chord in bars 22-24 and the two D major configurations in bars 29 through 32 of the B section. As Bruhn asserts, colouring the minor 9th chord with an “added sixth” is “a feature Ravel also employs elsewhere” (1997, p. 82).

Ravel’s composition also represents a masterful example of lyricism and melodic effectiveness. In *Une barque sur l'océan*, the opening statement is remarkable for its simplicity, floating and indefinite rhythm, and colourful in its harmonic implications. According to Cooney, Ravel is “an economist in that there exists a strong continuity and coherence in his thematic material” and “a favorite trait of Ravel is a falling motive, usually by a fourth or third” (2002). Similarly, I shaped a simple two-note motif that gracefully floats on top of the fast-sweeping and lush chords I devised. In order to have the melody stand out from the underlying dense harmonic layers, I employed it as an accented anacrusis at the start of the piece; its unfolding continues in this fashion by preceding the first beat of every measure. Rhythmically, this generates two extra semiquavers, hence the unusual time signature of 18/16 as shown in Figure 5, and contributes to deliver a swaying effect in the music. Moreover, I also choose small intervallic leaps as an additional reference to Ravel and for their mere practical execution. In fact, variations in the melodic material were possible within the restrictions imposed by the difficulty of sustaining highly complex chord shapes. Their performance requires the occasional use of slides, slurs, and overall strength and flexibility in the left hand. Throughout this composition, the melodic fragments also alternate between ascending and descending contours, thus resulting in a call-and-response effect with a degree of unpredictability. The figure below shows some of the harmonic and melodic characteristics discussed so far.

² The accompanying musical figures are still notated a tone down as traditional practice for pieces written with a capo; for the sake of this analysis, I will refer to the actual sound of the music rather than the written notation.

Figure 6: Parallel movements, harmonic ‘planing’, and melodic variations in bars 7-10 of *Arpeggio Etude No. 1*

These techniques aim to mirror the opening section of *Une barque sur l’océan*’s opening section, where “a swaying motion over large waves forms the backdrop of a plaintive melody” (Bruhn, p. 78). The melody in this passage is created by a slurred leap of a perfect 4th (bar 7) and a major 3rd (bar 10) executed by the first and fourth finger, which occurs at the very end of this measure, and outlines the ninth of the chord. At the end of the bar 8, its variation is achieved by approaching the ninth by a semitone from the minor third located on the second string, thus highlighting the re-entering quality of MFT. These melodic changes require continuous and challenging movements of the index finger, which is otherwise grounded on the third string to complete the supporting chord shape. As Figure 6 illustrates, the use of the open second string creates another element of resonance and colour to the underlying harmony by adding either the minor seventh or doubling the tonic.

In the C section of *Arpeggio Etude No. 1*, similar techniques and devices are used to develop contrasting harmonic material, which shifts to major tonalities, and tessituras in the higher register of the instrument. This is also a reference to *Une barque sur l’océan* where momentary shifts to the relative major keys of the two opening minor chords are found in the later measures of the first section (bars 24 onwards). In the score extract below, the major triad layout is shown with an added major seventh in the four opening notes. The left-hand little finger doubles the third of the chord (B note), which functions as the melody, and is approached by another slur outlining a major third at the of measure 39. The execution of this particular melodic variation is one of the most difficult passages of this composition. Its four-fret leap has to be performed by the middle and little fingers, while the index maintains its position in the lowest part of the

fretboard to fully sustain the bottom two notes of the underlying harmonic structure and avoid breaking the musical flow with a short pause. In the meantime, the middle finger has to quickly come off the fourth string to execute the first note of the slurred melodic figure and then return to its starting point. This feature is technically very demanding due to the tempo of this passage, the wide distance between the two notes, and the accuracy and speed of the motions required.

The image shows a musical score for guitar. At the top, it indicates a tempo of $\text{♩} = 128$ and a key signature of one sharp (F#). The score is divided into two measures. The first measure contains a melodic line with slurs and accents, and a guitar tablature below it. The tablature includes fret numbers such as 9, 11, 14, and 0. A dashed line above the tablature is labeled "let ring". The second measure is similar to the first, with a melodic line and a guitar tablature. The tablature includes fret numbers such as 9, 11, 14, and 0. The score is written in a common time signature.

Figure 7: Major chord built on MFT’s structural triadic shape in a higher position of the fretboard and challenging melodic figure in conjunction with the underlying harmony in bars 39 and 40

As the figure above show, the contour of the harmonic structures in this portion of *Arpeggio Etude No.1* is also wider than the chords in section A and B by a major third or a fourth. In fact, the placement of chord shapes in higher positions of the fretboard delivers some unique configurations that display leaps of octaves and major ninths between the open G string and the chord’s higher tones. In addition, the larger gap existing between the melody and the inner harmonic voices makes this motif stand out more convincingly. This effect vaguely resembles the clear separation existing between the left-hand and right-hand’s parts in Ravel’s piece. Metaphorically, the wider layout of the chords and faster tempo represent, respectively, the larger size and the speed of waves, while the melody vacillates on top in even more precarious ways. These are other references to *Une barque sur l’océan* where “the sudden changes of the waves’ height and speed evoke the relentless capriciousness of the elements” (Bruhn, p. 78). In the portion illustrated below, the melodic embellishment is performed by the third and fourth finger, thus showing another example of the technical challenges discussed earlier.

Figure 8: Unique wide tessituras allowing greater exposure of the melody against the underlying harmony in bars 58-

59

Another characteristic of Arpeggio *Etude No 1* is the use of melodic passages that convey harp-like sonorities. The nature of the guitar does not always allow sustaining notes in scalar passages in order to create a legato effect. Therefore, as discussed in Chapter 1, *scordaturas* were largely employed for this specific purpose in early Baroque guitar music (Tyler, 2017). The use of unfretted notes in the context of linear playing can deliver this particular sound but it is limited to the pitches of the open strings and their concordance with the key of a specific musical passage. In MFT, the interval of a tone between the third and first strings is conducive to creating this musical device. As the following two scores in Figure 9 show, the cascading harp-like effect is achieved by combining slurs, open strings, and descending arpeggios and is applied to two contrasting tonalities. These single-note passages are used to conclude the first three sections of the piece and lead to individual fermatas that display a second inversion minor chord, thus allowing the music to have a moment of rest and suspense before the return of dense textures of sustained chords and fast arpeggios.

Figure 9: Two harp-like descending runs featuring open strings and slur in bars 16 and 51 of *Arpeggio Etude No. 1*

Despite the overall modal character of this composition, altered dominant chords are used as an occasional device to modulate to new harmonic centres. Particularly, the same harmonic structure is repeated three times over contrasting bass notes, each functioning as the V7 of the new arrival point (see Figure 10 below and bars 94-95 of full score in Vol. 2). The presence of dissonant extensions in these configurations introduces a new and tense harmonic flavour, thus momentarily breaking away from the more introspective sonorities discussed previously. This generates a feeling of unrest and musical impetus that functions as another figurative depiction of the turbulence of the sea.

The image displays a musical score for 'Arpeggio Etude No. 1', specifically bars 59 through 62. The score is written for guitar, showing a treble clef and a key signature of one sharp (F#).
 - **Bar 59:** The melodic line consists of eighth notes: F#4, G4, A4, B4, C5, B4, A4, G4, F#4. The bass line has a 'let ring' instruction and fret numbers: (12), 9, 10, 8.
 - **Bar 60:** The melodic line continues: G4, A4, B4, C5, B4, A4, G4, F#4. The bass line has fret numbers: (12), 9, 10, 8.
 - **Bar 61:** The key signature changes to one flat (Bb). The melodic line consists of eighth notes: Bb4, C5, Bb4, Ab4, Gb4, Fb4, Eb4, D4. The bass line has a 'let ring' instruction and fret numbers: (7), 4, 5, 3.
 - **Bar 62:** The melodic line continues: Eb4, D4, C4, Bb3, Ab3, Gb3, Fb3, Eb3. The bass line has a 'let ring' instruction and fret numbers: (7), 4, 5, 3, 11.

Figure 10: Use of dissonant harmonies as a modulation technique in bars 59-62 of *Arpeggio Etude No. 1*

Similarly, this modulation device occurs with a sequence of four variations of a G7 altered chord that leads to a shift to the C Dorian modality. In creating these individual voicings, I used the pitches of the A \flat melodic minor scale in order to deliver an altered sound, which is a very common method used in jazz improvisation and harmony. I envisioned a particular voicing of C minor in first position of the guitar as the arrival point of this harmonic modulation and I created a descending succession of chords over a pedal of the guitar's fifth string, which sounds a G3 pitch thanks to the capo. The re-entrant quality of MFT allowed these structures to display tonal clusters and to condense the width of their layouts, thus contributing to build even more tension in conjunction with the substantial decrease in tempo. Each configuration contains the major third and the minor seventh of the chord and combinations of altered fifths and ninth as the score reduction in Figure 11 shows (no transposition needed).

Figure 11: Harmonic reduction showing four variations of an altered G7 in bars 76-83 of *Arpeggio Etude No. 1*

This particular passage also shows meter changes to 8/16 and melodic continuity thanks to the recurring perfect-fourth leap up and down outlined by the arpeggiation of these structures (Figure 12, notated a tone down from actual sound). This melodic feature also continues in a large portion of the following E section.

Figure 12: Metric variations and motivic fourths with sequential altered dominant sounds in bars 76-77 of *Arpeggio Etude No. 1*

This transition point arrives at a contrasting section of the piece that is characterized by lush and evocative harmonies derived from the C Dorian mode. Thanks to the use of a capo, the bottom two strings of the guitar sound the notes C and G, which are consistently played throughout this segment to deliver a feeling of rest and a darker ambience with their full resonance. The tonic-fifth pedal allows the chord structures to move around different areas of the fretboard while maintaining harmonic and sonic presence; this also allows variation in the layout and textural qualities of each configuration. By virtue of its slower tempo and more introspective ambience, this section allows the music to express a more relaxed mood that moves towards the conclusion of the piece. The melodic material still preserves its simplicity and revolves around a falling interval of a perfect fourth as a reference to the idea employed over the altered dominant chords in the preceding D section. Towards the end of this contemplative part, the motif displays a descending leap of a major sixth (bars 91-92), which echoes the previous and only occurrence of such a wide melodic interval in bars 30 and 32. The music reaches a gradual *rallentando* and arrives at the fourth occurrence of the altered sound described earlier by a chromatic movement of the bass from C to C# in bars 96-97. This sudden and unexpected change anticipates the return to the starting tonality of F# minor, which will conclude the piece.

The final section of *Arpeggio Etude No. 1* is a recapitulation of the starting idea with variations. It solely centres on the key of F # minor, which shows modifications in its melodic and harmonic content and textural qualities. Gradual changes in tempo and dynamics changes also raise a sense of uncertainty in conjunction with the extended and languid perpetration of the minor tonality. Through a progressive climb, the melody reaches the highest pitch in the entire composition with F #. Descending minor seventh leaps also occur for the first time. Finally, the melody fades away with a plaintive falling minor 6th leap between the flat seventh and the ninth, which is stated four times. These melodic drops are also characteristic of MFT’s layout and its re-entering nature in conjunction with ascending arpeggiation between the second and first string. The last F # minor chord in second inversion displays the widest harmonic layout so far thanks to intervals of fifths and sixths among the chord’s voices. The idiosyncratic properties of MFT allow me to create a unique harmonic landscape that reinforce the underlying feeling of vulnerability created by the melody. The piece reaches its melodic, harmonic, tempo, and textural climaxes right at its very conclusive measures and then it suddenly fades away.

The image displays two systems of musical notation for the final bars of *Arpeggio Etude No. 1*. Each system consists of a standard musical staff with a treble clef and a guitar tablature staff below it. The first system covers measures 114 to 115. Measure 114 begins with a 'let ring' instruction and a circled '9' on the first string. The tablature for measure 114 shows fret numbers: (9) on the first string, 12 on the second, 12 on the third, 11 on the fourth, 11 on the fifth, and 9 on the sixth. Measure 115 continues with fret numbers: 14 on the first string, (14) on the second, 14 on the third, 14 on the fourth, 12 on the fifth, and 14 on the sixth. The second system covers measures 116 to 117. Measure 116 starts with a tempo marking '♩ = 135 rall.' and a circled '9' on the first string. The tablature for measure 116 shows: (9) on the first string, 12 on the second, 12 on the third, 11 on the fourth, 11 on the fifth, and 9 on the sixth. Measure 117 continues with: (9) on the first string, 12 on the second, 12 on the third, 12 on the fourth, 11 on the fifth, and 9 on the sixth. Both systems include a 'let ring' instruction and a dashed line indicating the sustain of the notes.

Figure 13: Melodic and textural property of the final bars of *Arpeggio Etude No.1*

These musical ideas are a final and deliberate allusion to Ravel’s composition. Bruhn describes that “a tremolo from *pp* to *ff* in the course of a single bar” (bars 38-43 of *Une barque sur l’océan*) are used as a “depiction of drama”. Moreover, the “notes D # and B #” express a “distress sigh” that allude to “a passionate, perhaps desperate cry” (1997, p. 78). These musical devices are “the most two powerful images evoked in this piece: that of the dangerously

exposed barge in the vastness of the ocean, and that of the lamenting human voice” (p. 80). Similarly, the last melodic statement and harmonic layout in *Arpeggio Etude No.1* are a depiction of fragility and desolation.

As demonstrated in this analysis, the compositional strategy blended both the idiosyncratic properties of MFT’s and two distinct sources of inspiration in Villa-Lobos’ and Ravel’s works, with particular emphasis on the impressionistic aesthetics found in *Une barque sur l’océan*. The two triadic shapes discussed at the beginning of this examination were fundamental in defining the musical content for larger portions of this piece as well as creating unique textural variations. The simplicity of the melodic material in conjunction with the development of uniform harmonic landscapes create a sense of continuity and logic through the contrasting sections of this piece. *Arpeggio Etude No.1* is a very challenging piece to perform due to the recurring presence of unusual and impractical chord shapes that require wide stretches, unorthodox flattening of the fingers, and exceptional strength, flexibility, and agility in the fretting hand. As a consequence, the process of practicing this piece in preparation for its final recording revolved on building the required endurance and strength in the left hand. It took me several months of consistent practice to learn to calibrate the right amount of pressure each shape needed so that I could avoid excessive fatigue during the course of the performance of *Arpeggio Etude No.1*. In addition, the *moto perpetuo* created by the right-hand arpeggio requires great endurance and sensitivity to accompany the variety of dynamics and tempos that are employed throughout the piece. Not being a classically-trained guitarist and having preferred the use of a plectrum in my playing style, this also encouraged a profound improvement in my right-hand technique and expanded my abilities as a guitarist considerably. In addition, the different atmospheres and emotions that each section aims to depict demand a deep level of musicality and interpretive skills. This composition has definitely pushed both my technical abilities and creative aspirations to a level I had never imagined before. Within my practice, *Arpeggio Etude No.1* represents a clear example of how the investigation of MFT’s has inspired me to tackle compositional formats, musical aesthetics, and guitar techniques I have shied away from in the past.

The Messenger from Oz

This piece is influenced by and dedicated to Australian guitar virtuoso Tommy Emmanuel. My choice of title seeks to describe Emmanuel's mission to share his incredible artistry with the world and to give people memorable experiences filled with joy and positive emotions. Attending one of Emmanuel's concert was one of the most extraordinary and inspirational experiences of my life. Particularly, this composition draws inspiration from Emmanuel's *The Tall Fiddler* from the iconic album *Endless Road*. As he states, this short, energetic, and virtuosic composition was inspired by the great violinist Byron Berline (Emmanuel, 2013). Strongly rooted in bluegrass aesthetics, *The Tall Fiddler* blends idiosyncratic guitar techniques with sonorities that emulate some of the violin's stylistic trademarks within this genre. It displays the use of material derived from the Mixolydian mode and the pentatonic and blues scales, as detailed score extracts will illustrate later in this analysis. In order to convey a stylistic sound, Emmanuel employs an alternate tuning where the bottom two strings are both dropped by a tone, thus delivering a Gmaj^{6th} chord (D-G-D-G-D-E from low to high). In addition, he uses a capo on the second fret so that the key of the composition is raised to A, which is a common tonality in this particular style of music (Emmanuel, 2013). Although *The Tall Fiddler* displays relatively simple riffs, which are built on strummed doubled and triple-stop figures, accented and syncopated chordal passages, and slurred single-note runs, it requires phenomenal technical abilities to match Emmanuel's astonishing speed and intensity of performance. Emmanuel's compositional structure features a tempo increase towards the second half of the piece "as they do in bluegrass a lot" (Emmanuel, 2016) and reaches a tempo marking of approximately ♩=328.

While crafting this composition, I relied on the musical ideas and compositional design found in Emmanuel's piece *The Tall Fiddler*. By selecting its specific motifs and structural components, I was able to elaborate them into original ideas that formed the building blocks of my work. Particularly, my choices gravitated around these specific musical elements: a) imitation of violin sonorities; b) use of strumming figures built on double and triple-stops; c) consequentiality of ideas; d) order of individual sections; e) pace of the composition and tempo increase; and f) technical challenges. Furthermore, I used two additional references to the classical violin repertoire, which abounds with technical studies and beautiful pieces that I have previously employed in my practice. Specifically, I quoted a fragment of the opening descending arpeggio from the 'presto' movement in Bach's *Violin Sonata in G minor* in bar 53 and a Paganini-inspired motif blending scale tones with chromaticism in bars 54 and 55 of my work.

The Messenger from Oz is a fast and lively solo composition in a compound duple meter of approximately three minutes duration. Its structure comprises of an A-B-A'-B-C-B'-D layout.

Figure 14: Transcription of the main motif of *The Tall Fiddler* (the music sound a major second higher due to the use of a capo)

Likewise, I decided to use the open third string in MFT (G) as a pedal tone and construct the central motif of the A section around the guitar's fifth position instead, where the fretting of the top two strings on the MFT configuration delivers the notes G and D respectively. Precisely, this allowed me to obtain the same starting structure used by Emmanuel, centred on G rather than A. In addition, I employed similar techniques of hammer-ons and pull-offs to add melodic material and rhythmic drive to this main riff as the example below illustrates.

Figure 15: Main motif in the A section of *The Messenger from Oz*

Since the high G in the first beat of the measure is used as a melodic *appoggiatura*, the leading tone in this triple-stop figure is the note A. This choice completes the violin-like sonority I intend to create as it results in delivering the sound of three of the violin's open strings, namely G, D, and A. MFT perfectly suited the intention behind this musical idea and allowed me to perform this specific texture with ease. Due to the use of a re-entered tuning, the melodic material that stands out from these strummed figures is always the note played on the second string. The following note C functions as a second melodic *appoggiatura* (see bar 6 in Figure 15) and reinforces the open and modal harmonic background in the beginning of this piece. By bar 8, the gradual introduction of the notes B \flat , F, and E concludes the exposition of the G Dorian mode in this nine-bar section (Figure 16).

Figure 16: Exposition of the G Dorian mode in bars 7-8 of *The Messenger from Oz*

As measure four in Figure 16 above shows, Emmanuel interrupts the consistent strumming of the opening section by creating a melodic conclusive statement with a distinctive bluesy sound. He achieves this flavour by quickly implying the **IV** chord and then returning to the tonic with a single-note sequence that outlines both the flat seventh and flat third. The syncopated and accented notes E and C and the arrival at a A5 chord on beat four in the last measure give this passage a powerful and punchy rhythmic character. In addition, he performs a semitone ‘bend and release’ from the minor third that momentarily reaches the major third of the chord; this is a common stylistic device used in Blues-flavoured material to create a sense of harmonic and melodic tension and ambiguity.

Similarly, I chose to employ a melodic passage to contrast and conclude the dynamic texture of the first section of *The Messenger from Oz*. As the Figure 17 below illustrates, the music features the use of open strings, slurs, slides, and arpeggiated sequences that mirror some of the techniques used by Emmanuel. The second part of bar 12 is quite challenging to perform due to the combination of single notes, double-stops, and pull-offs at very fast tempo. The double-stop figure would be problematic to execute with the same speed and fluency in standard tuning due to the presence of large intervals, such as minor sixths and sevenths, that cannot be played on the consecutive strings with ease. In bar 13, another interesting use of MFT’s re-entering tuning is highlighted by the sequential arpeggios on the bottom three strings. In fact, the open first string adds variety to the melodic contour of the line with its resonance and lower pitch. Harmonically, the outlined F major triad functions as a quick transition to \flat **VII** chord, which functions as a substitute for the **V** chord (modal dominant chord), before returning to the key of G minor. In the second ending of the A section, a similar melodic arpeggio is used to climb up the fretboard to arrive at the starting position of the first chord shape employed in the chorus. The elaboration of a corresponding idea on the F major tonality reaches the 12th fret of the guitar and resolves to an E \flat major 7th chord (see bar 23 in Figure 18 later). As these considerations show, the F major chord is used as pivot point that can either move up or down in a step-wise motion to the next harmonic centre. This implies two distinct cadences: \flat **VII** to **i** (principal tonic) or \flat **VII** to **VI** (secondary tonic).

Figure 17: Melodic passages are used to conclude the first musical phrase of the A section and as transition points to the chorus in bars 11-15 of *The Messenger from Oz*

The second main musical idea in Emmanuel's composition is a heavily syncopated part that alternates accented triads in two different positions of the guitar with ghost notes on multiple strings. This allows him to increase the rhythmic intensity of the piece and deliver a percussive and powerful musical effect. I tried to follow his compositional approach by creating a passage that intensified the overall sonority and texture of my piece. Rather than relying on rhythmic intensity exclusively, I designed a part with dense voicings, harmonic variety, dense arpeggios, and occasional syncopations. These features contrast with the modal and static quality of the opening section and give the piece a distinctive forward motion and a more dynamic character. The B section or chorus of *The Messenger from Oz* centres on a sequence of arpeggiated chords that outlines a descending bass line of E \flat , B \flat , G, and F. Also, it introduces the ambivalence of modalities found in the alternation of E \flat 's and E's ($\flat 6^{\text{th}}$ or $\natural 6^{\text{th}}$), occurring both as bass notes and chord tones, that are borrowed from the Dorian and Aeolian mode. The opening two chords E \flat and B \flat are built on an enigmatic harmony I heard in Messiaen's haunting and dissonant vocal piece *O Sacrum Convivium*. Specifically, this chord is a four-note structure consisting of a major sixth followed by two consecutive fifths, as shown in beat three of the last measure in the following example by the notes D, B, F \sharp , and C \sharp (the tenor in the second line sounds an octave lower).

Lent et expressif (battre les croches)

The image shows a musical score for the piece 'O Sacrum Convivium' by Olivier Messiaen. It consists of four staves, each with a vocal line and the lyrics 'O sa - crum con - vi - vi - um! in quo Chri - stus su - mi - tur: re - co - li - tur'. The tempo and performance instruction are 'Lent et expressif (battre les croches)'. The dynamics are marked with a piano 'p' on each staff. The key signature is three sharps (F#, C#, G#).

Figure 18: Borrowed harmonic material from bar 5 of Messiaen's *O Sacrum Convivium*

The score above clearly shows how this specific configuration is the result of a chromatic movement in the bass and voice-leading in the remaining parts. Interestingly, the intervallic design of this idiosyncratic voicing creates a shape on MFT that exactly corresponds to the one of a major chord with its root on the fifth string in standard guitar tuning (Figure 19).

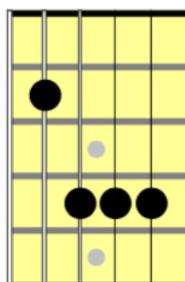


Figure 19: Messiaen's harmonic structure matches a common major chord shape in standard tuning

This case demonstrates one of MFT's advantages in relation to borrowing simple chord shapes from standard tuning to deliver fresh musical language without difficulty of execution. Firstly, I transposed Messiaen's structure to two different chords, $E\flat$ and $B\flat$, to match the overall tonality of this passage and expanded it by adding one note on the first string, which outlines the fifth of the underlying harmonic centre. Thanks to MFT re-entering disparity, this creates a close triad on the top of the voicing that is complemented by the syncopated accents on the last semiquaver of the arpeggio's shape and that contrasts the wide intervallic layout of the preceding arpeggio. I completed the harmonic progression of this two-bar phrase by adding an $E\flat^{add9}$ chord in first inversion, which reinforces the Aeolian mode of the two preceding chords (bar 23 in Figure 20). Contrastingly, the final F major chord, thanks to a melodic embellishment

that delineates the major 7th E, creates a brief and subtle tonal shift in the second part of bar 24 shown in Figure 20.

Figure 20: Descending chord structures and functional diatonic progression leading back to G minor in bars 23-26 of *The Messenger from Oz*

The two conclusive bars of the Figure 20 show how the return to the A section is achieved by the arpeggiation of two chords built on the E and F # bass notes, which temporarily hint at the G melodic minor scale. The final strummed cluster of notes over the ringing low F # creates quite a daunting and unsettled that functions as an unresolved V^{sus4} chord due to the lack of the note C and the presence of the G on the top. The ascending movement in the bass line also contrasts with the cascading series of chords in the previous part of the ‘B’ section.

The material discussed above presents a few challenges for both hands. The right hand performs a downward alternate-picking motion across the string to deliver the chords’ arpeggios at quite a brisk tempo; also, it needs to execute the accented three-note figures in the higher register before quickly moving upward to play the bass note of the next chord (bars 23-24 above). This requires quite a wide and precise motion of the hand in such a small fraction of time. Similarly, the arpeggios in bars 25 and 26 necessitate string-skipping picking techniques of variable degrees. The left-hand encounters chord shapes that involve the flattening of either the 2nd or 3rd finger to press three strings simultaneously and needs to perform rapid shifts along the fretboard spanning up to ten frets, as in the case of the move from the open F chord to the E \flat chord located in tenth position. Finally, the melodic embellishment at the end of bar 23 demands a very precise and quick slurring technique at the brisk tempo of this piece.

The third element in Emmanuel’s piece I used as an inspiration is a single-note interlude he employs to create contrast with the song’s two main sections. As he describes it in an instructional video on *The Tall Fiddler* available on his YouTube channel, this passage is a ‘hammer-ons, pull-offs sliding lick that I invented’. This melodic idea displays pitches of the A minor pentatonic scale with the additional use of the note C # (4^{3rd}), thus delivering another example of the major/minor third ambiguity discussed earlier. The increased tempo in this portion of the composition makes this lick quite virtuosic and flamboyant and very difficult to perform with Emmanuel’s precision and rhythmic force (score below sounds a tone higher due to the use of a capo).

Figure 21: Dazzling single-note run interlude from *The Tall Fiddler*

Likewise, I devised a melodic interlude to provide contrast to the previous material in my work. In fact, the C section of *The Messenger from Oz* constitutes a departure from the previous guitar textures of incessant strumming and arpeggiation and features a lyrical passage that focuses on the application of melodic lines to MFT. It was conceived as a solo interlude intended to capture some of the aspects of the violin’s melodic versatility. The predominance of fifth intervals between adjacent strings in MFT calls for a completely new approach to the execution of scales, arpeggios, and specific motifs on the guitar’s fretboard. Specifically, the impracticality of performing smaller intervals such as minor and major seconds on two consecutive strings imposes the finding of alternative paths rather than relying on traditional position or vertical playing, which most guitarists are comfortable and familiar with. In addition, the re-entrant quality of MFT does not allow the use of the first string in a strictly melodic sense, particularly when the direction of the melodic line is continually ascending. The following extracts allow a better understanding of these linear concepts and their application to this tuning layout.

Presto.

Figure 22: Comparison between the melodic sequence in bars 52-53 of *The Messenger from Oz* and the opening bars of the Presto movement in Bach's *Violin Sonata in G minor*

As Figure 22 above shows, the G minor arpeggio is executed on MFT by following a two note per string method. In standard tuning, similar melodic lines are usually performed around chord shapes and mostly by following a one note per string approach. Figure 23 illustrates two possible variations of this exact passage in standard tuning.

Figure 23: Preferable melodic paths for a G minor arpeggio sequence in standard tuning

The different path imposed by MFT is due to the impractical execution of intervals of thirds on two or more consecutive strings. In fact, these leaps require stretches of three or four frets for major and minor thirds respectively. Subsequently, the fretting hand would be forced to continually move towards the nut of the instrument rather than towards the bridge every time it changes strings and would eventually run into a dead-end point. This completely contradicts the way playing music on the guitar unfolds when a melodic line has an ascending contour and a

range that extends beyond a single vertical position on the instrument (see first line in Figure 23). The alternative two note per string approach falls nicely under the fingers and the incorporation of slurs allows a very smooth and fast execution. These configurations may present some challenges for players with smaller hands due to the wide stretches of five frets occurring on the G string (see bar 52 in Figure 22). The following paragraph discusses the topic of chromaticism and scalar passages found in the central portion of the C section.

The central portion of the C section of *The Messenger from Oz* contains scalar passages which use chromaticism. The music in bars 54 and 55 of Figure 24 would be quite impractical to execute in a fixed position due to the presence of chromatic passing notes in its underlying motif: the fifths-based layout of MFT imposes horizontal shifts along the guitar's fretboard. The approach taken to perform this particular series of notes is radically different from the way I would execute single-note runs in standard tuning. Nonetheless, the melodic design of this idea allows continuity of fingerings that can be repeated while ascending on the same string. Between bar 55 and 56, we encounter a series of seventeen notes that are played on the same string due to the conjunct motion of this melodic passage, which reaches the highest pitch available in this particular tuning layout (D6 in bar 57). I also chose to perform this sequence in this particular position of the fretboard as I was trying to achieve the best possible tone the instrument has to offer. As mentioned in Chapter 1, the lowest two strings tend to have an unclear and muffled timbre when notes are fretted in higher positions, due to the limited scale length on a traditional guitar that is not built to sustain the considerably lower pitches. This melodic passage could have been started on the on the 16th fret of the 5th string and would have required smaller horizontal adjustments; however, the overall tonal clarity of the line would have been inferior and hence the decision to execute it in lower positions of the fourth and third strings where the instrument's timbre is more consistently resonant and defined. It is important to point out another characteristic in the execution of the material in bar 56, which outlines a scalar sequence in G Dorian. The shifts between the 14th and 15th frets marked in the score in Figure 24 were chosen to avoid playing a four-note pattern on a single string and the lateral movements of one semitone are quite easy to perform. This is a demonstration of how MFT has imposed a different approach to playing scalar passages on the instrument and has fostered the development of a new way of thinking as far as the unfolding of melodic ideas on the guitar is concerned. Further discussion and musical examples are presented in Appendix B.

Figure 24: Alternative horizontal paths dictated by MFT’s tuning characteristics

The last three bars of the ‘D’ section demonstrate another use of MFT’s re-entering properties to create unique musical nuances that require slight adjustments from conventional guitar thinking. Particularly, the extract below shows how a motif built on descending and ascending thirds was arranged on two nonadjacent strings in order to achieve a smooth legato effect.

Figure 25: Motif built in thirds highlighting MFT’s re-entering quality and delivering a legato effect

The sliding position shifts in measures 61 and 62 of Figure 25 are performed by the index finger, while the notes on the top string are executed by the third finger. This particular fingering configuration allows the notes in this passage to ring into one another creating a fluid melodic line that culminates with the return to the chorus, which is achieved with a variation of the arpeggio used in the A section (bar 62). Also, the presence of both E^b’s and E[♯]’s is another occurrence of the modal ambivalence which is a recurring trait in this composition.

The final section of *The Messenger from Oz* returns to the opening textures of incessant right-hand strumming in conjunction with double and triple-stop figures. In order to set up the faster tempo in the last portion of the piece, I devised a short vamp with a driving rhythm and a two-note sliding idea over a G pedal, as Figure 26 illustrates.

Figure 26: Short vamp to set up the brisker tempo in the last section of *The Messenger from Oz*

Finally, the section continues as a recapitulation of the material introduced in the A section, which is restated with slight variations in melodic and rhythmic content, as shown in the following score.

Figure 27: Slight melodic and rhythmic variation of the material borrowed from the A section in bars 79-83 as recapitulation of *The Messenger from Oz*

In bar 82, the material constitutes the last development in texture and rhythm of the primary motif of this composition. In fact, the shift of this structural shape to the tenth fret delivers a three-note chord that is comprised of an octave topped by a moving melodic line. The triplet on beat four of the same measure is also a reference to the same rhythmic variation found in the A

section (see bar 8 in Figure 16 earlier). After the exposition of the material from bar 12 and 13 twice, the piece's conclusive bars display the ascending arpeggio previously used as a transition to the chorus. In this case, the same motif continues a step forward from the F major triad and arrives at G minor located at the 12th fret of the guitar. While the top strings are still ringing, a lower G note is sounded and a *fermata* occurs, thus creating a moment of suspense before a concluding G minor chord is played with assertiveness. This final musical gesture is reinforced by MFT's strength in the low register and by the resonance of its idiosyncratic wide harmonic structure delivered by the four consecutive bottom strings as Figure 28 below demonstrates.

Figure 28: Final measures of *The Messenger from Oz*

This analysis has shown how Tommy Emmanuel's compositional strategies and virtuosity have inspired me to craft a solo piece that similarly combines guitar techniques with violin-like sonorities and textures achieved by: the use of hammer-ons and pull-offs, double and triple stops figures, melodic inventions, and tonalities that imitate the open strings of the violin. *The Messenger from Oz* is an example where compositional borrowing in specific ways led to the discovery of useful and sonic originality of the tuning in my practice. In addition, I followed Emmanuel's example in writing a piece as a tribute to one of my musical heroes, just as he did for Byron Berline. *The Messenger from Oz* celebrates Emmanuel's immense contribution to the world of the guitar, his sense of humour, and genuine love for music and his fans. Naturally, my composition developed with a blend of other musical sources such as classical music, modal interchanges, sophisticated chords, and a tiny fragment borrowed from Messiaen's immense harmonic universe. At the same time, I tried to use minimal material to mirror Emmanuel's

concise writing style, and the detailed descriptions have illustrated how the individual sections of my piece followed his compositional design.

From a technical point of view, *The Tall Fiddler*, despite being a simple and catchy piece, requires a substantial amount of guitar practice to match the combination of raw energy, virtuosity, and command on the instrument that Emmanuel delivers in every performance of this piece. There are several videos available online where he breaks down all the main ideas employed in this composition. While addressing the consistent down-up strumming motion in the right-hand, he stresses the importance of being “super super relaxed otherwise you’re never gonna make it” with reference to the mesmerizing speed he achieves in the second half of the composition (Emmanuel, 2016). Similarly, *The Messenger from Oz* presents great challenges for the right-hand and I strictly followed his advice while practicing it. Moreover, the extensive broken-chord arpeggios in the B section represent a further technical workout for the width of motion and speed required by the right hand. In conjunction with the novelties of MFT, the intent to emulate Emmanuel’s compositional style and strive for his speed, intensity, and musical flair has had a remarkable impact on my performing abilities.

