Identifying and Developing the Personal Voice in Improvised Music Performance

Fiona Christina Burnett

ORCID: 0000-0001-5445-7784

Thesis and recordings submitted in fulfilment of

the requirements for the degree of

Doctor of Philosophy

Department of Jazz and Improvisation

Faculty of Fine Arts and Music

The University of Melbourne

December 2019

Dedication

This thesis is dedicated to my father, Eric John Burnett (1926–1984). A scientist, researcher and explorer. Unable to finish school, he left humble beginnings in Manjimup, WA and moved to Perth. At the age of 16, he joined the Australian Army as a radio operator stationed in Papua New Guinea and Thailand during World War II, where he was involved in the release of Japanese prisoners of war. After four and a half years of service, he arrived in Sydney, obtained his Leaving Certificate and completed both a Bachelor and Masters' degrees in science. In between these two qualifications, he charted new territory, naming Mt Burnett in Antarctica (Latitude 67°53′S, Longitude 62°, 49′E) and was awarded the Polar Medal for his work between 1958 and 1959 on this southernmost continent.

Education was always my father's passion. To him, it was a pathway to self-realisation. At 12 years old, I shared my ambition to play the saxophone. I remember his surprise and delight that I had a sense of the pathway ahead.
His response was affirming:
'So, you want to play the Sax!'

At the age of 13, I commenced playing the saxophone; this was a few months after my father had passed away. I have always been inspired by his memory, to learn, research, explore, critically evaluate and continually strive towards taking steps towards the summit of the mountain.

Abstract

This study documents a phenomenological and philosophical enquiry into the nature and dimension of the personal voice (McMillan 1996) in improvised music performance.

Utilising heuristic research (Moustakas 1990), a practice-based research methodology adapted for the purpose of this enquiry, this study examines my artistic practice as a musician, composer and soprano saxophonist. This practice is observed through the differentiated stages of the development of musical syntax within improvisation.

Works by J. S. Bach and John Coltrane are examined as potential sources of new material for improvised works. Arguably, music history appears to be an additive process whereby each new generation of composers, performers and improvisers add new layers to an existing core of practice. However, when contrasting a relatively new performance practice, such as John Coltrane's improvisations in the 'Hard Bop' genre, against the performance practice from the Baroque era by Bach, the performer may discover that the two music practices, chosen for the purposes of the source materials, share elements and processes. This could contribute to informing new musical language through the process of generative[1] or improvised music performance.

This study is significant because, observably, within elite music training institutions and the concert activity of major metropolitan cities there appears to be a rigid demarcation of performance practice. A music practitioner may prioritise interpretive music performance over improvised music or vice versa. While the notion of composer/performer is well understood in contemporary music practice, what possibilities exist for the notion of generative interpretation and the

[1] 'Generative music' is a term for improvised music, describing the nature of this art form as a process of spontaneous creation of new material in the moment of musical performance.

development of the personal voice (McMillan 1996) and individual expression in improvisation?

This thesis examines source materials from diverse styles by J. S. Bach and John Coltrane to consider the process and context of the creative process in improvised music and the development of the personal voice (McMillan 1996). This practice-based research project (Barrett and Bolt 2012) is examined via musical practice, assimilation and interpretation, where the elements of music and musical language derived from the source materials are examined, practised, recorded and considered as containing the potential for informing spontaneously improvised outcomes. Musical syntax arising through the process of improvisation is demonstrated via transcription and analysis to understand personal idiosyncratic qualities in the form of musical gestures within spontaneously improvised music. The development and identification of creative and musical influences are examined through the cultivation of an in-depth understanding and assimilation of the source materials.

To ascertain the extent of musical influences on spontaneous improvisation, more broadly in terms of implicit style and interpretation, or explicitly in terms of how specific and measurable musical elements such melodic, harmonic and rhythmic material are examined via transcription and analysis (Mulholland and Hojnacki 2013) informing the creative outcomes and the extent and nature of influence that can be measured, within the spontaneous solo improvisations in the context of this study.

Acknowledgements

To my principal supervisor, Associate Professor Robert Vincs, I give my sincerest thanks for his guidance, wisdom, artistry and musicianship, for the inspiration, support and belief in my potential in performance and artistic research. I thank Dr Donna Coleman, whose supervision, musicianship and scholarship have informed and contributed to my research in numerous ways. I also thank Greg Dikmans, whose formidable knowledge and passion of the Baroque era brought the music of Bach to life within my imagination, thus informing my understanding of Baroque performance practice and interpretation of the suite BWV 1008 by J. S. Bach.

I acknowledge the assistance of the Faculty Small Grants Scheme at the Faculty of Fine Arts and Music for providing funding for my lessons with Greg Dikmans and travel to Trinity College in Dublin to present my research findings at the *Twenty-First Century Composition* conference.

I thank Evripides Evripidou for his precise and meticulous attention to detail through the post-production, mixing and mastering stages of the recordings. I thank Richard Mitchell for his generosity in facilitating unlimited access to Knox Community Arts Centre to develop the research and providing practice and performance opportunities. I thank David Jones for his musicianship, friendship, enthusiasm, encouragement and for providing my first performance opportunity with the research material.

I thank the late Brian Brown for challenging me to think differently about music, improvisation and the creative process. I thank Dr Ros McMillan for encouraging me to look further into Brian's ideas about music and the nature of the personal voice, for listening to me discuss music and improvisation in my formidable years.

To my family and my mother, Margaret Burnett, for your generosity and love. Thank you for always supporting me in my musical pursuits and development. To my three

kind-hearted children, Aurora, Jasper and Persephone, who have with good humour and patience encouraged my research with enthusiasm. Thank you for your love, laughter and positivity. Thanks to Lue, the rescued Labrador, for visiting me at my desk.

To my partner, Dr Patrick Kuhn, thank you for understanding the significance of this research project. Thank you for the practical assistance, including numerous outings and camping trips without me. I will always be grateful for your unwavering belief in my potential and your encouragement and endless support of my endeavours in artistic research.

Capstone Editing provided copyediting and proofreading services, according to the guidelines laid out in the university-endorsed national 'Guidelines for Editing Research Theses'.

Declaration

This thesis contains no material which has been accepted for the award to the candidate of any other degree or diploma. To the best of my knowledge, it contains no material previously published or written by another person except where due reference has been made.

Fiona Burnett

December 2019

Table of Contents

Recorded Material Creative Component Track Listing

All Works performed on soprano saxophone and recorded by Fiona Burnett.

Produced by Fiona Burnett.

Mixed and mastered by Evripides Evripidou.

Recordings accessed via Dropbox digital download.

File Names:

1. Fiona Burnett Source Material A: BWV 1008 by J. S. Bach

1.	Prèlude	3:38
2.	Allemande	3:21
3.	Courante	2:35
4.	Sarabande	3:28
5.	Menuet I and II	3:43
6.	Gigue	2:59

2. Fiona Burnett Source Material B: *Countdown* by John Coltrane

1.	Slow Version 175 BPM	3:38
2.	Fast Version 230 BPM	2:57

3. Fiona Burnett Improvised Music Transcribed Examples

1.	Example 1: Improvisation 1.16	3:29
2.	Example 2: Improvisation 1.8	2:15
3.	Example 3: Improvisation 4.6	1:45

4. Fiona Burnett Improvised Music Complete Recordings

1.	Improvisation 1.1	2:48
2.	Improvisation 1.2	2:27
3.	Improvisation 1.3	3:06
4.	Improvisation 1.4	0:23

5.	Improvisation 1.5	2:17
6.	Improvisation 1.6	1:38
7.	Improvisation 1.7	0:52
8.	Improvisation 1.8	2:15
9.	Improvisation 1.9	2:42
10.	Improvisation 1.10	4:45
11.	Improvisation 1.11	0:44
12.	Improvisation 1.12	1:58
13.	Improvisation 1.13	2:51
14.	Improvisation 1.14	2:54
15.	Improvisation 1.15	2:09
16.	Improvisation 1.16	3:29
17.	Improvisation 2.1	1:39
18.	Improvisation 2.2	0:47
19.	Improvisation 2.3	3:50
20.	Improvisation 2.4	5:12
21.	Improvisation 2.5	4:14
22.	Improvisation 2.6	0:52
23.	Improvisation 2.7	1:11
24.	Improvisation 2.8	0:57
25.	Improvisation 2.9	2:58
26.	Improvisation 3.1	2:33
27.	Improvisation 3.2	3:22
28.	Improvisation 3.3	1:58
29.	Improvisation 3.4	3:44
30.	Improvisation 4.1	1:07
31.	Improvisation 4.2	1:23
32.	Improvisation 4.3	2:38
33.	Improvisation 4.4	5:36
34.	Improvisation 4.5	3:24
35.	Improvisation 4.6	1:45
36.	Improvisation 4.7	3:27

37.	Improvisation 4.8	8:15
38.	Improvisation 4.9	8:14
39.	Improvisation 5.1	0:30
40.	Improvisation 5.2	1:33
41.	Improvisation 5.3	9:52
42.	Improvisation 5.4	8:31
43.	Improvisation 6.1	1:08
44.	Improvisation 6.2	1:25
45.	Improvisation 6.3	1:27
46.	Improvisation 6.4	2:06
47.	Improvisation 6.5	4:57
48.	Improvisation 6.6	4:56

List of Figures

Chapter 1: Introduction

1.1 Purpose of the Study

The concept of a personal voice[2] (McMillan 1996) in music is arguably a fundamental notion related to jazz and improvised music performance. A modernist idea, the improvising jazz musician shapes musical phrases from a unique set of filters, determining the compositional choices. While the concept of an individualised voice is relatively ubiquitous among jazz practitioners, it is unlikely to be well understood, defined or even agreed on. Therefore, this investigation will proffer a very particular research methodology intended to challenge the idea that a consensus could be reached on a definition of the personal voice (McMillan 1996), its role in improvisation and its role in the creation of 'jazz' based improvisation.

This research on the nature of an individualised and personal voice (McMillan 1996) in improvisation is intended to stimulate dialogue and uses the process of practice-based research incorporating methodologies devised by Barrett and Bolt (2012) and the heuristic research methodology (Moustakas 1990) in conjunction with musical analysis. Creative outcomes in the form of recordings are investigated to ascertain the level of impact[3] of the research on the performance process and outcomes in new generative music.

This examination is contextualised by the inclusion of two contrasting works that function as source materials to the research process. The source materials focus the enquiry, ascertaining if influence can be measured within the musical syntax of new recorded solo improvisations. Therefore, this study, situated in the field of artistic research, is intended to encourage dialogue focused on the formation of identifiable characteristics of the personal voice (McMillan 1996), the musical elements engaged and the impact of stylistic influences.

[2] In this thesis, the term 'personal voice' (McMillan 1996) in improvisation is used interchangeably with 'voice', 'individual voice' and 'individual syntax' or 'personal sound'. The term denotes musical features that become synonymous with the individual improviser, representing a particular set of musical characteristics and idiosyncratic devices forming a personal musical syntax or vocabulary. The personal voice (McMillan 1996) could extend to include particular nuances and musical gestures attributed to characteristics of the individual's approach or sound.

[3] 'Impact' in this context is defined as an effect or an enabling tool that has the potential to engender change or development.

1.2 Research Question

Through considering the potential for improvised music, the following research question is investigated in this study: Is the personal voice (McMillan 1996), a key notion in the performance of jazz and improvised music, latent in the musician, or is this voice an agglomeration of acquired influences?

1.3 Personal Voice and Improvised Music

There has been discussion and conjecture as to the role of the individual voice in improvised music, particularly in recent years. For example, in an interview with Mark Small in 2004 for *Berklee Today*, American jazz guitarist Pat Metheny stated the following regarding his experiences of developing a personalised sound in jazz:

> In order to exist in jazz … [you have] to have a concept and identity-a sound and vision of what jazz could be. It wasn't enough to be a second or third-generation copy of someone else ... You need to develop a sense of artistry and be able to communicate something. You have to render something that is meaningful to you in sound, something that is meaningful to you as an individual, that might be of interest to someone else.[4] (Metheny 2004, 12)

In this statement, Metheny (2004) identifies the significance of striving for identity and developing an individual 'sound and vision', essential to the artistic process. Metheny (2004) argues for the importance of the development of a personal aesthetic as an active and conscious process necessary to the survival as a jazz musician. Given Metheny's influence as an improviser, his sentiments on the conceptualisation of identity and sound are significant to the discussion. Metheny (2004) describes *sound* in a manner that transforms this element from the acoustical properties of music to imply a broad combination of musical elements and nuance to inform and explore individuality and communication via improvised music.

[4] 'Pat Metheny has been awarded 16 Grammy Awards in nine different categories. Metheny's stature as one of today's most influential guitarists and jazz composers owes something to his disregard of musical boundaries' (Metheny 2004).

A contemporary in the field with Metheny, American jazz guitarist John Abercrombie (2009), expresses a contrasting interpretation of the concept of individualised voice in improvised music. In an interview with Tom Sawada and Federico Pereiro (2009), Abercrombie (2009) discussed his view that the voice in improvised music is uncovered in an intuitive manner, rather than actively sought:

> I think most people who find their own voices don't go looking for them. It just happens. Like a Zen approach, instead of the student looking for the teacher, you could say that the teacher finds the student. I think what happens is that you just keep playing, and all of a sudden you realize that you have something in your playing – something more particular, personal to you. Many times this comes about because you hear it on a recording. You try to follow this natural instinct, because you realize it helps you develop your own way. (Abercrombie 2009, 87)

Rather than actively seeking individuality as an improvising soloist, Abercrombie (2009) describes the search for voice as an innate and instinctive process. Yet, like Metheny (2004), Abercrombie (2009) describes the outcome of this as 'personal', suggesting this is discovered via the reflective practice (Schön 2016) of listening back: 'you hear it on a recording', where this process 'helps you develop your own way' (Abercrombie 2009).

In the above comments, both Metheny (2004) and Abercrombie (2009) discuss their individual experiences of the concept of voice in improvisation, reflecting and demonstrating two different understandings of the voice in improvised music, whereby its very nature is experienced individually.

Metheny (2004) identifies three qualities that contribute to individuality in jazz and improvised music, and contextualises these criteria as a conscious threefold process:

1. Something meaningful to the individual in sound.
2. Something with individual meaning.
3. Something that will interest others.

In contrast, Abercrombie (2009) outlines an approach to improvisation that is created through the process of playing, innately evolving as an emergent process:

1. Most people who find their own voices do not go looking for them. It just happens.
2. All of a sudden, you realise that you have something in your playing—something more particular, personal to you.
3. This comes about because you hear it on a recording.

In describing his process of the individual voice in improvisation, Abercrombie (2009) states 'something more particular, personal to you'. Metheny (2004) puts his own approach to improvising in very similar terms: 'something that is meaningful to you as an individual'.

This research seeks to demonstrate that the concept of the individual voice in improvisation could be experienced as both an active and conscious process (Metheny 2004) and as an intuitive and innate process (Abercrombie 2009).

The process for identifying the personal and individual within improvised music remains central to this study of improvised music, and recognition of identifiable characteristics are examined through practitioner-based research (Barrett and Bolt 2012) and heuristic research (Moustakas 1990).

1.4 Limitations and Challenges

1.4.1 Rationale for the Inclusion of Source Materials

This practice-based research study examines the process of the identification and development of the personal voice in improvised music performance to investigate, recognise and demonstrate potential musical influences and how these may be expressed and recognised through improvisational syntax. The enquiry is situated by the research question within the context of source materials utilised for their potential to act as primary influences within newly recorded improvised works for solo soprano saxophone.

Two works were selected as source material with the intent of informing the improvisational process within the context of this research. The specific source materials used for the research process pose a unique set of limitations and challenges due to their diversity and disparateness. These works are applied as a research data set for

experimenting with the concept of influence and are examined as prospective stylistic impact on the spontaneous process of improvisation.

The source materials selected are highly specific, diverse, potentially incongruent and deliberately contrasting. The works are derived from different eras, styles and instrumentation and there are no apparent links between the two composers, with the exception of advanced harmonic concepts and progressions.

Both works and their respective composers represented influences I sought to cultivate within my improvisational practice, where the choice of the actual works could be argued as being less relevant than the selection of the two composers. The specific rationale for selecting Source Materials A and B is detailed in Chapters 5 and 6 respectively.

The primary rationale for the two composers examined resides within my interest in the horizontal expression of vertical harmony within single line instrumentation, in combination with technically demanding works. Both composers provide exemplary examples of challenging compositions that employ the expression of harmony within the melodic line. Through the process of consideration and consultation of different editions of the source materials, the arrangements were developed and adapted to the range of the instrumentation.

1.4.2 Source Material A

The six-movement suite composed for violoncello by J. S. Bach, BWV 1008, has been adapted and transcribed for the soprano saxophone. This work is studied without the intention to specialise in Early Music performance practice, but to inform and extend the range of influences of my improvisational syntax, including the extension of expressive devices (see Chapter 5).

1.4.3 Source Material B

The composition by John Coltrane, *Countdown* (1960), performed on tenor saxophone presents an additional set of challenges due to the harmonic structure and technical

demands of the improvised solo. The specific content of *Countdown* (1960) required a different and less spontaneous approach to the learning process as applied to Source Material A.

A combination of access to the original recording of *Countdown* (1960) and availability of two different notated transcriptions of Coltrane's improvisation (Baker 1980; Coltrane [1977] 2013) necessitated a rote learning approach, due to the fixed nature of the material within Source Material B (addressed in Chapter 6).

1.5 Transcription Process

The transcription process was applied at each stage of the research to demonstrate the different steps of the process, from the source materials to the improvised outcomes. The use of transcription is acknowledged as an essential learning tool in jazz pedagogy. Per Baker (1980, 6), 'listening to, analyzing and playing along' is indispensable if one is to 'learn the language, its syntax, grammar inflections'. Liebman (1996, 17) states that 'imitation is the learning ones gathers from predecessors in the field', the 'writing out, playing with and analysis of the masters', when referring to the transcription process.

The transcriptions informed the research findings and are located in Appendices A–C.

1.6 Limitations and Challenges

As practitioner-based artistic research, this study examines a research question from the perspective of the musician as the author, performer and improviser. This study contextualises the research question within creative practice and development, where recorded outcomes are documented on the soprano saxophone. The instrumentation could be perceived a limitation to the reach of the study as some findings specifically relate to the saxophone, while others could be adapted across a range of instrumentation via their relevance to improvisation.

The scope of this research is, by definition, simultaneously narrow and broad. The source materials consulted providing a diversity of influences and content for the development of

new improvised work. With some noted exceptions, Source Material A and B have necessarily been treated as two separate or stand-alone influences in Chapters 5 and 6.

Specifically, the creative outcomes of this research comprise of solo improvisations with the exclusion of any group interactions. This could be considered a limitation as improvisation in jazz and improvised music is frequently performed as ensemble music as evidenced by both the common instrumentation of the music and historical and current recordings within the style. As a result, the focus on solo improvisation and specific instrumentation could limit the broader impact and reach of the research outcomes.

Challenges arising from the potential dissonance between the selection of the composers and individual works are acknowledged. The choice of source materials is a potential challenge due to the different and disparate nature of the works. Difficulties arising from this possible friction of influences between the selection of the particular works and corresponding composers is acknowledged as presenting creative challenges. However, these influences may determine identifiable changes within individual improvisational syntax.

The specific works as source materials have been studied and contextualised in relation to the overall aims of the research project. Within the context of this practice-based research, there is no intention to become an Early Music specialist or expert on the music of J. S. Bach. Similarly, there is no intention to imitate the language of the Hard Bop Era or John Coltrane recording consulted within this artistic research. Both source materials were engaged as data sets to frame the research question in relation to the nature of the personal voice (McMillan 1996) and its potential for development within improvisation.

1.7 Summary of Introduction

Identifying the potential for influence, I was inspired by both J.S Bach and John Coltrane and their treatment of the elements of music, the application of counterpoint and demonstration of harmony via a single line melodic instrument. In particular, it was the elucidation of vertical harmony on the horizontal line, as evidenced within the notated

score, that I sought to examine and investigate within the context of the development of the personal voice (McMillan 1996) in improvised music.

The initial focus of the study was on preparation for improvisation, which served as the basis for improvisation in practice. The outcomes are documented in recordings and transcriptions. I have included additional commentary on the area of preparation for Source Material A, as this stage of the research process was time-intensive, presenting significant technical and stylistic challenges. The success of the research project relied on the creative outcomes, and their realisation required the first two stages of the research project to move into the background during the process of recording the improvisations. Therefore, the source materials served as primary influencers but not as the primary outcomes.

Chapter 2: Literature Review

Within traditional research modalities, the practice of creating a literature review is well understood. However, in creative practice research, this can be problematic for several reasons. First, the scope of the artistic practice in question may cross discipline boundaries, making the inclusion and exclusion of texts and relevant media highly personalised. It is unlikely in creative practice research that a comprehensive discipline boundary could be established. Further, if it were possible, it would most likely be self-referential, rather than a body of knowledge that seeks to expand itself beyond its own terms of reference.

Second, as research into creative practice is relatively new, so too is the field of research in jazz and improvisation. Author and musician Robert Burke (2014, 10) stated, 'Self-reflective, practice-based research, especially in the art of jazz and improvised music, is relatively new and consequently literature on the topic is comparatively sparse'.

Given the problems of constructing a literature review within a creative practice research project in the field of jazz and improvisation, and subjectifying within a field of enquiry that investigates the concept of a personal voice in improvised music, this literature review forms a contextual review. A model identified in Tim O'Dwyer's (2012) thesis is adapted here, whereby O'Dwyer (2012) categorised and provided short critiques of specific texts and media that were directly influential to the pursuit of his research question. This approach to the literature review has been extended to secondary sources, scores and recordings. Therefore, this review focuses exclusively on literature and artistic references that inform this enquiry to identify developing the personal voice (McMillan 1996) in improvised music, rather than identifying a broader nascent disciplinary field.

In situating this research, this literature review includes a range of material specific to the enquiry. Including texts and other resources that contribute to practice-based research on improvised music and jazz, music analysis and literature on the areas studied are important for grounding and informing the performance practices of the source materials. Therefore,

the literature has been widely sourced and is inclusive of all material that has informed each stage of the practice-based research.

Specifically, the research question focuses on the concept of influence and the personal realisation of individuality in spontaneous solo improvisation. Much of the commentary on improvised music and jazz consulted is focused primarily on group improvisation interactions; however, these works are still highly relevant in regard to practice and musical outcomes.

2.1 Practice-Based Research

Practice-based research supports a flexible view of knowledge brokering. Whereas aspects of the research fall within the boundaries of a traditional approach to analysis, the research focus lies within the act of improvisation and the development of a personal voice (McMillan 1996). Through practice-based research, improvisation is experienced as a creative act that generates spontaneous outcomes. Dean and Smith (2014, 2) state, 'In the humanities, theory, criticism and historical investigation have been heavily prioritised over arts practice'. Dean and Smith continue their argument through the discussion of artistic research:

> Terms such as practice-led research have been developed by creative practitioners, partly for political purposes within higher education, research and other environments, to explain, justify and promote their activities, and to argue – as forcefully as possible in an often unreceptive environment – that they are as important to the generation of knowledge as more theoretically, critically or empirically-based research methods. (2014,12)

Artworks often embody 'generalizable and transferable knowledge' (2014, 3). Yet, they also flag the reality that in higher education the definition of knowledge is 'normally verbal or numerical' (2014, 3). Dean and Smith also state that both sonic or visual works of art 'transmit knowledge in non-verbal and non-numerical' ways and that any 'definition of knowledge needs to acknowledge these non-verbal forms of transmission' (2014, 3). Dean and Smith assert that this definition could go further to 'include the idea that knowledge is itself often unstable, ambiguous and multidimensional, can be emotionally or effectively

charged and cannot necessarily be conveyed with the precision of a mathematical proof' (2014, 3).

Supporting this argument of creative practice, McNiff (2013) addresses artistic enquiry and explores questions in the area of the personal nature of art-based research. He discusses the 'gap that exists between artistic knowing', the personal and professional lived experiences of artists, and 'current academic definitions of research' (2013, xiii). McNiff argues that the experience of the artist extends parameters of research as a whole:

> As actors, dancers, film-makers, musicians, visual artists and writers immerse themselves in any area of problem-solving, they bring their unique ways of examining and communicating experience, which they further what we might call a more complete community of enquiry where methods of research are designed in an effort to find the best ways to address certain questions (2013, xiv).

McNiff asserts that even with advances in professional and academic practice, within arts-based practice there remains 'resistance and hesitation within applied arts fields' (2013, xiv). Burke (2014, 10) states that practice-based research 'demands a more personal approach' and the 'aural experience' is 'under-pinned by the written word and musical notation'.

> Research in music has historically been the domain of musicologists and ethnomusicologists who write on social, historical and ethnographic issues and analyse pre-composed material. Self-reflective, practice-based research, especially in the art of jazz and improvisation, is relatively new. Consequently, literature on the topic is somewhat sparse (Burke 2014, 10).

The aural experience is a predominant aspect of this enquiry, although the creative outcomes have a slightly different focus to Burke (2014), of solo improvisation, rather than the soloist within a group improvised setting.

The text *Practice as Research: Approaches to Creative Arts Enquiry* (Barrett and Bolt 2012) was influential in my research in terms of an approach to studio practice and provided scope for the practical nature of the research, supporting the notion of practice as a knowledge-producing activity.

> A general feature of practice-based research projects is that personal interest and experience, rather than objective 'disinterestedness', motivates the research process. This is an advantage to be exploited, since, in terms of the acquisition of knowledge, artistic research provides a more profound model of learning. As such, studio-based research provides a heuristic model for innovative practice-based pedagogies—one that provides a rationale for the integration of theory and practice as a basis for research training, both within and beyond creative arts disciplines (Barrett and Bolt 2012, 5).

Practice as Research (Barrett and Bolt 2012) consists of 12 chapters, each covering different approaches to artistic research as the production of knowledge. 'Studio-based research provides a heuristic knowledge model for innovative practice-based pedagogies' (Barrett and Bolt 2012, 5). They identify the interdisciplinary and creative aspects of arts research and state that, 'An often a vexed issue in creative arts research is related to establishing the work in an identifiable location within the broader arena made up of more clearly defined disciplines or domains of knowledge' (Barrett and Bolt 2012, 7).

2.2 J. S. Bach

Material reviewed commenced with consulting recorded versions of BWV 1008 by J. S. Bach, followed by the consideration of scores, biographical material, primary sources on interpretation, secondary sources and additional material. Literature from the Baroque era was studied to enhance improvisational outcomes, rather than to adhere to Early Music performance practice and inform unconventional practical outcomes.

2.2.1 Recordings Consulted

All recordings of BWV 1008 by J. S. Bach feature performances on cello:

- Pablo Casals: Cello Suites (EMI Classics 2003)
- Anner Bylsma: The Cello Suites, Vol. 1, Nos. 1, 2, 3 (Sony Classical 1999)
- Peter Wispelwey: Six suites per violoncello solo senza basso (Channel Classics CCS 1998)
- Steven Isserlis: The Cello Suites (Hyperion, CD A67542, 2007).

2.2.2 Scores Consulted

The following scores were consulted, all drawn from *Bach: Bärenreiter Urtext* (Schwemer and Woodfull-Harris 2006):

- Source A, Copyist: Anna Magdalena Bach dates between 1727–1731
- Source B, Copyist: Johann Peter Kellner, possibly dated 1726
- Source C, Copyist: Prepared by two unknown copyists, property of Johann Christoph Westphal, dated from the second half of the eighteenth century
- Source D, Copyist: Anonymous copyist, dated late eighteenth century (on sale in 1799 by the art and music dealer Johann Traeg in Vienna)
- Source E, Preface mentions Pierre Norbin, cellist and teacher, but it is unknown if this edition is copied by Norbin (published by Janet et Cotelle, Paris, 1824)
- The Bärenreiter edition also cites Sources X, F, G and H, where X is the original working copy of J. S. Bach (all these sources are lost)

This research also consulted J. S. Bach's *Six Suites for Violoncello Solo BWV1007-1012* (edited by August Wenzinger 2000).

2.2.3 Other Sources Consulted

Works on the historical background and bibliographic material was sourced through texts by Wolff (2000) and Williams (2012).

The primary text on Baroque performance practices and interpretation was *On Playing the Flute* by Quantz ([1752] 2001) which focuses on the interpretation of Baroque music, in particular Chapters 7 ('Of Taking Breath, in Practice of the Flute', pp. 87–90)) and 8 ('Of the Appoggiaturas, and the Little Essential Graces Related to Them', pp. 91–108).

Further contextualisation in the text *Essay on the True Art of Playing Keyboard Instruments* by C. P. E. Bach ([1759] 1949, 27) states that the keyboardist, 'must be able to improvise fantasias in all styles, to work out extemporaneously any requested setting after the strictest rules of harmony and melody; how he must be at home in all keys and transpose instantly and faultlessly; and play everything at sight whether designed for his instrument or

not'. Within this statement, C. P. E. Bach acknowledges that the Baroque musician is accustomed to flexibility in instrumentation, an important consideration of this research.

A Treatise on the Fundamental Principles of Violin Playing (Mozart [1756] 1986) provides insights into the era. Mozart, in the introduction of his text, stating:

> God gave the first human beings, soon after the Creation, every opportunity to invent the excellent science of music. Adam was able to distinguish the difference between human voices; he heard the song of the various birds; he perceived the changes of the whistling of the wind through the trees, varying from a high to a low pitch; and the tool for singing had been given to him from the beginning by the good Creator, planted in him by Nature. ([1756] 1986, 19).

Secondary text for the interpretation of Early Music included Dolmetsch ([1915] 2005) and Donnington (1974).

Additional literature on J. S. Bach and, specifically, the suites for unaccompanied cello included Martin Jarvis (2011), who argues that the works for solo cello attributed to J. S. Bach were composed by his second wife, Anna Magdalena. A court musician and singer in the court of Prince Leopold in Cöthen, Anna Magdalena was a distinguished musician in her own right. Having consulted a forensic specialist in handwriting, Jarvis (2011) asserts the works were composed by Anna Magdalena and not J. S. Bach: 'The music calligraphy of Anna Magdalena was very beautiful, precise and elegant, and I immediately become convinced as I looked at the facsimile of her supposed "copy" of the Cello Suites that this was not a copy of someone else's music but her own composition' (2011, 33).

2.3 John Coltrane

2.3.1 Recordings Consulted

The following John Coltrane recordings were consulted:

- *Giant Steps*, John Coltrane Quartet (1960)
- *Kind of Blue* ([1959] 2015)

2.3.2 Transcriptions Consulted

The following transcriptions were consulted:

- *The Jazz Style of John Coltrane* (Baker 1980)
- *John Coltrane Omnibook, Bb Instruments* (2013)

2.3.3 Other Sources Consulted

Biographical material of John Coltrane included, Porter (2016), Nisenson (1995), Ratliff (2007) and DeVito (2010). Literature documented as titles from Coltrane's library of spiritual text were considered for providing further background into Coltrane's approach and insights into his artistic inspiration and process. Porter (2016, 150) states that 'I wouldn't underestimate Coltrane's interest in religion and mysticism'. Coltrane's interest in literature on music and spiritual themes was extensively documented and include the works of Scott ([1933] 2013) and Khan (1996).

2.4 John Coltrane and Influential Literature

> Throughout the ages, philosophers, religionists and savants have realised the supreme importance of sound. In *the Vedas*, considered the oldest scriptures in the world, it is stated that the whole cosmos was brought into being through the agency of sound (Scott [1933] 2013, 36).

Scott stated that 'Musical training is a more potent instrument than any other, because rhythm and harmony find their way into the inward places of the soul'. Scott references Plato when he continues with the assertion that new music must be 'Shunned, since styles of music are never disturbed without affecting the most important political institutions' ([1933] 2013, 27). Coltrane was influenced by the text by Scott and while disruption of the establishment may not have been Coltrane's intention, it is widely documented that this is the result of his own pursuit for expression in improvised music; that his explorations led to a significant search both musically and spiritually. These moved through identifiable stages that were categorised, and Coltrane was applauded and criticised for his approach.

Scott ([1933] 2013) also undertakes a psychological investigation and states that repetitions within music practice suggest the development of both physical and moral qualities. Scott ([1933] 2013, 39) also acknowledges that music awakens emotions: 'by music a man becomes accustomed to feeling the right emotions'. Interestingly, Scott refers to music that 'operates on the mind', stating:

> Nevertheless, we do not intend to imply that music operates on the emotions only: there are several types of music that operate on the mind. Thus, we shall see in due course that Bach's music had a very definite effect on the mentality … as Bach's art is of an intellectual type, it produces an intellectual effect. (Scott [1933] 2013, 39).

The series of lectures by the Sufi teacher Hazart Inayat Khan (1996) touches on the concepts of religion, mysticism and music. Hazart states, 'When one looks at this subject (Music) from the Eastern point of view one finds that the Eastern idea of music originated from intuition … Music, according to the ancient people, was not a mechanical science or art: music was the first language' (1991, 47).

Coltrane's approach to music in his later years became increasingly informed by his broad interests which included the written works by Hazart Inayat Khan (1996). Khan (1996, 47) states, 'The first expression of the emotions and passions of the heart … for what art cannot express, poetry explains, and what poetry cannot express is expressed by music'.

The *Thesaurus of Scales and Melodic Patterns* (Slonimsky 1975) is a significant resource for both technical practice and the development and implementation of the organisation and division of different interval groupings within the octave (in addition to hybrid scales, arpeggios and 12-tone spirals). Porter (2016, 149–150) documented that Coltrane investigated the *Thesaurus of Scales and Melodic*, using the content to inform his harmonic language. This material has been considered through a practical application, where I have practised the 'Equal Division of One Octave into Two Parts', 'Interpolation of Two Notes' and 'Interpolation of Three Notes' (Slonimsky 1975, 1, 2, 5), adapted the range of the soprano saxophone and transposed into 12 key signatures.

2.5 Improvisation

Liebman's (1996) *Self Portrait of a Jazz-Artist* is partially self-referential, providing background material of Liebman's professional experiences and inclusive of a guide to assist in orientating the aspiring jazz improviser. Liebman (1996) demarcates the three stages within jazz practice that can lead to the development of a personal aesthetic or voice in improvisation. Progress through each stage is dependent on a series of developmental steps. Liebman shares his lived experiences as a practitioner in the field, balanced with his experiences as an educator of improvisation: 'In order to be universal, the artist's task is to integrate his own individuality with those attributes and feelings that are common to mankind as he observes it. This goal of integration underlies all artistic achievement' (Liebman 1996, 16).

Free improvisation has been discussed by Nachmanovitch (1990), providing evidence of the process and performance outcomes of improvisation. Nachmanovitch (1990, 27) states that:

> An improviser does not operate from a formless vacuum, but from three billion years of organic evolution; all that we were is encoded in us … dialogue with the self … [is a] dialogue not only with the past but with the future. … [Through this dialogue] our playing … unfolds, the inner, unconscious logic of our being begins to show through and mold the material.

In *The Philosophy of Improvisation*, Peters (2009, 4) asserts, that improvisation 'is not an aesthetic space constructed by a philosopher', but 'situated within a practice'. *Thinking in Jazz*, Berliner (1994) provides an extensive discussion on jazz improvisation, the sociological context, jazz education and the musicianship of both individual and ensemble performance. In Chapter 8, 'Composing in the Moment', Berliner (1994, 192) describes the processes involved in the performance of improvisation:

> Experts drive home the point once again by invoking language metaphors. Whereas previously these images of verbal expression crystallized such general processes as constructing musical sentences from vocabulary patterns, this time in elucidating these other features of their music system, their purpose is to emphasize fundamental principles of musical logic and development that guide expression in jazz.

2.6 Music Analysis

Where this research has been an experiment in process, I have also included the analysis to demonstrate in terms of notation and to extend both practice and the research context. The primary source of the approach applied to music analysis within this study was derived from Mulholland and Hojnacki's (2013) *The Berklee Book of Jazz Harmony*. This approach has been implemented in conjunction with a working knowledge of jazz harmony analysis, note analysis and chord and scale relationships developed over a significant period of time as a practising musician.

Additional analysis focused on Cooke's (1989) *The Language of Music*, Liebman's (1991) *A Chromatic Approach to Jazz Harmony and Melody*, Piston's (1947) *Counterpoint* and Swindle's (1962) *Polyphonic Composition*. Cooke states that the 'task facing us is to discover exactly how music functions as a language, to establish the terms of its vocabulary' (1989, 34). I have also considered the significance and proliferation of Schenkerian analysis and consulted both Pankhurst (2008) and Cook (2009). Having considered a range of analytical methods, I proceeded with the Berklee model (Mulholland and Hojnacki 2013) to provide a comprehensive analysis of the content of the musical outcomes.

2.7 Additional Literature

I included additional recordings by Australian musicians such as Melbourne-based improvising musicians with an interest in music from the canon of European music including Andrea Keller's (2002) Bartok project *Mikrokosmos*; Joe Chindamo and Zoe Black's (2013) recordings *The New Goldenberg Variations* and *Passion*; and five works composed by Paul Grabowsky (1999) and performed by the Australian Art Orchestra. Additional material consulted within the literature review include texts and articles by Pressing (1987), Whiteoak (1999), Johnson (2000), Dean (1989), Burke and Onsman (2017) and Sugg (2014).

2.8 Conclusion

All reviewed literature was selected to situate the enquiry creating cohesion and informing the creative context of the solo improviser. A broad range of material was necessary to

inform this review, where texts were chosen to provide a context for practice-based research, or their relevance to jazz and improvised music, where significant contributions by Australian practitioners and authors were included.

Chapter 3: Methodology

3.1 Introduction to the Research Methodology

This practice-based research enquiry utilises a combination of practice-led, phenomenological and analytical research methods developed to accommodate the specific concepts, process and stages of this creative enquiry, incorporating practical, analytical and theoretical phases within the research project. This methodology situates practice-based research, drawing from Moustakas's (1990) heuristic research with techniques in musical (harmonic and melodic) analysis (Mulholland and Hojnacki 2013).

Through identifying the significance of artistic, studio or practice-based enquiry as generating new knowledge, Barrett and Bolt (2012, 3) recognise the 'relationship between art and knowledge' facilitating 'research, practice and alternative modes of logic' and providing 'pedagogical approaches variously understood as experiential, action or problem-based learning'. Due to the nature of improvised music and its spontaneous outcomes, 'the context of studio-based research, innovation is derived from methods that cannot always be pre-determined, and "outcomes" of artistic research are necessarily unpredictable' (Bolt and Barrett 2012, 3).

A combination of practice-based, phenomenological and analytical research methodologies facilitated an effective approach for examining relevant materials and providing creative and analytical outcomes. Identifying and organising the processes that determine the classification of stylistic elements and recognisable gestures within improvised works informed the research via the third concept of heuristic research, tacit knowing (Moustakas 1990).

The analysis of specific and measurable aspects of the recorded music, including the harmonic and note analysis of all transcriptions (located in the appendices), provides important research data and informs findings. The impact of the source materials on the creative outcomes is determined via the examination of the melodic, harmonic, rhythmic

and timbral content of all the recordings in conjunction with the comparative analysis of the transcriptions, demonstrated by the figures provided.

3.1.1 The Epoche

The practical, theoretical and creative outcomes are incorporated into the methodology, and further adaptations have been made, where relevant to the practice-based research process. For example, the Epoche[5] process (Moustakas, 1994) is applied to facilitate the first step of the methodology and contextualises the research topic through the inclusion of self-history. The Epoche (Moustakas, 1994) is a relevant addition to the methodology originating from the text *Phenomenological Research Methods* (Moustakas, 1994), facilitating documentation of the observations of musical experiences in early life and pertinent aspects of my formative education. This is significant, as Moustakas (1994, 85) states, 'In the Epoche, we set aside our prejudgements, biases and preconceived ideas about things'. Applied in this context, the Epoche (Moustakas, 1994) facilitates reflections on early impressions and experiences, situating my musical development and research interests. Moustakas (1994) describes the Epoche as 'a preparation for deriving new knowledge' and a process ‘of setting aside predilections, prejudices, predispositions' (85) essential for 'scientific determination' for ‘living itself’ (85) and situating the investigation.

Heuristic research has provided a methodological template with sufficient scope to encompass the breadth of the stages involved in the research project. Moustakas (1990, 32) states that heuristic research is ‘essential in investigations of human experiences’, where ‘reflecting, sifting, exploring, judging its relevance or meaning’ provides a system of phases and stages to investigate and ‘ultimately elucidating the themes and essences that comprehensively, distinctively, and accurately depict the experience’.

The specific stages[6] of this research are listed below and provide an overview of the methodology developed for this practice-based research:

[5]The Epoche, as devised by Moustakas (1994), facilitated the documentation of, observations of musical experiences in early life and my formative education, foregrounding and contextualise the research.

[6] The stages of the research process were developed specifically to investigate the research question combining practical, phenomenological and analytical aspects of the research.

1. Research question and rationale for research problem
2. Literature review
3. Methodical stages of investigation
4. Epoche
5. Practice-based research process for Source Material A
    a. Study
    b. Practice
    c. Recording
    d. Transcription
6. Practice-based research process for Source Material B
    a. Study
    b. Practice
    c. Recording
    d. Transcription
7. Recording process
8. Analysis of creative outcomes
9. Conclusions

3.2 Summary of Heuristic Research Method

In the first instance, Moustakas (1990, 11) describes the heuristic processes as requiring 'a return to the self, a recognition of self-awareness and a valuing of one's own experience', describing the process where one is challenged and may experience doubt regarding the 'understanding of a human concern or issue'. Considering the first concept of heuristic research, identifying with the focus of enquiry, facilitated consideration of the 'question or problem' with a view to 'illuminate or answer' the research questions through 'processes aimed at discovery' (1990, 15) and self-inquiry. Moustakas (1990, 15) acknowledges 'heuristic process is autobiographic', stating that 'virtually every question that matters personally there is also a social-and perhaps universal-significance'.

The application of heuristic research provides clarity through the concepts and phases of the methodology. The term heuristic encompasses the processes deemed to be 'essential in

investigations of human experiences' (Moustakas 1990, 9). In essence, as a research process, the heuristic research method is designed for the exploration and interpretation of experience, which uses 'the self of the researcher' (Moustakas 1990, 9).

The two key aspects of this methodology are listed below. Moustakas (1990, 15) identified seven 'Concepts and Processes of Heuristic Research' and six stages or 'Phases of Heuristic Research'. The seven concepts and processes of heuristic research are:[7]

1. Identifying with the focus of inquiry
2. Self-dialogue
3. Tacit knowing
4. Intuition
5. Indwelling
6. Focusing
7. The internal frame of reference.

The six phases of heuristic research are:[8]

1. Initial Engagement
2. Immersion
3. Incubation
4. Illumination
5. Explication
6. Creative Synthesis.

3.3 Research Stages

The concepts and processes of heuristic research were applied across the stages of the present research, as detailed below:

- Part 1: Research question, initial engagement:
    - Identification of the research problem

[7] The seven concepts and processes provided the scaffolding for the practice-based research and are integrated with the phases and stages of the research.
[8] The six phases are aligned with the stages of the research process.

    - Development of the research question
- Part 2: Source materials, immersion, selection and examination of source materials:
    - Source material A: J. S. Bach, BWV 1008:
        - Historical content
        - Examination of score (Urtext) and development of workable score and analysis of work
        - Study of primary and secondary texts and study of performance practices
    - Source material B: John Coltrane, *Countdown*:
        - Historical content
        - Examination of recording and transcriptions
        - Development of transcriptions for the soprano saxophone
- Part 3: Practice and preparation for recording, incubation:
    - Preparation for recording BWV 1008 By J. S. Bach
    - Preparation for recording *Countdown* by Coltrane
    - Preparation for recording improvisations
- Part 4: Recording, illumination:
    - J. S. Bach: Recording of Six Movements
    - Coltrane: Two Versions of *Countdown* (175 beats per minute [bpm] and 230 bpm)
    - Recording of improvised creative outcomes
    - Post-production of recordings
- Part 5: Transcription and analysis, explication:
    - Transcription of recordings analysis of recordings
    - Comparative study of transcriptions
- Part 6: Research outcomes, creative synthesis:
    - Research outcomes
    - Research conclusions.

3.4 Overview of Heuristic Research Concepts

3.4.1 Identifying with the Focus of Inquiry

Consideration of the first concept of heuristic research, identifying with the focus of inquiry, informed the area of practice-based research to investigate. Identification of areas requiring further investigation and study within my improvisational practice were recognised and developed via the research question. Through the identification stage it was possible to further engage, thereby 'getting inside the question, becoming one with it' (Moustakas 1990, 15) and facilitating 'exploratory, open-ended inquiry, self-directed search and immersion in active experience' (Moustakas 1990, 15).

3.4.2 Self-Dialogue

In the process of self-dialogue, 'one may enter into a dialogue with the phenomenon, allowing the phenomenon to speak directly to one's experience, to be questioned by it' (Moustakas 1990, 16). In practice, self-dialogue enabled the process undertaken as ideas were realised and provided links between initial stages and the content of the subject matter. The facilitation of this process involved the consideration of the 'significance of becoming one with what one is seeking to know' (Moustakas 1990, 16).

3.4.3 Tacit Knowing

Tacit knowledge is a term used by Moustakas (1990) and others such as Polanyi (1966), who call 'the elements of tacit knowledge *subsidiary* and *focal'* (Moustakas, 1990, 21), capturing the sense of the whole and the unity 'of something from an understanding of the individual qualities or parts' Moustakas (1990, 20). Barrett and Bolt (2012, 4) state that, 'creative arts research is often motivated by … personal and subjective terms … operates not only on the basis of explicit and exact knowledge but also that of tacit knowledge'.

The understanding of the whole, assembled via experiencing the different elements of the investigation, bring aspects of the entire creative process together as a unified work. Tacit knowledge connects all aspects of the enquiry, where similarities are strengthened, and

contrasts integrated. Through this understanding, we can 'find our way in the dark' (Moustakas 1990, 22).

3.4.4 Intuition

Often presented as a flash, intuition is a perception which, on reflection, can inform the concepts, processes and connection of ideas. 'Intuition makes immediate knowledge possible without the intervening steps of logic and reasoning' (Moustakas 1990, 23). Intuition, refined through frequency of use, is often employed as a tool for uncovering both the creative process and findings. 'The more intuition is exercised and tested, the more likely one will develop an advanced perceptiveness and sensitivity to what is essential in discovery of knowledge' (Moustakas 1990, 23):

> From the tacit dimension, a bridge is formed between the implicit knowledge inherent in the tacit and explicit knowledge, which is observable and describable. The bridge between the explicit and the tacit is the realm of the between, or the intuitive.

The experience of the process of intuition (Moustakas 1990) can provide significant insights and initiate a flow[9] (Csikszentmihalyi 1990) of ideas. Intuition (Moustakas 1990) is spontaneous, at times unpredictable, and can develop further when the practitioner identifies the experiences and the stages involved within the process.

3.4.5 Indwelling

The heuristic process of indwelling facilitates a 'turning inward to seek a deeper more extended comprehension of the nature or meaning of quality or theme of human experience' (Moustakas 1990, 24). The qualities examined through the research 'involve a willingness to gaze with unwavering attention and concentration into some facet of human experience to understand … its wholeness' (24). This process is cyclic and new material is

[9] Csikszentmihalyi (1990) an American psychologist who investigated optimal experience and the related state of consciousness. Through his findings, Csikszentmihalyi describes this process as 'flow' and asserts this involves 'the use of muscle and nerve on the one hand, and will and thought and feelings on the other' (118) leading to the ordering of the mind and thoughts, and thereby recognising the importance of 'the role of memory, then how words can be used to produce flow experiences' (120).

gathered and integrated over time. 'The indwelling process is conscious and deliberate, yet it is not lineal or logical' (24). Ideas appear where the discovery of and links between the different approaches and creative outcomes can occur, traversing across this potentially incongruent territory. The process of indwelling facilitates clues 'wherever they appear' (24). The clues can be unpredictable, and the researcher needs to be alerted to their possible discovery at any given moment. Engagement in the process involves dwelling within these clues and expanding 'their meanings and associations until a fundamental insight' (24) is achieved and demonstrated through the process of studying the source materials.

3.4.6 Focusing

As a concept, focusing facilitates the clarification of thoughts by removing 'clutter', (Moustakas 1990, 25) and providing 'an inward space to enable to tap into thoughts and feelings that are essential to clarifying a question' (25). Concentrating on what is relevant, such as influences, ideas and notions outside the created paradigm fall away; thus, only what is relevant to the investigation is considered: 'The process of focusing enables one to see something as it is and to make whatever shifts are necessary to remove clutter and make contact with necessary awareness and insights into one's experiences' (25). Focusing is 'a concept that points to a significant idea relevant to personal growth, insight, and change', and 'elucidating its constituents; making contact with core themes; and explicating the themes' (25). It facilitates an 'inner attention', allowing for a 'sustained process of systematically contacting the more central meaning' (25).

3.4.7 Internal Frame of Reference

The final heuristic concept, the internal frame of reference, creates a self-referential boundary, providing an opportunity to reflect on the how the concepts can inform the research process. Here, the significance of how the research question has been assimilated and its relevance to the research problem is reflected in the data generated from the practice-based research and creation of new works. Per Moustakas (1990, 26), all 'Heuristic processes relate back to the internal frame of reference … One must create an atmosphere of openness and trust, and a connection with the other that will inspire that person to share

his or her experiences in unqualified, free and unrestrained disclosures'. The internal frame of reference provides structure to the investigation. Outside of this paradigm, one's behaviour may appear to be 'irrational' (26).

3.5 Phases of Heuristic Research

The concepts and processes of heuristic research provided the framework of the research methodology. In contrast, the phases correlated with the linear stages of the research process. The six phases of the heuristic research 'guide unfolding investigations and comprise the basic research design' (Moustakas 1990, 27). Phases of heuristic research were applied consecutively to the stages of the research and across the concepts. For example, during the first phase (initial engagement), Moustakas (1990, 27) states that 'the investigator reaches inward for tacit awareness and knowledge, permits intuition to run freely, and elucidates the context from which the questions take form and significance'. The phrases are discussed below.

3.5.1 Phase 1: Initial Engagement: Research Questions

Through initial engagement, a topic is explored which could be in the form of a question, problem or theme to be developed. Here, there is interest and the 'initial engagement is to discover as intense interest' (Moustakas 1990, 27). This compelling interest is in an area of enquiry, where 'one encounters the self, one's autobiography and significant relationships' (27). As these various elements coalesce and are examined for possible inclusion to address the research problem: 'The question lingers within the researcher and awaits the disciplined commitment that will reveal underlying meanings' (27). Various ideas are explored for their potential viability, and a sense of expansiveness engaged. Moustakas (1990, 27) demonstrates how this facilitates the phase of initial engagement: 'During the initial engagement, the investigator reaches inward for tacit awareness and knowledge, permits intuition to run freely, and elucidates the context from which the question takes form and significance'.

Here, the topic, question and ideas that represent a 'critical interest and area of search' (Moustakas 1990, 27) are considered, providing unfixed notions and different options to

explore. Moustakas (1990, 27) states, 'The engagement or encountering of a question that holds personal power is a process that requires inner receptiveness'. Moustakas (1990, 27) discusses the need for 'willingness' to completely engage with the theme, to 'enter' into it and the researcher must be prepared to 'discover from within the spectrum of life experiences that will clarify and expand knowledge of the topic'.

3.5.2 Phase 2: Immersion: Source Materials A and B

The process of immersion is contextualised by Moustakas (1990, 28) who states 'Once the question is discovered and its terms defined and clarified … The immersion process enables the researcher to come to be on intimate terms with the question-to live it and grow in knowledge and understanding of it'. Living with the research question is all-immersive, where all experiences and encounters have the potential to take on a renewed significance: 'the researcher lives with the question in waking, sleeping and even dream states. Everything in his or her life becomes crystallized around the question' (28). The research question becomes ever-present in thoughts. Through immersion, many potential sources of insight and inspiration arise. The immersion experience facilitates a significant engagement with the subject matter and source materials; an internalisation and a depth of understanding that otherwise would not be present.

The phase of immersion is a multi-layered process that includes 'spontaneous self-dialogue and self-searching, pursuing intuitive clues or hunches, and drawing from the mystery and sources of energy and knowledge within the tacit dimension' (Moustakas 1990, 28). Living within the research question, 'The researcher is alert to all possibilities for meanings' (28), providing the 'raw material' (28) significant to the immersion stage. Moustakas (1990, 28) states, 'People, places meetings, readings, nature-all offer possibilities for understanding the phenomenon'.

3.5.3 Phase 3: Incubation: Practice and Preparation for Recording

The process of incubation allows for stepping back to take place from the 'intense, concentrated focus on the question' (Moustakas 1990, 28). Rather than being acutely aware of the question and its nature, the absorption of the material in an unconsciousness manner

facilitates the assimilation process. Moustakas (1990, 28) states, 'The period of incubation enables the inner tacit dimension to reach its full possibilities'. This allows the process of incubation to 'clarify and extend understanding on levels outside the immediate awareness' (28).

3.5.4 Phase 4: Illumination: Recording

The process of illumination is 'one that occurs naturally when the researcher is open and receptive to tacit knowledge and intuition' (Moustakas 1990, 29). When working with the intuition and a developed sense of tacit knowledge, the process of illumination occurs as a 'breakthrough into the conscious awareness of qualities and clustering of qualities into themes inherent in the question' (29). Corrections and modifications can be made to the research data and provide clarity. 'A degree of reflectiveness is essential, but the mystery of situations requires tacit workings to uncover meanings and essences' (29). The process of illumination allows for a greater, more integrated understanding of the research questions, opening 'the door to new awareness, modification of an old understanding, a synthesis of fragmented knowledge, or an altogether new discovery of something that has been present for some time yet beyond immediate awareness' (30). Through illumination, a paradigm shift can occur; thus, the researcher's understanding can be adjusted or changed. Here, the source materials are no longer completely separate entities, but provide important links to performance practice techniques. Using tacit knowledge to see the overall picture of the research and significance of the subject and content facilitates a greater understanding of the nuances of the source material with the intention of developing a system for developing the personal voice (McMillan 1996) in improvisations.

3.5.5 Phase 5: Explication: Transcription and Analysis

This stage of the heuristic research method involves the full examination of 'what has awakened in consciousness, to understand its various layers of meaning' (Moustakas 1990, 31). Various heuristic process and phases are engaged to facilitate a 'full elucidation of the descriptive qualities and themes that characterize the experience being investigated' (31). This may include the recognition of new themes uncovered via the transcription process. Here, the 'heuristic researcher utilizes focusing, indwelling, self-searching, and self-

disclosure' (31). These processes come together to facilitate 'meanings that are unique and distinctive to an experience and depend upon the internal frame of reference' (31). Through explication, refinement, articulation and identification of the central and dominant themes takes place, demonstrated through analysis. Features and qualities are recognised and come together as a 'comprehensive depiction of the essences of the experience' (31). The 'researcher explicates the major components of the phenomenon' (31), facilitating the integration of the whole experience.

3.5.6 Phase 6: Creative Synthesis: Research Outcomes, Findings and Conclusions

In the final phase of heuristic research, the works come together as a creative synthesis. The familiarisation of the material enables a thorough working knowledge of all the elements and research data produced, with 'qualities and themes and in the explication of the meanings and details of the experience[d] as a whole' (Moustakas 1990, 31). The data is examined against the method and validated through the experiential and practical nature of the research.

The results transpire, findings are made, and conclusions are drawn from tacit knowledge and intuitive processes (Moustakas 1990). Moustakas (1990, 31) states, 'Once the researcher has mastered knowledge of the material that illuminates and explicates the question, the researcher is challenged to put the components and core themes into a creative synthesis'. Moustakas (1990, 31) describes creative synthesis as taking the form of a 'poem, story, drawing, painting, or some other form'. Focusing on a topic, questioning through a period of 'solitude and meditation' (32), in addition to a thorough knowledge of the data, are the 'essential preparatory steps for the inspiration that eventually enables a creative synthesis' (32). Cultivating the ability to move beyond 'a confined or constricted attention to the data itself and permit an inward life on the questions to grow', facilitating a 'comprehensive expression of the essences of the phenomenon investigated is realized' (32).

3.6 Rationale for Inclusion of Source Materials

The study examines the identification and development of the personal voice (McMillan, 1996) improvised music to examine, recognise and demonstrate how potential musical influences may be integrated and expressed. The enquiry is framed by the research question within the milieu of two contrasting musical works utilised as source materials for their potential to act as primary influences on newly recorded improvised works for solo soprano saxophone. The success of this process of generating new musical ideas and the development of personal syntax within improvisation will be determined via the stages undertaken within the practice-led research process.

3.7 Transcription Process

Musical transcription was implemented at different stages of the research process to facilitate the study and prepare source materials. Transcriptions of the recorded improvisations are used to demonstrate outcomes and findings of the research process. Transcription is an essential and accepted process in jazz pedagogy. Baker (1980, 6) states that 'listening to, analyzing and playing along' is essential to 'learn the language, its syntax, grammar inflexions'. Liebman (1996, 17) recognises that 'imitation is the learning one gathers from predecessors in the field' via the 'writing out, playing with and analysis of the masters' defining transcription as the most essential and effective method of learning the language (of jazz). Within this research the transcription process was utilised as an essential investigative tool, informing the research process and outcomes.[10]

3.8 Conclusion

Heuristic research has provided the model for this practice-based research to examine the nature and input of influence and continuity in improvised music, essentially the observation of influence through the process of immersion and incubation and tacit knowledge (Moustakas 1990).

[10] Transcriptions are located in Appendices A–C.

As this research involved different stages and the examination of two source materials, layers of content were created within both the preparatory and creative stages. As a result, a large volume of material was generated within the immersion and incubation phases. The preparation stages were consequently more time intensive than the creating/recording stages. The prioritisation of the immersion and incubation phases was significant in informing the tacit knowing and indwelling concepts and processes, which facilitated the ability to both absorb and observe the diversity of content within the source materials.

The integration of heuristic methodology with other relevant practical, analytical and phenomenological research methods provides a combined approach. The developed research techniques, inclusion of source materials, generation of research data and use of transcription and musical analysis were used to determine the research outcomes and success of the creative outcomes.

This methodology was determined by the experimental nature of the research, contextualised within the series of solo improvisations as creative outcomes and providing the opportunity for highly personalised material to be considered, examined and analysed, whilst also challenging inherent hierarchies within the periods and styles.

Chapter 4: Epoche

The concept of 'Epoche', outlined by Moustakas (1994, 85), facilitates a method of reviewing experiences and events taken place within the self-history of the researcher: 'As I reflect on the nature and meaning of the Epoche, I see it as a preparation for deriving new knowledge but also as an experience in itself' (Moustakas 1994, 85). It is a process of reflection and investigation ideally free from assumptions and predetermined outcomes, highlighting important experiences, themes and affording insights. In the context of this practice-based research, the Epoche contributed to the investigation by contextualising my biographical material and documenting important events and experiences that preceded and have the potential to inform the research. Per Moustakas (1994, 85), 'Whatever or whoever appears in our consciousness is approached with an openness, seeing just what is there'. Therefore, via the process of identifying my Epoche, (Moustakas, 1994), I have examined findings and detailed experiences directly relevant to the practice-based enquiry.

To situate this study, I have addressed my research question from the perspective of embodied knowledge. It is uncertain whether this will resonate with other practitioners and thereby open a dialogue into the development of a personal generative musical syntax. Moustakas (1994, 84) states that 'Evidence from phenomenological research is derived from first-person reports of life experiences. It may serve other artistic researchers to contextualise their own self-history by engaging with the mechanics of both abstract and creative thinking. In the context of the Epoche, Moustakas (1994, 84) argues that within 'phenomenological principles, scientific investigation is valid when the knowledge sought is arrived at through descriptions', where these descriptions, in this case my formative experiences in music, facilitate 'understanding of the meanings and essences of experience'. (84).

The Epoche (Moustakas 1994) has contextualised the significance of the concept of self-history in framing the present research. Allowing acuities of memories of events to appear without self-editing or challenging assumptions regarding perceived self-knowledge allows for new observations and findings. The Epoche 'requires that we allow a phenomenon or

experience to be just what it is and to come to know it as it presents itself' Moustakas (1994, 85) clarifies the process undertaken in the Epoche by asserting that 'One's whole life of thinking, valuing and experiencing flows on, but what captures us in any moment and has validity for us is simply what is there before us as a compelling thing, viewed in an entirely different way'.

Reflecting impartially on my personal history has provided insights that may otherwise have been dismissed as not relevant to the research. Devising this personal account of the past, facilitated reflection on experiences and events that contributed to lived experience. Through consciously discarding 'prejudgements, biases, and preconceived ideas about' my experiences and actively 'invalidate' and 'disqualify' all commitments with reference to previous knowledge and experience (Moustakas 1994, 85).

Before engaging in the Epoche (Moustakas 1994), process, I anticipated new perspectives and insights into my experiences that could contextualise the direction of this artistic enquiry. As I considered what material to invalidate and disqualify (Moustakas 1994, 85), I experienced the process of the Epoche (Moustakas 1994) as highly personalised. In the context of the Epoche (Moustakas 1994) chapter, I felt vulnerable in documenting these life experiences. Through this sense of unease, I observed that I have previously dismissed the importance of my early life experiences. I hold these experiences as containing highly personal material, which in the context of practice-based artistic research is significant with the potential to lead to insights and research findings. It is these opportunities for informing the research findings that led to the inclusion of the Epoche (Moustakas 1994). My desire to not disclose autobiographical material was strong and arose from an impulse to guard personal content from trivialisation or misinterpretation. These feelings experienced highlight this information as significant to working with self-history in the context of practice-based research.

4.1 My Epoche: Early Experiences

The aural environment of my childhood has provided potent memories of everyday sounds combined with musical experiences. On reflection, my earliest memories include an acute

awareness of aural perception and perceiving sound, a sensory experience existing in an external physical space. These aural memories and impressions are both potent and vibrant with sound, where the vitality of these recollections is often accompanied by a visual memory. Through recalling aural memories, I have gained an awareness that tone or sound can be associated with an impression or an emotion. This emotion could be fleeting, in a state of flux through the impression observed or could present as static.

If I consider how my perceptions of sounds changed as I developed, my awareness and capacity to identify music increased as my connection to sound was initially instinctive. Rather than delineating between music and sound, I recognised changes in pitch and tone qualities as occupying the same space. Within my experience, sounds existed in the surrounding air as vast and expansive.

The aural environment I recall from childhood consist of impressions from my home life; including the conversations of adults; my mother's singing; the compressed tone of the transistor short wave AM radio; the tone quality of mono television; the record player with vinyl on the turntable playing a diverse range of styles and genres including classical music, folk music and popular songs; the sounds of Australian bush songs and folklore; the poems of Henry Lawson and Banjo Patterson; and my attempts of tapping out melodies on my toy piano, which had limited resonance and broken keys.

As anticipated, my experiences of music became more structured when I entered formal education. The following sections provide an overview of some of the specific stages of my musical development.

4.1.1 Preschool Music

Early experiences in my general music education were positive, and I have vivid recollections of sitting in a group with a basket of percussion instruments including; bells, tambourines, triangles, maracas and shakers played with other children together in a circle. This opportunity to directly engage with instruments was a process of discovery and experience in tone colour without any expectation of musical outcomes. The sounds of these instruments were fascinating, and the resulting exploration of music was memorable.

I felt the resonance of tone as sounds waves radiated out. The sensation of creating a sound from where the resulting tone impacted outwardly on the environment, I experienced as creating an inward effect. It was an action and reaction experience, and although the skill level required was negligible, my engagement was high.

As a small child, I felt uninhibited within this experience of music. There was no value judgment of 'good' or 'bad' music and no prerequisite knowledge or technical skill required.

4.1.2 Primary School

My experiences of music in primary school were uneven. As school become increasingly academic, the more challenges I experienced. I had a predisposition for the arts rather than sport, and by my middle primary years, I felt disconnected from the interests of my peers. This caused a feeling of disquiet, and I was unable to articulate the sense of feeling adrift with my learning and environment. Fortunately, as my interest in music grew, and as I developed the ability to read manuscript, my academic skills developed concurrently.