Chapter Five: Compositions Influenced by Nature

This chapter focuses on the analysis of two original compositions that were inspired by nature. The detailed examination of their compositional process, musical aesthetics, and characteristics allows a deeper understanding of how MFT has contributed to the musical realization of non-musical imagery and metaphors that were borrowed from external domains. Moreover, it will show how the depiction of natural phenomena has been a fundamental driver in the development of both compositions' structural design and unique sonorities.

Laniakea

In this piece, the investigation of MFT allowed me create sonorities that seemed to correlate with aspects of imagery I intended to convey. This was achieved by: a) focusing on the sound qualities of unique textures such as natural harmonics and the resonance of open strings; b) repetition and development of underlying motifs; c) devising dramatic contrasts of range; d) modifying the pace and momentum of the composition; e) use of dissonance; f) juxtaposition between introspective sonorities and unsettling passages. These elements were decided upon persistent explorations, reflection, and deliberative choices.

As mentioned in Chapter 3, my fascination with celestial bodies started in my early teens and has continued to grow over the years thanks to new discoveries, technologies, and space explorations that have contributed to expand our knowledge of the cosmos. The inspiration to write this composition came after watching a brief documentary about the theoretical formulation of the Laniakea super-cluster, which is home to our galaxy and approximately one-hundred thousand other galaxies³. The name Laniakea means 'immeasurable heaven' in Hawaiian and 'is meant to honor Polynesian navigators who used their knowledge of the heavens to make long voyages across the immensity of the Pacific Ocean' (Choi, 2014). Computer-generated illustrations and video simulations available online show "massive clusters made up of hundreds of galaxies, all interconnected in a web of filaments in which galaxies are strung like pearls" (Choi, 2014) against the dark backdrop of empty space. Their viewing immediately captured my imagination and made me contemplate the possibility of creating a piece that evoked these images. *Laniakea* was conceived as a musical collage that depicts the movements, vibrations, colours, and shapes of the heavenly bodies inhabiting this magnificent and mysterious super-cluster.

While the initial sketch of *Laniakea* was developing, I started to reflect on the relationship between this work and the images of the supercluster that inspired its conception. Interestingly,

³ https://en.wikipedia.org/wiki/Laniakea_Supercluster

the word ‘influence’ is an astronomical term coined in the 14th century meaning ‘streaming ethereal power from the stars when in certain positions, acting upon character or destiny of men’ (Harper, 2017). At the time, I was aware of the historical significance of music in the realm of philosophy and science thanks to curricular studies conducted while in high school and the reading of *The Music of the Spheres* (James, 1996) a few years ago. I decided to start deepening my investigation on the relationship between music and the cosmos. There is a vast body of literature dedicated to this area of study and I particularly became intrigued by the vibrational frequencies of planets in the solar system and their associated musical pitches and colours (Couto, 2009). By consulting charts compiled by this author, I learned that the frequency of the sun (126.22 Hz) is a note between a B3 and C3. The open 4th string in MFT is a pitch with a frequency of approximately 130.81 Hz in standard A=440 tuning. Since *Laniakea* features harmonic landscapes and specific musical ideas based on the note C (opening chord, harmonics, and finale), I was surprised to discover that there was a close connection of frequencies between this piece and the gravitational center of our solar system. In order to strengthen the connection between the music and the phenomena it intends to depict, I decided to detune the guitar to perfectly match the actual sun’s frequency before the recording of this composition.

Laniakea is the first through-composed piece I wrote with MFT and therefore represents an interesting example of how the new tuning influenced my compositional approach. I started sketching out ideas for this piece only in the first few weeks after setting up one of my guitars in MFT and, at that time, I had a very limited amount of musical language at my disposal on the new configuration and a poor notion of its underlying logic. This compelled me to maximize the use of ideas and flesh out large portions of this piece with simple concepts and material. Creatively, I relied on a combination of improvisation, intuition, embedded guitar knowledge, and a fair amount of trial and error strategies to come up with the musical material that shaped this composition. Video recording allowed me to revisit improvised sessions and visually discern what I was playing, thus facilitating the process of transcribing what I believed was interesting and in line with the intention of the composition. In between cycles of spontaneous flow of ideas, analytical listening also enabled me to keep refining individual motifs and to plan out their systematic development. The selection process was quite intuitive and musical ideas were chosen on the basis of their intrinsic sound, emotional strength, and on how well they conveyed the imagery they intended to portray. As a consequence, some parts of *Laniakea* cannot be described with conventional parameters of music theory as this analysis has shown. Chord progressions and harmonic structures were specifically chosen thanks to their fresh sonorities and their inner sense of consequentiality and balance. MFT pushed me to think ‘outside the box’ and to rely on a more intuitive and aurally based approach for the discovery of adventurous and idiosyncratic musical language.

Laniakea is a through-composed and multi-structured piece for solo jazz guitar of approximately nine-minute duration and symbolizes an imaginary voyage of observation across the wonders of Laniakea’s supercluster. It features a recurring juxtaposition between static and dynamic sections, which are figuratively intended as moments of contemplation and stillness versus phases of impetus and transformation. The musical material displays variety in texture, complexity, and mood and is infused with colorful and exploratory harmonies that are inspired by contemporary jazz aesthetics. After a short introduction showcasing two suspended and enigmatic chords with volume-swelling effects, *Laniakea* centers around a pivotal idea of natural harmonics that features a rhythmic ostinato in a 6/8 meter. Its pulsating quality, incessant repetition, and ambiguous harmonic character generate an atmosphere of suspense and hesitation. Throughout this piece, the underlying rhythmic contour of this motif is applied to contrasting modalities, chord progressions, and harmonies, thus delivering a dynamic and consistent pace. The continuous flow of musical ideas is occasionally broken by changes in dynamics and textures, unexpected meter alterations, rhythmic displacements, and odd time signatures. After a climactic section that alternates cascading melodic figures with dense and dissonant sonorities, the coda returns to a more relaxed mood and terminates this relentless musical journey with a slow and contemplative finale that, once again, evokes the opening feeling of awe and mystery.

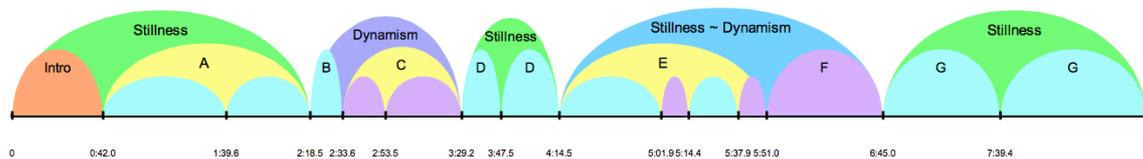


Figure 29: Structural outline of *Laniakea* showing sections that figuratively convey moments of stillness vs moments of dynamism

Laniakea’s opening and central motif, which is showcased in the introduction and remaining sections extensively, is based on a rhythmic ostinato that outlines a series of natural harmonics executed at the twelfth fret of the guitar. I came across the embryo of this idea while improvising a few days before I became aware of the existence of *Laniakea*. Through several cycles of improvisation and by analytical listening to the recorded videos of these sessions, I continued to refine its shape and content until it perfectly captured the essence of what I had in mind. The delicate texture of natural harmonics in conjunction with the sonic ambiguity created by the pitches of MFT’s top four strings (C, G, D, A) sets up an atmosphere of mystery that infuses several portions of this composition. In addition, the vibrating quality and shimmering resonance of the natural harmonics aim to mirror the scintillating dim light emitted by distant stars, as the Figure 30 illustrates. Throughout the A section, the underlying feeling of

unpredictability is also reinforced by recurring meter changes. Four individual measures in 5/8 transform the pattern of harmonics into quick arpeggios of enigmatic chords, while the alternation of time signatures momentarily breaks the incessant flow of the starting motif (see bars 6, 8, 10 and 12 of the full score in Vol. 2). The presence of open strings slightly changes the previous texture created by the harmonics without modifying its pitch content, thus offering variety without losing continuity. The fourth and last chord in the series implies an F dominant sound (with 9th and 13th extensions) that leads to a B \flat minor tonality in the following measure. In general, the vibrating quality and shimmering resonance of the natural harmonics aims to mirror the scintillating dim light emitted by distant stars (Figure 30).

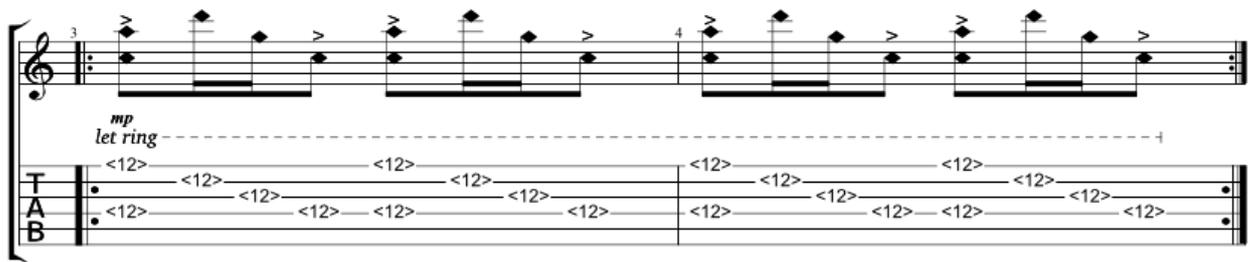


Figure 30: Natural harmonics creating a pulsating and shimmering effect in the opening bars of *Laniakea*

Thanks to the neutrality and openness of its hypnotic sound, this theme is used as a structural element throughout the composition and is used to signal a point of departure towards the exploration of new material or a point of return within specific sections. Its recurring appearance and development through subtle melodic and rhythmic alterations represent the binding force that holds this piece together, approximating the role of gravity in keeping the formidable masses of celestial bodies in a perfect state of balanced motion. An example of this characteristic is showed in the continuation of the A section, where four new tonal centers are introduced in chronological order, with quick intermission of the natural harmonics motif in between, as Figure 31 shows. This creates a push-pull effect that figuratively resembles the gravitational attraction existing in space.

The image shows a musical score for guitar, divided into two systems. The first system covers measures 19 and 20. The treble clef staff contains a melodic line with notes and dynamics markings: *f* at measure 19 and *f* at measure 20. Below the treble staff is a guitar-specific staff with fret numbers (1, 3, 4) and the instruction "let ring" with a dashed line. The second system covers measures 21, 22, 23, and 24. The treble clef staff contains a melodic line with notes and dynamics markings: *mp* at measure 21, *mf* at measure 23, and *mf* at measure 24. Below the treble staff is a guitar-specific staff with fret numbers (1, 3) and the instruction "let ring" with a dashed line. The guitar-specific staff includes symbols like "<12>" and "0" indicating fretting and open strings.

Figure 31: Alternation of harmonics and chords delivering a gravitational effect during the A section of *Laniakea*

Harmonically, the chords in the extract above display an open sonority by disguising the minor third within the inner voices of their configuration. Extensions such as the 9th and 11th are also present, thus contributing to deliver the jazzy flavor I mentioned earlier. Visually, the horizontal contour of these arpeggiated chords, with the exception of the bass note, replicates the shape of a wave and therefore is an additional reference to the vibrations associated with movements of light through space. From a performance perspective, the wide distance existing between the harmonics pattern at the twelfth fret and the chordal structures in first position are quite challenging to execute with precision in conjunction with the delivery of variety in dynamics and consistency of musical flow. Moreover, the soft and delicate textures of natural harmonics require great accuracy in applying the right amount of pressure by the fingers of the left hand in order to sound each string with clarity and evenness.

After a short and transitory passage built on the alternation of the natural harmonics device and a dissonant F chord with added $\flat 9$ and $\sharp 9$ in a 5/8 meter, the C section opens with a series of melodic and accented chordal figures over the 6th open string and showcases an alternation between 6/8 and 7/8 time signatures. The low range, metric changes, and rhythmically displaced figures in this portion change the impetus of the composition quite drastically by delivering a forward push with an irregular drive. Metaphorically, this represents a sudden movement towards unknown and darker regions of space, where the lack of points of reference contributes to create a sense of being disoriented. The wide intervallic spaces between the melodic and

chordal material against the low-pitched B flat also evokes the great distances existing in every direction in the most remote areas of the universe, thus strengthening the image of slipping into darkness and emptiness.

The figure shows two systems of musical notation. The first system covers bars 47-50. It features a treble clef staff with a key signature of one flat (Bb) and a common time signature. The melody begins at bar 47 with a forte (f) dynamic and a 'let ring' instruction. The bass line is a constant Bb drone. The guitar tablature (TAB) is provided for both systems, showing fret numbers for the treble (T), middle (A), and bass (B) strings.

System 1 (Bars 47-50):

- Bar 47: Treble clef, key signature of one flat (Bb), common time. Melody starts with a forte (f) dynamic and a 'let ring' instruction. Bass line is a constant Bb drone.
- Bar 48: Continuation of the melody and bass line.
- Bar 49: Continuation of the melody and bass line.
- Bar 50: Continuation of the melody and bass line.

System 2 (Bars 49-50):

- Bar 49: Treble clef, key signature of one flat (Bb), common time. Melody starts with a forte (f) dynamic and a 'let ring' instruction. Bass line is a constant Bb drone.
- Bar 50: Continuation of the melody and bass line.

Figure 32: Melodic and chordal figures over a dark-sounding B flat drone in bars 47-50 of *Laniakea*

The second salient feature of this section is a contrasting passage with a consistent 6/8 meter that displays a more relaxed and introspective character (bars 53-56). A sequence of harmonic movements briefly touches four new tonalities before returning to the initial idea explained above. While discovering these specific chords, I decided to use a contrary motion effect between the melody and the bass notes, while the overall logic of the harmonic flow is maintained by common inner tones among these otherwise seemingly unrelated structures. Rather than following rules rooted in functional harmony, I focused on finding an intriguing chord progression that delivered the mood and contrasting flavour I intended to create. Thus, this is an example of how MFT has influenced my approach to compositional strategies by stressing the importance on the intrinsic sound of an idea. During the second exposition of this harmonic progression, the final resolution arrives at the new tonal centre of A major (bars 71-74).

From now on, the musical material temporarily gravitates around the tonality of A major with the exception of the note G appearing in bar 82 and the lowest pitch of the harmonics motif (also G). Once again, the natural harmonics motif, which is played at the 7th fret of the guitar in this occasion, marks the beginning of the D section. The position change generates harmonics that are a perfect fifth higher, thus spelling out the notes G, D, A, E. The higher pitches with a finer and more delicate resonance intend to depict more distant stars emitting a fainter light (bars 75-77). In a similar manner to the A section, this motif is interrupted by measures in 5/8 that display broken chords in conjunction with open strings. Harmonically, they are quite difficult to define with conventional chord symbols and showcase some of the peculiar sonorities of MFT. The process of creating these chords was driven by selecting notes of the A major scale that produced idiosyncratic resonance in combination with the first and second open strings. In addition, they are located in the vicinity of 7th fret in order to facilitate the execution of natural harmonics occurring in close succession. The following vertically aligned/homophonic representation of the original lines (bars 78-84 of full score in Vol. 2) provides for easier scrutiny of the ambiguous harmonies.

Figure 33: Harmonic reduction showing enigmatic chord structures in *Laniakea*

The first chord does contain an A major triad in its inner voices, but the B note on the bass and D on the top create quite an interesting and suspended sound. A possible interpretation could be that of naming this structure as A^{add4}/B. Likewise, the chord in measure three, could be interpreted as A^{add4}/G. In measure four, those particular pitches deliver the sound of an E dominant chord in first inversion (with an added 6th). This functional interpretation is also in virtue of its resolution to an A major in the following measure of the piece. In bars 91-94, this section continues with two configurations that are borrowed from the A section (bar 25) and finally arrives at a slight variation of the F dominant used in bars 41 and 44. In this instance, the chord also displays the minor seventh as an added melodic tone, thus delivering quite an abrupt change of mood that prepares for the harmonic content of the next portion of *Laniakea*. These considerations also showed how repetitions of musical ideas, borrowed harmonies, and structural design were employed to give unity and logic to this composition.

The E section marks the beginning of a new exploratory phase in the piece, both musically and metaphorically. It displays two distinct contemplative passages and then develops into a descending series of chords that culminates in two examples of dark, dense, and dissonant harmonic structures. Firstly, the motif of harmonics returns to the 12th fret and is developed by adding a fretted note within its outline and by altering its rhythmic contour. This delivers a different tonality by temporarily substituting the note A of the opening idea with a B flat, thus implying a shift towards a slightly darker mode. The lack of the third and the presence of the ninth in the underlying implied tonality, built again on the note C, continues to deliver the characteristic feeling of uncertainty and openness of this piece. This subtle alteration in texture provides another figurative depiction of shimmering objects in space. Next, the section unfolds into a highly pitched arpeggiated sonic landscape that implies an E \flat Dorian modality. This harmonic configuration also has a glimmering, delicate, and ethereal quality and, to my ears, it depicts the essence of stars quite well. In addition, the independent and simultaneous movement of the melody against the inner lower voices creates a dance-like effect that mirrors the fluctuation of these celestial bodies in space. Figure 34 illustrates the passage under examination.

The figure shows two musical passages for guitar. The top passage, starting at bar 125, is marked 'let ring' and features a melody on the treble clef staff with notes at the 12th fret. The bottom passage, starting at bar 127, is marked 'mf let ring' and features a melody on the treble clef staff with notes at the 12th fret, and a bass line on the bass clef staff with notes at the 15th and 21st frets. Both passages include fret numbers and rhythmic markings.

Figure 34: Contemplative passages depicting shimmering stars and oscillating heavenly bodies in bars 125-129 of *Laniakea*

In contrast, the remaining portion of the E section is characterized by a faster and more energetic pace and displays chord structures moving down in parallel motion and following a homogeneous melodic design. Both during their first exposition and on the repeat, these progressions arrive at two mysterious and discordant harmonies that possess a distinctively dark and dissonant character. Sudden changes of meters also contribute to build up the tension in this

particular portion. The music in these passages intends to evoke the spiraling movements and shapes that are characteristic of innumerable galaxies and gas formations across the cosmos (Figure 35), and the mysterious qualities and power of black holes, dark energy, and dark matter (Figure 36).

The image shows two systems of musical notation for guitar. The first system (measures 130-132) features a treble clef staff with notes and a guitar tablature staff with fret numbers (21, 18, 15, 15, 15, 15, 15, 13, 13, 10, 10, 8) and 'let ring' markings. The second system (measures 133-134) also features a treble clef staff with notes and a guitar tablature staff with fret numbers (8, 8, 8, 11, 8, 6, 6, 6, 10, 6, 6) and 'let ring' markings. The music is marked with a forte 'f' dynamic.

Figure 35: Descending chords mirroring spiral-like movements of galaxies bars 132-135 of *Laniakea*

The image shows two systems of musical notation for guitar. The first system (measures 119-122) features a treble clef staff with notes and a guitar tablature staff with fret numbers (5, 4, 5, 4, 6, 8, 8, 5, 4, 6, 8) and 'let ring' markings. The second system (measures 135-138) also features a treble clef staff with notes and a guitar tablature staff with fret numbers (5, 9, 8, 10, 8, 10, 10, 5, 9, 8, 10, 10) and 'let ring' markings. The music is marked with a forte 'f' dynamic.

Figure 36: Score reduction illustrating dissonant harmonies in bars 119-122 and bars 135-138 of *Laniakea*

In the simplified extract above, the actual arpeggiation of these structures has been included to illustrate their overall contour and the unsettling effect created by the delayed bass note. Their execution is particularly challenging due to the wide stretches of five frets required by the left hand. The first chord is a B \flat seventh with a raised fifth and ninth, which is a commonly used voicing in contemporary jazz harmony, implying the use of the altered scale or ‘super Locrian’

mode. The second harmony is a very idiosyncratic sonority that I was able to create thanks to the tuning peculiarities of MFT. It defies conventional diatonic interpretations and therefore is more accurately described as a pitch-class configuration starting from the note B flat [0-1-4-5] or [B \flat , B, D, E \flat]. This unique set of pitches is a great example of how MFT has pushed me into the discovery and utilization of sounds that were previously not part of my musical language.

Similarly, the next portion of *Laniakea* continues to expand the sense of urgency and the use of complex material displayed in the last few musical examples. In fact, the second-last section symbolizes the climax of this composition and features some of its most adventurous and elaborate musical devices. Its overall design is based on the alternation of a cascading melodic pattern of seven notes and turbulent arpeggiations that outline dense and sophisticated chord shapes across the guitar's six strings. Metaphorically, these devices portray a spiraling downfall into unknown and dark regions in the farthest corners of the universe. Both melodically and harmonically, this portion demonstrates some of the musical strengths and singularities of the MFT tuning very convincingly. The specific melodic motif is achieved by pressing the top four strings on the same fret with one finger. The same shape is then moved down the fretboard by following the intervallic design of the pentatonic scale. This generates four independent melodies in the key of C, E \flat , F, and B \flat major (respectively on the first, fourth, second, and third strings) that unfold in a parallel manner. The interesting and intricate musical language that blossoms from this rather simple idea is another peculiar effect created by MFT's unique layout. Later in this section, the same pattern is lowered down chromatically, thus delivering melodic variety and a sense of instability and disorientation (Figure 37).

Figure 37: Recurring cascading melodies derived from the major pentatonic scales in the key of C, E♭, F, and B♭ and their application to four strings simultaneously in the F section of *Laniakea*

The following score is a simplified illustration of the dense harmonies that serve as resolution points of these descending melodic figures.

Figure 38: Idiosyncratic sonorities from *Laniakea*, bars 142-165

These five configurations share similar characteristics in the use of: open strings, the extended low register of MFT, tonal clusters, and an enigmatic harmonic sophistication. Also, the last four chords display a sequence of descending chromatic fifths in the lowest two voices that finally resolves to a C suspended sound, which is the harmonic center of *Laniakea*'s finale. These harmonies display an idiosyncratic sonority and density that is impossible to replicate in standard tuning. In addition to creating more resonance in each voicing, the open strings outline extensions, alterations, and tone clusters against the remaining harmonic material, thus making the definition of each sound quite problematic. For example, the first shape is very similar to a C Lydian Dominant chord but the major third is missing; alternatively, it could be interpreted as a G minor chord with a major seventh over a C bass note. Similarly, the second voicing show

has an E flat minor triad at the bottom of the configuration, while the other voices spell out the major 6th, major 7th, and the raised 11th. In addition, the energetically active right-hand arpeggios used in the piece combine to scatter and displace these sounds, thus delivering an even more ambiguous and enigmatic harmonic effect as Figure 39 illustrates.

Figure 39: Simplified version of complex and enigmatic sonorities with intense arpeggios found in the F section of *Laniakea*

Overall, this portion of *Laniakea* showcases the most technically challenging material in the whole composition. Particularly, the combination of odd rhythms and continuous horizontal shifts in the melodic sequence are difficult to play smoothly. The chord shapes are also quite demanding on the left-hand due to their unusual arrangements on the fretboard, which are completely unrelated to any familiar structure in standard tuning. In addition, the incessant plucking figures in the right hand are quite arduous to perform with the required intensity and musicality.

After such an intense and climactic section, the finale of *Laniakea* features a drastic *rallentando* that sets up a contemplative and slow movement. The coda returns to the harmonic material utilized in the very beginning of the piece, without using the technique of natural harmonics. The sound of the open C, G, and D strings provides a static and reflective harmonic background while a poignant and simple melodic statement is performed on the guitar's first string. The fuller tone of MFT's first string (A3 and second highest pitch in the layout) allows this melody to have a distinctive timbre and to stand out against the delicate drone-like accompaniment. Thanks to these characteristics, the implied minor modality of the melody, and the occasional slurs, slides, and melodic embellishment, this finale is somehow reminiscent of the introspective and spiritual quality of the beginning of an Indian raga. In between the exposition of its two melodic statements, an improvised development of the material is included in the recording but is not notated in the score.

Figure 40: Pensive finale in bars 166-169 of *Laniakea*

The coda comes to a conclusion with a dramatic crescendo that alternates the two voicings that opened the composition. After a fermata on the chord appearing in the last beat of bar 169 in Figure 40, one last variation of the natural harmonics motif is quickly and softly restated and played at the 12th and 24th frets before fading away quite abruptly. The musical material in the finale marks the end of the contemplative journey across the unfathomable mysteries and wonders within the *Laniakea* supercluster. The composition is supposed to leave the listener with a feeling of both awe and unsettledness caused by the impossibility of comprehending the immeasurable depths and complexities of the universe we happen to be part of.

As this analysis demonstrates, the adventurous and idiosyncratic sonorities that infuse *Laniakea* resulted from MFT, and well served my intention to depict some of the natural phenomena and celestial bodies inhabiting the cosmos. My limited knowledge of MFT's functioning at that time pushed me towards the discovery of unique sonic landscapes by attempting to translate figurative and visual elements into musical vocabulary. Imagery and concepts borrowed from the extra-musical domain of astronomy aided the creation of individual ideas and informed the structural development I employed in this composition. I believe that the use of an alternate tuning allowed me to effectively capture the symbolic connection between sound and the images of *Laniakea*, as illustrated by in depth musical analysis.

Storms

Through this second extended solo guitar composition, I continued to address some of the challenges of writing a multi-sectional and intricate piece using an infrequently used tuning configuration. The investigation of MFT's stimulated me to venture into this fascinating and intimate musical setting in order to highlight some of the tuning's unique sonorities and textural possibilities. As the title suggests, this work was inspired by the natural phenomena of torrential rains, which are commonly experienced in the city of Brisbane at different times of the year. It is an attempt to evoke the incessant sounds caused by the heavy beating of rainfall and to depict the successions of alternating phases of downpours and calm. Detailed description of the conception of *Storms* and its parallel to these activities will be discussed throughout this analysis.

This composition blossomed from the analysis and transcription of the material that unfolded during a recorded improvisation. The identification of the characteristics of principal musical motifs displayed in the video recording allowed me to develop entire sections of this piece by elaborating and modifying existing fingering patterns and chord shapes in accordance with the specific modalities I chose. Deliberate decisions occurred at specific moments when I realized that the use of a particular motif had exhausted its effectiveness. This compelled me to steer the composition towards new directions by altering its harmonic rhythm, textural density, range, resonance, and tempo. Simultaneously, I tried to incorporate elements borrowed from non-musical domains to shape the structure and character of this composition

Beside the effect of the MFT tuning on my instrument, other important musical influences behind *Storms* are American guitarist Ben Monder's extended solo works for jazz guitar, and the minimalist piece for solo piano *Phrygian Gates* (1977) by American composer John Adams. Monder's visionary guitar style and compositional approach is a synthesis of many musical traditions such as modern jazz, Baroque counterpoint, contemporary classical music, and progressive rock. His approach has been a consistent source of inspiration in my personal attempt to write multi-faceted and extended solo guitar pieces. Ben Monder's compositions *Windowpane* (2000), *Mistral* (2000), *Still Motion* (2005) and *Double Sun* (2005) display the ability to elaborate rather simple, fundamental musical motifs and concepts into intricate and enigmatic works. Talking about his solo compositions, Monder affirms that "*Still Motion* and *Mistral* are fingerpicking patterns I discovered that became the basis for a tune [...] I feel I need to limit myself to as few parameters as possible, to give myself some kind of direction, and things proceed from there" (cited in Adler, 2005). His approach in using minimal ideas to shape long compositions has certainly inspired the conception and overall design of *Storms*.

Secondly, John Adams's iconic piece *Phrygian Gates* is an extraordinary and deeply moving solo piano composition where the simple opening melodic motif keeps evolving and taking unexpected turns regarding its melodic developments, rhythmic displacements, density, and dynamics. According to Evans, this work "implements a much broader scheme of textural variety, pitch cell development, and dynamic contrast" (2013, p.3). Moreover, the piece displays a remarkable use of modalities to create mesmerizing musical landscapes that are always in flux. Direct imitation of some of the aesthetics and techniques used by these two composers will be illustrated throughout this analysis.

Storms is an eclectic and elaborate solo guitar work of approximately eight and half minute duration. The different phases of this piece feature a variety of guitar textures and techniques, explorations of modalities, complexity of harmonic structures, and the use of MFT's full tonal range and idiosyncratic voicings. *Storms* is based on a right-hand plucking pattern with a distinctive rhythmic and melodic contour. The repetition of this idiomatic texture and its application to several harmonic layouts allow the development of large portions of this piece while preserving a cohesive character among them. Rather than utilizing keys in a diatonic way that follows traditional harmonic cadences and hierarchies exclusively, *Storms* displays the use of modalities as a vehicle to create unique sonic ambience and emotional quality. Its compositional design intends to mirror both the characteristics and emotional states intrinsic to the alternation of the violent downpours and the moments of rest that occur during a series of torrential rains. Despite their occasional destructive nature, I found the sound of these phenomena to be quite relaxing and peaceful, which are qualities this composition intends to evoke as well. On one hand, several portions of *Storms* are centered on the turbulent and fast arpeggios of idiosyncratic chord shapes that produce dense musical landscapes with subtle melodic and rhythmic variations; these devices intend to mirror both the force and subtlety of the walls of sound created by the heavy beating of the rain. The slow harmonic pace in these parts contributes to evoke the sense of immutability that characterizes extended and powerful deluges. On the other hand, two interludes aim to evoke the moments after a violent storm, which are marked by many shades of colours and a sense of calm. The first one displays an introspective mood, a slow tempo, melodic embellishments, and harmonic progressions that are reminiscent of the traits of a jazz ballad played in a solo guitar chord-melody style. The second interlude gravitates on the juxtaposition of descending parallel chords and an ascending series of rich harmonic structures. Tonal extensions, contrary motion among the bass and the melody voices, and various voicing layouts are also predominant. This section culminates in an idiosyncratic minor 9th chord that is arpeggiated with cascading effects of fretted notes and artificial harmonics. The last section restates the opening motif with harmonies borrowed from the C Aeolian mode and displays the full use of MFT's low register. After a raising series of diminished chords, dazzling arpeggiated figures of high-pitched chords are encountered; this

passage features a bright and auspicious character that signals the conclusion of the last storm. Two major chords follow next and a repeated descending melodic figure with open strings arrives at an A \flat major chord, which quite unexpectedly concludes the piece with a sense of serenity and joy.

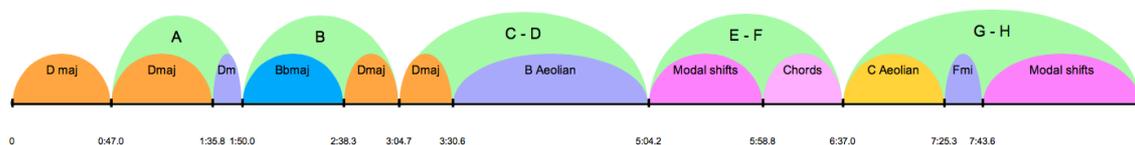


Figure 41: An outline of the different modalities used in *Storms*

Storms was initially conceptualized during an early summer night characterized by heavy torrential rains as the title suggests. In the preceding week, I had been experimenting with a set of new chord shapes I discovered through MFT in conjunction with a plucking pattern that created an interesting textural effect (details later in Figures 43 and 44.). Inspired by a combination of musical ideas and meteorology, I proceeded to capture some of the concepts I was working on with my laptop. The video recording ended up documenting a very inspired and unique performance. I felt I had somehow managed to seize the ethereal connection between the music and the surrounding atmospheric events. Moreover, the improvisation unfolded with an organic sense of structure and displayed a clear exposition of the material I had previously come across. Captured by the honesty and clarity of this performance, I decided to use this video recording as the main source to organize the overall design of *Storms*, as well as using specific musical concepts verbatim to develop large parts of this piece. Subsequently and through attentive listening, transcribing, and approximation, I was able to decipher some of the features of the ideas that flourished so naturally while improvising. Particularly, the identification of the exact rhythmic patterns in the plucking hand turned out to be quite a challenging task, due to its uneven grouping of notes and the subtle variations caused by the explorative improvisational approach I adopted. This is reflected in the score by unusual time signatures and a rhythmic cell of five notes in the right-hand arpeggio pattern.

As mentioned in the introduction, this work is heavily influenced by Ben Monder's compositional practice for solo jazz guitar. The following extract is taken from the opening fingerpicking figure of *Windowpane*, which serves as the foundation of large portions of this piece.

⑥ = D

Windowpane

Ben Monder

$\text{♩} = 152$

p i p m p i p m p i p m sim.

Figure 42: Opening right-hand plucking figure found in *Windowpane* (2000), bars 1-6

The combination of the right-hand pattern with the underlying harmony possesses an idiosyncratic quality that immediately sets the ambience of this work and constitutes the binding element throughout *Windowpane*. Similarly, I committed to employ a plucked *arpeggio* technique as a structural device in *Storms*. The unique texture in its opening bars is created by a D power chord shape in combination with the open top two strings. The main right-hand pattern of *p-a-p-m-i* delivers many repetitions of the notes D and A. These unison pitches are sounded both as open strings and fretted notes, thus providing subtle changes of timbre and achieving an attractive textural effect that identifies the character of this piece. Unisons constitute a motivic element that will be employed in other parts of this composition, such as bars 16, 21, 37, and 56. The 24 notes in one measure are organized as a sequence of four notes followed by four groups of five notes, as Figure 43 below shows. The offbeat contour and consistent repetition of D's and A's delivers a whirlpool of sounds that evokes the rhythmic and forceful beating of rain. Simultaneously, the lack of a clear demarcation of the underlying pulse conveys a feeling of disorientation and chaos. Throughout the introduction, the pitch content remains minimal and the appearance of the bass notes F # and C # completes the exposition the D major tonality. A stable pulse is finally established with the beginning of the A section: the right-hand arpeggio *a-p-m-i-p* outlines a repeated pattern consisting of four groups of five semiquavers. However, the displacement of the bass note on the second semiquaver of each bar continues to give a sense of rhythmic instability. In addition, the middle finger, which plucks the second string, alternates the open string's pitch with fretted notes; as a consequence, the re-entrant tuning shifts the melodic voice of each chord to the third semiquaver (bar 16 and 17 in Figure 44), thus creating an additional rhythmic effect that is used extensively throughout *Storms*.

The musical score for Figure 43 shows a treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The melody is written on a single staff and consists of repeated eighth-note patterns. The first measure starts with a dynamic marking of *p* and an accent (>). The melody continues with similar patterns, with dynamic markings of *p* and *sim.* (fortissimo). The bass line is written on three staves (T, A, B) and features open strings (0) and fretted notes (7, 9). The instruction "Sustain chords throughout" is written above the first measure, and "sim." is written above the fourth measure.