My initial experience of instrumental music instruction consisted of a group guitar class. I entered this environment as a beginner with others who had already developed some basics proficiencies. I found the required skill level difficult to obtain; my fingers hurt from the strings and was discouraged by the sound produced. Lost in this group instrumental lesson and unable to grasp the material I felt overwhelmed by the cacophony of sound.

4.1.3 Primary School Choir

Participating in the school choir was a positive experience. During rehearsals, I often found my attention focused on the piano accompaniment. I listened intently to the pianist and, in particular, the harmony parts. I was intrigued as to how the piano could sound so different depending on the number of parts played and the balance between the left and right hands, melody and harmony.

When the full accompaniment was played, I experienced harmony as ‘rich’ or ‘complete’. When only one vocal line was played, the piano would sound empty to my ears. In this context with the absence of harmony, something sounded missing within the music.

4.1.4 The Piano

There were musicians within my extended family. In particular, I became aware my maternal grandmother had played both the organ and piano; I would hear the stories about how she performed in both the Catholic and Anglican church services in Central West, New South Wales. Both congregations accepted her due to her musical abilities. Unfortunately, I never had the opportunity to hear her perform. However, the music seemed the hang in the air of the family home and came to life through stories. My grandmothers’ circumstance facilitated her musical education. One of eight children, due to a childhood illness she was raised by her maternal grandmother, who taught my grandmother how to play both the piano and organ and other skills deemed essential for a young woman such as embroidery.

Musical education had missed the generation of my parents, in large part due to the Depression and scarcity of resources. Nevertheless, my parents did own a large record collection encompassing a broad range of styles, including popular, folk and classical music. Watching records rotate whilst I listened became a favourite pastime. Yet, there came the point in my childhood where listening and observing was no longer sufficient, and the impulse to engage actively with music and play become an active pursuit.

My study of the piano commenced in 1982, at the age of 11, and signalled the start of my formal music studies. Piano lessons transformed the experience of my overall learning process and education, for the first time since early childhood, I approached learning positively. Access to an instrument and daily practice took place at the home of a family friend. I felt a sense of purpose within this process of studying music, and I thrived in the one-on-one learning environment of instrumental lessons. These lessons provided a new sense of meaning and a structured routine.

After learning the piano for close to a year, my father accompanied me to a practice session. He observed and soon thereafter, I was taken to a large music shop with an entire floor of

pianos; a vast landscape covered with pianos and recall experiencing a mixture of emotions, of overwhelm, disbelief and anticipation.

My small upright student Yamaha piano arrived, and my engagement in music transformed. My father had spent his entire savings on the piano. This gesture and the investment in my education became increasingly significant as time passed.

In this same year that my piano arrived, my father was diagnosed with a terminal illness, affecting his capacity to work and communicate. It was devastating to observe his rapid decline in health. After surgery and treatment proved ineffective, my father became unconscious, and nine months after his diagnosis passed away.

At 13 years old, I had difficulty processing the emotions I experienced as a result of this loss. It is evident that my father's passing was a profound life-changing event in my self-history. I searched for outlets of expression. Playing the piano became an experience of necessary solace, as did poetry. However, these activities were insufficient in expressing the extremes and intensity of emotions I was experiencing. To process my all-consuming grief, I sought to learn an instrument that embodied a diverse, dynamic range and flexibility of timbre to facilitate expressive outcomes.

4.1.5 The Alto Saxophone

The early years of playing the alto saxophone provided challenging experiences of trial and error. Control on the instrument took many years to develop. Initially, my playing was clumsy, and sound underdeveloped, yet I was determined to continue and improve my skills on the instrument. After only a month of learning to play the saxophone, I was fortunate enough to join a youth band led by percussionist Greg Sheehan. This project, *Earth, Wind Fire and Water*, organised by the New South Wales Craft Council in 1985, with regular workshops across a year, and culminating in the performance of an original multi art-form show at the Sydney Domain. Being a member of *Earth, Wind, Fire and Water* involved a process of developing original and creative material for performance and facilitated partnerships with other artists, dancers and puppeteers. Through artistic leadership, the

creative process was not diluted by the inexperience of the young performers but workshopped in a professional manner.

4.1.6 Jazz Education

The following year, I commenced lessons in saxophone technique and jazz improvisation. The word 'improvisation' itself evoked endless possibilities, a sense of freedom, openness and opportunities to explore. I was unsure of how to apply my fledgling knowledge of jazz repertoire, chord/scale relationships and instrumental technique.

At the age of 15, as my interest in the style continued through the listening of seminal albums by significant figures such as Miles Davis and saxophonists of the modern jazz era. Here, for the first time I heard John Coltrane on *Kind of Blue* (Davis [1958] 2015), Cannonball Adderley (1958) and Roland Kirk (1961).

Listening to Roland Kirk (1961) and his ability to play multiple woodwinds simultaneously broadened my perceptions of the musical conventions of jazz. Kirk's (1961) improvisational style appeared so far removed from the mainstream of jazz to the periphery of improvised music performance. What he was attempting and achieving to perform on three woodwind instruments at once, profoundly changed my conceptual awareness of music. Through this, I observed that Kirk (1961) was clearly able to express himself through self-determination, rich timbral textures, spontaneity and originality.

I developed a greater awareness of the connection between jazz improvisation and the expression of distinct personalities and individuality.

4.1.7 The Soprano Saxophone

In 1986, on listening to the live album *Bring on the Night* by Sting (1986), I heard the soprano saxophone, for the first time. This instrument sounded highly expressive and emotive. Saxophonist Branford Marsalis soared over the band and gave the sense this instrument, and its tone colour facilitated a sense of freedom. This sound of this instrument made a lasting impression. Although I continued to play alto saxophone, through the

intensity of this listening experience I was conscious of the strong impulse to play the soprano saxophone as my first instrument.

4.2 Changing Schools and Later Years

In 1987, I changed from a state secondary school to an independent school, Australian International Independent School (AIIS), which was liberal in its ideologies. Creativity, enquiry and independent thinking were encouraged, alongside academic excellence. At AIIS I was immersed in the love of learning for learning's sake.

Concurrently, between 1986 and 1987, I experienced an important informal education. At the age of 16, I regularly attend jazz gigs at *The Basement* in Circular Quay, Sydney. I became familiar with the different musicians and bands playing on the Sydney jazz scene, which included regular visits from Melbourne-based jazz musicians. All the music I heard was improvised. The performances were inspiring, and I began to observe the workings of the small jazz ensemble and the experience of the jazz musician.

4.2.1 Preparing for Full-time Music Study

In 1989, at the age of 17, I commenced studies with saxophonist, Greg Mayson, a woodwind specialist based in Sydney. Through these lessons, I was challenged to improve my musicianship on all levels and gained a comprehensive education on saxophone technique and fundamentals in jazz improvisation.

In 1990 I relocated from Sydney to Canberra having gained entry to the jazz diploma course at the Canberra School of Music. Within this environment, my musical education became all consuming. During this period, I enrolled in the jazz harmony and analysis class taught by, Berklee School of Music graduate and guitarist, Mike Price. This experience formalised my musicianship and developed my knowledge of functional harmony. This period in Canberra was productive, providing an opportunity to practice; transcribe solos of jazz saxophonists such as Charlie Parker (1947, 1968, 1985) Dexter Gordon (1962) and Sonny Rollins (1956);

and immerse myself in the language of jazz. However, this was short-lived, and within two years, I searched for greater freedoms and creativity, which led to my departure.

4.2.2 Melbourne

With significant artistic activity and musical creativity taking place in Melbourne, relocating in 1992 to attend the Bachelor of Music Performance degree in improvisation at the Victorian College of the Arts (VCA) was an intuitive, but on reflection, logical step. Here I commenced study directed by soprano saxophonist Brian Brown in improvisation rather than specifically jazz. Once I began to learn and experience Brown's philosophy on the personal voice in improvisation (McMillan 1996) in practice, my musical sensibilities felt challenged. For some time, I experienced antipathy for the concept of the personal voice (McMillan 1996) in improvisation. I fervently believed that I needed to develop greater knowledge before considering my musicianship as worthy of developing a personal voice (McMillan 1996) in improvisation.

My artistic sensibilities were not ready to relinquish the ideals of the American Jazz pedagogy, and I continued to study American Jazz saxophonist in particular soprano saxophonists such as John Coltrane,[11] Steve Lacy[12] and David Liebman.[13] Transcribing some of the early recordings of Lacey ([1957] 1991), but my interest in the music of Coltrane and Liebman was predominately focussed on the genre of modal jazz. It became evident these influences were informing my approach to improvisation and, significantly, my thinking conflicted with the philosophical premises underpinning my new environment at the VCA.

Over time, my own approach shifted and evolved largely through my exposure to the faculty members of the Improvisation Department at the VCA. I become increasingly receptive to improvisation as a broader art form. The opportunities to play and workshop material significantly enhanced my performance skills, although I continued to experience conflict

[11] Albums such as *Coltrane's Sound* (1964), *Blue Train* ([1958] 2014) and *My Favourite Things* (1961) by John Coltrane.
[12] *Soprano Sax* ([1957] 1991)by Steve Lacey.
[13] David Liebman has been a significant influence through his recordings, for example, the recording Homage to John Coltrane (1987), writings on jazz and improvised music (1991, 1996), and Liebman's work as an educator.

regarding how I *should* play. My instrumental practice largely focused on the development of technique and studies, through my own volition, rather than the advice of a teacher. I prioritised the development of technique with the view this practice could lead to enhanced expression and creativity over the longer term.

4.2.3 *Morgana*

In late 1992, I founded my first ensemble, *Morgana* a jazz quintet, featuring an all-female line up of musicians. I co-led this ensemble with drummer and composer Sonja Horbelt for a period of eight years until 2000. Within *Morgana*, I found like-minded musicians performing original improvised music. The group was successful in gaining performances and facilitating other important opportunities, including touring and recording. Significantly, it led to confidence in my experiences and validation of the personal voice (McMillan 1996) in improvised music.

4.2.4 Further Study

In 1994, I completed my Bachelor of Music Performance at the University of Melbourne and furthered my education while also perusing my performing career as a saxophonist. In 1995, I completed a Diploma of Education and, in 1996, commenced a Master of Music Performance at the University of Melbourne. During this period, I had the opportunity to diversify my musicianship through the studying of contemporary classical composition techniques with Mary Finsterer and classical saxophone techniques with Graeme Shilton. This study furthered my knowledge of style, genres, compositional techniques and performance practices. I was challenged to reassess my approach to music through a variety of different performance and compositional methods.

Study with classical saxophonist Graeme Shilton transformed my saxophone technique in the areas of accuracy, intonation and technique, and brought my attention to the importance of appropriate stylistically nuanced interpretations of works through the study and practice of compositions. Adapted works studied included compositions for the flute; *Partita in A minor*, BWV 1013, by J.S. Bach (composed 1722–1723) and *Syrinx* by Debussy (composed in 1913).

Through my compositional studies with Mary Finsterer, a former student of the Dutch composer Louis Andriessen, I studied contemporary classical composition techniques including serialism. I commenced composing works based on the 12-tone technique of the second Viennese School for a range of instrumentation, from solo saxophone works, small chamber works to large-scale orchestral works. I was taught a dynamic approach with meticulous attention to detail, including calligraphy skills. This study in composition was grounded in bringing numerous concepts and elements together to create the whole and appealed to my creative sensibility, whilst facilitating skills in the area of composing for large ensembles and longer structures and forms. The composition lessons were often focused on concepts, ideas and disparate elements and, significantly, focused on the conception and realisation of creating a particular 'sound world', that often challenged historical and stylistic definitions.

I reflected on the concepts of music as an organised expression of sound, while acknowledging the significance of recognising the defining elements, characteristics and performance practices that define different styles and genres. I became cautious of the partitioning of music that occurred through the affiliation with a particular style and considered music more broadly and in terms of the function of the elements of music and the impact of the structure, form and instrumentation on musical outcomes.

After completing my Master of Music Performance degree, I pursued a full-time career as an independent artist and was involved in composing, performing, leading and planning projects, organising performances, touring and while pursuing artistic goals. Significantly, during this period my professional development included opportunities to study with musicians whom I admired in the United States, in particular, Dave Liebman, George Coleman, Dave Douglas and Kenny Werner.

4.2.5 Band Leading

From 1992 to 2009, I was engaged in leading ensembles, creating and releasing recordings, composing works for numerous ensemble settings; large, small and solo works; and compositions that embraced contrasting styles. Collaborations with musical colleagues were

pivotal to my development, and creative direction, equally important was the association with Mal Stanley, a producer at the ABC Southbank Studios in Melbourne, who recorded many of my projects for broadcast or release.

Each new project provided opportunities for different musical influences and collaborators, all of whom contributed to the creative dialogue: *Morgana*, my first ensemble project, featuring Lisa Young (voice), Sue Johnson (piano), Annette Jenko-Yates (double bass) and Sonja Horbelt (drums); *Fiona Burnett Quartet*, with Mark Fitzgibbon (piano), Matt Clohesy (double bass) and Darryn Farrugia; *Fiona Burnett Trio* with Ben Robertson (double bass) and David Jones (drums and percussion); and my collaborations with *Silo String Quartet* led by Caerwen Martin (cellist and composer); *Fiona Burnett Electric Band*, featuring Leonard Grigoryan (guitars), Christopher Hale (acoustic bass guitar) and Andrew Gander (drums); and the duo project *Music by Design*, featuring the percussionist and drummer David Jones. Each ensemble featured different line ups and variations in instrumentations. When considering the significance of the personal voice (McMillan 1996), in improvised music the development of syntax, it was the individual musicians involved in each project who played a significant role informing the creative outcomes.

In considering the impact of education and performance history on the preparation for the current practice-based research, two projects stand out as having a significant impact on this research. The first is a CD project titled *Counterpoint* (2004), a trio project featuring, double bassist Ben Robertson and percussionist and drummer David Jones. The other, a duo collaboration, also featuring David Jones, *Music by Design*, a one-hour spontaneous improvised work recorded at the Gasworks Theatre in Melbourne (2007) and later released by ABC as *Sound Inspirations* (2008).

As is evident from the above list of collaborations, the instrumentation of my creative projects became smaller with each consecutive project, (with the exception of a number of larger-scales projects involving chamber orchestras and strings quartets between 1999 and 2003). In general, each successive project has decreased in size, from quintet to quartet to trio to duo. Rather than being a featured soloist in an ensemble setting, this research

project has provided the opportunity to focus on my work as an improvising musician researching the personal voice (McMillan 1996) in a solo context.

4.3 Epoche Reduction Summary

Through analysing my Epoche, I note a number of significant themes that may be drawn out in subsequent chapters:

1. I have experienced a broad musical education that commenced with the simple manipulation of sounds and a fascination of tone colour, possibly opening the way to be a performer/composer.
2. I was exposed to a wide variety of musical styles via my parents, through which I enthusiastically absorbed a diversity of musical information.
3. Having experienced significant personal loss at a formative age created need for an expressive outlet, facilitated through the study of the saxophone.
4. A pattern of interest in diverse musical styles continued throughout my development, from my early years through to my postgraduate studies and my professional work as a performer, composer, ensemble leader and recording artist.
5. A reduction in the size of instrumentation and collaborative artists has led to the development of research into solo improvisation.
6. In practice, improvisation and composition has featured in my development, both informally and formally, across the Epoche, has been used as a form of personal expression since childhood, and has continued to dominate my creative practice.

Chapter 5: Source Material A: BWV 1008 by J. S. Bach[14]

Chapter 5 documents the process undertaken while examining Source Material A within phase 2 immersion (Moustakas 1990) and phase 3 incubation (Moustakas 1990) of the heuristic research methodology (where various concepts and processes of the methodology are applied where relevant). This includes the stages applied to the background research, study and practice of the work, culminating in the recording of BWV 1008 on the soprano saxophone. The work was studied in parallel with Source Material B (see Chapter 6), where the same methodological stages are applied to the research process (discussed in Chapter 3). Due to the differing nature of each source material, the content and outcomes are predictably varied.

Commencing with the immersion phase of the methodology (Moustakas 1990), concepts and processes of the heuristic methodology were applied where relevant. The creative outcomes of this chapter consist of recordings of the six movements of the suite BWV 1008 by J. S. Bach, originally for solo violoncello, within this practice-based research performed on the soprano saxophone. The primary consideration for the study of Source Material A is how the adaptation, learning and relevant performance practices of BWV 1008 have been applied to the creative outcomes of recorded solo improvisations and whether this process informed the development of new material within improvisational syntax or personal voice (McMillan 1996). The overall creative outcomes are discussed in Chapter 8, where three example improvisations are examined through comparative analysis with Source Material A and B. Further considerations include how the study of the six different movements of BWV 1008 by J. S. Bach may have impacted on my practice and/or interpretation of Source Material B.

5.1 Criteria for Source Material A

The following six-step process was undertaken to develop Source Material A:

[14] See Appendix A Transcription of Source Material A.

1. Background information, and historical and biographical material on J. S. Bach gathered to contextualise the performance practice techniques of the Baroque era. Different recorded versions of the suite BWV 1008 on violoncello consulted.
2. Survey of scores and development of an initial interpretation of the suite BWV 1008.
3. Study of primary texts and study undertaken with the Baroque woodwind specialist Greg Dikmans.
4. Development of an arrangement of BWV 1008 for soprano saxophone utilising adaptations of Baroque performance practice techniques.
5. Documentation through recording of BWV 1008.
6. Post-production, mixing and mastering of recording.
7. Transcription of recording, including documentation of harmonic and note analysis (see Appendix A).
8. Reflection on the process and the impact of this on learning Source Material B.
9. The impact of learning this material on the final creative outcomes and the potential to inform the individual syntax in the form of the personal voice (McMillan 1996) in improvisation.

The immersion stage of the methodology (Moustakas 1990), was a time-intensive process of study and practice, investigating aspects of the work and considering adaptations of the performance practices techniques specific to the work to the instrumentation. This amounted to approximately 5,000 hours of research and practice in developing background information and an interpretation of Source Material A.

Priorities for learning BWV 1008 were to:

1. Develop an understanding of Baroque performance practice techniques.
2. Further development of instrumental skills, technique and range on the soprano saxophone.
3. Adaptation of an arrangement of BWV 1008 for the soprano saxophone in the original key and informed by historical conventions.
4. Develop material with the potential to inform musical syntax and contribute to the personal voice (McMillan 1996) within the process of improvisation.

5.2 Historical Context

Historical and biographical material provides background material on the cultural and biographical context of J. S. Bach, his compositions and the Baroque period, facilitating the immersion process (Moustakas 1990) and contributing to tacit knowledge (Moustakas 1990) informing an overall context for the work, BWV 1008, within this study.

5.2.1 Brief Biographical Material

J. S. Bach was born in Eisenach on 21 March 1685 and died in Leipzig on 28 July 1750. He came of age at the height of the Baroque period and its conclusion coincided with his passing. A Germanic composer and organist born into a family who, for a period of 200 years or seven generations, were 'professional musicians well-known in Central Germany' (Williams 2012). His father, Johann Ambrosius Bach, was a court and town musician at Eisenach, and his mother was the daughter of a town official from Erfurt (Williams 2012, 8). Bach was orphaned at the age of nine and then lived with his elder brother Christoph, an organist from whom J. S. Bach 'learnt the first principles in keyboard playing from his brother' (Williams 2012, 14).

At the age of 17, Bach became the organist at Sangerhausen, then held a position in the court in Weimer. From here, he went to Arnstadt and was promoted to concertmaster. He was appointed Capellmeister in Cöthen at the court of Prince Leopold and continued to hold this title after his departure. The Cöthen role was the only secular position he would hold, while all other positions were within the Lutheran Church. J. S. Bach arrived in Cöthen towards the end of 1717. Wolff (2000, 188) states that 'Bach picked up his first pay on December 29, 1717', and Prince Leopold's records describes Bach as 'the newly arrived Capellmeister' (2000, 188). He resided at Cöthen from 1717 to 1723, and it was here that he composed the suite, BWV 1008, as part of a series of six for the unaccompanied violoncello.

J. S. Bach's time with Prince Leopold would be unique and productive for Bach due to the nature of his role as Capellmeister and his employer's appreciation of music and employment of a significant number of court musicians. Bach was prolific during this period,

engaging in the rearrangement of his own works and composed the suites for unaccompanied violoncello, the Sonatas and Partitas for violin, solo flute works, Well-Tempered Clavier and the Brandenburg concertos.

Within the documentation available, there is limited information about the number of performances outside of major events such as New Year's Day celebrations and Prince Leopold's birthday. Other occasions were likely to have been a regular part of courtly life with the prince, as demonstrated by a significant number of musicians on the payroll as chamber and court musicians, including three copyists and a dancing master (Wolff 2000, 193).

The suite BWV 1008 is the product of a lively court environment and a prince who as Bach's employer prioritised live performances. This suite, BWV 1008, and the five others in this series (BWV 1007-1012), could have been composed for Christian Ferdinard Abel, viola da gamba (also violin) or Johann Ludwig Rose, violoncello (Wolff 2000, 193).

5.2.2 Composition

Bach is a significant and influential figure as a composer. His ability to master multiple approaches to composition in the early eighteenth century is well documented. Bach was considered an 'indefatigable student of his art, eagerly learning from whatever he procures of the production of other nations' (Quantz [1752] 2001, 62) and demonstrates his ability to assimilate the French style applied to BWV 1008, representing 'the period when the suite, as distinct to the sonata, reached its highest point' (62), in addition to his mastery over the contrapuntal fugue and chorales. His compositional work is divided into three periods: his organ works, compositions for other instruments including the Baroque Orchestra, and his church compositions (Quantz [1752] 2001). The suite BWV 1008 is from the second period.

5.2.3 The French Suite

The suite was composed in the French style. While J. S. Bach never went to France, 'France came to him' and Bach was able to fully integrate the French suite into his compositional language. In writing about the circumstance of this work, Taruskin (2009) states:

> Bach made his most through assimilation of the French style when he was professionally required to do so. That was in 1717 when he left Weimar for the position Kapellmeister in Cöthen. This was an entirely secular position … Thus, for six years, Bach wrote mainly for instrumental music … The kind of entertainments demanded of Bach as part of his official duties would have taken the form of sonatas, concertos, and above all, suites. Bach turned out several dozen of the later, ranging from orchestral overtures through various sets for keyboard, to suites for unaccompanied violin and even cello, the later unprecedented as far as we know.

Through composition, Bach brought together a 'cogency of themes' (Wolf 1998,14) expressed through melody, harmony, counterpoint, rhythmic consistency and orchestration of monumental proportions. Bach's influence as a composer has been significant to Western European music, and his work as a teacher of composition is recognised as impacting his lasting influence. Wolff (2000) states that if Bach ever come close to creating a 'revolution', it was through the teaching of composition, asserting that Bach was the 'first to fully integrate the principles of thorough bass, harmony and counterpoint' (2000, 9).

Bach's influence over Western European composition continued to resonate. At the turn of the nineteenth century, Wolff (2000, 9) states that Schubert made the following remarks about Bach's compositions:

> The name of Johann Sebastian Bach radiates supremely and sublimely above those of all German Composers in the first half of the past century. He embraced with Newton's spirit everything that has hitherto been thought about harmony [composition] and that has been presented as examples thereof, and he penetrated its depths so completely and felicitously that he must be justly regarded as the lawmaker of genuine harmony, which is valid up to the present day.

5.3 Development of an Interpretation of Source Material A, BWV 1008 Arranged for Soprano Saxophone: Considerations and Challenges

The first consideration was the absence of the original score in Bach's calligraphy. Although the earliest available copy of the work was initially assumed to be in the handwriting of Bach, in 1873, Phillip Spitta, a biographer of Bach, discovered this version of the score was in the calligraphy of Anna Magdalena Bach (Siblin 2009). Siblin (2009, 247) states:

> Anna Magdalena's calligraphy, with its undulating lines and harmonious shapes, its elegant stemming and beaming, had so much come to resemble her husband's that scholars long assumed that the manuscript was in Bach's hand.

The original manuscript of BWV 1008 by J. S. Bach has not been located. All available copies of the manuscript are one or more steps removed from the original in J. S. Bach's own calligraphy. Without the urtext, there were minor discrepancies between different version of the score, which demanded consideration. However, this absence of the original score provided some leeway in the development of an interpretation specifically for the soprano saxophone.

Editions selected for the purposes of learning BWV 1008 included those by Henle (2000) and the *Bärenreiter Urtext* (2006), with the latter including six different editions of the work (Versions A–E), a score complied from these versions and documentation of the differences between the versions. Version A by Anna Magdalena Bach became the primary urtext. Listening consisted of different recordings of the work by contemporary cellists such as Steven Isserlis (*The Cello Suites* 2007) and Pieter Wisplelwey (*6 Suites for Violoncello Solo* 2012) and recordings of the suites by Anner Bylsma (1992) and the original version by Pablo Casals (*Bach: Cello Suites*, originally recorded between 1936 and 1939, and the remastered edition released in 2003).

In developing the interpretation for recordings, the process went through several stages. Initial consultation of the Henle (2000) and Bärenreiter (2006) editions and led to development of transposed parts into Bb, two octaves above the original pitch. This was partially effective and had varying degrees of success as the outcomes overlooked range considerations and produced arrangements that were relatively dysfunctional and difficult to play on the soprano saxophone. Through this, it was evident additional work was required to inform and shape the interpretations and address practical instrumental considerations. In addressing these challenges, different variations to the score were considered and adaptations were applied considering range limitations and technical considerations (especially the omission of double and triple stops in some instances).

Consequently, two significant challenges were addressed as a result of this initial version and became significant areas of focus of this stage of the research: range and phrasing.

5.3.1 Range

Composed for unaccompanied violoncello, BWV 1008 is notated in the bass clef, while the soprano saxophone is a Bb instrument, notated in the treble clef, within the written range of Bb below the stave to High F# above the staff.

Challenges of the instrumental range were associated with issues arising via transposition and limitations within the extreme registers of the saxophone. The transposition of the score into the treble clef by two octaves and a tone resulted in some content transposed into the altissimo register. This adversely affected the tone colour of the saxophone and contributed to technical challenges. Additional adjustments of range were applied in order to improve the balance across the different saxophone registers.

5.3.2 Phrasing

The initial approach to the phrasing was determined by the length of musical lines, rather than practical considerations of breath capacity. Consequently, this compromised breath support, stamina, tone and, inevitably, the music. Phrasing became a key feature of the development of Source Material A. Quantz ([1752] 2001, 7) warned of this difficulty: 'I am endeavouring to train a skilled and intelligent musician, and not just a mechanical flute player, I must try to not only to educate his lips, tongue, and fingers, but must also try to for his taste, and sharpen his discernment'.

5.4 Additional Considerations, Instrumentation and Baroque Pitch

At the commencement of this stage of the research, additional points were considered important in framing the context of the adaptation of BWV 1008 By J.S. Bach for soprano saxophone. Firstly, considering the significance of the short history of the saxophone in comparison to Baroque music and instrumentation. The saxophone is a relatively modern

instrument, invented in 1842 by the Belgian instrument maker Adolphe Sax, approximately 100 years after the conclusion of the Baroque period.

Secondly, it was important to consider Baroque pitch and the potential implications for the overall performance outcomes, sounding approximately a semitone lower (A4 = 415 Hz) than the current standardisation (A4 = 440Hz). In this context of adapting Source Material A for the soprano saxophone, there was no scope to adjust down to Baroque pitch. Due to the shape of the soprano saxophone, a conical bore and based on the overtone series, large adjustments down in pitch are not possible and undesirable in terms of potential tone colour outcomes. Listening to recordings of Baroque music on period instruments by Beschi (1997) and Dikmans (2014) was insightful. Therefore, it was important to consider in the context of acknowledging the contrast between Baroque pitch and the current standardised pitch of A4 = 440Hz and how contrasting the work would have sounded on a period instrument in the Baroque era.

5.5 Study in Baroque Performance Practice

Through his formidable knowledge of this specialist field of Early Music, Melbourne-based Baroque flute specialist Greg Dikmans taught the music of J. S. Bach from a practical application or 'player's' perspective. My studies with Dikmans facilitated an understanding of the BWV 1008 contextualised by the primary texts used to inform Baroque interpretation. These texts included books by Quantz ([1752] 2001) specific to woodwind instruments and other references such as C. P. E. Bach ([1759] 1949) Leopold Mozart ([1756] 1986). Secondary sources by Dolmetsch ([1915] 2005) and Donnington (1974) also facilitated the application of Baroque performance practice and interpretation.

Through the process of studying BWV 1008, Dikmans contextualised the form of the movements of the suite through the consideration of Baroque architecture to understand the symmetry inherent in Baroque music. The even and balanced dimensions of Baroque buildings was reflected in the structure and form of the movements of the suite. The simple symmetry was seen in combinations of the A B forms of the *Allemande*, *Courante*,

Sarabande, *Minuet* and *Gigue*, where the *Prélude* stood apart with an open-ended, improvisatory form at the commencement of the suite.

Significant development of my interpretation of BWV 1008 took pace place during this period of study with Dikmans. I commenced study of BWV 1008 directly from the bass clef score and returned to the Anna Magdalena Bach edition, considering notated phrasings from this version and implementing these where technically possible on the soprano saxophone. Later, due to the difficulty of reading this calligraphy, returning to the Henle (2000) edition of the score.

I found benefits within the process of working with the bass clef score of BWV 1008. The technical issues caused by range and phrasing were addressed and the breath became a central feature of the phrasing and interpretation, rather than an obstacle. This facilitated the opportunity to develop a greater understanding of the terminology of Baroque performance practice and its practical application.

Through the primary texts and Dikmans' teachings, I became aware of a range of expressive devices specific to the Baroque performance practice. I developed insights into the knowledge base and expectations placed upon the Baroque musician. Parallels between the process of interpretation of music in the Baroque era and improvised music and jazz become evident, although these lead to contrasting outcomes, where the manuscript provides often minimal information and the conventions of the style and performance practices are implicit.

As a result, aspects of Baroque performance practice that allowed for subtlety and nuance were considered. Significantly, I found the performance practice had room for flexibility in its interpretation which could be of improvisatory in nature, rather than prescriptive, and determined by the individual musician's choices. These choices could be spontaneous or determined by various factors such as context, setting, individual taste, technical considerations and the acoustical properties of the room. This was unexpected and facilitated a greater capacity for spontaneity within the development of my interpretation of Source Material A.

5.5.1 Movements

The six movements of Source Material A are the *Prèlude*, *Allemande*, *Courante*, *Sarabande*, *Menuet I* and *II*, and *Gigue*. Originally, the French suite was designed for dancing, although this work was composed for listening. Over time, I gained a greater awareness of the nature of each movement; the relevance of the time signatures, tempo and structure; and the distinct character of each movement.

5.5.2 Embellishments

In discussing the interpretation of embellishments, C. P. E. Bach ([1759] 1949, 79) stated:

> No one disputes the need for embellishment. This is evident from the great numbers of them everywhere to be found: They are, in fact indispensable. Consider their many uses: They connect and enliven tones and impart stress and accent; they make music pleasing and awaken our close attention. Expression is heightened by them; let a piece be sad, joyful, or otherwise, and they will lend a fitting assistance. Embellishments provide opportunities for fine performance as well as much of its subject matter. They improve mediocre compositions. Without them the best melody leaves us empty and ineffective, the clearest content clouded.

5.5.3 The Appoggiatura, Vorshlag and Abzug

The appoggiatura is an Italian word meaning 'to lean', while the German translation the 'vorshlag' implies a slightly different meaning of 'fore-beat', where notes that otherwise may look equal in rhythmic duration visually (i.e., through notation) are not performed equally. Initially, I found this concept of a note written in one way, to be interpreted another way difficult to reconcile. When comparing the vorshlag to the written rhythmic notation of a swing feel facilitated my understanding of the rhythmic placement of the fore-beat. Where the extended duration of one note borrows duration from the following note. In this instance the first note is often a grace note that can supersede the downbeat in both significance and duration.

To explain the role of the appoggiatura, Quantz ([1752]2001, 91) states, 'In performance, appoggiaturas are both ornamental and essential. Without appoggiaturas a melody would sound very meagre and plain'. Figure 5.1 shows an example of the notation as it appears in the Bärenreiter (2006) edition (Bb Transposition).

Figure 5.1: *Prèlude*, Bars 26–27.

Figure 5.2 shows the same section of notation with the appoggiaturas (Bb Transposition).

Figure 5.2: *Prèlude*, Bars 26–27.

Playing this appoggiatura felt counter-intuitive, highlighting challenges in the area of the control in the nuances of the diminuendo. The appoggiatura in Figure 5.3 demonstrates a leaning onto the first note of each two notes.

Figure 5.3: *Gigue*, Bars 24–26.

In the final movement, the *Gigue* (translated as 'jig'), I found this passage of articulation initially difficult to play. In practice I slowed this section down considerably to develop the required articulations. I observed that in my recording of this passage, the dynamics are static across the two notes. This is an example of where the intent and actual realisation in performance differ, in part due to the technical challenges involved and in part due to inherent challenges involved in adapting this expressive device to suit the instrumentation.

C. P. E. Bach ([1759] 1949, 87) states the follow regarding appoggiaturas:

> Appoggiaturas are among the most essential embellishments. They enhance the harmony as well as melody. They heighten the attractiveness of the latter by joining notes smoothly together and in the case of notes, which might prove disagreeable because of their length, by shortening them while filling the ear with sound. At the

same time, they prolong others by occasionally repeating a preceding tone and musical experience attests to the agreeableness of well-contrived repetitions.

5.5.4 The Abzug

The abzug is a term for a grace note, 'very small notes that receive its … value from the notes before which they stand' (Quantz [1752] 2001, 91). Developing my capacity to play and interpret the abzug became a key focus, and I found the playing of this particular appoggiatura useful as an expressive device. In regard to articulation of the appoggiatura and abzug for the woodwind player, Quantz ([1752] 2001, 95) indicates that 'Appoggiaturas must be tipped gently with the tongue, allowing them to swell in volume if time permits; the following notes are slurred a little more softly. This type of embellishment is called the Abzug'. In the edited notes of *On Playing the Flute*, Edward R. Reilly (Quantz [1752] 2001, 93) states, 'The Abzug is not a new or separate type of ornament, but a normal, long appoggiatura performed in a special way, that is, with a swell and a diminuendo'. Figure 5.4 shows an example notation with a grace note followed by a trill.

Figure 5.4: *Sarabande*, Bar 1.

The grace note could be interpreted with rhythm shown in Figure 5.5.

Figure 5.5: S*arabande*, Bar 1.

Figure 5.6 is a transcription of this particular abzug, and trill are interpreted in the recording (Movement IV, *Sarabande*, Source Material 1).

Figure 5.6: *Sarabande*, Bar 1.

5.5.5 Trills

On the use of the trills, ornaments or, as they are described by Quantz ([1752] 2001), shakes, Quantz states:

> Shakes add great lustre to one's playing, and, like appoggiatura's are quite indispensable. If an instrumentalist or singer were to possess all the skill required by good taste in performance, and yet could not strike good shakes, his total art would be incomplete. (101)

Like other aspects of Baroque music, the 'shakes' or 'trills' are not set; that is, they are ornamental, interpretive or improvised. This is in contrast to later music, where ornaments are predetermined within the notation. There is an interpretative freedom in the trills within Baroque music, and the performer has the choice within the performance practice and conventions. Figure 5.7 shows an example of a short trill at beat 3.

Figure 5.7: *Allemande*, Bar 6.

Figure 5.8 shows an example of an improvised turn at beat 2.

Figure 5.8: *Sarabande*, Bar 10

Figures 5.7 and 5.8 are the recorded outcomes of the process of developing different trills within the score, where these examples are improvised (Source Material A, Movement IV, *Sarabande*).

5.6 Concept of Sound: Tone Control, Mouthpieces and Reeds

As I experimented with new interpretative techniques such as the appoggiatura and abzug in my practice, I addressed necessary changes to my mouthpiece and reed set up. Initially, I opposed this impending change, but on reflection, I realised this resistance was largely due to attachment built up around the concept sound and its use as a personal expressive tool. I identified this concept of sound as not exclusively an audible experience of music, but also comprised of a physical and emotive element.

My soprano saxophone mouthpiece, Otto Link size 5, medium chamber, had been a fixture of my setup for a period of 20 years. The reed selection of # 3 Plastic Cover, Rico reed was my preferred reed for a 10-year period. This set-up of a relatively small mouthpiece chamber paired with a hard reed created a high level of resistance. The adaptation of the new stylistic conventions was incongruent with this particular mouthpiece set-up. As a result, I was unable to achieve the level of control or subtlety required for Baroque music, therefore, consideration was given to alternatives mouthpieces, reeds and ligatures, all integral to the tone produced. With the re-evaluation of my tone and the need for greater flexibility, I changed this set-up to a Vandoren Optimum SL3 Mouthpiece, Vandoren, #3 traditional reed and a Rovner ligature. There was an immediate improvement in the control of subtleties, facilitating greater nuances and scope for improved control of the expressive devices within my interpretations of Source Material A.

The change of mouthpiece was initially a daunting process of changing my concept of ‘sound’ that had become synonymous with my conception of creativity and improvisation. However, the new mouthpiece and softer reed changed the response of the airflow and allowed for improved control and range of subtleties in articulations and dynamics. This facilitated greater responsiveness of the airflow. Accordingly, I was able to experiment further with the breath, shaping the notes and dynamics. Smaller changes to the airflow achieved greater subtlety and contrasts in gestures and expression.

5.7 The Breath

Redefining my concept of breath control was one of the defining features of my interpretation of Source Material A. Prior to studying with Dikmans I had found it difficult to balance the phrasing and determine the placement for breathing. Initially the experience of 'running out' of air was too frequent and physically stressful, causing breathlessness and creating a destabilising effect on the music. Without consideration of the correct phrasing and planned breath markings, both tone and interpretation were compromised.

Reflecting on similar experiences of diminishing breath support while improvising, I considered both the musical line and duration of the breath. In developing the interpretation of BWV 1008, I had to prioritise the organisation of breath markings to enable the best practical and musical outcomes.

Quantz ([1752] 2001, 87) recognises these challenges, and he illustrates many specific examples of what to do regarding the 'best' place to breathe in different scenarios:

> Taking a breath at the proper time is essential in playing wind instruments as well as in singing … melodies that should be coherent are often broken up; the composition is spoiled ... To separate several notes that belong together is just as bad as to take a breath in reading [words] before the sense is clear or in the middle of a word or two or three syllables.

Quantz ([1752] 2001, 87) indicates his dissatisfaction of the attempts of many musicians in this area and believes that greater attention was required: 'Because of frequency encountered abuses in this regard, or because its performer does not possess sufficient capacity for conserving his breath'. Quantz continues, 'But who could determine all the situations where one cannot play everything in a single breath that should be played that way?' ([1752] 2001, 87).

Through this process I have considered how my breath control can change depending on the circumstance of performance, the acoustics of the space and the desired tonal outcome.

Additional factors can also inform the control of the breath, including the level of performance preparedness or anxiety experienced. This was particularly evident during my preparation for the recording process of BWV 1008, where I found that additional stamina was often required. The following is a sentiment expressed by Quantz (2001, 90):

> the fear that produces a constriction of the chest is to blame when one cannot always take a breath at the proper time. What is certain is that you can produce twice as much, if not more, in a single breath when you sing or play for yourself than when you must sing or play in the presence of many listeners.

I also observed contrasts to my breathing during the recording sessions for Source Material A and B and the improvisations. Changes in breath control were possibly caused by the different nature and familiarity of the style performed and expected outcomes.

5.8 Conclusion

At the commencement of the study of Source Material A, the initial research question was often superseded by more immediate concerns and technical challenges of the work. This demonstrates engagement with the phases of both immersion and incubation (Moustakas 1990) and also the processes of indwelling and focussing (Moustakas 1990) undertaken within this research stage. My intentions resurfaced in conjunction with considerations of tone and sound production and interpretative decisions reflective of the processes of both self-dialogue and tacit knowledge (Moustakas 1990). It became evident that my tone on the instrument is a defining feature of my personal voice (McMillan 1996), and conscious changes to sound production contributed to the creative outcomes as demonstrated on the recordings (discussed in Chapter 7).

The decision to examine compositional material by J. S. Bach generally was to gain insights into the performance practice of the Baroque era and also to examine how Bach through his compositional process expressed the melodic and horizontal realisation of vertical harmonic content.

It is acknowledged that the adaptation of the score for soprano saxophone involved different stages of development. This was a gradual process of assimilation with similarities to the stages of development of the improviser as outlined by Liebman (1996, 17) as a threefold process of imitation, style recreation and innovation. This, in conjunction with the process of tacit knowledge (Moustakas 1990) has facilitated a level of achievement that Liebman (1996) describes as the endpoint for many musicians. At this level of attainment, the musician is able to demonstrate the first two stages prior to accessing the third stage of 'innovation' (1996, 17). Source Material A provided an opportunity for an contextualised and non-traditional style recreation (1996) to be examined with a primary focus on imitation (Moustakas 1990) through the study of historical background and performance practices and the work, BWV 1008 and applied through the lens of improvisation and the internal frame of reference (Moustakas 1990).

Significant technical and interpretative challenges were addressed to prepare for the recording of Source Material A, BWV 1008 by J.S. Bach and as stated previously (in Chapter 5) aspects of improvisation were utilised in combination with performance practice techniques studied and documented here, as demonstrated in the recordings.

The creative outcomes of this stage of the research process are listed in the index on page xi, and consist of the six movements of BWV 1008 by J.S. Bach performed on soprano saxophone.

Chapter 6: Source Material B: *Countdown* by John Coltrane[15]

This chapter documents the research processes engaged in phase 2 and phase 3 of the research methodology; immersion (Moustakas 1990) and incubation (Moustakas 1990) through the study of Source Material B, (similar to the methodological treatment of Source Material A in Chapter 5). Source Material B is a harmonically complex and technically demanding work. The transcription of the improvised solo of *Countdown* performed by Coltrane provides an opportunity for the immersion (Moustakas 1990) into the complex harmonic language as devised by Coltrane in the composition and his detailed exploration of the melodic realisation of the harmonic content of the form.

Coltrane's contribution to jazz performance and practice presents a model for the development of the personal voice (McMillan 1996) in improvisation, therefore his music is an ideal choice within the context of this practice-based research. The process of studying the improvised solo by Coltrane (1960) of *Countdown* involved six steps and was significantly less time intensive then the study of Source Material A. This was due to the stylistic language being more familiar. Also, the availability of a recording of Coltrane's playing of the work facilitated accessibility.

6.1 Criteria for Source Material B

The following six-step process was undertaken to develop Source Material B:

1. Background and biographical information
2. Listening to the original recording
3. Consultation of two different sources of transcription
4. Devising a score from the three sources mentioned above (see Appendix B)
5. Practice with the metronome at different tempos
6. Recording two versions of the transcription at contrasting tempos (Source Material B Recordings 1. 175 bpm and 2. 230 bpm).

[15] Two versions of Source Material B were recorded: a slow version (175 bpm) and fast version (230 bpm) (see Appendix B for Bb for transcription and harmonic and note analysis).

Through both jazz history and folklore, the saxophonist and composer John Coltrane is immensely influential in leading successive changes in the stylistic direction of jazz. Coltrane is documented as a musician who worked incessantly at his musical development (Porter 2016). In particular, his indefatigable search for expression on the saxophone led to significant technical and expressive innovations. These developments came about through his practice and enquiry into the language of jazz, engaging the influence of other styles of music and through a search of different philosophical and spiritual practices (Ratliff 2007). In this chapter, information is provided to contextualise Source Material B, including discussion of Coltrane's development preceding the recording of *Countdown* and consideration of the processes that led to the composition.

Immersion (Moustakas 1990) in the musical language of Coltrane is aptly described by Ratliff (2007): 'Coltrane's music has some extraordinary properties-the power to change your consciousness'. This description is of Coltrane's playing as a whole, regardless of which stage he was at in his development. This part of the research focusses on Coltrane's most complex harmonic composition and improvisation. The release of the album *Giant Steps* in 1960 is central to Coltrane's development—a mid-point from where he had come and where he was progressing (being deeply immersed in the Free Jazz movement at the time of his death in 1967). Coltrane remains a towering figure, per Hentoff [16](1960, quoting Miles Davis): 'I don't understand this talk of Coltrane being difficult to understand. What he does, for example, is to play five notes of a chord and then keep changing it around, trying to see how many different ways it can sound'.

6.2 Background Information

John Willian Coltrane, an American Jazz saxophonist and composer, was born in 1926 in North Carolina. He became a significant figure in jazz through his relentless searching and development, leading multiple movements in jazz, which concluded with his premature death in 1967 while at the height of his involvement in the avant-garde jazz movement.

[16] Nat Hentoff quoted Miles Davis in his liner note to the album Giant Steps by John Coltrane (1960).

At age 12, Coltrane experienced a significant personal loss with his father, grandparents and aunt all dying within months of each other. Coltrane began playing music, commencing on the clarinet and alto horn. After moving to Philadelphia in 1943, his mother bought him an alto saxophone. Coltrane joined the United States Navy in 1945, entering 'just after the war ended … too late to be sent to the training camps for black seamen' (Porter 2016, 38). Many musicians had been through these camps, 'including such notables such as Clark Terry and Al Grey', and then played in bands deployed across America. As a black seaman, Coltrane's band position was not full time, unlike white seamen. Coltrane also had to undertake other roles, such as security and kitchen duties (Porter 2016). Before leaving the navy, Coltrane recorded eight songs with the Melody Makers (Ratliff 2007, 3). This early recording includes Coltrane improvising, with Ratliff (2007, 4) describing Coltrane's efforts on alto saxophone as a 'hideous, squeaking, lurching thing'. Coltrane took some time to develop his improvisational abilities; per Ratliff (2007, 4), 'Some jazz musicians are off and running at nineteen-Charlie Christian, Johnny Griffin, Art Pepper, Clifford Brown, Sarah Vaughan. John Coltrane was not'. After discharging in 1946, Coltrane returned to Philadelphia and 'did what any self-respecting alto saxophonist of the time would do: he tried to follow Charlie Parker's movements because Parker was the king soloist' (Ratliff 2007, 5).

In Philadelphia, Coltrane performed in rhythm and blues bands. Nisenson (1995, 6) states that Coltrane 'enjoyed the primitive power of rhythm and blues, and its ability to reach its audience with such basic musical techniques, but he was bored by the music'. Nisenson also observes:

> Many rhythm and blues saxophonists would routinely honk and shriek on their horn, overblowing and using tonal distortion to create extreme, and sometimes almost ludicrous effects … some of these effects in a different context and with different meanings would be used with equal intensity in the avant-garde movement, to which Coltrane devoted himself in the last few years of his life. (1995, 7)

Coltrane performed in Eddie 'Cleanhead' Vinson's band with the pianist Red Garland. While he was in Vinson's group, he was known by the other musicians as 'unusually devoted to his art' and 'constantly practising' (Nisenson 1995, 8). Nisenson (1995, 8) also observes that

‘The world of show business is a strange one for a man like John Coltrane, who was unusually shy and withdrawn’.

In 1949, Coltrane joined the big band of Dizzy Gillespie performing first alto saxophone. Gillespie, in an attempt to keep the ensemble viable, had the band performing music for dancing. Gillespie is quoted as stating that the audience could not care less about ‘the beautiful advanced harmonies and rhythms we played and our virtuosity, as long as they could dance’ (Porter 2016, 78). In this ensemble, ‘Coltrane definitely had the opportunity to play material that would certainly have an impact on his own writing’ (Porter 2016, 78).

It is possible that this had a lasting influence on Coltrane’s compositions. For example, the use of unusual chords and minor modes and predominance of two-chord vamps such as the A section in *A Night in Tunisia*. This composition features a movement of a semitone from Eb7 to a D minor chord, repeated for the entire A section, except for the turnaround in bar 7. Section A from *A Night in Tunisia* shows influence from Latin Jazz, as did other numbers in the band’s repertoire. Porter (2016, 79) states that it is ‘impossible to ignore the impact of Gillespie’s repertory had on Coltrane, in its use of unusual progressions, in its use of one or two-chord vamps and its emphasis on Latin rhythms’ and asserts that Coltrane’s interest in the music of other cultures can be traced back to Gillespie broadening Coltrane’s musical perspectives.

Coltrane went on to play with Earl Bostic and Johnny Hodges before joining Miles Davis. From October 1955, Coltrane performed in the Davis quintet with Red Garland on piano, Paul Chambers on bass and Philly Joe Jones on drums. In this dynamic band, Coltrane was the newcomer. Although he had the support of Davis in his frontline, Coltrane became an easy target for critics and was criticised for a lack of individuality and sounding too much like his influences ‘Gordon, Stitt and perhaps Rollins’ (Porter 2016, 99).

Coltrane struggled with drug use, and due to his addiction, he was fired by Davis in April 1957. This was an opportunity for Coltrane to prioritise his rehabilitation and during this time he collaborated with Thelonious Monk. In an interview with August Blume (DeVito 2010, 9–30), Coltrane describes the process he engaged in with Monk to learn the pianist’s

material. Coltrane would visit Monk at his home and work through the compositions, describing the experience as follows:

> I'd get my horn out and start playin' it and he'd look at me I guess, and so when he'd look at me. I'd get my horn and start trying to find out what he's playing. And he'd continue to go over and over and over and over, and I'd get this part, and next time he'd go over it I'd get another part. And he would stop and show me some parts that were pretty difficult … He would rather a guy learn without reading … You feel it quicker when you memorize it, when you learn it by heart, ear … so when I nearly had the tune down … he'd leave me to practice it alone, and he'd go out. (DeVito 2010, 18)

This intensive process of repeatedly working through the music on the tenor saxophone led to absorption and embodiment of the material. Coltrane would later apply this method to his own practice.

Coltrane returned to Davis's band in early 1958. He had transformed his playing through his associations with Monk. The term 'sheets of sound' (Porter 2016, 132–133) was coined by the jazz critic Ira Gitler to describe Coltrane's virtuosic improvisations. During his second stint with Davis's band, Coltrane refined both his melodic and harmonic approach to improvisation. He recorded his landmark solo album, *Giant Steps* (1960) in 1959 featuring the composition *Countdown*, within the same period as recording *Kind of Blue* ([1959] 2015) with Miles Davis.

This was a critical period in the development of modern jazz, and Coltrane's improvisations in *Kind of Blue* ([1959] 2015) were powerful. Nisenson (1995, 72) states that Coltrane produced 'the greatest solos of his career until that time'. Nisenson also observes that the compositions on *Kind of Blue* had forced Coltrane to play melodically and stirred him away from his focus on harmony, even briefly. In *Kind of Blue* ([1959] 2015), Coltrane masters the art playing of fluent lines: 'The John Coltrane of 1959, both as musician and man, had gone through a sea change; through hard work and deep introspection he had discovered who he was' (Nisenson 1995, 72).

One month after recording *Kind of Blue* ([1959] 2015) with Davis's band, Coltrane commenced a recording session that was 'a psychic hemisphere apart' (Ratliff 2007, 52). Two of the most significant and contrasting recordings that Coltrane participated in, and within jazz, were recorded side by side. A *Kind of Blue* ([1959] 2015) documented Coltrane's most melodic improvisations to date, and his recording of the album *Giant Steps* presented the most complex harmonic language jazz had ever heard (Ratliff 2007, 51).

6.3 Theory-Mad

Coltrane was 'theory-mad' and had 'studied third related harmonic relationships with Dennis Sandole at Grandoff School' (Ratliff 2007, 52). Ratliff also observes that Coltrane closely studied the *Thesaurus of Scales and Melodic Patterns* (Slonimsky 1975), which 'point[s] to the Giant Steps patterns, even down to some of its melody' (2007, 52).

6.3.1 *Coltrane Changes*

Essentially, Coltrane had created the chord progression (see Figure 6.1) used in *Countdown* as an advanced exercise in harmony. The chord progression is difficult to navigate due to the frequent modulations. This chord progression moves outside of expected conventions of functional diatonic major key harmony, extending the standard II-7 V7 I Maj7 progression includes dominant and tonic movement separated by a descending major 3rd interval creating an alternative and counterintuitive harmonic progression. Porter (2016, 216), states:

> Coltrane's style was always changing. He moved more and more into developing a self-reliant sound world that by the 1960s had less and less in common with the music that he started with – the music of Lester Young and Charlie Parker. For one thing, Coltrane was never partial to quoting … he developed a vocabulary of licks that are in many cases not traceable to his predecessors. One way that Coltrane developed this unique sound world is by bringing into his music – and through his influence, into all of jazz and beyond – an eclectic collection of method books, exercises, and scales from around the world.

Porter (2016) identifies three key elements in the development of an individual voice contextualised through Coltrane's musical trajectory:

1. a 'style' changes or emerges

2. Coltrane's style finds its own direction from influences such as Lester Young and Charlie Parker
3. Coltrane, through his constant musical searching, embraces stylistic elements and integrates techniques from other styles, disciplines and cultures, thus informing his individual style.

6.3.2 *Giant Steps*

In 1961, John Coltrane was asked in an interview by Benoìt Quersin if the album *Giant Steps* (1960), which features the composition *Countdown*, was a 'first definite step towards original music' (DeVito 2010, 99). Coltrane responded:

> Well that album, that album represented a few things that I'd been thinking of for about five or six months before it was made. The things that I was-harmonic structures that I was working on there, I hadn't fully developed them, and I didn't understand them. Actually, Giant Steps was, in quite a few respects, I don't know, an experiment, you know? And the things-some things I could have used in there-in Giant Steps-that I made a whole song out of, I could have probably taken-taken them and applied it to something else and they may have taken up a few bars and that have been it. But at that time, I was obsessed with the thing and it was all I had in my mind, because it was my first step into playing some extended chord structures in 'em, you know? That was the first one-record that I made with them in there. And since then I've done it, but it hasn't been so obvious because I've learnt to use it as a part of something and not as a whole. (DeVito 2010, 99)

The concluding comment regarding the use of the harmonic progress featured in both *Giant Steps* and *Countdown* suggests that it was a process of immersion (Moustakas 1990) that allowed this to occur; once consolidated, the work could be integrated within Coltrane's improvisational practice, rather than being the entire focus. From this insight (DeVito 2010), I considered how aspects of different influences have the potential to inform, rather than define, creative outcomes. In this instance, the study of Source Material B provided content, with a strong harmonic focus and rapid melodic material across the full range of the saxophone.

6.3.3 *Countdown*

The arrangement of Coltrane's recording of *Countdown* commences with a drum solo by Art Taylor, followed by six choruses of Coltrane's improvisations on tenor saxophone and ending with the melody, with focus on the drums and saxophone while the piano (Tommy Flanagan) and bass (Paul Chambers) play supportive rhythm section roles:

> The tempo of 'Countdown' was faster still than that of 'Giant Steps'. It was frightfully controlled music … distinguished by Coltrane's broad, passionate tone, his fantastic sense of rhythm, and the smart arrangement idea of beginning with a drum solo and ending, after a furious two minutes and twenty-one seconds, with tune's melodic theme. (Ratliff 2007, 52)

Countdown was recorded on the album *Giant Steps* in New York on 4 May 1959. It is a 16-bar harmonic form, or chorus, based on the Eddie 'Cleanhead' Vinson composition *Tune Up*. Here, Coltrane explored his Coltrane Changes at 350 bpm.

The original recording of *Countdown* by John Coltrane (1960) is the primary source material. Two different transcriptions were consulted as a part of learning the improvisation: David N. Baker (*The Jazz Style of John Coltrane* 1980) and John Coltrane (*Omnibook for Bb Instruments* 2013). My transcription of the improvisation combined elements of both transcriptions consulted the recording to arrive at my own version of the written transcription. There is an alternate recording of *Countdown* on a reissue[17] of *Giant Steps*. This alternate version, which is significantly longer at 4'38" and slower in tempo than the version selected for release, is noted but not used in the process of learning the transcription.

In contrast to Source Material A, there was no room for my interpretation within the transcription of Coltrane's solo on *Countdown.* I had anticipated benefits of being able to access the recording by Coltrane which demonstrated an inspiring display of virtuosic performance. The sheer force of the timbre produced by Coltrane's sound, his formidable technique and unrelenting sense of pulse was showcased at 350 bpm.

[17] Alternative take of Countdown, accessed as an individual track via iTunes.

Through practice, I experienced considerable technical challenges in achieving the same tempo performed by Coltrane on *Countdown*. Therefore, I considered practical options within my technical limits. I was able to perform a section of the transcription at tempo, Chorus A and Chorus B. However, after this point, I started to fall behind the tempo at 350 bpm. This presented a feeling of the tempo being out of reach; however, I observed that a similar tempo was recorded in the improvised outcomes demonstrated in Example 3, Improvisation 4.6. Reflecting on this process, I ascertained it was the nature of the content of the material that impacted on the technical difficultly and experienced this transcription more like an exercise with the ridged demarcation of expected outcomes.

To facilitate beneficial outcomes of Studying Source Material B, I considered working with the adaptations of different tempos. I made the decision to record two versions of the transcription, one at crotchet equal to 175 bpm and the other at 230 bpm, both significantly slower than Coltrane's recorded *Countdown* at 350 bpm. Through this process, the significance of tempo was deprioritised, and other important musical elements came forward.

As an experiment, I recorded two versions of the transcribed solo of *Countdown* by Coltrane at 175 bpm and 230 bpm. The version at 175 bpm is half the tempo of the original. This was technically manageable and provided the opportunity to clearly hear the horizontal expression of vertical harmony demonstrated within the melodic lines. Although 175 bpm is still a fast tempo, within this context, I experienced the sensation of this solo performed in slow motion, adding to the impression of the work presenting as an exercise rather than a musical statement. It was a beneficial process to record *Countdown* at this slower tempo, to warm up to the faster tempo and consolidate the fingerings and technique required. Attempting a faster tempo was a process of trial and error of finding the fastest metronome marking of 230 bpm to sustain throughout the recording process of Source Material B.

Although I felt that my recreation of the transcription was compromised by the slower tempo, I was still able to experience something of Coltrane's (1960) 'sound world' when demonstrating and playing excerpts of this transcription for the purposes of practice and

presentations. This further informed my understanding of Coltrane's (1960) approach to improvisation and facilitated a greater understanding his individual voice and how this evolved simultaneously within his work on the seminal album *Kind of Blue* ([1959] 2015)) and later into his free jazz period.

In attempting to replicate Source Material B, I experienced Coltrane's (1960) ability to sustain the tempo in combination with his use of a complex harmonic language as an unrelenting force that is both precise in melodic content and intense in tone colour, demonstrating significant stamina. I found it hard to decipher Coltrane's (1960) articulations from his recording, although there were certain characteristics and devices that were repeated and, therefore, easier to grasp. The written transcriptions served a guide and the recording of Coltrane (1960) performance on *Countdown* was employed to inform the interpretation.

The chord progression of *Countdown* is demonstrated in Figure 6.1 bars 1-12 (Bb transposition) and commences with an II-7 V7 I Maj7 progression where the V7 and Maj7 chords are in C major; however the II-7 chord is derived from E major from bar 4. From the C major chord, the progression modulates to Ab major on beat 3 bar 2 and then to E major at beat 3 bar 3. This same pattern then repeats at bar 5, a tone lower with chord E-7 and the key centre of D major, to Bb major, followed by Gb major and then to D major at bar 8. At bar 9 the pattern repeats this time commencing in C major with an additional descending tonal step. The pattern continues through descending major key centres, from C major to Ab major to E major and returning to C major. The final four bars of the form consist of an V 7 I Maj7 in the key of C major (see Appendix B Bars 13-16).

From this analysis (in Bb transposition) it can be concluded that the primary features of the chord progression, consist of three V7 I Maj7 chords each separated by a major third interval between the tonic keys, all preceded by an II-7 chord that is related to the final major key of the pattern. This same pattern is repeated, transposed down a tone, repeating twice, or occurring three times in total, and is concluded with a V7 I progression in the key of C Major, which leads back to the beginning of the form. The primary feature of this harmonic progression is established in the first four bars of the form and consists of the

descending tonic movement of three major 3rd key centres. This is followed by the transposition of same chordal pattern by a descending tone. A third repeat of the same chordal pattern down an additional tone takes place between bars 9-12. The form is concluded by a turnaround section within bars 13-16. The complete form is inclusive of six major keys, from a possible twelve major key centres. Although the progression contains dominant to tonic movement within the key centres, the pattern created by the descending major 3rd modulation followed by the descending tone transposition and the breaks down the expected functional major key harmony movement. It is these harmonic modulations, the harmonic rhythm and density of melodic content in combination with the tempo of the original that have contributed to the challenges of playing this composition.

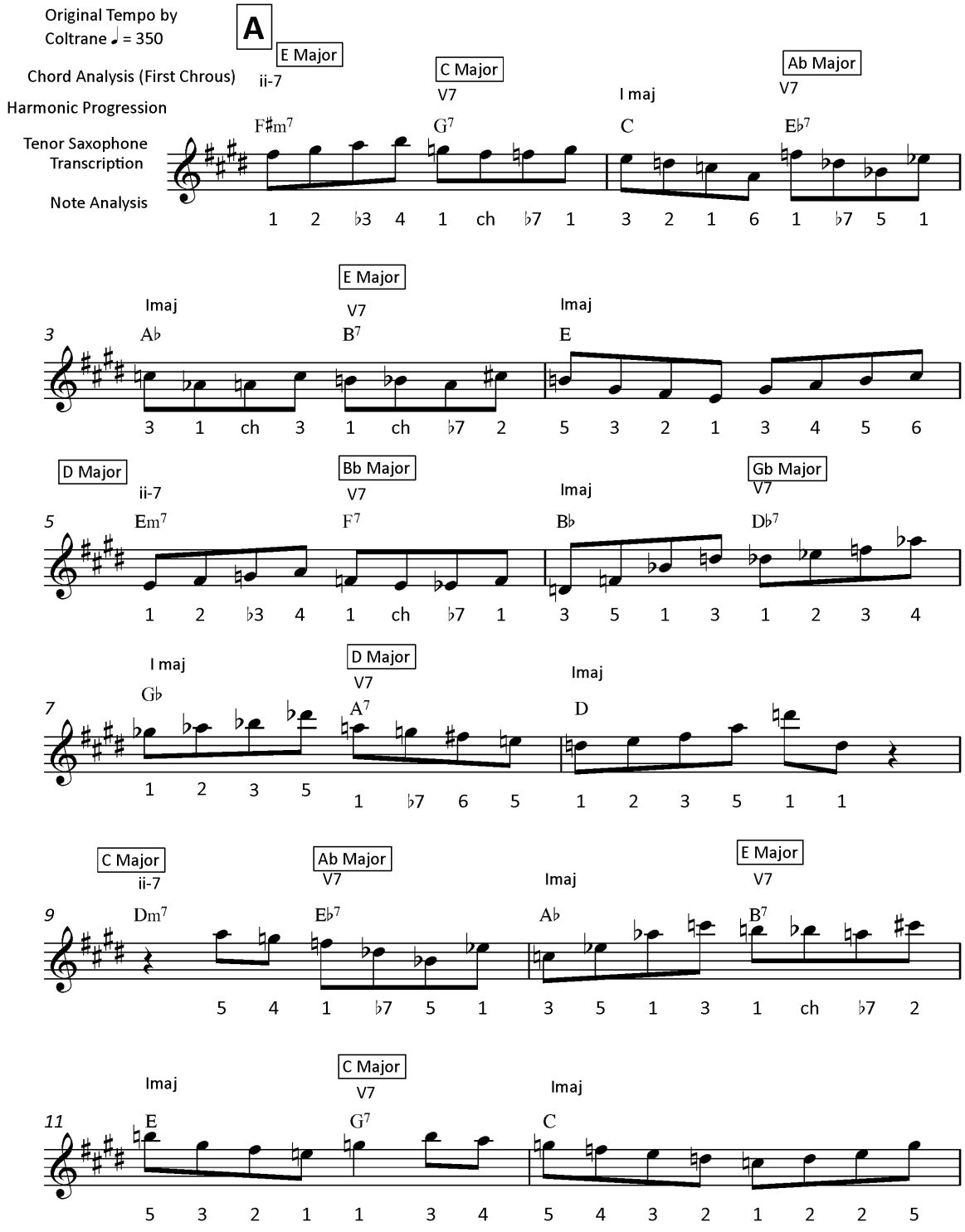


Figure 6.1: *Countdown* by John Coltrane, Analysis of Chorus A, Bars 1-12

6.4 Conclusions

Practicing the transcribed solo of *Countdown* was a straightforward process in contrast to the Source Material A. Coltrane's improvisations influenced my approach to improvisation, which had previously represented more timbral or sonic and modal influences. While I had anticipated that more of this harmonic language would be evident in my improvisation, I can conclude that my study of Coltrane's (1960) improvisation of *Countdown* contributed to facilitating other qualities. I gained a greater understanding of the composition and origins of the harmonic form of *Countdown* and Coltrane's influences at the time (especially Slonimsky [1975]). Further, and most significantly, I unexpectedly experienced his sound and unrelenting time feel in ways that generated changes in my improvisations. In my attempts to recreate the transcription, I rediscovered some of the intangible aspects of Coltrane's music in a new way, his immense strength, the forward motion of his creative process and sheer force propelling his sound through the musical language. The *Coltrane Changes* and *Countdown* represented a restriction and narrowing down of any artistic input due to the process of performing a transcribed improvisation. This process lacked spontaneity, but other benefits emerged in the process and limitations imposed. While I readily aligned with timbral aspects inherent in Coltrane's performance, tempo became the only element of the music that I could manipulate in realising the transcription.

I considered the study of Source Material B as an opportunity to evaluate how the study could inform creative outcomes. The restrictions inherent with the composition of *Countdown* became the precursor for the next stage in Coltrane's musical evolution. Grounded in the blues, Coltrane played with an intensity such that each note is infused with emotive potency. Coltrane uses *Countdown* as his vehicle for expression, and in the liner notes to the album *Giant Steps* (1960), Nat Hentoff[18] suggests that 'Part of the fury of the search, the obsession Coltrane has to play all he can hear or would like to hear-often all at once-and yet at the same time make his music, as he puts it, "more presentable" '.

[18] From the liner notes written by Nat Hentoff for the album Giant Steps (1960) by John Coltrane.

Ratliff (2007, xi) suggests that ‘we ought to widen the focus beyond the constructs of his [Coltrane’s] music, his compositions’. Through this, we ‘come around to the music’s overall sound: first how it feels in the ear and later how it feels in the memory, as mass and as a metaphor’. Ratliff summarises the significance of tone and Coltrane’s intent through his playing as follows: ‘Musical structure, for instance, can’t contain morality. But sound, somehow can’. Ratliff makes the following assessment of Coltrane’s sound: ‘Coltrane’s large, direct, vibrato-less sound transmitted his basic desire’, with Coltrane himself stating that ‘I am supposed to grow to the best good that I can get to’ (Ratliff 2007, xi)

The study of Source Material B presented technical and harmonic challenges, but also informed aspects of my playing in the area of tone colour, phrasings, range, articulations and breath support. It provided a balance to Source Material A. The contrast between the source materials was important and provided greater scope for diversity within the creative outcomes and development of improvisational syntax, harmonic material and melodic treatment. Consideration of how the development of sound informs and extends expressive outcomes informed the development of nuance and personal voice (McMillan 1996).

The recorded outcomes of Source Material B are listed in the index on page xi and consist of the 1. Slow Version 175 bpm and 2. Fast version 230 bpm of the *Countdown* performed on soprano saxophone.

Chapter 7: Recording Process: Source Materials A and B and Improvised Creative Outcomes

Chapter 7 documents the process undertaken in phase 4: illumination (Moustakas 1990) of the research methodology (where the recorded creative outcomes are listed in the index on pages x-xii) The creative component of the research was recorded over four months in 50 sessions, which produced over 100 hours of music consisting of Source Materials A and B and solo improvisations. The material was recorded independently in a resonate room with two NT1-A Rode studio microphones, using the software program Logic X to record onto a desktop computer.[19] The recordings consisted of ten sessions dedicated to each of the six movements of Source Material A, five sessions for recording the transcription of Source Material B, and ten sessions for the recordings of the improvisations, including both short and long improvisations. From these recordings, individual tracks were either selected for post-production or ruled out based on performance outcomes. Upon conclusion of the recording stage, post-production took place in a commercial studio with the assistance of a sound engineer.

7.1 Incubation: Recording Source Materials A and B

I first recorded the six different movements of Source Material A. The recording of Source Material A was time intensive when compared to recording Source Material B.

7.1.1 Recording Process for Source Material A

Recorded outcomes were anticipated in part due to the nature of BWV 1008, but also due to the detail covered in the development of the interpretations. I had memorised the suite BWV 1008, but often reviewed the notation. Attempts to control the interpretative outcomes of my performances had limited success. In practice, the recording process for Source Material A had more similarities than I had expected with the recording process of the improvisations, although the content of the work and musical outcomes were

[19] Recording process utilised Logic X software on an iMac computer in combination with an iPad to start and stop recording remotely.

contrasting. I found in practice, a level of spontaneity of the interpretation of Source Material A was required to generate the strongest performance outcomes.

7.1.2 Recording Process for Source Material B

Recording the transcribed solo of *Countdown* presented a different set of challenges. This recording required little spontaneity. While playing this transcription, I observed a change in my physicality and posture with the instrument. These changes affected the position of my hands on the keys. My breathing changed, and the position of my teeth on the mouthpiece was further forward, taking in more of the mouthpiece, consequently changing and broadening the tone. I also observed that this change to the tone colour of my sound reflected the intensity audible in Coltrane's playing. With a focus on specific tempos, I recorded Source Material B with a 'click track', which imposed additional structure. Two different tempos were recorded, both slower than the original (175 bpm and 230 bpm, compared to the original at 350 bpm).

7.2 Illumination: The Recording Process

7.2.1 Solo Improvisation

The third stage of the recording process facilitated the improvised creative outcome of the practice-based research and engaged the use of intuition and indwelling—the fourth and fifth concepts and processes of heuristic research and the fourth phase (Moustakas 1990).

To enhance spontaneity, the key criteria imposed within the process was to remove preconceived ideas of the improvised outcomes. Nachmanovitch (1990, 25) describes improvisation in a way that reflects this striving for spontaneity:

> Each piece of music we play, each dance, each drawing, each episode of life, reflects our own mind back at us, complete with all its imperfections, exactly as it is. In improvisation, we are especially aware of this reflective quality: Since we cannot go backwards in time, there is no crossing out, editing, fixing, retouching, or regretting.

Through the process of recording the improvisations, I set out to eliminate musical expectations and outcomes. These expectations were associated with my improvisational

practice, including the anticipation and prehearing of each phrase before it is played, consideration of dynamics, density of phrases shape and pitch range of the solo improvisation, timbral variation and intensity, visualisation of the entire improvisation, compositional form and contour of the complete improvisation.

It was important to consider how to shift this expectation away from preconceived expectations of particular musical outcomes within improvisation. This is significant because, to ascertain if the source materials had any impact on my improvisational syntax, the improvisations needed to be spontaneous, rather than planned, pre-heard or visualised prior to, or during the performance.

Therefore, to prepare for the recording of the improvisations, I considered the following three-stage process: remove expectations, quieten the thought processes and enhance the intuitive process. The consideration of intuition (Moustakas 1990) suggests a certain freeing or liberation from preconceived restraints and indicates the potential for open-ended possibilities within the improvised outcomes.

In practice, it was challenging to remove all expectations from improvising. As a result, duration was selected as the only criteria, providing an alternate focus in contrast to specific musical outcomes. Improvisations were designated as short (under five minutes) or long (approximately 10 minutes). However, even with the creation of simplistic criteria and actively removing other musical expectations from the process of improvisation, I unconsciously set alternate expectations. This is significant as it informs the findings and delineates aspects my artistic process in the creation of improvisation, at times contrasting and challenging my perception of the actual process and outcomes.

Liebman (1996, 35–36) summarises this as follows:

> The goal of the art of improvisation is no different than in other art forms; to express something meaningful and communicate it to others … The more an improviser reaches towards the unknown, the more likely he will stumble and become temporarily lost in the music.

7.2.2 Post-production

Post-production consisted of eight, four-hour studio-based sessions.[20] The focus was on the tone of the soprano saxophone in the recordings of Source Material A, especially certain notes and frequencies, balancing dynamics within phrases where required. The tone quality of the soprano saxophone was considered when finalising the effects utilised to enhance the sound. Two reverbs were selected to augment my sound: Lexicon medium concert hall merged with a reverb recorded in the Notre Dame Cathedral, Paris. The combined reverb sounds were applied to both recordings of Source Material A and the improvisations. The reverb was adjusted in keeping with the stylistic conventions of tone quality with a shorter, less resonate effect for the recordings of Source Material B.

All recordings were mastered using a process called 'Match EQ', where EQ levels from the best sounding track Movement I, *Prèlude*, BWV 1008 was applied to the complete recordings. Within this mastering process, the levels were not compressed as is standard practice for a CD release, as the homogenisation of the dynamic range was considered counterproductive to the artistic outcomes.

7.3 Conclusion

The recording process facilitated the creative outcomes where the track indexes for Source Material A, Source Material B and the solo improvisations and are listed in the index on pages x-xii.

As noted, the experience of recording each different stage of the research process was markedly contrasting due to a combination of content, expectations and creative outcomes. For example, where findings were expected, i.e. Source Materials A and B, the method produced conscious outcomes. Where the material performed was pre-heard and anticipated throughout the recording process. Listening back to these recordings led to

[20] Studio session were co-produced and engineered with Melbourne-based sound engineer and producer Evripides Evripidou in Melbourne, Australia.

anticipated expectations within the outcomes. This was contrasting to the improvisational outcomes where, as noted, I experienced some difficulty in dismissing all expectations in the performance of the recording process. However, I was successful in achieving some intended outcomes where on reviewing recordings of the solo improvisation, the majority of the material was experienced as if one was listening for the first time. This strongly suggests that the process of performing the improvisations was less conscious and not bound by expectations. What can be concluded from the recording process is the apparent parallels between my experiences of performing the source materials and the improvisations, demonstrating the treatment of the material in practice can determine and lead to contrasting outcomes and where the processes of tacit knowledge, intuition and indwelling (Moustakas 1990) have informed the illumination stage of the research (Moustakas 1990). The level of influence of Source Material A and B onto the improvised recordings and their contribution to the improvisational syntax and development of the personal voice in improvisation will be discussed further in Chapter 8.

Chapter 8: Improvisations: Analysis, Comparisons of Influences and Creative Outcomes

8.1 Explication: Transcription and Analysis

Three recorded examples are analysed, examined and compared to material in Source Materials A and B. Influences are substantiated and identified based on the examination of the transcriptions and the scores of the source materials. The extent to which aspects of the source materials have informed the creative outcomes are discussed through comparative analysis extending both the harmonic and note analysis located in Appendices A, B and C.[21] The analysis of each example compares the content of the improvisation with the source materials and considers musical gestures directly influenced by the source materials, the result of a variety of influences and/or indicative of characteristics of a personal voice (McMillan 1996) in improvisation.

In total 48 solo improvisations were submitted as a part of the creative outcomes. Three example improvisations were selected for transcription and analysis and comparison. The examples chosen are a diverse representation of material providing contrasting examples of the recorded creative outcomes of the research. The primary or dominant elements examined in the three examples are melody (Improvisation 1.16), harmony (Improvisation 1.8) and timbre (Improvisation 4.6). Rhythm, although varied in its treatment, features in all examples. Excerpts have been provided as figures to demonstrate specific elements and characteristics of each of the improvisations.

The following criteria informed the analysis of the example improvisations:

1. Evidence of influence from Source Materials A and B, where the specifics include the musical elements, melody, harmony, rhythm and tone colour. This extends to include other areas such as range, phrase shape and durations that may inform the personal voice (McMillan 1996).

[21] Full transcriptions are located in Appendices A, B and C.

2. Evidence of contrasts to the source material or other influences and material that cannot be attributed to the source materials.
3. Identifiable features of my personal voice (McMillan 1996) in improvisation that may be derived from Source Material A and B or other influences.

8.1.1 Analysis Summary Categorisation

Each improvisation is analysed by considering several different elements of music and the significance in determining the level of influence:

1. Melody: Note choice, the contour of lines and range of melodic material.
2. Harmony: Harmonic content, tonality and harmonic rhythm, and modulations.
3. Rhythm: Rhythmic content and phrasing
4. Phrasing: Type and duration of phrasing.
5. Timbre: Timbral content, tone colour used on the soprano saxophone, types of contrasts and effects and extended techniques employed.
6. Tempo: Tempo of improvisations and comparisons to relevant source materials.
7. Duration: Length of improvisations as compared to source materials and other improvisations.

It is noted the source materials utilise key signatures with additional accidentals where required. In contrast, the improvised music examples use accidentals in place of key signatures. All transcriptions are transposed for Bb soprano saxophone.

8.1.2 Context of Analysis

Improvisation 1.16 is analysed by observing sequential excerpts of the transcription. This was considered the best approach for this example due to its melodic focus. Improvisation 1.8 and 4.6 are not treated or analysed sequentially. Instead, the excerpts of these examples provide the best representation of the content for analysis. Improvisation 1.8 provides a harmonic focus, and the predominance of pedal points is a central thematic idea. In Improvisation 4.6, the primary focus is timbral. Significant excerpts have been used to demonstrate the specific content and musical characteristics of each improvisation, with

each excerpt presenting different combinations of harmonic and note analysis as appropriate.

8.2 Comparative Analysis: Improvisation 1.16

Improvisation 1.6 has the following characteristics:

- Duration: 3”:29”
- Number of bars: 60
- Tempo: Crotchet = 70 bpm
- Key centre/tonality (Bb Transcription): E Harmonic Minor
- Range of improvisation (Bb): Low B to High E (two octaves and perfect 4th interval range)
- Dominant musical element: Melody

In Figure 8.1, the tonality of the E Harmonic Minor of Improvisation 1.16 is established. The rhythmic gesture of the dotted crotchet followed by a quaver is a key feature of the opening passage and is repeated sequentially across the first 12 bars of the improvisation.

Within bars 1–8, the range of the phrase consists of a minor 9th interval from the starting note G above the stave extending up to C, a major 3rd above the starting note, to the leading note D# below the tonic note. The shape of the phrase is balanced, with the melody moving in semitones and diatonic seconds and thirds intervals. This balance is demonstrated through the gradual movement from the opening note commencing on the 3rd of the E-7 chord and finishing in bar 8 on the tonic note, E.

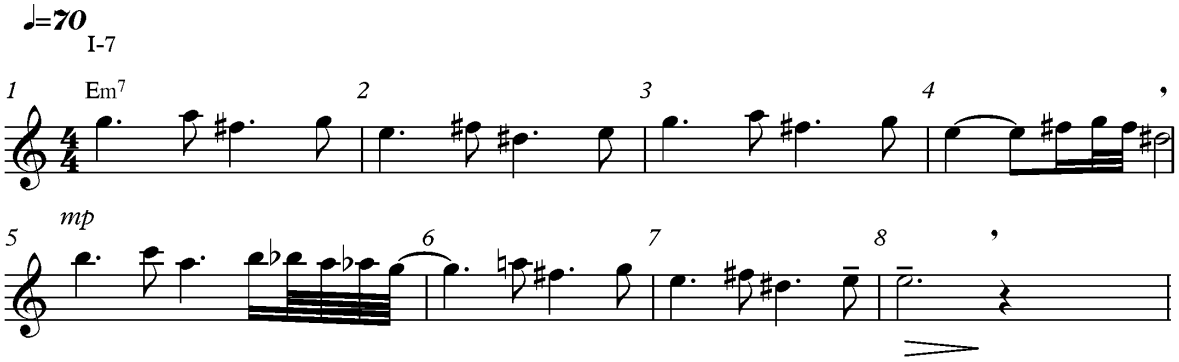


Figure 8.1: Improvisation 1.16, Bars 1–8.

Similarity the opening eight bars of the first movement to the *Prèlude* of Source Material A also establishes the tonality as E harmonic minor (see Figure 8.2). This is demonstrated through the melodic material, notes selected and the harmonic progression. Here, the tempo is 60 bpm.

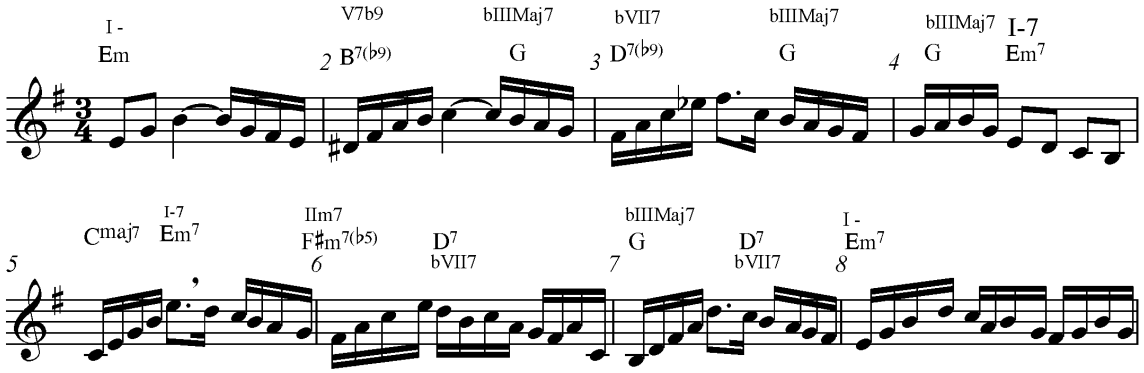


Figure 8.2: *Prélude*, Movement I, BWV 1008, Bars 1–8.

The dotted note rhythm features in Figures 8.1 and 8.2. This idea is contrasted by its use primarily on beat 2 of bars 3, 5 and 7, and notated at double the rhythmic value as bars 1–8 in Improvisation 1.16 by the rhythm of a dotted quaver, followed by a semiquaver.

The ranges of Figures 8.1 and 8.2 are contrasting, mainly occupying different areas of the stave, where Figure 8.1 commences at the top of the treble clef and above the staff. The first eight bars of the *Prélude* start on E, the lowest line of the treble clef, and finishes on the G above. Figure 8.1 demonstrates a range of a ninth above the tonic. The urtext for cello

commences on D below the staff in the bass clef were adaptations to the score of Source Material A have been applied to accommodate the range of the soprano saxophone.

The *Prélude* time signature is 3/4, or crotchet beats in the bar, rather than 4/4 as in Figure 8.1 (which contains significantly more notes as the content primarily contains semiquavers). Within this material, the harmonic rhythm has considerably more movement, in addition to more than double the number of notes within the melody (76 notes in this excerpt of the melody of the *Prélude* versus 33 notes in Improvisation 1.16).

The melodic line of the *Prélude* contains skip-wise movement in thirds. In contrast, the melodic choices in Figure 8.1 are predominately stepwise. Additional observations include evidence of counterpoint in the *Prélude* (see Figure 8.2) and similarities in the tonal quality employed and the tonality of the improvisation.

Similarities in phrasing is indicative of the influence of the *Prélude.* Where the interpretation of the *Prélude* is performed using a combination of both an informed interpretation and an adapted interpretation to suit the soprano saxophone.

Figure 8.3 demonstrates a continuation of the same rhythmic gesture of the opening eight bars of the improvisation. The melodic gesture of a trill is notated at bar 11 as a triplet on the final beat of bar 15. As the use of trills and ornaments was considered in the development interpretation of BWV 1008, this type of ornamentation could be attributed to the study of Source Material A (ornaments are discussed in Chapter 5).

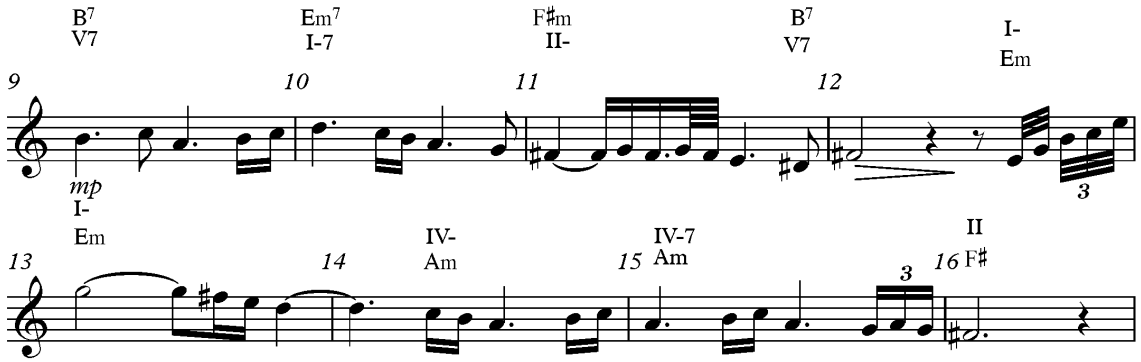


Figure 8.3: Improvisation 1.16, Bars 9–16.

In Figure 8.4, the opening six bars of the *Allemande* contains the same rhythmic idea that appears in bar 2 beat 3, a dotted rhythm, here notated in quavers rather than a dotted crotchet followed by a quaver. The repetition within bars 2–6 demonstrates the regularity of the rhythmic idea as a feature of the phrasing. Further, the trill in bar 6 is significant. Here, this rhythmic cell moves between beats 4 and 3 of the bar.

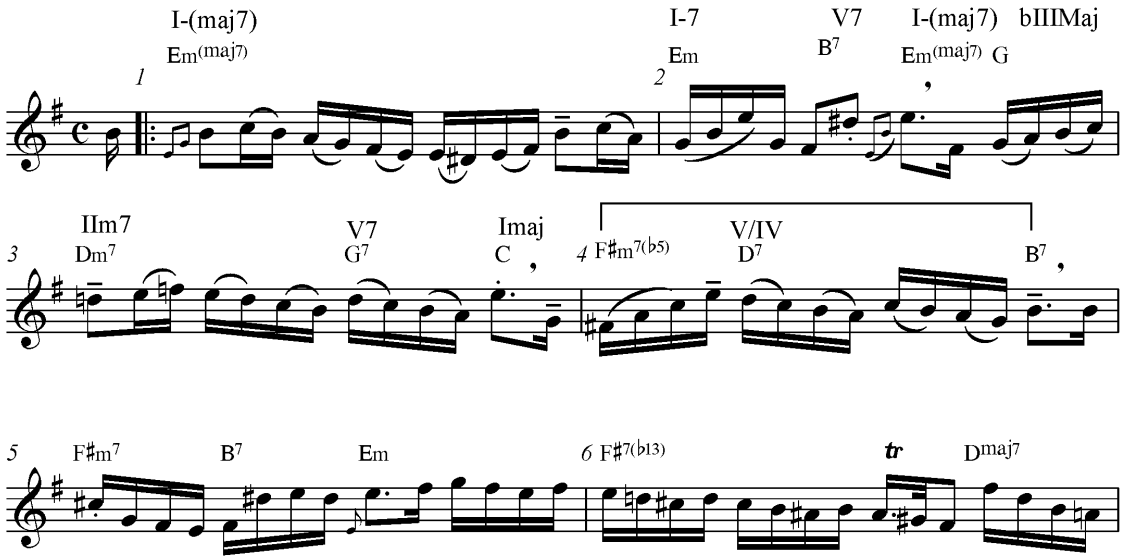


Figure 8.4: *Allemande*, Movement II, BWV 1008, Bars 1–6.

In contrast to the opening bars for Improvisation 1.16, the harmonic rhythm in Figure 8.4 moves through II V I progressions, in both minor and major keys (i.e. bars 2 and 5 have a minor II V I progression in E minor, and bar 3 has II V I in the key of C major). Some minor I chords are analysed as minor with a major 7th, where the 7th is presented in the melodic line, indicating the use of the harmonic minor scale. The chord presents as minor triad where no 7th is present.

Modulations in the relative G major at beat 4, bar 2 in the *Allemande* (Figure 8.4) and the harmony are analysed as the bIII major 7th chord. In Figure 8.5, other key centres are clearly demonstrated in Improvisation 1.16, and often the return back to the I-7 is delayed (e.g.,

bars 18–20 and sustained into bar 21, where the progression from bar 17 is V 7 to bIII major to relative major, then resolving to the E minor chord at the end of bar 20).

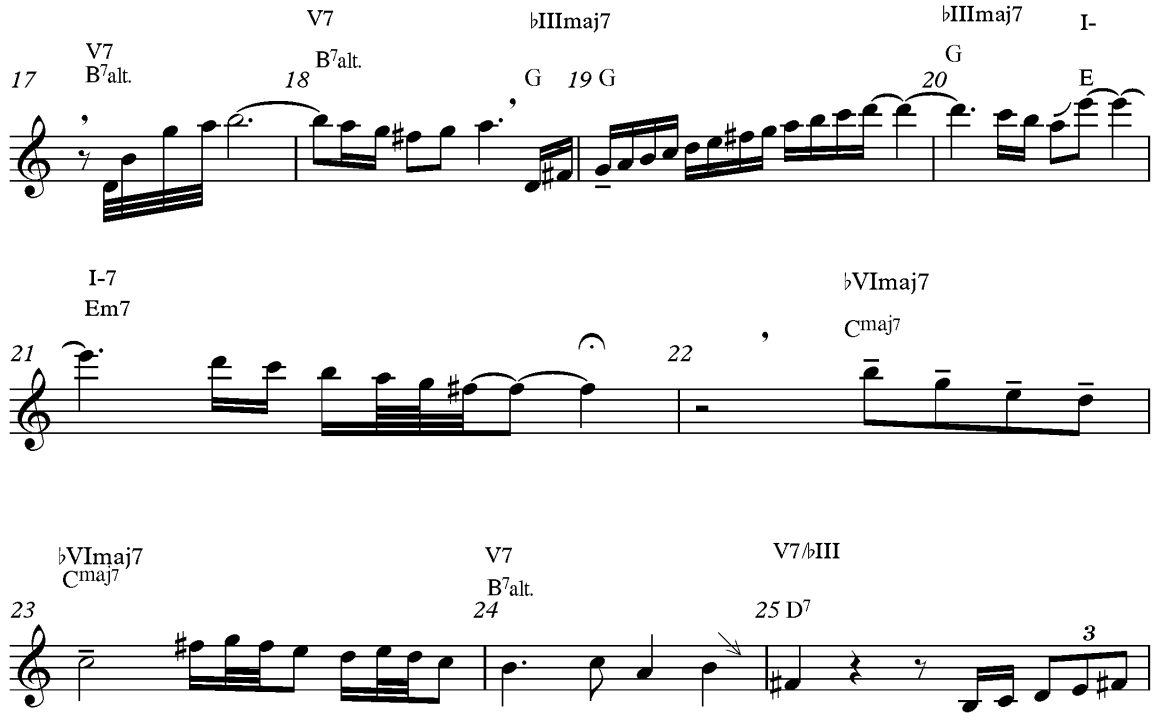


Figure 8.5: Improvisation 1.16, Bars 17–25.

Steps, skips and leap wise movements feature in Figure 8.5. In bars 17–25, Improvisation 1.16 demonstrates a combination of the different treatment of intervals from scale passages at bar 19, arpeggio movement at bar 22, and trill gestures at bars 21 and 23. Similar scale passages occur elsewhere within Source Material A, such as in the *Prélude* bar 24 (see Figure 8.6).

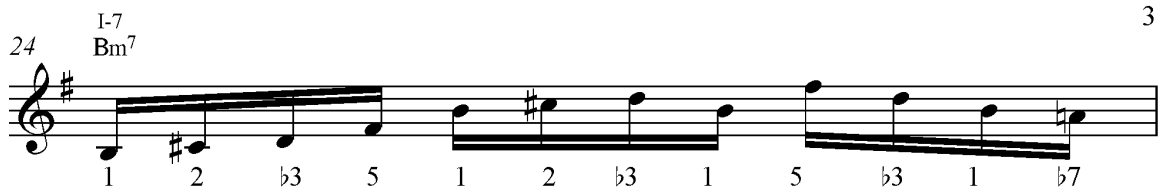


Figure 8.6: Prèlude, Movement 1, Bar 24.

Similar melodic content is also contained within Bar 25 of Improvisation 1.16 (see Figure 8.7).

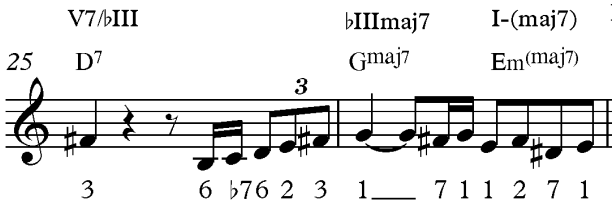


Figure 8.7: Bar 25, Improvisation 1.16.

Figure 8.8 demonstrates and extends the idea of bar 25 in Figure 8.7 and has similarities to Figure 8.6 (*Prélude*). This excerpt commences on the low B on the saxophone and demonstrates similar note choices, which have been analysed with different harmony/chords. This idea is then developed as a sequential pattern at bars 34–37.

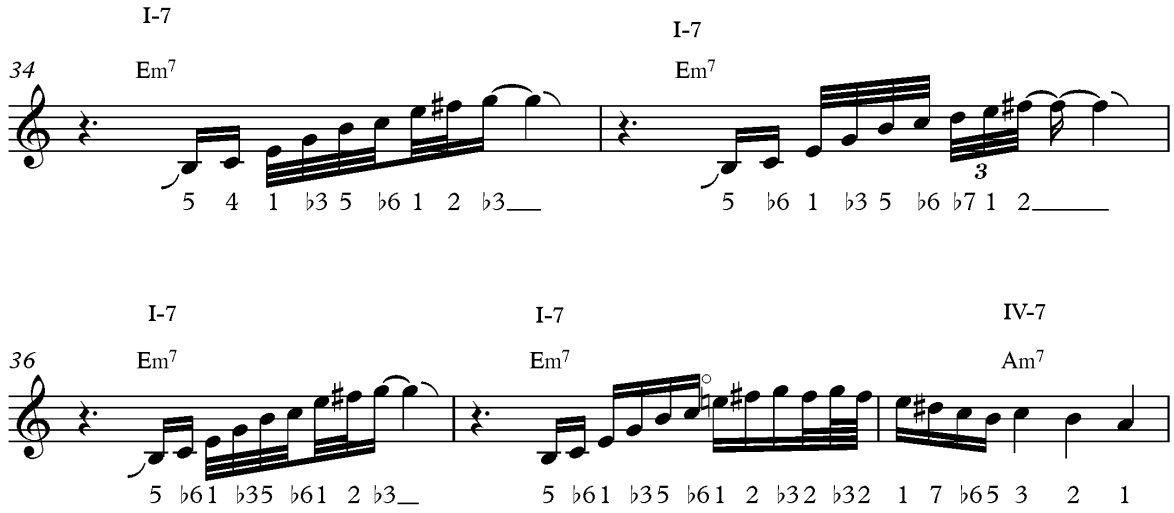


Figure 8.8: Improvisation 1.16, Bars 34–37.

This is also demonstrated in the example from the *Sarabande* (see Figure 8.9), where similar note choices are evident in bars 24 and 25. An exception to this is in movement five of Source Material A, which starts on the note B below the stave and up to an octave and a minor 3rd above (see Figure 8.9).

Figure 8.9: *Sarabande*, Movement IV, BWV 1008, Bars 24–25.

An example of an ascending scale passage in source materials is shown in bars 24–25. This is one of the few examples of this direction of scale passage in BWV 1008, where examples of descending scale passages are far more prevalent. This gesture, as demonstrated in Figure 8.5, is a feature of Improvisation 1, indicating that this type of melodic idea is repeated in Improvisation 1.16, which may be determined by the instrument, suggesting common fingering patterns, a gesture inherent to individual style, or a combination of both.

In bar 12 of the *Countdown* transcription, there is a short scale run descending and ascending before the perfect 5th to the tonic on C major, ascending to the palm keys on the saxophone in bar 13 and the first two beats of bar 14 (see Figure 8.10). This melodic and rhythmic idea reoccurs at other points within the *Countdown* transcriptions. It creates tension and a high point in the melodic line and range.

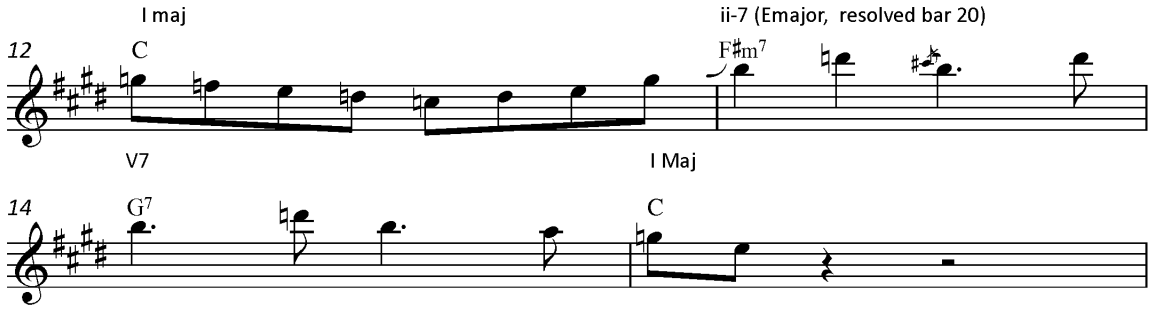


Figure 8.10: *Countdown*, Bars 12–15.

This idea is present in Improvisation 1.16, from the end of bar 19, with the anticipation of beat 4 to the beginning of bar 21 (see Figure 8.11).

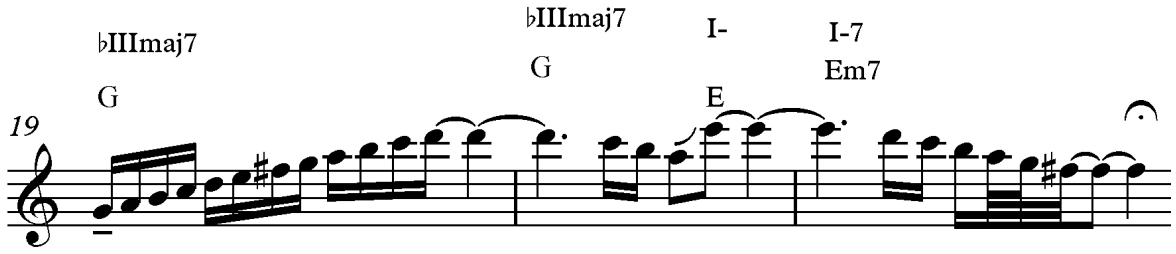


Figure 8.11: Improvisation 1.16, Bars 19–21.

This melodic idea becomes a sequential theme in Improvisation 1.16 and is similar in terms of the ascending line, but contrasting in the high point in the phrase. In these subsequent sequential phrases, the highest note is either a G or an F# above the stave played with altissimo fingers rather than palm keys, and lower than the high point of the first phrase of high D and High E (see Figure 8.12).

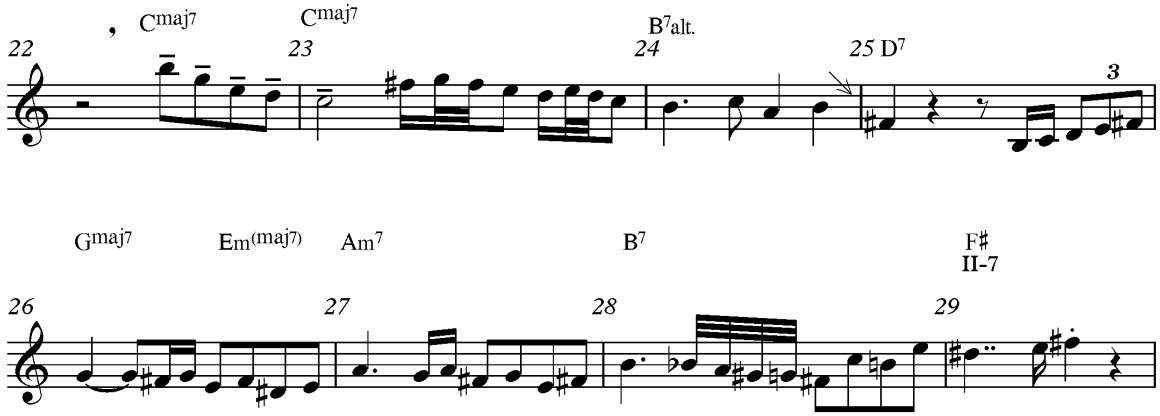


Figure 8.12: Improvisation 1.16, Bars 22–29.

In the above eight bars, the melodic gesture is balanced between the two phrases, descending prior to ascending. Bar 23 shows two examples of trills notated within a phrase, as does bar 28, which also contains chromatic material played in a descending direction. This is a recurrent feature of the improvisations in general and can in part be attributed to Source Material A where there are many examples of ornaments, often indicated with a trill symbol and not always notated.

The melodic gesture at the second half of bar 25 is an extension of the idea commencing at the end of bar 18 and a precursor to the sequential pattern that commences at bar 34 and continues to bar 37.

Figure 8.13 highlights the use of harmonics in bars 31–32. An extended technique has been applied here to the C, where the note is played at first with the fingering of this pitch and then matched using a long fingering, where the note an octave lower is played and the octave above is sounded.

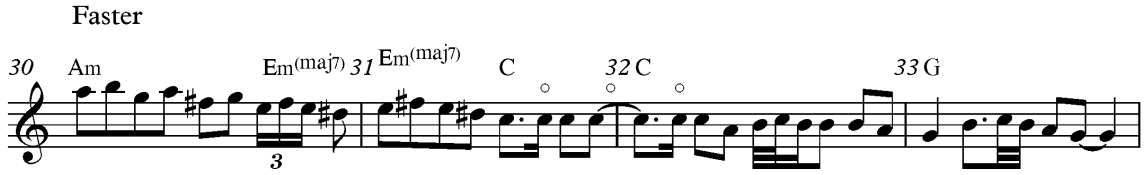


Figure 8.13: Improvisation 1.16, Bars 30–33.

This tonal effect I often apply in improvisation as an expressive device and therefore, could be attributed as a characteristic of my personal voice (McMillan 1996). The description of how this technique, specifically relates to the saxophone, however, the use of harmonics is not unique to the saxophone, providing timbral contrasts and a slight variation of pitch and tonal colour. This extended technique reoccurs as a feature in Improvisation 1.8 in the opening bars (on the same note, C although notated slightly differently as deemed appropriate for this transcription).

This gesture reoccurs at bars 34–37 (see Figure 8.14) which utilises a lower range on the soprano saxophone with a repetitive scale like melodic idea. The high point of the phrase, although lower, is a departure from the high point in the *Countdown* transcription. The differences indicate that the influence of both source materials is only partial in the development of this gesture and it could be more indicative of other influences[22] and/or personal style.

[22] Additional influences are other materials forming my aural/practice history (see Chapter 4).

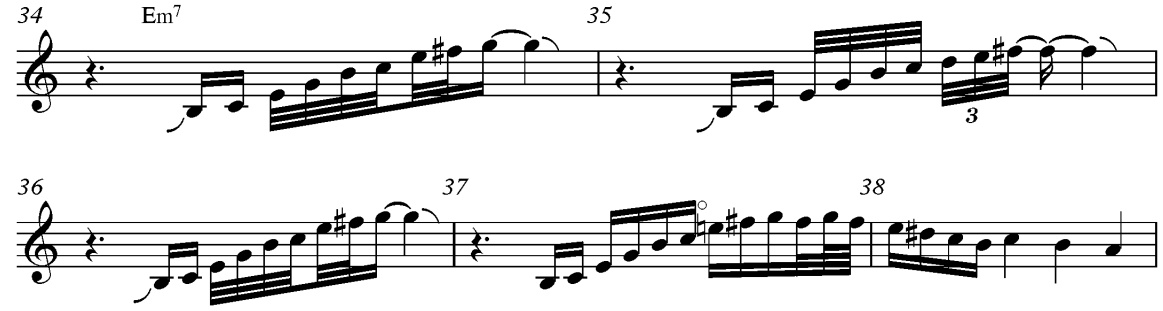


Figure 8.14: Improvisation 1.16, Bars 34–37.

This example of sequential patterns is in the tonality of E harmonic minor. In contour and range this compares to *Countdown* with the gesture on the high D on the soprano and relevant in terms of note choices, timbral effect and/or expressive devices. Bars 9–11 provide an example of a similar contour and a contrasting range (see Figure 8.15).

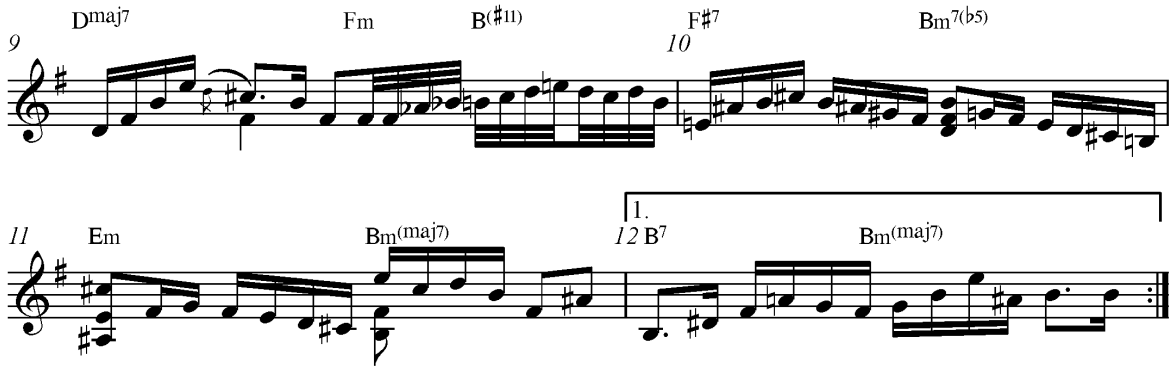


Figure 8.15: *Allemande*, Bars 9–11.

There is an evenness of contour demonstrated within the above example, Figure 8.15 in the *Allemande*.

Venting occurs at bar 41 (see Figure 8.16), creating a similar tonal colour effect to the use of harmonics and involving the opening of an side key slightly changing the tone colour of the note, moving between opening and closing this note with the side of the fore finger on the right hand. This creates a similar shift in tone to the use of the 1st harmonic in the previous example. This could be attributed to either an instrument-specific idea or a timbral gesture, where the rhythm is varied. This pattern continues through bars 42–55.

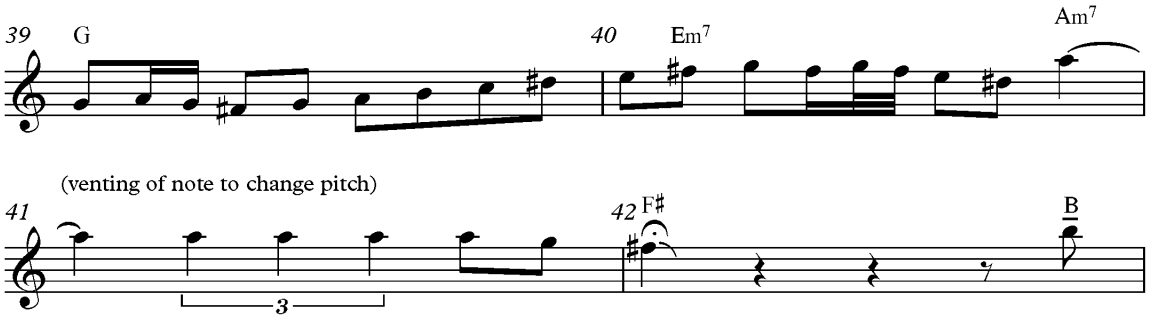


Figure 8.16: Improvisation 1.16, Bars 39–42.

Descending melodic material is featured from the end of bar 42–55 (see Figures 8.17–8.19) which in this context indicates the impending conclusion of Improvisation 1.16. Other featured gestures include the descending pitch inflexion at beat 1 in bars 42 and the second half of beat 3 in bar 46 as a continuation of this idea (see Figure 8.17), where this expressive pitch inflexion could be contributed to the personal voice (McMillan 1996).

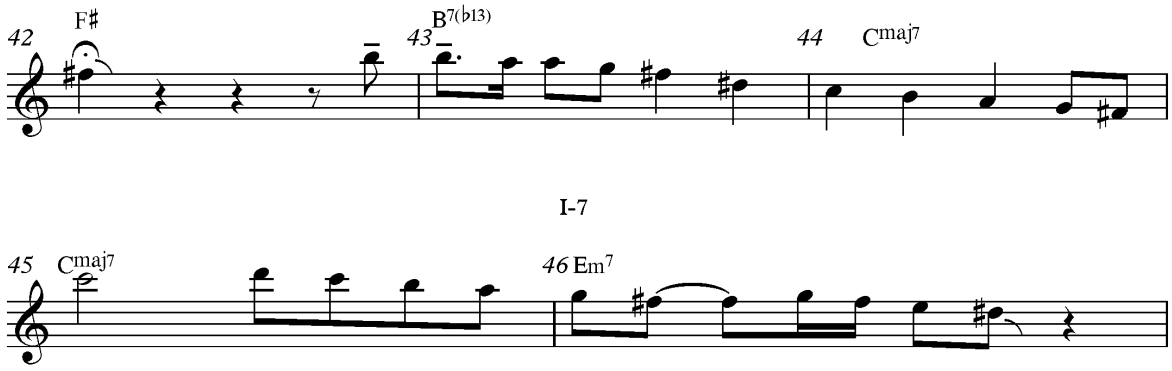


Figure 8.17: Improvisation 1.16, Bars 42–46.

In addition to an overall descending melodic movement Figure 8.18 demonstrates a balanced contour within each bar with a single high point in the bar demonstrated by the G in Bar 47, E in Bar 48 and A in bar 49. This is similar to the contour demonstrated in the *Prélude* in Figure 8.2, where each bar features a single high point to the melodic contour. This gesture of a high note within a single bar is also present within Example 2, Improvisation 1.8.

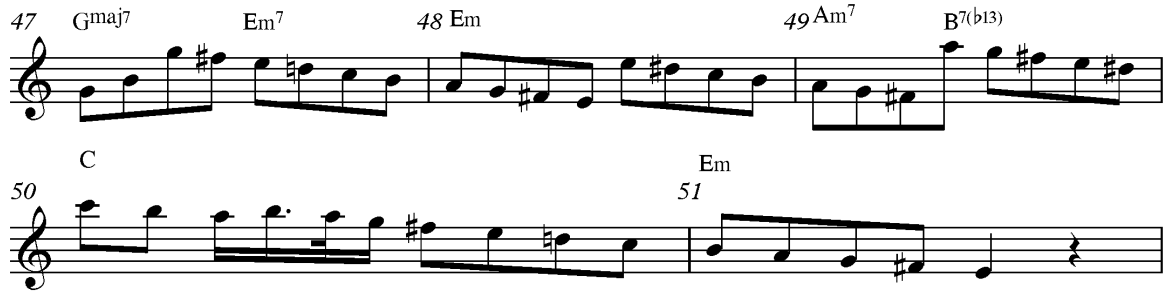


Figure 8.18: Improvisation 1.16, Bars 47–51.

The descending line commencing at Bar 50, Figure 8.18 continues in Figure 8.19. At Bar 52 longer durations are featured firstly on the leading note D# and resolving to the tonic of E at Bar 53, creating a strong tension and resolution. The tension is further emphasised through the use of the split tone at bar 55 (see Figure 8.19). Notes of longer durations are also present at the end of the final phrase of Example 2, Improvisation 1.8; this could suggest the use of this type of rhythm and melodic gesture as an inherent feature of my personal voice (McMillan 1996) in improvisation in the area of melodic contour.

Figure 8.19: Improvisation 1.16, Bars 52–55.

The final passage for Improvisation 1.16 contains a resolution to the tonic note E (see Figure 8.20). A pattern in bars 56–58 is performed but emerges with different variations of a melodic gesture. This gesture is grouped in crotchet beats and variations, in the intervals and direction of beats 1–4 of the bar, where each half bar presents as a sequential pattern.

It also demonstrates a rubato or deliberate slowing down of the melody and rhythm. This is contrasted by a faster descending line in semiquavers on beats 1 and 2 of bar 59, before playing two quavers on beat 3 to the leading note of the tonic or the third of chord V prior

to taking a breath, informing the phrasing before the final tonic note is played, concluding the improvisation.

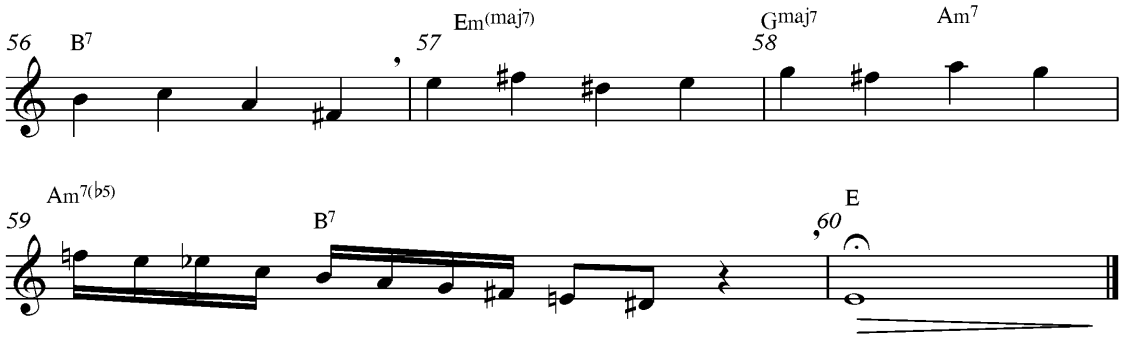


Figure 8.20: Improvisation 1.16, Bars 56–60.

The findings of the comparative analysis of Example 1, Improvisation 1.16 are summarised as follows:

1. Melodic content in Improvisation 1.16 is the primary focus of this example where the structure and shape of the melody contains similarities to the *Prélude* from Source Material A. The melodic content is also informed by the tonality and harmonic content of E harmonic minor as influenced by Source Material A. Other influences in contour are present within the example and comparisons have been made between Improvisation 1.16 and the *Allemande*, *Sarabande,* Movements II and IV of BWV 1008 and also comparison to an excerpt from *Countdown*, Source Material B, providing recognisable influences.
2. Harmonic content in Improvisation 1.16, as noted, is in the tonality of E harmonic minor and informing the melodic material. Here, the comparison with BWV 1008 by J.S. Bach is evident. Improvisation 1.16 does not modulate from the original tonality in contrast to the frequency of modulations within both source materials.
3. Rhythmic content, although not secondary to the melodic material, the rhythmic content and phrasing corresponds directly with the melody. Comparisons with rhythm are often not of identical content, but they are implied through a doubling or halving of the rhythmic gestures originally noted in the source materials. For example, bars 3, 5 and 7 from the *Prélude* and 9 and 10 from the *Allemande* as they relate to Improvisation 1.16.

4. Phrasing comparisons in noted passages of Improvisation 1.16 has a direct link to the phrasing of the source materials, for example, bars 34 to 37 from Improvisation 1.16 have phrasing influenced by the *Prélude* at Bars 25-26.
5. The timbral content of this improvisation is linked to the overall approach of the improvisation and is contains resemblance to the tone colour of Source Material A. Here, there is a clarity within the timbre produced by the soprano saxophone and expressive devices such as the amount and variation of the vibrato. This expressive device corresponds to different movements with Source Material A, in particular, the *Prélude*, *Allemande and Sarabande*.
6. The tempo is compared with three different movements of BWV 1008. The starting tempo of Improvisation 1.16 is crotchet (70 bpm), similar to the *Prélude* (60 bpm) and 2nd movement the *Allemande* (78 bpm), the tempo of Improvisation 1.16 sits in between these two movements. The tempo of the *Sarabande* is crotchet equals 60 bpm, slightly slower, yet comparable influence.
7. Duration of Improvisation 1.16 is 3':29", almost identical to the *Sarabande* (3':28"), similar to the *Prélude* (3':38"), *Allemande* (3':38"), *Menuet* (3':43") and *Gigue* (2':59"). The slow version of Source Material B is 3':38".

8.3 Comparative Analysis: Improvisation 1.8

Improvisation 1.8 has the following characteristics:

- Duration: 2':18"
- Number of bars: 145
- Tempo: Crotchet = 146–220 bpm
- Time signature: Predominately 4/4 and changes to 3/4 and 2/4 on occasion as determined by the phrases performed
- Key centre/tonality: C
- Range of improvisations: Low Bb to High Db, written range
- Dominant element: Harmony (featured pedal notes and harmonic movement demonstrated by the use of rapid arpeggios)

Improvisation 1.8 was recorded prior to Improvisation 1.16. It is analysed second due to the nature and content of the improvisation. While Improvisation 1.16 has a key focus on melody, in Improvisation 1.8 harmony dominates. Key excerpts of the improvisation are presented in the figures. Due to the repetitive nature of the improvisation, excerpts are selected based on their musical content and relevance to the research, where the full transcription is located in Appendix C. The tempo of Improvisation 1.8 is crotchet equals 146 bpm (although it does fluctuate across the improvisation). Examples of rests within the transcript are representative of the phrasing and indicative of breaths taken, which in turn, informs the phrasing.

In Figure 8.21, the tonic note C acts as a pedal point throughout the example, providing the tonal centre and counterpoint to the melodic content, harmonically focused progressing in both scale steps and skips. This is demonstrated from the opening phrase in the key of C, the chord C 11 chord without the major 3rd interval.

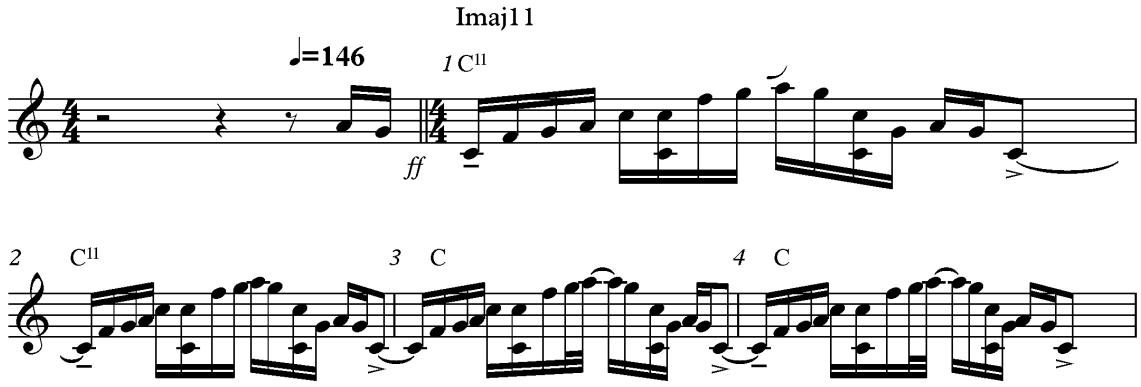


Figure 8.21: Improvisation 1.8, Bars 1–4.

Although this could also be analysed as a F major with the fifth degree of the scale in the bass, due to the strong dependence on the pedal point, C has been attributed as the tonic, which creates an arpeggiated suspended 11th chord.

As demonstrated in Figure 8.21, accents are often accompanied by use of the first overtone. Rhythmic material is repetitive throughout this phrase that is predominately 16th notes accentuated with a small number of 8th notes and 32nd notes (four of each within this

passage). Tied notes occur across the bar line, creating an emphasis and anticipating the downbeat in bars two, three and four.

Example of similarities with a different rhythmic placement of C major is demonstrated in Figure 8.22, as a pedal point with emphasis on the first beat of the bar, although this is the third degree of the scale rather than the tonic. In Figure 8.22 all pedal notes fall on weak beats, whereas, generally these same pedal notes are placed on strong beats in Improvisation 1.8, with the exception of where the notes are anticipating the downbeat. For example, the end of bars 2–4.

Figure 8.22: *Courante*, Movement III, BWV 1008, Bar 7.

Figure 8.23 demonstrates a change of the pedal point to Eb, a characteristic of this improvisation. Similar in rhythmic material to Figure s 8.21 and 8.25 featuring both 16th and 32nd notes. In Figure 8.23 the focus is on the downbeat which has no tied or anticipated notes. The time signature changes to 3/4 for four bars. Including some dotted rhythms, a rhythmic pattern is established in the second half of the first beat of the bar of this phrase. By contrast this phrase is in 3/4 and where the emphasis remains on the downbeat, featuring the tonic note functioning as a pedal point. The focus is Eb major as bIII major chord in relation to C.

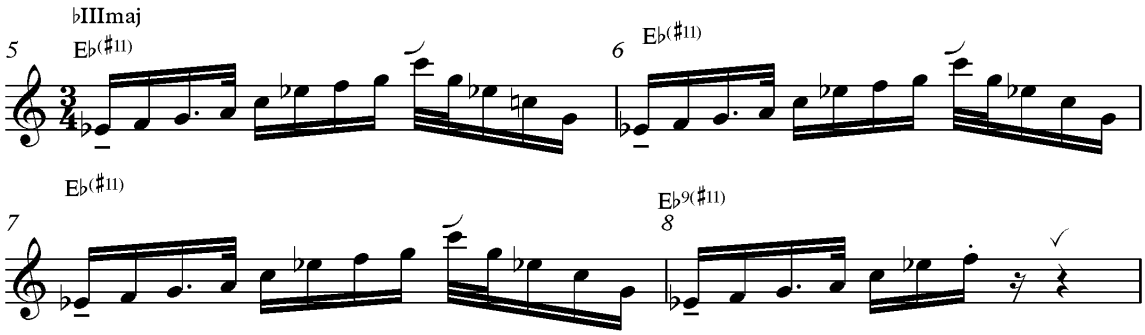


Figure 8.23: Improvisation 1.8, Bars 5-8.

This is significant as the rapid rhythmic material is featured with some variations to the content, including a brief change in time signature where the harmonic material is predominately static, remaining in one tonic centre for an entire phrase. The contour of phrases is even, from low to high and returning to the low register, and this is accentuated through the use of the pedal points which focus the content of each of the phrases.

Bars 9–12 (see Figure 8.24) are a continuation of bars 5–8, where Eb remains the pedal point, emphasised with tenuto markings and anticipated before bars 10–12. Here, the high point of the phrase is an A above the staff, in contrast to bars 5–8 where the high point is C above the staff.

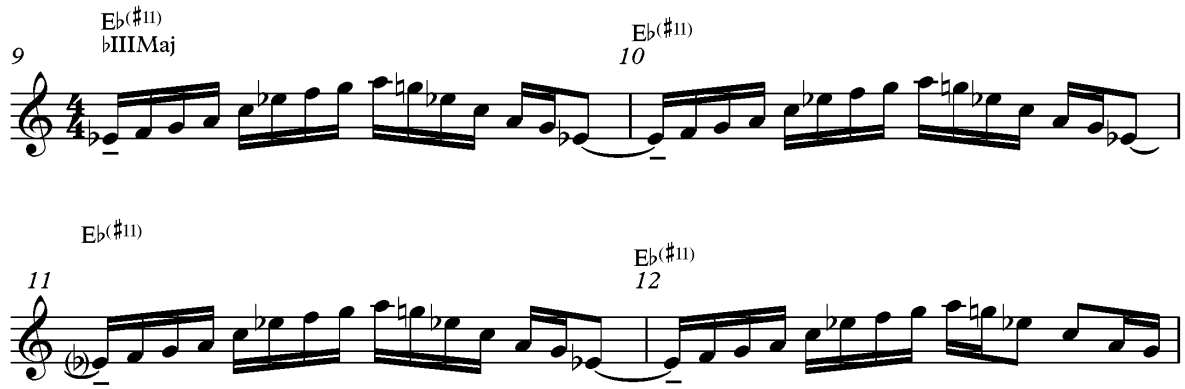


Figure 8.24: Improvisation 1.8, Bars 9–12.

The tempo increases at bar 13, and the pedal point shifts down a semitone and centred on D (see Figure 8.25). The rhythm shifts slightly, to include 8th, 16th, 32nd and 64th notes and some dotted rhythms in the fourth beat of bars 13–16. The high point of the phrase at bars 13–15 is C above the staff and is lowered to A above the staff at bar 16.

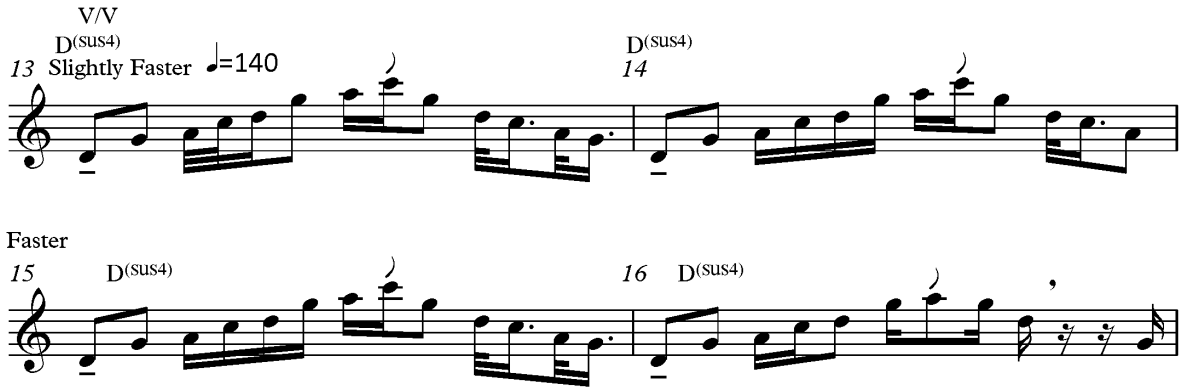


Figure 8.25: Improvisation 1.8, Bars 13–16.

This pattern of a four-bar phrase is established and continues with slight variations to the rhythmic material. This example pattern at bar 13 -16 demonstrates a four-bar movement in where the tonic note is static. Other examples commence on different starting notes based on a movement of tones and semitones, where this is a pattern that continues throughout the improvisation. Larger interval movement within the pedal points is present, yet the majority of the phrase features either repetition in the bass or small stepwise movement with a single high point.

The tempo increases again at bar 17 to crotchet = 220 bpm, and the rhythmic gesture becomes more syncopated in beat 1 of each bar. This syncopated idea is extended further from bar 30, where the same idea appears on beats 1 and 3.

In Figure 8.26 the first semiquaver in bar 10 and bar 11 demonstrates a chromatic movement on the lowest notes of the melody, creating counterpoint with the remaining notes of each bar. This is a theme that reoccurs throughout Improvisation 1.8. Again in 3/4, rather than 4/4, Figure 8.26 demonstrates an identical range from D# or Eb to A above the staff, and the placement of these notes fall on the same beats (i.e., D# on Beat 1 and A on Beat 3).

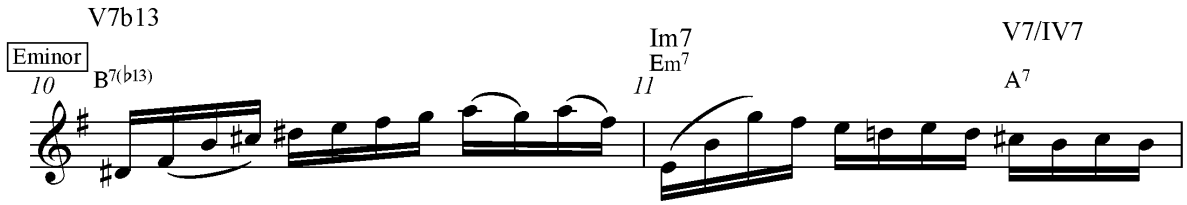


Figure 8.26: *Courante*, Movement III, BWV1008, Bars 10–11.

Figure 8.27 provides evidence of the pedal point note on middle B throughout the two bars.

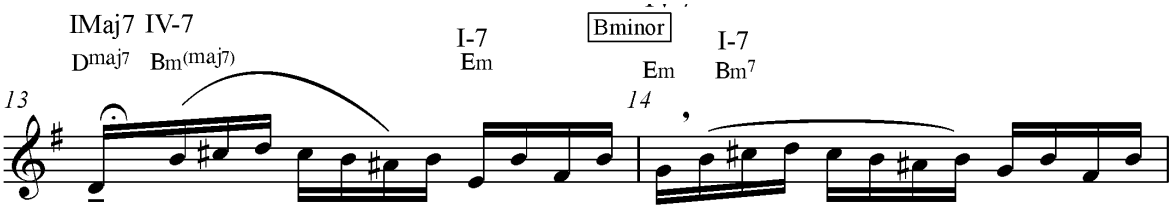


Figure 8.27: *Courante*, Movement III, BWV 1008, Bars 13–14.