Figure 43: Introduction of *Storms* featuring repeated notes with different timbre, open strings and odd rhythmic groupings

The musical score for Figure 44 shows a treble clef with a key signature of one sharp (F#) and a 20/16 time signature. The melody is written on a single staff and consists of repeated eighth-note patterns. The first measure starts with a dynamic marking of *p* and an accent (>). The melody continues with similar patterns, with dynamic markings of *mp* and *mf*. The instruction "A Tempo" is written above the first measure, and "sim." is written above the second measure. The bass line is written on three staves (T, A, B) and features open strings (0) and fretted notes (7, 9). The instruction "let ring" is written above the first measure, and "mf" is written above the second measure.

Figure 44: Structural right-hand pattern outlining four groups of five notes and delivering idiosyncratic textures in bars 16-17 of *Storms*

Upon reflection, I realized that the characteristics of this pivotal idea are influenced by the opening measures of *Phrygian Gates*, which consists of a melodic motif based on the pulsing of a same note, octaves, and major second intervals. Starting from such a simple concept, Adams brilliantly creates a musical journey predominantly based on the notes of the Lydian mode and showcases masterful use of motivic development, rhythmic displacement, and variety in density and dynamics. The underlying modalities in *Phrygian Gates* are carefully and slowly dosed to add different shades of tonal colours and increase the density, depth and scope of the composition. These modes, Evans states “are used as sources of pitch content throughout the piece” (2013, p.11). In imitation of Adams’ techniques, the gradual exposition of the material contained in sections A, C, and D of *Storms* unfolds thanks to subtle variations of the intervallic relationships among the pitches of D major combined with bass voice motion and diverse layout in each voicing. Occasional exceptions in pitch content are represented by the note F (bar 38 and 40), A # (bar 98), and G # (bars 111-114). Figuratively, the choice of a static pitch collection intends to imitate the underlying quality of the sound of a storm. There is, in fact, an almost unchangeable drone in the background of this natural phenomenon that encompasses all the other simultaneous and erratic sounds and rhythms created by the heavy beating of the water.

This effect is achieved in the music by the sustained bass notes ringing through the whirling layers of sounds and by occasional rhythmic displacements of the highest voice in each harmonic structure (discussed earlier), which allow the melodic material to stand out. These musical nuances are a direct consequence of MFT's re-entering properties and are realized through the application of various chord shapes to its tuning layout. Figure 45 shows a passage taken from the A section of *Storms* that well illustrates these musical devices and metaphorical implications.

The figure displays a musical score for guitar in D major, divided into two systems. Each system includes a treble clef staff with a melodic line and a guitar tablature staff. The first system covers measures 18 and 19, and the second system covers measures 20 and 21. The tablature includes fret numbers (9, 0, 7, 9, 9, 7, 9, 9, 7, 9) and a 'let ring' instruction. The key signature is one sharp (F#).

Figure 45: Diverse harmonic material composed from the pitches of D major showing melodic variations, rhythmic displacements, and unique voicing structures in sections A of *Storms*. References to the opening motivic cell of repeated unisons appear in bar 18 and 21

The B section of this composition constitutes the first interlude that momentarily breaks the former incessant flow of fast arpeggios and dense layers of sounds. The abrupt interruption of the previous textures and the transition to a slower and introspective phase imitate the sudden cessation of violent downpours and the restoration of tranquility and light. This intermezzo features a slow meditative moment with a compositional approach that is reminiscent of solo guitar playing in the context of a jazz ballad. The key of B \flat in this section signals a departure from the former pitch content and immediately sets up a warmer and calmer atmosphere. It also allows the use of the two lowest strings in MFT, thus delivering the full versatility of its harmonic presence and resonance. The use of diatonic cadences, secondary dominants, and passing diminished chords in bars 43 through 49 restates a sense of order and direction that contrasts with the previous immutability of the D major modality. The chosen chord progressions and melodic embellishments are characteristic of traditional jazz idioms and are well-suited to MFT's layout. The overall sonorities are slightly different due to MFT's

configuration but they arguably deliver a convincing representation of this particular style. Once again, the re-entering first string allows variations on chord structures that otherwise would have been redundantly based on strict consecutive fifths. Particularly, tonal clusters are achieved on beat three and four of bar 43 and beat one and four of bar 44. Figure 46 shows the chord-melody approach and features the full and resonant low register of the tuning, particularly in bars 44, 45, 47, and 48 with the notes B1, C2, D2, and E \flat 2. The illustrated chords are easy to play and the novelty in the fingerings does not present challenges for the more experienced player. The melodic connecting fragments are extrapolated from or played around the chord shapes and can be comfortably executed.

A Piacere
♩ = 60

B

The musical score for 'A Piacere' in the B section of *Storms* (bars 43-48) is presented in a chord-melody style. It features a treble clef staff with notes and rests, and a bass staff with guitar tablature for strings T, A, and B. The tempo is marked as ♩ = 60. The key signature has two flats (B-flat major/D minor). The score includes a section labeled 'B' and a 'let ring' instruction in bar 46. The tablature shows various chord shapes and melodic lines, including triplets and a 'let ring' instruction in bar 46.

Figure 46: Chord-melody style featuring diatonic progressions, melodic figures and tonal clusters within chord shapes, and MFT's low range in the B section of *Storms* (bars 43-48)

The concluding measures of the B section display a melodic arpeggio sequence of two harmonic structures outlining the tonic major chord and the four minor 6th chord. After its exposition in the key of B \flat , the same sequential line is played in the key of D major, which is reached through a minor ii-V cadence, and the modulation prepares for the pitch content of the next section. This modal interchange technique features an interesting use of open strings to achieve a scalar contour with a sustained effect. It is important to notice the string skipping between the 3rd and 1st string imposed by MFT to maintain the stepwise motion in this line, as shown in bars 52-54 in Figure 47. Figuratively, the Locrian mode on the E minor chord, the presence of the \flat 9

and $\flat 13$ on the A dominant chord, and the use of minor plagal cadences in these final bars deliver a darker ambience and a feeling of unsettledness that prepares for the transition to the following series of storms.

The image displays two systems of musical notation for guitar. The first system, labeled with measure numbers 51 and 52, features a treble clef staff with a melodic line and a guitar tablature staff below it. The tablature includes fret numbers (0, 2, 3, 5, 6) and 'let ring' markings. The second system, labeled with measure numbers 53 and 54, continues the melodic and tablature lines, with fret numbers (4, 6, 7, 9, 10) and 'let ring' markings. The key signature changes from one flat to one sharp between the two systems.

Figure 47: Sequential and parallel melodic lines that allow modulation in the conclusive bars of the B section of *Storms*

Programmatically, sections C, D, and E of *Storms* constitute the depiction of the longest uninterrupted phase of downpours. Variety of density, range, voicings layout, and resonance through the intermittent use of open strings showed in the music aims to portray the ever-changing sounds created by rainfalls, which arbitrarily become heavier or lighter. The harmonic trajectory of this central portion sets out from the static palette of D major and gradually arrives at the richer sonorities in the second interlude via a series of contrasting textures and modulations in previously unexplored tonalities. The C section marks the beginning of the development of the material exposed in the A section (bars 56-68), which still gravitates around the D major chord and its relative mode. Variety in the underlying right-hand arpeggio is provided by recurring meter changes that outline either four or three groups of five notes, which stands as another metaphor for unpredictability (see Figure 48). From bar 69 onwards, the B Aeolian mode is established as the new pivotal harmonic centre for the remainder of sections C and D. Chord structures based on the previously unused bass notes G and A assume a more important role as well (bars 73-76). The transition to the B tonality is reinforced by a chord sequence that abstractly implies a sub-dominant to dominant movement resolving to the minor

tonic despite the slight harmonic ambiguity and incompleteness of the pitches displayed. Both the dominant and the tonic chords are in fact missing the third in the layout (Figure 48).

Figure 48: Approximation of a traditional diatonic chord progression in bars 79-81 of *Storms*

Many other harmonic structures with unusual and enigmatic intervallic designs are abundant throughout sections C and D. The unique properties of MFT deliver voicings that are quite difficult to interpret and are ambivalent in their nature. The compositional approach I employed purposely aimed at finding ambiguous and fresh sonorities while restraining myself to the limited pitch content of one key. This process involved the testing of many possible chord shapes and finger combinations in different sets of strings in conjunction with a fixed bass note and with the occasional use of open strings (see bars 81 and 82 in Figure 48). In addition, common chordal fragments and individual pitch cells were maintained to give a sense of motivic development from one harmony to the next and are easily identifiable by the fret numbers displayed in the tablature. Further examples in Figure 49 demonstrate the variety of configurations this creative method produced and the subsequent idiosyncratic musical language delivered by MFT.

Figure 49: Contrasting intervallic designs featuring open strings and common melodic cells in bars 102-105 of *Storms*

The E section of *Storms* begins the departure from the primary modality used so far thanks to a more interesting and engaging harmonic path. The introduction of new pitches and the perceivably increased harmonic pace suggest that change is unfolding and will result in the cessation of the storm. Through logical voice leading and occasional chromaticism, the material descends towards darker modalities by a gradual flattening of specific voices within the chord shapes. Firstly, there is also more activity in the bass line, which assumes a more independent role and creates contrapuntal effects against the melodic contour of each harmonic configuration in bars 116-124 and later in bars 132-137. Secondly, the same device is shifted to the inner voices of the chords in bars 126, 128, and 130. With the exception of one diatonic cadence targeting an A minor chord in bar 120, the series of new modalities is achieved without modulation and simply follows the natural progression of the cycle of fifths. This particular technique makes reference to compositional strategies employed in *Phrygian Gates*. As Evans affirms “the circle of fifths is used to determine the progression of pitch centers even though its typical association with major and minor scales and key relationships is mostly ignored” (2012, p.11). Moreover, the transition from the Lydian mode to the Phrygian mode in Adams’ piece just happens unexpectedly as the composer describes:

‘Gates’, a term borrowed from electronics, are the moments when the modes abruptly and without warning shift. There is “mode” in this music, but there is no “modulation” (Adams, 2016).

This extended harmonic sequence starts at the ninth position of the guitar and slowly descends towards the first position, which marks the arrival point of this section with a rich and resonant E \flat major 9th chord (bar 133). Occasionally, some of the harmonic structures are difficult to

define, such the material in bar 117 (Figure 50). The G # in the bass is simply used as a chromatic approach towards the note A in the following measure. The remaining pitches deliver an ambiguous and dissonant sonority thanks to the presence of a $\flat 9$ interval (G # and A) and a major second (A and B) in the upper voices.

The image displays a musical score for the E section of the piece 'Storms', covering bars 115 to 118. The score is written in treble clef with a key signature of one sharp (F#) and a common time signature. The first system (bars 115-116) is marked with a boxed 'E'. The bass line is shown with fingerings (12, 11, 9, 8) and includes a 'let ring' instruction. The second system (bars 117-118) shows a chromatic approach in the bass (G# to A) and a major second interval (A and B) in the upper voices.

Figure 50: Opening bars of the E section featuring movements in the bass voice and occasional ambiguous sonorities in bars 115-118 of *Storms*

Figure 51 shows an instance of the sudden switch of modalities, in this case from F Lydian to B \flat Lydian (with temporary suspension created by the C on the bass in bar 129 below). Also, the motion within the inner voices of the chords appears and is marked with accents in the score. The resonance of the open top two strings is employed as a returning textural effect, which metaphorically re-establishes the forceful sound of the falling masses of water. The sustained tones D and A are shared among the individual modalities that are quickly passed through, thus creating a subtle and fluid transition. The re-entering first string in conjunction with the remaining voices of the underlying harmonic configurations creates wavelike patterns that intends evoke the subtle flux and peripheral sounds inherent to the storm.

The image shows a musical score for guitar, measures 127-130. It consists of a treble clef staff with a melodic line and a tablature staff with strings T, A, and B. Measures 127 and 128 show a modal shift with a 'let ring' instruction. Measures 129 and 130 continue the melodic pattern with a 'let ring' instruction. The tablature shows fret numbers for each string, with some triplets in measure 130.

Figure 51: Modal shift, textural use of open strings, melodic use of inner voices, and undulating patterns in bars 127-130 of *Storms*

Next, the material found in the F section allows a closer look at some of the characteristic voicings used in this piece and enables the discussion of the harmony in relation to MFT. Comparisons with standard tuning and technical consideration are also addressed in the following paragraphs. Through an unexpected meter change and the use of block chords strongly marking each beat of the bar, the pace of the previous incessant texture of arpeggios is abruptly interrupted. The descending parallel voicings show a fixed intervallic design that consists of three consecutive fifths, displayed with identical fret numbers in the tablature, on string two, three, and four. While this configuration remains the same during its descent on the fretboard, the fourth note in the re-entering string is played either one or two frets away. Besides being identical to two chords shapes common in standard tuning and therefore easy to play, they deliver quite an interesting sonority thanks to the tuning properties of MFT. The lower pitch of the first string creates a series of triadic structures supported by a bass note on the fourth string, thus resulting in the series of slash chords shown in Figure 52, bar 139 (F/B \flat , Emi/A, Dmi/G, and so on). The mixture of B's, B \flat 's, E's, and E \flat 's in these shapes delivers a sense of harmonic ambiguity that is resolved by the rich E \flat chord in bar 140. This particular passage shows how two simple shapes borrowed from standard tuning were able to create novel musical language.

Figure 52: Use of parallel slash chords in section F of *Storms*

Contrastingly, the second harmonic idea features contrary motion between the melody and the bass and a gradual expansion of the intervallic distance among the inner voices of each chord. This delivers a dramatic effect that culminates in the full display of the harmonic power and complexity MFT is capable of.

Figure 53: Idiosyncratic voicings in bars 141-144 of *Storms*

In bar 141, the first two chords are common voicings in standard tuning and their execution in all-fifths tuning is quite accessible. The third and fourth shapes are easier to play in this tuning because all the notes are still located in four adjacent strings. In standard tuning, the shape of these chords would span across the sixth, fourth, third, and first string and would present some challenges in altering the spacing of the plucking hand's fingers. From this point on, none of the voicings could be replicated in standard tuning as they would require impractical stretches and

exceed the conventional range of the instrument. Moreover, the harmonic progression and descending bass line would be interrupted and the dramatic climax of this passage lost. The fifth chord in this excerpt, $E\flat\text{maj}7^{(\#11)}$, displays a distinctive quintal structure in the three upper voices and possess a balanced and beautiful resonance. Interestingly, its layout on the fingerboard is identical to a D/A shape in standard tuning and therefore falls very easily under the fingers. Subsequently, we encounter a $B\text{maj}7^{(\#11)}$ chord, which functions as a chromatic approach to the following $B\flat\text{maj}9$ in bar 142. The latter has an extremely wide layout that spans four octaves and a major second, thus delivering a quite unique sonority for the guitar. The last chord of bar 143 show a lush and dissonant D dominant chord with both raised 9th and 5th (the perfect fifth is also present at the bottom end of the voicing). This powerful structure has a distinctive pianistic sonority that stretches over five frets, spans over the six strings, and requires the flattening of the little finger to press two strings simultaneously. For these reasons, it presents some difficulties in execution and can only be performed by advanced players. Similarly, the final chord is strictly characteristic of a fifths-based layout and confirms the unique harmonic possibilities and strengths of the chosen tuning. The beautifully rich G minor 9th sonority of consecutive fifths ends this progression with harmonic balance and elegance and is enhanced by the idiosyncratic guitar texture of artificial harmonics. This technique requires to position the right-hand index finger exactly twelve fret higher than each fretted note that form the shape of the chord. Slight pressure is applied by the index finger while the thumb simultaneously plucks the string. This produces a pitch that is one octave higher than the fretted note. After striking an artificial harmonic, a regular note is played by the right-hand ring or little finger. The combination of fretted notes and artificial harmonics produces subtle and shimmering overtones that deliver a harp-like effect and infuse the music with another element of resonance and sophistication. The harmonics are marked with diamond-shaped headnotes, as Figure 54 illustrates.

♩ = 106

mf
let ring

A.H. A.H. A.H. A.H. A.H. A.H.

let ring

A.H. A.H. A.H. A.H. A.H. A.H. A.H.

145 146 147 148

T
A
B

T
A
B

(9)

Figure 54: Use of artificial harmonics in combination with characteristic quintal voicings in bars 145-147 of *Storms*

The G section of *Storms* marks the beginning of the last phase of torrential rains this composition intends to portray. The recapitulation of the material found in section A is presented with the darker colours of the C Aeolian mode and the main arpeggio pattern is re-established. The abundant use of the open third and fourth strings, which sound the pitches C and G, well suit the effective display of the new tonal centre by creating a drone built on tonic and fifth. The preliminary ideas around this new tonality were transcribed from the original improvised session mentioned at the beginning of this analysis, where I explored some intervallic structures and chord shapes in combination with open strings. The use of MFT's full low register is displayed with the pitches B1 and C2 in bars 161-163, D \flat 2 in bars 171 and 173, which is another example of a quick modal shift, and D3 in bars 174-175. These deep and haunting notes are supposed to evoke the sound of distant thunder in the background of the deluge.

Figure 55 shows the recapitulation of the beginning material in a new modality, open strings drone effect, and low bass note in bars 162-165 of *Storms*. The score is presented in a two-staff format: a treble clef staff with a key signature of two flats (B-flat and E-flat) and a guitar TAB staff below it. The guitar part is divided into three strings: Treble (T), Alto (A), and Bass (B). The bass line is marked with a low bass note in bar 162. The 'let ring' instruction is indicated by a dashed line above the treble staff. The fret numbers for the strings are as follows:

Bar	T	A	B
162	3	0	2
163	3	3	0
164	5	0	0
165	6	0	0

Figure 55: Recapitulation of the beginning material in a new modality, open strings drone effect, and low bass note in bars 162-165 of *Storms*

Another singular example of idiosyncratic chord structures at the end of this section is the sequence of diminished chords illustrated in Figure 56. The minor tenth interval existing between the bass and the tenor voices (marked in red) make these chords impossible to play in standard tuning. The bass notes of this particular shape can only be played with the thumb of the fretting hand, thus making its execution extremely difficult.

Figure 56 shows a sequence of diminished chords from *Storms*, bars 172-173. The score is presented in a two-staff format: a treble clef staff with a key signature of two flats (B-flat and E-flat) and a guitar TAB staff below it. The guitar part is divided into three strings: Treble (T), Alto (A), and Bass (B). Red boxes highlight the minor tenth intervals between the bass and tenor voices. The fret numbers for the strings are as follows:

Bar	T	A	B
172	8	7	7
173	11	10	10

Figure 56: Sequence of diminished chords from *Storms*, bars 172-173

The last section of this composition displays the shimmering tone that is characteristic of this tuning for chords in higher position of the fretboard. In conjunction with the right-hand plucking, these unusual shapes produce wide and fluctuating intervallic leaps and interesting harmonic structures. From bar 178, the changing melodic line in the second-highest voice of the chord is achieved thanks to the irregularity of the tuning in the first string. In standard tuning, this would have resulted in a variation of the highest note instead and would have provided a different tessitura effect. The structures in the last two bars shown in Figure 57 are extremely difficult to execute due to the wide stretches of five and six frets between the barred first finger

and the combination of ring and small fingers. Although not practical, these chords produce a nice contrast to the wider harmonic shapes of the previous bars.

Figure 57: Wide variety of tessituras and challenging voicings found in *Storms*, bars 176-181

Lastly, a descending motif of diatonic sevenths is played in conjunction with the open second and third strings, which deliver a final variation of the very opening motif in a different modality. This sequence arrives at a rich and resonant A \flat Lydian chord, which concludes the piece with a gradual subsiding of the chordal arpeggio (Figure 58).

Figure 58: Texture of repeated notes and open strings and a lush voicing in the final bars of *Storms*

The analysis of *Storms* has given insights into the process of creating an extended composition for solo guitar that combines borrowed musical techniques, the inspiration from natural phenomena, and the investigation of idiosyncratic sonorities of a new tuning configuration. Through a single improvised performance, a spontaneous blending of all these elements was made possible and the recorded video material constituted the primary source from which the structuring ideas were identified and exploited. The influence of nature was pivotal in providing

both guidelines for the overall compositional design of *Storms* as well as offering details that were used to shape specific textures, different degrees of harmonic dynamism, rhythmic and melodic nuances, and the metaphorical allusions found in this piece. The unpremeditated merging of guitar techniques with the sonic manifestations of heavy rains at that particular point in time and place constituted the primary stimulus for this piece. I recognize these elements to be what Aaron Copland calls the “germinal ideas” that “seem to be begging for their own life, asking their creator, the composer, to find the ideal envelop for them, to evolve a shape and colour and content that will most fully exploit their creative potential” (cited in Harvey, 1999, p. 139).

It is important to emphasize the impact MFT had in determining the guitar textures, effects, and the majority of the musical language displayed in this composition. As the many examples showed, the re-entering and all-fifths characteristics of this tuning were crucial in the following aspects:

- shaping the opening idea with repeated unisons and its subsequent uses that occur throughout the piece;
- creating rhythmic and melodic displacements, tonal clusters, and idiosyncratic intervallic layouts within the chord shapes employed;
- determining the overall pitch content of large portions thanks to the use of open strings, which well suited the tonalities of D major, B \flat major, and C Aeolian;
- offering a wider bass register to generate harmonic depth, new tonal possibilities, and figurative effects;
- delivering piano-like chord structures with great resonance, sophistication, dissonance, and range.

Large portions of *Storms* blossomed from developing initial ideas and concepts through an intuitive exploration of MFT’s tuning infrastructure. Musical choices were influenced by the idiosyncratic sonorities offered by this tuning in combination with personal aesthetic preferences and embodied knowledge. During its investigation for this particular composition, MFT presented material that was difficult to label and that did not always make sense from a traditional theoretical point of view. For these reasons, it fostered a compositional method that gravitated around sound, exploration, and approximation rather than relying on precise techniques and prescriptive analytical thinking exclusively. For these reasons, I feel that *Storms* was a successful verification of how alternate tuning configurations allow the bypassing of engrained *modi operandi* and foster the establishment of new creative paths.

Chapter Six: MFT and Song-writing

This chapter focuses on the analysis of two pieces to gain some insights and allow considerations of the influence of MFT in my song-writing practice. The compositions, duets for guitar and voice, show how the new tuning aided my creative process both from compositional and arranging perspectives. *Two Worlds United* is the first piece I completed after my decision to employ MFT as the primary creative driver in this research project. My initial objective was to create a piece to showcase the unique resonance, the idiosyncratic tonalities, and basic chords intrinsic to MFT in the relatively simple context of an original song with lyrics. However, the rudimentary grasp I had on the tuning's inner workings at that time imposed a very intuitive approach to song-writing. On the contrary, *The Watcher* is a fairly recent adaptation and expansion of a song that was initially drafted on a guitar in standard tuning. My decision to remodel pre-existing material constitutes an experiment to verify my ability to use the knowledge I have acquired in the last three years to craft a through-composed guitar arrangement that showcases MFT's distinctive musical characteristics. By examining two compositions with identical settings, but ranging chronologically across the span of this doctoral study, I intend to reveal how the practice of and assimilated knowledge of MFT has impacted the depth of my musical expression using this particular alternate tuning. In both cases, the new tuning configuration helped me create unique sonic backgrounds to accompany the intimate setting of a duet. This analysis will also discuss how the lyrics served both as a driver in the creative process and as a contributing musical device through the use of phonetics and imagery.

Two Worlds United

In this composition, I was able to craft the harmonic progressions displayed in the verse and chorus by testing out the sounds of seventh chords in different positions of the fingerboard and in conjunction with the resonance of open strings. The overall rhythmic feel of the piece was developed by experimenting with different strumming patterns. The melodic material was composed through repetitive cycles of improvisation where particular attention was given to: a) inflection of words; b) syllabic imitation; c) syncopation; d) interplay between the guitar part and the melody

This composition is a dynamic pop/rock song with sophisticated chords, unusual harmonic progressions, and syncopated melodies. It is approximately four and a half minutes long and displays an AABCB structure. This composition showcases MFT's fresh resonance through the extensive use of open strings in its idiosyncratic chordal configurations. It takes advantage of the new tuning's extended range to deliver unusual tonalities and powerful sonorities that expand the guitar's tonal scope and versatility. The lyrics focus on the lives of two troubled

teenagers, a girl and a boy, and their interaction with both their outer and inner world. The narrative throughout this piece is very concise and much is left to the imagination of the listener. Each of the two verses reveals, with short statements, small but crucial details about their experiences and age-related emotional and social struggles. The second half of the song brings the two together and centers on their meeting, falling in love, and the subsequent realization of their being destined for each other.

Two Worlds United is the first work I composed using MFT and it blossomed from the initial investigation of its unique layout. Due to the complete novelty of this tuning, I started with the discovery of chord shapes to use in combination with a variety of strumming patterns, similar to what any beginner player would do. This basic approach allowed me to start getting accustomed to MFT's inner workings and take full advantage of its unique resonance. As this process continued, I began to comprehend the underlying anatomy of this tuning system and familiarize myself with some of its voicing configurations by drafting several chord diagrams. The symmetrical nature of MFT made the recognition and memorization of triads and seventh chords quite easily. The larger intervallic space existing between the notes in each harmonic layout delivered idiosyncratic and open sonorities, which sounded strikingly different from the tonal characteristics of a guitar in standard tuning and immediately caught my ear and imagination. In addition, the extended range of MFT inspired me to investigate the full potential of the lower register through the placement of seventh chords on the bottom four strings of the guitar. Afterwards, I explored the combination of both major and minor voicings with the two remaining strings open, in order to take advantage of the natural resonance of the instrument. As the musical examples in this section show, this approach became the driving line of thought to develop the chord progressions of *Two World United*. The use of the top two open strings' pitches D and A as chordal extensions of different harmonic centres allowed the creation of beautiful and rich voicings by working downwards from the upper structure of the chord rather than thinking from the bass note. At this particular stage of the creative process, my knack for sophisticated harmonic structures, rooted in modern jazz aesthetics, guided the construction of the sonic atmospheres of this composition. In addition, the peculiarity of the re-entering string in MFT added some interesting tonal clusters within the higher voices of each chord. This provided further structural variety and balanced the contrasting and wider intervallic distances existing at the bottom end of these voicings. Figure 59 illustrates the opening four chords of the verse of *Two Worlds United*. This visual system also allowed me to easily archive and memorize the new shapes I was discovering. Standard notation of the same chords is also included to appreciate the musical idiosyncrasies inherent in MFT.

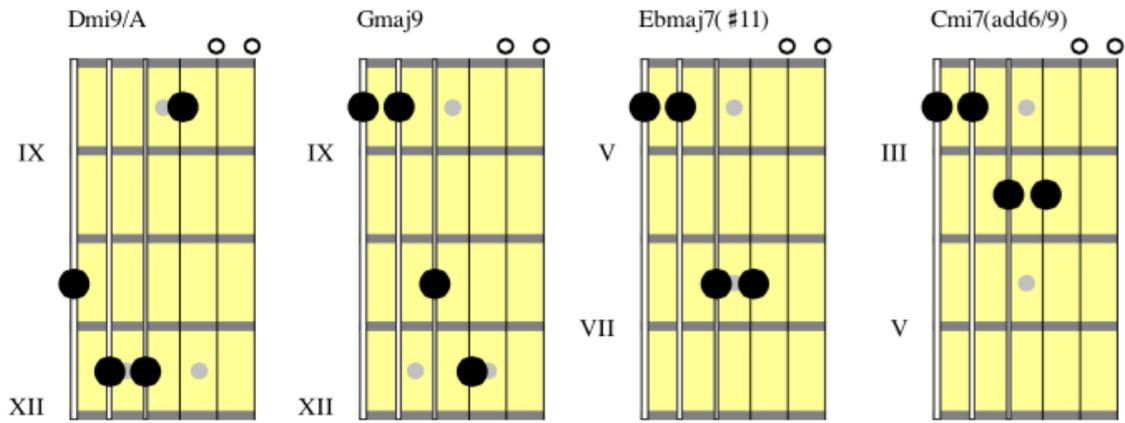


Figure 59: Chord shapes used in the verse of *Two Worlds United*. Black dots indicate fretted notes; Roman numerals show the fret numbers; and the open strings are marked by hollow circles above the respective strings

Figure 60: Harmonic reduction of the verse of *Two Worlds United*. Use of extensions, tonal clusters, common open strings, and the extended low register of MFT are evident in these configurations. The inclusion of single notes describes occasional adjustments in the chords shape to create further harmonic variety

All the bass notes in the structures above belong to the key of $B\flat$ major, which is the main gravitational tonality of this composition. However, there is a lack of diatonic cadences and the material is built from pitches of both the $B\flat$ Ionian and $B\flat$ Lydian modes. In addition, the appearance of the natural 9th (E) on the D minor chord and of the major 3rd (B) on the following G major chord, in the first two measures in Figure 60, contributes to making this sequence unpredictable and ambiguous. This is the result of a compositional method that was based on improvisation and aural intuition rather than following premeditated harmonic paths. The investigation of MFT is responsible for delivering musical material that show *poly-modality*, or

the existence of two simultaneous modes where the pitch content is drawn from (see Figures 20 and 25 for use of this device in *The Messenger from Oz*). The continuous resonance offered by the top two open strings allows a smooth transition from one harmony to the next and somehow functions as the binding force that holds this sequence together. In the second four bar phrase that completes the verse's outline, a B \flat Lydian chord is used as a substitution for the D minor, thus mildly reinforcing the B \flat as the main tonal centre. Once the choice of the harmonic material was complete, I continued to improvise with different strumming patterns until the underlying groove of this song was defined. Figure 61 shows the main strumming figure employed in both the verse and chorus of this piece. Rhythmic and tonal nuances are created by slight variations delivered by the right-hand motion during performance.

Figure 61: Strumming pattern employed in *Two Worlds United*

Following a similar approach, I continued to search for idiosyncratic voicings to shape the chorus of *Two Worlds United*. In order to attain variety of texture and tonality, I explored different chordal possibilities by moving some of the shapes used in the verse around the fretboard until a specific sound appealed to me. This intuitive method allowed the development of characteristic voicings by maintaining a similar or identical intervallic designs in the bottom four strings of the guitar, as Figure 62 illustrates.

Figure 62: The chord shapes in the chorus of *Two Worlds United* show a similar or identical design to the material used in the verse

Variety in these configurations was achieved through the use of the open 2nd string to create additional resonance and by fretting the first string in different positions to deliver textural and harmonic subtleties. Allowing the D pitch of the 2nd string to ring throughout these chords creates interesting extensions, specifically the 6th, the 11th, and #11th. Only the second voicing in Figure 62 does not employ the 2nd string's resonance, although it still displays the same pitch as a fretted note outlining the major 9th of the C major chord. The harmonic progression in the chorus is built on the tonic and relative minor chords in the keys of A \flat and C major, which continues the *poly-modality* device explained earlier. Its unpredictable design uses the opening F minor as a pivot point that firstly moves to C major through a minor plagal cadence, and then secondly to A minor through parallel motion of a major third. Finally, the A \flat major is reached through smooth voice leading from the A minor: the two bottom notes move down by semitone, the top note ascends by a half step, and the middle three voices remain the same. Figure 63 offers a reduction of the chorus's harmonic outline.

Figure 63: Harmonic reduction of the chorus of *Two Worlds United* displaying harmonic ambiguity and colorful voicings

The distinctive use of non-traditional harmonic movements shown above is clearly a consequence of the investigation of a different tuning layout. Simultaneously, the impact of Joni Mitchell's approach to songwriting was a driving force into the creation of this piece. As Whitesell (2002) asserts "while many songwriters have been inventive within traditional tonal harmony, Mitchell's work is impressive for its extended exploration of alternatives to single key structures and the major/minor system" (jonimitchell.com).

As the main two sections of *Two Worlds United* were being completed, I decided that this piece would be enhanced by an instrumental introduction and a bridge to achieve balance between words and music so that the story could unfold at the right pace. The novelty of MFT's lowest two strings, B \flat and F, inspired me to craft an idiosyncratic voicing with full resonance that would set the character of the composition right away. The placing of these two pitches on beat one and three of the bar respectively creates an assertive harmonic statement centered on the key of B \flat . The major 3rd, 9th, and #11 are also used in the chordal arpeggio and define the B \flat Lydian mode, which constitutes the primary modality of this piece. The held chord at the end of measure 4 sounds the note A as well (open 1st string) and clearly delivers an F major 7th chord. Rhythmically, the arpeggio's ostinato pattern strongly establishes the underlying dynamic feel of the song, as Figure 64 shows.

Figure 64: An idiosyncratic B \flat Lydian chord displaying the use of the bottom two strings of MFT as a powerful harmonic device. A rhythmic arpeggio pattern is employed to establish the groove in the opening measures of *Two Worlds United*

The development of this material allowed the creation of the transition point to the chorus. The same melodic and rhythmic contour is maintained in the higher voices while the bottom two lines show a parallel movement of spread thirds. The bass line in this progression proceeds in a step-wise motion from the lowest available pitch B \flat up to E. Each note harmonizes two major chords, B \flat and C, both in root position and first inversion (Figure 65). The ascending quality of the bass motion strongly leads to the F minor chord, which opens the chorus (see first chord in Figure 63 earlier).

Figure 65 shows a musical score for a pre-chorus section. The top staff is a treble clef with a key signature of one flat (Bb) and a common time signature. It contains a repeating melodic figure of eighth and quarter notes. Below the staff are three guitar staves labeled T, A, and B. The T staff has fret numbers 0, 5, 0, 5, 0, 5, 5, 4. The A staff has fret numbers 2, 5, 2, 4, 5, 4, 5, 4. The B staff has fret numbers 0, 2, 4, 6. The instruction 'let ring' is written below the staff with a dashed line indicating the duration of the ring.

Figure 65: The pre-chorus features an ascending bass lines over a repeating melodic figure in bars 27-28 of *Two Worlds United*

Finally, the bridge is built around an instrumental interlude intended to convey a contemplative mood and to contrast with the dynamic strumming in the previous sections. Again, the chordal arpeggios and melodic figures below are borrowed from the B \flat Lydian modality and outline a D minor to B \flat major chord progression. After this intermission, four chords from the verse are strummed and held for an entire measure, thus slowing down the pace of the song even further. The material of the pre-chorus and chorus is repeated once more and the piece concludes suddenly by interrupting the dynamic strumming on the A \flat major chord.