The *Courante* provides a number of examples of the use of pedals points (see Figures 8.28 and 8.29)

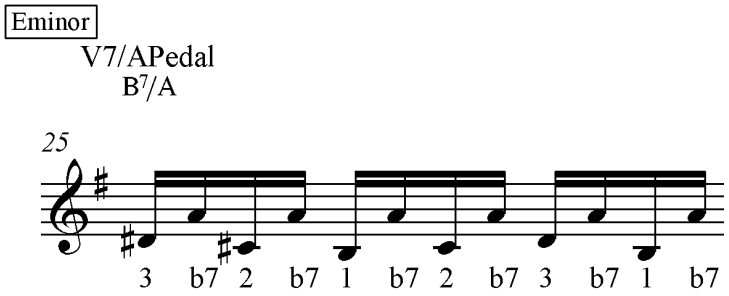


Figure 8.28: *Courante*, Movement III, BWV 1008, Bar 25.

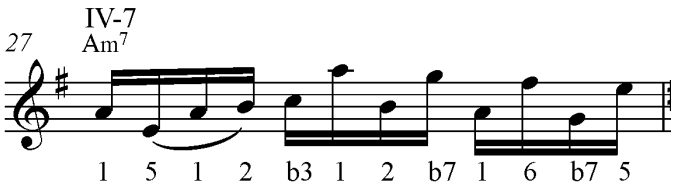


Figure 8.29: *Courante*, Movement III, BWV 1008, Bar 27.

There is also material from the *Gigue* that provides examples of the use of a single high note within the bar that is evenly placed within the bar (see Figure 8.30).

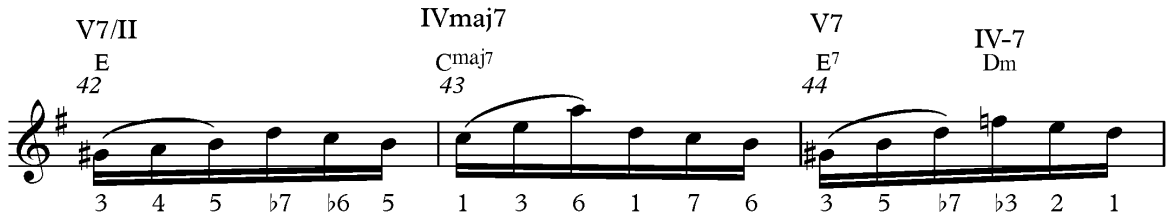


Figure 8.30: *Gigue*, Movement VI, BWV 1008, Bars 42–44.

A single high point in the middle of each bar, similar to the featured gesture in Improvisation 1.8, repeats in the *Gigue* at bars 50–52 and 54–56. This idea is repeated with the two-beat harmonic rhythm until bar 88.

The shape of the lines is essentially the same until bar 76, where a triplet gesture is played, and the harmonic rhythm increases to two beats (see Figure 8.31). This triplet idea is not a feature of the source materials, yet, in the *Gigue*, phrases are not grouped together in twos, but by three or six semiquavers together (e.g., bars 38 and 39; see Figure 8.32).

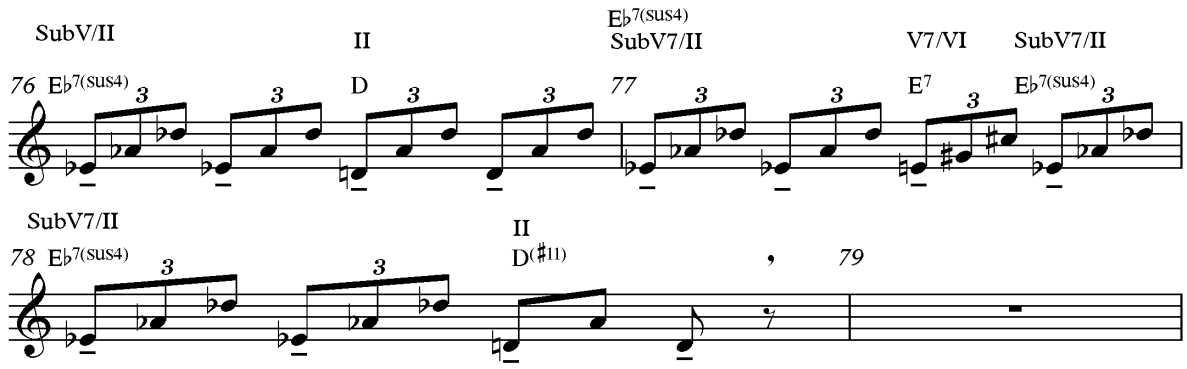


Figure 8.31: Improvisation 1.8, Bars 76–79.

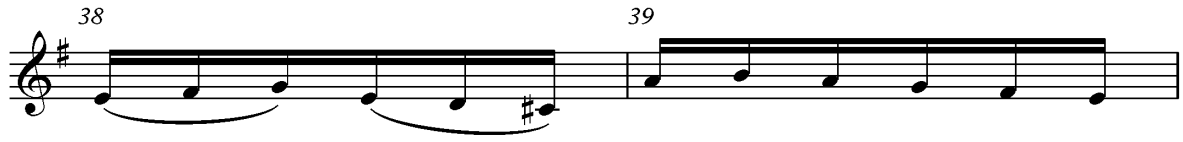


Figure 8.32: Gigue, BWV 1008, Bars 38 and 39.

At bar 90, the original gesture, pedal point on Low C, returns with the addition of the use of the 1st overtone of C producing a multiphonics tone (at beat 3½) and the four-bar pattern is established (see Figure 8.33).

Figure 8.33: Improvisation 1.8, Bars 90–93.

Bars 99 to 101 demonstrate the addition of slightly more space before the main gesture and contour return at bar 102 (see Figure 8.34).

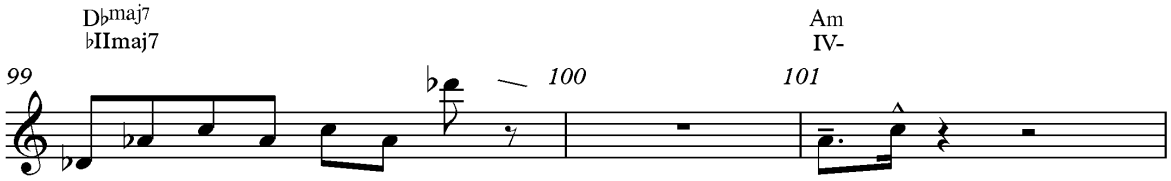


Figure 8.34: Improvisation 1.9, Bars 99–101.

The example in Figure 8.35 from *Countdown* provides a similar contour and the same high note Db above the staff.

Figure 8.35: *Countdown*, Bars 118–120.

Bars 102–106 are generally consistent with the established theme but becomes more timbral with the increased use of notes derived from harmonics and numerous inflexions (see Figure 8.36). A slight change in rhythmic gestures and use of a quarter note triplet and some syncopation at Bar 2 between Bars 102-105, with the end of each bar containing a longer note of a quaver, and crotchets at Bar 106.

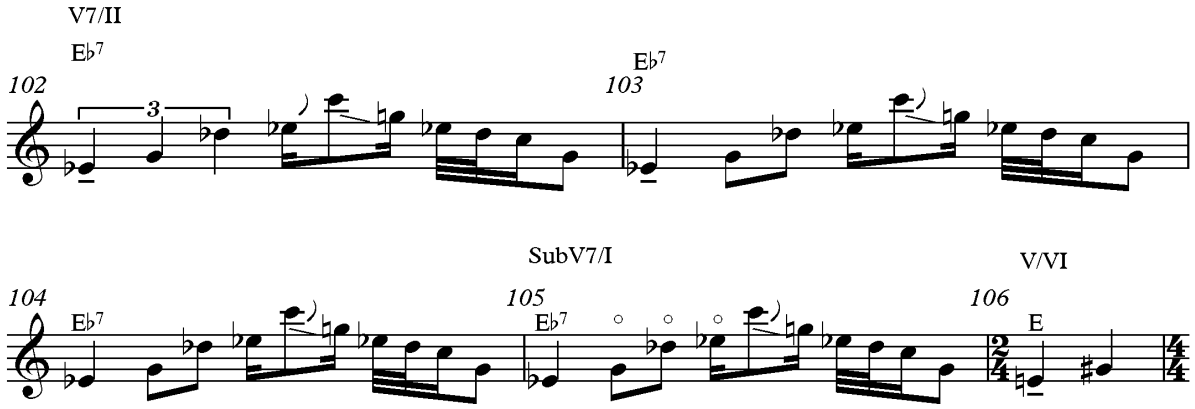


Figure 8.36: Improvisation 1.8, Bars 102–106.

Improvisation 1.8 starts increasing the use of a broader timbre, with some similarities to Improvisation 4.6, although the effect is more pronounced in Improvisation 4.6. A harder or more forceful tone is played in the recording of *Countdown*, which is markedly different to the approach to tone in the recording of Source Material A. The melodic gesture slows down markedly, with crotchet = 134 and coinciding with a time signature change to 3/4, where the melodic line is becoming increasingly timbral (see Figure 8.37).

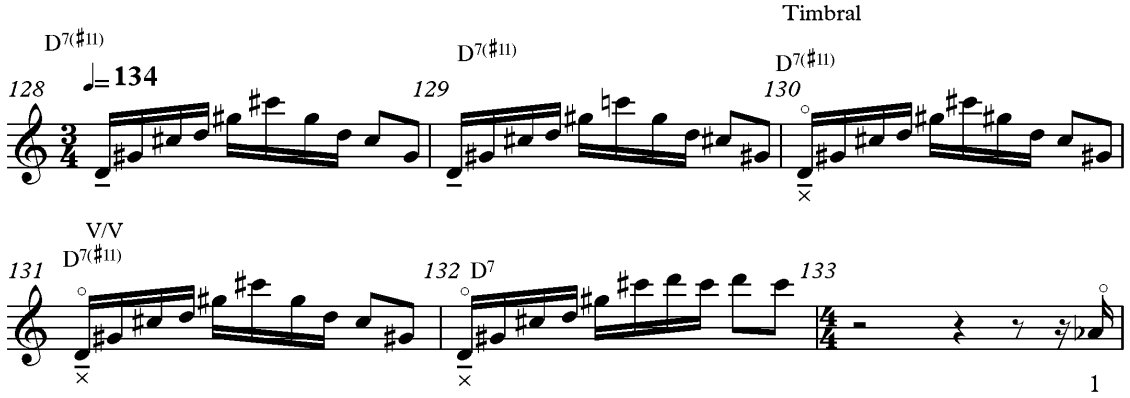


Figure 8.37: Improvisation 1.8, Bars 128–133.

Towards the end of the improvisation, further timbral content is present, and extended techniques increase, using a combination of methods including the use of overtones, multiphonics and pitch inflexions to inform phrasings (see Figure 8.38).

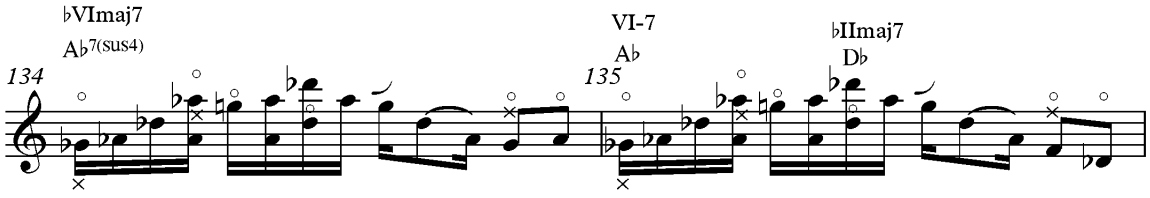


Figure 8.38: Improvisation 1.8, Bars 134–135.

The closing phrase of Improvisation 1.8 concludes with the lowest note of the soprano saxophone, Bb, followed by a bar of silence, before playing a sustained high Db, which represents the range of the preceding phrase as demonstrated in bars 139-140. Bar 140 provides melodic content similar to the opening passage of Improvisation 4.6, providing a single high point in the bar with added tonal variations (see Figure 8.39).

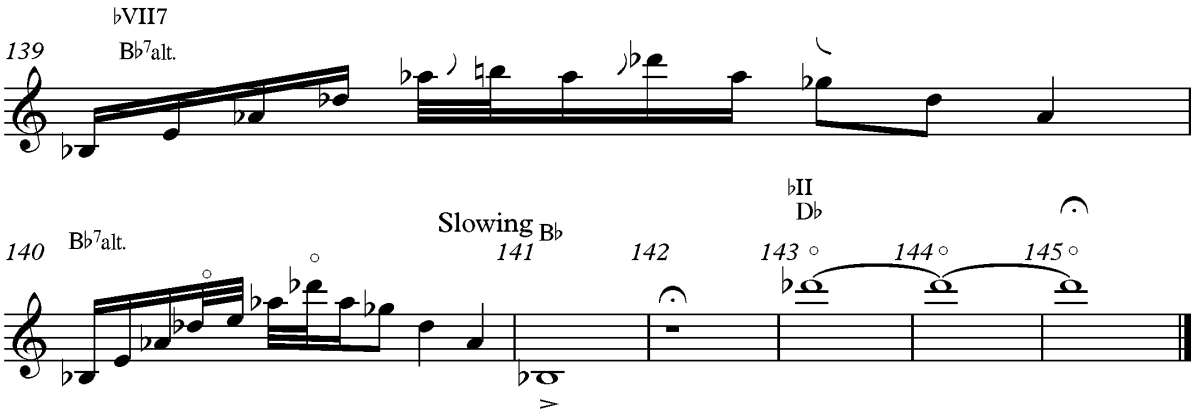


Figure 8.39: Improvisation 1.8, Bars 139–145.

The findings of the comparative analysis for Example 2, Improvisation 1.8 are summarised as follows:

1. Melodic content is not the primary focus of Improvisation 1.8; however, it does remain a dominant feature in defining the improvisation. The shape and contour of the melodic material is often quite repetitive and is demonstrated largely as a gesture with a low pedal point and a high note within most bars. This same gesture is also evident in Movement VI the *Gigue* of Source Material A. Although Improvisation 1.8 is repetitive in content, the contour of the melodic material is balanced.
2. Harmonic content in Improvisation 1.8 is the dominant musical element, this is demonstrated through the use of a repeated pedal point idea that changes the bass note, or tonic of the chord, often within a limited range of notes, commencing on a low C on the soprano saxophone. The same pedal point is repeated for up to eight bars at a time in the case of Eb between bars 5–12, or in some cases as little as two beats at a time (e.g., bars 80–83, with different pedal points commencing on Eb for the first half of the bar and D in the second half in bar 80). The primary feature of Improvisation 1.8 is the rapid semiquaver movement featuring arpeggiated chords. The harmony moves largely in small steps of semitones and tones, in minor and major 3rds and occasionally larger intervals. The harmonic movement does not follow the same progression as Movement VI, the *Gigue* of Source Material A, but moves in steps and has similarities in contour. Although the harmonic analysis relates back to C as the tonic, each pedal point could be identified as a new tonic note.

3. Rhythmic content provides a strong forward motion, in part due to the tempo commencing at 220 bpm and the repetitive nature of each bar predominantly containing semiquavers throughout Improvisation 1.8. There is a shift between different time signatures determined by the phrasing 4/4 and 3/4. Increased syncopations in the phrases occur at bar 17 and continues until the introduction of triplet motif at bars 80–88. The syncopated rhythmic idea returns at bars 123–127.
4. Phrasing content provides similarities to Source Material B in the consistent and unrelenting nature of the phrasing, where the duration of lines is determined by breath capacity. This is also the case in Improvisation 4.6.
5. Timbral content of Improvisation 1.8 contains similarities in the intensity of tone colour of the saxophone with the recording of Source Material B, which is influenced by the original recording by Coltrane, particularly towards the later part, or conclusion of Improvisation 1.8.
6. The tempo commences at 220 bpm and fluctuates at bar 118, increasing to 380 bpm. The original recording of *Countdown* by John Coltrane is 350 bpm. The recordings of Source Material B are at 230 bpm (fast version) and 175 bpm (slow version).
7. Duration of Improvisation 1.8 is 2':15". There are a number of other improvisations from the creative outcomes of a similar duration, such as Improvisation 1.2 (2':27"), Improvisation 1.5 (2':17") and Improvisation 6.4 (2':06"). The closest duration within the source material is *Courante* (2":35"), Movement III of Source Material A.

8.4 Comparative Analysis: Improvisation 4.6

Improvisation 4.6 has the following characteristics:

- Duration: 1'45"
- Number of bars: 153
- Tempo: Crotchet = 340 bpm
- Key centre/tonality (Bb Transcription): Commences in C and concludes in F. However, there is no fixed tonality, although harmonic analysis has been provided within transcription
- Dominant musical element: Timbre

Full transcription of Improvisation 4.6 is in Appendix C.

The musical elements of Improvisation 4.6 are dominated by an expressive use of tone colour, informing the musical content. As a result, the use of timbre presented a different set of considerations for the transcription process, necessitating the documentation of several extended techniques. Considering this, Improvisation 4.6 could also be documented through the development of a graphic score, as the use of the notation facilitates a predominance of the significance of pitch, harmony and rhythm, wherein this example, Improvisation 4.6 features timbre as the dominant musical element.

The use of a graphic score could provide a different representation of the timbral aspects of this improvisation. However, for consistency with all transcriptions and scores within the research, the use of notated manuscript was maintained. Therefore, the timbral focus needs to be considered when comparing Improvisation 4.6 to both source materials, scores and the other transcribed improvisations. As a result, the transcription of Improvisation 4.6 has been documented in a manner that presents an approximation of the recorded content. Symbols are used to identify the extended techniques employed, demonstrating the specific character of the improvisation, including the placement of arrows above or below the stave to demonstrate the flexibility of pitch as a featured characteristic of the improvisation.

Similar to Improvisation 1.8, not every phrase of the improvisation is included in the analysis. Excerpts relevant to the features of the improvisation are examined for their potential to identify both influences from the source materials and characteristics attributed to the personal voice (McMillan 1996).

Several symbols were used to identify the use of various extended techniques (see Figures 8.40–8.45). Overtones are indicted with the placement of a small circle above the note (see Figure 8.40). Cross fingerings are indicated with the symbol of a cross below the pitch (see Figure 8.41). Multiphonics are notated as multiple notes played at once on the stave (see Figure 8.42). Microtonal melodic content is demonstrated by arrows pointing in the direction of the pitch (see Figure 8.43). Arrows placed above the note pointing either up or

down indicate a shift from the standard notation (see Figure 8.44). The use of slurs up and down placed before and after a note indicate the use of pitch bends (see Figure 8.45).

Figure 8.40: Symbol for Harmonic Note.

Figure 8.41: Symbol for Cross Fingering.

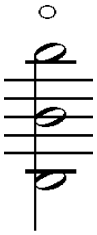


Figure 8.42: Symbol for use of Multiphonics.

Note: Figure 8.42 shows an example of three notes sounded simultaneously.

Figure 8.43: Symbol for Pitch Played Above Notated Note.

Figure 8.44: Symbol for Pitch Played Below Notated Note.

Figure 8.45 provides an example of the use of broad flexibility of pitch, featured both on both the attack and decay of the note in Improvisation 4.6. Pitch inflexions are documented by symbols indicating specific movement up and down of pitch. The figure also demonstrates a passage played in the altissimo register of the soprano saxophone, adding to the intensity of tonal colour and overall impact of the sound as discussed in the analysis.

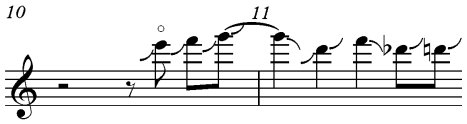


Figure 8.45: Improvisation 4.6, Bars 10 and 11.

The opening passage of Improvisation 4.6 commences with a juxtaposition between two distinct ideas within the same phrase. The first idea is demonstrated at bar 1 and second idea at bars 2–5 (see Figure 8.46).

Figure 8.46: Improvisation 4.6, Bars 1–5.

From the first phrase, there is a density of content evident and present throughout Improvisation 4.6. There is a similar intensity and volume of content in Source Material B and the use of tone is more closely matched to this source material than to Source Material A.

Figure 8.47 is the opening phrase of *Countdown* as recorded by Coltrane on the album *Giant Steps* (1960). Similarities are evident between Figures 8.46 and 8.47 in the use of melodic material that is primarily defined by the harmonic content. The content of both figures

demonstrates the utilisation of chordal notes, scale tones and chromaticism. There is a similarity to the approach to tone colour, as evidenced in the recordings of both versions of Source Material B and Improvisation 4.6, demonstrating an influence of the range of the tone colour produced by Coltrane on his recording of *Countdown*.

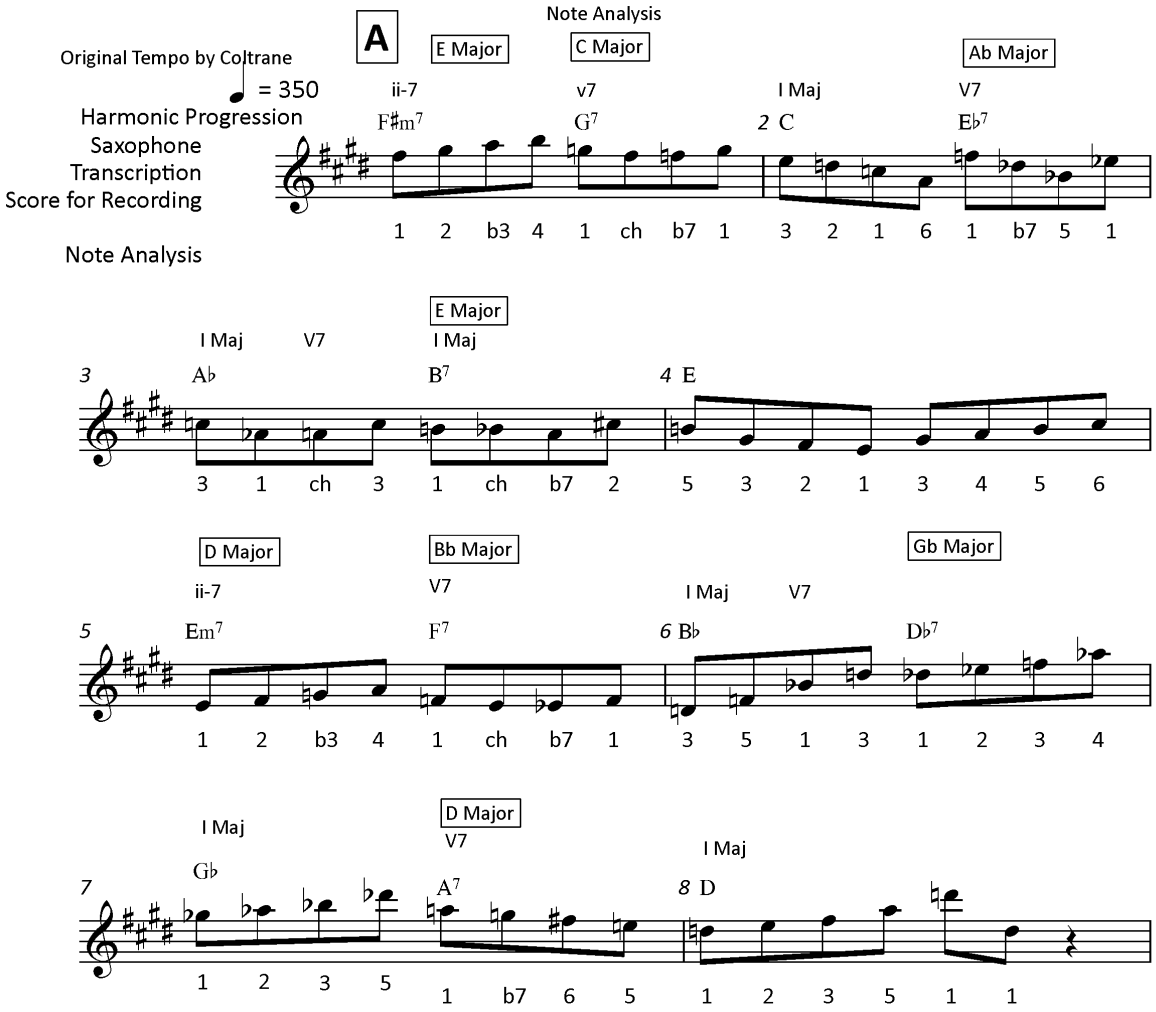


Figure 8.47: *Countdown*, Bars 1–8.

The shift in tone colour from Source Material A and the other improvised examples is the result of a change of placement of the mouthpiece and the embouchure. This change involves the placement of the mouthpiece further into the mouth and covering a larger surface area of the reed. This, in conjunction with adjustments to breathing, where a greater volume of air is moved through the instrument more rapidly, results in further variations of tone colour and as a result of additional overtones are produced within the sound.

The tone produced on the soprano saxophone is not less controlled, but provides a contrasting tonal outcome, a key research finding, where tempo, by association, may be a factor informing the tonal outcomes in this context. There is also the influence of the recording by Coltrane (1960) of *Countdown* and possible influence by other recordings by Coltrane studied and transcribed prior to this research.

This opening phrase of Improvisation 4.6 (see Figure 8.48) contains similarities in content to the first bar in Improvisation 1.8 (see Figure 8.49).

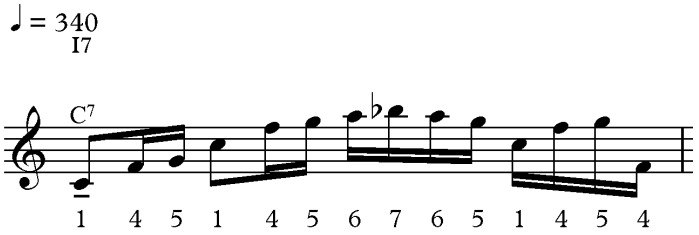


Figure 8.48: Bar 1 of Improvisation 4.6.

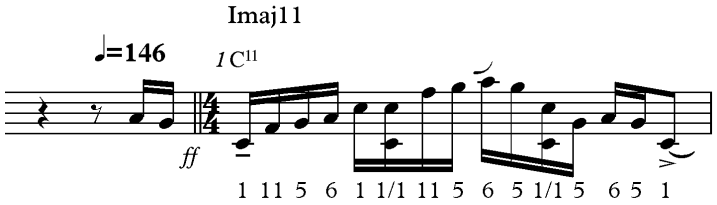


Figure 8.49: Improvisation 1.8, Bar 1.

The similarities between Figures 8.48 and 8.49 indicate that this type of gesture and phrasing could be attributed to the feature of an individual syntax.

The opening idea to the Improvisation 4.6 appears at bar 33 (see Figure 8.50). This gesture also bears a similarity to Figure 8.38 from Improvisation 1.8. In addition, there is a return to the pedal point idea at bar 34, beat 2, a thematic gesture throughout this improvisation and is also demonstrated in the *Courante* and *Allemande* from Source Material A.

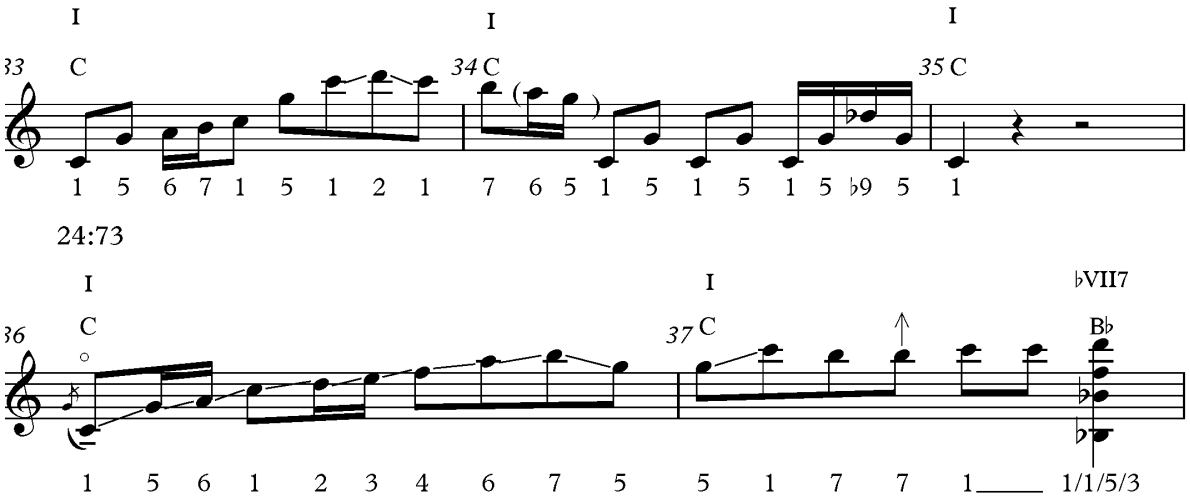


Figure 8.50: Improvisation 4.6, Bars 33–37.

In addition, there is a lot of movement within the pitch and the use of a Bb multiphonics (see Figure 8.51). Phrase 1 of this improvisation includes two distantly different ideas. Bar 1 bares a relationship with material in Improvisation 1.8 (see Figure 8.39).

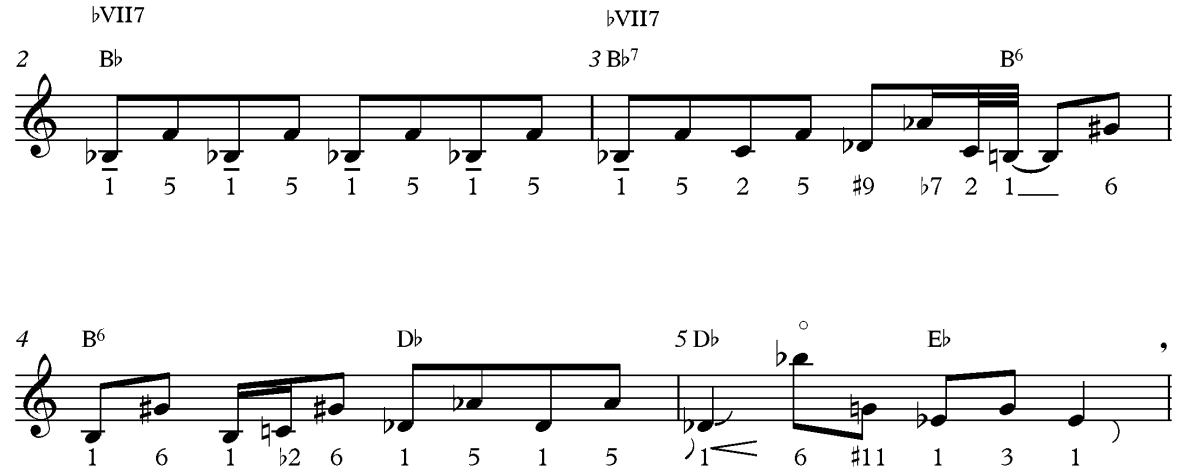


Figure 8.51: Improvisation 4.6, Bars 2–5.

Figure 8.51 commences at bar 2 of Improvisation 4.6, demonstrating very contrasting material from the initial bar but remaining part of the same phrase. Similarities can be found in Source Material A from Movement III, the *Courante* but in a different tonal centre (see Figures 8.52–8.54). The repeated bass notes provide a counterpoint between the high

and the low notes of the phrase. This is a repeated idea that features not only in Source Material A, but also in Improvisation 1.8.

Figure 8.52: *Courante*, Movement III, BWV 1008, Bar 7.

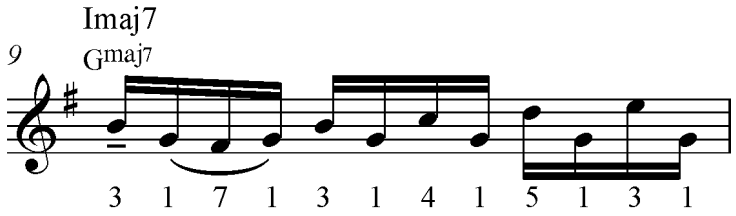


Figure 8.53: *Courante*, Movement III, BWV 1008, Bar 9.

Figure 8.54: *Courante*, Movement III, BWV 1008, Bar 27.

All three of the above excerpts from the *Courante* demonstrate similar content, with a featured pedal point, presented in different harmonic content in Improvisation 4.6 (e.g., Figure 8.51).

Bar 6 in Figure 8.55 provides another example, but with a smaller pitch range of major 3rd. This intervallic content narrows down progressively to a major 2nd prior to expanding out again in bar 8 to a perfect 5th interval. Therefore, Figure 8.55 is similar in content to the *Courante* excerpts (Figures 8.52–8.54), but with increased chromaticism from bar 7 and the

use of extended techniques to affect the tone colour, particularly at bar 9, providing contrasts.

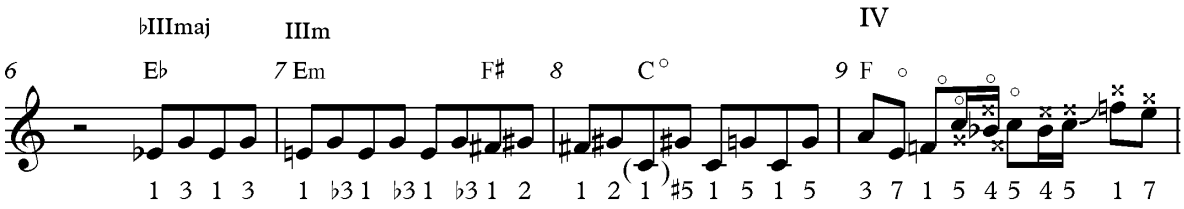


Figure 8.55: Improvisation 4.6, Bars 6–9.

The idea commencing at bar 6 reappears at the end of bar 23, from beat 3 and continues until the end of bar 32 (see Figure 8.56). Different pedal points are provided as the harmonic material shifts. This is a feature of this example improvisation as well as Improvisation 1.8. The same type of gesture occurs in Source Material A, but the harmonic progression of this movement is generally different and more likely to move in the circle of fifths. Conversely, the movement in Improvisations 4.6 and 1.8 are more likely to be chromatic or move in major and minor thirds in nature. This movement in thirds can be derived from the harmonic content of *Countdown*, where the *Coltrane Changes* were used in the composition and feature a harmonic tonic movement of a descending major 3rd interval. In the transposition for Bb soprano saxophone, this harmonic movement is C major, Ab major, E major, then a movement of a tritone to Bb major and returning to descending major 3rd movement between Gb major to D major.

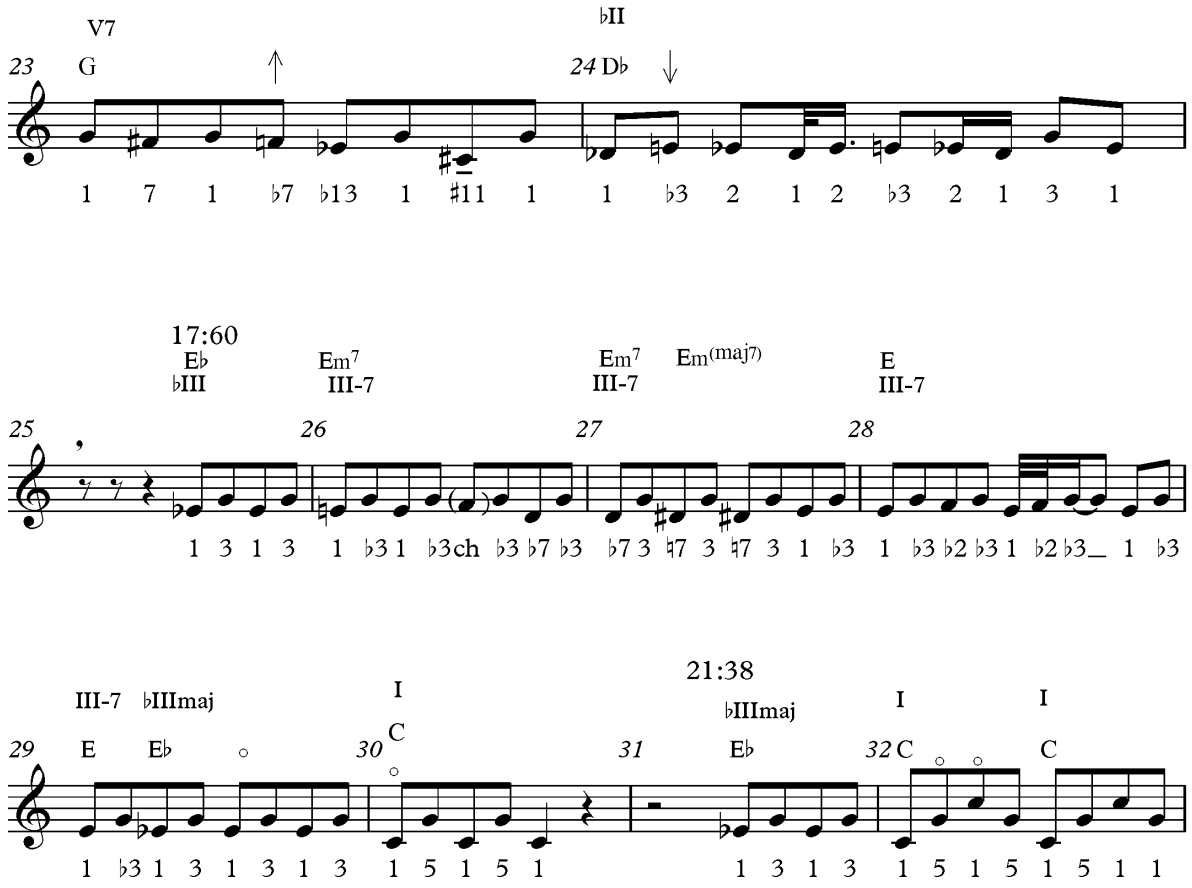


Figure 8.56: Improvisation 4.6, Bars 23–31.

In Figure 8.57 the *Countdown* harmonic progression moves through six different major key centres across 12 bars and concludes with a substitute V to V7 to I movement in C major to complete the 16-bar form (see Figures 8.57 and 8.58). The key centres within the progression consist of major chords separated by a major 3rd interval, all preceded by a dominant 7th chord. Each four bars commence with an ii minor chord that pre-empts the final V I progression for each of the first three lines. Where as noted in Chapter 6 each of these first three lines of each harmonic form is transposed down by a tone.

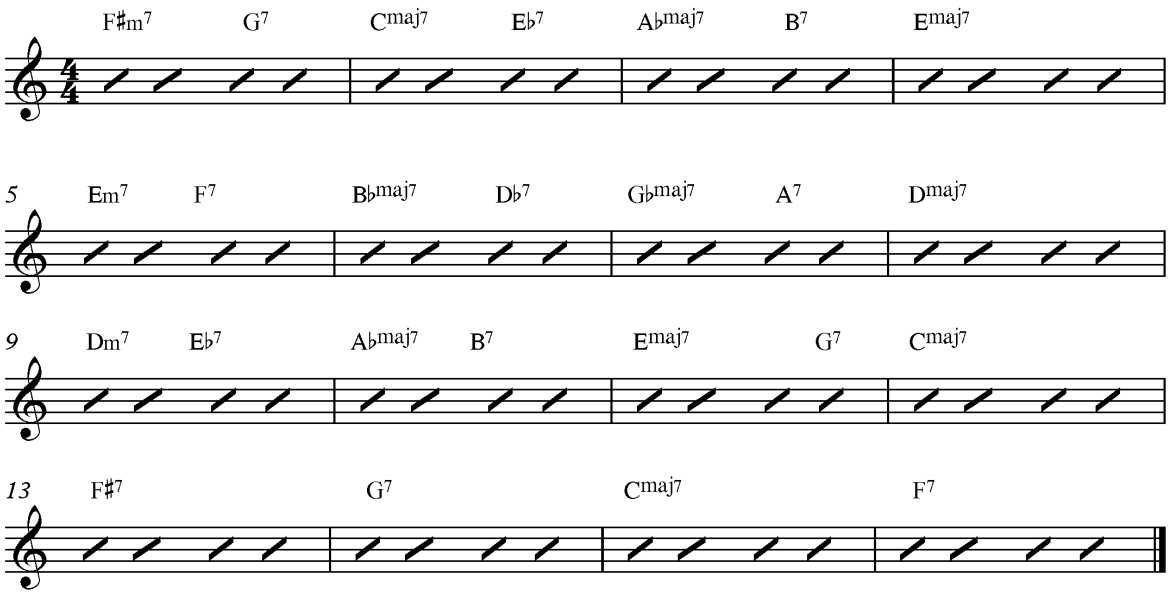


Figure 8.57: *Countdown*, Harmonic Progression Bb Transposition without Analysis.

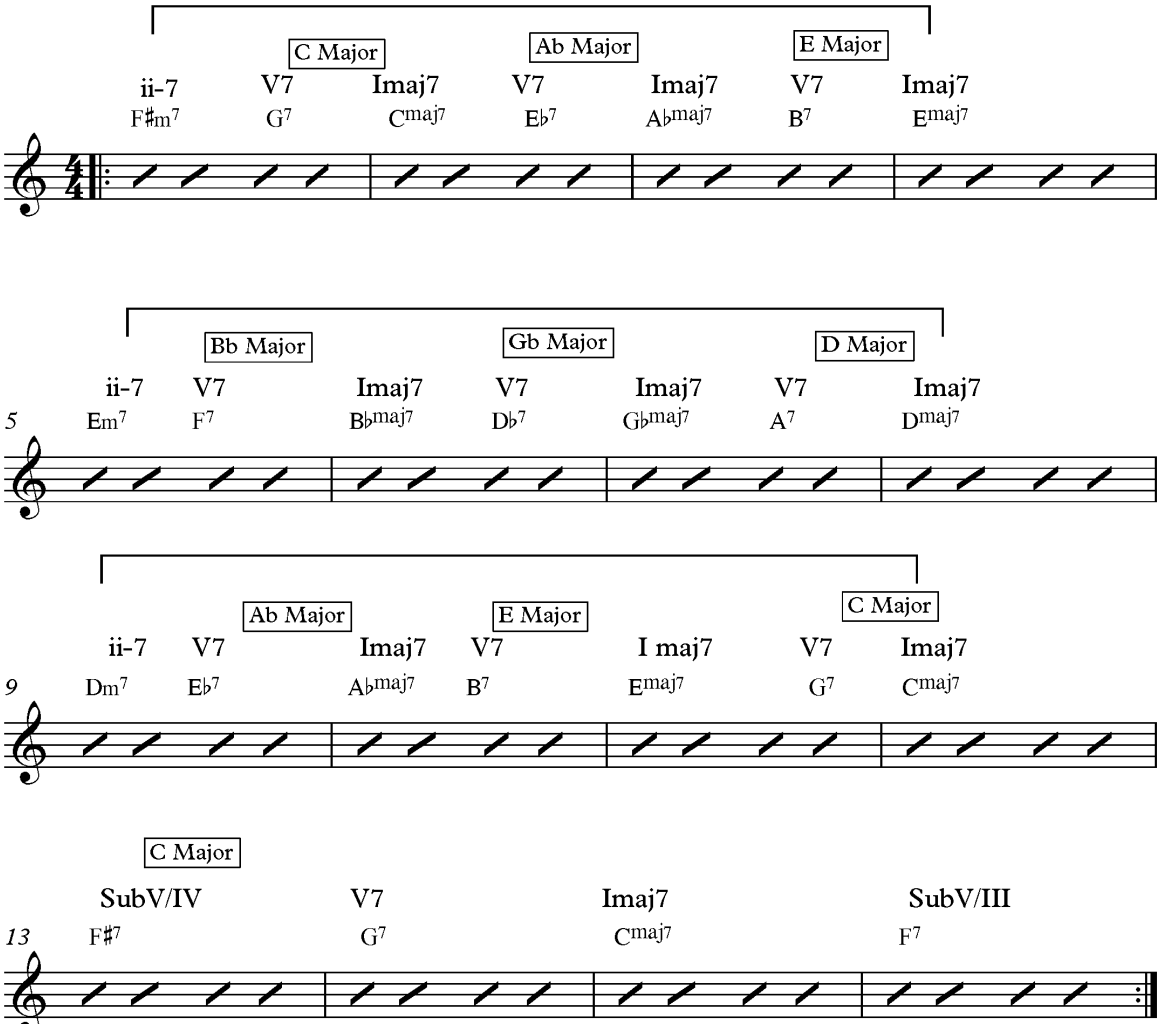


Figure 8.58: *Countdown*, Bars 1–16 with Harmonic Analysis.

Whereas the *Coltrane Changes* are applied as the harmonic bases of *Countdown* providing a highly structured progression, the harmonic movement within Improvisation 4.6 is improvised. Both the melodic and harmonic movement is minimal in Improvisation 4.6, there are some changes outside of small steps of semitones and tones intervals such minor 3rds, major 3rds and tritones featured within the progression. Also evident within the harmonic content of Improvisation 4.6 the use of pedal points as demonstrated in the harmonic example provided of the first 16 bars of Improvisation 4.6 (see Figure 8.59).

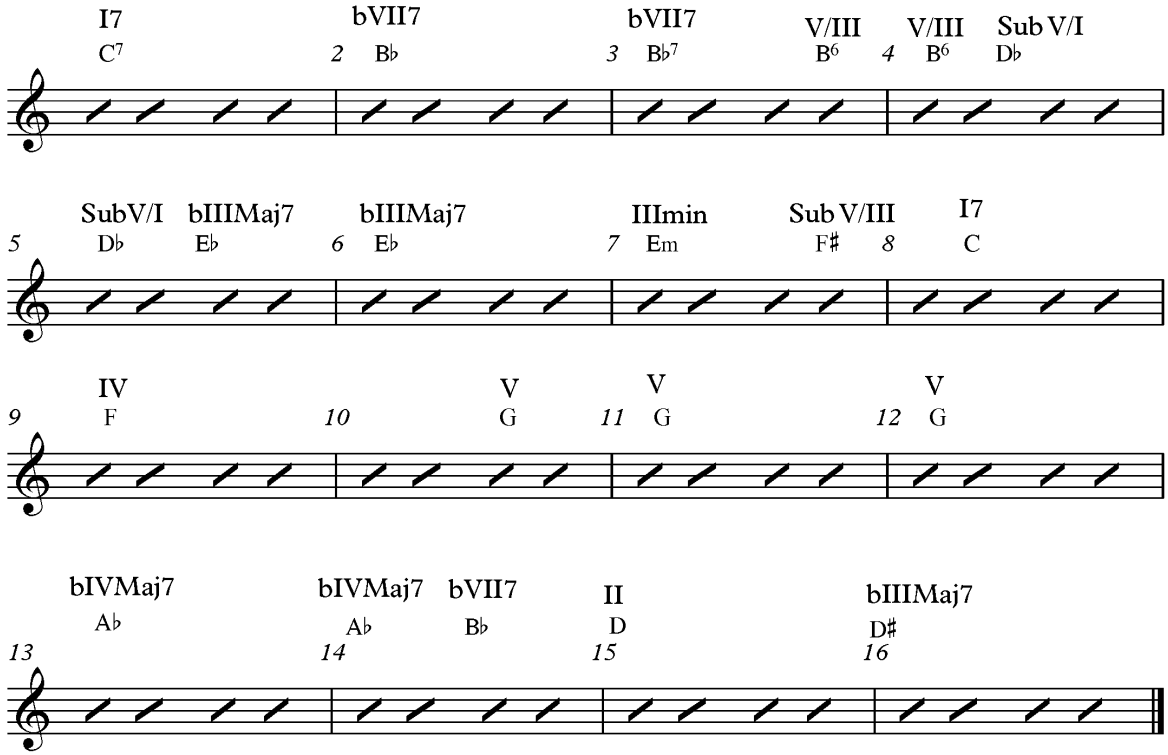


Figure 8.59: Improvisation 4.6, Bars 1–16 with Harmonic Analysis.

The harmonic material in Figure 8.59 is analysed as relating back to C as the tonic centre. However, the repeated chords as pedal points provide the opportunity to change the tonic note where potential modulations are suggested by the repeated bass notes for consistency C as the tonal centre is maintain for analysis purposes. This also highlights influences demonstrated via this small range of the harmonic content in Improvisation 4.6, where the movement of the root progression is not moving in the circle of 5ths, as is often the case in Source Material A. However, in Improvisation 4.6, the harmonic movement is a secondary consideration after the timbral and melodic content and bears greater resemblance to

Source Material B (although, as discussed, there are also significant contrasts in both the form and construction of the harmonic material).

Improvisation 4.6 also contains gestures that contain extremes of the ranges, particularly in the altissimo register as demonstrated in Figure 8.60. The extended range into the altissimo register and the use of chromaticism share similarities with *Countdown* (see Figure 8.61), although they do not share the same relationship with the harmonic movement.

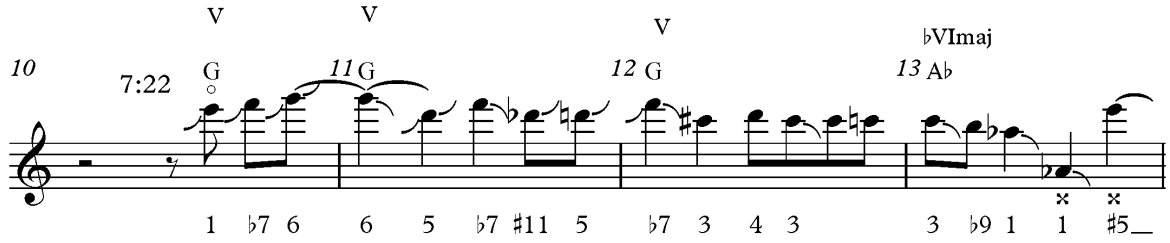


Figure 8.60: Improvisation 4.6, Bars 10–13.

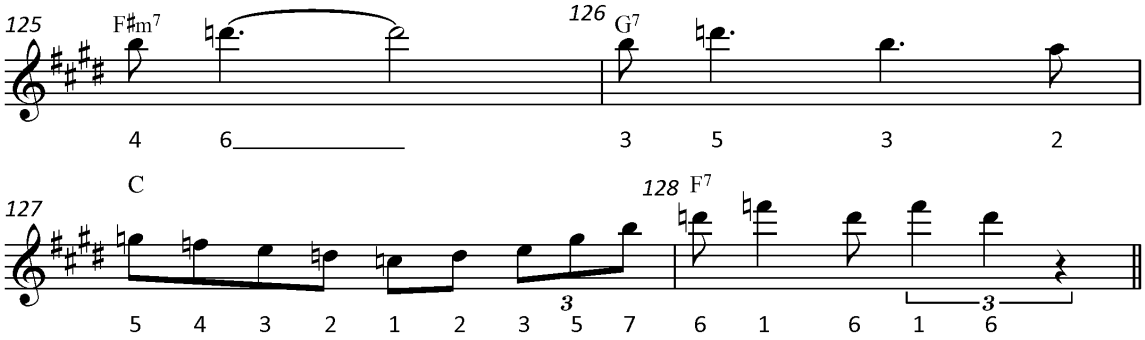


Figure 8.61: *Countdown*, Bars 125–128.

Similar movements in range are found in the other improvisations and source materials, with the use of increasing chromaticism in passages as a recognisable feature of my personal syntax (voice) (McMillan 1996). Figure 8.62 demonstrates the use of legato and microtones, in particular in the altissimo register, including the palm keys and above.

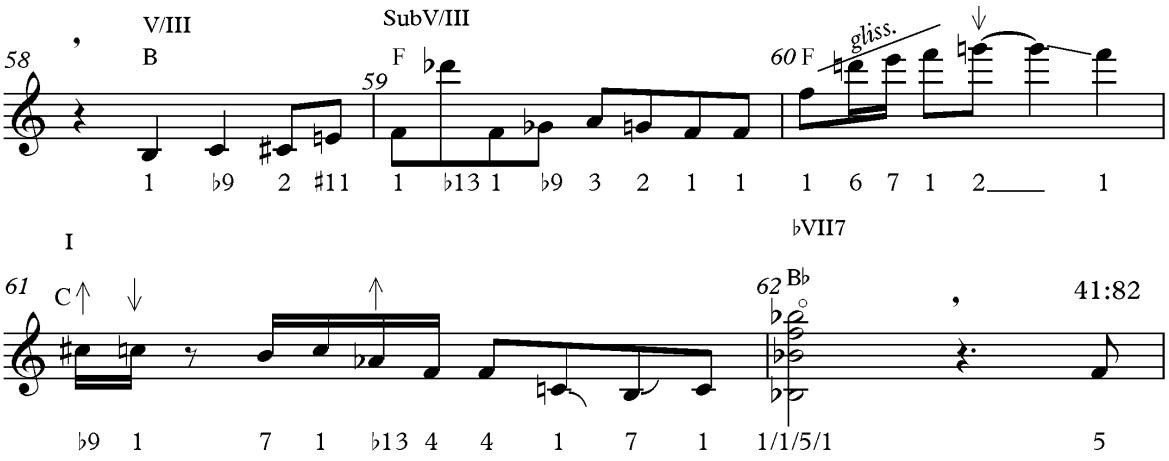


Figure 8.62: Improvisation 4.6, Bars 58–62.

Figure 8.63 demonstrates the use of small interval movements and microtones (as indicated by the arrows) and there is a balance between the expansion of ranges of certain phrases and a contraction of the content. Harmonic movement in small intervals of semitones and tones is defined by the melodic material.

Figure 8.63: Improvisation 4.6, Bars 63–65.

In Figure 8.64, the note G is featured as the tonal centre within the pedal point idea and extended interval laps have become synonymous with reoccurring ideas within my syntax and integrated into my playing. There are also large dissonant interval leaps of an octave and a tritone.

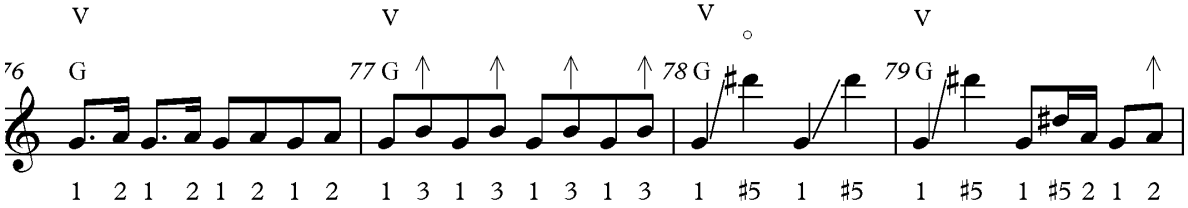


Figure 8.64: Improvisation 4.6, Bars 76–79.

In Figure 8.65, harmonic movement is identical to *Countdown* bars 90 to 93 featuring descending major thirds, while pedal of C remains a featured gesture and reinforces C as the tonic.

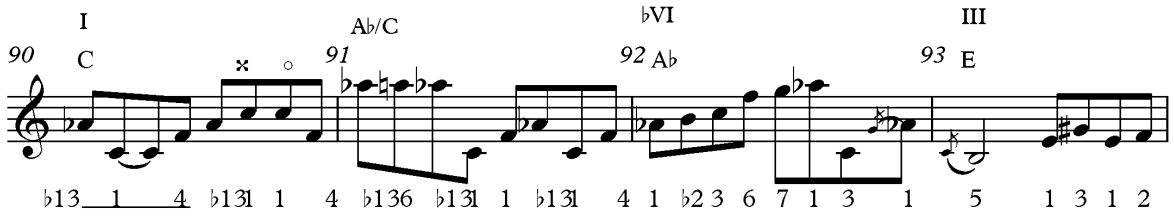


Figure 8.65: Improvisation 4.6, Bars 90–93.

The repetitive passage is a featured gesture of this improvisation (see Figure 8.66) demonstrates resemblance to Improvisation 1.8.

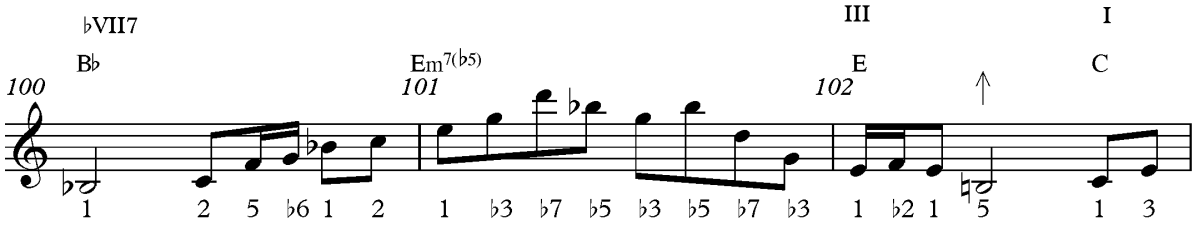


Figure 8.66: Improvisation 4.6, Bars 100–102.

Expansion of range continues towards the end of the improvisation, demonstrating gestures of the individual syntax, chromatic notes used as ornaments, clearly defined harmonic material and the use of a glissando adding tension while extending the range of the phrase (see Figure 8.67).

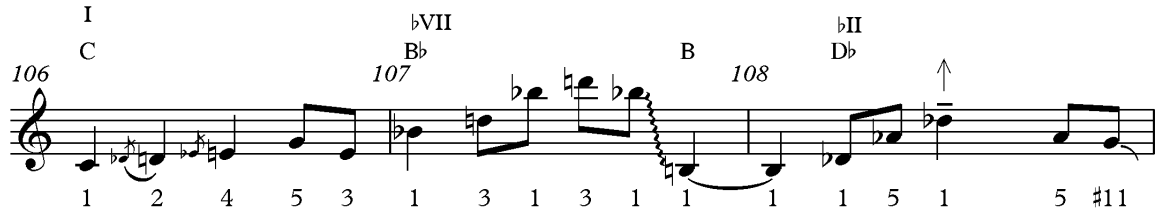


Figure 8.67: Improvisation 4.6, Bars 106–108.

Identification of range and tone colour in the altissimo register on the soprano saxophone, as well as manipulation of the pitch and use of microtones, is balanced with the playing of the extremes of the range (see Figure 8.68).

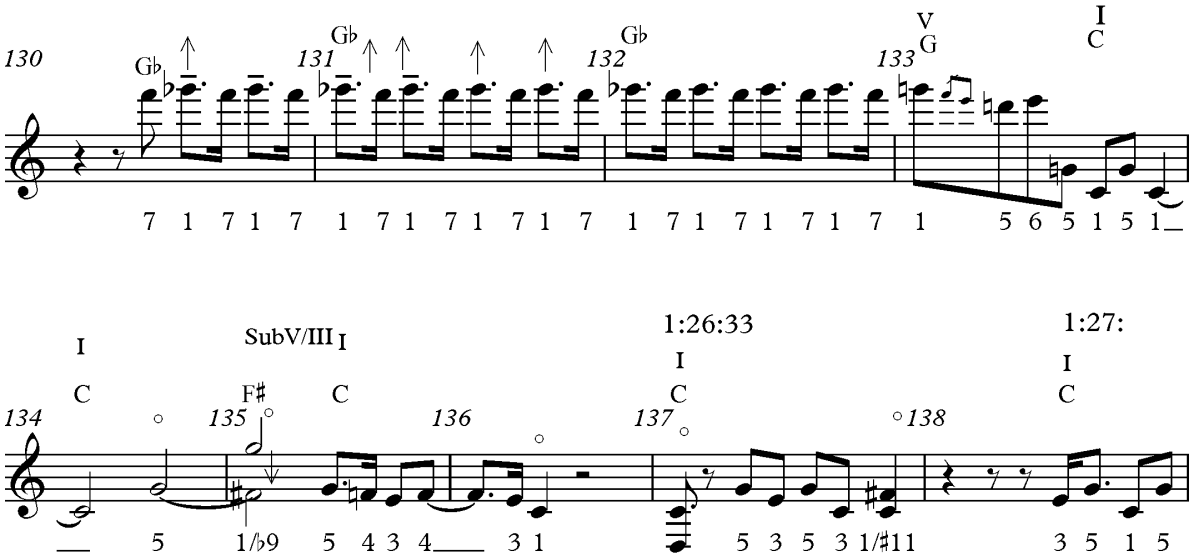


Figure 8.68: Improvisation 4.6, Bars 130–138.

Repetition in the high passage has a minimalist effect on the melodic content. Like the entire improvisation, the final passage provides melodic material that demonstrates extremes, and towards the end the content becomes more repetitive and increasingly focused on timbral outcomes within the altissimo register, providing a pitch contrast to conclude the final phrase of the improvisation. The arrow in the final passage indicates a descending pitch fall from a high F (see Figure 8.69).

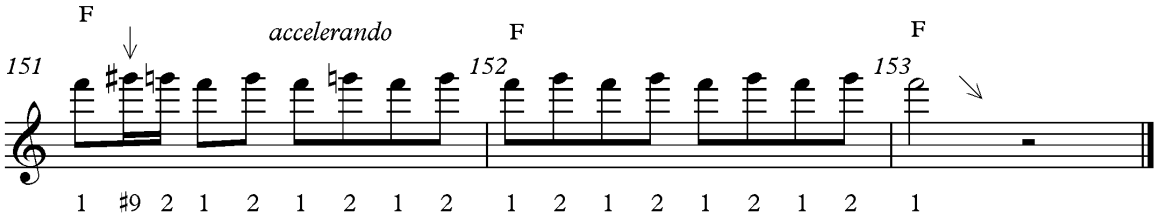


Figure 8.69: Improvisation 4.6, Bars 151–153.

The findings of the comparative analysis of Example 3, Improvisation 4.6 are summarised as follows:

1. Melodic content contains a three-octave range within Improvisation 4.6, from low Bb to A in the altissimo register. The melodic material is contrasting, expanding and contacting within the phrases. Yet, the content is often minimal, with repetitive material on the same note, and the use of extended techniques including the use of pitch inflexions, microtones and multiphonics.
2. Harmonic content of the improvisation is analysed with C as the tonic. The pedal point material does move away from C, and this material demonstrates resemblance to excerpts from Source Material A. Much of this harmonic analysis is derived from limited melodic material and repetitive notes in an effort to contextualise the melodic and harmonic material for the purposes of analysis all the harmony is related back to C. A key finding was the extent to which the harmonic movement in *Countdown* was evident in Improvisation 4.6, appearing in the form of both descending major 3rds and tritone movement to the tonic notes. Within Improvisation 4.6 more harmonic content became apparent through the process of analysis then first anticipated. Overall the harmonic content is generally static, with repetitive phrases and informed by the limited melodic content.
3. Rhythmic content contains resemblance to rhythmic phrases from Improvisation 1.8 and Source Material A. The intensity of the rhythmic phrasing contains parallels to the content of Source Material B, *Countdown*. As with the melodic material, there is a significant amount of repetition within the rhythmic content.
4. Phrasing and contour of this example transcription is often quite static, remaining on one or a few different notes clustered together. This same gesture is moved across the range of the instrument. One of the key features of the improvisation is the expansion and contraction of the ideas from a small range to across three octaves and into the altissimo register of the soprano saxophone.
5. Timbral content was key to the character of Improvisation 4.6. As noted, extensive use of extended techniques in the form of overtones or harmonic notes, multiphonics, cross fingerings and flexibility of pitch bending at the attack and decay of the note. This, in conjunction with additional breath support and a shift in mouthpiece placement, facilitated additional overtones within the tone colour and a more intense timbre.

6. Tempo was likely a contributing factor in the tone colour produced by the saxophone in this particular instance, adding to the intensity. The tempo is very fast (crotchet = 340 bpm), a similar tempo to Coltrane's recording of *Countdown* (crotchet = 350 bpm).
7. Duration of Improvisation 4.6 is comparatively short (1'45") versus the source materials and other improvisations. All the source materials are longer in duration. A number of improvisations are of similar or shorter duration to Improvisation 4.6, including Improvisation 1.6 (1'38"), Improvisation 2.1 (1'39"), Improvisation 4.1 (1'07"), Improvisation 4.2 (1'23"), Improvisation 5.2 (1'33"), Improvisation 6.2 (1'25") and Improvisation 6.3 (1'27").