Figure 66 shows a musical score for the bridge section. The top staff is a treble clef with a key signature of one flat (Bb) and a common time signature. It contains a melodic figure of eighth and quarter notes. Below the staff are three guitar staves labeled T, A, and B. The T staff has fret numbers 9, 9, 9, 10, 10, 12, 10, 7, (7), 7, 7, 7, 7, 10, 12. The A staff has fret numbers 9, 9, 9, 10, 10, 10, 12, 10, 12, 12, 12, 10, 12. The B staff has fret numbers 9, 9, 9, 9, 0. The instruction 'let ring' is written below the staff with a dashed line indicating the duration of the ring.

Figure 66: Main material used in the bridge of *Two Worlds United*, bars 47 and 48

This section focuses on the creative process which enabled the development of the melody and the lyrics of *Two Worlds United*. By following a well-established technique in my songwriting practice, I periodically recorded myself while singing improvised lines over the song's main chord progressions. This method is clearly influenced by my background in jazz performance and mirrors the practice of improvising over a set of chord changes. The transcription of spontaneous ideas is used as a compositional tool that allows the slow process of developing a melody by choosing the best fragments from different takes. Through a natural verbalization of musical ideas, I use random words and phrases to help myself identifying the right note choice and articulation I am looking for. At this stage, phonetics, rhythm, and pitch take part in the development of the melody simultaneously. In addition, attentive listening to recorded improvisations allows me to detect particular uses of words in terms of their intrinsic sound qualities. Repetitive cycles of this modus operandi help me elaborate primary sentences into

melodic and rhythmic cells that constitute the building blocks of both the lyrics and the melody of a song. In the case of *Two Worlds United*, the improvisations displayed the recurring use of adverbs ending with the syllable 'ly'. Therefore, I decided to employ variations of adverbs as a semantic device in the narrative of this song with eleven individual uses. This technique influenced both the weight of the wording and the overall musicality of specific sentences. Despite its simplicity and the limited range of one octave (from G4 to G3), the melody in the verse gravitates around colorful extensions such the 11th, 9th, major 7th, and major 6th and displays syncopations, rhythmic variety, and inflections such as *glissandi* and *appoggiature*. Subtle variations in rhythmic and melodic content occur during both verses to accommodate the musical phrasing dictated by the lyrics. Figure 67 illustrates the opening six bars of the first verse.

Figure 67: An extract of the melody in the first verse of *Two World United*, bars 13-28

In the chorus, the melody becomes rhythmically sparser but still shows the use of syncopation. Within each structural block of six bars, its length spans over five measures, thus leaving the last one silent. The note choice is kept simple and supports the underlying harmony by outlining both guide tones, such as 3rd and 7th in the first line below, and more interesting extensions such as 9th and #11 over the A \flat chord. In addition, the three-note ascending motif used at the start of the chorus reinforces the modal duality discussed previously by stating both E's and E \flat 's, as shown in Figure 68.

Figure 68: Melodic contour in the chorus of *Two Worlds United*, bars 37-42

As this analysis has shown, the influence of MFT has been critical in creating both the overall sonority and the harmonic layout of *Two Worlds United*. By investigating chordal possibilities available in MFT's configuration, I was able to craft unique harmonic progressions that go beyond the key system approach. Particularly, the use of two separate keys in the chorus of this piece resembles harmonic devices that are common in Joni Mitchell's work. In the analysis of Mitchell's *I Don't Know Where I stand*, Whitesell remarks "one of the most original paths of exploration in Joni's oeuvre has to do with the fission or doubling of tonal centre" (2002, jonimitchell.com). Mitchell's use of an alternate guitar tuning has most likely contributed to the two-key harmonic system displayed in her piece.

The Watcher

This composition blossomed from the adaptation and reinterpretation of a previously-penned work in order to verify the functionality of MFT as an arranging device. While I tried to adhere to the harmonic and compositional design of the original piece as much as possible, the different tuning configuration of MFT resulted in modifications of the following: a) key of the piece to exploit the sound of the open lower strings; b) range; c) harmonic structures; d) melodic contour; e) dynamics and textures; and f) duration and content of the musical interludes. At specific moments of this composition, I had to make deliberate choices to overcome problems caused by the impossibility of replicating musical language composed in standard guitar tuning verbatim with MFT.

The Watcher is an introspective song in 3/4 meter for voice and guitar of approximately four and a half minute duration. It is performed at a medium tempo with a relaxed feel in simple triple meter and is strongly rooted in the language of diatonic harmony. It has a melancholic character with figurative and profound lyrics that were inspired by the experiences at an intensive meditation retreat. Its chant-like and minimal melodic statements gravitate on the key of F minor, which is expressed through the use of colorful and poignant harmonies. The interplay and echoing figures between the vocal part and the guitar accompaniment create a delicate and interlocking musical texture. Instrumental interludes follow each melodic statement, thus generating a sense of a continuous dialogues between the two instruments.

After completing a ten-day long spiritual retreat in close contact with nature and removed from the noise, distractions, and commitments of every day's life, I felt compelled to write a piece that would reflect on and capture the essence of this unique experience. Since I had no musical instruments with me at that time, I started writing down a few thoughts and recording some melodies on my phone. These ideas were quickly elaborated into the melody and words of *The Watcher* and I began to imagine a guitar part that would complement the material I had come up with. Thanks to this process of conceptualization away from my instrument, the musical accompaniment in a standard tuning guitar developed very quickly on my return home. After almost one year, I thought about rearranging this piece on MFT to see if this layout could improve the overall musicality and mood of this composition. In addition, this task would be a great experiment to verify my ability to use MFT as an arranging device to enhance the quality of a pre-composed piece. Having two versions of the same piece allowed interesting comparisons between guitar parts written in two contrasting tuning layouts to identify their corresponding musical textures and performance implications.

Since the music of *The Watcher* blossomed from melodic ideas and lyrics, this section starts with a quick examination of these elements first. The melody of this piece shows a rather simple

design with a concise range of a minor 7th. The repetitive dotted-crochet inflection in the verse creates a polyrhythmic effect of two over three in conjunction with the accompaniment figure. As Figure 69 shows, this motif's primary trait is a major-third upward leap, which outlines the 3rd and 5th of the underlying tonality of F minor. The economy of melodic content and rhythmic contour creates a chant-like quality that is reinforced by syllabic repetitions in the lyrics of the first two lines. The recurring use of adjectives ending with the syllable *-ry* also appears in the second verse. The melody over the D \flat chord, as shown in bar 18 (Figure 69) shows slight variations in each of the individual statements during the three verses, thus representing an element of subtle variety within the structure of the song.

A Verse
 Fmi Eb maj9
 10
 mf
 So- li ta- ry men- ing weaves
 Close your eyes to stop the see- ing
 14 Fmi Eb maj9
 Man- da- to- ry breach- ing ti- dal
 Let your heart bathe
 18 D \flat maj6
 waves

Figure 69: Melodic simplicity in the verse of *The Watcher*, bars 10-17

Similarly, the melody in the chorus is built on very simple material. The use of space between the two main phrases allows musical dialogue between the voice and the guitar. The opening E \flat note, which is the highest pitch in the entire vocal part, is an assertive melodic statement that outlines the 11th of the underlying B \flat minor chord. The second phrase displays an even simpler rhythmic contour with long note durations, and confirms the final note F as the most frequent arrival point in the melodic material throughout the composition.

B Chorus
 B \flat mi 11 Fmi/C A \flat maj9 Fmi
 30
 Cur- tains fall- ing walls crush- ing down
 35 Fmi(#5) Fmi Fmi(#5) B \flat mi 11 G \flat maj9
 It's eas- y just

Figure 72: Differences in range, intervallic layout, and melodic contour when translating similar material from standard tuning to MFT during the verse of *The Watcher*

While preserving an almost identical harmonic design, the music in the chorus of *The Watcher* assumes a contrasting character through MFT's layout. Choices were dictated by the fact that the guitar accompaniment supports the vocal part by doubling the melody, thus imposing constraints in the width and design of each chord. Significant differences involve range, voicing configuration, melodic contour, and the use of dissimilar open strings (standard tuning is on top and MFT at the bottom in Figure 73).

B Chorus

B Chorus

The image displays two musical scores side-by-side, comparing standard tuning (top) and Modified Fifth Tuning (MFT, bottom). The top score is for the chorus, starting at bar 23. It features a treble clef with a key signature of two flats (B-flat major/D minor). The guitar part below it shows fret numbers for strings T, A, B, and B. The bottom score continues from bar 27, also in the same key signature. It shows a different guitar part with fret numbers and 'let ring' instructions. The guitar part in the bottom score has a different voicing and melodic contour compared to the top score.

Figure 73: Comparisons between the material in the opening bars of chorus. The two tuning layouts deliver contrasting textures with unique contours, range, and harmonic qualities.

The opening four bars in standard tuning make use of the open G string as a common tone throughout the harmonic progression, creating some tonal clusters and added resonance within the fairly compact layout of the voicings; the chordal arpeggios in the second line outline two G minor structures, the latter introducing colorful tones such as the $\flat 6^{\text{th}}$ and the 9^{th} . On the contrary, MFT delivers a musical background with lower and wider sonorities. The chordal intervallic configurations are also slightly different due to the difficulty in replicating close voicings in a fifths-based tuning while maintaining a designated note at the top. In Figure 73, bar 19 in the standard tuning score shows an F minor triad in second inversion with an added 9^{th} , which creates a semitone cluster within the chord layout. In MFT, an identical structure, E \flat minor 9^{th} over B \flat , would have been quite impractical to perform: the semitone existing between the minor 3^{rd} and the 9^{th} would have required a seven-fret stretch to execute underneath the E \flat top voice. Thus, I opted for a B \flat minor 11^{th} chord, which still displays the note E \flat as an extension and therefore infuses this specific passage with a similar harmonic flavor. The second line in the MFT's score features a melodic contour with intervallic leaps that contrasts the homogeneous arpeggio configuration used in standard tuning.

Similarly, the instrumental interlude that concludes the chorus and prepares for the second verse went through some interesting developments thanks to MFT. The music in standard tuning mirrors the material in bars 23-26 (Figure 73, top score) and features subtle melodic variations in the middle part of the arpeggio of a G minor chord: the note D is raised to E \flat , G is lowered to

F, and B \flat moves to C. This passage ends on a B \flat ^{add9}/F, which leads to the G minor at the start of the second verse.

Figure 74: Features of the original interlude joining the chorus with the second verse in bars 30-34 of *The Watcher*

The adaptation of this material to MFT allowed for the creation of a quite different musical texture. The particular intervals generated by the re-entering string delivered a more sophisticated melodic motif in the high register of the music, thus infusing this passage with a stronger lyrical quality. The F minor voicing in bar 36 (Figure 75) is the result of smooth voice-leading from the preceding C7 chord in bar 35: the note G moves to A \flat and jumps from the first to the second string; the note E, initially located on the third string, resolves to F now placed on the first string. This unusual moving around of chord tones among different strings to attain clear resolution produced the chordal configuration in bar 36, which inspired me to create the next structure by moving all the voices surrounding the note F in ascending parallel motion. This technique, in conjunction with subtle variations in the arpeggio figure and the sustaining of the voices from one chord to the next, creates a suggestive and delicate melodic motif that emphasizes the notes F, G, A \flat , and B \flat (Figure 75, bars 36-42). Subsequently, I decided to extend this passage by doubling its length in order to fully develop this melodic idea. The final E \flat dominant in bar 43 features a more assertive sonority: its powerful resonance, aided by the low register of the tuning, contrasts with the preceding lighter texture and the fermata creates a moment of suspense before the beginning of the second verse.

The image displays two systems of musical notation for guitar. The first system, labeled with bar numbers 35 through 39, features a treble clef staff with a key signature of two flats and a common time signature. The melody consists of eighth notes with accents. Below the staff is a tablature section with strings 'T', 'A', and 'B' indicated. The tablature includes fret numbers (10, 9, 10, 7, 6, 8, 5, 6, 10, 6, 8, 5, 6, 5, 10, 6, 8) and 'let ring' markings with dashed lines. The second system, labeled with bar numbers 40 through 43, continues the melody. It also includes a tablature section with fret numbers (8, 8, 6, 10, 10, 6, 6, 8, 8, 5, 8) and 'let ring' markings. The system concludes with a 'Da Segno' marking and a fermata over a final chord.

Figure 75: Elaboration of the same interlude and new musical language created by MFT in bars 36-43 of *The Watcher*

The final comparison between the two tuning configurations involves the instrumental bridge in this composition. The examination of this passage demonstrate how I was able to preserve a musical texture with similar harmonic and melodic nuances while transposing and adapting the original material to MFT's layout. As Figure 76 illustrates, the idea in the original version of *The Watcher* revolves around an ascending bass line against an ostinato arpeggio pattern that outlines G and D minor triads. The open 4th string (D) is played throughout bars 41-44 of this sequence, while the open 3rd string (G) appears in the following two measures, thus creating a subtle texture with additional resonance. Rhythmically, the three-note figure creates a two-over-three hemiola. At the end of bar 44, the note F # is briefly sounded over a E b diminished triad, which functions as a D7^{b9} chord resolving back to G minor. From bar 44 onwards, a series of three suspended triads is played over a D pedal note before reaching a conclusive fermata on a D7 chord with b9th and #5th.

The image shows a musical score for an instrumental bridge in G minor, bars 41-48. The score is written for guitar and includes a treble clef staff with a key signature of one flat and a 4/4 time signature. The notation shows a melodic line with eighth and sixteenth notes, and a bass line with triplets and arpeggios. 'let ring' markings are present above bars 41-42, 43-44, 45-46, and 47-48. The tablature below the staff shows fingerings for the top (T), middle (A), and bottom (B) strings.

Figure 76: Instrumental bridge in the original key of G minor in bars 41-48 of *The Watcher*

Overall, the notation in the MFT's score in Figure 77 shows musical textures and contours that agree with the original arrangement. However, a close examination of the tablature reveals the substantial differences of fingerings imposed by MFT and their inherent performance alterations. Variations in the music occur from bar 55 onwards where the bass line's ascending motion is interrupted by switching to a lower register; this was dictated by the impractical fingerings intrinsic to the chord shape with the E bass note that would have resulted if the melodic line were continued on the 5th string. The octave drop in the bass line breaks the flow of the original arrangement and, once again, infuses this passage with a darker mood. As a consequence, I decided to disregard the material shown in bar 45-46 above, which continues the ascending contour of the music, and opt for a fermata on a D^b, which prepares the following sequence of suspended arpeggios on the C pedal (Figure 77).

Figure 77: Textural and structural changes imposed by MFT in bar 52-61 of *The Watcher*

As these two analyses demonstrated, MFT's layout influenced my song-writing practice both from compositional and arranging perspectives. In the case of *Two Worlds United*, the alternate tuning aided the creation of a distinctive harmonic vocabulary by discerning seventh chords configurations and moving them around the fretboard. Through the wide use of specific open strings and the benefits derived from the extended low range of MFT, I was able to craft voicings with unique resonance, intervallic design, and sonic presence. In addition, the chord progressions I discovered showed a fresh approach to modulations and modalities, previously unexplored in my artistic practice. The examination of *The Watcher* allowed a closer look at the process of using MFT as an arranging tool capable of infusing pre-existing material with new-found sonorities and ambience. While maintaining the overall structure of its previous arrangement in standard tuning, *The Watcher* went through a significant transformation that has resulted into a more refined guitar accompaniment. The switch to the key of F minor represents quite an unusual sonority for the guitar, particularly if we consider the use of three low open strings, B \flat , F, and C, and the added resonance conveyed by their tonal characteristics within the chosen harmonic palette. Exploiting MFT's wider range and intrinsic intervallic peculiarities has allowed the creation of a powerful and unique musical statement that surpasses the tonal scope and character of standard tuning.

Chapter Seven: Conclusion

Changing the underlying tuning arrangement of one's instrument is a radical decision that undermines a multitude of embedded patterns, concepts, and musical conditioning. Only string players can fully appreciate the adjustments this practice requires and the impact it has on the way a musician conceptualizes and plays music. What kind of music would a pianist create if the organization of the 12 chromatic tones within the piano's octave were drastically rearranged? What melodic inventions would a saxophonist come up with if the relationships among fingerings and pitches were manipulated? These hypothetical scenarios may sound bizarre but they accurately describe the path I have undertaken during this study. Despite the initial challenges, the unusual resonance of the chosen tuning encouraged a novel interest in the guitar and inspired me to investigate the countless new sonic possibilities at my disposal. Through this research, I have discovered a vast array of new language by letting spontaneous improvisation aid the act of musical discovery and composition. I needed to develop a different conceptual framework for my instrumental technique in order to function within MFT's arrangement. These considerations also reveal the importance of the intimate relationship between the creator and the tool that allows the creation to blossom: the musical instrument. The following passage, in Bailey's words, deepens the concept of 'instrumental impulse' proposed in Chapter 2 and gives an excellent description of the bond that exists between the player and the instrument:

"It is the attitude of the player to this tactile element, to the physical experience of playing an instrument, to the 'instrumental impulse' which establishes much of the way he plays. One of the basic characteristics of his improvising, detectable in everything he plays, will be how he harnesses the instrumental impulse. Or how he reacts against it. And this makes the stimulus and the recipient of this impulse, the instrument, the most important of his musical resources" (1992, p. 97).

This chapter aims to draw some important conclusions on the knowledge I have assimilated about the inner workings of MFT and the areas of my artistic practice that have been influenced by its investigation. This discussion addresses the following topics: implications of a re-entrant tuning; design of harmonic structures; range, tonalities, and open strings; spatial dimensions of the guitar; and compositional approach.

Re-entering tuning

At first, the necessity to drop the guitar's first string by one octave due to the excessive tension exerted by the intended A4 pitch, as the full-fifths configuration would have implied, appeared to me as a problem. Breaking the ascending succession of consecutive fifths seemed to preclude the extended range in the high register I had envisioned. Additionally, it seemed to be a

hindrance to developing full-ranging harmonic structures and to exploiting the symmetry of a full-fifths layout for improvisational purposes. Thirdly, getting used to a re-entering tuning seemed to be a challenging task from a performance perspective and a limiting factor in relation to the melodic range of the guitar, whose functionality was now reduced from six to five strings. As it turned out, the re-entrant quality of MFT, by virtue of breaking the sequential logic of an all-fifths tuning, allowed for the creation of a much wider variety of musical language. Similar to the discrepancy that exists in standard guitar tuning, the anomaly in MFT's arrangement constitutes a powerful musical device with countless ramifications. The pitch drop that occurs when moving from second to first string and the subsequent divergence in the traditional hierarchy within the instrument's tuning organization is certainly a disadvantage at the start. This requires a different approach to playing altogether simply because guitarists expect to have a higher string at their disposal above the second string. In addition, when using a plucking technique in the right hand, guitarists usually imagine the ring finger as the recipient of the melodic voice in the music due to its placement on the highest string. These two important concepts about guitar playing are radically changed by MFT's tuning idiosyncrasies.

Musical analysis has showed how the re-entering string has been quite a valuable and productive device for compositional purposes. In fact, the embedded technique of envisioning the first string of the instrument as the recipient of the melody has created some unusual effects and textures in the music. As many score extracts have illustrated, the immediate consequence of developing musical ideas on the re-entering string has resulted in melodic movement and textural variety within the inner voices of the underlying harmony rather than variations in the melodic contour of a specific passage exclusively. The outcomes that naturally flowed from the combination between MFT's characteristics and personal performance techniques and finger mechanics have generated a vast array of new musical language that did not require deliberate compositional choices. Without a re-entering first string, it would have not been natural to conceive and perform music with the specific characteristics that have been highlighted by the analysis of my compositions. For example, MFT generated descending melodic leaps and slightly modified rhythmic contours in conjunction with right-hand plucking patterns. Melodically, the execution of a common '*p-i-m-a*' plucking pattern, in which the '*a*' finger is placed on the first string, creates an unexpected effect caused by the final pitch descent. Rhythmically, the reverse pattern of *a-m-i-p* sounds the highest pitch in a chordal configuration as the second note. This effect generates a slight rhythmic displacement of the material that is functioning as the melodic voice in the music. Although not as evident from a listener's perspective, these nuances are certainly significant when performing and were important factors that influenced my approach to writing for the guitar. In other instances, the unusual tuning relationship between the first and second strings gave the impression that two melodies were executed at the same time, simply because guitarists would instinctively play the notes in the

first string as if they were the melody, despite their lower pitch in comparison to the notes on the second. These subtle variations were quite significant in the overall economy of specific musical passages and entire compositions, such as the analyses of *Storms*, *Laniakea*, and *Arpeggio Etude No.1* have revealed.

Harmonic design

Another salient implication of MFT's characteristics is that it creates tonal clusters in chord structures that encompass the first string. As the analyses have shown, this feature has produced a multi-faceted harmonic vocabulary, which otherwise would have become redundant and predictably saturated with intervals of fifths. Intervals of minor and major seconds within the chord design became available thanks to MFT's re-entrant quality and allowed the creation of sophisticated and complex voicings. Moreover, the close distance between specific voices stands in contrast with the wider intervals in the remainder of the chord's design, thus producing powerful harmonic and tonal effects. If the proposed tuning had been an all-fifths configuration, these variations in the layout of chords would have been quite problematic to perform. In fact, the leap of a perfect fifth among adjacent strings requires extremely wide stretches, spanning six or seven frets, to execute major and minor seconds. This would have been quite impractical for the left hand and the execution of voicings rich in tonal clusters would have been limited to a few possible combinations in conjunction with the open strings.

In addition, the extended intervallic gap among five out of the six strings in MFT produced powerful and resonant voicings that resemble the strength, range, and sophistication delivered by the piano. The first set of seventh chords presented in Appendix A are also playable in standard tuning, where they spread over five strings of the guitar and up to five frets across the fingerboard. Despite being technically more difficult to perform, these chords display quite a different sonority in standard tuning. This is caused by a wide divergence in timbre between the strings that are used to execute these configurations. On MFT, the more compact layout of these chords, which only spans over four strings, produces more unity of timbre and has a much more balanced and round sonority,

Furthermore, the examination of several passages from the portfolio have highlighted chords that extend up to three octaves. Such wide distance between the extremities of the chord's makeup is not reproducible in standard tuning, with the exception of configurations that involve the use of the bottom two open strings E and A. In general terms, fretted chord shapes in standard tuning are usually contained within two octaves or less. On the contrary, MFT allows the creation of voicings that span comfortably up to two octaves plus a fifth without neither the aid of open strings nor limitation to particular keys. MFT's harmonic versatility has proven to

be one of most important musical advantages of this configuration and has enabled me to create some innovative sonorities for the guitar.

Range, Tonalities, and Open Strings

As Figure 1 has illustrated in Chapter 1, MFT extends the low end of the guitar by a diminished fifth by virtue of its starting with B \flat 1 on the sixth string and, simultaneously, maintains the usual potential of the guitar's standard layout by reaching D6 (located on the 24th fret on the instrument at my disposal). A comparison with standard guitar tuning shows the musical advantages created by MFT's extended low register in solo guitar settings. Many compositions for the guitar across contrasting musical genres and styles display language that gravitates around the keys of E, A, and D. In fact, these tonalities allow the use of the guitar's lowest three strings to provide harmonic support using the full resonance and presence of those open strings. Moreover, a guitarist is free to move around the fingerboard without being restricted to one area exclusively. The advantages and effectiveness of this instrumental technique, which is intrinsic to standard tuning, are, on the other hand, a limitation on the range of tonalities that the guitar can exploit with strength and musical variety. To explore different keys, bass notes need to be fretted and, consequently, the musical language that can be expressed is limited to the vicinity of the locations of those particular on the fretboard.

In MFT, the six additional lower notes on the 6th string generate an abundance of opportunities for alternative bass notes, tonalities, and wider harmonic configurations. Due to its extended range, MFT allows the execution of functional bass notes even in higher positions of the fingerboard (ninth fret and above). This constitutes a wonderful musical advantage that has enabled the creation of a variety of unique musical language. Additionally, the combination of MFT's lower range and fifths-layout is conducive to crafting powerful harmonic structures in any key. These features have gone beyond the limitations of standard tuning, where the delivery of complex and colourful sonorities is usually restricted to guitar-friendly tonalities as previously discussed. As a consequence, many passages in my original portfolio gravitate around unusual tonalities for the guitar, such as B \flat major and minor, A \flat major, E \flat major, D \flat major, C minor, and F \sharp minor. The ability to conceive music in any key thanks to MFT's versatility and power is a great outcome of this research that has both influenced my artistic practice and made a significant contribution to the guitar's tonal possibilities and repertoire.

The use of MFT's open strings is another fruitful creative device. As Figure 1 shows at the beginning of this dissertation, only the pitch of the third string (G3) is shared between MFT and standard guitar tuning. This resulted in countless applications of alternative tonal colours both in a melodic and harmonic sense. The low B \flat , F, and C have been extensively used to create

harmonic landscapes in their relative keys, both in major, minor, or dominant configurations, which are significantly distant tonalities from common guitar keys discussed earlier. This has shifted the focus of the music towards sonorities that are not as easily and powerfully conveyed in standard tuning. Besides obvious musical implications, it is the emotional quality of these fresh tonalities that have infused the music with a unique ambience.

On the other hand, the use of MFT's top three strings have also delivered additional melodic contour to the music and contributed to the creation of colourful chordal extensions and unique single-line passages. Across the whole portfolio, the use of open strings has possibly been the most frequently utilized musical device. Some of the most evocative motifs I created were based on the extensive use of open strings, such as the repetitive unisons in *Storms* or the natural harmonics in *Laniakea*. The distinctive resonance offered by the pitches of MFT's top open strings has also permeated my works with an idiosyncratic atmosphere that represents a considerable departure from the tonal nuances of standard guitar tuning. These considerations show the effectiveness of MFT in expanding the palette of sonorities of the guitar, which was achieved through unusual resonance, extended bass notes, harmonic strength and variety, and multi-faceted chordal configurations.

Symmetry and Space

The following discussion concerns two fundamental aspects of the guitar as an instrument, its vertical and horizontal dimensions and their musical implications. Within the countless possibilities of alternate tuning configurations, the appeal of using a layout based on consecutive fifths strongly resided in its potentials as a symmetrical design. The regularity of MFT's intervallic relationship between five consecutive strings is certainly an advantage in comparison to standard guitar tuning, whose intervallic anomaly between the second and third strings causes many difficulties with remembering a multitude of melodic patterns and harmonic shapes in different positions of the neck and when changing sets of strings. With regards to the re-entering first string, it is important to note that despite its irregularity of pitch - in virtue of an octave drop from A4 to A3 - the logical functionality of an all-fifths layout is retained. Instead of a consecutive fifth, the leap between the second and first becomes a perfect fourth, which is the complement interval of the perfect fifth. If we start from any note, an ascending jump of a fifth or a descending leap of a fourth arrives at the same note but in two distinct octaves. As a consequence, all the triads and chords that include the re-entering string do not show alterations neither in shape nor in the quality of the underlying harmonic material. The pitch drop in the first string delivers only slightly different musical language with one of the chord tones lowered by an octave. The chord diagrams in Appendix A show that the shapes of triads remain identical in any combination of three strings when moving vertically. When

these configurations include the re-entering string, they simply change from open voiced triads to close-position triads. The same rule applies to four-note chord voicings, which can be moved in three independent sets of strings without the need to modify their layout. In standard tuning, these same chord shapes generate different arrangements on each group of four strings, thus generating three times the amount of musical vocabulary to memorize. This general discussion illustrates one of the advantages of MFT and its practicality for organizing harmonic material in symmetrical and repetitive shapes.

MFT also puts a stronger emphasis on the importance of lateral movements as a fundamental technical skill for a guitarist. As mentioned in the analysis of *The Messenger from Oz*, the re-entering first string does not function well in conjunction with melodic playing. Once the second string is reached, only further horizontal movements will result in an increase in pitch. Therefore, MFT can be viewed as a five-string guitar for strictly linear applications, while its re-entering string has a strong harmonic functionality rather than an all-round melodic versatility. In addition to the consequences arising from tuning characteristics, the interval of fifths among adjacent strings imposes a different approach to the execution of scalar patterns. Traditionally, guitarists tend to favour a three-note-per-string method when playing scales, which perfectly suits the arrangement of standard tuning and allows the exploration of the vertical dimension of the instrument.

On the contrary, MFT requires playing four-notes-per-string in order to remain in the same vertical position; additional horizontal space needs to be covered on each individual string before the player can move on the next string to continue the natural succession of the notes in a musical scale. This results in continuous and challenging stretches in the left hand, which can be quite impractical and particularly demanding when executed in lower positions of the guitar where the frets are much wider. Alternatively, scalar patterns can be completely reinterpreted by substituting the excessive stretches with horizontal shifts or slides performed by one finger, thus executing two notes in row. Such movement is best achieved in conjunction with the semitones in the diatonic scales, thus reducing the space the assigned finger has to cover to its minimum. This technical variation enables the execution of scales in a fixed vertical position. The limitation of having a re-entering first string inspired me to think of a completely different approach to playing musical scales on MFT. As Appendix B illustrates, these uncommon melodic configurations were derived from the intrinsic intervallic consistency within diatonic scales and constitute quite a unique approach to devising scalar patterns on the guitar in a manner that is strongly rooted in horizontal movements. Despite the initial challenges in mastering lateral movements, these alternative patterns could open up unexplored melodic possibilities for guitar players and foster a whole new conceptualization of the guitar's fretboard in standard tuning as well.

Compositional process

In the years preceding this doctoral project, my writing style matured from techniques I had assimilated during my studies in jazz harmony, improvisation, composition, and arranging. My creative approach also blossomed from the transcription of numerous pieces written by past and contemporary jazz musicians I admire, which informed my personal preferences for melodic design, harmonic progressions, form, and instrumentation. Previously, my compositional method would rely on testing out different chordal formations and movements to generate an original chord progression. This approach was heavily influenced by both functional and non-functional harmonic devices, which constitute the fundamental conceptual scheme underlying new compositions. Next, I would employ idiomatic improvisation techniques to aid the formulation of an original melody. Following the well-established practices of jazz composers, my original works were mainly designed as vehicles for improvisation. This meant that the arrangement, instrumentation, performance traits, and stylistic choices of my original music were dependent on the characteristics of the ensemble that I was working with at any given time. Under these parameters, compositions were only partly finalized at the end of the writing phase and were continually open to variations with each new performance.

By shifting my focus and examining MFT as a device for composition, I pushed my musical thinking and writing techniques towards different practices and aesthetics. Firstly, MFT, by virtue of reducing the immediate access to melodic and harmonic vocabulary on the guitar, opened up a new world of opportunities. Rather than approaching the instrument with preconceived ideas and knowing what sounds would be generated by certain chord shapes and melodic patterns, I had to simply start relearning musical language through an aural paradigm that was heavily based on intuition and improvisation. This explorative and unrehearsed method shifted the focus towards more abstract concepts and put me in touch with a more primitive and emotional connection with sound. It also lowered my expectations on the creative process itself simply because the tuning's unfamiliarity drastically restricted my musicality and my ability to generate refined musical ideas. The resulting elimination of judgement and analytical processes allowed me to get in touch with extra-musical elements, such as natural phenomena, imagery and the playfulness of practicing and composing music without a full theoretical understanding of the creative tool at my disposal. It is likely that I would have rejected many of the ideas that form the building blocks of the original portfolio I created with MFT had they been discovered on a guitar in standard tuning. In a sense, I had to flesh out compositions from minimal material rather than from a wide resource of musical patterns and models. Moreover, the initial disconnection with both the visual and aural relationship with the guitar fostered the search for different creative pathways, unencumbered by force of habit, bias or discrimination. This way of creating music was extremely enjoyable, liberating, and playful.

These reflections on the creative act point to the most important aspect of this research: the unveiling of a completely new way of making music, which was based on intuitive and aural paradigms for me. This change in the creative path has allowed me to delve into musical settings, genres, and techniques I had not explored before. Most importantly, my style shifted to the creation of through-composed works with an emphasis on solo guitar setting and duets. The selection of these intimate musical forms has allowed me to investigate the novel sonorities of MFT more in depth. In addition, contrary to my practice as a jazz musician, I could not include extended improvisation sections in my pieces because I had simply not acquired the requisite level of command over this new configuration that would allow me to improvise over complex chord progressions with ease and full expression. Technically, composing extended solo works has been a great opportunity to expand my abilities as a guitarist and performer. It pushed me towards developing my right-hand's dexterity and endurance considerably, and increasing my interpretive skills, much more in the way that a classical guitarist would.

By virtue of MFT's layout and intrinsic sonorities, the musical outputs generated through this doctoral research constitute a unique set of compositions for the guitar that are not reproducible in standard tuning or any other configuration. As the musical analysis has demonstrated, MFT's unique properties have been exploited to create original works that have expanded the tonal possibilities of the guitar, particularly within its harmonic versatility and power. As a result, this project has provided insights into the different possibilities for composing with alternate guitar tunings by analysing and reflecting on the musical idiosyncrasies and implications of MFT. The novelty of the tuning arrangement I chose has pushed me towards the discovery of new pathways for guitar performance and new models for composition. Although the tuning did not require a radical change in the embedded guitar technique I possessed, it certainly imposed both conceptual and technical adjustment in the way I play.

The spontaneous investigation of MFT's unfamiliar layout resembled the act of free improvisation, where intuitive models and concepts arise in the moment thanks to a combination of physical gestures and embedded techniques. During this process, the selection of musical ideas was not driven by pre-meditated models but followed a more intuitive method that was strongly based on the aural and emotional dimension. As a consequence, this approach represents a valid alternative to developing compositional ideas and models through idiomatic and analytical strategies.

What next?

Since this project has allowed me to expand my musical endeavours from a compositional point of view, I intend to employ MFT in many other aspects of my artistic practice.

First, my main challenge is to focus on developing a confident and all-rounded command on MFT, both melodically and harmonically. The focus on composition in this research project has not allowed me to dedicate time towards achieving the same improvisational fluidity in MFT as I possess with standard tuning. Rather than replicating my present improvisational language in MFT, I aim to investigate the melodic possibilities of this tuning variation as much as I have done for composition in order to shape a fresh and idiosyncratic improvisational style. Thanks to its tuning characteristics, MFT has an intrinsic tendency towards unusual melodic patterns and intervallic shapes that transcend the possibilities of standard tuning. Sequences that are extremely challenging on standard tuning become quite natural and easy on MFT. Moreover, the harmonic language that can be developed on this tuning configuration could represent a great alternative for using the guitar as an accompanying instrument in many musical settings. Particularly, I envision its powerful low range and extensive harmonic versatility as the perfect mixture to accompany singers in jazz and pop settings, which number among my engagements as a performing musician.