8.5 Conclusion

In total 48 original solo improvisations are included within the creative outcomes where the three selected examples, although diverse in nature, provide a sample of the content of the creative outcomes. Additional findings may have been featured with an alternative selection of sample improvisations. However, given the broad range of musical elements within Improvisation 1.16, Improvisation 1.8 and Improvisation 4.6, there is significant scope for deriving important content and providing consistency within the research findings. As demonstrated in the analysis provided in this chapter, some of the influences from the source material are explicit, such as the use of the same tonality and key in Example One, Improvisation 1.16 as Source Material A. Other influences appear across the three examples outlined above, including the use of melodic contour and the repeated idea of placement of a single high point within a bar. Interconnection between the example improvisations emerged, which was initially an unexpected finding, and suggests the development of consistency of syntax observed within the personal voice (McMillan 1996).

Additional findings include gestures or characteristics indicative of the influence of the source materials and others gestures of self-generated ideas or earlier influences. Observations also include the prevalence of subtle expressive nuances as defining features of the personal voice (McMillan 1996).

Some notable influences have not been directly observable through the analysis of the transcriptions but are evident through the listening of the examples, such as the approach to timbre in both Source Material B and Improvisation 4.6. Although there was a changing hierarchy of the elements of music within the example improvisations, it was apparent that each of the focus areas of melody, harmony and timbre (where the element of rhythm was a constant throughout) of the example improvisations were addressed within the source materials. The contrasts between the two different source material enabled a broad range of influence within the creative outcomes and as consequence providing diversity within characteristics of the personal voice (McMillan 1996).

In the example improvisations where one element predominated, other elements supported the musical outcomes. For example, where timbre was featured in Improvisation 4.6, rhythmic, harmonic, melodic and rhythmic content were also significant to the overall outcomes.

Aspects of counterpoint were evident in Improvisation 1.8 where harmony and pedal points predominated, also within Improvisation 4.6 individual repeated tones became anchor point of individual phrases providing a harmonic focus.

In conclusion to Chapter 8, it became evident through the analysis process, that expressive devices and tone colour have been of equal significance to the overall findings as the influence of melodic, harmonic, rhythmic and timbral content. In addition to the recognition of consistencies of these influences across the examples, they are also indicative of the development of a personal style or voice (McMillan 1996) evolving as a result of the influences of the source materials. Therefore, as demonstrated through this analysis, the source materials have been effective in providing content and influence upon the process of solo improvisation, although as evidenced here other influences also prevail including a cross-reference of influences between the example improvisations.[23]

[23] The complete transcriptions including harmonic and note analysis of both source materials and example improvisations are located in Appendices A, B and C.

Chapter 9: Conclusion

The research question was, Is the personal voice (McMillan 1996), a key notion in the performance of jazz and improvised music, latent in the musician, or is this voice an agglomeration of acquired influences? This question has been addressed through the implementation of the methodology contextualising the practice-based research, providing a framework in which to examine the material.

Examination of the research question was facilitated through a multi-layered and multifaceted approach, corresponding with the content and stages of the research. The concepts and process of heuristic research methodology (Moustakas 1990) facilitated the practice-based research, from the initial stages through to the key findings. In practice, the heuristic processes (Moustakas 1990) were not sequential or applied in the same manner as the heuristic stages of the research. This was partly due to the nature of the study and the different ways the research process informed the findings. The consideration and implementation of heuristic concepts (Moustakas 1990) such as identifying the focus of enquiry informed the research question on the development of the personal voice (McMillan 1996) in improvised music. The source materials were chosen through the processes of self-dialogue (Moustakas 1990) and consideration of how the practice of the source materials could impact on the creative outcomes. The overarching view of the research has been viewed through tacit knowing (Moustakas 1990) and implemented as a primary concept to manage the different areas of study and consideration of the research stages in terms of the whole. The fourth concept of intuition (Moustakas 1990) was applied to the recording of all creative outcomes, but in particular to the improvisation process, as discussed in Chapter 7. Indwelling (Moustakas 1990) facilitated the learning of the source materials, particularly areas with significant technical challenges, and where considerable time was taken to consider the adaptation of specific performance practices of the Baroque period for Source Material A. This applied to a lesser extent to the consultation of Source Material B. Indwelling (Moustakas 1990) enabled the internalisation of the source materials

through the phases of immersion and incubation (Moustakas 1990), informing the findings demonstrated through analysis, as demonstrated in Chapter 8.

The research question was clarified through focusing (Moustakas 1990), the sixth concept of heuristic research, and through the implication of the investigation the development of new musical syntax. Here, the 'constituents' (Moustakas 1990) are in the form of the source materials providing content. The final process of heuristic research the internal frame of reference (Moustakas 1990) has provided a consistent platform for the self-referential process interconnecting all the stages of the research, addressing the layers of process and emergence of outcomes through the creative process interconnected throughout the investigation.

The methodology provided a practical framework to determine the key findings. Whether this approach to practice-based research into the development and extension of a personal voice (McMillan 1996) in improvised music resonates with other practitioners in the field is yet to be determined. However, it is a starting point for the discussion of the nature of musical influence and how it can be identified within the individual syntax of the improviser within a solo context.

The influence of the source material on the creative outcomes (discussed in Chapter 8) have been identified and determined through particular musical gestures directly compared to the source materials and identified via the transcriptions. These musical gestures include the use of pedal points, rhythmic ideas and note choices. Other musical elements suggestive of influences from the source materials include tonality, ornamentations, phrasings, duration of works, expression and range. In considering the variety of musical elements employed and their treatment in both the source materials and the improvised examples, comparisons more broadly determined specific improvisations and their featured elements of melody, harmony and timbre. Each example improvisation featured a different element of music that dominated the creative outcomes (Improvisation 1.16, melody; Improvisation 1.8, harmony; and Improvisation 4.6, timbre). Yet, the defining features of each of the example improvisation were also influenced by additional factors that include both the

impact of previous musical study and performance experience, and features attributed to the innate characteristics of the personal voice (McMillan 1996).

It is possible that the filtering of new material to facilitate the creation of original solo improvisations would lead to creative outcomes that were not unadulterated in terms of specific performance practice, but combined elements of influences at each stage of the process, including the recordings of the source materials. Consequently, the methods undertaken within the study led to outcomes that do not present a strictly authentic representation of the Baroque performance practice, but an exploration of musical content and ideas based on the study of a specific work by J.S. Bach. Considering this, the particular work, BWV 1008, was less significant to the content studied, but served as a catalyst of the process undertaken. The influence of Source Material B and the music of John Coltrane within the creative outcomes was predictable, given my musical history and instrumentation. While elements of Source Material B and the more general influence of Coltrane is present within my playing, it is contextualised within the broader frame of reference, indicating the presence of material that is both the direct result of studying Source Material B and the result of earlier study and listening of an broad range of recordings by Coltrane across the different periods of his prolific career.

In the opening argument, I considered two different approaches to the development of an individual voice in improvised music as discussed by the American jazz guitarists Metheny (2004) and Abercrombie (2009). Metheny (2004) discussed the identification of personal elements of style as a conscious and self-determined process, and Abercrombie (2009) described the process as a realisation occurring through reflection with the benefit of hindsight, identifying the elements unique to the individual soloist within the musical outcomes. This research has found through my own experiences that the individualised voice is determined by a number of different factors, where direct influence can be identified as being attributed to, for example, a particular phrase of a movement of BWV 1008. Influence can also be attributed to additional factors that may inform other elements of the creative outcomes. The impact of the chosen works or a specific composers' style can be determined through analysis, but the overall creative outcomes are not solely attributed to these influences, where the superimposition of music from the source materials through

the stages of immersion and incubation (Moustakas 1990) have led to outcomes that possess different types of influences contributing to the personal voice (McMillan 1996).

As a contribution to new knowledge, this practice-based research in the area of solo improvisation may benefit other practitioners in the field. The research findings conclude that the development of the personal voice (McMillan 1996) is a result of direct influence, inspiration and the intuitive process (Moustakas 1990), and in addition, also based on musical knowledge and performance practices from outside and within improvised music. Therefore within the context of determining an original contribution to the field of practice in the area of the solo improvisation, the research has found the development of the personal voice (McMillan 1996) in improvised music is determined by a conglomeration of both influences and innate characteristics, informing the creative outcomes that merge musical gestures, elements and structures in combination with spontaneous musical ideas that can be defined as innate or of an individualised nature. However, this does not detract from the importance of the musicians' imagination in shaping, informing and crafting musical material within improvised outcomes.

Bibliography

Abercrombie, John. 2009. *Words of the Music Masters, Eight Masters Share their Principles with You. Interview by Tom Sawada, and Federico Pereiro*. http://wordsofthemusicmasters.com/read.html (assessed 18 September 2018).

Attali, Jacques. 2011. *Noise: The Political Economy of Music*. Minneapolis: The University of Minnesota Press.

Bach, C. P. E. (1759) 1949. *Essay on the True Art of Playing Keyboard Instruments*. Edited by William J. Mitchell. Translated by William J. Mitchell. New York: W.W. Norton & Company.

Bailey, Derek. 1992. *Improvisation: It's Nature and Practice in Music*. Ashbourne: Da Capo Press.

Baron, Carol. 2006. *Bach's Changing World: Voices in the Community*. Rochester, NY. University of Rochester Press.

Barrett, Estelle and Barbara Bolt. 2012. *Practice as Research: Approaches to Creative Arts Enquiry*. New York, NY: I.B. Tauris & Co Ltd.

Bell, Graeme. 1988. *Australian Jazzman: His Autobiography*. Frenches Forest: Child & Associates Publishing Pty. Ltd.

Benson, Bruce Ellis. 2003. *The Improvisation of Musical Dialogue*. Cambridge, United Kingdom: Cambridge University Press.

Berliner, Paul F. 1994. *Thinking in Jazz: The Infinite Art of Improvisation*. Edited by Philip V. Bohlman and Bruno Nettl. Chicago: The University of Chicago Press.

Bohlman, Philip V. n.d. 'Vernacular Music'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/46449.

Bohlman, Philip V. and Bruno Nettl, eds. 1994. *The Infinite Art of Improvisation*. Chicago: The University of Chicago Press.

Bolt, Barbara. 2011. *Heidegger Reframed*. London: I.B. Tauris.

Boorman, Stanley. n.d. 'Holograph'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/13248.

Boorman, Stanley. n.d. 'Urtext'. Grove Music Online. Oxford Music Online. Oxford University Press.

http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/28851.

Borgo, David. 2005. *Sync or Swarm: Improvising Music in a Complex Age*. New York, NY: Continuum.

Burke, Robert and Andrys Onsman, eds. 2017. *Perspectives on Artistic Research in Music*. Lanham, Maryland: Lexington Books.

Burke, Robert. 2014. 'Analysis and Observations of Pre-Learnt and Idiosyncratic Elements in Improvisation: A Reflective Study in Jazz Performance' PhD thesis, Monash University.

Burnett, Fiona. 1997. 'The Significance of Sound: A Study of the Changing Role of Music in Society'. Master's thesis, Victorian College of the Arts, University of Melbourne.

Coady, Christopher. 2016. *John Lewis and the Challenge of "Real" Black Music*. Ann Arbor: University of Michigan Press.

Cook, Nicholas. 2009. *A Guide to Musical Analysis*. Oxford: Oxford University Press.

Cooke, Deryck. 1989. *The Language of Music*. Oxford: Oxford University Press.

Corbett, John. 2016. *A Listeners Guide to Free Improvisation*. Chicago: Chicago University Press.

Csikszentmihalyi, Mihaly. 1990. *Flow: The Psychology of Optimal Experience*. New York, NY. First Harper Perennial Modern Classics.

Davis, Stephen and Stanley Sadie. n.d. 'Interpretation'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/13863.

DeVito, Chris, ed. 2010. *Coltrane on Coltrane: The John Coltrane Interviews*. Chicago: Chicago Review Press.

DeVito, Chris, Yasuhiro Fujioka, Wolf Schmaler and David Wild. 2013. *The John Coltrane Reference*. Edited by Lewis Porter. New York, NY: Routledge.

Dean, Roger T. and Hazel Smith. 2014. *Practice-led Research, Research-led Practice in the Creative Arts*. Edinburgh: Edinburgh University Press.

Dean, Roger. 1989. *Creative Improvisation: Jazz, Contemporary Music and Beyond*. Milton Keynes: Open University Press.

Dolmetsch, Arnold. (1915) 2005. *The Interpretation of Music of the 17th and 18th Centuries*. New York: Dover Publications, Inc.

Donnington, Robert. 1974. *The Interpretation of Early Music. London:* Faber and Faber.

Evans, Sandra Janette. 2014. 'Meetings at the Table of Time: A Creative Practice Enquiry into Carnatic Jazz Intercultural Music'. PhD thesis, Macquarie University. http://hdl.handle.net/1959.14/353468.

Fux, Johann Joseph. 1971. *The Study of Counterpoint. Revised Edition*. Edited by Alfred Mann. Translated by Alfred Mann. New York: W.W. Norton & Company.

Grier, James. n.d. 'Editing'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/08550.

Heble, Ajay. 2000. *Landing on the Wrong Note: Jazz Dissonance and Critical Practice*. New York: Routledge.

Immel, Steven. n.d. 'Facsimile'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/40475.

James, Jamie. 2000. *The Music of the Spheres, Music, Science and the Natural Order of the Universe*. London: Abacus.

Jarvis, Martin. 2011. *Written by Mrs Bach*. Sydney: ABC Books.

Johnson, Bruce. 2000. *The Inaudible Music: Jazz Gender and Australian Modernity.* Sydney: Currency Press.

Kahn, Ashley. 2003. *A Love Supreme: The Study of John Coltrane's Signature Album*. New York, NY: Penguin.

Kahn, Ashley. 2006. *The House that Trane Built: The Story of Impulse Records*. New York. NY: W.W. Norton & Co.

Kernfeld, Barry. n.d. 'Barnett, Anthony'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/44041.

Khan, Hazrat Inayat. 1996. *The Mysticism of Sound and Music*. Boston: Shambhala.

Kosky, Frank. 2010. *Coltrane on Coltrane: The John Coltrane Interviews*. Edited by Chris DeVito. Chicago, Illinois: Chicago Review Press.

Ledbetter, David. 2009. *Unaccompanied Bach: Performing the Solo Works*. New Haven: Yale University Press.

Liebman, David. 1991. *A Chromatic Approach to Jazz Harmony and Melody*. Rottenberg: Advance Music.

Liebman, David. 1996. *Self-Portrait of a Jazz Artist, Musical Thoughts and Realities*. Alfred Music. Rottenberg: Advance Music.

Lindley, Mark. n.d. 'Temperaments'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/27643.

Little, Meredith and Natalie Jenne. 2001. *Dance and the Music of J.S. Bach: Expanded Edition*. Bloomington IN: Indiana University Press.

Little, Meredith Ellis and Suzanne G. Cusick. n.d. 'Allemande'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/00613.

Marston, Nicolas. n.d. 'Autograph'. Grove Music Online. Oxford Music Online. Oxford University Press. http.www.oxfordmusiconline.com.ezp.lib.unimelb.au/subscriber/article/grove/music/01567.

McMillan, Rosalind. 1996. ' "A Terrible Honesty": The Development of a Personal Voice in Musical Improvisation'. PhD Thesis, The University of Melbourne.

McNiff, Shaun. 2013. *Art as Research: Opportunities and Challenges*. Chicago: Intellect, The University of Chicago Press.

Metheny, Pat. 2004. 'No Boundaries'. *Berklee Today* 16 (1).

Moustakas, Clark. 1990. *Heuristic Research, Design, Methodology and Applications*. Newberry Park, California: SAGE.

Moustakas, Clark. 1994. *Phenomenological Research Methods*. Thousand Oaks, California: SAGE.

Mozart, Leopold. (1756) 1986. *A Treatise on the Fundamental Principles of Violin Playing*. Second Edition. Translated by Editha Knocker. Oxford: Oxford University Press.

Mulholland, Joe and Tom Hojnacki. 2013. *The Berklee Book of Jazz Harmony*. Boston, MA. Berklee Press.

Nachmanovitch, Stephen. 1990. *Free Play Improvisation in Life and Art*. New York: Jeremy P. Tarcher/Putnam.

Nettl, Bruno et al. n.d. 'Improvisation', Grove Music Online. Oxford Music. htttp://www.oxfordmusiconline.com.ezp.lib.unimelb.edu.au/subscriber/article/grove/music/13738pg2.

Nisenson, Eric. 1995. *John Coltrane and His Quest*. New York: Da Capo Press.

O'Dwyer, Timothy Joseph. 2012. 'The Adventure of the Refrain: Composing with Improvised Music'. PhD thesis, Queensland University of Technology.

Pankhurst, Tom. 2008. *Schenker Guide: A Brief Handbook and Website for Schenkerian Analysis*. New York, NY: Routledge.

Pelikan, Jaroslav. 1986. *Bach Among the Theologians*. Eugene, Oregon: Wipf & Stock Publishers.

Peters, Gary. 2009. *The Philosophy of Improvisation*. Chicago: The University of Chicago Press.

Piston, Walter. 1947. *Counterpoint*. New York: W.W. Norton & Company Inc.

Polanyi, Michael. 1966. *The Tacit Dimension*. University of Chicago Press: Chicago.

Porter, Lewis. 2016. *John Coltrane: His Life and Music*. Michigan: The University of Michigan Press.

Pressing, Jeff. 1987. 'Improvisation: Methods and Models'. In *Generative Processes in Music*, edited by J. Sloboda. Oxford: Oxford University Press.

Quantz, Johann Joachim. (1752). 2001. *On Playing the Flute: The Classic of Baroque Music Instruction*. Trans. with notes and forward by Edward R. Reilly. Boston: Northeastern University Press.

Ratliff, Ben. 2007. *Coltrane: The Story of a Sound*. New York: Farrer, Straus, Giroux.

Sawada, Tom and Federico Pereiro. 2009. *Words of the Music Masters, Eight Masters Share their Principles with You*. http://wordsofthemusicmasters.com/read.html.

Schön, Donald A. 2016. *The Reflective Practitioner: How Professionals Think in Action*. New York: Routledge.

Scott, Cyril. (1933) 2013. *Music and Its Secret Influence: Throughout the Ages*. Inner Traditions/Bear.

Shand, John. 2009. *Jazz: The Australian Accent*. Sydney, NSW. University of NSW.

Siblin, Eric. 2009. *The Cello Suites: J.S. Bach, Pablo Casals and the Search for A Baroque Masterpiece*. New York. Grove Press.

Steiner, Rudolf. 1986. *The Arts and their Mission*. New York: The Anthroposophic Press.

Steiner, Rudolf. 1983. *The Inner Nature of Music and the Experience of Tone*. New York: The Anthroposophic Press.

Sugg, Andrew. 2014. *The Influence of John Coltrane's Music on Improvising Saxophonists, Comparing Selected Improvisations of Coltrane, Jerry Bergonzi, and David Liebman*. Lewiston, New York: The Edwin Mellen Press.

Swindale, Owen. 1962. *Polyphonic Composition: An Introduction to the Art of Composing Vocal Counterpoint in the Sixteenth-century Style*. London: Oxford University Press.

Taruskin, Richard. 2009. 'Chapter 6: Class of 1685'. In *Music in the Seventeenth and Eighteenth Centuries*, edited by Richard Taruskin. Oxford University Press. http://www.oxfordwesternmusic.com/view/Volume2/actrade-9780195384826-div1-06005.xml.

Weiss, Marcus and Giorgio Netti. 2010. *The Techniques of Saxophone Playing*. Kassel: Bärenreiter.

Werner, Kenny. 1996. *Effortless Mastery: Liberating the Musician Within*. New Albany. IN. Jamey Abersold Jazz Inc.

Whiteoak, John. 1999. *Playing Ad Lib: Improvisatory Music in Australia 1836-1970*. Sydney: Currency Press.

Whyton, Tony. 2013. *Beyond a Love Supreme, John Coltrane and the Legacy of an Album*. Oxford: Oxford University Press.

Williams, Peter. 2012. *J.S. Bach: A Life in Music*. Cambridge: Cambridge University Press.

Wolff, Christoph. 2000. *Johann Sebastian Bach: The Learned Musician*. New York: W.W. Norton & Company.

Wolff, Christoph. 1998. *The New Bach Reader: A Life of Johann Sebastian Bach in Letters and Documents.* New York: W.W. Norton & Company.

Discography

Adderley, Cannonball. 1958. *Somethin' Else*. Blue Note. BST 81595.

Australian Art Orchestra, Paul Grabowsky and Christine Sullivan 1999. *Passion: Inspired by J.S. Bach's Passion According to St. Matthew.* ABC Classics, ABC 465 230-2

Beschi, Paolo. 1997. *Baroque Cello. Violoncello Solos Suites I, II, III*. Winter & Winter 910001-2. 1997.

Burnett, Fiona and David Jones. 2008. *Sound Inspirations: Music of Pure Invention*. ABC Atmospheres, ABC 478 681-4. 2008.

Burnett, Fiona. 2003. *Soaring at Dawn*. ABC Jazz, ABC 067 199-2.

Burnett, Fiona. 2002. *3 Voices*. Newmarket Music, NEW3105.2.

Burnett, Fiona. 2005. *Counterpoint*. ABC Jazz, ABC 982 838-6.

Casals, Pablo. 2003. *The Great Recordings of the Century, Cello Suites. By Bach*. EMI Classics, 724356261129. 2003.

Chindamo, Joe and Zoë, Black. 2015. *The New Goldberg Variation.* AlFi Records, AlFi15002.

Coltrane, John. 1960. *Giant Steps*. Atlantic. SD-1311.

Coltrane, John. 1961. *My Favourite Things*. Atlantic SD-1361.

Coltrane, John. 1964. *A Love Supreme*. Impulse! GR-155.

Coltrane, John. 1964. *Coltrane's Sound.* Atlantic SD-1419.

Coltrane. John. (1966) 1970. *Coltrane Plays the Blues.* Atlantic. 7567-81351-2.

Coltrane, John. (1961) 1987. *Lush Life*. Prestige. 131-2 P-7188.

Coltrane, John. (1964) 1996. Crescent. Impulse! IMP-1202.

Coltrane, John. (1964) 1996. *Coltrane Live at Birdland*. Impulse! IMP!11982.

Coltrane, John. (1958) 2014. *Blue Train.* Blue Note 1577.

Davis, Miles. 1965. *My Funny Valentine*. CBS.85558.

Davis, Miles. (1957) 2015. *Kind of Blue*. Columbia Legacy Vinyl. 88875111921.

Dikmans, Greg and Lucinda Moon. 2014. *The Art of Elegant Conversation. Johann Joachim Quantz, Sei Duetti*. Elysium Ensemble.

Gordon, Dexter. 1962. *Go!.* Blue Note. BST84112.

Isserlis, Steven. 2007. *The Cello Suites. By Johann Sebastian Bach*. Hyperion, CDA67542.

Keller, Andrea. 2002. Mikrokosmos: The Bartók Project. ABC Jazz, ABC 066 204-2.

Kirk, Roland. 1961. We Free Kings. Mercury. MCL 125 015

Lacy, Steve. 1991. *Soprano Sax*. Prestige, OJCCD-130-2(P-7125).

Liebman, David. 1987. *Homage to John Coltrane.* Owl Records, 046.

Ma, Yo-Yo. 2005. *The Essential*. Legacy/Sony Classical S2K 93927.

Monk, Thelonious. 1993. *Live at the Five Spot*. *Discovery*. *Featuring John Coltrane.* Blue Note. CDP 0777 7 99786 2 5.

Parker, Charlie. 1947. *Charlie Parker on Dial Volume 2*. Dial. 103-8.

Parker, Charlie. 1968. *Charlie Parker*. Everest Records. FS-214.

Parker, Charlie. 1985. *The Cole Porter Songbook*. Verve. 823 250-1.

Rollins, Sonny. 1956. *Tenor Madness*. Prestige 7047.

Sting. 1986. *Bring on the Night*. A&M Records. 396 705-2.

Wispelwey, Pieter. 1998. *6 Suites per violoncello solo, Senza Basso. By Johann Sebastian Bach*. Channel Classics. CCS 12298.

Scores and Music Texts

Aebersold, Jamey. 1983. *John Coltrane: Play – A-Long Book and Recording Set*. New Albany, IN, Jamey Aebersold Jazz Inc.

Bach, J. S. 2006. *Bärenreiter Urtext: 6 Suites a Violoncello Solo Senza Basso BWV1007-1012, Scholarly Critical Performing Edition*. Kassel: Bärenreiter.

Bach, Johann Sebastian. 2000. 'Six Suites for Violoncello Solo BWV1007-1012'. In *Fingering and Bowing*. Edited by August Egon Voss and Reiner Ginzel. Munich: G. Henle Verlag.

Baker, David N. 1980. *The Jazz Style of John Coltrane: A Musical and Historical Perspective*. Florida: Studio 224.

John Coltrane Omnibook. 2013. *Bb Instruments*., ISBEN 978-1-4584-2211-8 Milwaukee: Hal Leonard.

Slonimsky, Nicolas. 1975. *Thesaurus of Scales and Melodic Patterns*. New York: Macmillan Publishing Company.

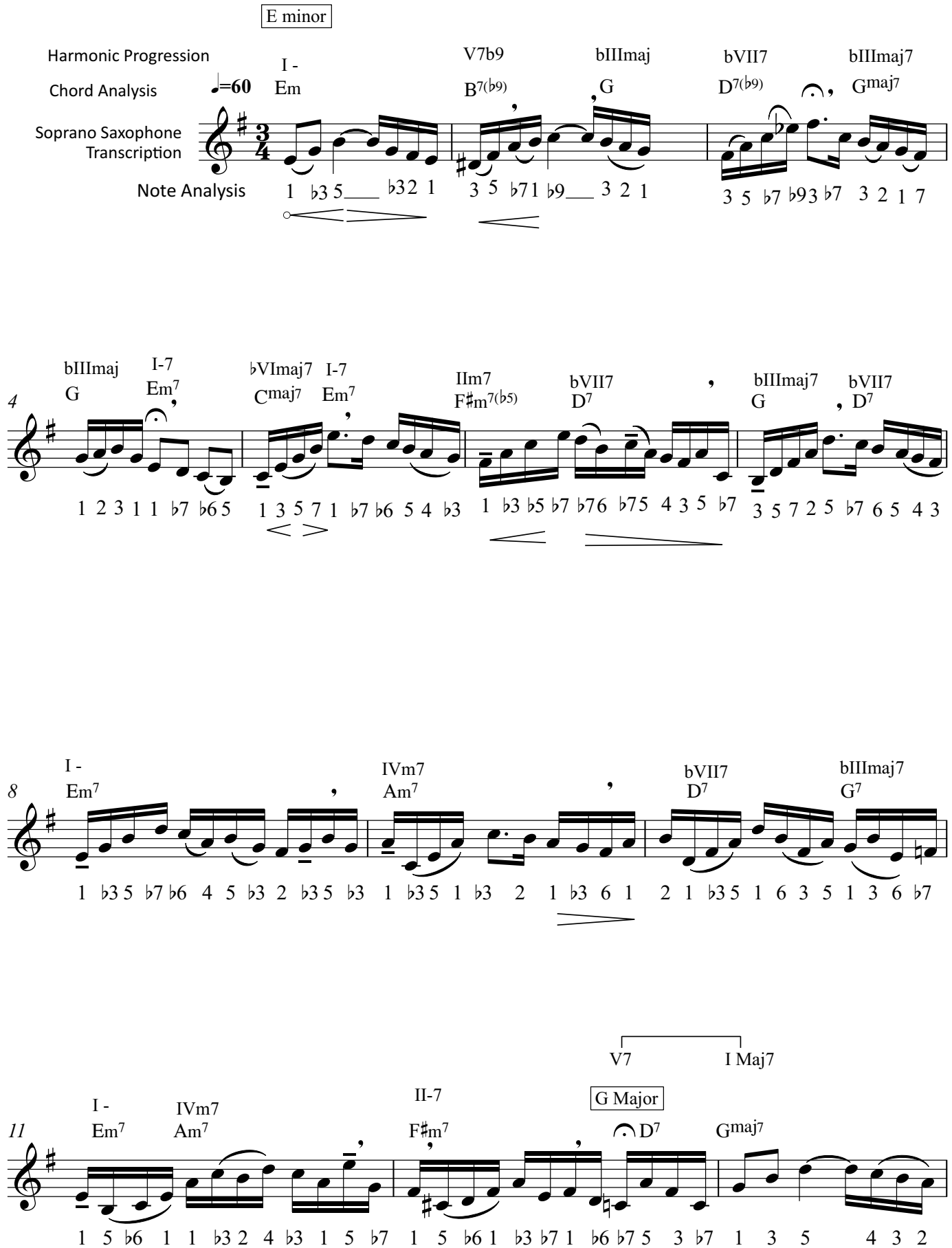
Appendices

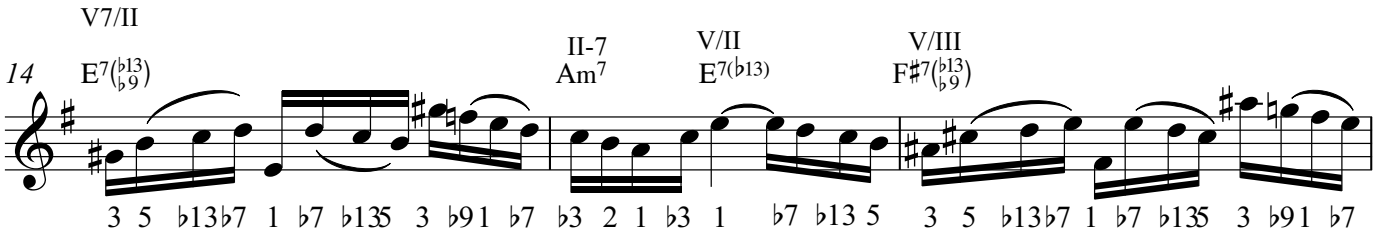
Appendix A

BWV 1008 by J.S Bach for Unaccompanied Violoncello

Bb Transcriptions for Soprano Saxophone
Chord and Note Analysis

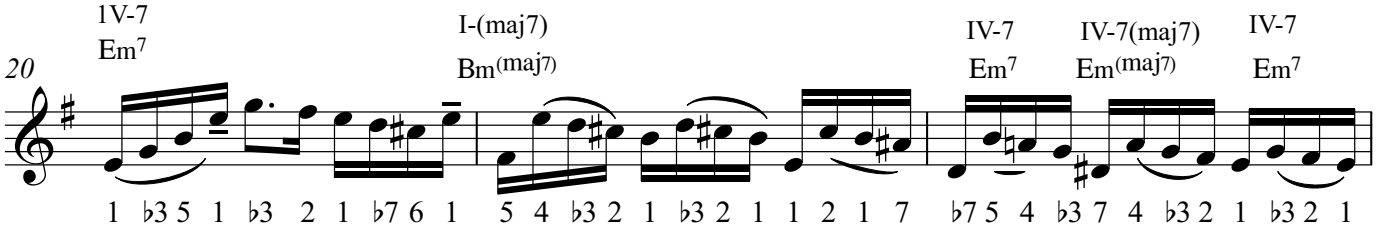
I. Prèlude
II. Allemande
III. Courante
IV. Sarabande
V. Menuet I and II
VI. Gigue

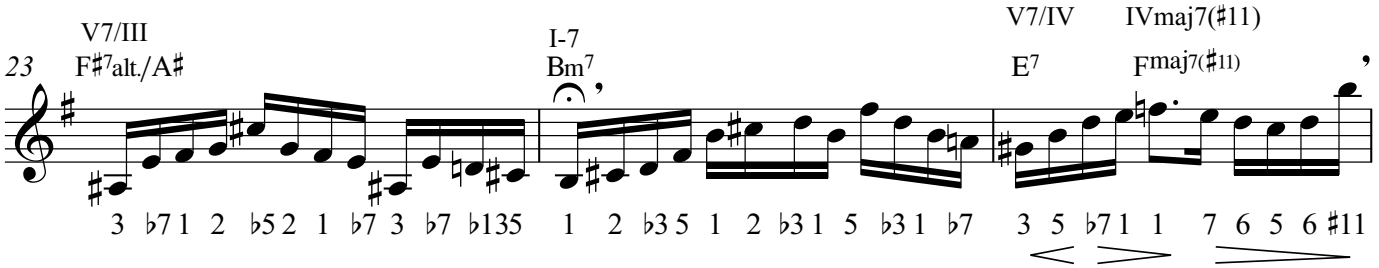

E minor
Harmonic Progression
Chord Analysis
Soprano Saxophone Transcription
Note Analysis
♩=60
I - Em
V7b9 B7(♭9)
bIIImaj G
bVII7 D7(♭9)
bIIImaj7 Gmaj7
1 ♭3 5 ♭3 2 1
3 5 ♭7 1 ♭9 3 2 1
3 5 ♭7 ♭9 3 ♭7 3 2 1 7
4
bIIImaj G
I-7 Em7
♭VImaj7 Cmaj7
I-7 Em7
IIm7 F♯m7(♭5)
bVII7 D7
bIIImaj7 G
bVII7 D7
1 2 3 1 1 ♭7 ♭6 5
1 3 5 7 1 ♭7 ♭6 5 4 ♭3
1 ♭3 ♭5 ♭7 ♭7 6 ♭7 5 4 3 5 ♭7
3 5 7 2 5 ♭7 6 5 4 3
8
I - Em7
IVm7 Am7
bVII7 D7
bIIImaj7 G7
1 ♭3 5 ♭7 ♭6 4 5 ♭3 2 ♭3 5 ♭3
1 ♭3 5 1 ♭3 2 1 ♭3 6 1
2 1 ♭3 5 1 6 3 5 1 3 6 ♭7
V7
I Maj7
11
I - Em7
IVm7 Am7
II-7 F♯m7
G Major
D7
Gmaj7
1 5 ♭6 1 1 ♭3 2 4 ♭3 1 5 ♭7
1 5 ♭6 1 ♭3 ♭7 1 ♭6 ♭7 5 3 ♭7
1 3 5 4 3 2

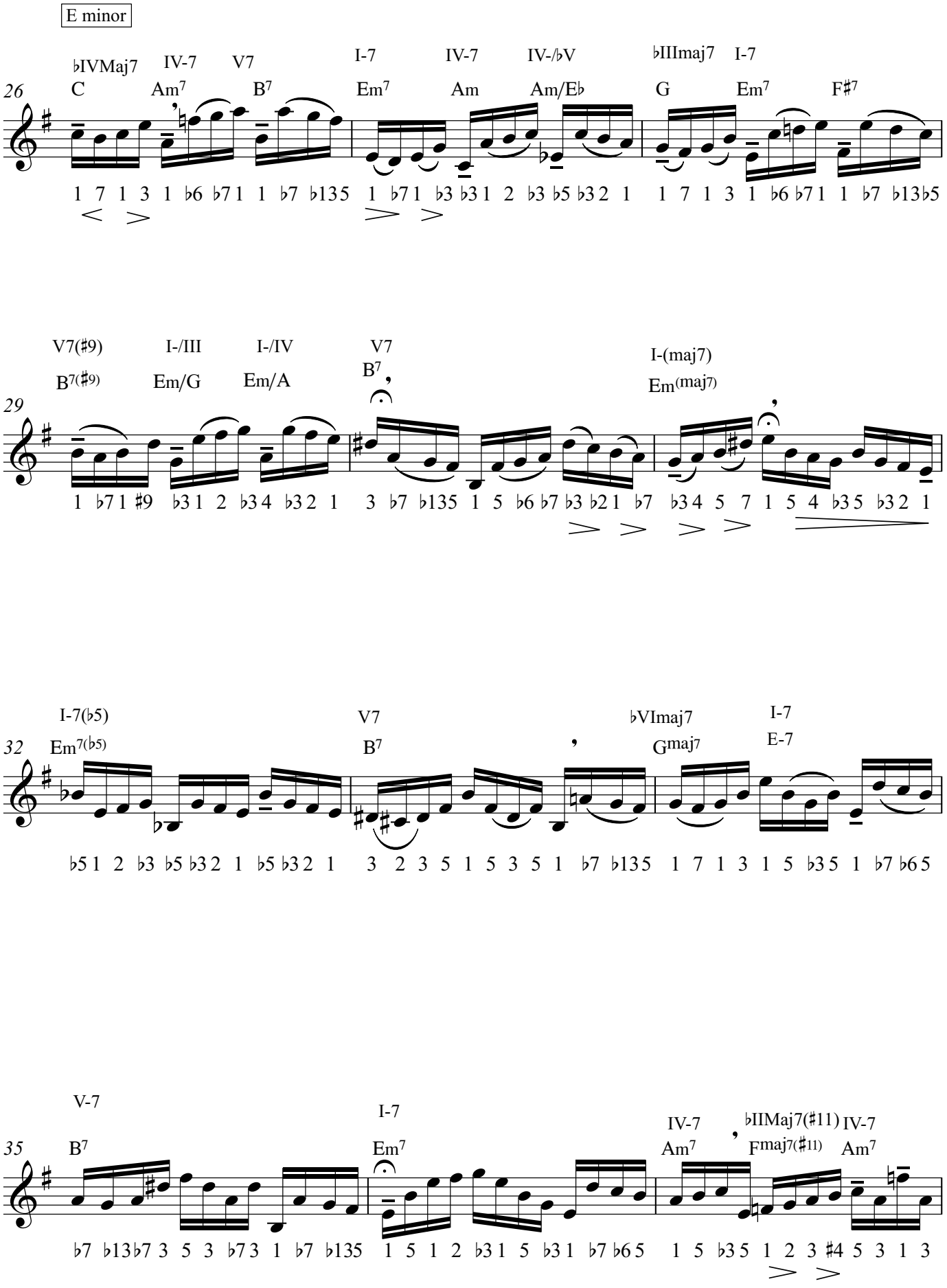

14
V7/II
E7(♭13/♭9)
II-7
Am7
V/II
E7(♭13)
V/III
F♯7(♭13/♭9)
3 5 ♭13 ♭7 1 ♭7 ♭13 5 3 ♭9 1 ♭7 ♭3 2 1 ♭3 1 ♭7 ♭13 5 3 5 ♭13 ♭7 1 ♭7 ♭13 5 3 ♭9 1 ♭7

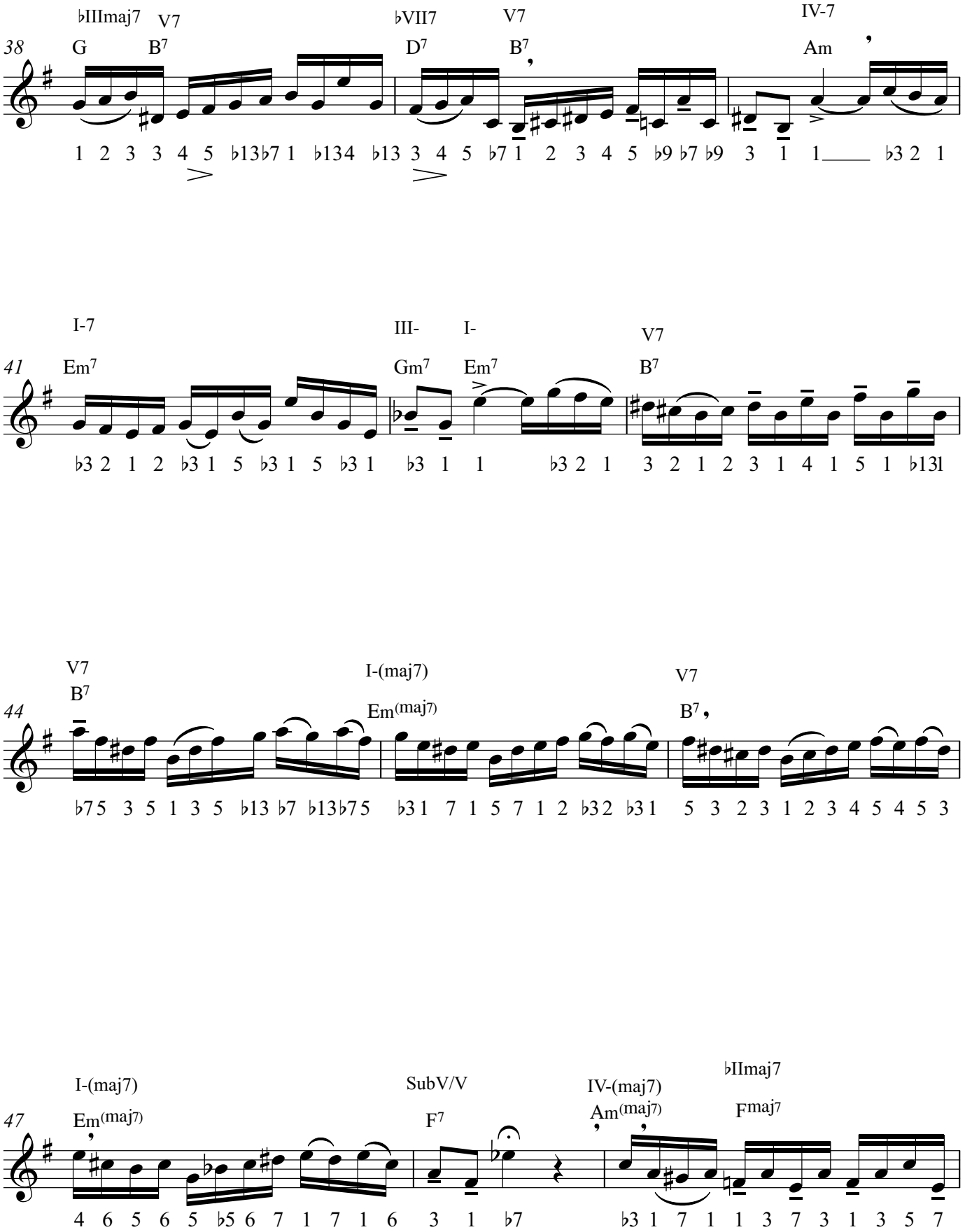
B minor

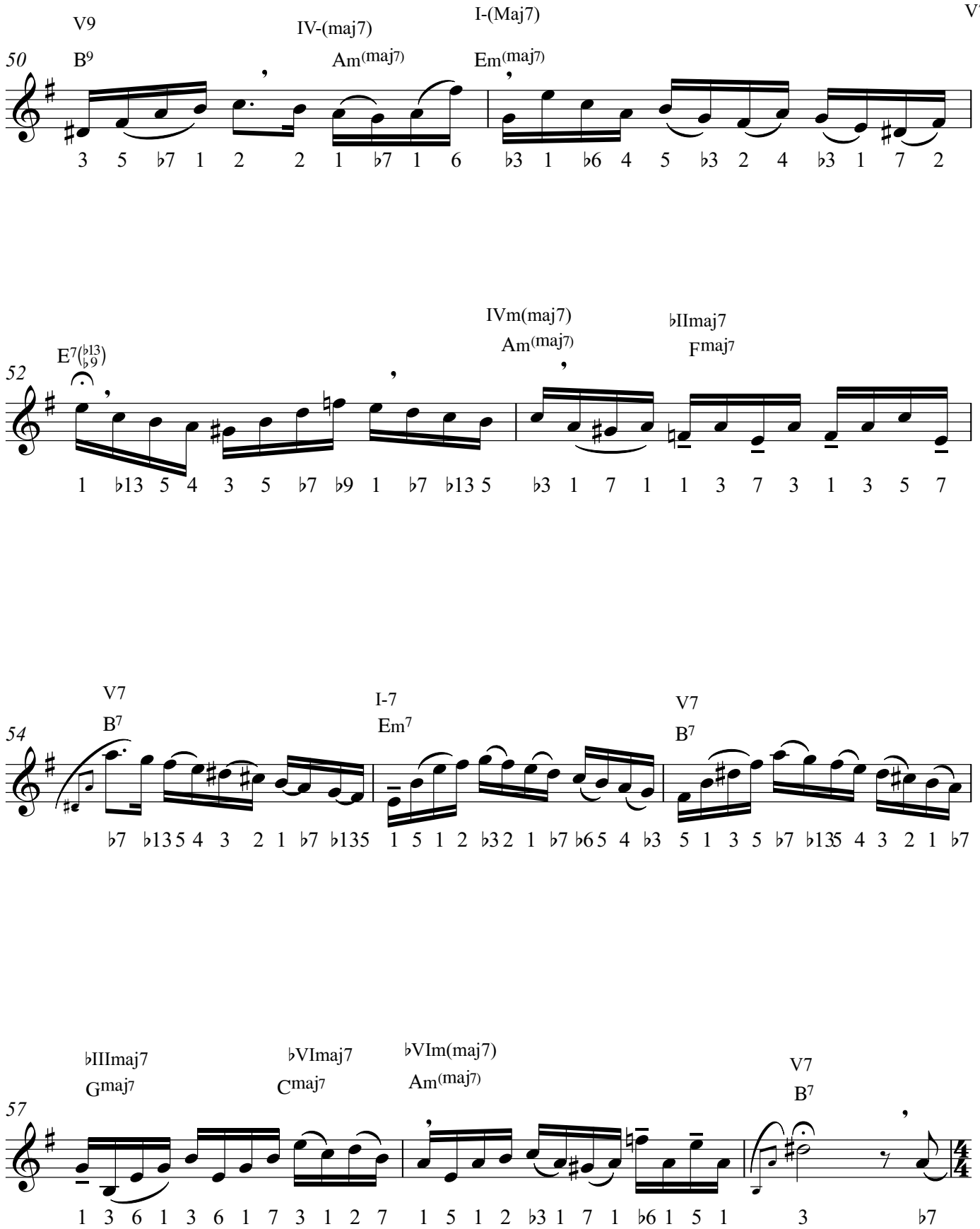

17
III-maj7
Bm(maj7)
VI-7
Em
V7/III
F♯7
I-(maj7)
Bm(maj7)
♭3 2 1 ♭3 ♭6 5 ♭6 7 5 ♭3 1 ♭7 5 ♭7 3 5 ♭7 6 5 4 3 4 ♭3 5 1 ♭3 5 ♭3 2 1 7 1

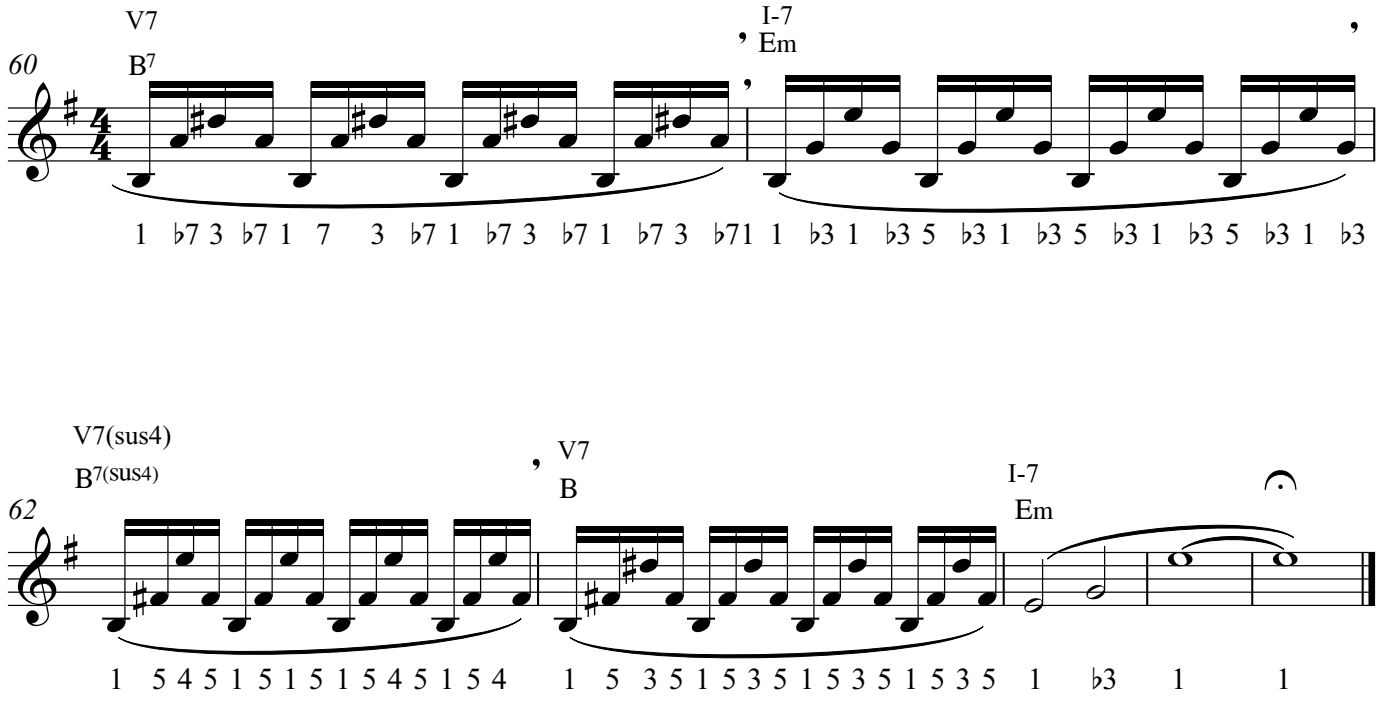

20
1V-7
Em7
I-(maj7)
Bm(maj7)
IV-7
Em7
IV-7(maj7)
Em(maj7)
IV-7
Em7
1 ♭3 5 1 ♭3 2 1 ♭7 6 1 5 4 ♭3 2 1 ♭3 2 1 1 2 1 7 ♭7 5 4 ♭3 7 4 ♭3 2 1 ♭3 2 1


23
V7/III
F♯7alt./A♯
I-7
Bm7
V7/IV
E7
IVmaj7(♯11)
Fmaj7(♯11)
3 ♭7 1 2 ♭5 2 1 ♭7 3 ♭7 ♭13 5 1 2 ♭3 5 1 2 ♭3 1 5 ♭3 1 ♭7 3 5 ♭7 1 1 7 6 5 6 ♯11


E minor
26
♭IVMaj7 C
IV-7 Am7
V7 B7
I-7 Em7
IV-7 Am
IV-/♭V Am/E♭
♭IIImaj7 G
I-7 Em7
F♯7
1 7 1 3 1 ♭6 ♭7 1 1 ♭7 ♭13 5 1 ♭7 1 ♭3 ♭3 1 2 ♭3 ♭5 ♭3 2 1 1 7 1 3 1 ♭6 ♭7 1 1 ♭7 ♭13 ♭5
29
V7(♯9) B7(♯9)
I-/III Em/G
I-/IV Em/A
V7 B7
I-(maj7) Em(maj7)
1 ♭7 1 ♯9 ♭3 1 2 ♭3 4 ♭3 2 1 3 ♭7 ♭13 5 1 5 ♭6 ♭7 ♭3 ♭2 1 ♭7 ♭3 4 5 7 1 5 4 ♭3 5 ♭3 2 1
32
I-7(♭5) Em7(♭5)
V7 B7
♭VImaj7 Gmaj7
I-7 E-7
♭5 1 2 ♭3 ♭5 ♭3 2 1 ♭5 ♭3 2 1 3 2 3 5 1 5 3 5 1 ♭7 ♭13 5 1 7 1 3 1 5 ♭3 5 1 ♭7 ♭6 5
35
V-7 B7
I-7 Em7
IV-7 Am7
♭IIMaj7(♯11) Fmaj7(♯11)
IV-7 Am7
♭7 ♭13 ♭7 3 5 3 ♭7 3 1 ♭7 ♭13 5 1 5 1 2 ♭3 1 5 ♭3 1 ♭7 ♭6 5 1 5 ♭3 5 1 2 3 ♯4 5 3 1 3

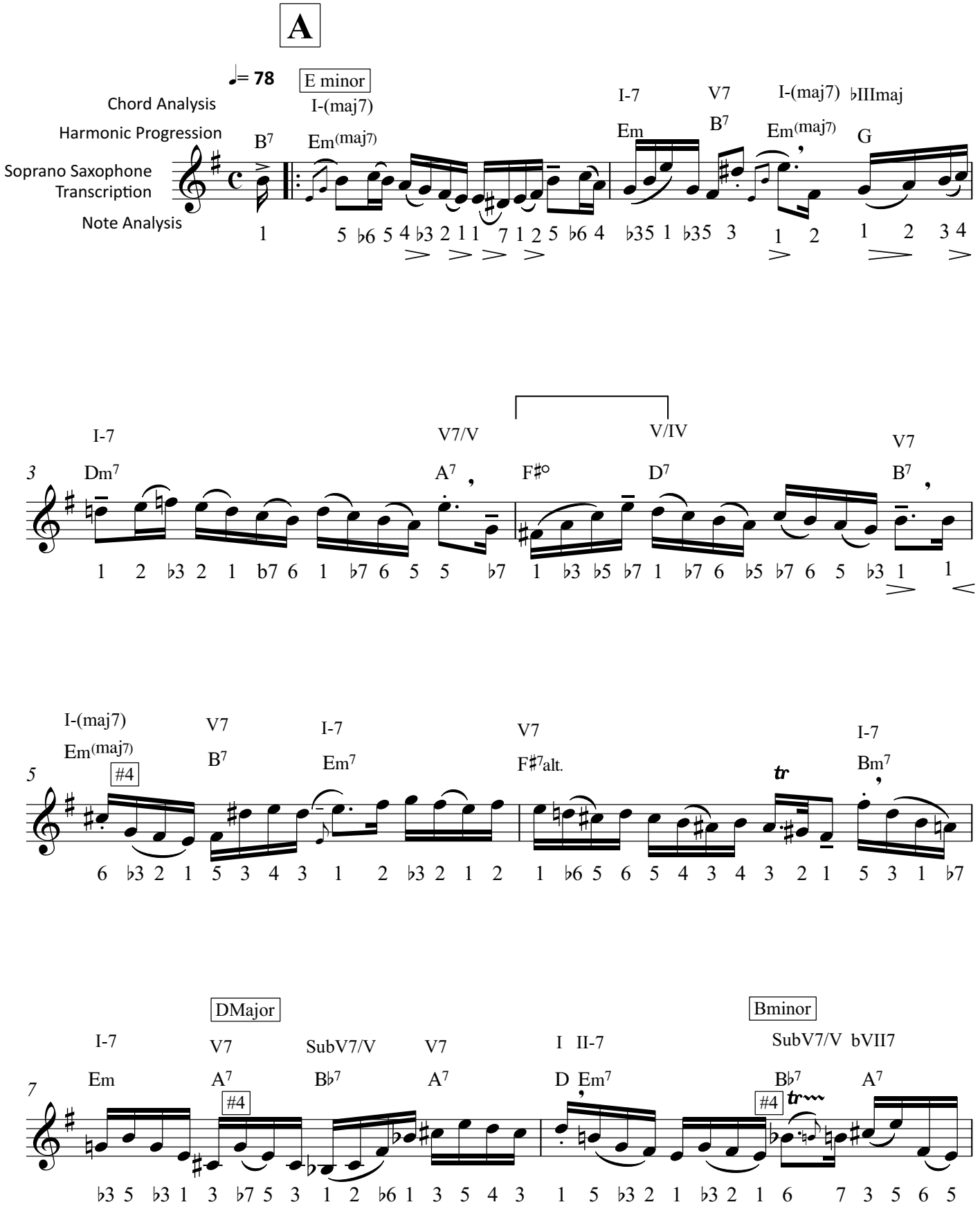

38
♭IIImaj7 V7
G B7
♭VII7 V7
D7 B7
IV-7
Am
1 2 3 3 4 5 ♭13♭7 1 ♭134 ♭13 3 4 5 ♭7 1 2 3 4 5 ♭9 ♭7 ♭9 3 1 1 ♭3 2 1
41
I-7 III- I- V7
Em7 Gm7 Em7 B7
♭3 2 1 2 ♭3 1 5 ♭3 1 5 ♭3 1 ♭3 1 1 ♭3 2 1 3 2 1 2 3 1 4 1 5 1 ♭13 1
44
V7 I-(maj7) V7
B7 Em(maj7) B7
♭7 5 3 5 1 3 5 ♭13 ♭7 ♭13♭7 5 ♭3 1 7 1 5 7 1 2 ♭3 2 ♭3 1 5 3 2 3 1 2 3 4 5 4 5 3
47
I-(maj7) SubV/V IV-(maj7) ♭IImaj7
Em(maj7) F7 Am(maj7) Fmaj7
4 6 5 6 5 ♭5 6 7 1 7 1 6 3 1 ♭7 ♭3 1 7 1 1 3 7 3 1 3 5 7

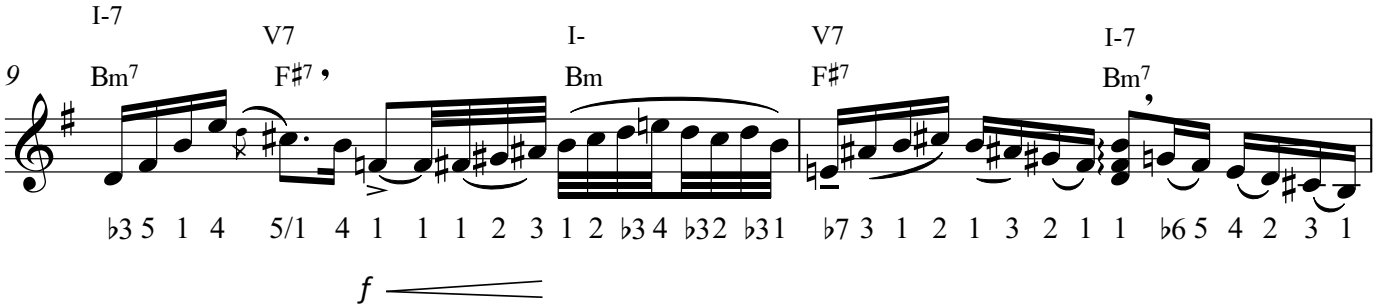

V9
B9
IV-(maj7)
Am(maj7)
I-(Maj7)
Em(maj7)
V7/IV
50
3 5 ♭7 1 2 2 1 ♭7 1 6 ♭3 1 ♭6 4 5 ♭3 2 4 ♭3 1 7 2
E7(♭13 ♭9)
IVm(maj7)
Am(maj7)
♭IImaj7
Fmaj7
52
1 ♭13 5 4 3 5 ♭7 ♭9 1 ♭7 ♭13 5 ♭3 1 7 1 1 3 7 3 1 3 5 7
V7
B7
I-7
Em7
V7
B7
54
♭7 ♭13 5 4 3 2 1 ♭7 ♭13 5 1 5 1 2 ♭3 2 1 ♭7 ♭6 5 4 ♭3 5 1 3 5 ♭7 ♭13 5 4 3 2 1 ♭7
♭IIImaj7
Gmaj7
♭VImaj7
Cmaj7
♭VIm(maj7)
Am(maj7)
V7
B7
57
1 3 6 1 3 6 1 7 3 1 2 7 1 5 1 2 ♭3 1 7 1 ♭6 1 5 1 3 ♭7

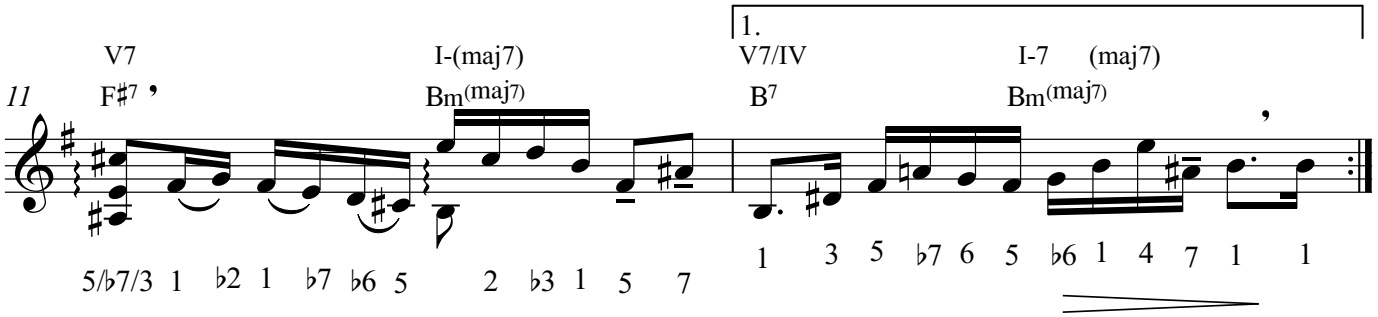

V7
B7
I-7
Em
60
1 ♭7 3 ♭7 1 7 3 ♭7 1 ♭7 3 ♭7 1 ♭7 3 ♭71 1 ♭3 1 ♭3 5 ♭3 1 ♭3 5 ♭3 1 ♭3 5 ♭3 1 ♭3
V7(sus4)
B7(sus4)
V7
B
I-7
Em
62
1 5 4 5 1 5 1 5 1 5 4 5 1 5 4 1 5 3 5 1 5 3 5 1 5 3 5 1 5 3 5 1 ♭3 1 1

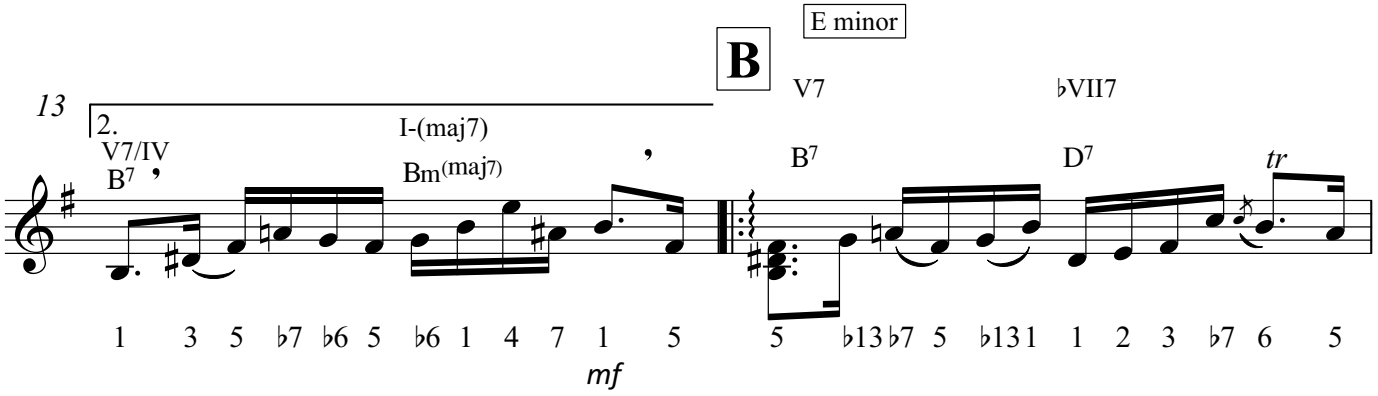
BWV 1008 by J.S.Bach Movement II, Allemande, Transcription and Analysis for Bb Soprano Saxophone

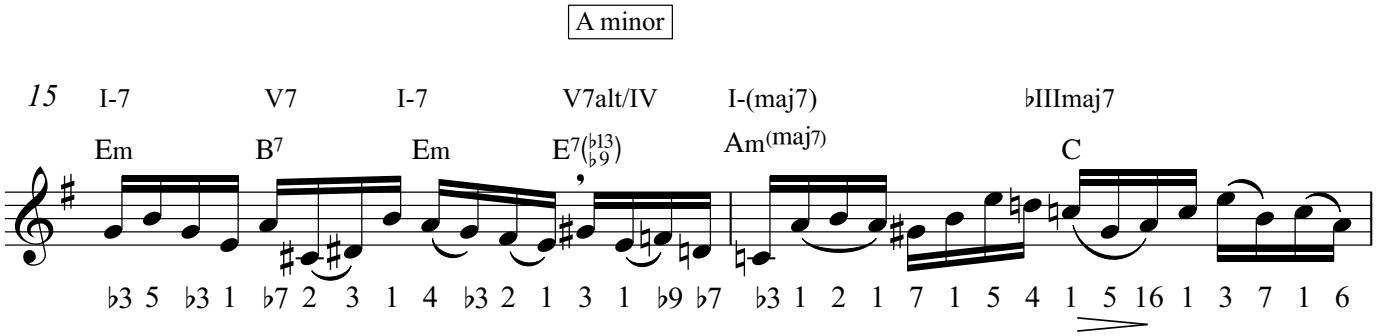
Track ID: 1. Fiona Burnett Source Material 1 BWV 1008 by J.S. Bach, 2. Allemande 3:38