Secondly, the development of harmonic and melodic control on this tuning layout will also enable me to compose music for larger ensembles as well as reintroduce improvised sections in my original pieces. I am quite intrigued to see how MFT will function within the context of a guitar trio or a jazz quartet and how other musicians will react to and interact with its sonic qualities. I am sure that MFT could be the catalyst for crafting ensemble music with a unique sound. Moreover, I intend to continue the investigation of MFT for solo guitar composition and for my song-writing practice, as it is demonstrably suited to aid the creation of unique musical works.

Thirdly, I would like to orchestrate some of the material I wrote for this doctoral project for ensembles that do not include the guitar. This will be a great musical experiment that will challenge me to reinterpret the portfolio I created with MFT and remove it from the idiosyncrasies of the guitar and the specific traits of alternate tuning practice. Moreover, arranging this music for different instruments will be another valid test to verify the compositional strength of this creative practice and evaluate the peculiarities of MFT in different musical contexts.

Finally, I intend to continue the production of chordal and scalar systems for MFT. This will expand my contribution to the existing literature on alternate tunings by publishing more

material on the specific functionality and inner workings of fifths-based layouts and their application to guitar performance and composition. I believe that the distinctive approach to music making stimulated by alternate tuning practices enables the scrutiny and understanding of important musical concepts from a different angle. This will surely unlock further technical possibilities for the guitar in general and contribute to the development of other musicians' creative paths.

References

- Ackerman, W. (2017). Tunings. Retrieved from www.williamackerman.com
- Adams, J. (1977). Phrygian Gates for solo piano [Recorded by R. van Raat]. On John Adams - Complete Piano Music [CD]. Naxos Records, 2007.
- Adams, J. (2016). Works – Phrygian Gates and China Gates [website]. Available at <http://www.earbox.com/>.
- Adler, D. (2006, May). Kurt Rosenwinkel: Emerging Brilliance. All About Jazz [online]. Available at <http://www.allaboutjazz.com/kurt-rosenwinkel-emerging-brilliance-kurt-rosenwinkel-by-david-adler.php>
- Adler, D. (2005, December). Ben Monder: Excavating Ben. JazzTimes, pp. 70-73. Retrieved from <http://www.benmonder.com/article.pdf>.
- Aledort, A. (2017). How to Utilize Unusual Alternate Tuning Like Jimmy Page. Available at <http://www.guitarworld.com/deep-how-utilize-unusual-alternate-tunings-style-led-zeppelin-s-jimmy-page>.
- Aledort, A. (2015). Robert Johnson Lesson: Unlock the Guitar Mysteries of the Delta Blues Great. Available at <http://www.guitarworld.com/deep-unlocking-guitar-mysteries-delta-blues-great-robert-johnson>.
- Bach, J.S. (1720). Violin Sonata No.1 in G Minor, BWV 1001. [Public Domain]. Original work published in 1802 by Nikolaus Simrock in Bonn.
- Bailey, D. (1992). Improvisation: Its Nature and Practice in Music. The British Library National Sound Archive. London.
- Becker, T.R. (2012) Analytical Perspectives on Three Ground-breaking Composers for Guitar: Villa-Lobos, Martin, and Britten. Ph.D. Dissertation. University of Kansas.
- Borgdorff, H. (2013). The conflict of the faculties: Perspectives on artistic research and academia. Leiden: Leiden University Press.
- Boyden, D.D. and Stowell, R. (2017). Scordatura [descordato, discordato]. Grove Music Online. Available at <http://www.oxfordmusiconline.com/subscriber/article/grove/music/41698?q=Scordatura>
- Breeze, W. (2010). De Harmonia Mundi. In J. Zorn (2010). Arcana V: Musicians on Music, Magic, and Mysticism. Hips Road/Tzadik
- Bruhn, S. (1997). Images and Ideas in Modern French Piano Music. Pendragon Press. Stuyvesant, New York.
- Choi, C. Q. (2014, September). New Galactic Supercluster Map Shows Milky Way's 'Heavenly' Home. Retrieved from <https://www.space.com/27016-galaxy-supercluster-laniakea-milky-way-home.html>
- Collins, D. (2012). The act of musical composition - Studies in the Creative Process. Ashgate. London.
- Coessens, K., Crispin, D., and Douglas, A. (2009). The Artistic Turn: a Manifesto. Leuven University Press.
- Cooney, M.A. (2002). Ravel's 'Une Barque sur l'Océan' Performance Analysis. Master Thesis. University of Connecticut.
- Couto, H. (2009). The Cosmic Octave Tuning Forks [booklet]. Retrieved from <http://www.planetware.de/>
- Creswell, J.W. (2009). Research design: Qualitative, quantitative, and mixed methods approach (3rd ed.). Thousand Oakes, CA. Sage Publications.

- Denson, L. (2013). *Music from the Margins: An Auto-ethnographic Study of the Development of a Jazz Composer's Voice*. Doctoral Dissertation. Griffith University, Brisbane, Australia.
- Dowling, M. (2008). Reflexivity. In L. M. Given, (Ed.). *The Sage encyclopedia of qualitative research methods* (pp. 748-749). Thousand Oaks, CA. Sage Publications.
- Drozdowski, T. (2014). *Playing in Open G Tuning Like Keith Richards*. Available at <http://www.gibson.com/News-Lifestyle/Features/en-us/play-in-open-g-like-keith-richards-0910-2012.aspx>.
- Emmanuel, T. (2013). *The Tall Fiddler* [video]. Available at <https://www.youtube.com/watch?v=nW9rmaGaaG4>
- Emmanuel, T. (2016). *Tall Fiddler – Instructional – Tommy Emmanuel* [Youtube Channel]. Available at <https://www.youtube.com/watch?v=De9ETucExNE>
- Emmanuel, T. (2002). *The Endless Road* [CD]. Favoured Nations.
- Evans, J. 2013. *An Examination of the Role of Macro- and Micro-Level Processes in John Adams's Phrygian Gates*. Online Theses and Dissertations Paper 163.
- Flowers, C. J. (2015). *Altered States of Performance: Scordatura in the Classical Guitar Repertoire*. Doctoral Dissertation. The University of Georgia.
- Grossman, S. (1972). *The Book of Guitar Tunings*. Oak Publications.
- Gruhn, G. (2013). 1933 Gibson L-5 'Special'. Available at <https://www.vintageguitar.com/15441/1933-gibson-l-5-special/>
- Harper, D. (2001-2017). *Online etymology dictionary*. Retrieved from <http://www.etymonline.com/index.php?term=influence>
- Harvey, J. (1999). *Music and Inspiration*. Faber and Faber Limited. London, New York.
- Hedges, M. (n.d.). *Michael Hedges Interview* [YouTube video]. Available at <http://www.youtube.com/watch?v=ETmeXyaZLYQ>
- Hurley, A. and Taylor, H. (2015). *Music and Environment: Registering Contemporary Convergences*. *Journal of Music Research Online*, Vol. 6, pp. 1-18. Retrieved from <http://www.jmro.org.au/>
- James, J. (1993). *The Music of the Spheres*. Grove Press, New York.
- Julien, P. (2011). *Harmonic Plateaus in Two Works by Wayne Shorter*. *Jazz Perspectives*, Vol 5, No. 3, pp.163-183. DOI: 10.1080/17494060.2011.706379
- Knight, P. (2011). *The Intersection of improvisation and composition: A music practice in flux*. Doctoral Dissertation. Griffith University, Brisbane, Australia.
- Knopf, M. D. (2011). *Style and Genre Synthesis in Composition: Revealing and Examining the Craft and Creative Processes in composing Poly-genre Music*. Doctoral Dissertation. Griffith University, Brisbane, Australia.
- Kozbelt, A. (2012). *Process, Self-evaluation and Lifespan Creativity Trajectories in Eminent Composers*. In Collins, D. (2012). *The act of musical composition - Studies in the Creative Process*. Ashgate. London.
- Lawrence, C. (2014). *Sonic Youth Tuning Tutorial*. Available at <http://www.sonicyouth.com/mustang/tab/tuning.html>
- Lee Kats, S. (2012). *The Influence of the Extra-musical on the Composing Process*. In Collins, D. (2012). *The act of musical composition - Studies in the Creative Process*. Ashgate. London.

- Maxwell, J. (2005). A model for qualitative research design. In Maxwell, J. (Eds). Qualitative research design: An interactive approach (pp. 2-22). London: Sage.
- McCutchan, A. (2003). The Muse that Sings: Composers Speak about the Creative Process. Oxford University Press.
- Messiaen, O. (1937). O Sacrum convivium. Images of Christ [CD]. Recorded by The Cambridge Singers conducted by John Rutter, 1998. SRI, Canada.
- Monder B. (2008). Ben Monder compositions. Pacific, MO: Mel Bay Publications.
- Monder, B. (2005). Oceana. [Album]. New York, NY: Sunnyside Records.
- Monder, B. (2000). Excavation. [Album]. New York, NY. Arabesque Recordings.
- Rappenglueck, B. (2005). Cosmic music. Correlations between music and cosmos-related ideas across ancient cultures. Journal Article. Mediterranean Archaeology and Archaeometry 14(3):307-317 · January 2014.
- Orkin, D. (2017). The Essential Alternate Tunings of Eight Groundbreaking Guitarists. Published September 17th, 2017. Retrieved from www.reverb.com.au
- Raitt, D. 2011. The music of Michael Hedges and the re-invention acoustic fingerstyle guitar. California State University, Long Beach.
- Rodgers, J.P. (1996, August). The Guitar Odyssey of Joni Mitchell. Acoustic Guitar Magazine. Retrieved from <http://www.jonimitchell.com/library/view.cfm?id=38>.
- Rose, S. and MacDonald, R. (2012). Improvisation as Real-time Composition. Collins, D. (2012). The act of musical composition - Studies in the Creative Process. Ashgate. London.
- Rosenwinkel, K. (2013). Kurt talks about Zhivago and alternate tunings. Kurt Rosenwinkel Forum. Retrieved from www.kurtrosenwinkel.com.
- Rover, C. (2000, May). Kurt Rosenwinkel: From a Guitarist's Perspective. Gitarre & Bass. Retrieved from [http://www.christianrover.com/Englische Seiten/Rosenwinkelengl.html](http://www.christianrover.com/Englische%20Seiten/Rosenwinkelengl.html).
- Rowe, D. and Jensen, R. (1981). Baroque Guitar for the Modern Performer: A Practical Compromise. Published in Guitar Review, Fall 1981. Retrieved from www.classicalguitar.ws/index
- Russell, M. 2016. Tuning Patterns. Available at <http://jonimitchell.com>.
- Sallis, J. (Ed.). (1996). The guitar in jazz: An anthology. Lincoln, NE: University of Nebraska Press.
- Sayce, L. 2014. A brief history of the theorbo. Available at <http://www.theorbo.com/index.html>.
- Sethares, W.A. (2011). Alternate tuning guide. Madison, WI: University of Wisconsin.
- Settle, D. (2008). A look at form and pitch content in Toru Takemitsu's 'Equinox'. Tallahassee, FL: Florida State University.
- Simmons, R. (2004). Alternate Tunings for Guitar. Available at http://www.musicfolk.com/docs/Features/Feature_AltTuning.htm
- Smith, H. and Dean, R.T. (2009). Practice-led research, research-led practice in the creative arts. Edinburgh: Edinburgh University Press.
- Sonenberg, D. (2011). Review of the book 'The Worlds and Music of Joni Mitchell' by Benninghof, J. Notes, 67(4), June 2011.
- Stropes.com. 2014. Michael Hedges: Title/Tunings. Available at <http://www.stropes.com/>

Stropes, J and Hedges, M. 1995. Michael Hedges: Rhythm, Sonority, Silence. Racine: Stropes Editions Ltd.

Tamm, E. 1990. Robert Fripp: From Crimson King to crafty master. London: Faber & Faber.

Tyler (2017). Scordatura [descordato, discordata] – 3. Lute and Guitar. Grove Music Online. Available at <http://www.oxfordmusiconline.com/subscriber/article/grove/music/41698?q=Scordatura>

Wade, G. (2017). Re-entrant Tuning. Available at www.oxfordmusiconline.com.

Whitesell, L. 2002. Harmonic Palette in early Joni Mitchell. *Popular Music*, Vol 21/2 (pp.173-193). Cambridge University Press.

Appendix A: Triads, Seventh Chords, Unique Voicings, and Poly-chords

This appendix provides an introduction to MFT's layout by illustrating the basic shapes of triads and seventh chords and their inversions. In each chord diagram, the root is highlighted in red while the other chord tones show their intervallic relationship to the tonic. This will help with understanding the theoretical implications of each shape and facilitate further modifications and transpositions. Fret numbers are indicated by Roman numerals on the left side of each diagram. When open strings are used, they are marked by a hollowed circle above the respective string. Because of MFT's symmetry, the inversions of triads and seventh chords are only presented in one string set in their horizontal variants. For example, a shape that encompasses the bottom three strings can be transposed to any other three consecutive string combination and will generate an identical structure in a different key. When the re-entering string is employed, it produces an octave drop in the corresponding note of the triad or seventh chord without altering their harmonic quality.

Triads

Three voicing distributions are suggested for each sub-group of triads (major, minor, diminished, and augmented). The diagrams in Figures 78, 79, 80, and 81 will help with comprehending their geometric shapes and, if tested, appreciating the sonic characteristics that are produced by moving voices apart. A great variety of musical language can be derived from these simple configurations by constructing small melodic fragments around their layouts or adding consonant open strings. Additional triadic possibilities are available and their discovery and applications are encouraged.

Seventh Chords

Seventh chords are also presented in three sets of voicings in Figures 82, 83, and 84. The first intervallic design (1-5-3-7) is the only possible arrangement on four consecutive strings in this tuning layout. The remaining two variations display some personal interpretations of how the voices can be moved to different string sets. In the major 7th shapes in first and third inversion, the root has been substituted with the 9th to avoid an unpleasant $\flat 9^{\text{th}}$ interval in the chord's sound (the root is still indicated in red in the diagram only as a reference). This produces sonorities that are identical to $\text{Emi}7^{\text{th}}$ chords in the case of the illustrated $\text{Cma}7^{\text{th}}$. As a result, the exact intervallic sequentiality from chord to chord has been discarded in favour of consonance and functionality. The intervallic information contained in each note of the diagram is

particularly useful for modifications in the chord structure, such as altering the fifth in dominant sonorities or substituting chord tones in major and minor configurations (6th replacing the 7th and so on).

Unique Voicings

Some characteristic chord structures are presented to assist the construction of more advanced sonorities on MFT. Most of these voicings involve all the six strings of the guitar to showcase the full power and versatility of this layout. Fingerings have been included in the advanced voicings to facilitate their execution as they require occasional unorthodox flattening of the left-hand's digits. Some of these shapes are very challenging and demand great flexibility and strength in the left hand and are therefore recommended for advanced players. Among these unique shapes, I include four variants of a fully diminished 7th chord. In addition, special configurations were purposely designed in conjunction with open strings, both as bass notes and upper voices of the chord, to fully exploit the unique resonance of MFT.

Poly-chords

An in-depth discussion is dedicated to the creation of poly-chords on the MFT's layout. Preliminary considerations address the theoretical classification of these voicings. Some of the applications of these harmonic structures are firstly explored in standard tuning to understand the guitar's limitation in delivering this complex musical language (Figure 88). Secondly, the illustrated shapes are built on MFT with two harmonically-unrelated triads to be played simultaneously, and producing unique dissonant sonorities (Figures 89 and 90).

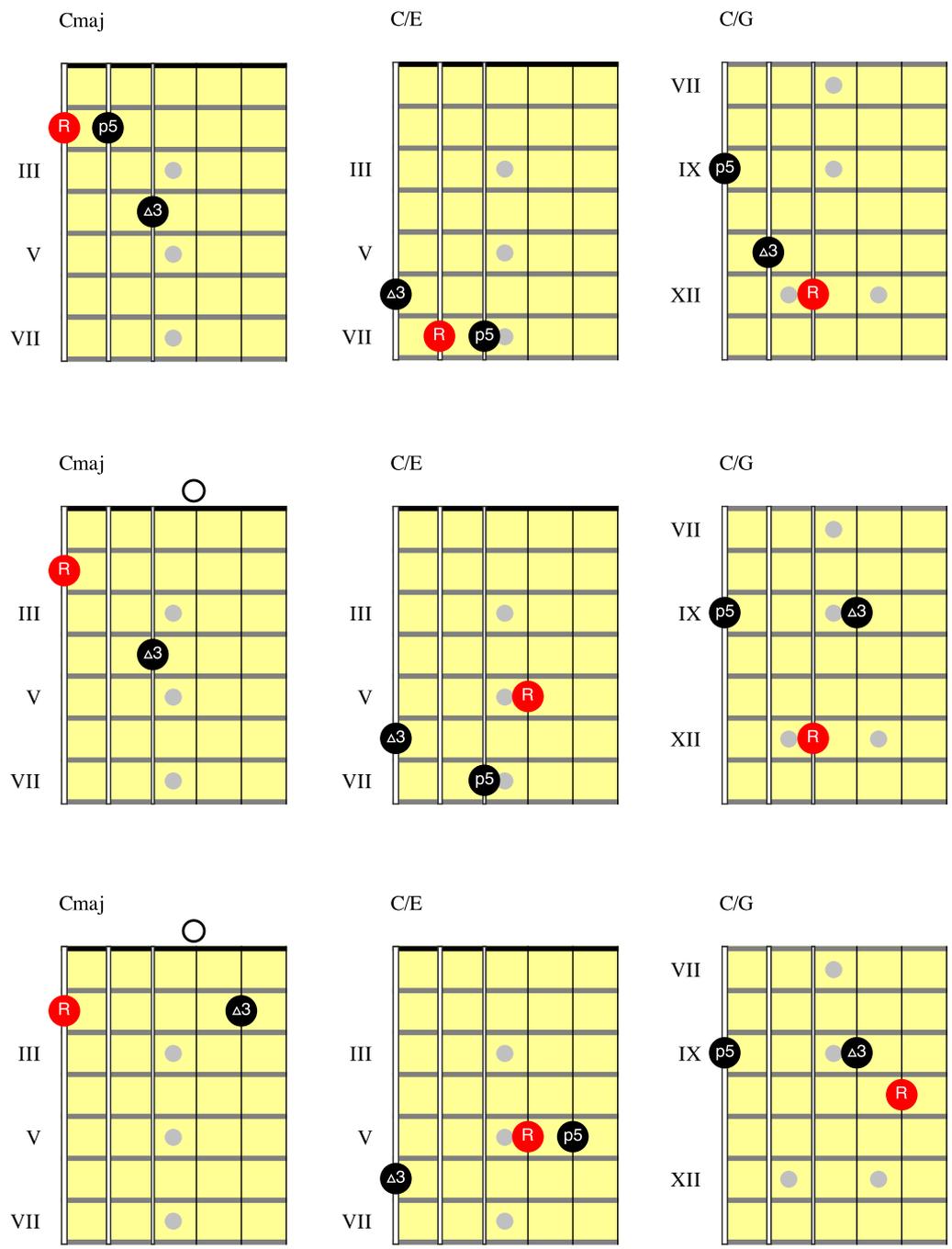


Figure 78: Major triads

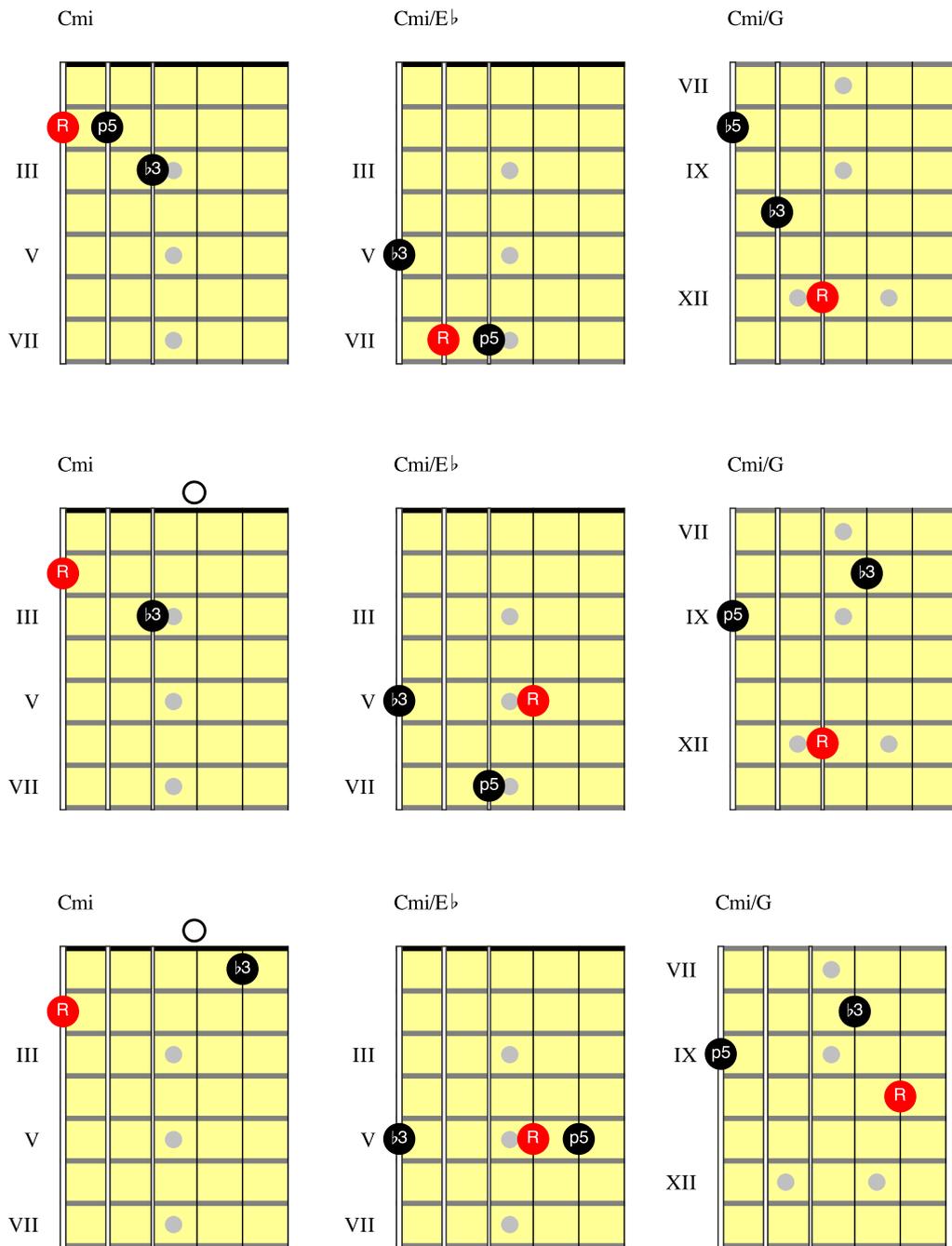


Figure 79: Minor triads

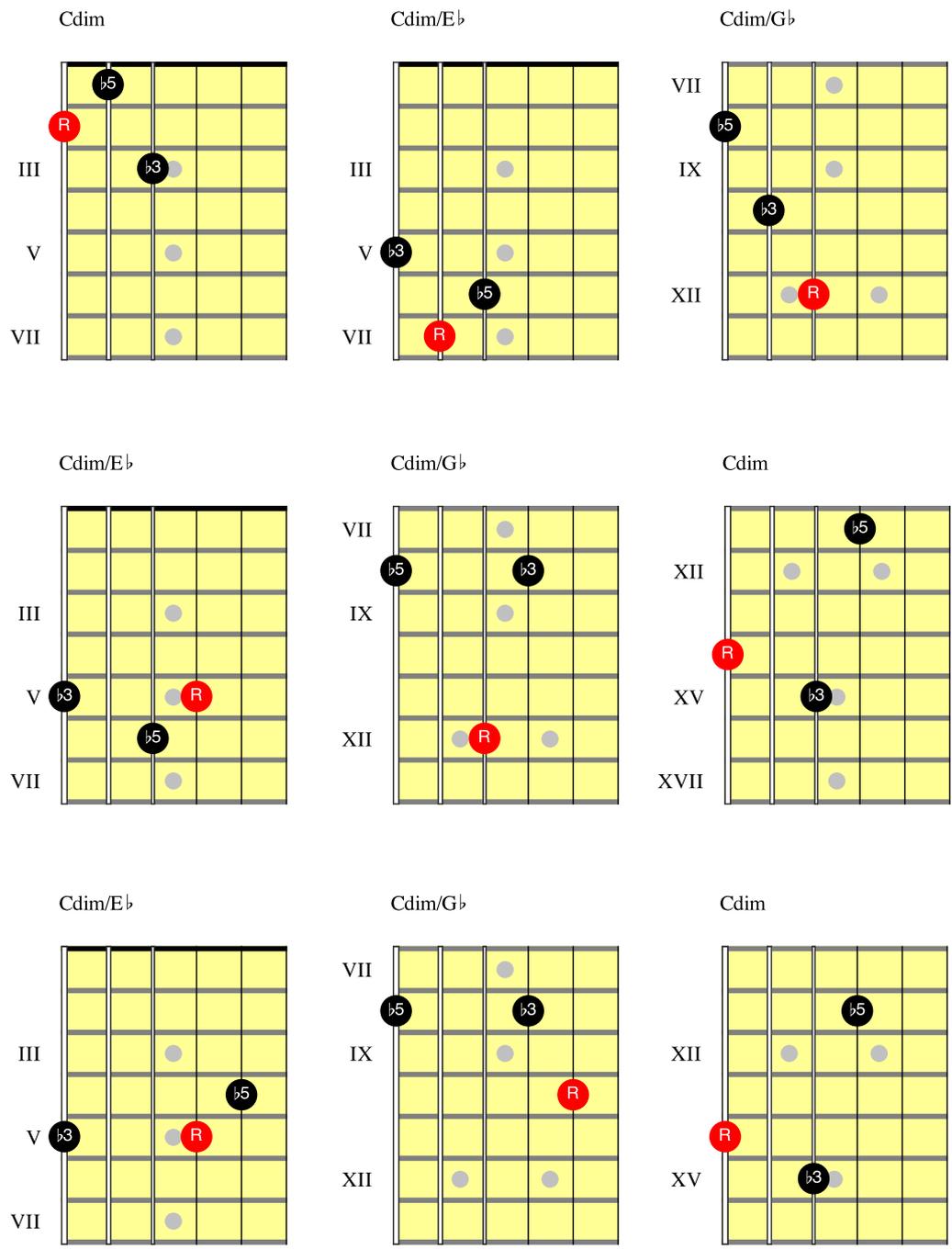


Figure 80: Diminished triads

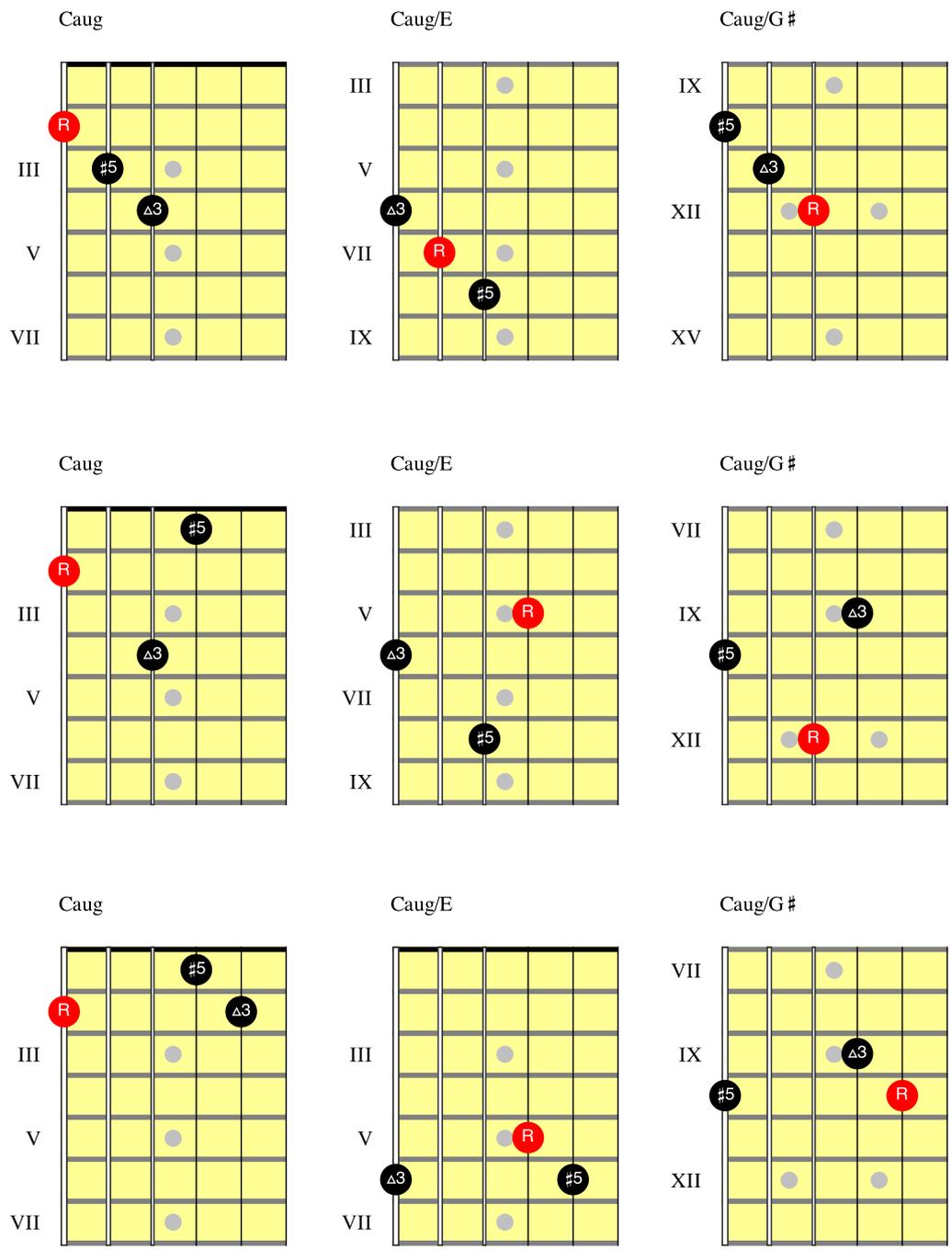


Figure 81: Augmented triads

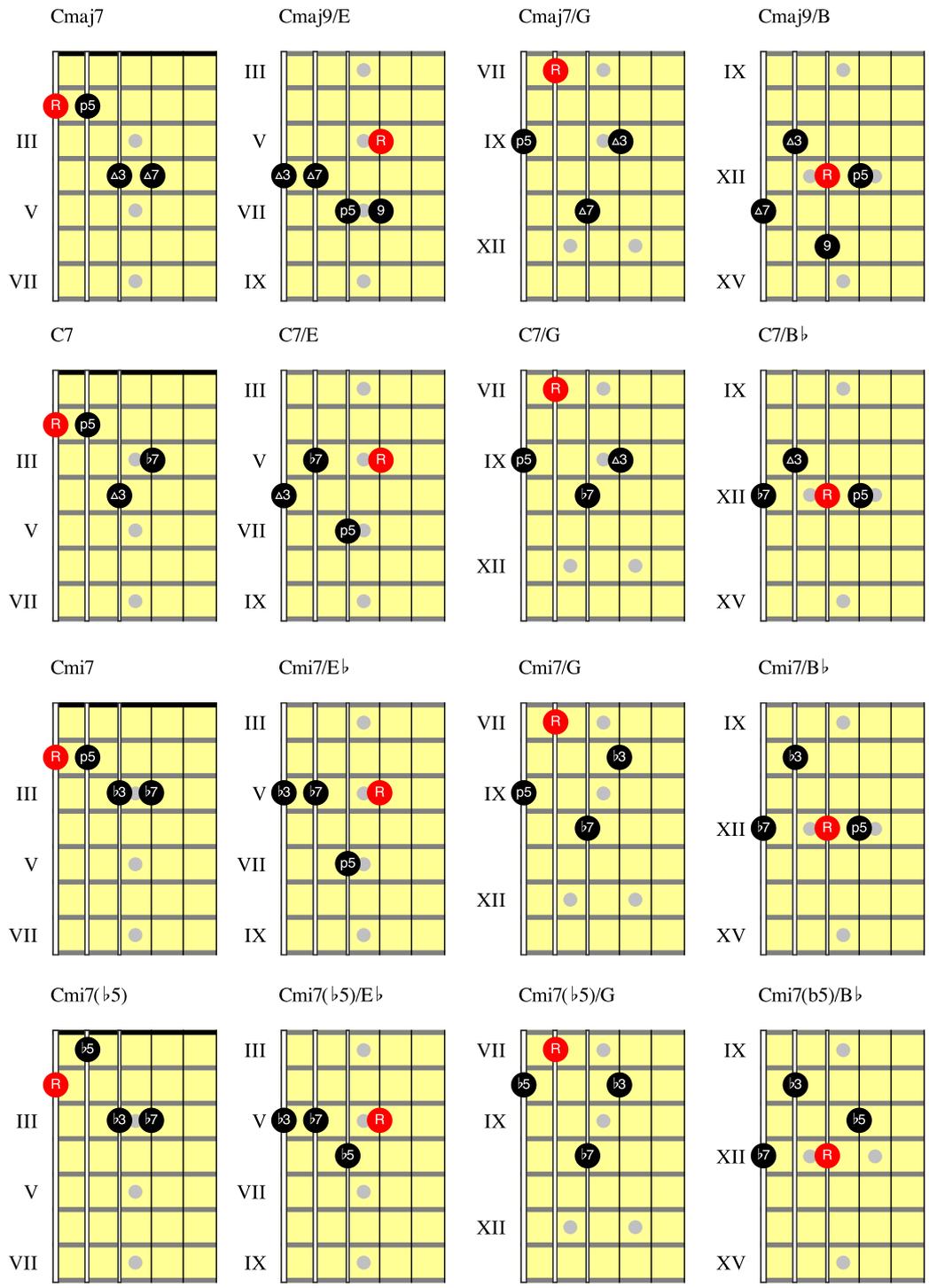


Figure 82: Seventh chords (starting layout 1-5-3-7)