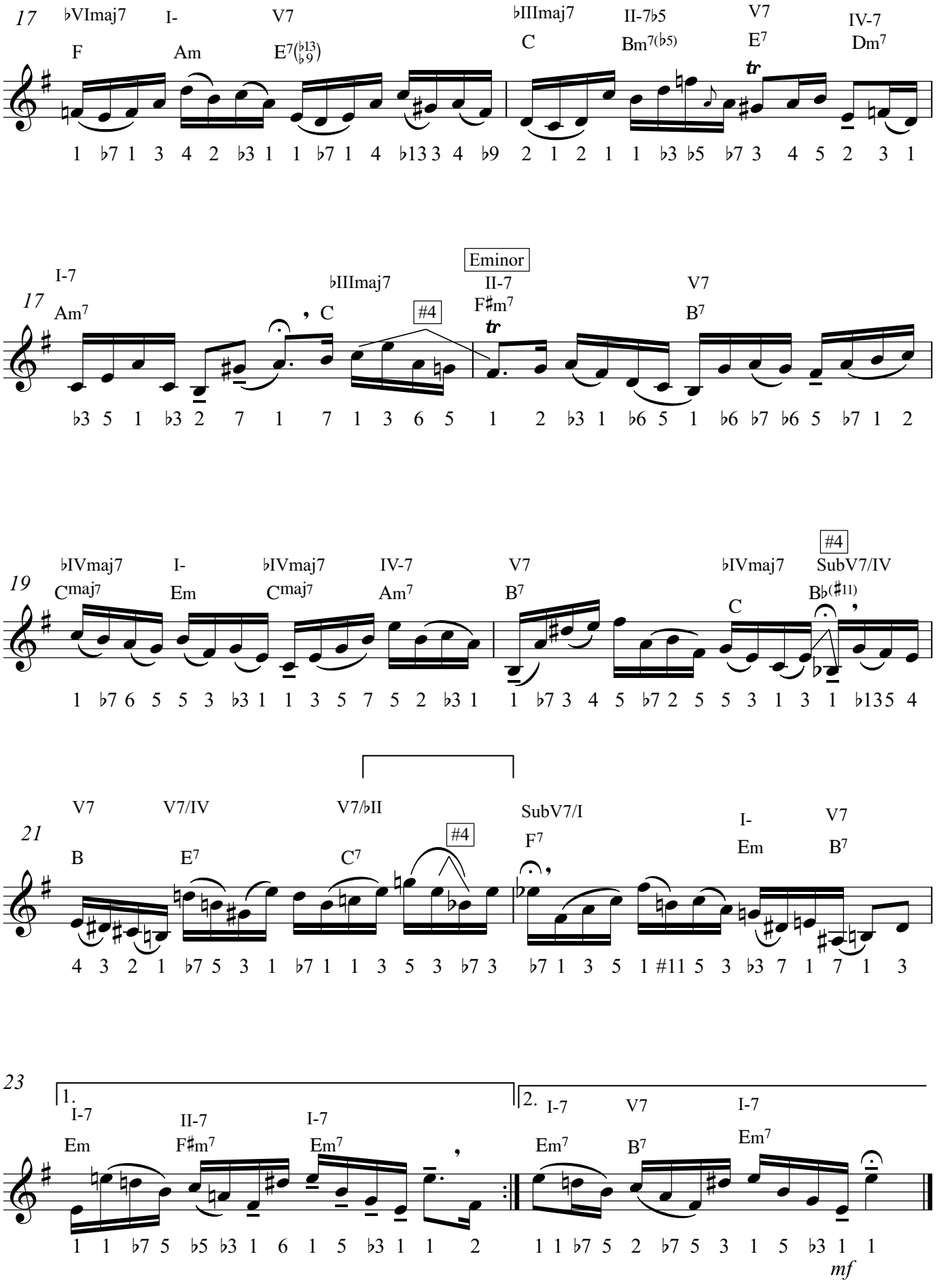



I-7
V7
I-
V7
I-7
9
Bm7
F♯7
Bm
F♯7
Bm7
♭3 5 1 4 5/1 4 1 1 1 2 3 1 2 ♭3 4 ♭3 2 ♭3 1 ♭7 3 1 2 1 3 2 1 1 ♭6 5 4 2 3 1
f


1.
V7
I-(maj7)
V7/IV
I-7 (maj7)
11
F♯7
Bm(maj7)
B7
Bm(maj7)
5/♭7/3 1 ♭2 1 ♭7 ♭6 5 2 ♭3 1 5 7
1 3 5 ♭7 6 5 ♭6 1 4 7 1 1

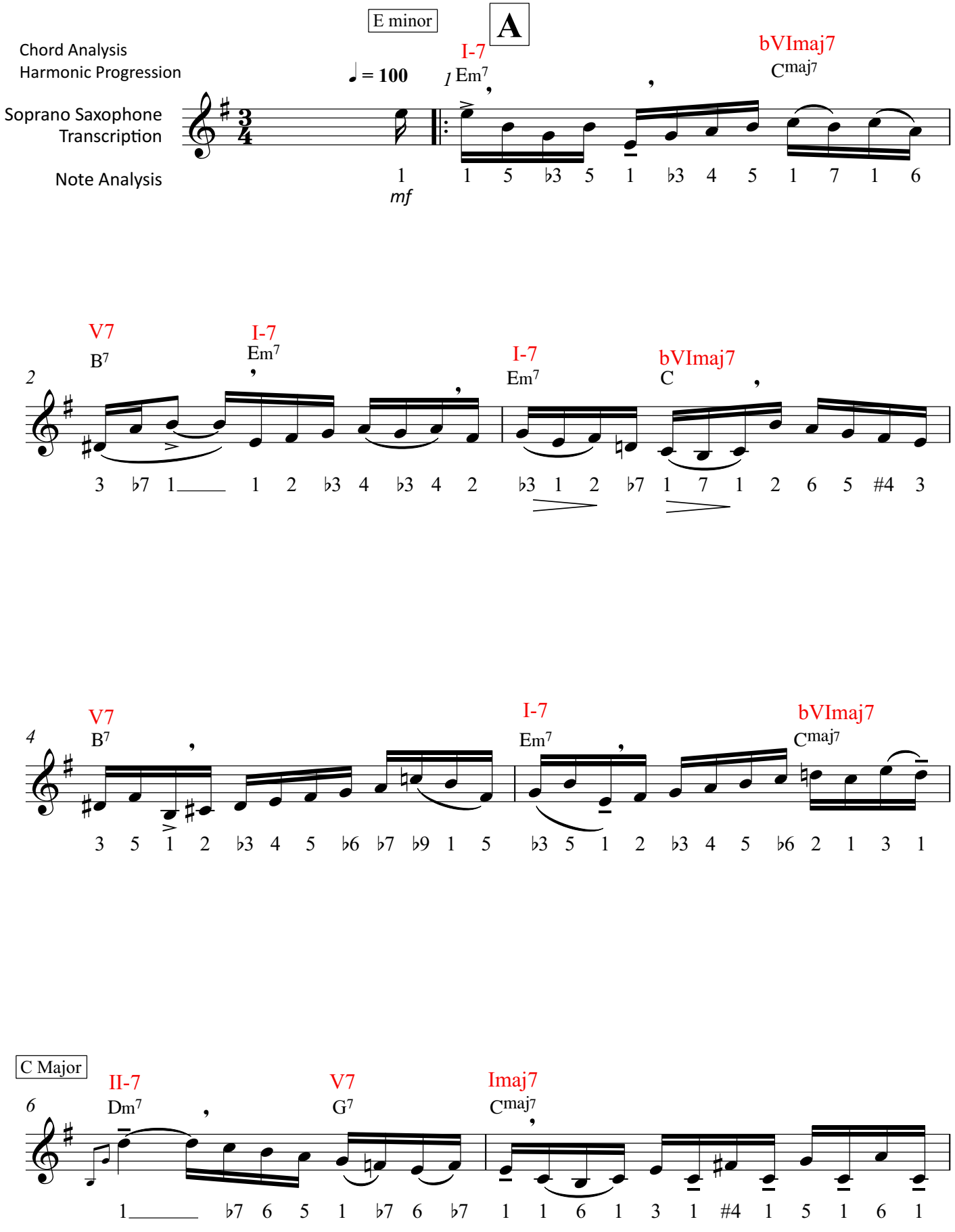

E minor
B
13
2.
V7
♭VII7
V7/IV
I-(maj7)
B7
Bm(maj7)
B7
D7
tr
1 3 5 ♭7 ♭6 5 ♭6 1 4 7 1 5 5 ♭13 ♭7 5 ♭13 1 1 2 3 ♭7 6 5
mf


A minor
15
I-7
V7
I-7
V7alt/IV
I-(maj7)
♭IIImaj7
Em
B7
Em
E7(♭13 ♭9)
Am(maj7)
C
♭3 5 ♭3 1 ♭7 2 3 1 4 ♭3 2 1 3 1 ♭9 ♭7 ♭3 1 2 1 7 1 5 4 1 5 16 1 3 7 1 6

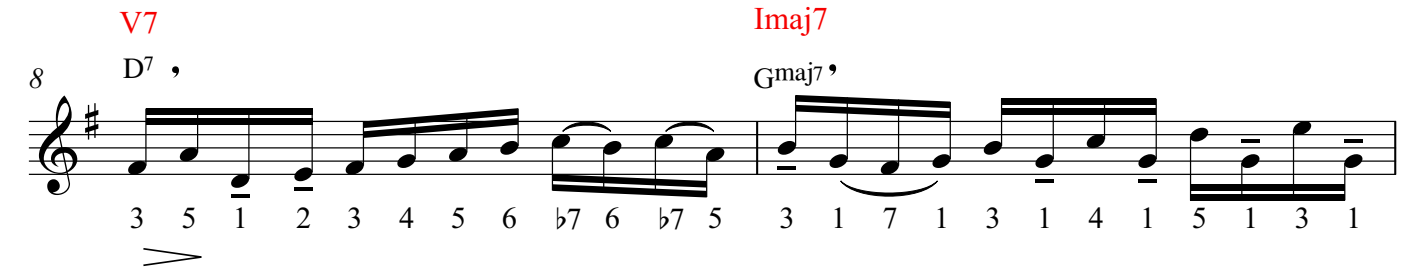

17
♭VImaj7 F
I- Am
V7 E7(♭13 ♭9)
♭IIImaj7 C
II-7♭5 Bm7(♭5)
V7 E7
IV-7 Dm7
1 ♭7 1 3 4 2 ♭3 1 1 ♭7 1 4 ♭13 3 4 ♭9 2 1 2 1 1 ♭3 ♭5 ♭7 3 4 5 2 3 1
17
I-7 Am7
♭IIImaj7 C
#4
Eminor
II-7 F♯m7
V7 B7
♭3 5 1 ♭3 2 7 1 7 1 3 6 5 1 2 ♭3 1 ♭6 5 1 ♭6 ♭7 ♭6 5 ♭7 1 2
19
♭IVmaj7 Cmaj7
I- Em
♭IVmaj7 Cmaj7
IV-7 Am7
V7 B7
♭IVmaj7 C
#4
SubV7/IV B♭(♯11)
1 ♭7 6 5 5 3 ♭3 1 1 3 5 7 5 2 ♭3 1 1 ♭7 3 4 5 ♭7 2 5 5 3 1 3 1 ♭13 5 4
21
V7 B
V7/IV E7
V7/♭II C7
#4
SubV7/I F7
I- Em
V7 B7
4 3 2 1 ♭7 5 3 1 ♭7 1 1 3 5 3 ♭7 3 ♭7 1 3 5 1 #11 5 3 ♭3 7 1 7 1 3
23
1.
I-7 Em
II-7 F♯m7
I-7 Em7
2.
I-7 Em7
V7 B7
I-7 Em7
1 1 ♭7 5 ♭5 ♭3 1 6 1 5 ♭3 1 1 2 1 1 ♭7 5 2 ♭7 5 3 1 5 ♭3 1 1
mf

BWV 1008 by J.S.Bach, Movement III, Courante, Transcription and Analysis for Bb Soprano Saxophone

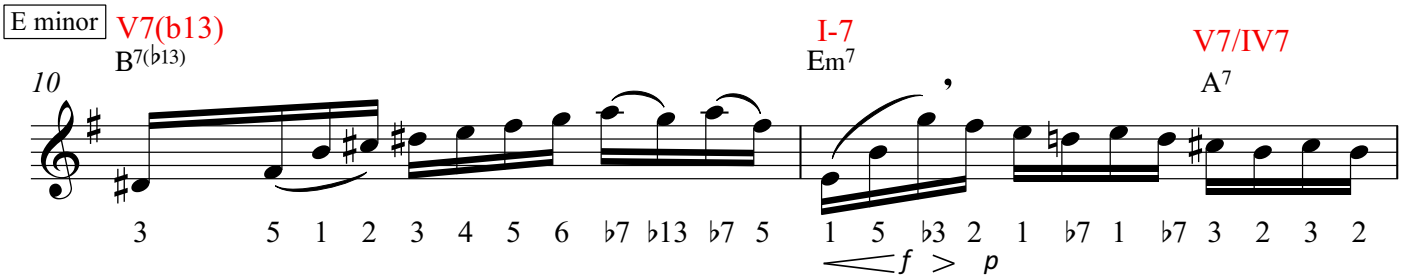
Track ID: Fiona Burnett Source Material 1 BWV 1008 by J.S.Bach, 3. Courante, 2:35



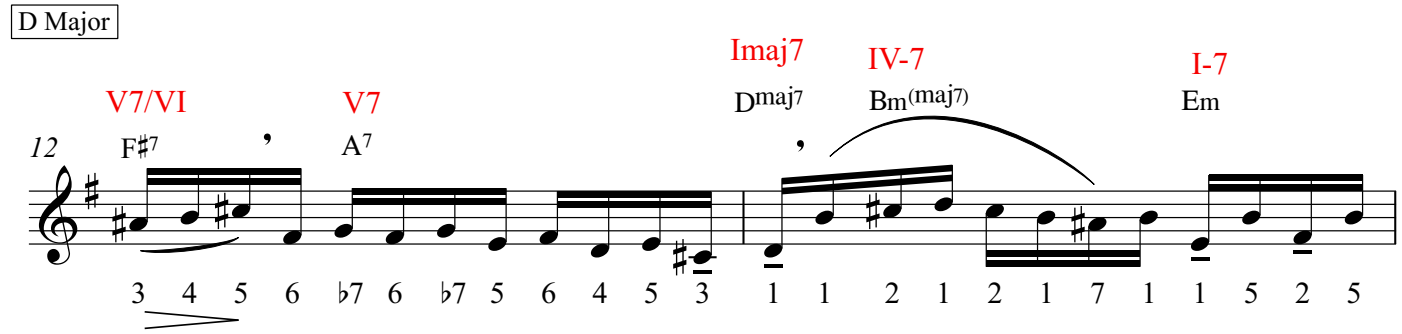
G Major



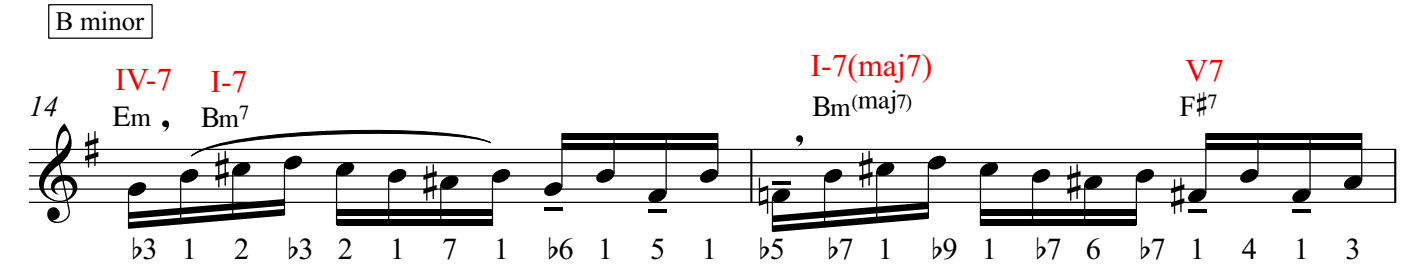
E minor

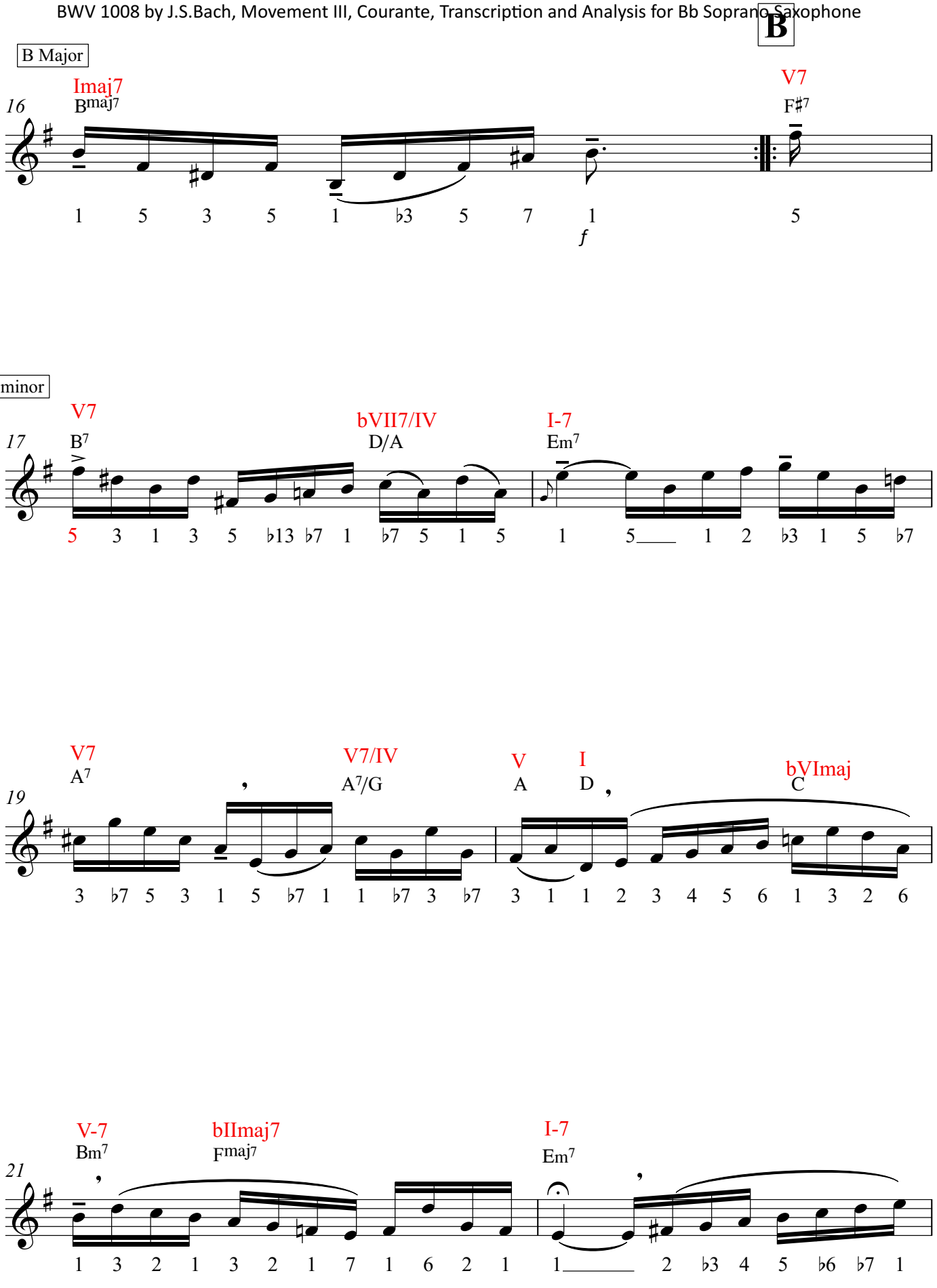


D Major

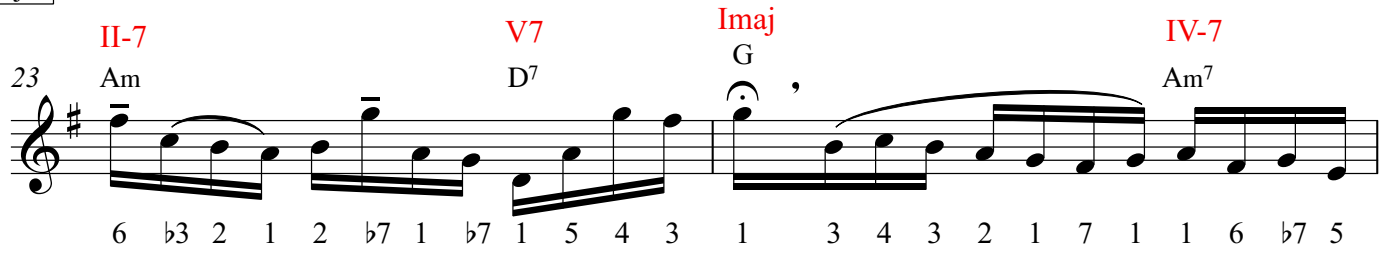


B minor

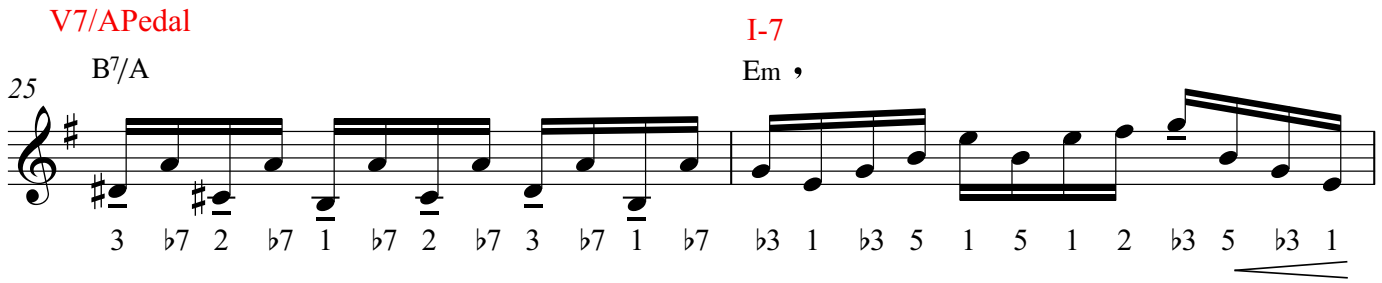


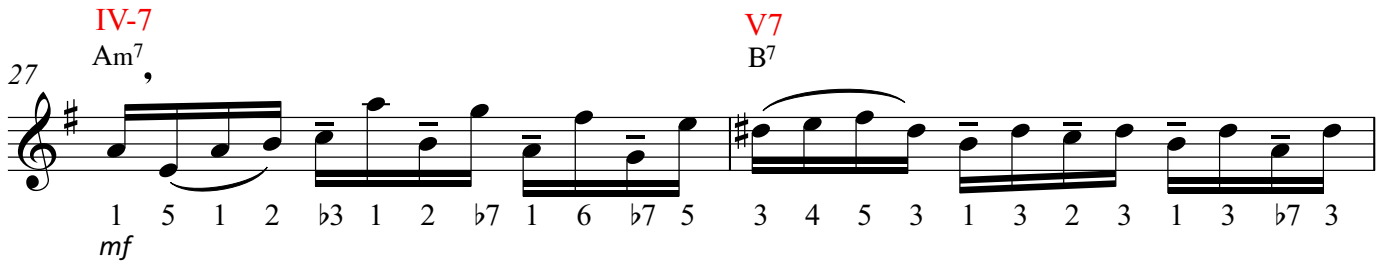

B
B Major
16
Imaj7
Bmaj7
V7
F♯7
1 5 3 5 1 ♭3 5 7 1 5
f
E minor
17
V7
B7
bVII7/IV
D/A
I-7
Em7
5 3 1 3 5 ♭13 ♭7 1 ♭7 5 1 5 1 5 1 2 ♭3 1 5 ♭7
19
V7
A7
V7/IV
A7/G
V
A
I
D
bVImaj
C
3 ♭7 5 3 1 5 ♭7 1 1 ♭7 3 ♭7 3 1 1 2 3 4 5 6 1 3 2 6
21
V-7
Bm7
bIImaj7
Fmaj7
I-7
Em7
1 3 2 1 3 2 1 7 1 6 2 1 1 2 ♭3 4 5 ♭6 ♭7 1

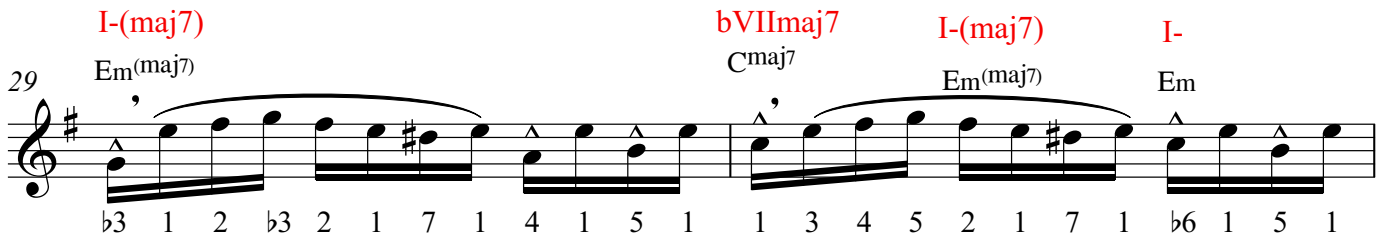
G Major

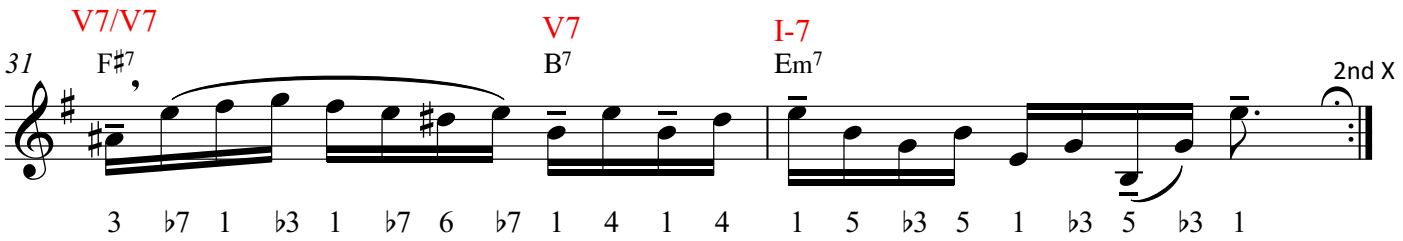


E minor



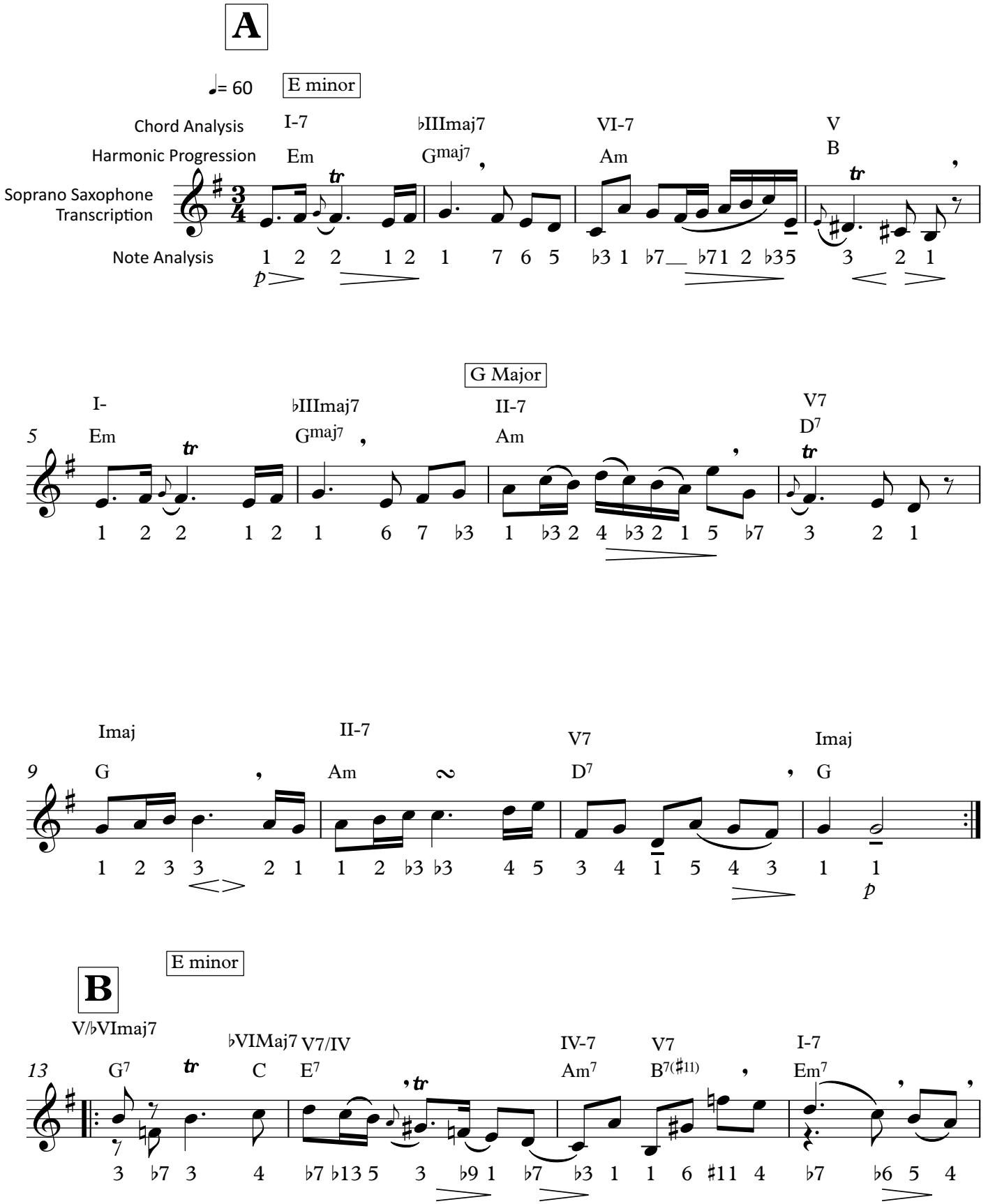


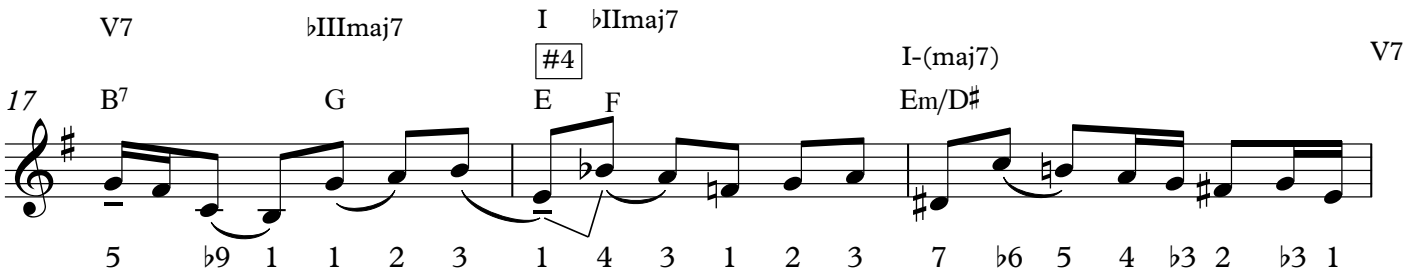


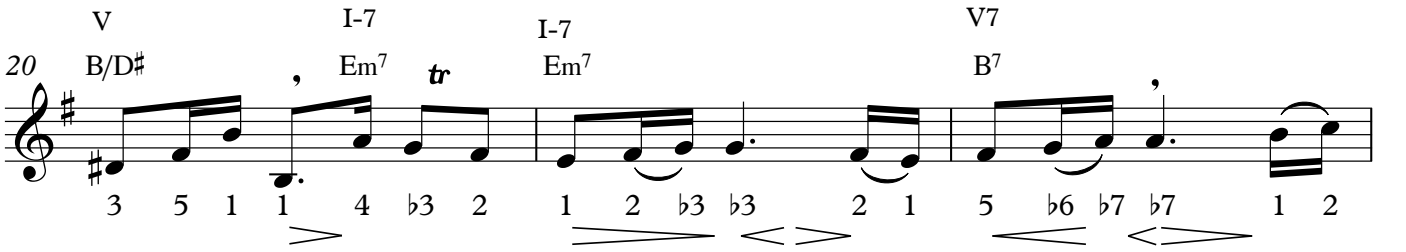

V7/V7
F♯7
V7
B7
I-7
Em7
31
2nd X
3 ♭7 1 ♭3 1 ♭7 6 ♭7 1 4 1 4 1 5 ♭3 5 1 ♭3 5 ♭3 1

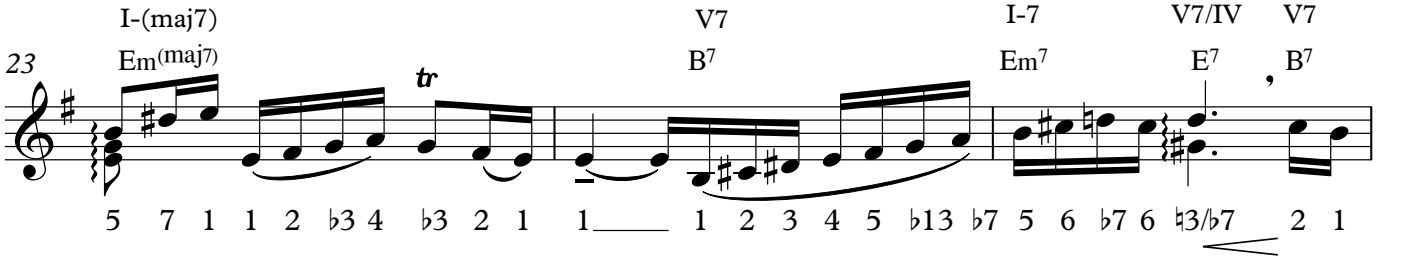
BWV 1008 by J.S. Bach Movement IV, Sarabande, Bb Transcription and Analysis for Soprano Saxophone

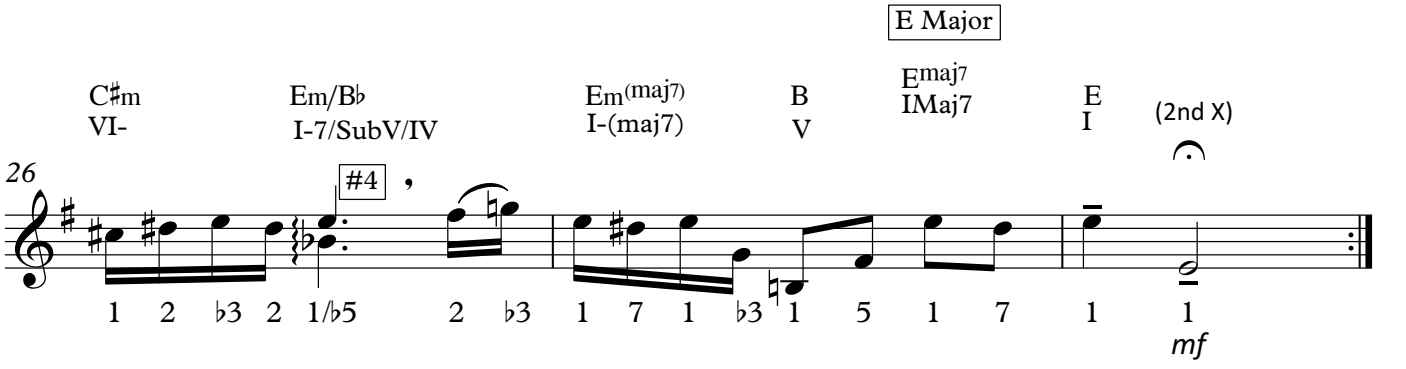
Track ID: 1. Fiona Burnett Source Material 1 BWV 1008 By J.S. Bach, 4. Sarabande 3:28




V7
♭IIImaj7
I
♭IImaj7
#4
I-(maj7)
V7
17
B7
G
E
F
Em/D♯
5 ♭9 1 1 2 3 1 4 3 1 2 3 7 ♭6 5 4 ♭3 2 ♭3 1

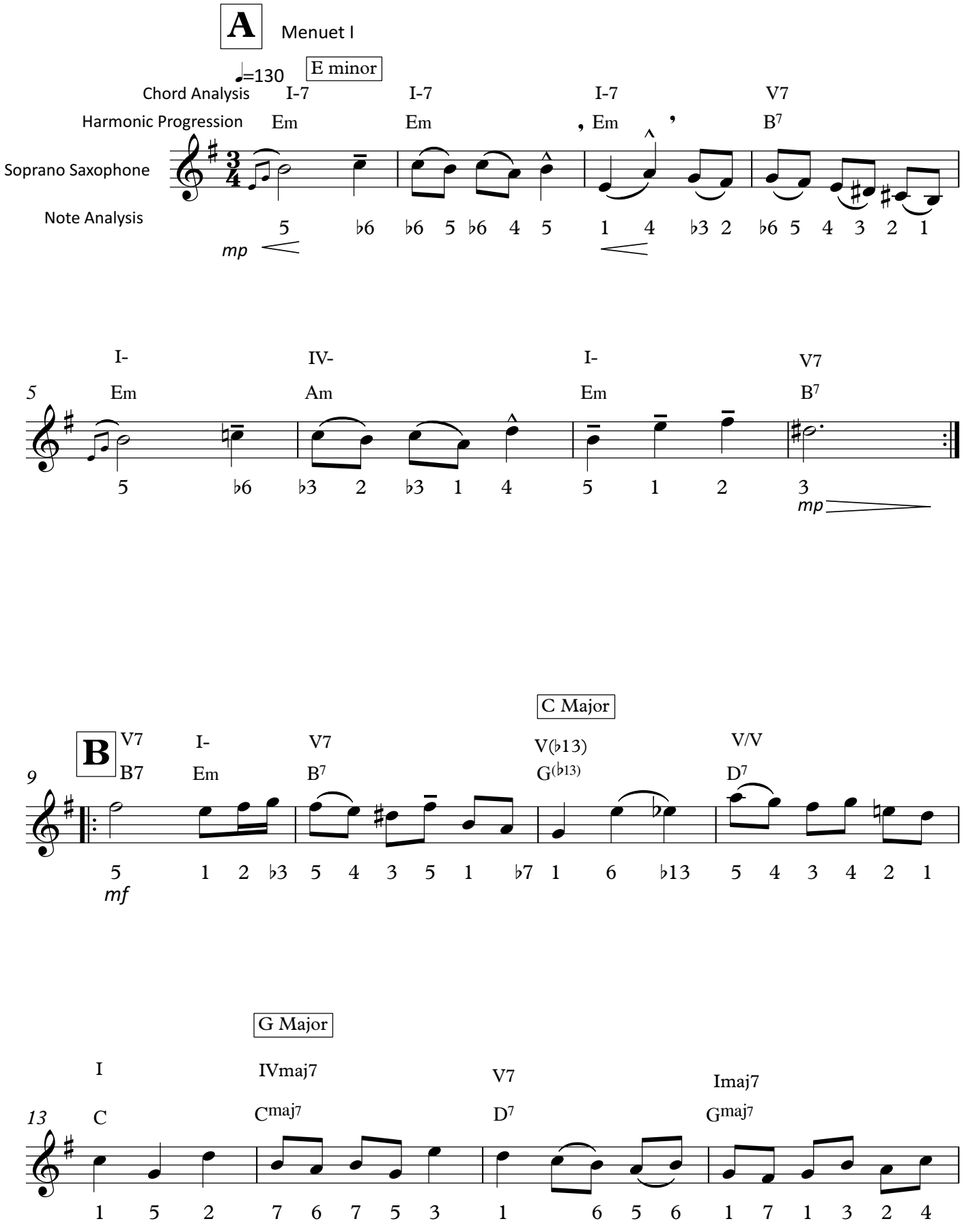

V
I-7
I-7
V7
20
B/D♯
Em7
tr
Em7
B7
3 5 1 1 4 ♭3 2 1 2 ♭3 ♭3 2 1 5 ♭6 ♭7 ♭7 1 2

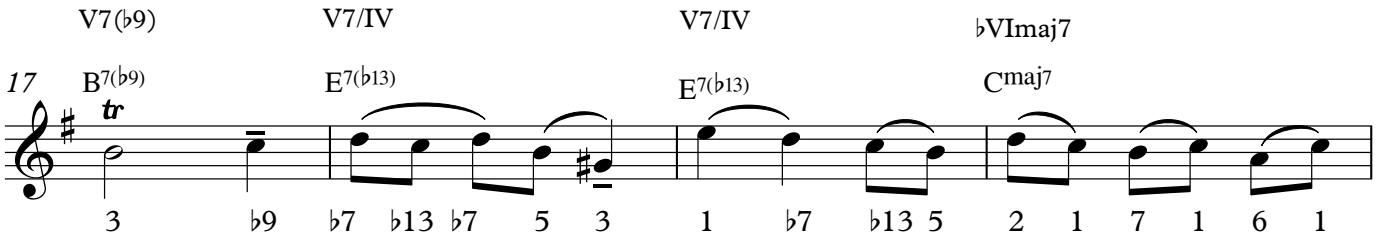

I-(maj7)
V7
I-7
V7/IV
V7
23
Em(maj7)
tr
B7
Em7
E7
B7
5 7 1 1 2 ♭3 4 ♭3 2 1 1 1 2 3 4 5 ♭13 ♭7 5 6 ♭7 6 ♮3/♭7 2 1

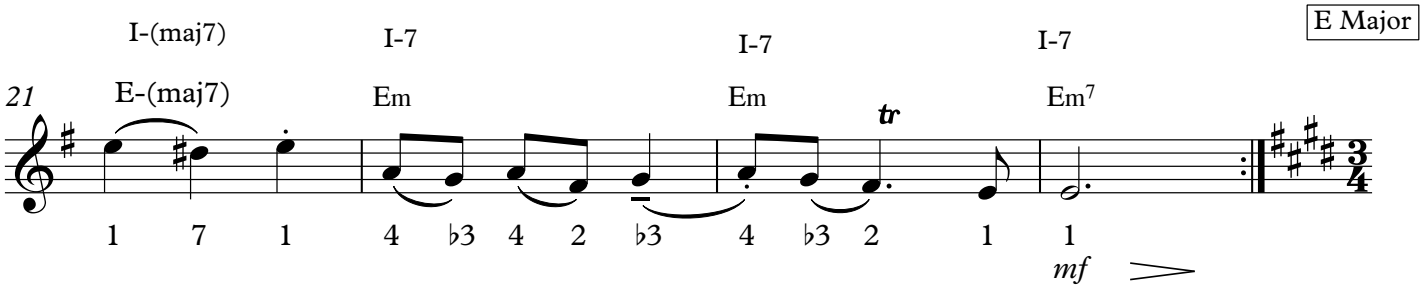

E Major
C♯m
VI-
Em/B♭
I-7/SubV/IV
Em(maj7)
I-(maj7)
B
V
Emaj7
IMaj7
E
I
(2nd X)
26
#4
1 2 ♭3 2 1/♭5 2 ♭3 1 7 1 ♭3 1 5 1 7 1 1
mf

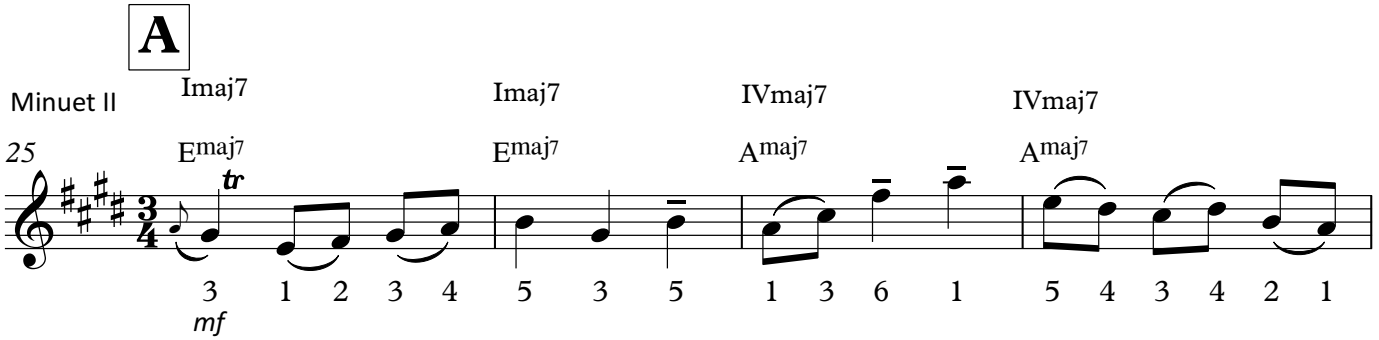
BWV 1008 by J.S.Bach, Movement V, Menuet I and II, Transcription and Analysis for Bb Soprano Saxophone

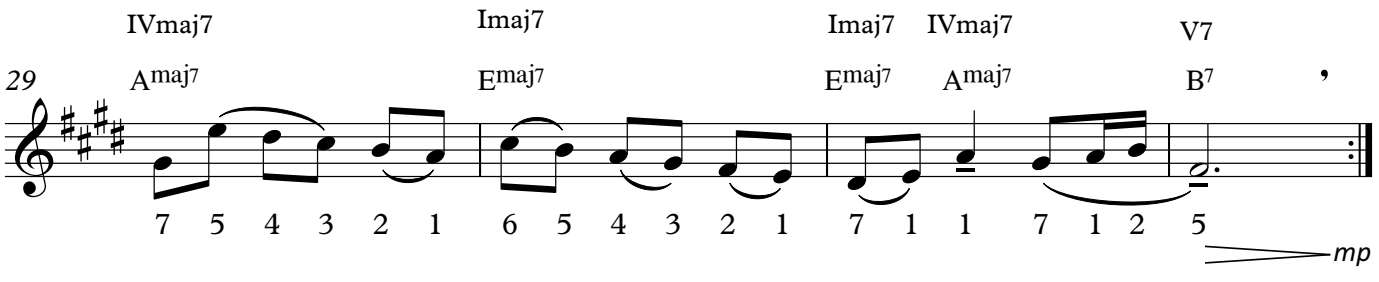
Track ID: Fiona Burnett Source Material 1 BWV 1008 By J.S. Bach, 5. Menuet I and II 3:43

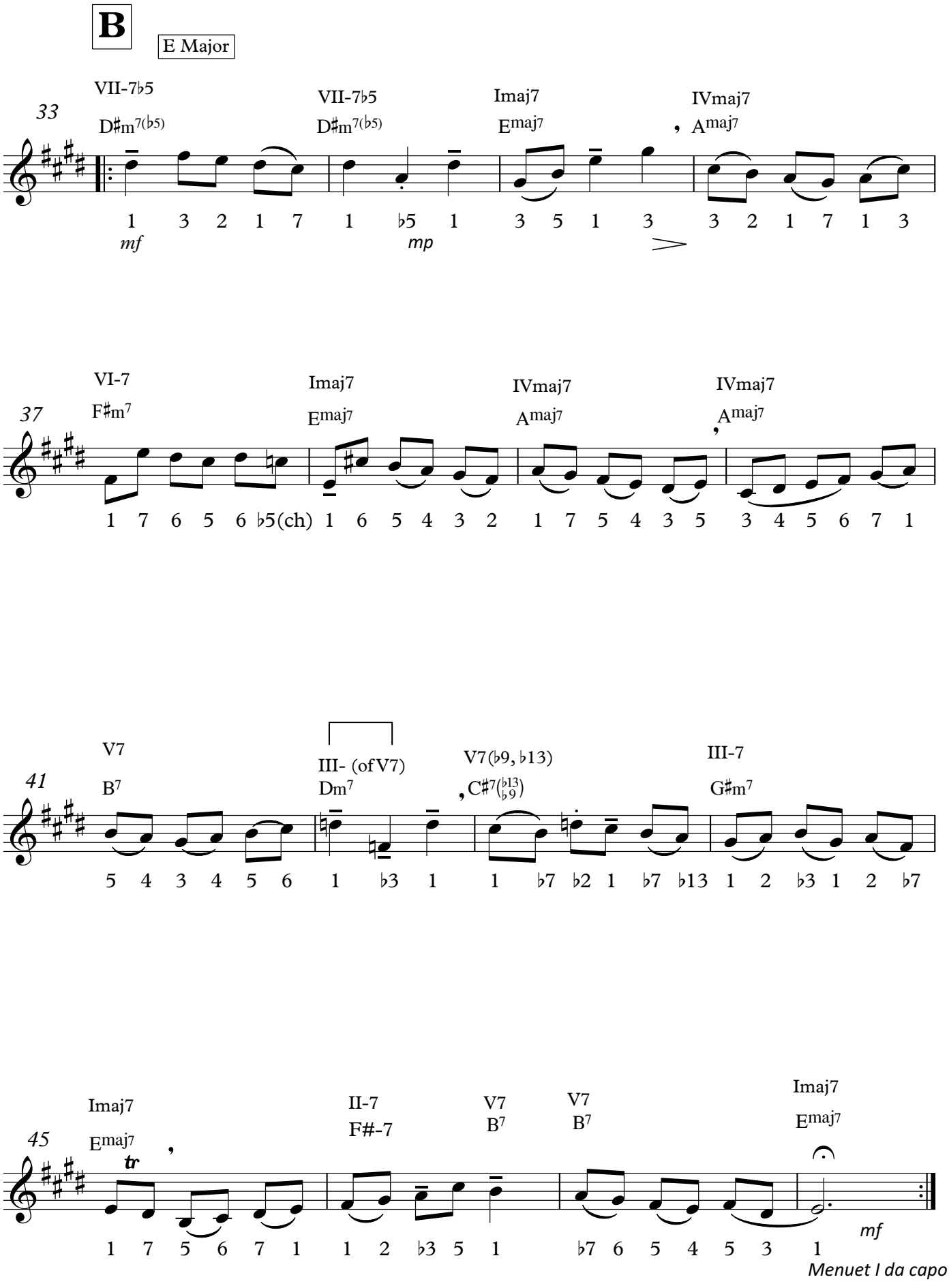



V7(♭9)
V7/IV
V7/IV
♭VImaj7
17
B7(♭9)
E7(♭13)
E7(♭13)
Cmaj7
tr
3 ♭9 ♭7 ♭13 ♭7 5 3 1 ♭7 ♭13 5 2 1 7 1 6 1


I-(maj7)
I-7
I-7
I-7
E Major
21
E-(maj7)
Em
Em
Em7
tr
1 7 1 4 ♭3 4 2 ♭3 4 ♭3 2 1 1
mf

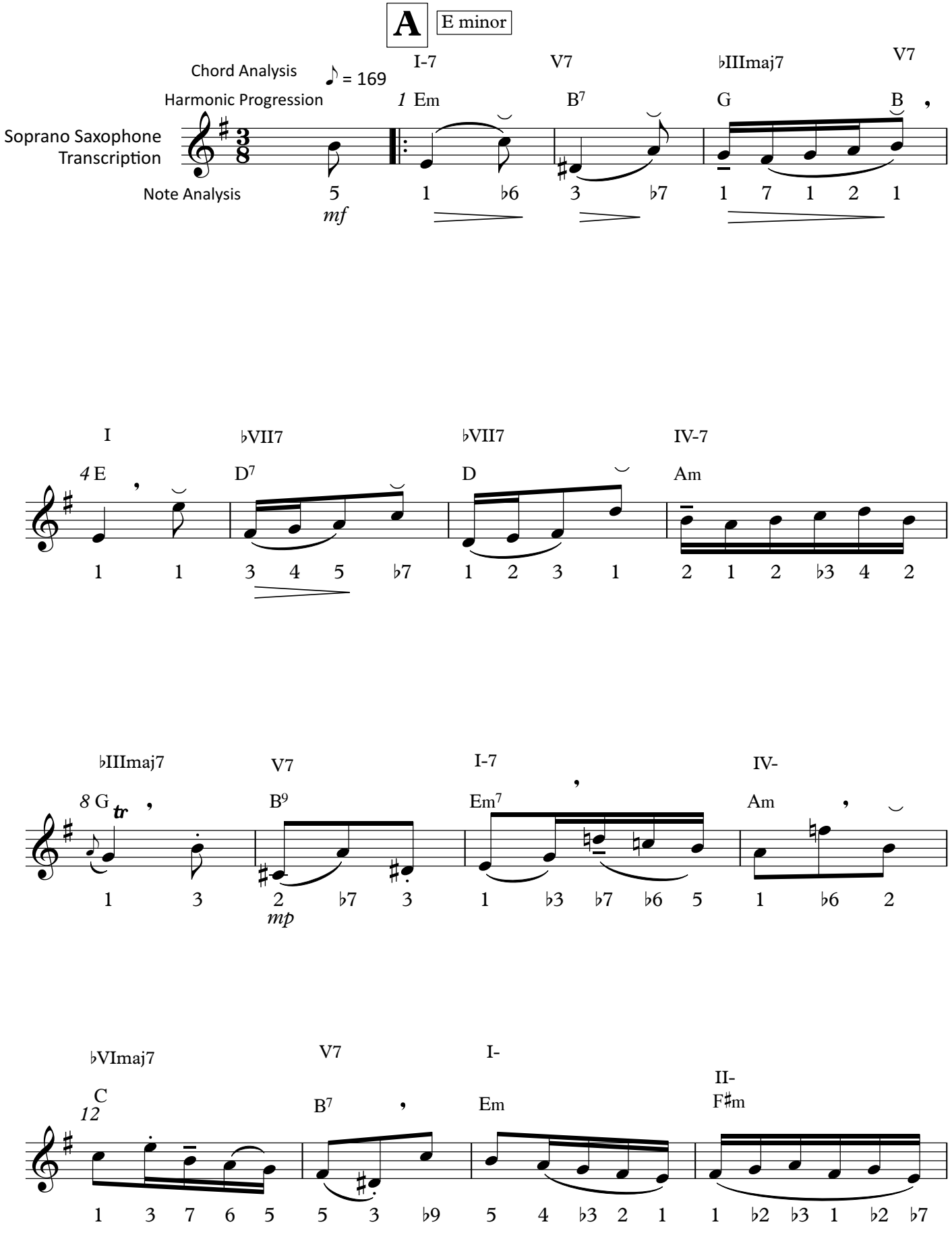

A
Minuet II
Imaj7
Imaj7
IVmaj7
IVmaj7
25
Emaj7
Emaj7
Amaj7
Amaj7
tr
3 1 2 3 4 5 3 5 1 3 6 1 5 4 3 4 2 1
mf

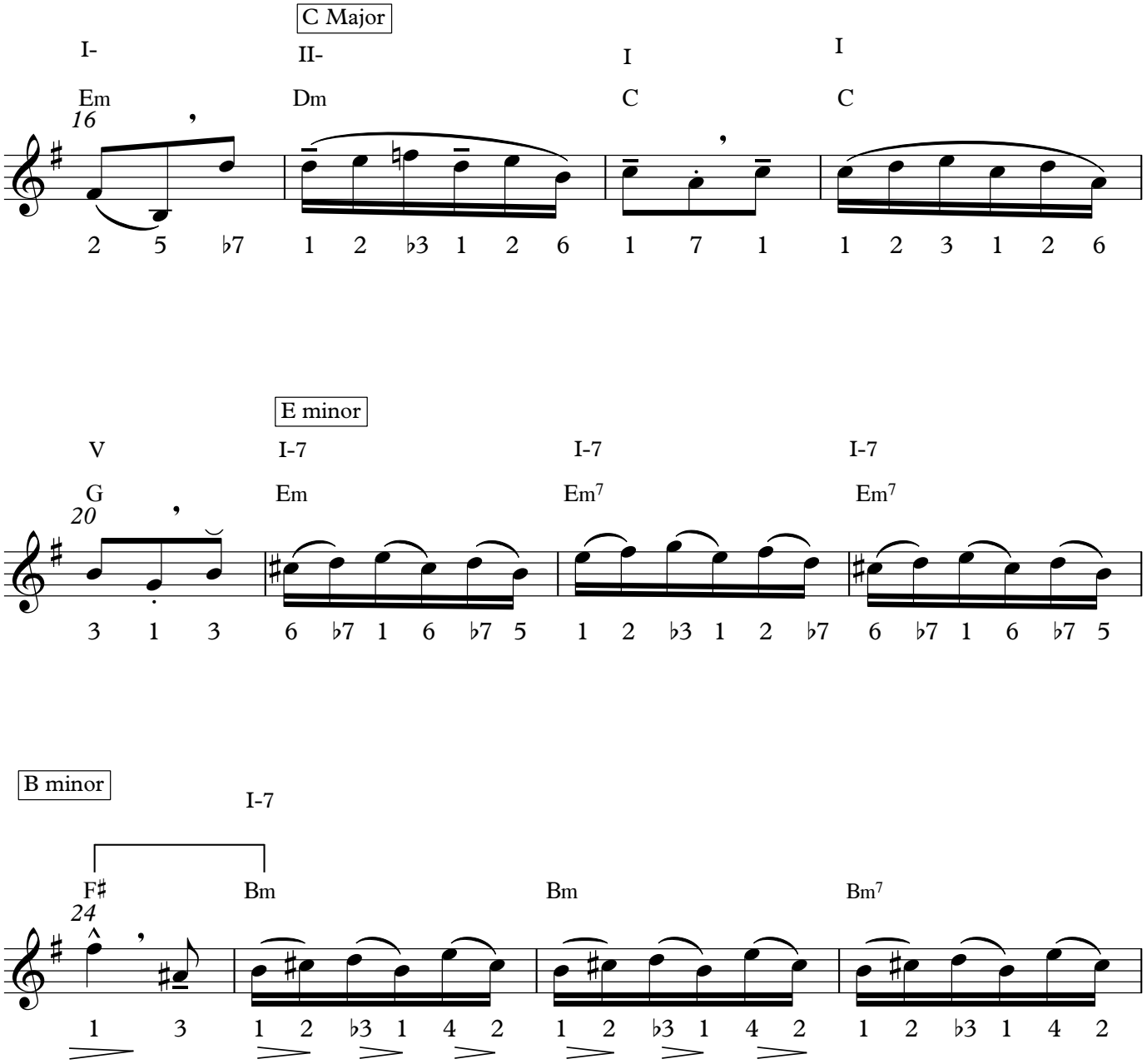

IVmaj7
Imaj7
Imaj7
IVmaj7
V7
29
Amaj7
Emaj7
Emaj7
Amaj7
B7
7 5 4 3 2 1 6 5 4 3 2 1 7 1 1 7 1 2 5
mp

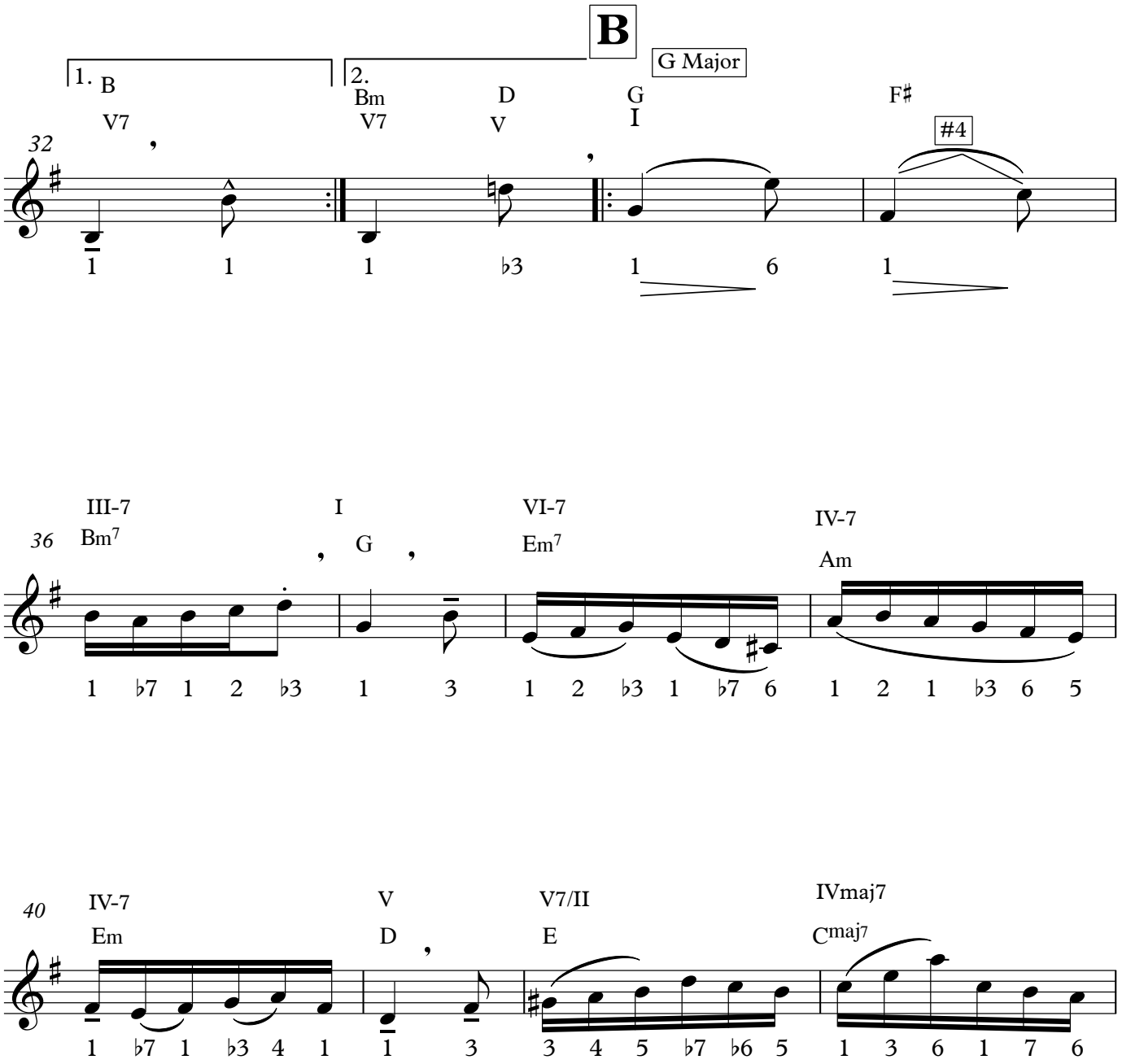

B
E Major
33
VII-7♭5
D♯m7(♭5)
VII-7♭5
D♯m7(♭5)
Imaj7
Emaj7
IVmaj7
Amaj7
1 3 2 1 7 1 ♭5 1 3 5 1 3 3 2 1 7 1 3
mf
mp
37
VI-7
F♯m7
Imaj7
Emaj7
IVmaj7
Amaj7
IVmaj7
Amaj7
1 7 6 5 6 ♭5(ch) 1 6 5 4 3 2 1 7 5 4 3 5 3 4 5 6 7 1
41
V7
B7
III- (of V7)
Dm7
V7(♭9, ♭13)
C♯7(♭13 ♭9)
III-7
G♯m7
5 4 3 4 5 6 1 ♭3 1 1 ♭7 ♭2 1 ♭7 ♭13 1 2 ♭3 1 2 ♭7
45
Imaj7
Emaj7
tr
II-7
F#-7
V7
B7
V7
B7
Imaj7
Emaj7
1 7 5 6 7 1 1 2 ♭3 5 1 ♭7 6 5 4 5 3 1
mf
Menuet I da capo