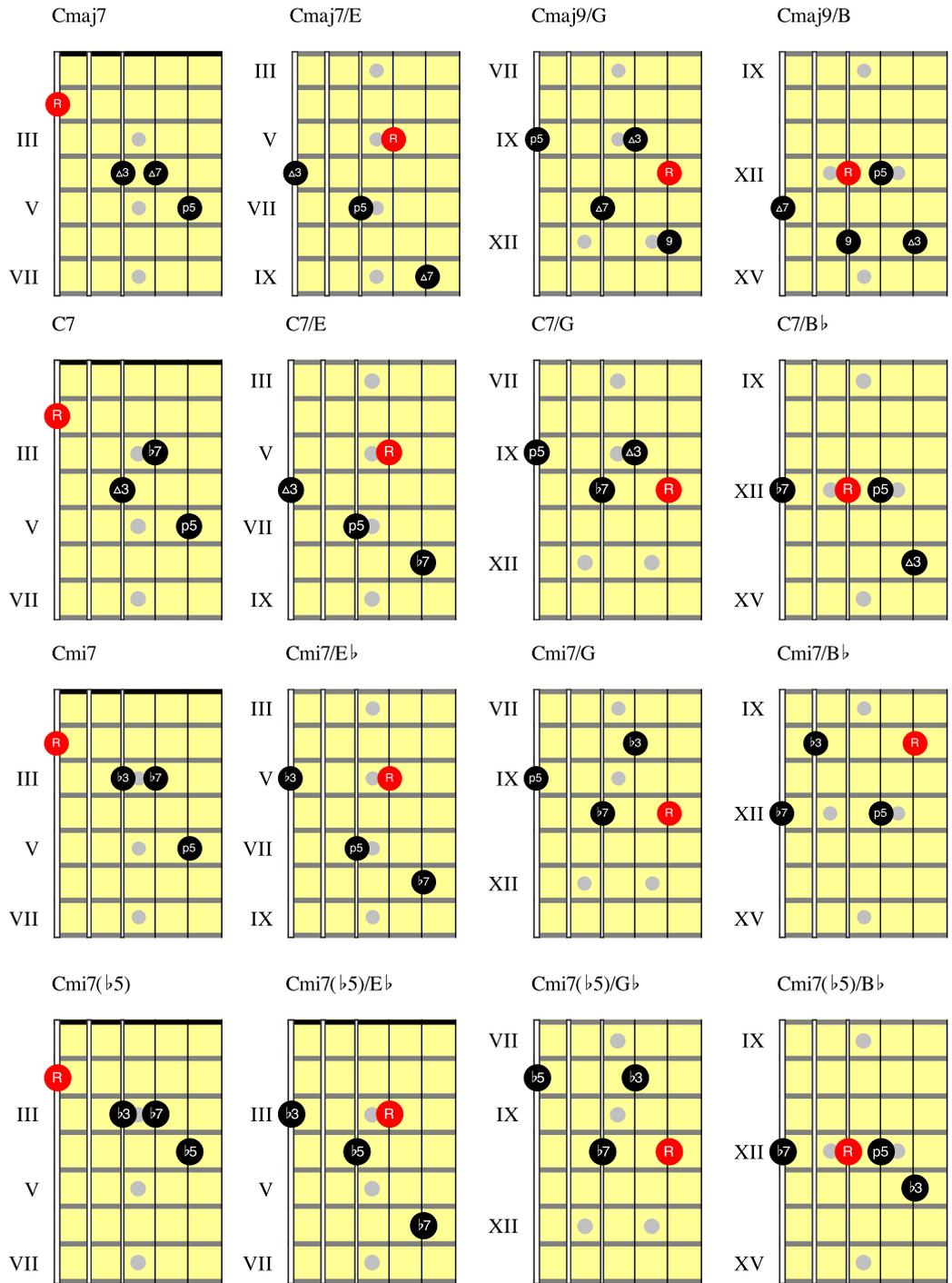


Figure 83: Seventh chords (starting layout 1-3-7-5)

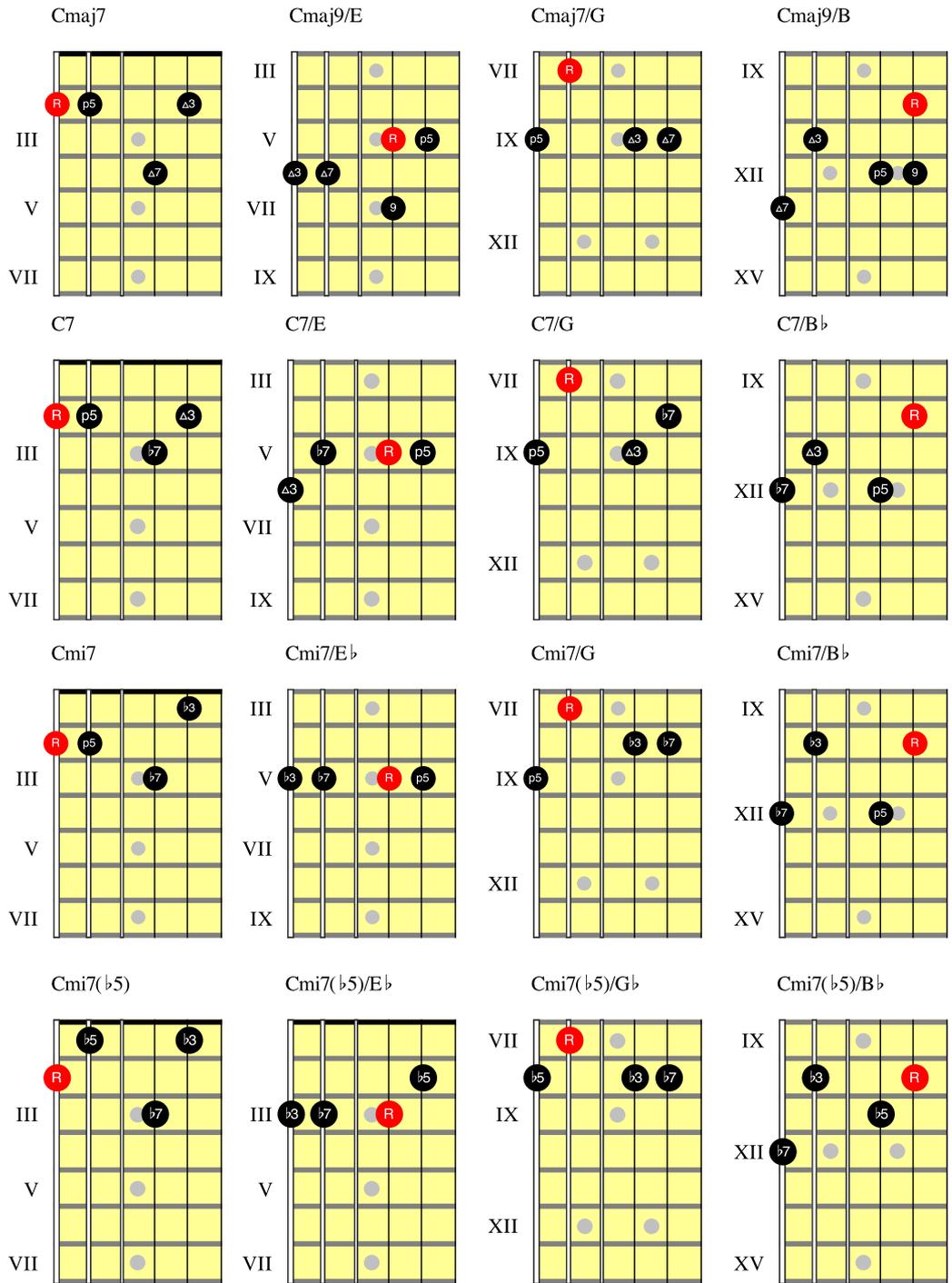


Figure 84: Seventh chords (starting layout 1-5-7-3)

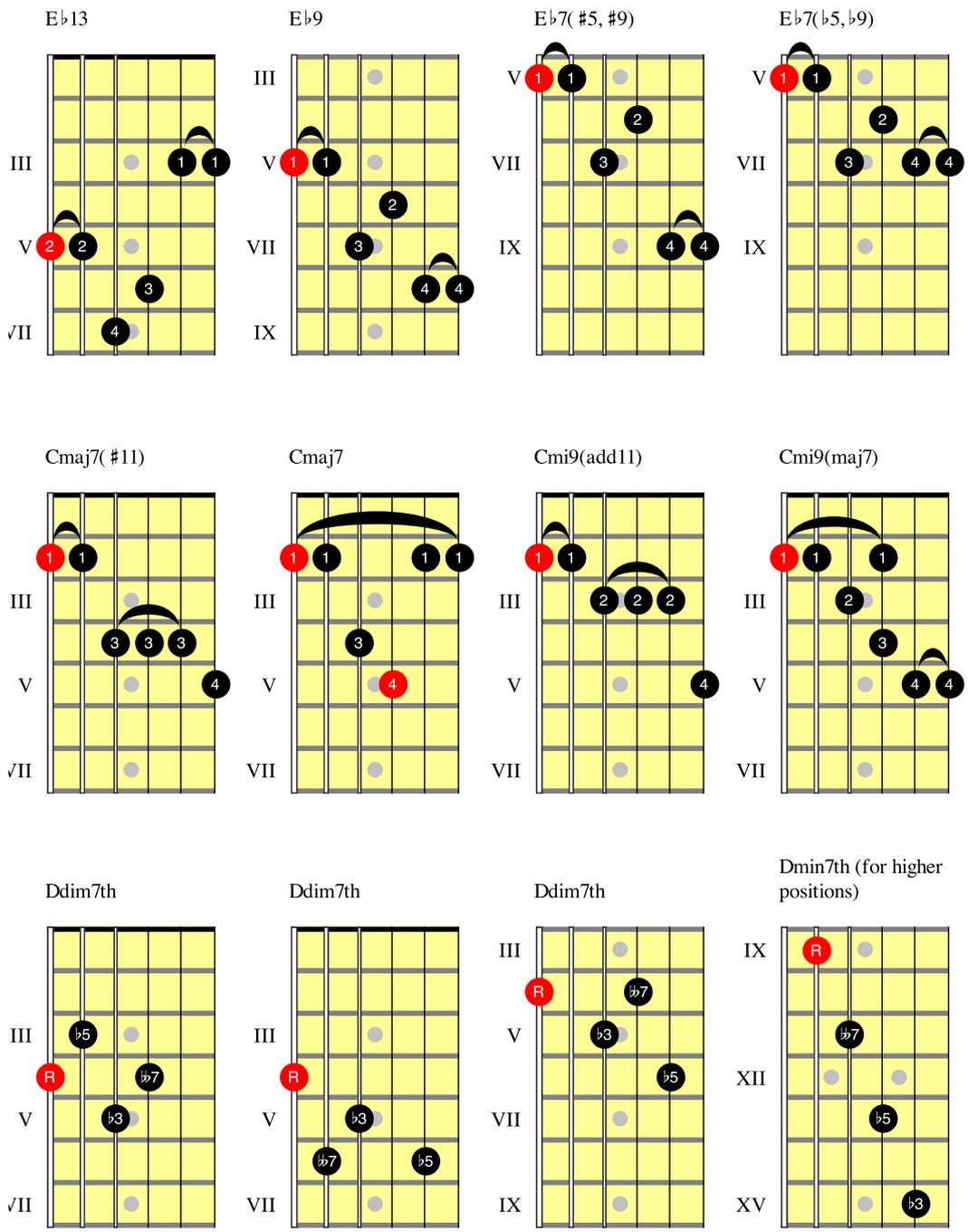


Figure 85: Special chord configurations. Dominant, major, and minor chords with extensions. The bottom line includes four moveable diminished shapes. The last shape is not practical in lower positions of the neck as it requires two-frets stretches among all fingers

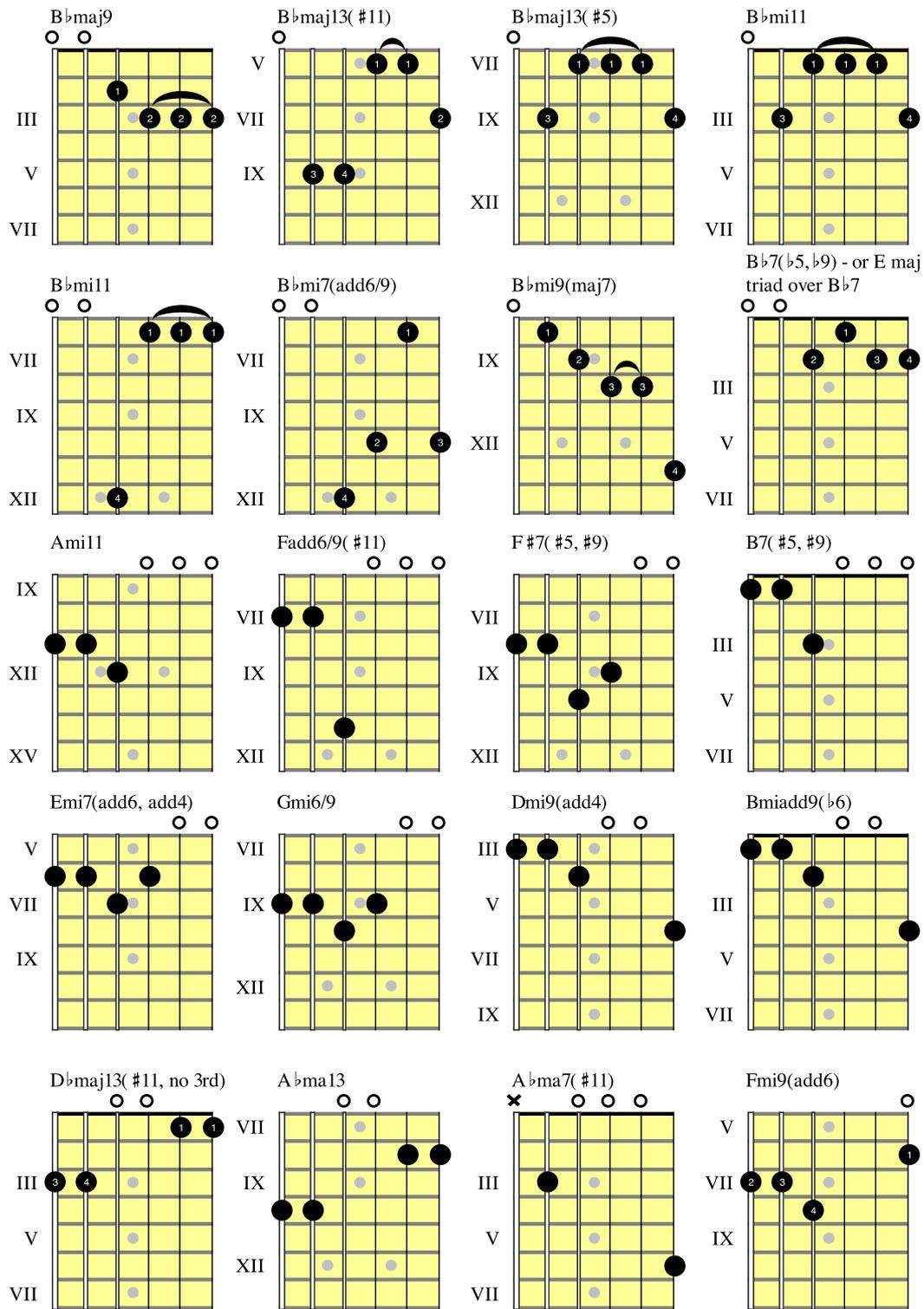


Figure 86: Colourful and idiosyncratic voicings featuring open strings for added resonance. Open strings are employed as bass notes, upper extensions, and inner voices

The image displays 20 guitar chord diagrams and their corresponding tablatures, organized into five groups of four. Each diagram shows the chord name, a treble clef staff with notes, and a six-string tablature with fret numbers. The chords are:

- Group 1:** B \flat add9 (mf), B \flat maj13(#11), B \flat maj13(#5), B \flat m11
- Group 2:** B \flat mi11, B \flat mi7(add6/9), B \flat mi9(maj7), B \flat 7(\flat 5, \flat 9)
- Group 3:** A mi11, F add6/9(#11), F# 7(#5,#9), B7(#5,#9)
- Group 4:** E mi7(add6,add4), G mi6/9, D mi9(add4), B mi add9(\flat 6)
- Group 5:** D# ma13(#11,no3rd), A# ma13, A# ma7(#11), F mi9(add6)

1/1

Figure 87: Notation and tablature describing the voicings in Figure X (previous page)

Poly-chords

Poly-chords are adventurous and complex sonorities that are created by sounding two chords simultaneously. The most interesting variants are produced by pairings that do not include repetition of notes in their layout. Due to the limitations of the guitar in standard tuning, this discussion will only deal with playing triads at the same time. Among their many configurations, four fundamental sub-groups can be identified with C as the consistent tonic of the bottom triad (not all possibilities are included):

1. Two unrelated triads producing six individual pitches: D \flat maj/Cmaj, C \sharp min/Cmin, C \sharp dim/Cdim and Daug/Caug;
2. Upper triad functioning as a harmonic extension of the bottom triad: Bmi/Cmaj for a Lydian sound, G \flat maj/Cmaj or A \flat maj/Cmaj for an altered dominant sound, and Bmaj/Cmaj for a Lydian $\sharp 9$ sound;
3. Two triads built on the same tonic but with different qualities: Cmaj/Cmin, Cmin/Cmaj, Cdim/Caug, and so on;
4. Pairings producing redundant sonorities: Amin/Cmaj, Emin/Cmaj, Eaug/Caug, and E \flat dim/Cdim (these combinations will not be discussed further).

The limitation of having only four fingers available to press the strings on the guitar makes the execution of these sonorities quite problematic. Because the top three strings of the guitar in standard tuning form an E minor triad (E-B-G high to low), all combinations that display this triad as the upper structure of the poly-chord are possible and easy to play. While keeping the top part unchanged as E minor, the bottom triad can assume eight shapes: three for major and minor (root position and two inversions); and, one for diminished and augmented (due to their symmetrical design). Among these combinations, the occasional repetition of notes creates sonorities that cannot be entirely classified as poly-chords. This includes all the triad families that contain one or more notes of the E minor triad within their layout. Nonetheless, particular configurations show the presence of both the major and minor thirds or the perfect fifth combined with either the diminished or augmented fifth. As a result, interesting and ambiguous sounds that are difficult to label can be generated.

When we start to move away from using three open strings in standard tuning, *poly-chords* shapes become impractical or impossible to play and their construction is limited to a few possibilities. Particularly, barring the top three strings with the first finger can facilitate the production of these sonorities, but is limited to the sound of a minor triad on top, as Figure 88 illustrates (bars 1-5). The A minor triad has been chosen for its practical location on the fifth

fret of the guitar's fingerboard, thus allowing neighbouring variations of the bottom triad. The first three chords in the top line of Figure 88 display triads in second inversions. All the remaining bottom structures in bars 4 and 5 are in root position.

In addition, combinations of two unrelated major triads that deliver six different pitches are particularly problematic and the only possible solutions are those including open strings (bars 6-8 in Figure 88) If a similar approach is applied to other triad families, it results in similar conclusions: none of these shapes are moveable and therefore are limited to specific shapes that involve the use of open strings. The configurations in bars 9-11 have been created around the open second, third, and fourth strings which sound a G triad. The second triad that forms the *poly-chord* has been split among the remaining available strings, the first, fifth, and sixth. As a result, I indicated the word 'combined' to describe those sonorities because *poly-chords* require one full structure to be above the other. This preliminary discussion illustrates the problems and limitations that guitarists encounter when trying to expand the palette of harmonic range intrinsic to the instrument.

The figure displays a series of guitar chords and their corresponding tablatures, organized into five systems. Each system consists of a treble clef staff and a guitar tablature staff. The chords are as follows:

- System 1:** Ami/Dbmaj, Ami/Ebmaj, Amin/Abmaj. Includes a dynamic marking *mf*.
- System 2:** Amin/Cmin, Amin/Fmin, Amin/Ddim, Amin/Baug.
- System 3:** Cmaj/Dbmaj, Cmaj/Bmaj, Amaj/Bbmaj.
- System 4:** F#maj and Gmaj combined, Abmaj and Gmaj combined, Dbmaj and Gmaj combined.

Figure 88: Poly-chords in standard tuning displaying the use of the same minor triad in the top of structure (bars 1-5).
 Open strings are necessary to build some combinations of two major triads played simultaneously (bars 6-11)

As I was investigating the possibilities of creating moveable poly-chords on MFT, I realized that the simultaneous execution of two triads had many more applications than I expected. This is due to the simplicity of major and minor triads, which can be executed with only two fingers, as mentioned in the analysis of *Arpeggio Etude No 1* in Chapter 4. In comparison with standard tuning, MFT's idiosyncratic layout allows the delivery of a broader poly-chordal vocabulary thanks to the presence of shapes that do not rely on the pitches of open strings. On this occasion, diagrams have been preferred to notation and tablature for the clarity of their visual representation. The indication of fingerings was also necessary as the execution of some of these structures is quite challenging and can span up to six frets of the fingerboard. Unusual flattening of the left hand's fingers to press two strings simultaneously on the same fret is also required.

The configurations in Figure 89 are based on the note $E\flat$ as the tonic of the bottom triad of the poly-chord structure, as it is positioned on the lowest string of the guitar at the fifth fret. Major and minor triads and their interpolations were explored around this fixed position. All combinations give priority to idiosyncratic sounds that are created using unrelated triads. Despite occasional repetition of the same note between the two distinct triads (such as $A\flat\text{maj}/E\flat\text{maj}$) their sound still displays a unique character that is beyond the guitar's traditional harmonic language. Additional redundant possibilities, as mentioned at the beginning of this section, have not been included. Nonetheless, they are available in the vicinity of the indicated shapes (usually one semitone away), if a certain sonority is preferred and or useful. Finally, Figure 89 illustrates a few additional poly-chords that involve diminished and augmented triads. Their use is more limited as they require more than three fingers to be performed. It is encouraged to mix and match shapes from both Figure 89 and Figure 90 to explore their further applications.

As this Appendix has demonstrated, the many possibilities of moveable *poly-chordal* configurations on MFT constitute a significant expansion and innovation in terms of the complexity of the harmonic language that the guitar can generate.

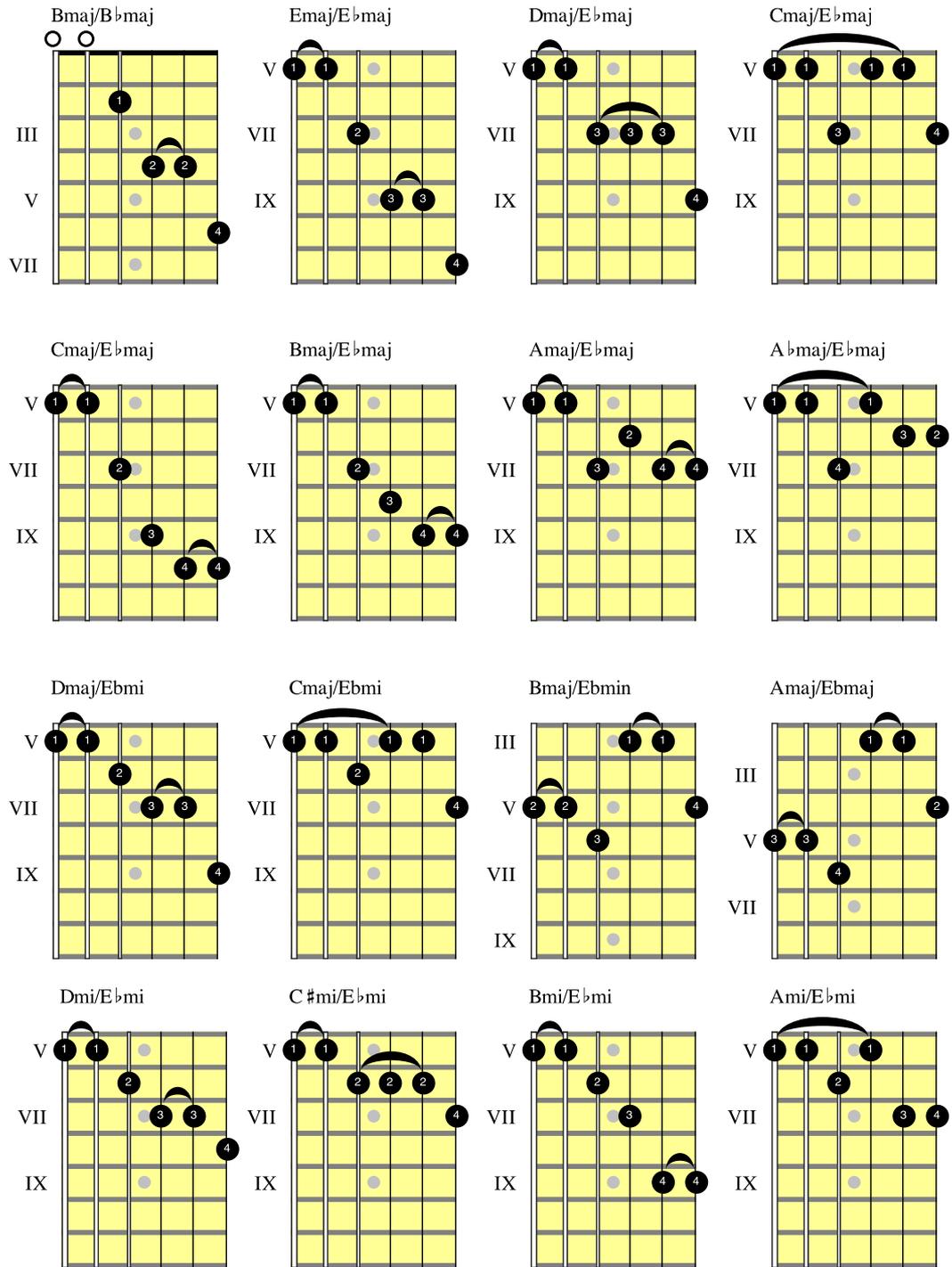


Figure 89: Moveable poly-chords shapes on MFT showing combinations of both major and minor triads

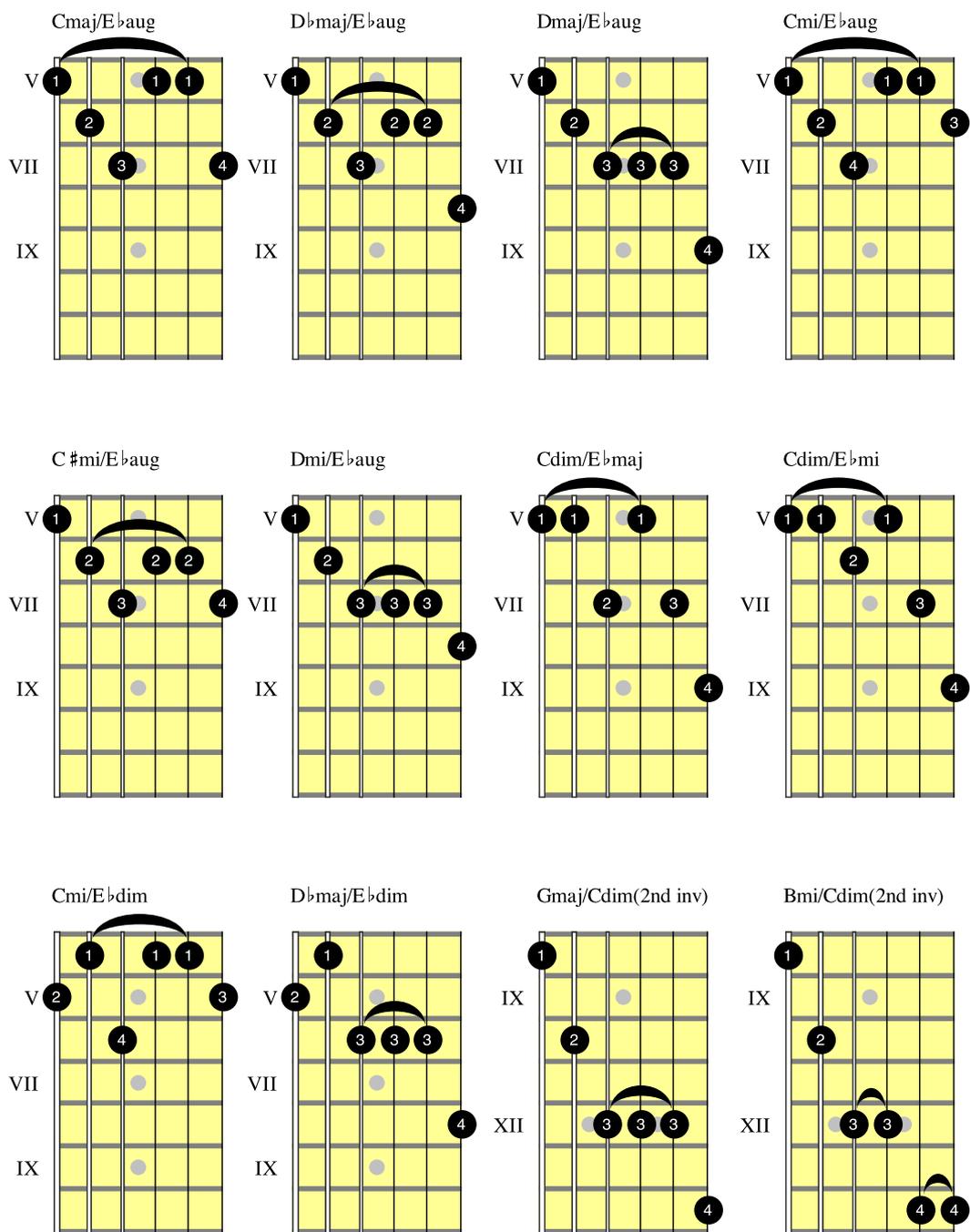


Figure 90: Poly-chords including augmented and diminished triads as underlying harmonic structures

Appendix B: Scales

This appendix offers some personal interpretations on how to organize scales on MFT's layout. The included graphics will help other guitarists to familiarize themselves with the novelty of the patterns associated with fifths-based configurations in general. The majority of the chosen patterns are radically different to the vertical arrangements most guitarists are accustomed to as I believe that MFT requires a completely new approach to playing melodic lines on the guitar. Therefore, these configurations require both a new conceptual framework for the performer and the development of additional technical abilities. For these reasons, the underlying model of how the patterns have been devised can be applied to standard guitar tuning and stimulate brand-new strategies for creating unusual scalar configurations that break away from familiar and over-used sequences.

The traditional approach to learning and playing scales on the guitar is based on the division of the fretboard in vertical positions. When considering a scale of seven notes, this line of thinking generates seven distinct configurations, which start on each degree of the scale itself. It is important to mention that additional in-between layouts crossing two separate positions are also possible, thus generating even more variations. Most scalar arrangements are performed with a three note per string approach with occasional two note per string fragments that occur either on the second or third string of the guitar (due to the irregular major third interval among them). This system is a convenient way of organizing the placements of notes and patterns around the instrument. However, it results in countless possibilities that take a long time to be assimilated.

Since I was exploring a new tuning layout, I thought of devising a more efficient system based on the inner logic of musical scales to facilitate their memorization. Moreover, I realized that executing scales in three notes per string manner could not be applied to MFT. When performing an ascending scale, the fifths-based layout imposes lateral movements towards the nut of the guitar, when crossing the strings, in order to find the next note in the sequence. Figure 91 shows how the traditional method of executing a scale with three note per string approach arrives at a dead-end point.

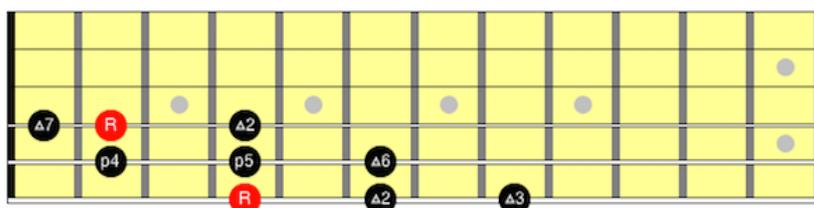


Figure 91: D major scale on MFT executed with a conventional approach

In order to continue the natural progression of the D major scale in Figure 91, the note F # can only be played on the fourth string, which is where the sequence is interrupted, and is located two frets above the indicated major 2nd. The pitch of the following open string (G3) is above the intended note F # by one semitone. Clearly, a fifths-based configuration demands a different use of the horizontal and vertical dimensions of the guitar compared to standard tuning. If scales are to be performed in vertical position, MFT imposes a four notes per string approach. With this system in mind, the next diagrams show a D major scale played in position

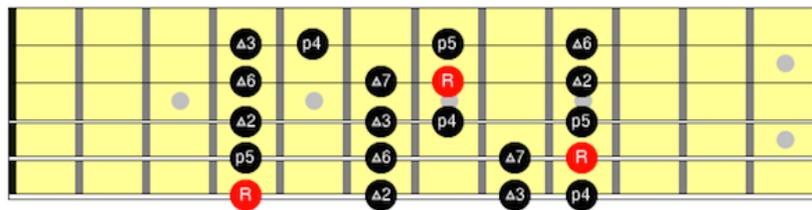


Figure 92: D major scale on MFT played with four notes per string allowing to exploit the vertical dimension of the guitar

Figure 93 shows the preferred fingerings I devised in order to avoid two-frets stretches between the middle and ring fingers, which are the most challenging to execute. When the same fingering is indicated on two consecutive notes played on one string, a horizontal movement is required by that digit. This method also gives two performance options: articulating both notes for more clarity and attack; or executing a slide into the second note for a more legato effect.

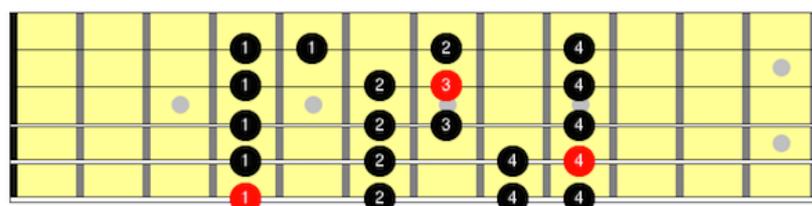


Figure 93: Suggested fingerings for a D major scale in position

The remaining six vertical configurations of the major and other scales are easy to find and similar fingerings, which involve slides rather than excessive stretches, should be followed in lower positions. In higher positions, the four notes per string method is more practical and slides may not be necessary for more advanced players. Manipulations of scale degrees can be derived quite intuitively to produce all possible melodic variations. It is important to notice that the scalar pattern in Figure 93 ends on the second string because the re-entering first string does not

allow the ascending continuation of the melodic sequence. This apparent limitation in MFT's layout, which transforms the guitar in a five-string instrument for melodic purposes, inspired me to devise a different strategy to execute scales. As Figure 94 shows, one octave can be covered in the space of two consecutive strings (bottom two strings).

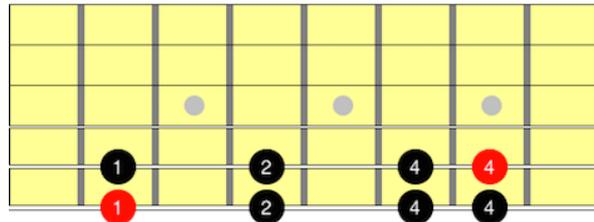


Figure 94: One octave major scale showing the repetitive fingering sequence

In Figure 94, it is evident that the same fingering sequence is repeated on both strings. An interesting application of this technique involves scalar sequences that are larger than one octave. Instead of developing the scale vertically, I thought of moving this fingering pattern horizontally along the fretboard. This can be achieved by playing the last note of the pattern, marked in red on the right, with the first finger rather than executing a slide with the little finger (as suggested earlier). This prepares the first finger for the next horizontal position, and the full octave sequence shows the following fingering distribution: 1-2-4-4 followed by 1-2-4-1 (Figure 95).

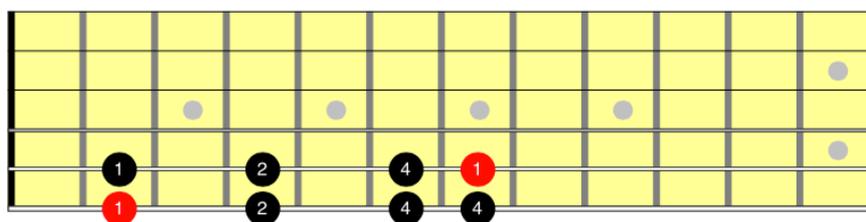


Figure 95: One octave fingering preparing the first finger for the next horizontal position

This adjustment allows the repetition of the same pattern throughout all the available octaves within the chosen scale, until the range of the instrument has been exhausted. The horizontal shift required by the left hand may be challenging at first but it does allow the continuation of the ascending sequence of the scale quite naturally. By virtue of this technique, the octave can be divided in different intervallic formulas, each with adjusted fingerings, and their lateral transposition can be used to cover the whole range of the instrument (Figure 96). This strategy is particularly useful considering the limitations of the vertical dimensions discussed earlier.

C major

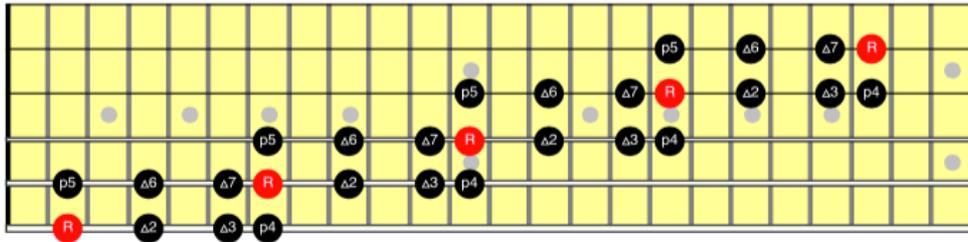


Figure 96: C major scale, four octaves

In other major keys, this specific pattern must undergo some slight variations. For example, this occurs when the tonic of a scale is located in higher positions of the 6th string. This will not allow the use of four ascending octaves as the top diagram in top diagram of Figure 97 shows (key of E major). Similarly, if the scale starts from the 5th string, the interruption of the symmetrical pattern will also occur before its full layout has been exploited (bottom diagram in Figure 97, key of A \flat major).

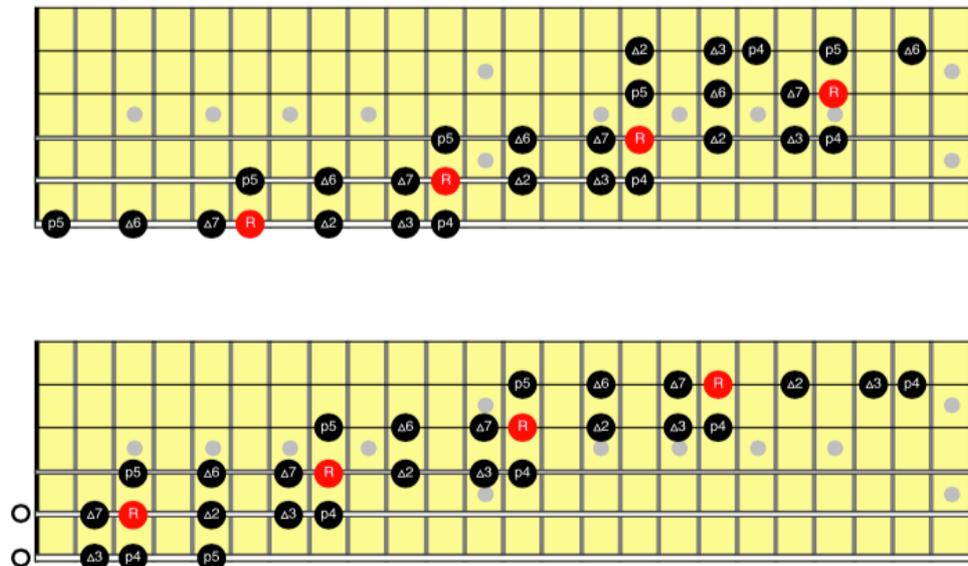
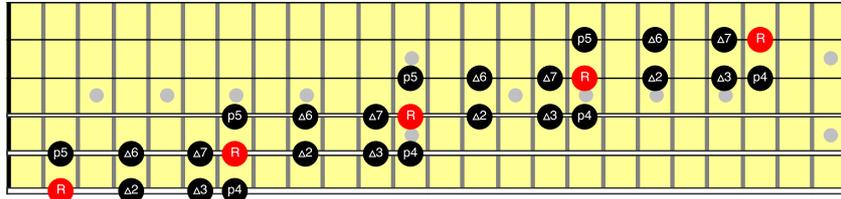


Figure 97: Two examples of modifications to the fundamental scalar pattern

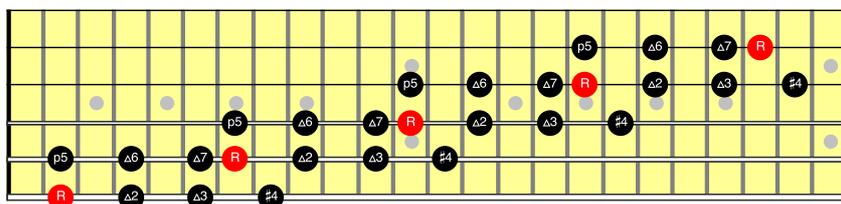
Rather than providing a universal method, these considerations and illustrations describe a simple concept that was conceived to work with the advantages and disadvantages of MFT's unique tuning characteristics. Figures 98 and 99 illustrate fundamental scales and modes that were compiled with improvisation in mind. Knowledge of this vocabulary is essential for any improvising musician and allows the navigation of a wide variety of chord types and harmonic progressions. The presence of numbered scale degrees in their geometric layouts allows easy modifications to create countless scalar possibilities that have not been included here as they

clearly exceed the scope of this appendix. All the scales are built from the note C, which is conveniently located on the second fret of the lowest string and allows the full exploration of MFT's range. Fingerings for one octave are indicated on top of each scale.

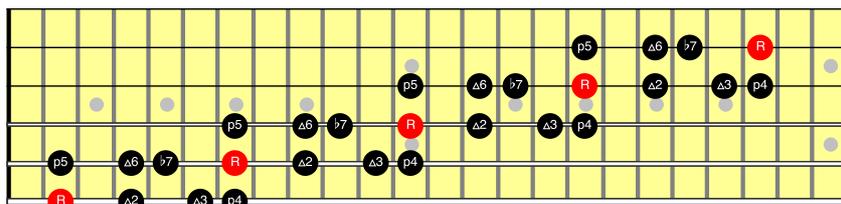
C major - Fingering: 1-2-4-4, 1-2-4-



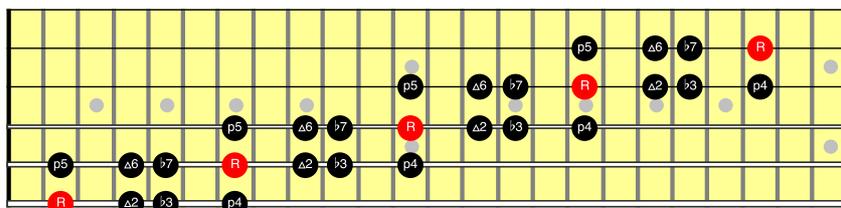
C Lydian - Fingering 1-2-4-4, 1-2-4-



C Mixolydian - Fingering: 1-2-4-4, 1-2-3-1



C Dorian - Fingering: 1-2-3-4, 1-2-3-1



C Locrian - Fingering: 1-1-2-4, 1-2-4-

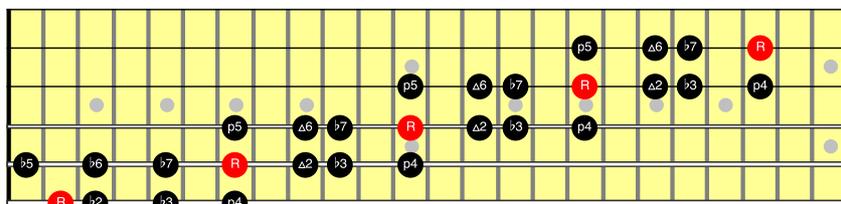
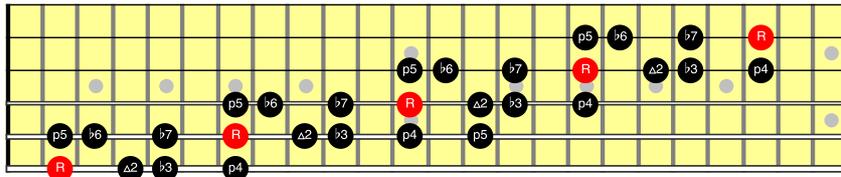
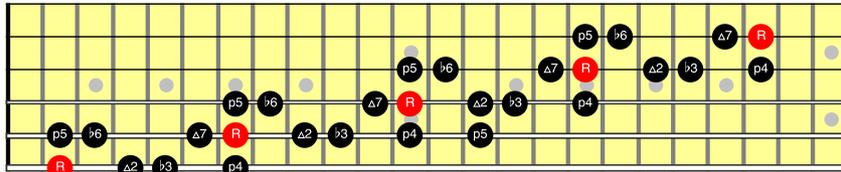


Figure 98: Scalar patterns for improvisation purposes

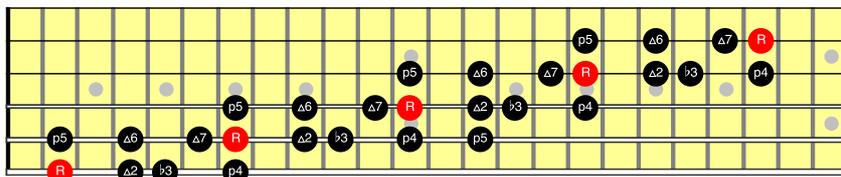
C Natural Minor - Fingering: 1-2-3-4, 1-2-4-



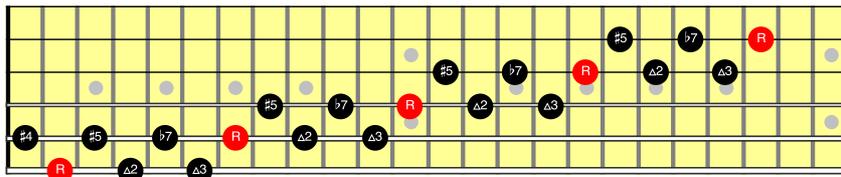
C Harmonic Minor - Fingering: 1-2-3-4, 1-2-4-



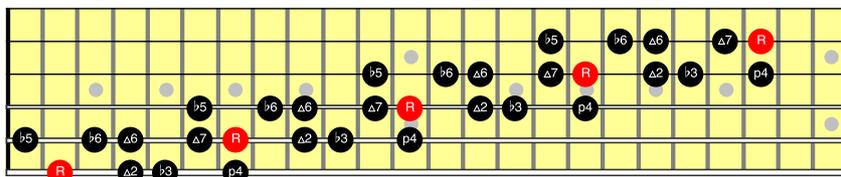
C Melodic Minor - Fingering: 1-2-3-4, 1-2-4-



C Whole Tone - Fingering: 1-2-4, 1-2-4-



C diminished (whole-half) - Fingering: 1-2-3-4, 1-2-3-4-



C Diminished (half-whole) - Fingering: 1-1-3-4, 1-1-3-4-

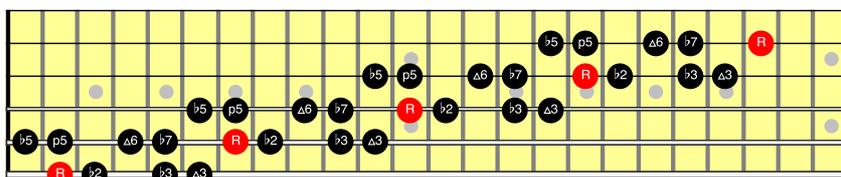


Figure 99: Scalar patterns for improvisation purposes (continued)

Appendix C: Arpeggios

This section illustrates the application of the method presented in Appendix B for the execution of arpeggios. The wider intervallic nature of arpeggios, compared with the linearity of musical scales, further emphasizes the necessity for a different conceptualization of melodic pathways on the unique layout of MFT even further.

In order to demonstrate how MFT imposed the proposed line of thinking, Figure 98 shows a few options for arpeggiating an E \flat major triad. The triad sequence is also started with two different fingers to illustrate some of the possible variations. This particular key has been chosen for the placement of the note E \flat on the fifth fret of the lowest string, which is a practical starting point in the middle of in the lower part of the fingerboard.

The figure displays three musical examples of arpeggiating an E \flat major triad. Each example consists of a treble clef staff with a 4/4 time signature and a guitar tablature staff. The key signature is two flats (B \flat major/E \flat minor). Example 1 starts with a 4th finger on the 5th fret of the low E string, followed by an ascending arpeggio sequence. Example 2 starts with a 1st finger on the 5th fret of the low E string, followed by an ascending arpeggio sequence. Example 3 starts with a 1st finger on the 5th fret of the low E string, followed by a more complex ascending arpeggio sequence. Each example includes a tablature staff with fret numbers and string indicators (T, A, B).

Figure 100: Three possible fingering variation for an E \flat triad.

The first configuration is quite comfortable to play but the use of open strings requires some adjustments when transposed to other keys. As the tablature clearly shows, the second shape presents problematic position changes when crossing strings. It is important to notice how MFT's layout forces the hand to move towards the nut of the guitar, which is not conducive to executing an ascending motif. The third example hints at the advantages of using a horizontal approach to the execution of melodic lines. In this case, the fingering is simplified (mostly being

Exploring a Modified Fifths Tuning as a Vehicle for Composition for Jazz Guitar

Vol. 2

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Doctor of Musical Arts*

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Laniakea

Storms

Two Worlds United

Vocal score

Guitar score

The Watcher

Vocal score

Guitar score – MFT

Guitar score – standard tuning

LYRICS

Children of War

The Watcher

Two Worlds United

Whispered

6

let ring

TAB

(9) 0 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6

8

let ring

TAB

(9) 0 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6 | 6 7 4 0 4 7 6

10

let ring

TAB

(7) 0 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4

12

let ring

TAB

(7) 0 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4 | 4 5 2 0 2 5 4

♩ = 128

C

let ring

TAB

9 11 11 11 11 9 14 0 0 10 14 (14) 14 0 0 10 14

let ring

TAB

9 11 11 11 11 9 14 0 0 12 14 (14) 14 0 0 11 14

let ring

TAB

9 11 11 11 11 9 14 0 0 12 14 (14) 14 0 0 10 12

let ring

TAB

7 9 9 9 7 12 0 0 9 12 (12) 12 0 0 10 12

let ring

TAB

7 9 9 9 7 12 0 0 9 12 (12) 12 0 0 10 6

57 let ring (14) 0 11 0 11 14 11 0 11 0 11 12-14 (14) let ring 12 12

TAB 9 9 11 0 11 9 11 0 11 9 11 0 11 9 9 11 0 11 9 11 0 11 12 12

61 let ring (12) 12 12 12 12 (12) 12 12 12 12 7 7

TAB 8 8 10 9 12 9 10 8 10 9 12 9 10 8 8 10 9 12 9 10 8 12 9 10 8 7 7

65 let ring (7) 7 7 7 7 (7) 7 7 7 7 9 11

TAB 3 3 5 4 7 4 5 3 4 5 4 5 3 3 5 4 7 4 5 3 4 5 4 5 3 9 11

69 let ring (11) 11 9 9 9 9 9 9 9 9 11 9 9 9 9 11

TAB 8 8 9 9 9 8 9 9 9 9 8 8 9 9 9 9 8 8 9 9 9 9 9 9 9 11

73 let ring (11) 11 9 9 9 9 9 9 9 9 11 9 9 9 9 5-9

TAB 8 8 9 9 9 8 9 9 9 8 8 9 9 9 9 8 8 9 9 9 9 9 9 9 9 5-9

85

let ring

TAB

(3) 3 3 3 3 3 3 3 3 (3) 3 3 3 3 3 3 3 3 8 8

5 6 6 5 6 5 6 5 0 5 6 6 5 0 5 6 5 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

87

mf
let ring

TAB

(8) 8 8 8 8 8 8 8 8 (8) 8 8 8 8 8 8 10 10

13 8 8 13 0 13 8 13 0 13 8 8 13 0 13 8 13 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

89

let ring

TAB

(10) 10 10 10 10 10 10 10 (10) 10 10 10 10 10 10 6

8 10 10 8 0 8 10 8 0 8 10 10 8 10 8 10 8 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

91

let ring

let ring

TAB

8 8 10 6 10 6 10 6 10 6 (6) 8 10 6 10 3 3

10 6 6 10 0 10 6 10 0 10 6 6 10 0 10 6 10 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

accel.

Musical notation for measures 100-101. The top staff shows a treble clef with a melodic line starting at measure 100. The bottom staff shows a guitar tablature with fret numbers 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6, 5-9, 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6. The instruction "let ring" is written above the tablature.

$\text{♩} = 135$

Musical notation for measures 102-103. The top staff shows a treble clef with a melodic line starting at measure 102. The bottom staff shows a guitar tablature with fret numbers 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6, 5, 9, 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6, 7, 9. The instruction "let ring" is written above the tablature.

Musical notation for measures 104-105. The top staff shows a treble clef with a melodic line starting at measure 104. The bottom staff shows a guitar tablature with fret numbers 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6, 9, 9, 6, 7, 4, 4, 7, 6, 9, 4, 9, 4, 9, 9. The instruction "let ring" is written above the tablature.

Musical notation for measures 106-107. The top staff shows a treble clef with a melodic line starting at measure 106. The bottom staff shows a guitar tablature with fret numbers 6, 7, 4, 4, 7, 6, 4, 7, 4, 7, 6, 9, 9, 6, 7, 4, 4, 7, 6, 9, 4, 9, 4, 14, 14. The instruction "let ring" is written above the tablature.

108

let ring

TAB

(14) 14 14 14 14 14 14 (14) 14 14 14 14 14

9 11 12 12 11 11 11 11 9 11 12 12 11 11 11 11

110

let ring

TAB

(14) 14 14 14 14 14 (14) 14 14 14 14 9

9 11 12 12 11 11 11 11 9 11 12 12 11 11 11 11

112

let ring

TAB

(9) 12 12 12 14 14 (14) 14 14 14 14 9

9 11 12 12 11 11 11 11 9 11 12 12 11 11 11 11

114

let ring

TAB

(9) 12 12 12 14 14 (14) 14 14 14 14 9

9 11 12 12 11 11 11 11 9 11 12 12 11 11 11 11

rall.

Musical notation for measures 146-151. The top staff is a treble clef with a 14/6 time signature. It contains six measures of music with notes, accidentals (sharps), and dynamic markings (v). Below the staff is a dashed line with the instruction "let ring". The bottom staff is a guitar tablature with six lines, showing fret numbers (9, 11, 12) and bar lines.

Musical notation for measures 152-157. The top staff is a treble clef with a 14/8 time signature. It contains six measures of music with notes, accidentals (sharps), and dynamic markings (v). Below the staff is a dashed line with the instruction "let ring". The bottom staff is a guitar tablature with six lines, showing fret numbers (9, 11, 12) and bar lines.

7

let ring

TAB

5-7 5-5 5-5 5-5 5-7 5-5 5-5 5-5 5-8 7-5 5-5

0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0

9

let ring

TAB

5-7 5-5 5-5 5-5 5-7 5-5 5-5 5-5 5-7 5-5 5-5 5-5

0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0

11

let ring

TAB

5-7 5-5 5-5 5-5 5-7 5-5 5-5 5-5 7-8 7-5 5-5 5-5 5-0 5-5 5-5 0-2 0-2 3-5 3-5

0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 8-5 0-5 5-3 2-0 0-2 2-3 5-5 5-3

2.
14

let ring

TAB

0-0 0-2 0-2 3-5 3-7 5-0 0-10 10-12 10-10 12

B

Musical notation for measures 16-17. The top staff shows a treble clef with a key signature of one flat (Bb) and a common time signature. The music features a melodic line with accents (>) and vibrato (>v) markings. The bottom staff shows guitar tablature for the Treble (T), Alto (A), and Bass (B) strings. Measure 16 starts with a dynamic marking of *mf* and includes the instruction "let ring" with a dashed line. Measure 17 continues the melodic pattern.

Musical notation for measures 18-19. The top staff shows a treble clef with a key signature of one flat (Bb) and a common time signature. The music features a melodic line with accents (>) and vibrato (>v) markings. The bottom staff shows guitar tablature for the Treble (T), Alto (A), and Bass (B) strings. Measure 18 includes the instruction "let ring" with a dashed line. Measure 19 continues the melodic pattern.

Musical notation for measures 20-21. The top staff shows a treble clef with a key signature of one flat (Bb) and a common time signature. The music features a melodic line with accents (>) and vibrato (>v) markings. The bottom staff shows guitar tablature for the Treble (T), Alto (A), and Bass (B) strings. Measure 20 includes the instruction "let ring" with a dashed line. Measure 21 continues the melodic pattern.

Musical notation for measures 22-23. The top staff shows a treble clef with a key signature of one flat (Bb) and a common time signature. The music features a melodic line with accents (>) and vibrato (>v) markings. The bottom staff shows guitar tablature for the Treble (T), Alto (A), and Bass (B) strings. Measure 22 includes the instruction "let ring" with a dashed line. Measure 23 continues the melodic pattern.

33

let ring

T
A
B

35

let ring

T
A
B

B

37

let ring

T
A
B

39

let ring

T
A
B

42 >

let ring ----| V let ring ----| V let ring ----| □ V let ring ----|

T 12 12 12 13 12 7 7 7 7 8

A 12 12 12 12 7 7 7 7 3 3 3 3 5

B 10 12 12 12 5 7 7 7 2 3 3 3 0 0 2 3 2 3 2 0

44 >

let ring ----| V let ring ----| V let ring ----| □ V let ring ----|

T 12 12 12 13 12 7 7 7 7 8

A 12 12 12 12 7 7 7 7 3 3 3 3 5

B 10 12 12 12 5 7 7 7 2 3 3 3 0 0 2 3 2 3 2 0

46

let ring ----| let ring ----|

T 7 5 0 5 0 7 5 0 5 7 9 8 0 8 9 9 8 7 8 10

A 7 5 0 5 0 7 5 0 5 7 9 8 0 8 9 9 8 7 8 10

B 6 6 8 8

C

48

let ring ----| let ring ----|

T 12 7 8 10 12 14 15 17 19 17 19 15 17 14 17 14 15

A 12 7 8 10 12 14 15 17 19 17 19 15 17 14 17 14 15

B 12 7 8 10 12 14 15 17 19 17 19 15 17 14 17 14 15

50

TAB

14-15-14 17-14-15 15-12 12-14 10-10 14 14-10 10-12-7 10-7 9 8

52

TAB

9 7-10 7-12 8-12-8 12-8 12-7 12-7 10-7 10-7

54

TAB

9-7-6-7-10-11-12-10-9-10 5-6 7-5-4-5-8-9-10-8-7-8-10-11

56

8va

TAB

12 14-15-17-19 14-15-17 19 22-20-24-20-19 (19)-20-22-17

58

TAB

(17)-19-20-15 17-19-14 17 14-15 14-15-14 17-14-15 15-12 15-14-12

60

T
A
B

62

T
A
B

B

63

let ring ---- | V let ring ---- | V let ring ---- | □ V let ring ---- |

T
A
B

65

let ring ---- | V let ring ---- | V let ring ---- | □ V let ring ---- |

T
A
B

67

let ring ---- | V let ring ---- | V let ring ---- | □ V let ring ---- |

T
A
B

69 >

let ring ----| V let ring ----| V let ring ----| □ V let ring ----|

TAB

12 12 12 12 13 12 12 7 7 7 7 8 3 3 3 3 5 2 3 2 3 2 0

10 12 12 12 12 5 7 7 7 7 2 3 3 3 0 0 2 3 0 3 2 0

71

let ring -----| let ring ----| let ring -----| let ring -|

TAB

0 0 5 5 7 5 0 5 7 9 8 0 8 9 9 8 0 8 0

6 7 5 5 6 7 5 5 7 8 9 8 8 9 9 8 8 8

73

let ring -----| let ring ----| let ring -----| V □ V □ V

TAB

0 0 5 5 7 5 0 5 7 10 10 10 10 10 0 0 0 0 0

6 7 5 5 6 7 5 5 7 9 8 0 8 9 9 8 8 8 8 8 8 8 8

$\text{♩} = 290$

D

75

let ring -----|

TAB

5 8 8 8 8 5 5 5 5 5 5 8 8 8 8 10 12 12 12

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

77

let ring -----|

TAB

5 8 8 8 8 5 5 5 5 5 5 3 3 3 3 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

79

let ring

TAB

5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5

0 0

81

let ring

let ring -|

TAB

5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5

0 0

10 10

0 0

83

let ring

TAB

5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5

0 0

85

let ring

let ring

let ring -|

TAB

5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5

0 0

7 8 7 5 5 5 5 5 5 5 5 5 5 8 7 5 5 5 5 5 5 5 5 5

0 0

87

let ring

TAB

5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5 5 7 5 5 5 5

0 0

89

let ring

TAB

5 7 5 5 5 5 5 5 7 5 5 5 5 10 10 10 10 10 10 10
 0

91

let ring

TAB

5 7 5 5 5 5 5 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
 0

93

let ring

TAB

5 7 5 5 5 5 5 5 7 5 5 5 5 5 5 7 8 7 5 5 5 5 5 5 0 5 5 5
 0 8 5 3 2

95

let ring

TAB

0 0 2 0 2 3 5 3 0 3 0 5 7 8 7 5 5 5 5 5 5 0 5 5 5 5 0 0 2 0 2 3 5 3 0 3 0
 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 8 5 5 5 5 0 0 2 0 2 3 5 5 3 0

98

f
let ring let ring ----- | let ring --- | let ring -- | let ring | let ring -- | let ring ----- |

T
A
B

5 7 8 7 5 5 5 5 5 5 0 5 5 5 0 0 2 3 5 3 7 5 0 0 10 10 10 12 12 12 13 13

101

let ring

T
A
B

14 12 10 9 9

Laniakea

Music by Andrea Vocaturo

MFT
①=A ⑤=F
②=D ⑥=Bb
④=C

♩ = 96

Volume Swells Ad Lib

Intro

1 2

T
A
B

0 0 0 0 0 2

1 1 1 1 0 0

A Tempo

3 4

mp
let ring

T
A
B

<12> <12> <12> <12> <12> <12> <12> <12> <12> <12> <12> <12>

A

5 6

let ring

mf

T
A
B

<12> <12> <12> <12> <12> <12> <12> <12> 9 12 0 0

7 *mp* *let ring* *mf*

TAB: <12> <12> <12> <12> | <12> <12> <12> <12>

9 *mp* *let ring* *mf*

TAB: <12> <12> <12> <12> | <12> <12> <12> <12>

11 *mp* *let ring* *mf*

TAB: <12> <12> <12> <12> | <12> <12> <12> <12>

1. 13 *let ring*

TAB: 1 1 1 1 | 1 1 1 1

27 *let ring*

TAB

29 *f let ring*

TAB

2. 31 *mf let ring*

TAB

33 *let ring* 34 *f* 35 *mf*

TAB

C

Musical notation for measures 47-48. Measure 47 starts with a treble clef, a key signature of one flat (B-flat), and a 7/8 time signature. It features a melodic line with eighth and sixteenth notes, some with accents (>) and slurs. The bass line consists of single notes. Measure 48 continues the melodic line. A dynamic marking of *f* (forte) is present. Below the staff is a dashed line with the text "let ring".

T	8	6	8	8	8	6	8	6	8	4	8	6	8	10	6
A														10	6
B	0	0	0	0	0	0	0	0	0	0	0	0	0	13	10

Musical notation for measures 49-50. Measure 49 starts with a treble clef, a key signature of one flat, and a 7/8 time signature. It features a melodic line with eighth and sixteenth notes, some with accents (>) and slurs. The bass line consists of single notes. Measure 50 continues the melodic line. A dynamic marking of *f* is present. Below the staff is a dashed line with the text "let ring".

T	(6)	6	6	6	6	6	6	6	8	8	8	6	8	6	8
A	(6)	6	8	6	6	5	5	3							
B	(10)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Musical notation for measures 51-52. Measure 51 starts with a treble clef, a key signature of one flat, and a 7/8 time signature. It features a melodic line with eighth and sixteenth notes, some with accents (>) and slurs. The bass line consists of single notes. Measure 52 continues the melodic line. A dynamic marking of *f* is present. Below the staff is a dashed line with the text "let ring".

T	6	8	6	8	6	8	10	6	(6)	6	6	6	6	6	6
A									(6)	6	8	6	6	5	5
B									(10)	0	0	0	0	0	0

Musical notation for measures 53-54. Measure 53 starts with a treble clef, a key signature of one flat, and a 6/8 time signature. It features a melodic line with eighth and sixteenth notes, some with accents (>) and slurs. The bass line consists of single notes. Measure 54 continues the melodic line. A dynamic marking of *mf* (mezzo-forte) is present. Below the staff is a dashed line with the text "let ring".

T	3	4	3	4	3	3	3	3	4	3	3	3	6	6	6
A															
B	3	3	3	3	3	5			3	3	3	6	6	6	6

55 *let ring* ----- | 56 *let ring* ----- |

T 3 4 3 4 3 3 3 3 8
 A 3 3 3 3 3 3 3 3 6 6 6
 B 3 5 3 6

57 *f let ring* ----- | 58 *let ring* ----- |

T 8 6 8 8 8 8 6 8 6 8 10 6
 A 8 6 8 6 6 6 6 5 6 8 6 6
 B 0 0 0 0 0 0 0 0 0 0 13 10

59 *let ring* ----- | 60 *let ring* ----- |

T (6) 6 6 6 6 6 6 8 6 8 8 8 6 8
 A (6) 6 8 6 6 5 5 3 8 6 8 8 6 6
 B (10) 0 0 0 0 0 0 0 0 0 0 0 0 0

61 *let ring* ----- | 62 *let ring* ----- |

T 6 8 6 8 6 8 10 6 (6) 6 6 6 6 6
 A 5 5 6 6 6 6 6 5 6 6 5 5 3
 B (10) 0 0 0 0 0 0 0 0 0 0 0 0 0

63 *mf* *let ring* ----- | *let ring* ----- |

TAB 3 4 3 4 3 3 3 3 | 4 3 3 3 6 6 6

B 3 3 3 3 5 3 6 6

65 *let ring* ----- | *let ring* ----- |

TAB 3 4 3 4 3 3 3 3 | 4 3 3 3 6 4 4 4

B 3 3 3 3 5 1 4 4

67 *let ring* ----- | *let ring* ----- |

TAB 3 4 3 4 3 3 3 3 | 4 3 3 3 8 6 6 6

B 3 3 3 3 5 3 6 6

69 *let ring* ----- | *let ring* ----- |

TAB 3 4 3 4 3 3 3 3 | 4 3 3 3

B 3 3 3 3 5 1 3 3

71 72 73 74

f
let ring

T
A
B

D

75 76 77 78

mp
let ring

f

T
A
B

79 80

mp
let ring

f

T
A
B

81 82

mp
let ring

f

T
A
B

83 *mp* let ring *f*

TAB <7> <7> <7> <7> <7> <7> <7> <7> 3 4 4 0

85 let ring

TAB 7 6 4 4 4 4 7 6 4 6 4 4

87 *mp* let ring *f*

TAB <7> <7> <7> <7> <7> <7> <7> <7> <7> <7> 7 6 6 6 7 6 6 6

TAB <7> <7> <7> <7> <7> <7> <7> <7> <7> <7> 4 4 4 4 4 4 4 4

91 let ring

TAB 7 4 7 4 7 4 7 4 7 4 7 4

TAB 6 4 6 4 6 4 6 4 6 4 6 4

93 *let ring*

T
A
B

4 1 4 1 1 4 | 4 1 4 1 1 4

3 1 3 1 4 1 | 3 1 3 1 4 1

95 *let ring*

T
A
B

9 6 10 6 6 10 | 9 6 10 6 6 10

0 9 0 9 0 9 | 0 9 0 9 0 9

97 *let ring*

T
A
B

9 6 10 6 6 10 | 9 6 10 6 6 10

0 9 0 9 0 9 | 0 9 0 9 0 9

E 99 *let ring* 100 **3x**

T
A
B

13 <12> <12> <12> <12> <12> | <12> <12> <12> <12> <12> <12>

<12> <12> <12> <12> <12> <12> | <12> <12> <12> <12> <12> <12>

111 *mf*
let ring

TAB

21	18	16-15	15	21	18	16-15	15	21	18	16-15	15
15	15	15	15	15	15	15	15	15	15	15	15

114 *f*
let ring

115 *f*
let ring

116 *f*
let ring

TAB

21	18	16-15	15	13	13	10	(10)	10	8
15	15	15	15	13	13-17	13	10	10	10
				13			10	10	13

117 *f*
let ring

118 *f*
let ring

TAB

(8)	8	8	11	8	6	(6)	6	10	6	6
8	8	8				6	6	6	10	6

119 *f*
let ring

120 *f*
let ring

TAB

5	4	6	5	4	6	5	4	6	5	4	6
8	6	4	6	8	8	8	6	4	6	8	8

121 122

let ring ----- | *let ring* ----- |

T 5 4 5 4 5 4 5 4
 A 8 6 6 8 6 8 6 8
 B 0 0

123 124 **3x**

let ring ----- | **3x**

T 13 <12> 13 <12> <12> <12> <12> <12> <12> <12>
 A <12> <12> <12> <12> <12> <12> <12> <12>
 B <12> <12> <12> <12> <12> <12> <12> <12>

125 126

let ring ----- |

T 13 <12> 13 <12> <12> <12> <12> <12> <12> <12>
 A <12> <12> <12> <12> <12> <12> <12> <12>
 B <12> <12> <12> <12> <12> <12> <12> <12>

127 128 129

mf
let ring ----- |

T 21 18 16-15 15 21 18 16-15 15 21 18 16-15 15
 A 15 15 15 15 15 15 15 15 15 15 15 15
 B 15 15 15 15 15 15 15 15

130 *f* *let ring* -----|

21 18 16-15 15 15 15 15

15 15 15 15 15 15 15

131 *let ring* -----|

13 13 13 10

13 13-17 13

132 *let ring* -----|

(10) 10 10 8

10 10-13 10

133 *let ring* -----|

(8) 8 8 6

8 8 8 11 8

134 *let ring* -----|

(6) 6 6

6 6 6 10 6

135 *let ring* -----|

5 5 9 8 5 9 8

10 8 9 8 10 10

136 *let ring* -----|

5 5 9 8 5 9 8

10 8 9 8 10 10

137 *let ring* -----|

5 5 9 8 5 9 8

10 8 9 8 10 10

138 *let ring* -----|

5 5 9 8 5 9 8

10 8 9 8 10 10

F

139 140 141

let ring

T
A
B

142 143

let ring

T
A
B

144 145 146

let ring

T
A
B

147 148

let ring

T
A
B

149 150 151

T
A
B

152 153

let ring ----- | *let ring* ----- |

T
A
B

154 155 156

T
A
B

157 158

let ring ----- | *let ring* ----- |

T
A
B

159 160 161

let ring ----- |

T
A
B

162 *let ring* *let ring*

TAB: 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0

B: 2 2 0 0 2 0 | 2 2 0 0 2 0

J = 92 *rall.*

164 *let ring* *let ring*

TAB: 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0

B: 2 2 0 0 2 0 | 2 2 0 0 2 0

J = 54

G

166 *mp* *let ring*

TAB: 12 0 0 0 12 0 | 8 0 0 0 8-10 0

B: 0 0 0 0 0 0 | 0 0 0 0 0 0

168 *let ring*

TAB: 5 0 0 0 3 5 3 5 3 1 | (1) 2 3 2 3 0 3

B: 0 0 0 0 0 0 | 2 2 2 2 2 2

170

let ring

TAB

172

let ring

TAB

174

let ring

TAB

f

176

let ring

let ring

TAB

Storms

Music by A. Vocaturo

MFT

- ①=A ⑤=F
- ②=D ⑥=Bb
- ④=C

♩ = 132

sim.