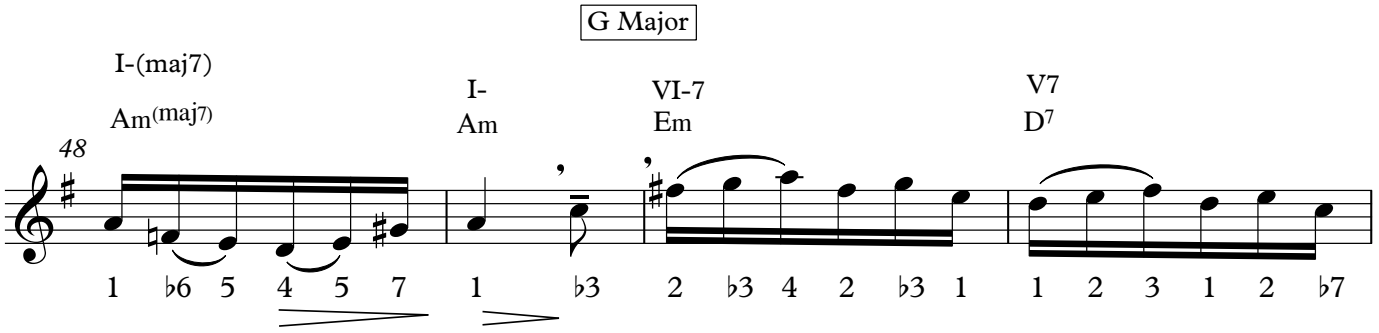
BWV 1008 by J.S. Bach Movement VI, Gigue, Transcription and for Bb Soprano Saxophone

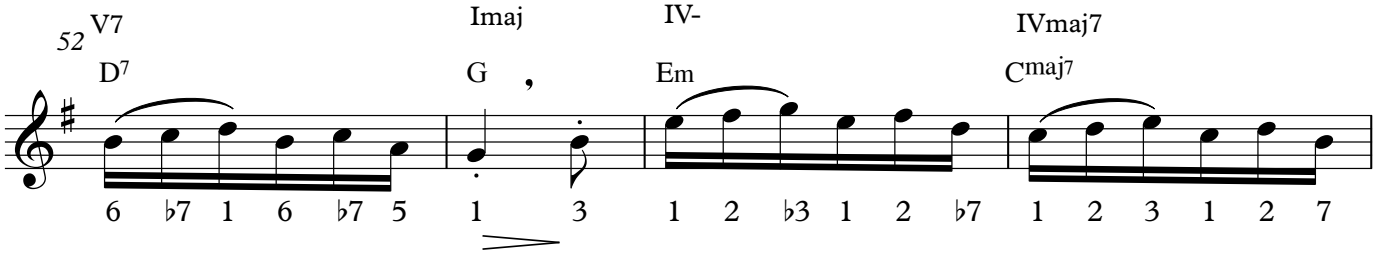
Track ID: Fiona Burnett Source Material 1 BWV 1008 by J.S. Bach, 6. Gigue 2:59

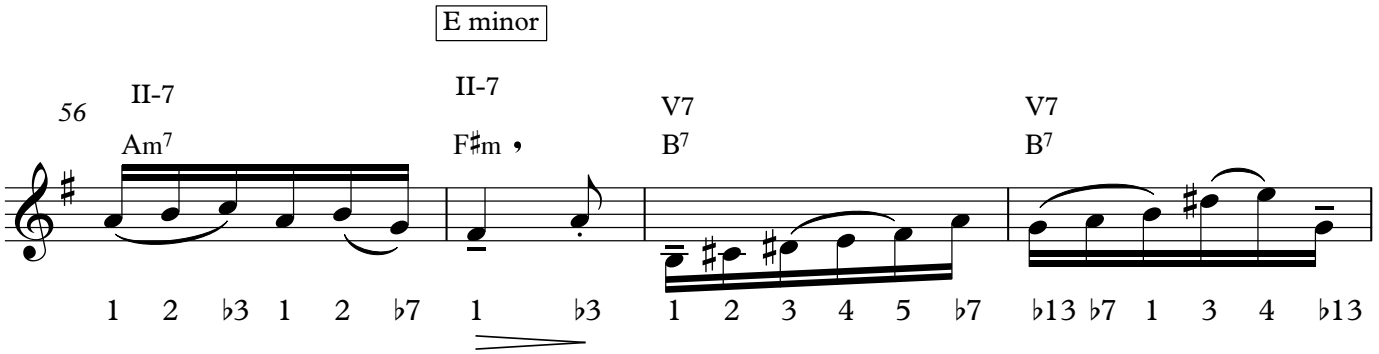


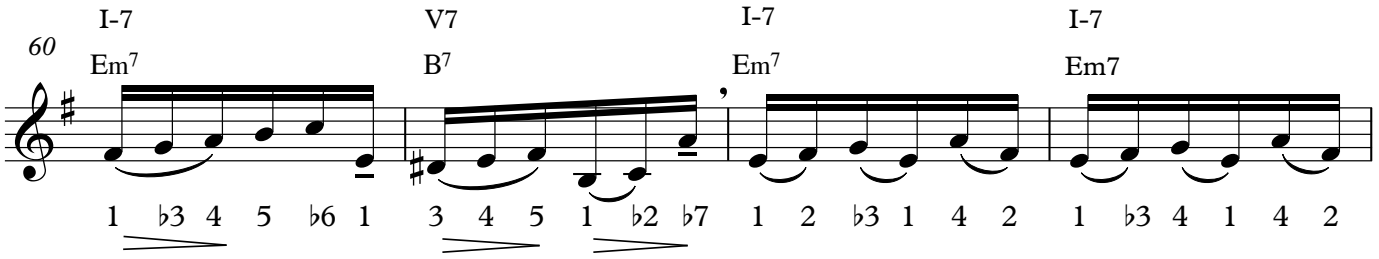

C Major
I-
II-
I
I
Em
Dm
C
C
16
2 5 ♭7 1 2 ♭3 1 2 6 1 7 1 1 2 3 1 2 6
E minor
V
I-7
I-7
I-7
G
Em
Em7
Em7
20
3 1 3 6 ♭7 1 6 ♭7 5 1 2 ♭3 1 2 ♭7 6 ♭7 1 6 ♭7 5
B minor
I-7
F♯
Bm
Bm
Bm7
24
1 3 1 2 ♭3 1 4 2 1 2 ♭3 1 4 2 1 2 ♭3 1 4 2
V7
28 Bm
G(♯11)
Dmaj7(♯5)
B
1 2 ♭3 1 4 2 3 7 6 5 #11 1 3 2 1 7 #5 1 ♭6 5 4 5 3

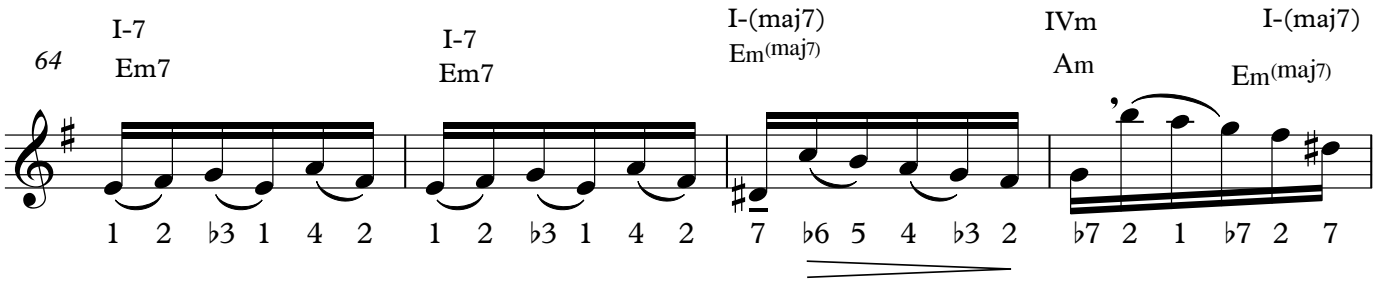

B
G Major
1. B
2.
Bm
D
G
F♯
V7
V7
V
I
#4
32
1 1 1 ♭3 1 6 1
III-7
I
VI-7
IV-7
36
Bm7
G
Em7
Am
1 ♭7 1 2 ♭3 1 3 1 2 ♭3 1 ♭7 6 1 2 1 ♭3 6 5
IV-7
V
V7/II
IVmaj7
40
Em
D
E
Cmaj7
1 ♭7 1 ♭3 4 1 1 3 3 4 5 ♭7 ♭6 5 1 3 6 1 7 6
A minor
V7
IV-7
♭IIImaj7
I-
SubV/I
I-(maj7)
I-(maj7)
44
E7
Dm
Cmaj7
Am
B♭
Am(maj7)
Am(maj7)
1 5 ♭7 ♭3 2 1 1 7 1 5 1 ♭3 1 7 1 7 1 ♭6 5 1 7

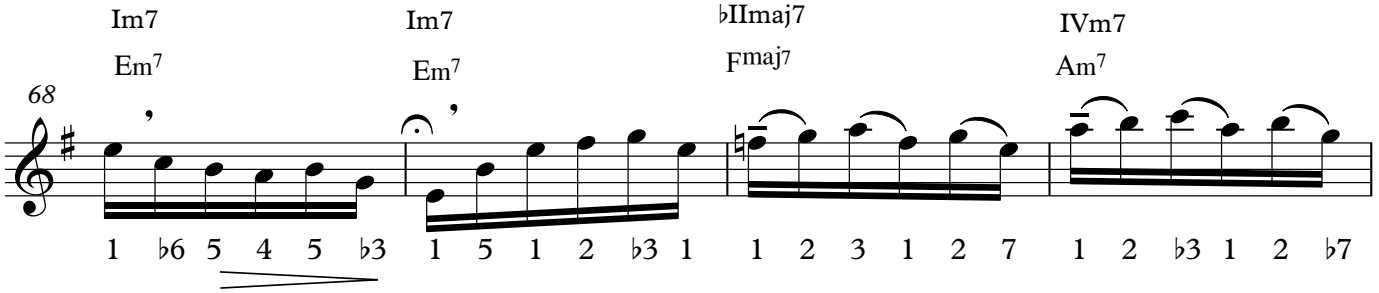

G Major
I-(maj7)
Am(maj7)
48
I-
Am
VI-7
Em
V7
D7
1 ♭6 5 4 5 7 1 ♭3 2 ♭3 4 2 ♭3 1 1 2 3 1 2 ♭7

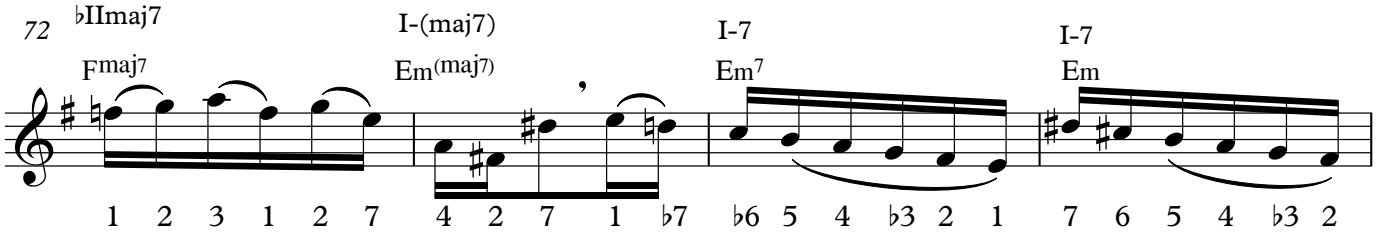

52
V7
D7
Imaj
G
IV-
Em
IVmaj7
Cmaj7
6 ♭7 1 6 ♭7 5 1 3 1 2 ♭3 1 2 ♭7 1 2 3 1 2 7


E minor
56
II-7
Am7
II-7
F♯m
V7
B7
V7
B7
1 2 ♭3 1 2 ♭7 1 ♭3 1 2 3 4 5 ♭7 ♭13 ♭7 1 3 4 ♭13


60
I-7
Em7
V7
B7
I-7
Em7
I-7
Em7
1 ♭3 4 5 ♭6 1 3 4 5 1 ♭2 ♭7 1 2 ♭3 1 4 2 1 ♭3 4 1 4 2


64
I-7
Em7
I-7
Em7
I-(maj7)
Em(maj7)
IVm
Am
I-(maj7)
Em(maj7)
1 2 ♭3 1 4 2 1 2 ♭3 1 4 2 7 ♭6 5 4 ♭3 2 ♭7 2 1 ♭7 2 7


68
Im7
Em7
Im7
Em7
♭IImaj7
Fmaj7
IVm7
Am7
1 ♭6 5 4 5 ♭3 1 5 1 2 ♭3 1 1 2 3 1 2 7 1 2 ♭3 1 2 ♭7


72
♭IImaj7
Fmaj7
I-(maj7)
Em(maj7)
I-7
Em7
I-7
Em
1 2 3 1 2 7 4 2 7 1 ♭7 ♭6 5 4 ♭3 2 1 7 6 5 4 ♭3 2


76
I-7
Em
I-
Em
Fine
1 ♭3 5 1 ♭3 5 1 ♭7

Appendix B

Countdown by John Coltrane

Bb Transcription for Soprano saxophone and Analysis
Fiona Burnett Source Material B

Countdown Composition and Solo by John Coltrane Harmonic (First Chrous) and Note Analysis

Bb Transciption from Edited Sources: Recording Giant Steps, Atlantic SD 1311, The Jazz Style of John Coltrane by David N. Baker(1983), John Coltrane Omnibook and adapted for recording purposes for Fiona Burnet on soprano saxophone

Track ID: Fiona Burnett Source Material 2 Countdownby John Coltrane

1. Slow Version 175 BPM, 3:38 2. Fast Version 230 BPM 2:57

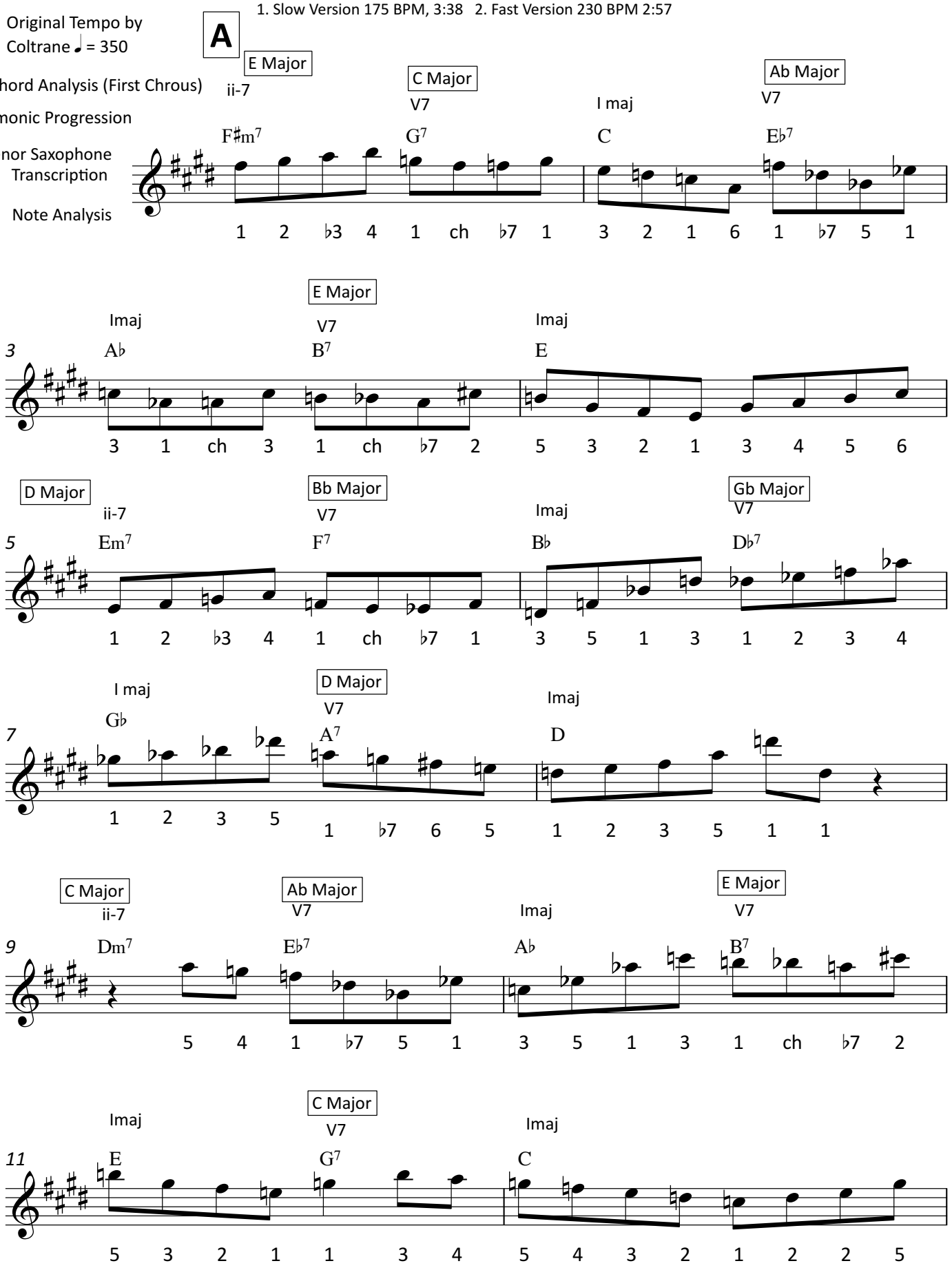
Original Tempo by Coltrane ♩ = 350

Chord Analysis (First Chrous)

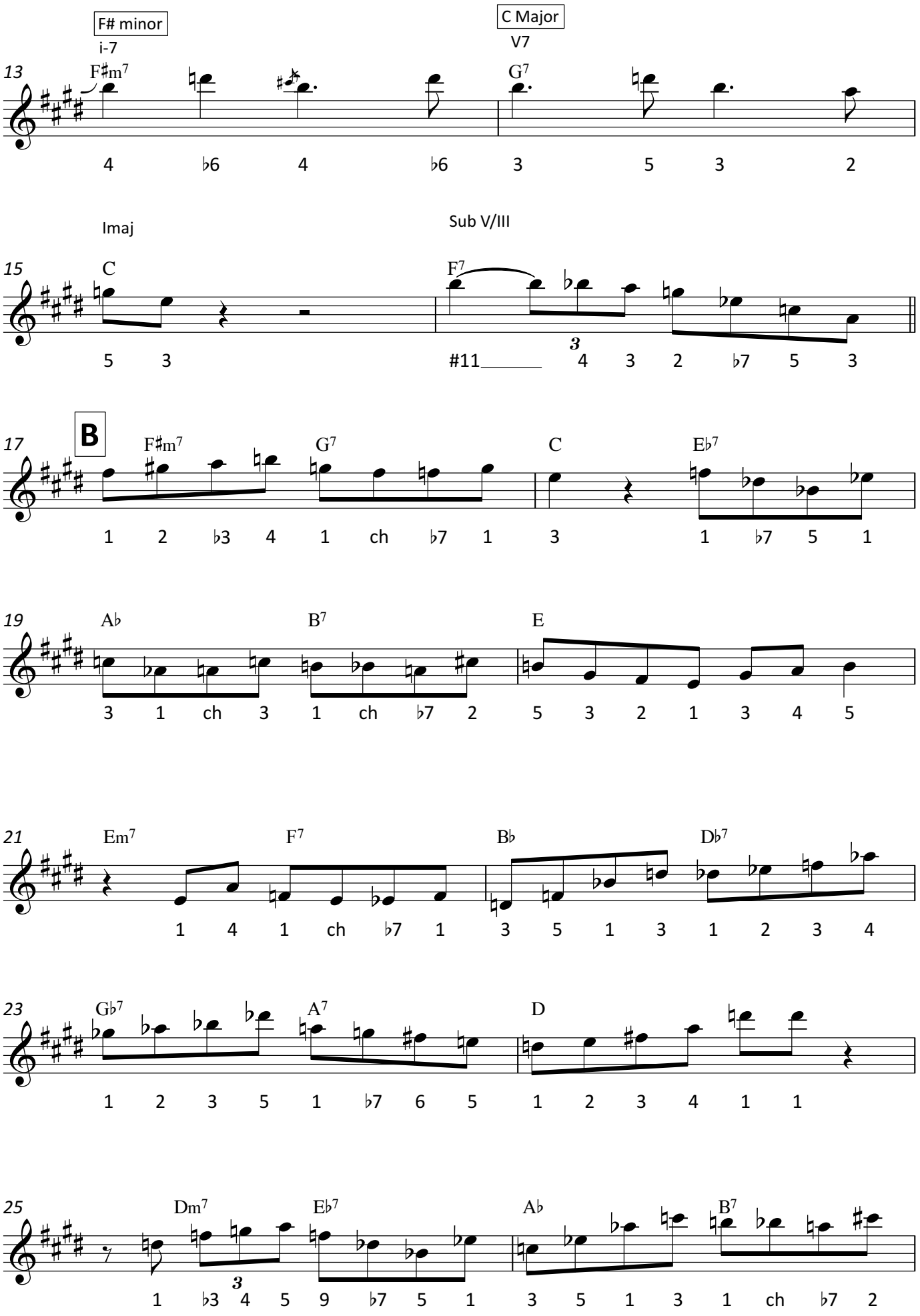
Harmonic Progression

Tenor Saxophone Transcription

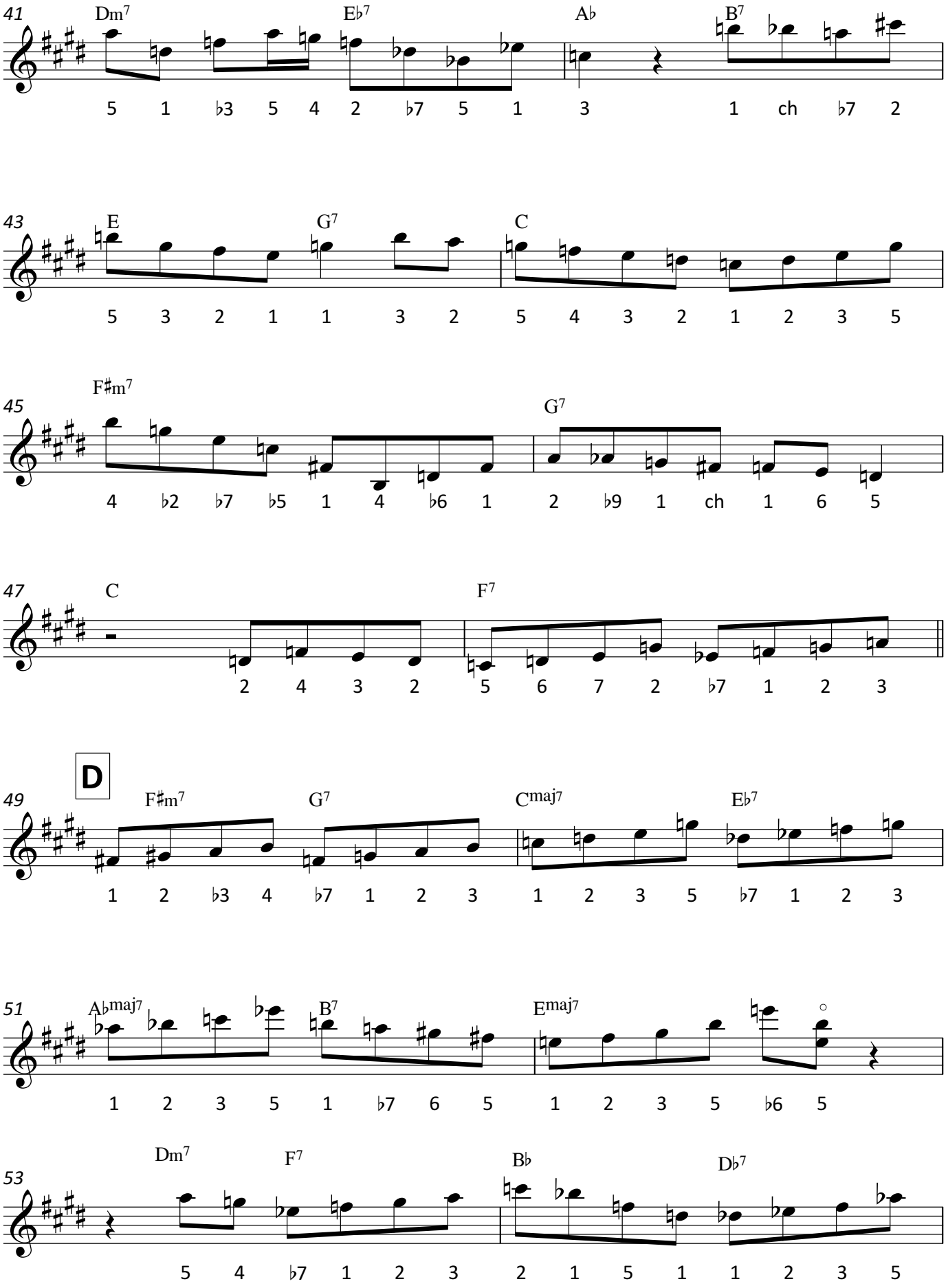
Note Analysis

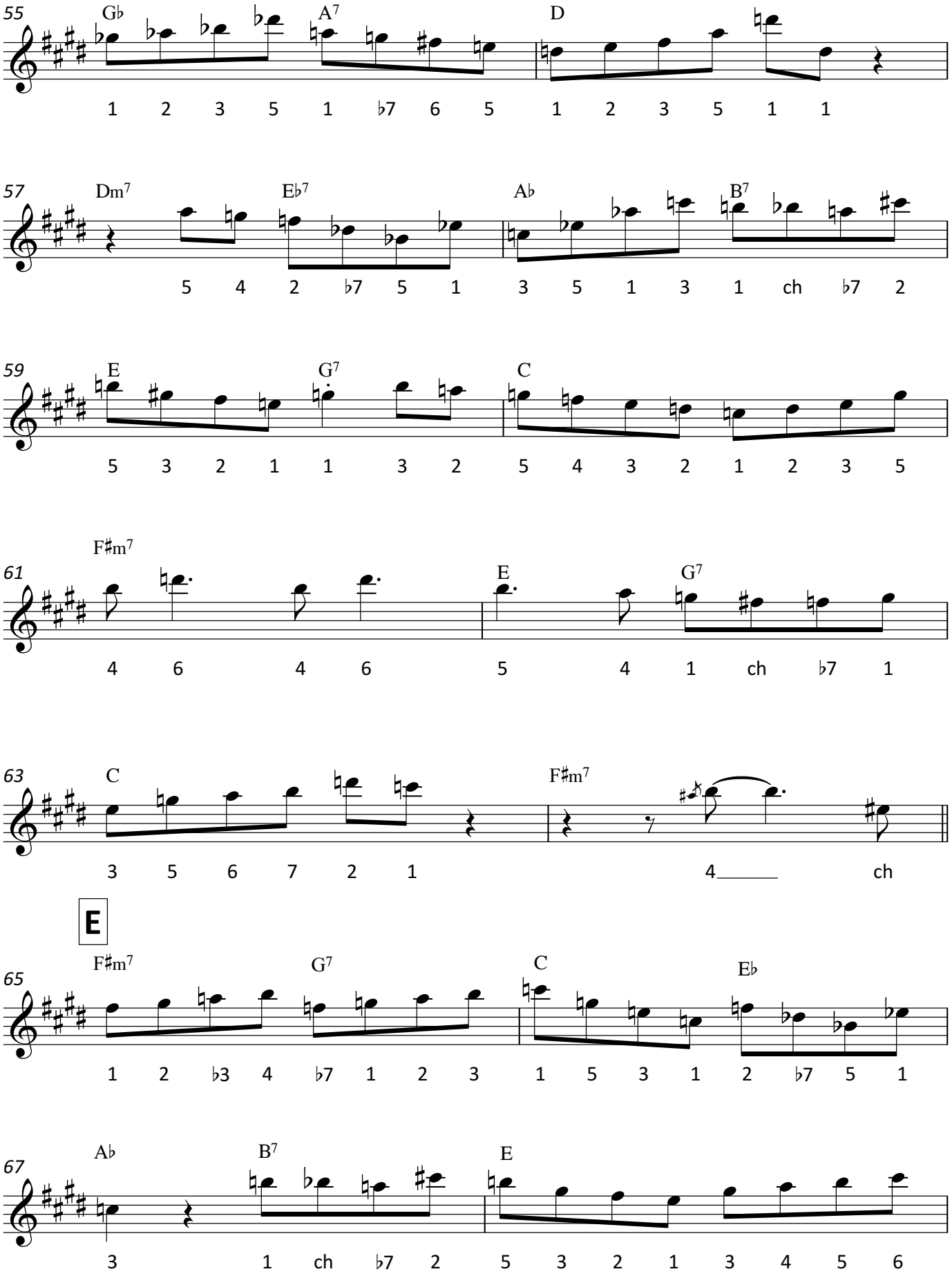


Countdown by John Coltrane Bb Transcription

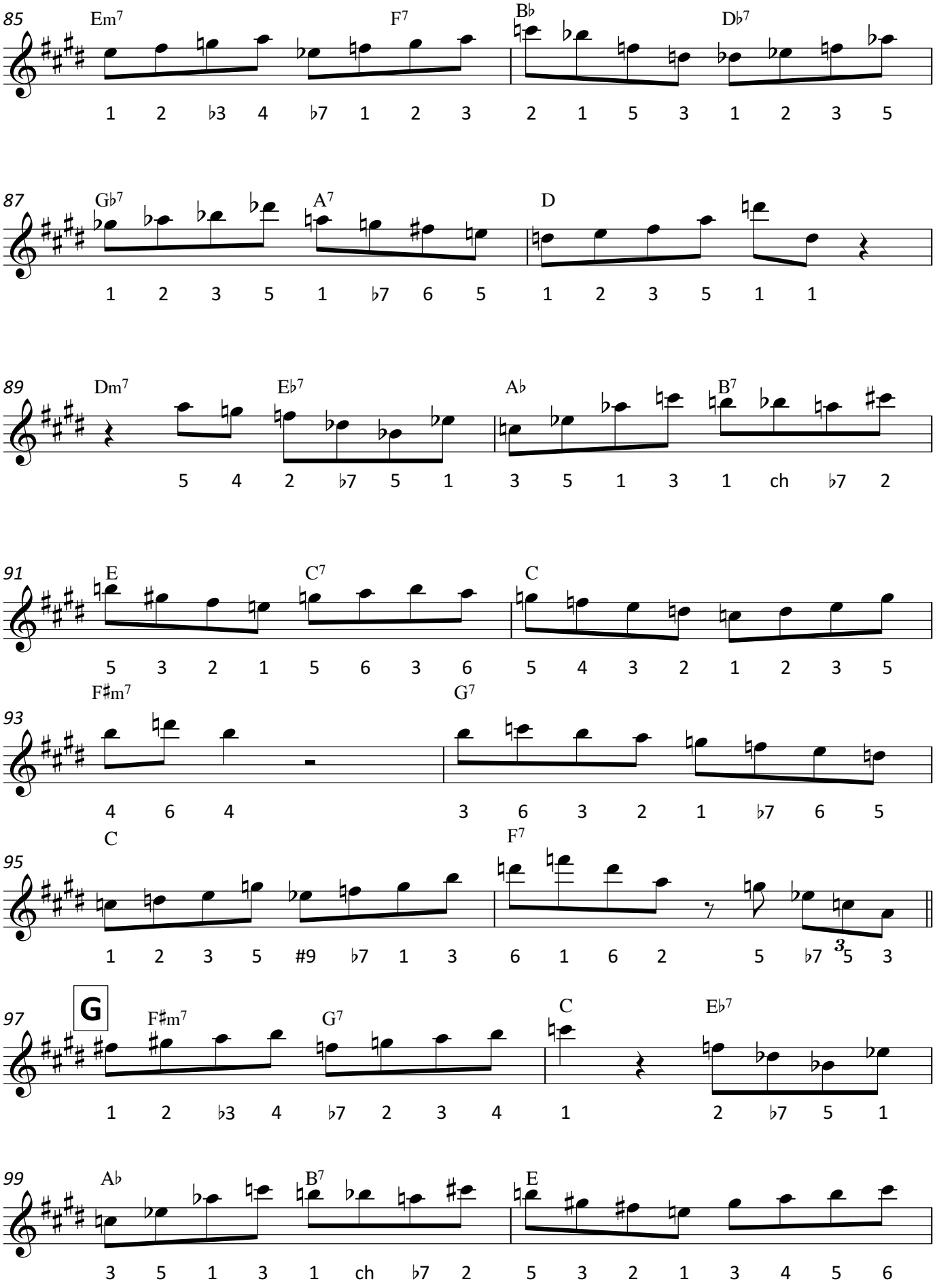


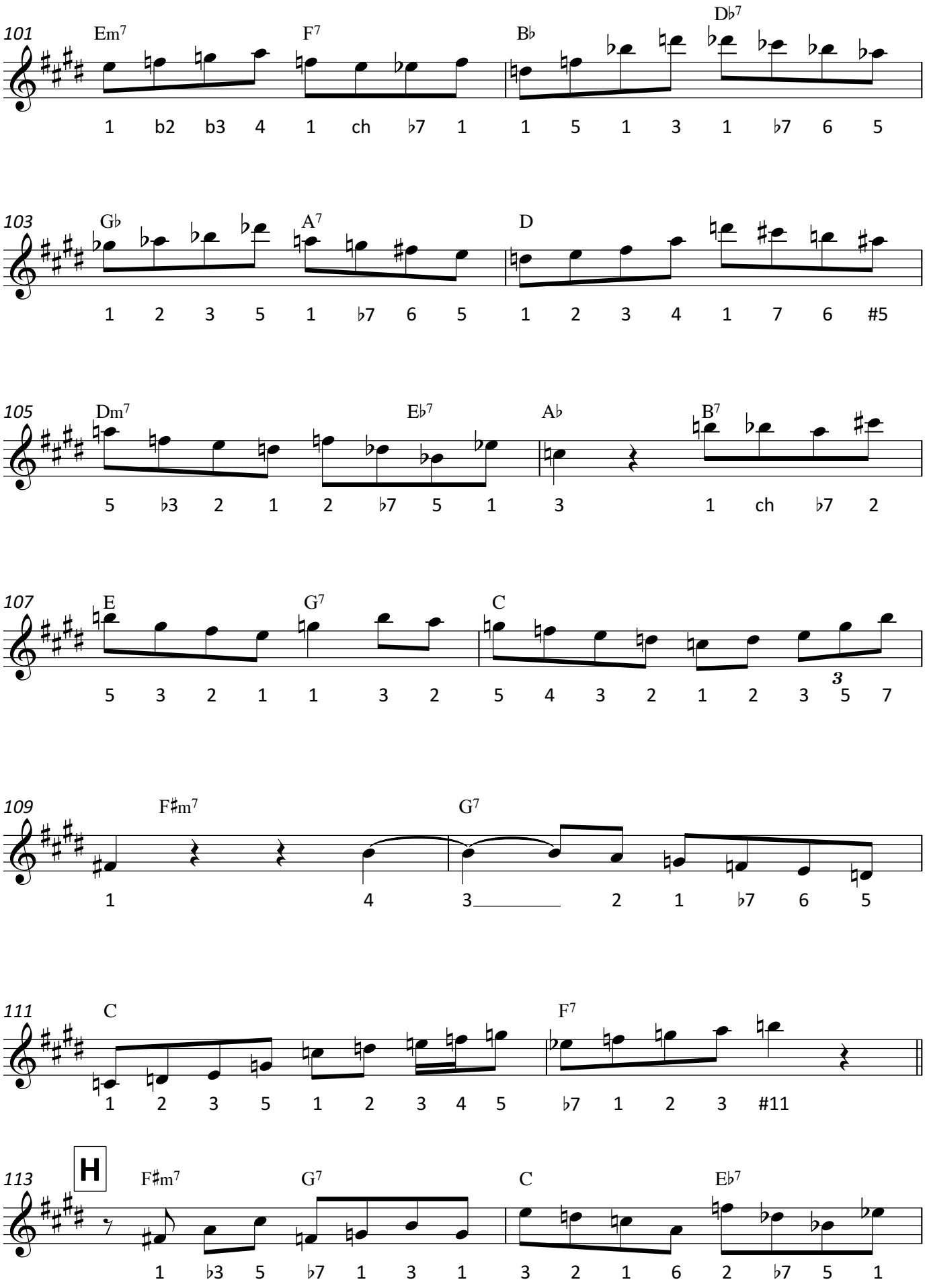

27
E
G7
C
5 3 2 1 1 3 2 5 4 3 2 1 2 3 5
29
F♯m7
G7
4 ♭6 4 ♭3 1 ch ♭7 6 5 ♭7 6 5
31
C
F7
1 2 3 5 ♭3 4 5 ♭7 2 1 6 3 2 ♭7
33
C
F♯m7
G7
C
E♭7
1 ♭3 5 ♭7 1 3 5 1 2 ♭7 5 1
35
A♭
B7
E
3
3 5 1 2 3 1 ch ♭7 2 5 3 2 1 3 4 5
37
Em7
F7
B♭
D♭7
♭5 4 ♭9 1 ♭7 1 6 6 #4 5
39
G♭
A7
D
3
ch 5 ♭5 4 7 5 6 7 5 3 2 1


41
Dm7
E♭7
A♭
B7
5 1 ♭3 5 4 2 ♭7 5 1 3 1 ch ♭7 2
43
E
G7
C
5 3 2 1 1 3 2 5 4 3 2 1 2 3 5
45
F♯m7
G7
4 ♭2 ♭7 ♭5 1 4 ♭6 1 2 ♭9 1 ch 1 6 5
47
C
F7
2 4 3 2 5 6 7 2 ♭7 1 2 3
D
49
F♯m7
G7
Cmaj7
E♭7
1 2 ♭3 4 ♭7 1 2 3 1 2 3 5 ♭7 1 2 3
51
A♭maj7
B7
Emaj7
1 2 3 5 1 ♭7 6 5 1 2 3 5 ♭6 5
53
Dm7
F7
B♭
D♭7
5 4 ♭7 1 2 3 2 1 5 1 1 2 3 5


55
G♭ A7 D
1 2 3 5 1 ♭7 6 5 1 2 3 5 1 1
57
Dm7 E♭7 A♭ B7
5 4 2 ♭7 5 1 3 5 1 3 1 ch ♭7 2
59
E G7 C
5 3 2 1 1 3 2 5 4 3 2 1 2 3 5
F♯m7
61
E G7
4 6 4 6 5 4 1 ch ♭7 1
63
C F♯m7
3 5 6 7 2 1 4 ch
E
F♯m7 G7 C E♭
65
1 2 ♭3 4 ♭7 1 2 3 1 5 3 1 2 ♭7 5 1
A♭ B7 E
67
3 1 ch ♭7 2 5 3 2 1 3 4 5 6

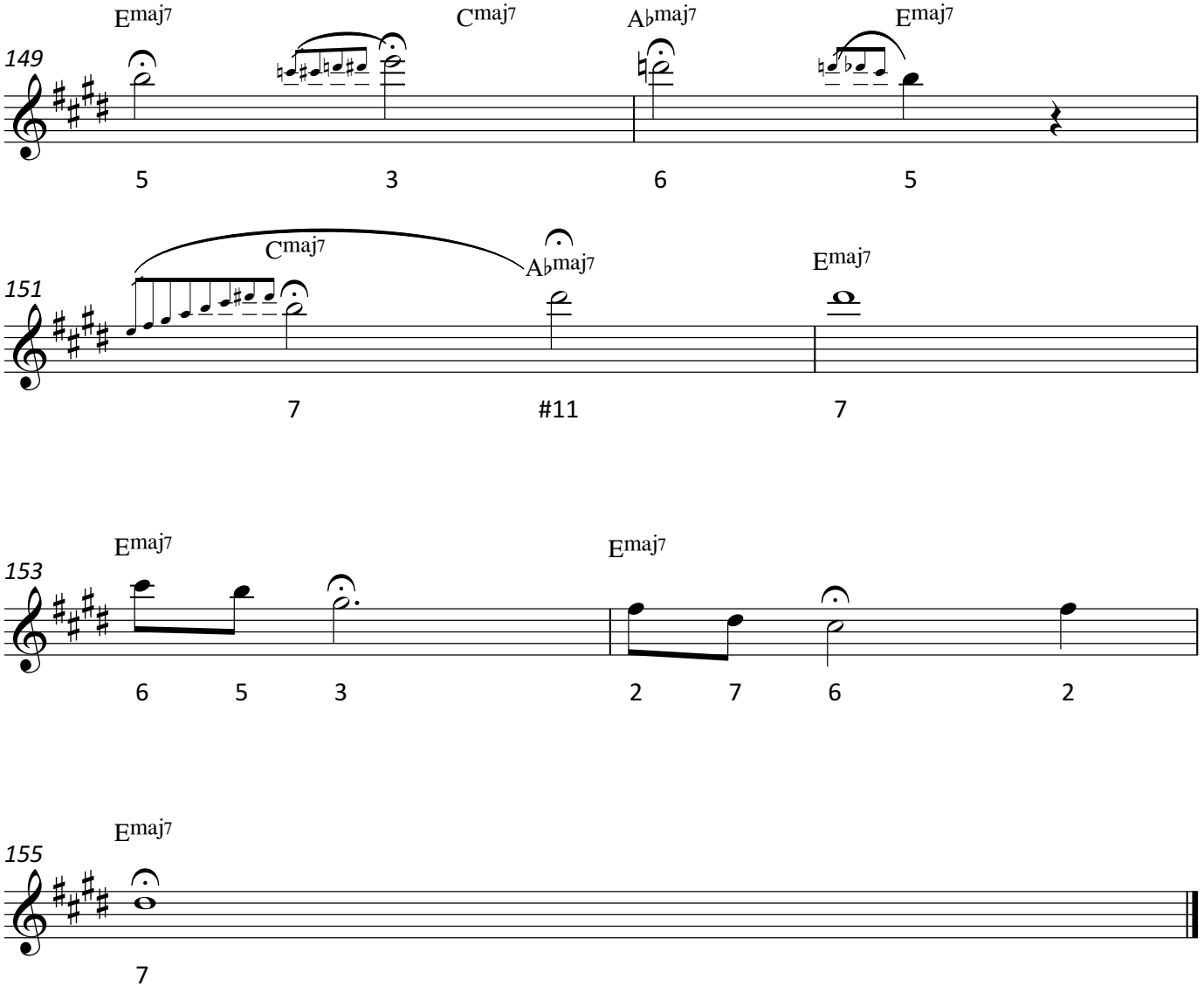

69
Em7
F7
B♭
D♭7
1 2 ♭3 4 ♭7 1 2 3 5 1 5 1 2 1 2 3 5
71
G♭
A♭
D
1 2 3 5 ♭9 7 ♭7 #5 1
73
Dm7
E♭7
A♭
B7
5 4 2 ♭7 5 1 3 1 ch 3 1 ch ♭7 2
75
E
G7
C
5 3 2 1 1 2 3 5 1 2 3 5 1 5 3 1
77
F♯m7
G7
1 2 ♭3 2 5 3 2 1 ch7 ♭7 1
79
Cmaj7
F7
1 5 6 7 2 1 7 2 3 2 ♭7 5 1
81
F
F♯m7
G7
C
E♭7
1 ♭3 5 1 ♭9 3 5 1 2 3 5 2 ♭7 5 1
83
A♭
B7
E
3 1 b9 3 1 ch b7 1 7 1 2 7 1 2 3 5


85
Em7
F7
B♭
D♭7
1 2 ♭3 4 ♭7 1 2 3 2 1 5 3 1 2 3 5
87
G♭7
A7
D
1 2 3 5 1 ♭7 6 5 1 2 3 5 1 1
89
Dm7
E♭7
A♭
B7
5 4 2 ♭7 5 1 3 5 1 3 1 ch ♭7 2
91
E
C7
C
5 3 2 1 5 6 3 6 5 4 3 2 1 2 3 5
F♯m7
G7
93
4 6 4 3 6 3 2 1 ♭7 6 5
C
F7
95
1 2 3 5 #9 ♭7 1 3 6 1 6 2 5 ♭7 5 3
G
97
F♯m7
G7
C
E♭7
1 2 ♭3 4 ♭7 2 3 4 1 2 ♭7 5 1
99
A♭
B7
E
3 5 1 3 1 ch ♭7 2 5 3 2 1 3 4 5 6


101
Em7
F7
B♭
D♭7
1 b2 b3 4 1 ch ♭7 1 1 5 1 3 1 ♭7 6 5
103
G♭
A7
D
1 2 3 5 1 ♭7 6 5 1 2 3 4 1 7 6 #5
105
Dm7
E♭7
A♭
B7
5 ♭3 2 1 2 ♭7 5 1 3 1 ch ♭7 2
107
E
G7
C
5 3 2 1 1 3 2 5 4 3 2 1 2 3 5 7
3
109
F♯m7
G7
1 4 3 2 1 ♭7 6 5
111
C
F7
1 2 3 5 1 2 3 4 5 ♭7 1 2 3 #11
113
H
F♯m7
G7
C
E♭7
1 ♭3 5 ♭7 1 3 1 3 2 1 6 2 ♭7 5 1


115
A♭ B7 E
3 1 7 3 1 ch ♭7 2 5 3 2 1 3 4 5 6
117
Em7 F7 B♭ D♭7
1 2 ♭3 M7 1 3 5 1 3 1 2 3 5
119
G♭ D
1 2 3 5 ♭9 #11
121
Dm7 D♭7 A♭ B7
1 ♭3 5 ♭3 1 6 4 3 5 1 3 1 ch ♭7 2
123
E G7 C
5 3 2 1 1 3 2 5 4 3 2 1 2 3 5
125
F♯m7 G7
4 6 3 5 3 2
127
C F7
5 4 3 2 1 2 3 5 7 6 1 6 1 6
I
129
F♯m7 G7 Cmaj7 E♭7
3 7 6


131
A♭maj7
B7
Emaj7
5
3
2
5
133
Em7
F7
B♭maj7
C♯7
4
3
7
b13
135
F♯maj7
A7
Dmaj7
137
D♭m7
E♭7
A♭maj7
B7
5
2
4
6
5
5
2
139
Bmaj7
G7
Cmaj7
1
b13
5
6
2
1
141
F♯m7
G7
4
3
1
2
3
5
4
1
2
143
Cmaj7
F7
3
3
#11
J
145
F♯m7
G7
Cmaj7
E♭7
4
3
7
6
147
A♭maj7
G7
Cmaj7
B7
5
5
4
7
b7


Emaj7
Cmaj7
Ab maj7
Emaj7
149
5
3
6
5
Cmaj7
Ab maj7
Emaj7
151
7
#11
7
Emaj7
Emaj7
153
6
5
3
2
7
6
2
Emaj7
155
7

Appendix C

Fiona Burnett Improvised Music Transcribed Examples
Bb Transcription for Soprano Saxophone and Analysis

1. **Example 1: Improvisation 1.16**
2. **Example 2: Improvisation 1.8**
3. **Example 3: Improvisation 4.6**

Improvisation Track ID: 1-16 Fiona Burnett Soprano Saxophone

DURATION: 3':29"

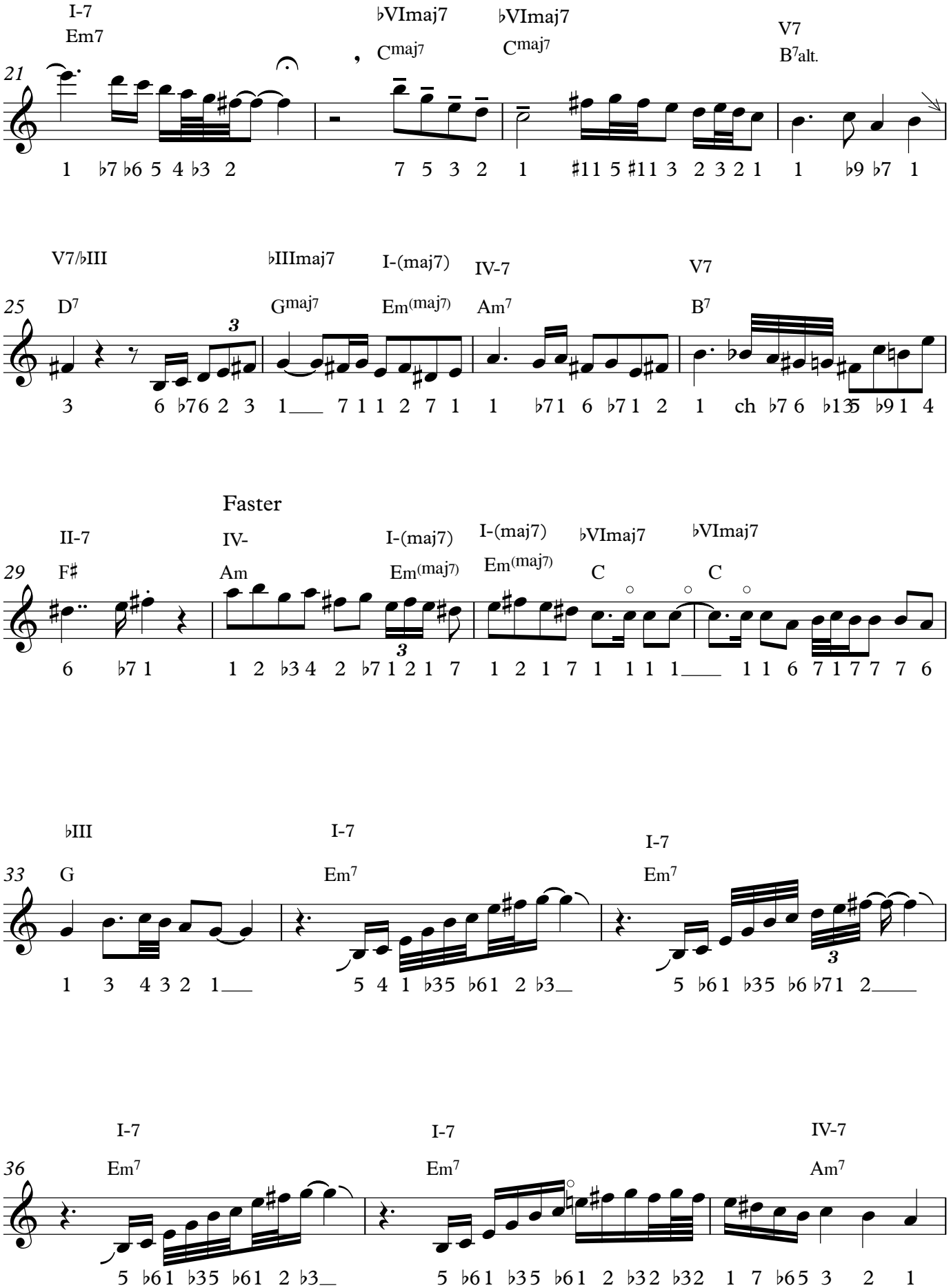
Transcription Transposed for Bb Soprano Saxophone Note and Chord Analysis

Improvisation Example 1

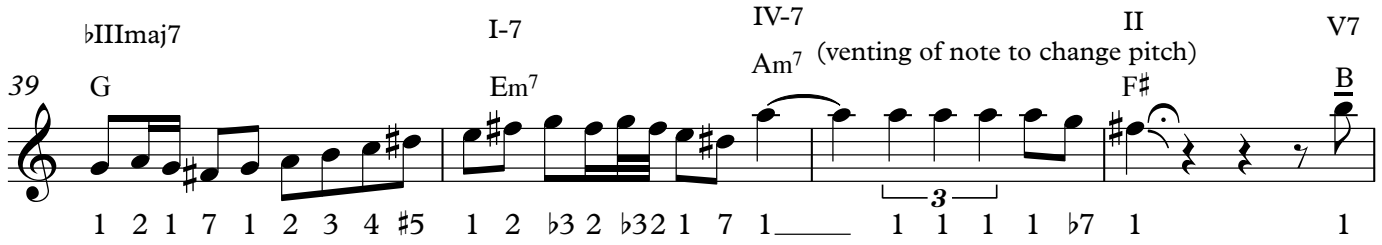
Improvisation Track ID: 1-16

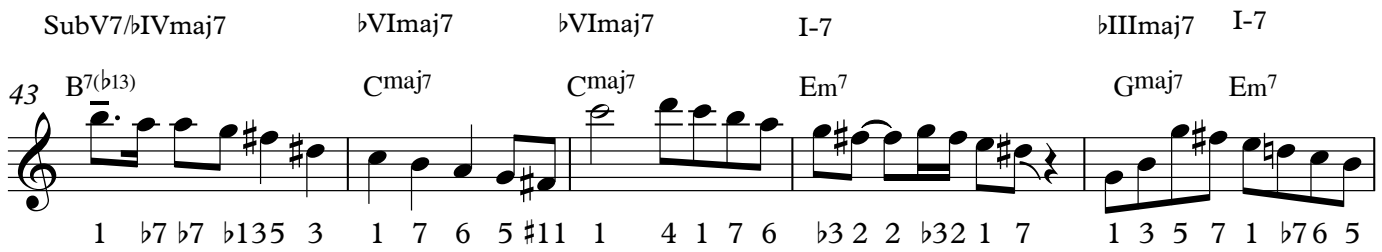
Eminor

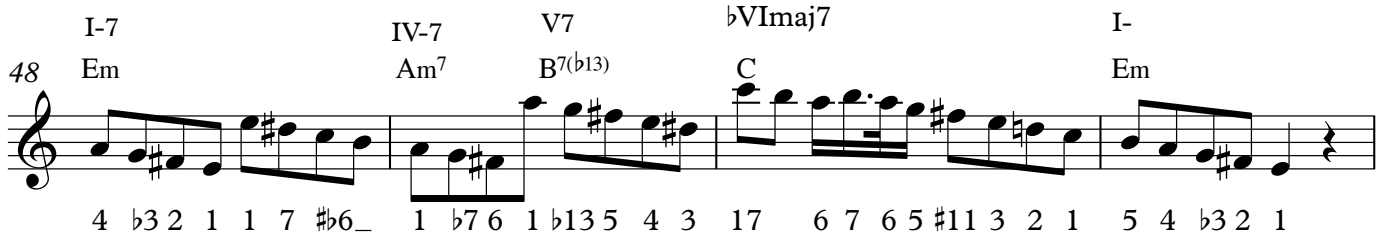
Soprano Saxophone

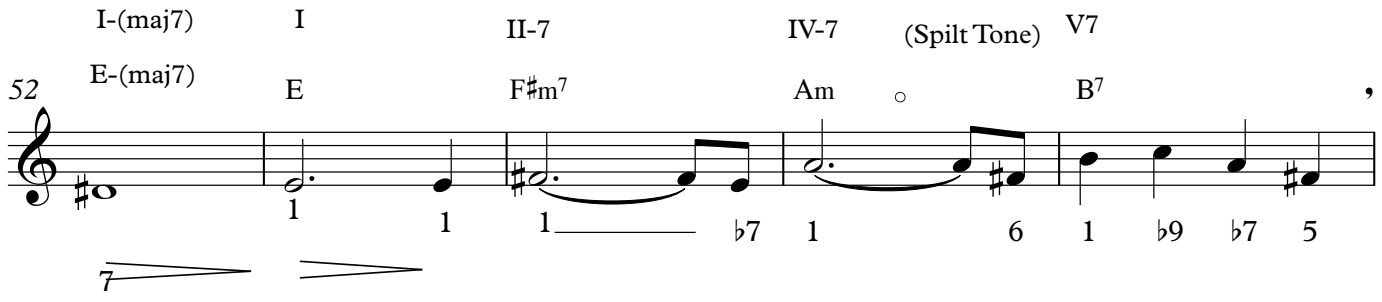

21
I-7
Em7
♭VImaj7
Cmaj7
♭VImaj7
Cmaj7
V7
B7alt.
1 ♭7 ♭6 5 4 ♭3 2
7 5 3 2 1 ♯11 5 ♯11 3 2 3 2 1 1 ♭9 ♭7 1
25
V7/♭III
D7
♭IIImaj7
Gmaj7
I-(maj7)
Em(maj7)
IV-7
Am7
V7
B7
3 6 ♭7 6 2 3 1 7 1 1 2 7 1 1 ♭7 1 6 ♭7 1 2 1 ch ♭7 6 ♭13 5 ♭9 1 4
Faster
29
II-7
F♯
IV-
Am
I-(maj7)
Em(maj7)
I-(maj7)
Em(maj7)
♭VImaj7
C
♭VImaj7
C
6 ♭7 1 1 2 ♭3 4 2 ♭7 1 2 1 7 1 2 1 7 1 1 1 1 1 6 7 1 7 7 7 6
33
♭III
G
I-7
Em7
I-7
Em7
1 3 4 3 2 1 5 4 1 ♭3 5 ♭6 1 2 ♭3 5 ♭6 1 ♭3 5 ♭6 ♭7 1 2
36
I-7
Em7
I-7
Em7
IV-7
Am7
5 ♭6 1 ♭3 5 ♭6 1 2 ♭3 5 ♭6 1 ♭3 5 ♭6 1 2 ♭3 2 ♭3 2 1 7 ♭6 5 3 2 1

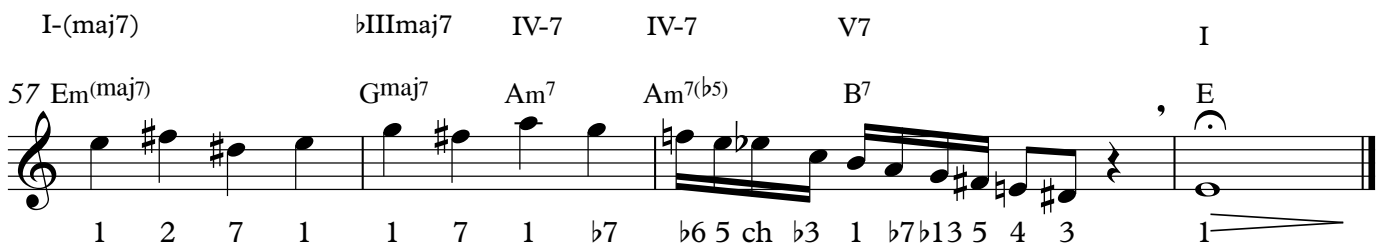
Improvisation Track ID: 1-16











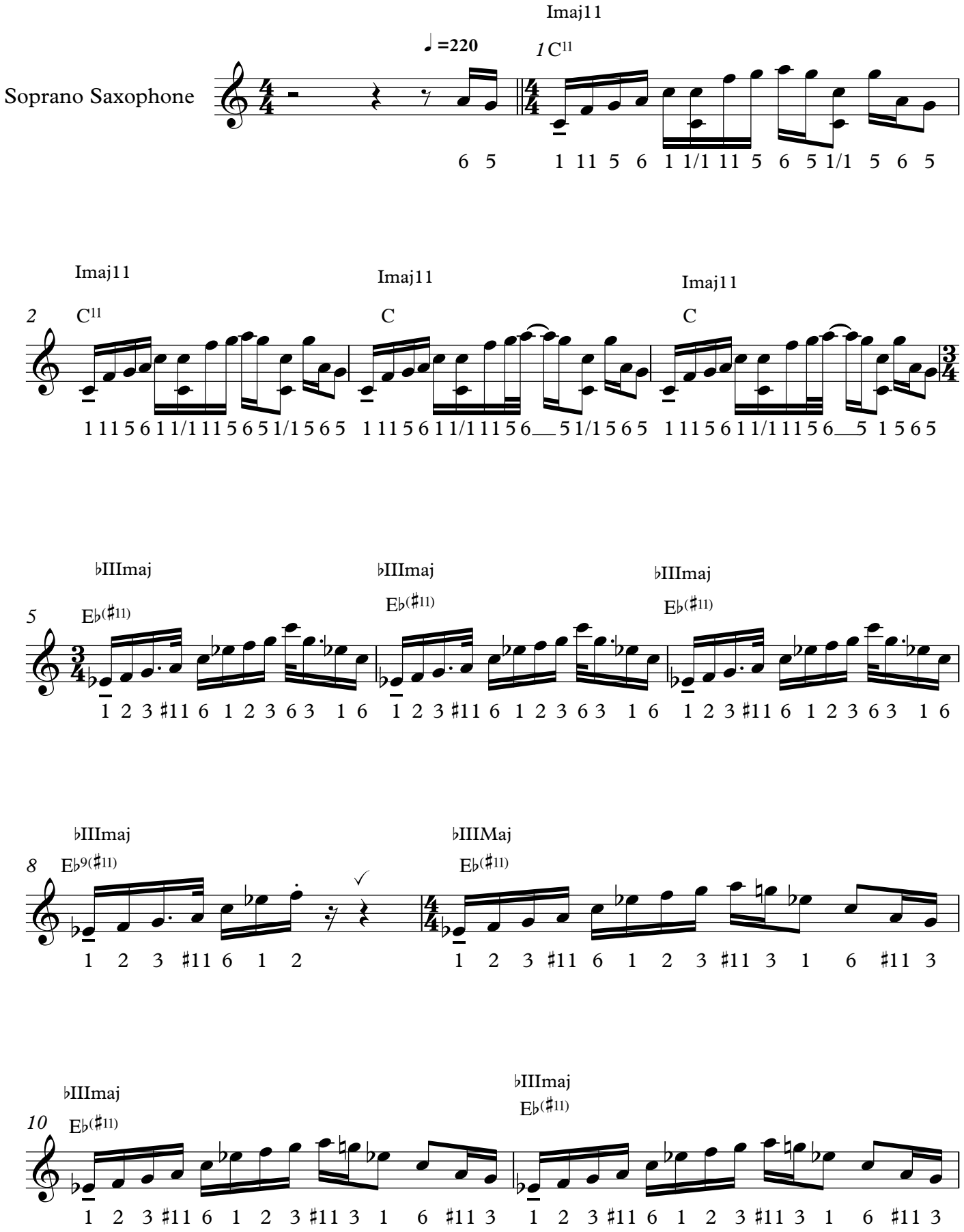
Improvisation Track ID: 1-8 Fiona Burnett Soprano Saxophone

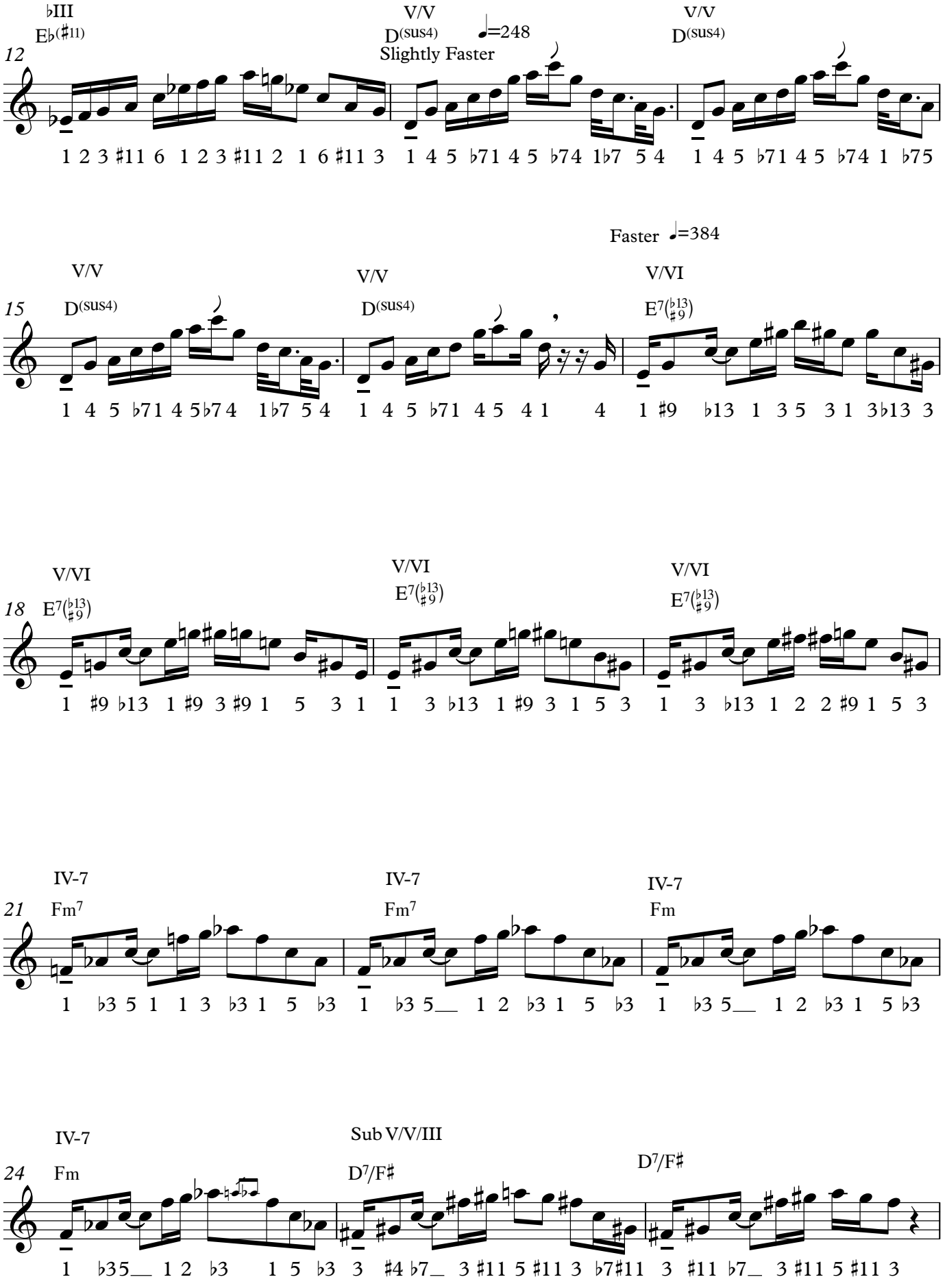
Duration: 2':18"