Intro

1

p > *p* > *p* > *p* >

T
A
B

0 0 7 9 9 7 9 9 7 9 9 7 9 9 7 9 9 7

9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

2

T
A
B

0 0 7 9 9 7 9 9 7 9 9 7 9 9 7 9 9 7

9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

3

T
A
B

0 0 7 9 9 7 9 9 7 9 9 7 9 9 7 9 9 7

9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

5

mp > > *mf* >

T
A
B

0 0 6 9 9 6 9 9 6 9 9 6 9 9 6 9 9 6

8

18

let ring

T
A
B

20

let ring

T
A
B

22

let ring

T
A
B

24

let ring

T
A
B

26

let ring

T
A
B

28

let ring

T
A
B

7 7 7 7 7 7 7 7 7 7 | 4 4 4 4 4 4 4 4 4 4

9 9 9 9 9 9 9 9 9 9 | 6 6 6 6 6 6 6 6 6 6

30

let ring

T
A
B

0 0 0 0 0 0 0 0 0 0 | 4 4 4 4 4 4 4 4 4 4

6 6 6 6 6 6 6 6 6 6 | 6 6 6 6 6 6 6 6 6 6

32

let ring

T
A
B

0 0 0 0 0 0 0 0 0 0 | 9 0 9 0 9 0 9 0 9 0

6 6 6 6 6 6 6 6 6 6 | 8 6 9 9 6 9 9 6 9 9

34

let ring

T
A
B

0 0 0 0 0 0 0 0 0 0 | 9 0 9 0 9 0 9 0 9 0

8 9 6 6 9 6 6 9 6 6 | 8 6 9 9 6 9 9 6 9 9

36

let ring

T
A
B

0 0 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0

8 9 6 6 9 6 6 9 6 6 | 9 7 9 9 7 9 9 7 9 9

A Tempo

49

let ring ----- | let ring ----- |

TAB: 0-1 3 | 3 2 3 | 3 0 3 2 3 0 3 2 5 3-6 3 6

51

let ring ----- | let ring ----- | let ring ----- |

TAB: 0 2 3 3 2 5 3-6 3 3 6 | 7 6 0 3 5 0 6 0 3 6 | 0 0 5 5 6 6 6 2 4 4 7 6

53

let ring ----- | let ring ----- | let ring ----- | let ring ----- |

TAB: 7 4 6 7 4 7 6 9 7-10 7 7 10 | 4 4 6 7 4 7 6 9 7-10 7 7 10

55

TAB: 9 9 | 7 6 4 4

$\text{♩} = 132$
C

56 $\frac{20}{16}$

let ring *p*

TAB

9 0 7 9 9 0 7 9 9 0 7 9 9 0 7 9

57 $\frac{20}{16}$

let ring *mp*

TAB

7 7 7 7 7 7 7 7 9 0 9 0 9 0 9 0 7 9

59 $\frac{20}{16}$

let ring *mf*

TAB

7 7 7 7 7 7 7 7 9 0 9 0 9 0 9 0 6 9 9 6 9 9 6 9

61 $\frac{20}{16}$

let ring

TAB

0 9 6 9 9 6 9 9 6 9 9 0 9 0 9 0 9 0 6 9 9 6 9 9 6 9

63 $\frac{20}{16}$

let ring

TAB

0 9 6 9 9 6 9 9 6 9 9 9 0 9 0 10 0 10 0 7 9 9 7 9 9 7 9

65

let ring

T
A
B

67

let ring

T
A
B

69

let ring

T
A
B

71

let ring

T
A
B

73

let ring

T
A
B

75

let ring

TAB

4 4 4 4 4 4 4 4 4 4 | 7 0 7 0 7 0 0 6

4 6 6 6 6 6 6 6 4 | 4 6 6 6 6 6

77

let ring

TAB

9 9 9 9 9 9 9 9 9 9 | 7 7 7 7 7 7 7 7 7 6

6 6 6 6 6 6 6 6 6 | 6 6 6 6 6 6 6 6

79

let ring

TAB

5 5 5 5 5 5 5 5 5 5 | 4 0 4 0 4 0 4 0 4 0

6 7 7 6 7 7 6 7 7 6 | 1 4 4 4 4 4 4 4 4 4

6 | 1

81

let ring

TAB

4 4 4 4 4 4 4 4 4 4 | 0 0 0 0 0 0 0 0 0 0

6 4 6 6 4 6 6 4 6 6 | 6 0 6 6 0 6 6 0 6

83

let ring

TAB

4 4 4 4 4 4 4 4 4 4 | 7 0 7 0 7 0 0 6

2 4 4 4 4 4 4 4 4 4 | 4 6 6 6 6 6

85

let ring

TAB

87

let ring

TAB

89

let ring

TAB

91

let ring

TAB

94

let ring

TAB

106

let ring

mp

TAB

4 4 5 4 0 4 0 2 4 4 2 | 0 0 0 0 0 0 0 0 0 0 0 0

6 4 6 6 4 4 2 4 4 2 | 6 0 6 6 0 6 6 6 6 6 6 6

108

let ring

mf

TAB

0 0

6 6 6 6 6 6 6 6 6 6 6 6 9 6 6 9 6 6 9 6 9 6 6

8

110

let ring

mf

TAB

0 0

6 9 9 6 9 9 6 9 9 6 11 8 8 11 8 8 11 8 8 11 8 8 11 6

8

112

let ring

mf

TAB

0 0

9 8 8 9 8 8 9 8 8 9 11 8 8 11 8 8 11 8 8 11 8 8 11 6

8

114

let ring

mf

TAB

0 0

9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 8 8 9 6

8

E

115

let ring

TAB

12 12 12 12 12 12 12 12 | 12 11 12 11 12 11 12 11

11 11 11 11 11 11 11 11 | 9 9 9 9 11 9 11 9

117

let ring

TAB

12 9 12 9 12 9 12 9 | 10 0 10 0 9 0 9 0

8 11 8 8 11 8 8 11 8 | 9 9 9 9 9 9 6 6

119

let ring

TAB

9 0 9 0 9 0 9 0 | 8 0 8 0 8 0 8 0

7 7 7 7 7 7 7 7 | 8 8 8 8 8 8 9 9

6

121

let ring

TAB

7 0 7 0 7 0 7 0 | 2 0 2 0 2 0 2 0

9 5 9 9 5 9 9 5 9 | 4 5 4 4 5 4 5 4 4 5 4

6

123

let ring

TAB

7 0 7 0 7 0 7 0 | 2 5 2 5 2 5 2 5

4 5 4 4 5 4 4 5 4 | 4 5 4 4 5 4 2 5 2 0 5 0

125

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	7	7	5	7	7	5	7	9	12	12	9	12	11	11	11
0								0							

127

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	7	7	5	7	7	5	7	9	12	12	9	12	11	11	11
0								0							

129

let ring

TAB

0	0	0	0	0	0	0	0	3	0	3	0	3	0	3	0
10	10	10	10	10	10	10	10	0	5	5	5	5	4	4	4
7								5							

131

let ring

TAB

0	0	0	0	0	0	0	0	3	0	3	0	3	0	3	0
10	10	10	10	10	10	10	10	0	5	5	5	5	5	0	5
7								5							4

133

let ring

TAB

1	0	1	0	1	0	0	0	3	0	3	0	3	0	3	0	1	0	1	0	1	0	0	0
5	5	5	5	5	5	0	5	5	5	5	5	5	5	5	0	5	5	5	5	5	5	0	5
5								5							4	5							

136

let ring

T
A
B

F

139

T
A
B

1.

141

T
A
B

2.

143

T
A
B

♩ = 106

Musical notation for measures 145-150. The piece is in 4/4 time with a tempo of 106. The key signature has two flats. The notation includes a treble clef, a key signature of two flats, and a 4/4 time signature. The music features a melodic line with accents and vibrato, and a bass line with fret numbers. The dynamic is marked *mf*. The instruction "let ring" is present. The fret numbers for the bass line are: 9, 9, 10, 9, 10, 10, 10, 10, 12, 12, 12, 12, 12, 12, 12, 12, 10, 10.

mf
let ring — A.H. A.H. A.H. A.H. A.H. A.H. — let ring — A.H. A.H. A.H. A.H. A.H. A.H. A.H. —

T
A
B

Musical notation for measures 147-150. The piece is in 4/4 time with a tempo of 106. The key signature has two flats. The notation includes a treble clef, a key signature of two flats, and a 4/4 time signature. The music features a melodic line with accents and vibrato, and a bass line with fret numbers. The dynamic is marked *mf*. The instruction "let ring" is present. The fret numbers for the bass line are: 12, 10, 12, 12, 12, 12, 12, 10, 9, 9, (9).

let ring — A.H. A.H. A.H. A.H. A.H. —

T
A
B

♩ = 140
G

Musical notation for measures 149-150. The piece is in 2/16 time with a tempo of 140. The key signature has two flats. The notation includes a treble clef, a key signature of two flats, and a 2/16 time signature. The music features a melodic line with accents and vibrato, and a bass line with fret numbers. The dynamic is marked *p*. The instruction "let ring" is present. The fret numbers for the bass line are: 5, 1, 5, 1, 5, 1, 5, 1, 6, 3, 6, 3, 6, 3, 6, 3.

p
let ring —

T
A
B

Musical notation for measures 151-152. The piece is in 2/16 time with a tempo of 140. The key signature has two flats. The notation includes a treble clef, a key signature of two flats, and a 2/16 time signature. The music features a melodic line with accents and vibrato, and a bass line with fret numbers. The instruction "let ring" is present. The fret numbers for the bass line are: 5, 1, 5, 1, 5, 1, 5, 1, 3, 0, 3, 0, 3, 0, 3, 0.

let ring —

T
A
B

153

mp
let ring

TAB

5 1 5 1 5 1 5 1 | 6 3 6 3 6 3 6 3

0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0

155

let ring

TAB

5 1 5 1 5 1 5 1 | 3 0 3 0 3 0 3 0

0 3 0 0 3 0 0 3 | 0 0 0 0 0 0 0 0

157

mf
let ring

TAB

3 0 3 0 3 0 3 0 | 3 0 3 0 3 0 3 0

3 3 3 3 3 3 3 3 | 2 3 3 3 3 3 3 3

159

let ring

TAB

3 0 3 0 3 0 3 0 | 3 0 3 0 3 0 3 0

0 1 0 0 1 0 0 1 | 3 3 3 0 3 3 3 3

161

let ring

TAB

3 3 3 3 3 3 3 3 | 3 3 3 0 3 3 3 0

0 3 3 3 3 3 3 3 | 0 3 3 3 3 3 3 3

172

let ring

TAB

1	1	1	1	1	1	1	1	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6
0	0	0	0	0	0	0	1	0	3	5	5	5	5	3	5	5	5	3	5	5	3	5	5
									3					3									

174

let ring

TAB

3	3	3	3	3	3	3	3	5	6	4	5	6	4	5	6	4	5	6	4	5	6	4	5
4	5	5	5	5	5	5	5	4	5	5	5	4	5	5	4	5	5	4	5	5	4	5	5
								4						4									

176

let ring

TAB

8	9	8	9	8	9	8	9	7	8	8	7	8	8	7	8	11	12	10	11	11	10	11	12	10	11	11	10	11	
7	8	8	7	8	7	8	8	7	8						10	11	11	11	11	11	11	10	11	11	11	10	11		
								7							7														

178

let ring

TAB

18	12	18	12	18	12	18	12	15	12	15	12	15	12	15	12	12	15	12	12	12	12	12	12	12	12	12	12	12	
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

180

let ring

TAB

12	16	12	16	12	16	12	16	12	16	15	12	16	15	12	16	15	12	16	15	12	16	15	12	16	15	12	16	15	12
14	15	12	14	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12	14	12

182

let ring

T 18 17 17 17 18 17 17 17 18 12 18 12 12 12 12 12 15 12 15 12

A 19 17 17 17 19 17 17 17 12 15 12 12 12 12 12 15 12 15 12

B 17 17 17 17 17 17 17 17 12 12 12 12 12 12 12 12 12 12 12 12

184

mp let ring

T 8 8 8 8 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5

A 8 8 8 8 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5

B 14 14 14 14 14 14 14 14 10 10 10 10 10 10 10 10 10 10 10 10

186

mf let ring

T 8 8 8 8 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5

A 8 8 8 8 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5

B 14 14 14 14 14 14 14 14 10 10 10 10 10 10 10 10 10 10 10 10

188

mp let ring

T 8 0 6 0 5 0 3 0 0 6 0 0

A 7 0 5 0 3 0 2 0 0 5 0 0

B 7 0 5 0 3 0 2 0 0 5 0 0

190

let ring *mf*

T 1 0 1 0 1 0 1 0 8 0 6 0 5 0 3 0 0

A 0 0 0 0 0 0 0 0 7 0 5 0 3 0 2 0 0

B 3 3 3 3 3 3 3 3 7 0 5 0 3 0 2 0 0

192 *5/16* *let ring*

T
A
B

194 *rall.* *f* *let ring* *5/16*

T
A
B

196 *mf*

T
A
B

Two Worlds United

Words & Music by Andrea Vocaturo

♩ = 98

Intro

A Verse

mf
She watch- es close- ly While the
Her beau- ty and out- si- de what e-
world's ig- nor- ing she cri- es si- lent- ly
very- one no- ti- ces A close look inside her heart
re- veals but no- one's e- ver lis- ten- ing
a bunch of bro- ken pro- mi- ses

B Verse

He saw her brief-ly and his
Scorn and ag- gres- sion forced his
world had trem- bled He ponders se- cret- ly
pride to crum- ble Doubts and in- se- cu-
ri- ty but his will is fee- ble
pierced his heart like need- les

33

Chorus

37 Fmi13 Cmaj9 Fmi13

Sud- den- ly will- ing- ly he walks

40 Ami11 Abmaj9(#11)

to her

43 Fmi13 Cmaj9 Fmi13

takes her hand looks in- to her frigh-

46 Ami11 Abmaj9(#11)

tened eyes

49 Fmi13 Cmaj9 Fmi13

walk with me con- fide in me Two worlds

52 Ami11 Abmaj9

col- li- ded

55

D Bridge

57

61

Da Coda

63 Dmi9/A Gmaj9

They're hold- ing sweet- ly

E♭maj7(#11) Cmi7(add6/9)

65 as if no- one's watch- ing

Chorus
Fmi13 Cmaj9 Fmi13

71 In- stant- ly clear- ly they knew

Ami11 A♭maj9(#11)

74 it all

Fmi13 Cmaj9 Fmi13

77 the cer- tain- ty that they be- long to one

Ami11 A♭maj9(#11)

80 a- no- ther

Fmi13 Cmaj9 Fmi13

83 Plain- ly per- fect- ly two worlds

Ami11 A♭maj9

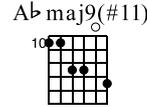
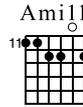
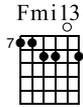
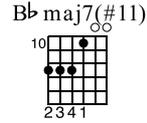
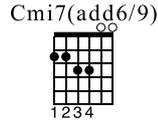
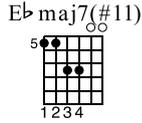
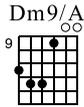
86 u- nit ed

A♭maj9

A♭maj9

Two Worlds United

Words & Music by Andrea Vocaturo



♩ = 98

Intro

S-Gt

mf
let ring

let ring

Dm9/A Gadd9

let ring

E \flat maj7(#11) **Cmi7(add6/9)**

let ring

T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	7	7	7	7	7	7	7	7	7	3	3	3	3	3	3	3	3
E	5	5	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2

B \flat maj7(#11) **Gadd9**

let ring

T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	10	10	10	10	10	9	9	9	12	12	12	12	12	12	12	12	12
E	12	12	12	12	12	12	12	12	9	9	9	9	9	9	9	9	9

E \flat maj7add#11 **Cmi7add6/9**

let ring

T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	7	7	7	7	7	7	7	7	3	3	3	3	3	3	3	3	3
E	5	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2

A Verse

let ring

T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	9	9	9	9	9	9	9	9	12	12	12	12	12	12	12	12	12
B	12	12	12	12	12	12	12	12	11	11	11	11	11	11	11	11	11
E	11	11	11	11	11	11	11	11	9	9	9	9	9	9	9	9	9

15

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

17

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	12	12	12	12	12	0	12	12	12	12	12	12	12	12	12	12	12
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9

19

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

21

let ring

TAB

0	2	5	0	5	2	0	4	5	0	5	4	5	4	2	5	0	5	2	0	4	5	0	5	4	5	4	
0	2	5	0	5	2	0	4	5	0	5	4	5	4	0	2	5	0	5	2	0	4	5	0	5	4	5	4

23

let ring

TAB

0	2	5	0	5	2	0	4	5	0	5	4	5	4	0	2	5	0	5	2	0	4	5	0	5	4	5	4
0	2	5	0	5	2	0	4	5	0	5	4	5	4	0	2	5	0	5	2	0	4	5	0	5	4	5	4

B Verse

25

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11

27

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

29

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
12	12	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0

31

let ring

TAB

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

33

let ring

TAB

0	5	0	5	0	5	0	5	4	5	4	5	4	0	5	0	5	4	5	4						
2	5	0	5	2	0	4	5	0	5	4	5	4	2	5	0	5	2	0	4	5	0	5	4	5	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

35

let ring

TAB

Chorus
Fmi13

37

let ring

TAB

Fmi13

Ami11

39

let ring

TAB

Ab maj9(#11)

41

let ring

TAB

43

let ring

T	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5
A	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5
B	7	7	7	7	7	7	7	2	2	2	2	2	2	2	2	2

45

let ring

T	8	8	8	8	8	8	8	12	12	12	12	12	12	12	12	12
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	7	7	7	7	7	7	7	11	11	11	11	11	11	11	11	11

47

let ring

T	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

49

let ring

T	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5
A	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5
B	7	7	7	7	7	7	7	2	2	2	2	2	2	2	2	2

1.

59

let ring

T
A
B

9 9 9-10 9 9 10-12-10 10-12 7 (7) 7 7 10 12

2.

61

let ring

let ring

let ring

T
A
B

9 9 9-10 9 9 10-12-10 10-12 12 12 12 10 12

Da Coda

63

let ring

T
A
B

0 0 0 12 11 11

65

let ring

T
A
B

0 0 7 7 5 5

67

let ring

T
A
B

0 2 5 0 5 2 0 4 5 0 5 4 5 4 2 5 0 5 2 0 4 5 0 5 4 5 4

77

let ring

T	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5
A	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5
B	7	7	7	7	7	7	7	2	2	2	2	2	2	2	2	2

79

let ring

T	8	8	8	8	8	8	8	12	12	12	12	12	12	12	12	12
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	7	7	7	7	7	7	7	11	11	11	11	11	11	11	11	11

81

let ring

T	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

83

let ring

T	8	8	8	8	8	8	8	5	5	5	5	5	5	5	5	5
A	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5
B	7	7	7	7	7	7	7	2	2	2	2	2	2	2	2	2

B Chorus

30 $B\flat$ mi11 Fmi/C $A\flat$ maj9 Fmi

Cur-tains fall-ing walls crush-ing down

35 Fmi(#5) Fmi Fmi(#5) $B\flat$ mi11 $G\flat$ maj9

It's eas-y just

40 Fmi(add9)/C C7sus(#5) C7 Fmi

use your breath-ing

45

49 $E\flat$ 9

C Verse

52 Fmi $E\flat$ maj9

A-lea-to-ry states of sub-stance

56 Fmi $E\flat$ maj9

Il-lu-so-ry theo-ries of ex-

60 $D\flat$ maj6

ist-ence

64 Fmi Eb maj9
 Close your eyes to stop the see- ing

68 Fmi Eb maj9
 Let your mind be- come like wa- ter

72 Db maj6
 steam- ing

75 Fmi F/A

B Chorus
 78 Bb mill Fmi/C Ab maj9
 Cur- tains fal- ling walls crush- ing

82 Fmi Fmi(#5) Fmi Fmi(#5)
 down It's

86 Bb mill Gb ma9 Fmi(add9)/C C7sus(#5) C7
 eas- y just use your

C Bridge
 91
 breath- ing

95

99

103

107

112

D Fmi Eb maj9

All will pass and things will per- ish

Fmi Eb maj9

What we have is this mo- ment to

1 Db maj6

cher- ish

Fmi Eb maj9

Don't com- plain but do ab- plain sta- in

Fmi Eb maj9

No de- sire to be re- born a-

Db maj9

136

gain a-

140

gain A- gain

145

149

152

155

The Watcher

Words & Music by A. Vocaturo

MFT

- ①=A ⑤=F
- ②=D ⑥=Bb
- ④=C

♩ = 112

Intro

1

mf
let ring -----|

let ring -----| let ring -----| let ring -----|

T
A
B

3 1 3 6 0 8 8 0 0 8 7 5 5 0 8 8

5

let ring -----| let ring -----| let ring -----|

T
A
B

3 1 3 6 0 8 8 0 0 8 7 8 7 5 (5)

A Verse

10

let ring -----| let ring -----|

T
A
B

3 3 3 0 0 5 5 5

14

let ring

1.

T
A
B

18

let ring

let ring

1.

T
A
B

22

let ring

let ring

2.

T
A
B

24

let ring

let ring

2.

T
A
B

B Chorus

28

let ring -| let ring -| let ring -| let ring

3 3 3 3

TAB: 1 0 1 0 | 0 0 4 5 0 | 8 8 | 6 5 6

B: 0 0 2 0 | 3 0 4 5 0 | 0 0 0 0 | 0 0 3 3

32

let ring -| let ring -| let ring -| let ring -|

3 3 3 3

TAB: 3 1 3 | 6 3 3 5 0 | 1 0 0 0 0 | 1 1 1 3

B: 2 | 3 3 3 5 0 | 0 0 0 0 0 | 0 0 1 0 0 0

37

let ring -| let ring -| let ring -| let ring -|

1 1 1 1

TAB: 1 1 1 | 8 8 12 8 | 4 1 1 3 | 3 4 8 0

B: 0 0 1 | 0 0 8 0 | 1 1 1 3 | 7 8 0

41

let ring -| let ring -| let ring -| let ring -|

11 10 10 10

TAB: 7 10 10 | 10 9 10 | 6 8 5 6 | 10 10 6 6

B: 7 | 7 10 | 0 8 5 6 | 0 10 6 6

46

let ring -----|

let ring -----|

let ring -----|

TAB

10 6 8 8 5 6 10 6 6

0 10 6 8 0 8 5 6 0 10 6 6

Rit.

49

let ring -----|

let ring -----|

TAB

8 6 5 8 0 5 5 1 (1)

0 8 5 8 5 5 1 (1)

C Verse

52

let ring -----|

let ring -----|

TAB

1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 5 5 5 5

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 5 5 5

56

let ring -----|

let ring -----|

TAB

1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 5 5 5 5

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 5 5 5

60

let ring -----| let ring -----| let ring -----| let ring -----|

TAB

5	5	5	3	3	5	5	6
3	3	3	3	3	3	3	3

64

let ring -----| let ring -----|

TAB

1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5	5	5	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5

68

let ring -----|

TAB

1	0	0	0	1	0	0	0	1	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0

71

let ring -----| let ring -----| let ring -----| let ring let ring -----|

TAB

0	0	5	5	3	5	5	3	3	5	5	3	5	5
5	5	5	5	3	3	3	3	3	3	3	3	3	3

B Chorus

75

let ring ----- | let ring - - | let ring - - | let ring

TAB 6 3 3 3 | 1 0 1 0 | 0 0 4 5 0 | 8 8 8 8 0 0 0

79

let ring - - - | let ring - - - | let ring - - | let ring - - - - - |

TAB 6 5 8 0 | 5 6 3 2 | 3 1 3 3 | 6 3 3 5 0 | 1 0 0 0 0

83

let ring ----- | let ring - - - - - | let ring - - - - - |

TAB 1 1 0 | 1 0 0 | 1 1 1 | 8 12 8 8 0 0 0

87

let ring - - | let ring - - - - - | let ring - - - - - |

TAB 4 1 1 1 | 3 4 8 11 | 7 8 0 10 10 | 10 9 10 7

C Bridge

91

let ring

let ring

let ring

let ring

let ring

T
A
B

Sustain Chords

96

let ring

T
A
B

99

T
A
B

102

T
A
B

106

TAB

3	3	10	10	10	10
1	0	8	0	8	8
3	0	5	8	7	9
3	0	5	8	7	9
5	6	6	6	6	6

109

A.H. let ring

A.H. let ring

A.H. let ring

TAB

10	10	10	10	10	8
0	10	10	10	10	0
0	10	10	10	10	0
0	10	10	10	10	0
0	10	10	10	10	0

112

A.H. let ring

let ring

let ring

TAB

10	10	10	10	10	8
0	10	10	10	10	0
0	10	10	10	10	0
0	10	10	10	10	0
0	10	10	10	10	0

115

D

let ring

TAB

7	3	3	0	1	0
6	3	3	0	0	0
3	3	3	0	0	0
0	3	3	0	0	0
2	3	3	0	0	0

118

let ring -----|

3

T
A
B

1 0 0 0 0 0 | 0 0 5 5 5 5 | 1 0 0 0 0 0

121

let ring -----|

3

3

T
A
B

1 0 0 0 0 0 | 1 0 0 0 0 0 | 0 0 5 5 5

1. 124

let ring -----|

let ring -----|

let ring

T
A
B

5 5 3 5 5 | 3 3 5 3 5 3 | 6 3 5 3 5

1. 127

let ring -----|

3

3

3

T
A
B

5 3 5 3 | 1 0 0 0 0 0 | 1 0 0 0 0 0

130

let ring

T
A
B

133

let ring

T
A
B

136

let ring

T
A
B

139

let ring

T
A
B

142

let ring

T
A
B

145

let ring -----| let ring -----|

TAB

5		5		8		8		7	5
5		5		8		8		3	3
3	3	3	3	3	3	3	3	3	3

148

let ring -----| let ring -----|

TAB

(5)		3		1	1	3		6	
(3)		3		0	0	0		7	8
(3)		0	0	0	0	0		8	8

151

let ring -----| let ring -----| let ring -----|

TAB

0		8	7	5		3		1	1
5		8	7	5		3		0	0
5	5	8	7	0	8	8	8	0	0

Rit.

Freely

154

let ring -----| let ring -----| A.H. A.H. A.H.
let ring -----|

TAB

6		0		0		0		0	
6		0		0		0		0	
7	8	8	0	5	8	7	8	7	0

157

let ring -----

T
A
B

6 11 10

10
10
13
0
0
0

Detailed description: The image shows a musical score for guitar. The top staff is a treble clef staff with a key signature of three flats (B-flat, E-flat, A-flat) and a time signature of 4/4. It contains three notes: a quarter note on the first line (F4), a quarter note on the second line (G4), and a quarter note on the second space (A4). A measure rest symbol is present above the second note. The bottom staff is a guitar tablature staff with six lines. It contains the numbers 6, 11, and 10 on the first, second, and third lines respectively, indicating fret positions. A dashed line labeled 'let ring' spans from the first fret to the end of the measure. On the right side, there is a vertical stack of fret numbers: 10, 10, 13, 0, 0, 0, corresponding to the six strings. A wavy line with an arrow points downwards from the top staff to the bottom staff, indicating a transition or a specific playing technique.

The Watcher

Words & Music by A. Vocaturo

Standard tuning

♩ = 118

Intro

mf
let ring -----| let ring -----| let ring -----|

T
A
B

A Verse

let ring -----| let ring -----|

T
A
B

let ring -----| let ring -----|

T
A
B

let ring -----|

T
A
B

17

let ring let ring let ring

TAB

3	3	0	3	3	0	3	2	0	3	0	0
3		0	0		0	1		0	2		0

B Chorus

19

let ring -----|

TAB

6	0	0	6	3	4	0	3	3	4	8	8	0	8	6	0	7	7	7
3	3	6	3	3	3	3	3	3	3	5	8	0	8	6	0	7	7	7
														6	6	8		

23

let ring -----|

TAB

3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3																		

27

let ring -----| let ring -----| let ring -----|

TAB

6	0	0	6	3	4	0	3	3	4	8	8	0	8	6	0	5
3	3	6	3	3	3	3	3	3	3	5	8	0	8	4	5	0

Da Segno

1.

31

let ring -----|

TAB

3	5	5	3	3	3	3	5	3	5	3	3	3	3	3	3	3	3	3
3																		

C Bridge

2.

35

let ring -----|

TAB

3	3	3	3	3	3	3	3
0	0	3	0	1	0	3	0
3				3			

39

let ring -----|

let ring -----|

TAB

10	10	10	10	10	10	10	8
0	7	0	8	0	9	0	0
10			8		9		0

43

let ring -----|

TAB

10	10	10	10	10	10	8	0
0	7	0	8	0	9	0	0
10			8		9		0

45

let ring -----|

let ring -----|

let ring -----|

TAB

10	11	10	11	10	11	10	11
0	0	8	0	10	0	<12>	12
10	12			8	10	12	12

49

let ring -----|

let ring -----|

let ring -----|

let ring -----|

TAB

6	6	6	6	10	10	10	10
0	8	6	8	<12>	12	12	12
0	8	6	8	10	10	8	8

53

let ring

TAB 6 4 5 0 9 (9)

D Verse

55

let ring

TAB 3 0 3 0 3 0 3 0 2 0 1 0

59

let ring

TAB 3 0 3 0 3 0 3 0 2 0 1 0

63

let ring

TAB 0 3 0 3 5 3 5 3 0 3 0 3 7 0 7 0

67

let ring

TAB 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

Rit.

71

let ring

T
A
B

3 3 3 3 | 3 3 3 3 | 3 3 3 3 | 3 3 3 3 |

0 3 0 3 | 3 0 3 0 | 3 0 3 0 | 3 0 3 0 |

3 0 0 3 | 1 0 3 0 | 3 0 0 3 | 1 0 3 0 | 3

Children of War

Keep your ears there is no sound
but I'm screaming
Take a look outside there's no moving around
but I'm shaking
Is everyone safe, dead, or alive?
'Cause I'm bleeding

Every day we ask why we're at war
One life at a time they take them all

Maybe we're too little to understand
but we're trying
We have no mother, father, or even a land
but we're fighting
When will this pain come to an end?
We are praying

From this rage and hell there's no return
Condemn this nation to die and burn

Nobody punishes the plans of aggression
Nobody breaks the rules of oppression
When will we cease this carnage of innocent?
When will we choose love over hatred?
Reveal the truth that needs to be told
Channel the peace that wants to unfold
Envision the harmony you wish to behold
Envision the harmony you wish to behold
We all wish to behold
We all wish to behold

The Watcher

Solitary mending weaves
Mandatory breaching tidal waves
Close your eyes to stop the seeing
Let your heart bathe in sun's warm beaming

Curtains falling, walls crushing down
It's easy, just use your breathing

Aleatory states of substance
Illusory theories of existence
Close your eyes to feel the breeze in
Let your mind become like water steaming

Curtains falling, walls crushing down
It's easy, just use your breathing

Time will pass and all will perish
What we have is this moment to cherish
Don't complain but do abstain
No desire to be reborn again

Two Worlds United

She watches closely
while the world's ignoring
She cries quietly
but no one's ever listening
Her beauty and outside
is what everyone notices
A close look inside her heart reveals
a bunch of broken promises

He saw her briefly
and his world had trembled
He ponders secretly
but his will is feeble
Scorn and aggression
forced his pride to crumble
Doubts and insecurity
pierced his heart like needles

Suddenly, willingly, he walks to her
Takes her hand, looks into her frightened eyes
'Walk with me, confide in me'
Two worlds collided

They're holding sweetly
as if no one's watching
Instantly, clearly, they knew it all
The certainty that they belong to one another
Plainly and perfectly two worlds united

Whispered

It lays its eyes on you
It's not the pain you knew
It leaves you without a clue
You don't seem to pull through
the gloom and searing darkness

And all seems hopeless

It wants to break us down
It wants to drag itself out
We're pushed down to the ground
It wants to drive us to
emotion wastelands

Where life seems wasted

The dreams and memories
Cast upon the shores
The flakes of industries
lost in the soul's chores

The saving code is whispered
We opened and listened
The spirit's awakened
And new life is witnessed