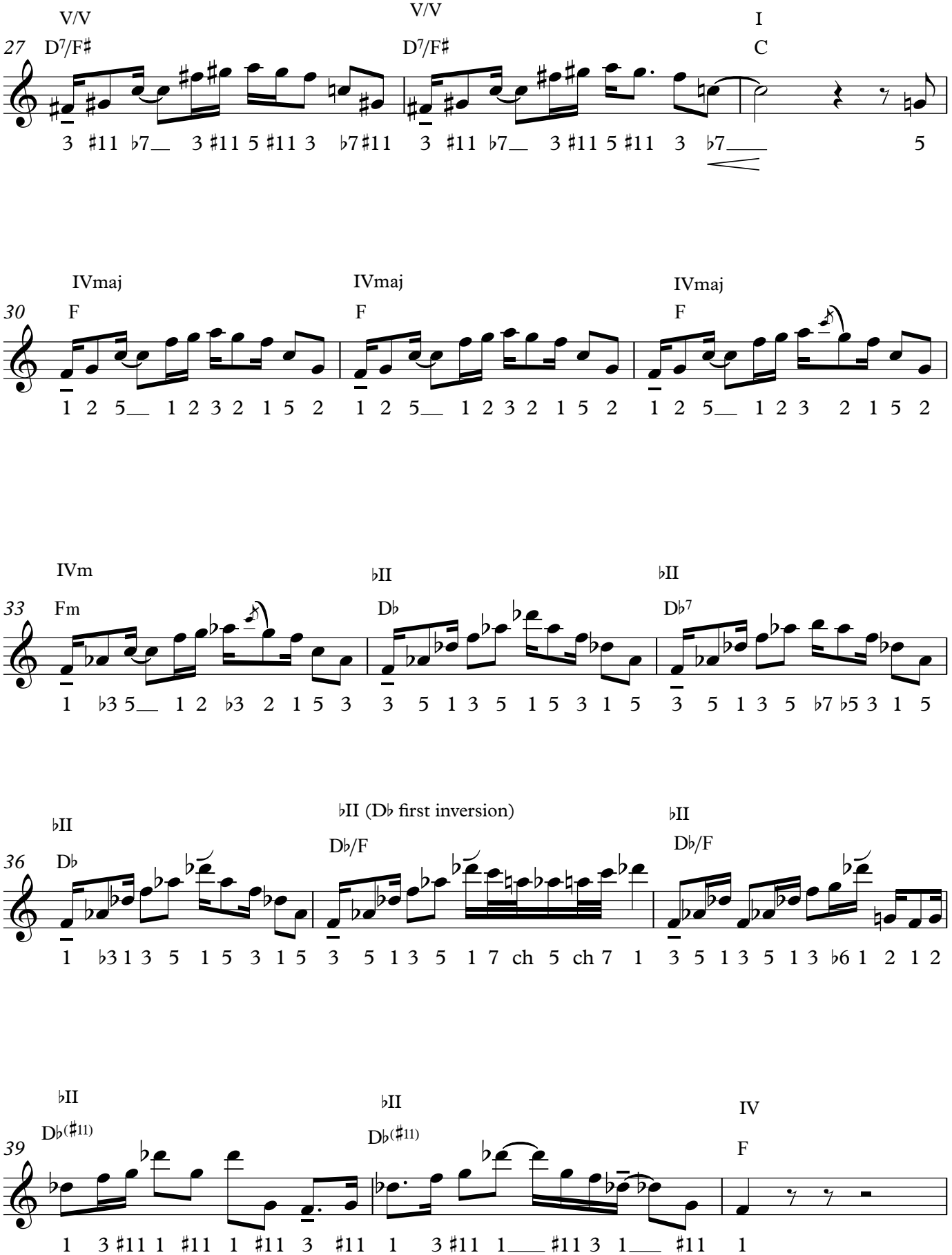
Transcription Transposed for Bb Soprano Saxophone

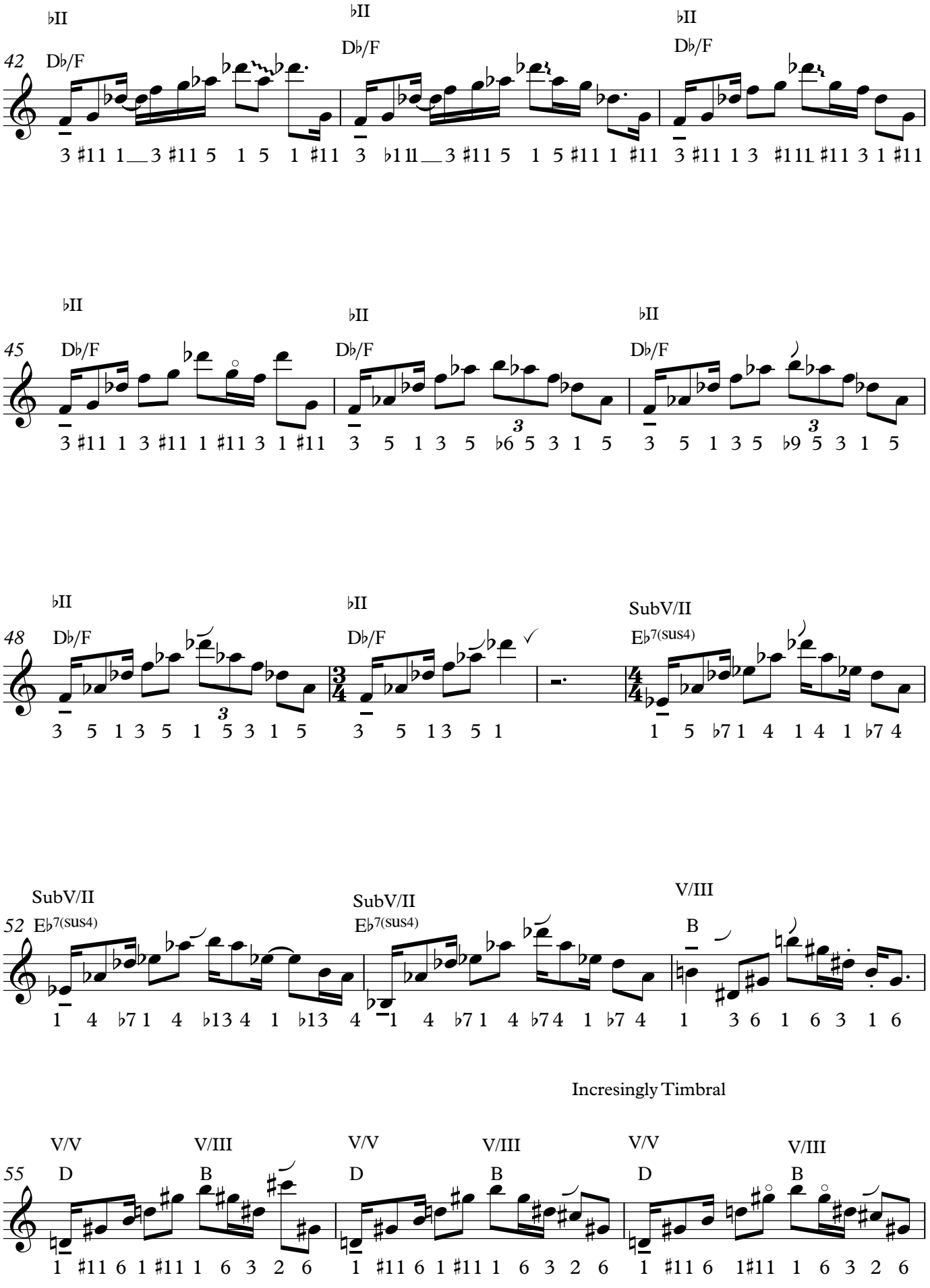
Improvisation Example 2

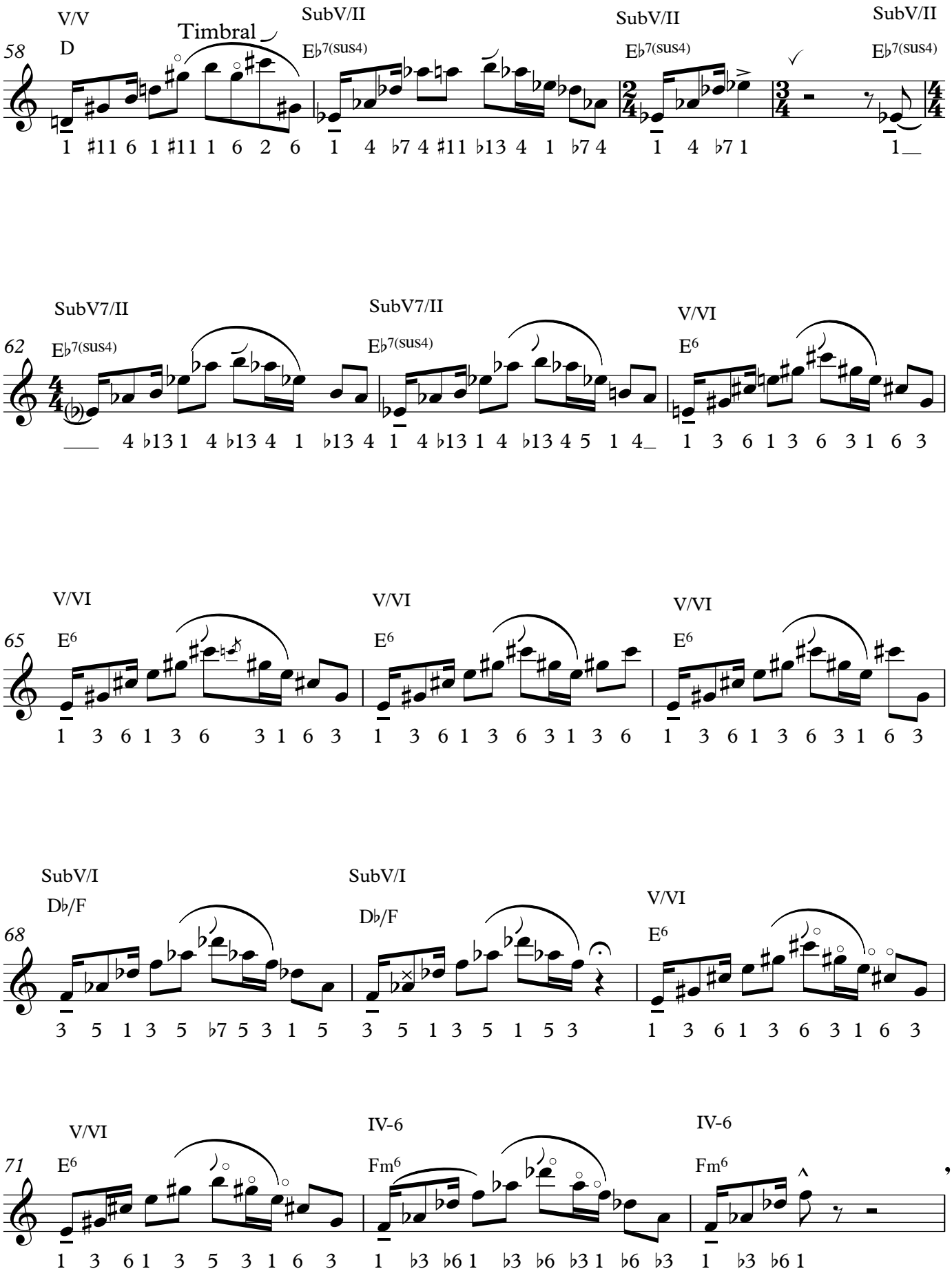
C Tonal Centre

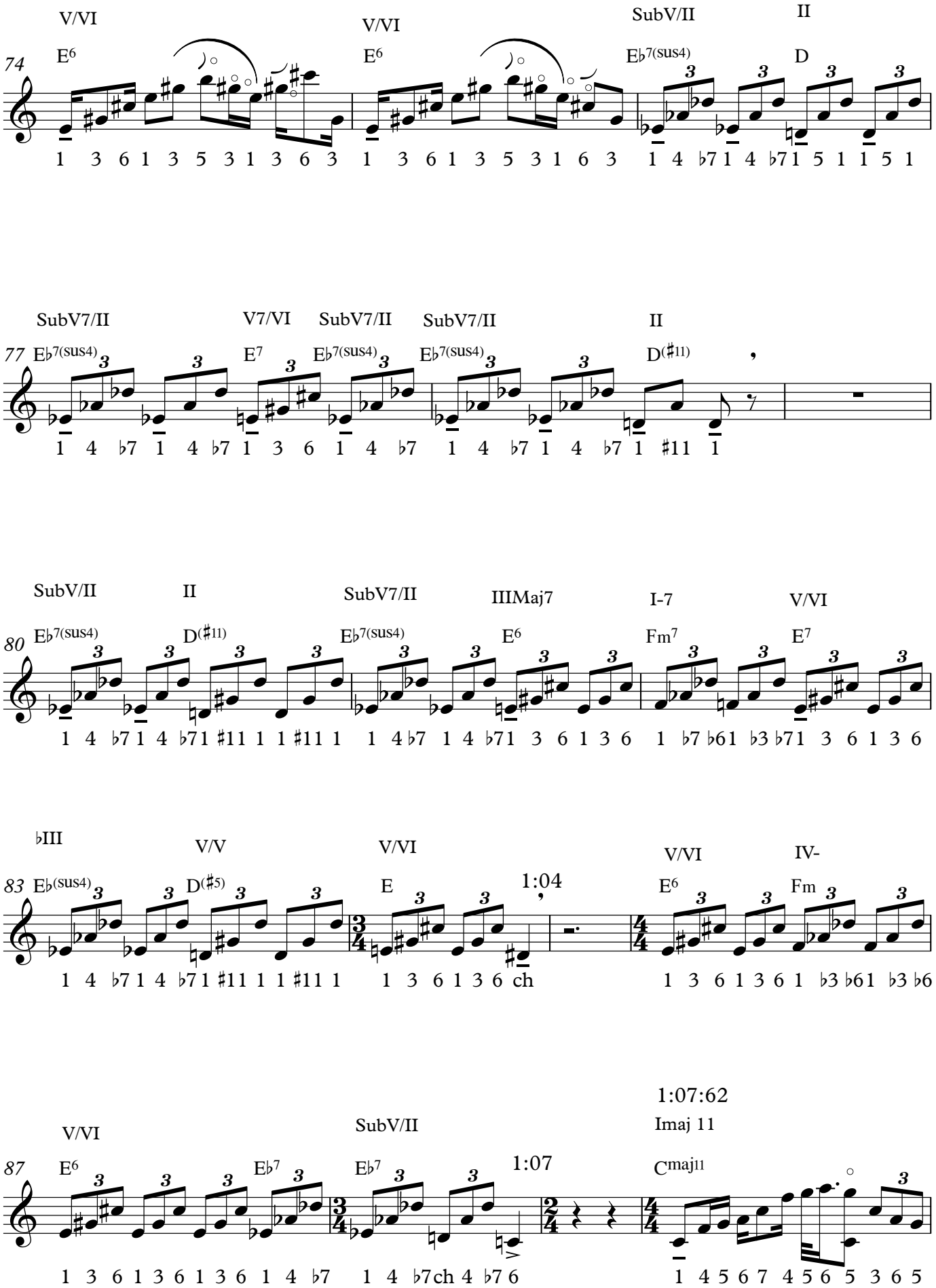


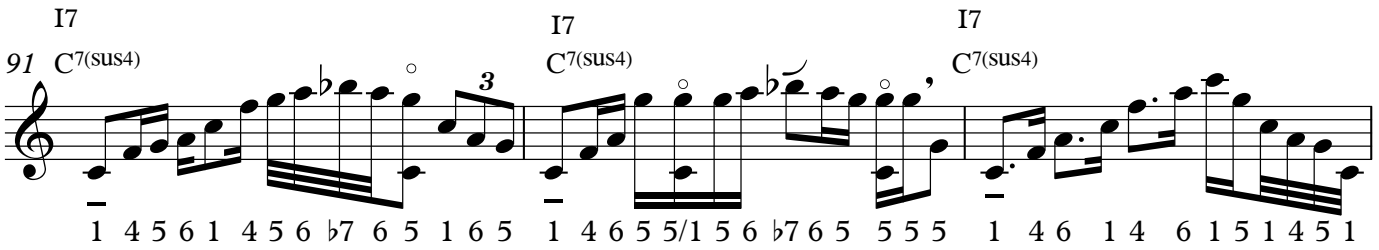

12
♭III
E♭(♯11)
V/V
D(sus4)
♩=248
Slightly Faster
V/V
D(sus4)
1 2 3 ♯11 6 1 2 3 ♯11 2 1 6 ♯11 3 1 4 5 ♭7 1 4 5 ♭7 4 1♭7 5 4 1 4 5 ♭7 1 4 5 ♭7 4 1 ♭7 5
15
V/V
D(sus4)
V/V
D(sus4)
Faster ♩=384
V/VI
E7(♭13/♯9)
1 4 5 ♭7 1 4 5♭7 4 1♭7 5 4 1 4 5 ♭7 1 4 5 4 1 4 1 #9 ♭13 1 3 5 3 1 3♭13 3
18
V/VI
E7(♭13/♯9)
V/VI
E7(♭13/♯9)
V/VI
E7(♭13/♯9)
1 #9 ♭13 1 #9 3 #9 1 5 3 1 1 3 ♭13 1 #9 3 1 5 3 1 3 ♭13 1 2 2 #9 1 5 3
21
IV-7
Fm7
IV-7
Fm7
IV-7
Fm
1 ♭3 5 1 1 3 ♭3 1 5 ♭3 1 ♭3 5 1 2 ♭3 1 5 ♭3 1 ♭3 5 1 2 ♭3 1 5 ♭3
24
IV-7
Fm
Sub V/V/III
D7/F♯
D7/F♯
1 ♭3 5 1 2 ♭3 1 5 ♭3 3 #4 ♭7 3 #11 5 #11 3 ♭7 #11 3 #11 ♭7 3 #11 5 #11 3


27
V/V
D7/F♯
3 ♯11 ♭7 3 ♯11 5 ♯11 3 ♭7 ♯11
V/V
D7/F♯
3 ♯11 ♭7 3 ♯11 5 ♯11 3 ♭7
I
C
5
30
IVmaj
F
1 2 5 1 2 3 2 1 5 2
IVmaj
F
1 2 5 1 2 3 2 1 5 2
IVmaj
F
1 2 5 1 2 3 2 1 5 2
33
IVm
Fm
1 ♭3 5 1 2 ♭3 2 1 5 3
♭II
D♭
3 5 1 3 5 1 5 3 1 5
♭II
D♭7
3 5 1 3 5 ♭7 ♭5 3 1 5
36
♭II
D♭
1 ♭3 1 3 5 1 5 3 1 5
♭II (D♭ first inversion)
D♭/F
3 5 1 3 5 1 7 ch 5 ch 7 1
♭II
D♭/F
3 5 1 3 5 1 3 ♭6 1 2 1 2
39
♭II
D♭(♯11)
1 3 ♯11 1 ♯11 1 ♯11 3 ♯11
♭II
D♭(♯11)
1 3 ♯11 1 ♯11 3 ♯11
IV
F
1

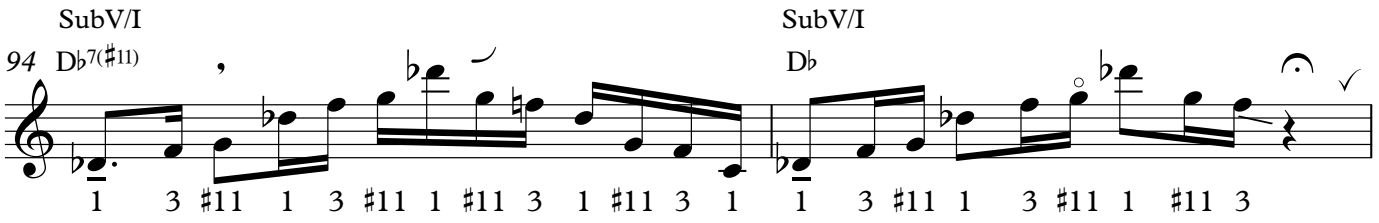

42
♭II
D♭/F
45
48
52
SubV/II
E♭7(sus4)
V/III
B
55
V/V
D
Incresingly Timbral


58
V/V
D
Timbral
SubV/II
E♭7(sus4)
SubV/II
E♭7(sus4)
SubV/II
E♭7(sus4)
1 #11 6 1 #11 1 6 2 6 1 4 ♭7 4 #11 ♭13 4 1 ♭7 4 1 4 ♭7 1 1
62
SubV7/II
E♭7(sus4)
SubV7/II
E♭7(sus4)
V/VI
E6
4 ♭13 1 4 ♭13 4 1 ♭13 4 1 4 ♭13 1 4 ♭13 4 5 1 4 1 3 6 1 3 6 3 1 6 3
65
V/VI
E6
V/VI
E6
V/VI
E6
1 3 6 1 3 6 3 1 6 3 1 3 6 1 3 6 3 1 3 6 1 3 6 1 3 6 3 1 6 3
68
SubV/I
D♭/F
SubV/I
D♭/F
V/VI
E6
3 5 1 3 5 ♭7 5 3 1 5 3 5 1 3 5 1 5 3 1 3 6 1 3 6 3 1 6 3
71
V/VI
E6
IV-6
Fm6
IV-6
Fm6
1 3 6 1 3 5 3 1 6 3 1 ♭3 ♭6 1 ♭3 ♭6 ♭3 1 ♭6 ♭3 1 ♭3 ♭6 1

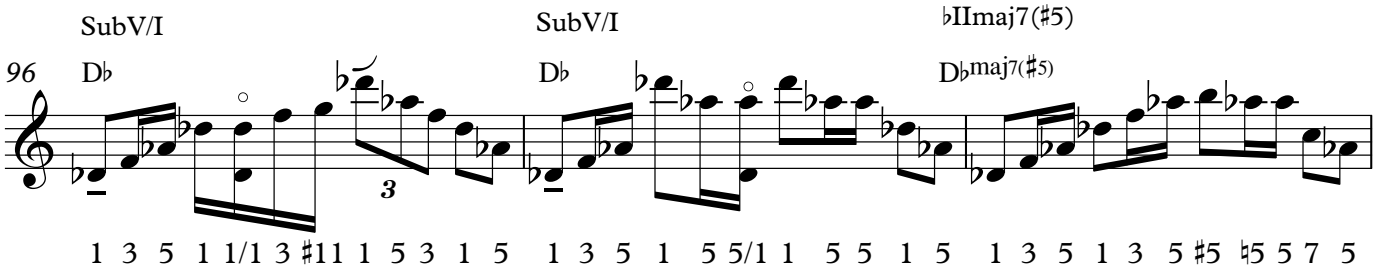

74
V/VI
E6
1 3 6 1 3 5 3 1 3 6 3
V/VI
E6
1 3 6 1 3 5 3 1 6 3
SubV/II
Eb7(sus4)
1 4 b7 1 4 b7 1 5 1 1 5 1
II
D
77
SubV7/II
Eb7(sus4)
1 4 b7 1 4 b7 1 3 6 1 4 b7
V7/VI
E7
SubV7/II
Eb7(sus4)
1 4 b7 1 4 b7 1 3 6 1 4 b7
SubV7/II
Eb7(sus4)
1 4 b7 1 4 b7 1 4 b7
II
D(#11)
1 4 b7 1 4 b7 1 #11 1
80
SubV/II
Eb7(sus4)
1 4 b7 1 4 b71 #11 1 1 #11 1
II
D(#11)
SubV7/II
Eb7(sus4)
1 4 b7 1 4 b71 3 6 1 3 6
IIIMaj7
E6
I-7
Fm7
1 b7 b61 b3 b71 3 6 1 3 6
V/VI
E7
83
bIII
Eb(sus4)
1 4 b7 1 4 b71 #11 1 1 #11 1
V/V
D(#5)
V/VI
E
1 3 6 1 3 6 ch
1:04
V/VI
E6
1 3 6 1 3 6 1 b3 b61 b3 b6
IV-
Fm
87
V/VI
E6
1 3 6 1 3 6 1 3 6 1 4 b7
Eb7
Eb7
1 4 b7ch 4 b7 6
SubV/II
1:07
1:07:62
Imaj 11
Cmaj11
1 4 5 6 7 4 5 6 5 3 6 5



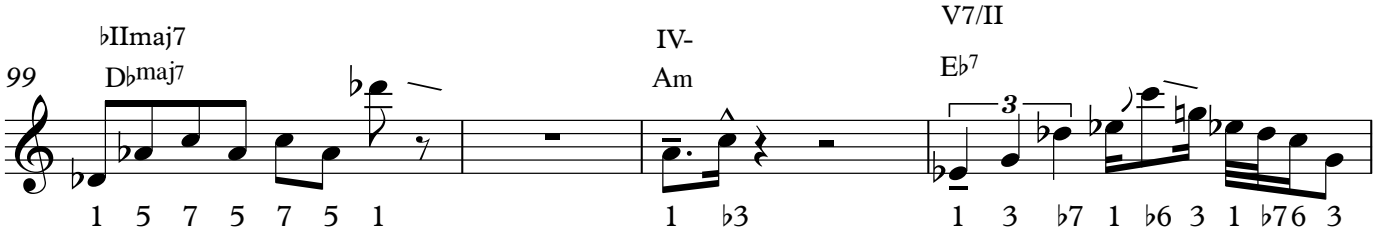
1:10:68



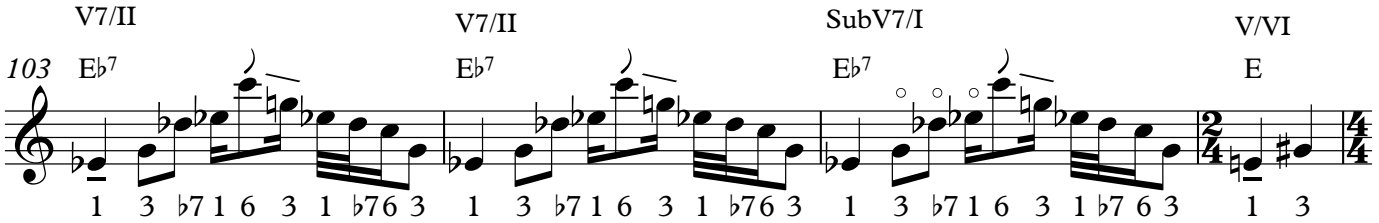
1:12:84



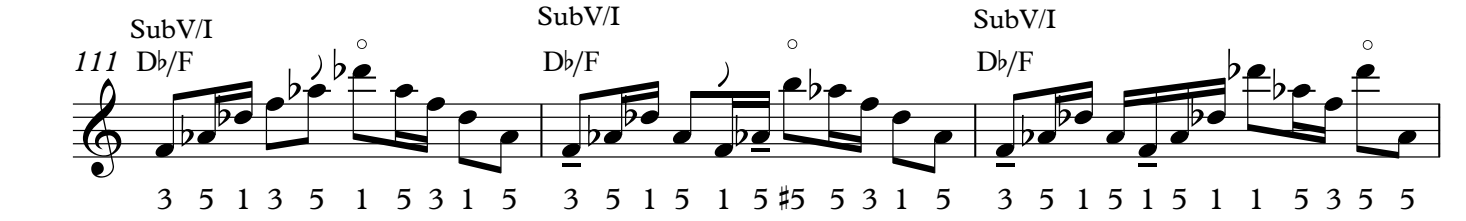
1:16

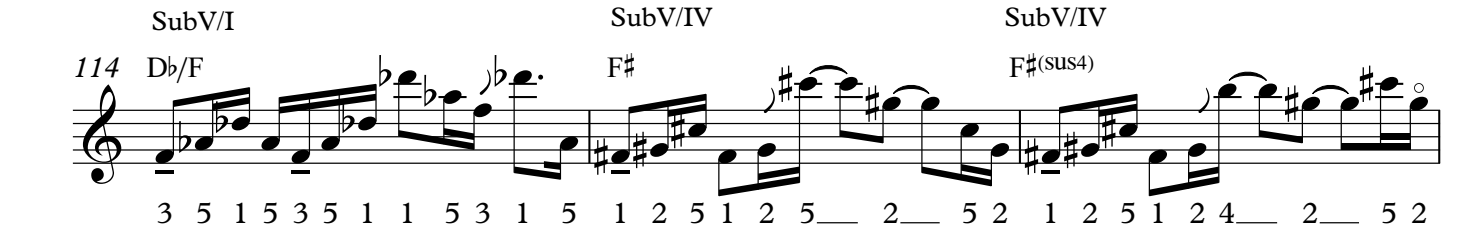


1:19:55



1:22:45

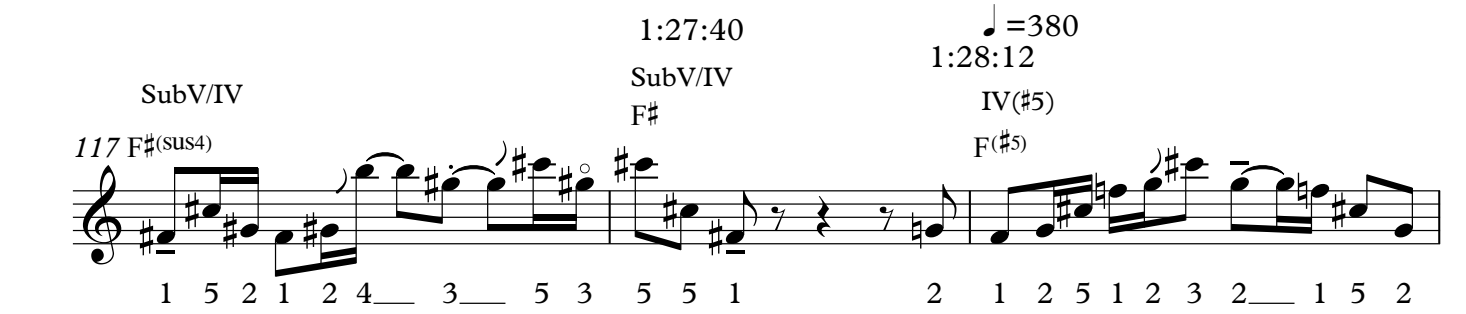


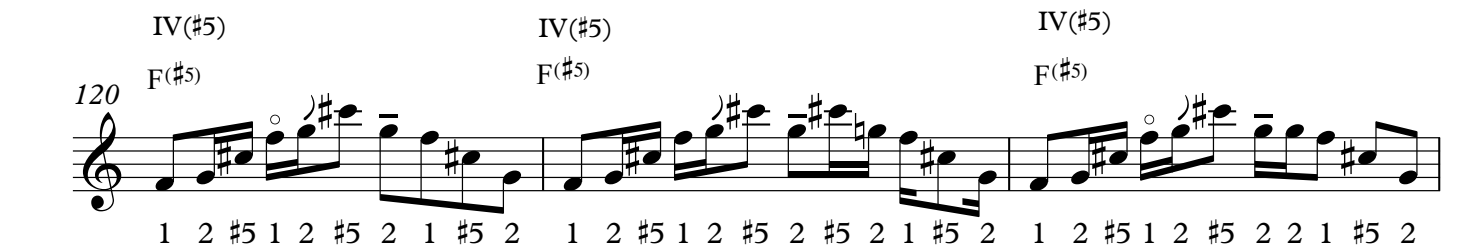


1:27:40

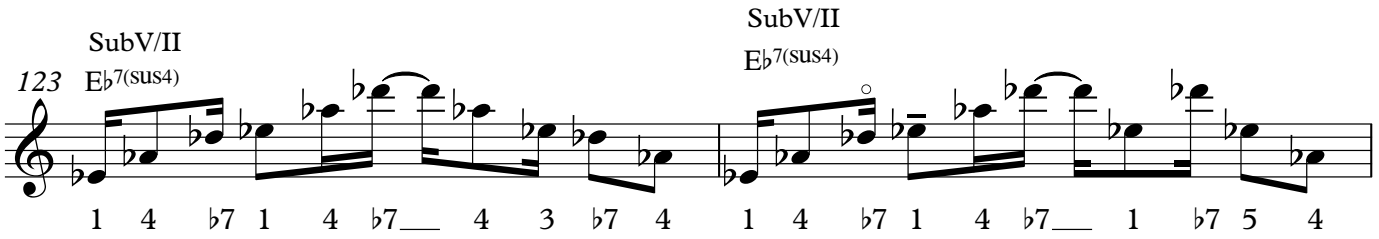
♩ =380

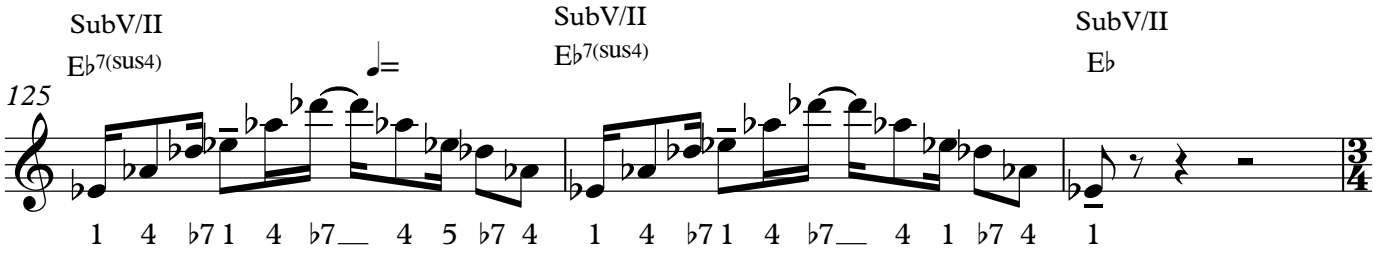
1:28:12



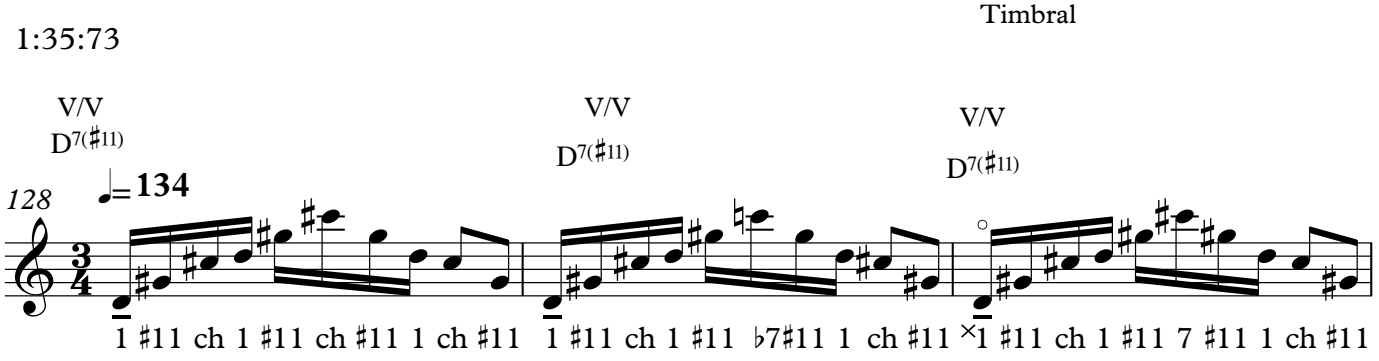


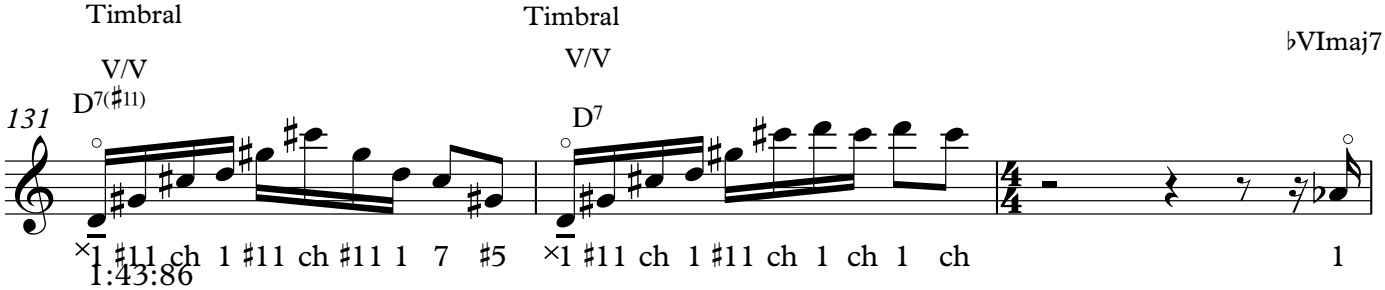
1:30:96



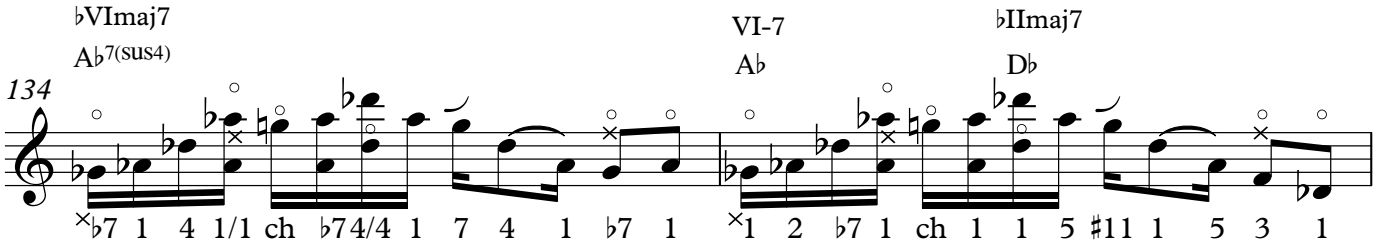


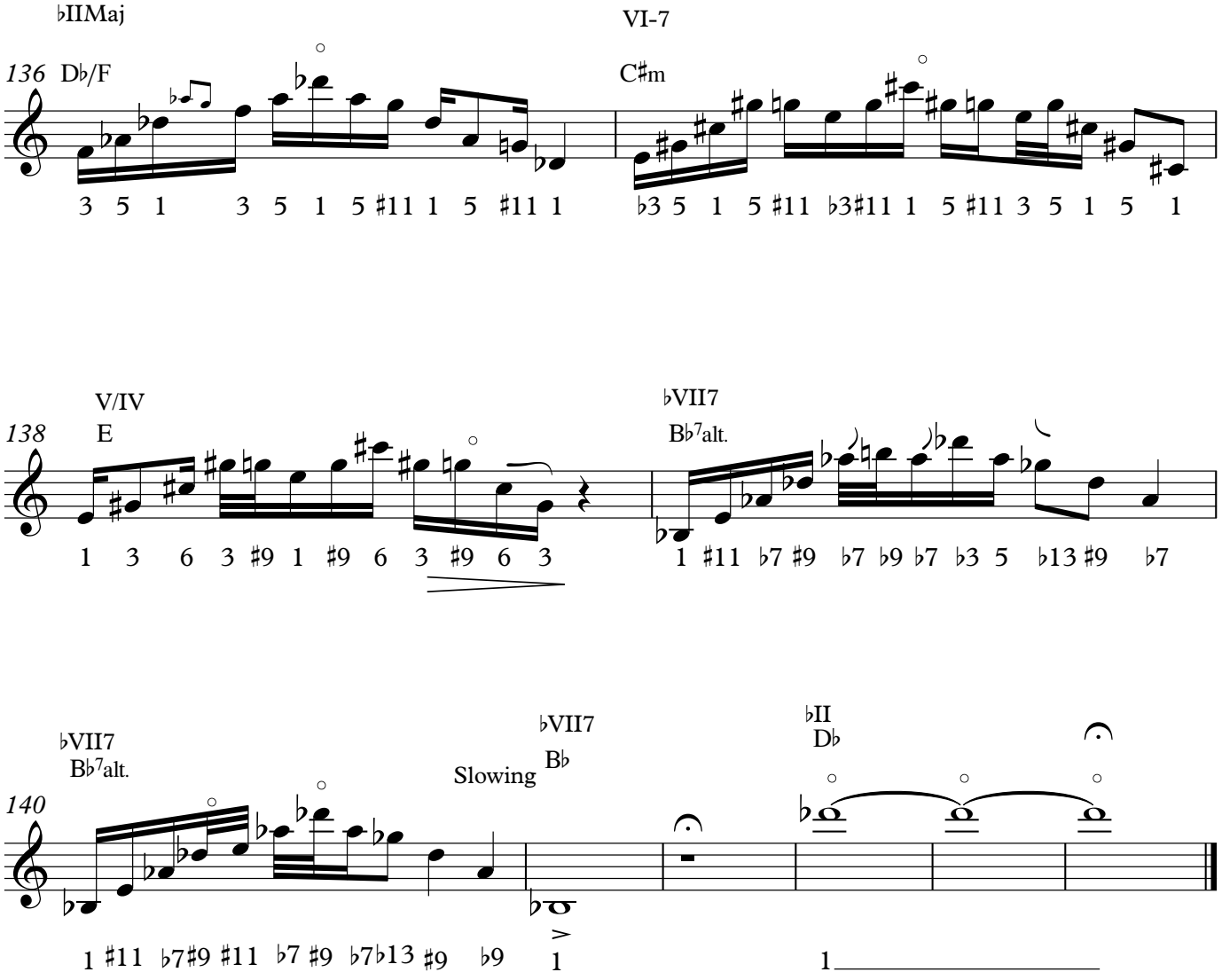
1:35:73





1:43:86




136
♭IIMaj
D♭/F
VI-7
C♯m
3 5 1 3 5 1 5 ♯11 1 5 ♯11 1
♭3 5 1 5 ♯11 ♭3♯11 1 5 ♯11 3 5 1 5 1
138
V/IV
E
♭VII7
B♭7alt.
1 3 6 3 ♯9 1 ♯9 6 3 ♯9 6 3
1 ♯11 ♭7 ♯9 ♭7 ♭9 ♭7 ♭3 5 ♭13 ♯9 ♭7
140
♭VII7
B♭7alt.
Slowing
♭VII7
B♭
♭II
D♭
1 ♯11 ♭7♯9 ♯11 ♭7 ♯9 ♭7♭13 ♯9 ♭9
1
1

Improvisation Track ID: 4-6 Fiona Burnett Soprano Saxophone

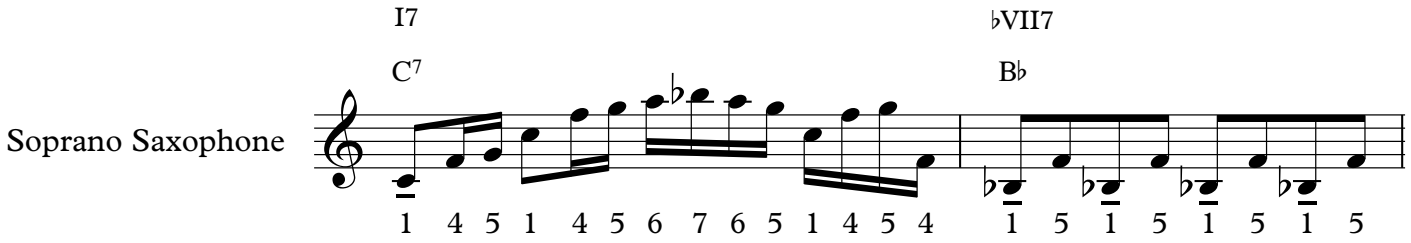
Duration: 1'45"

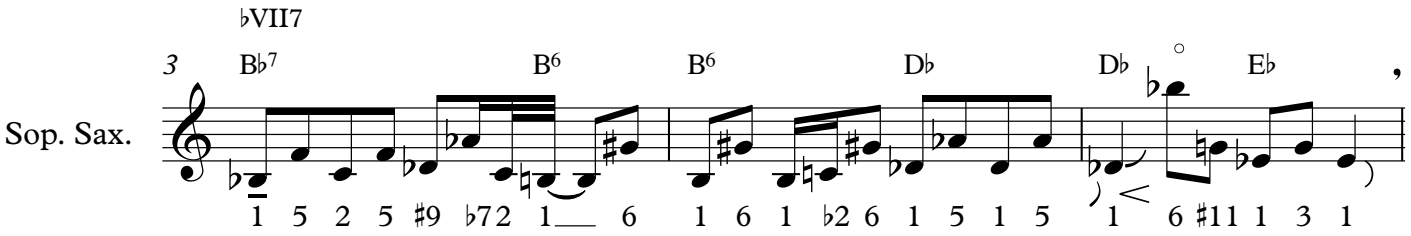
Transcription Transposed fpr Bb Soprano Saxophone

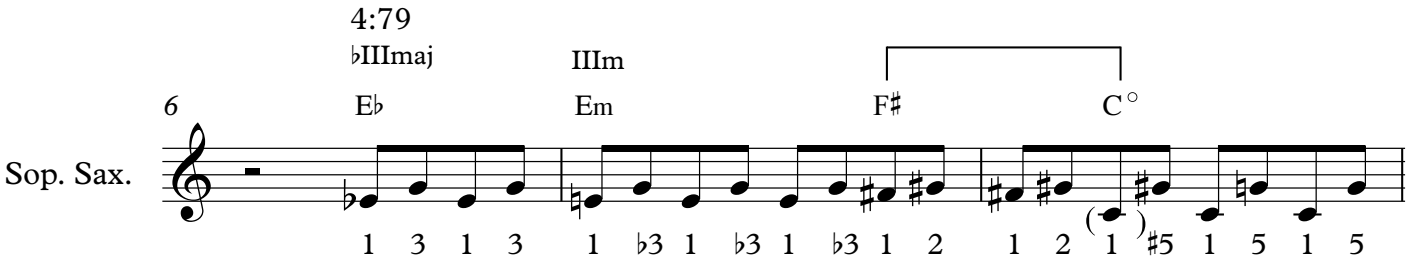
Improvisation Example 3

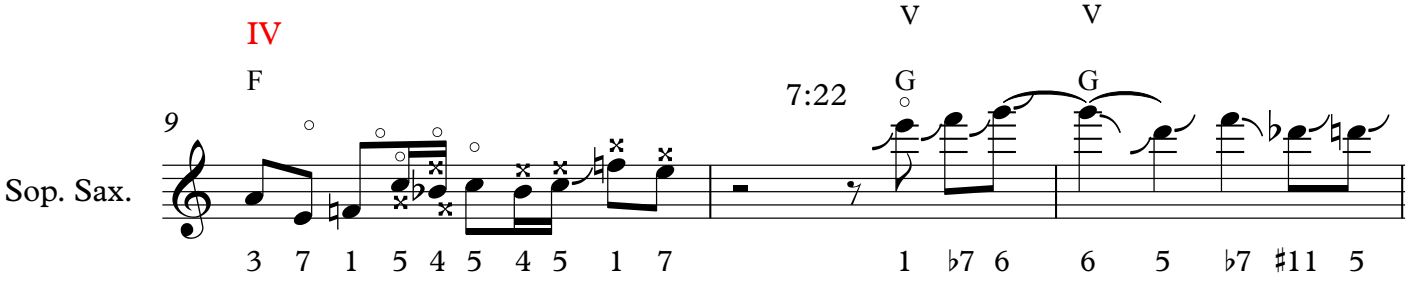
Improvisation Track ID: 4-6 Transcription for Bb Soprano Saxophone

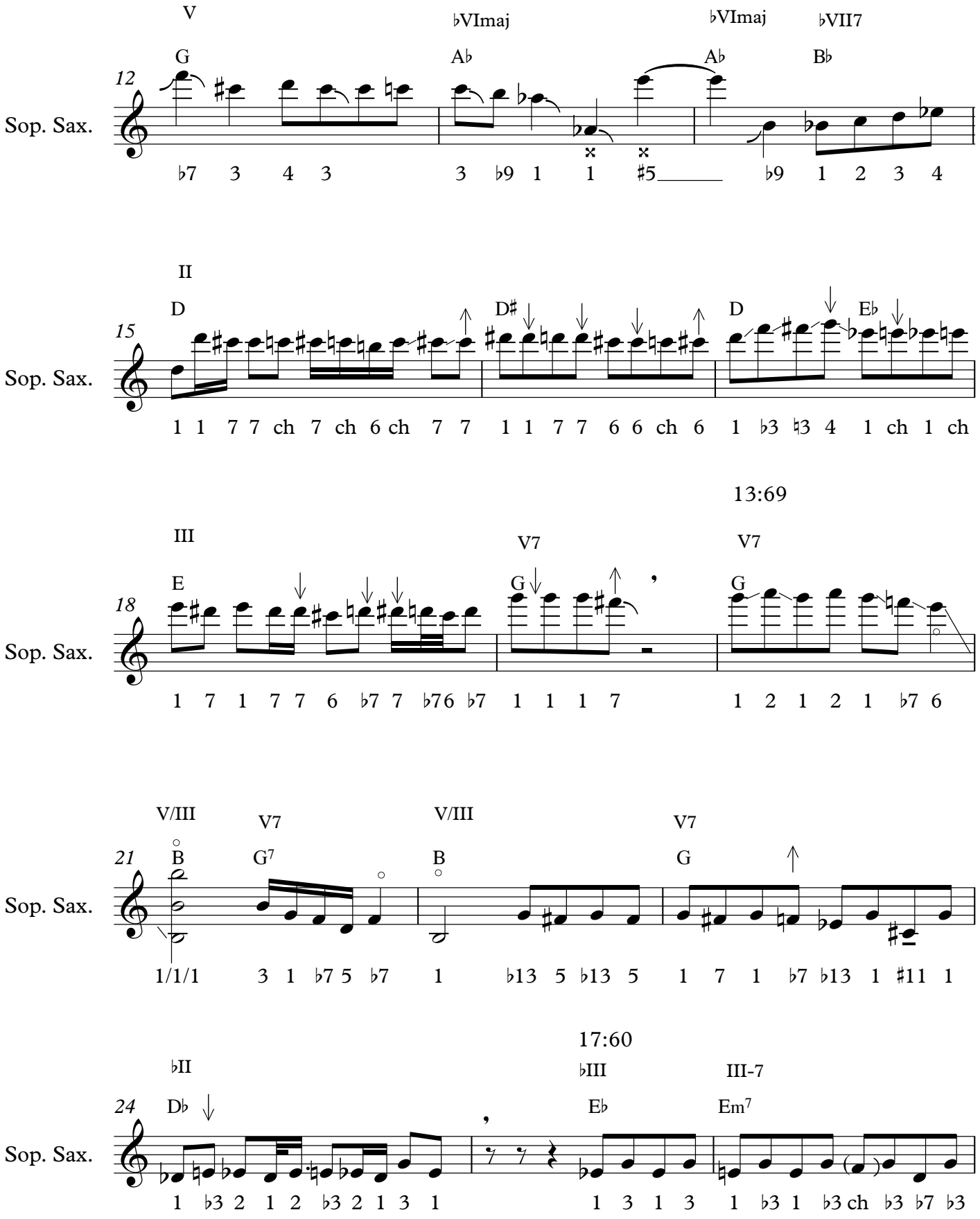
♩ = 340

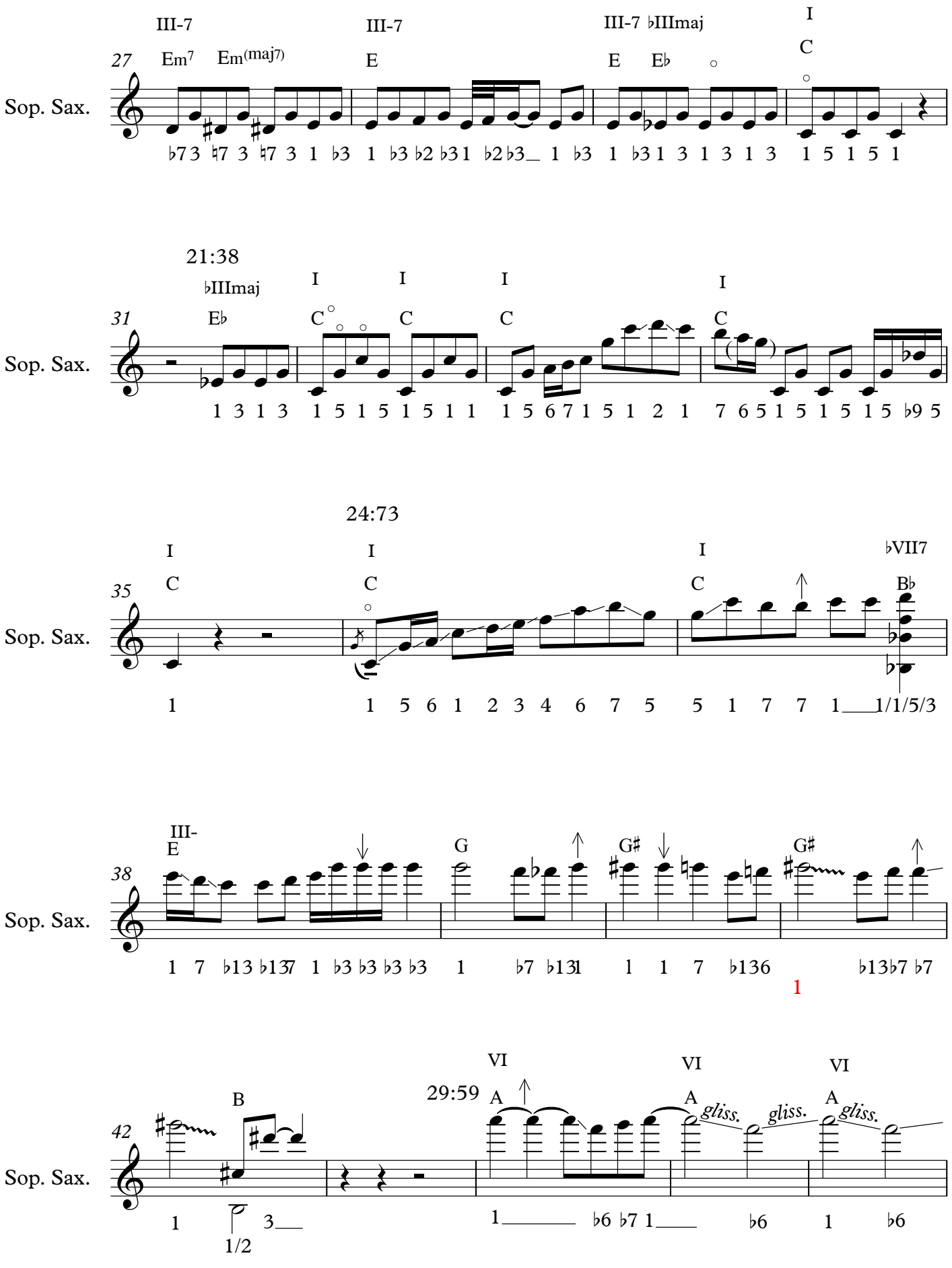




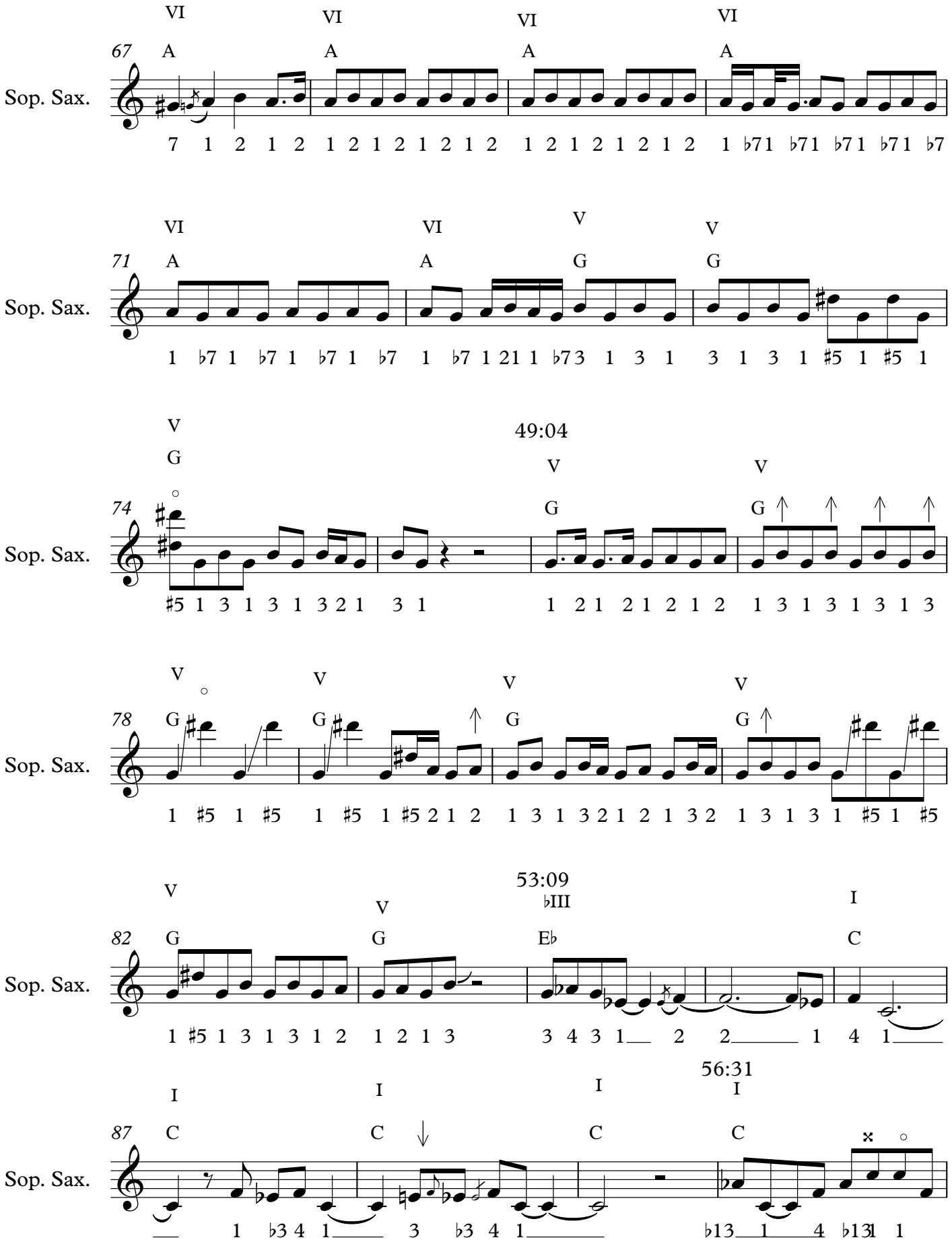


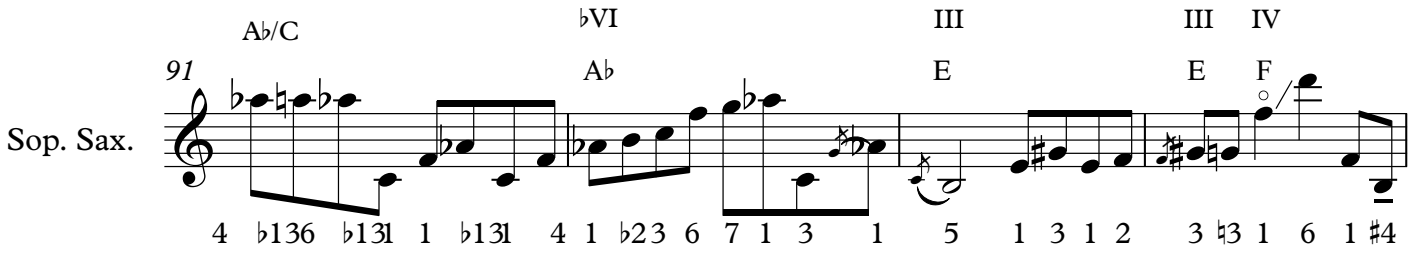



V
G
♭VImaj
A♭
♭VImaj
A♭
♭VII7
B♭
12
Sop. Sax.
♭7 3 4 3
3 ♭9 1 1 #5
♭9 1 2 3 4
II
D
D♯
D
E♭
15
Sop. Sax.
1 1 7 7 ch 7 ch 6 ch 7 7 1 1 7 7 6 6 ch 6 1 ♭3 ♮3 4 1 ch 1 ch
13:69
III
E
V7
G
V7
G
18
Sop. Sax.
1 7 1 7 7 6 ♭7 7 ♭76 ♭7 1 1 1 7 1 2 1 2 1 ♭7 6
V/III
B
V7
G7
V/III
B
V7
G
21
Sop. Sax.
1/1/1 3 1 ♭7 5 ♭7 1 ♭13 5 ♭13 5 1 7 1 ♭7 ♭13 1 ♯11 1
17:60
♭II
D♭
♭III
E♭
III-7
Em7
24
Sop. Sax.
1 ♭3 2 1 2 ♭3 2 1 3 1 1 3 1 3 1 ♭3 1 ♭3 ch ♭3 ♭7 ♭3


III-7
III-7
III-7 ♭IIImaj
I
27
Em7
Em(maj7)
E
E
E♭
C
Sop. Sax.
21:38
♭IIImaj
I
I
I
I
31
E♭
C
C
C
C
Sop. Sax.
24:73
I
I
I
♭VII7
35
C
C
C
B♭
Sop. Sax.
1/1/5/3
III-
E
G
G♯
G♯
38
Sop. Sax.
1
29:59
VI
VI
VI
B
A
A
A
gliss.
gliss.
gliss.
42
Sop. Sax.
1/2

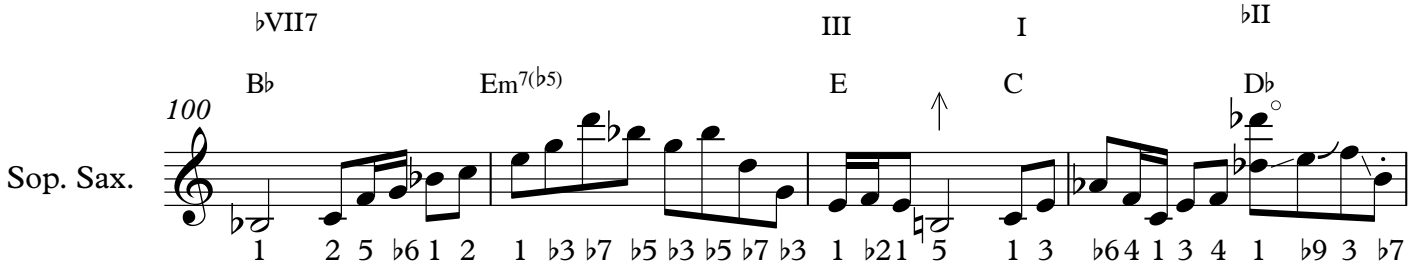
Improvisation Track ID: 4-6 Transcription for Bb Soprano Saxophone

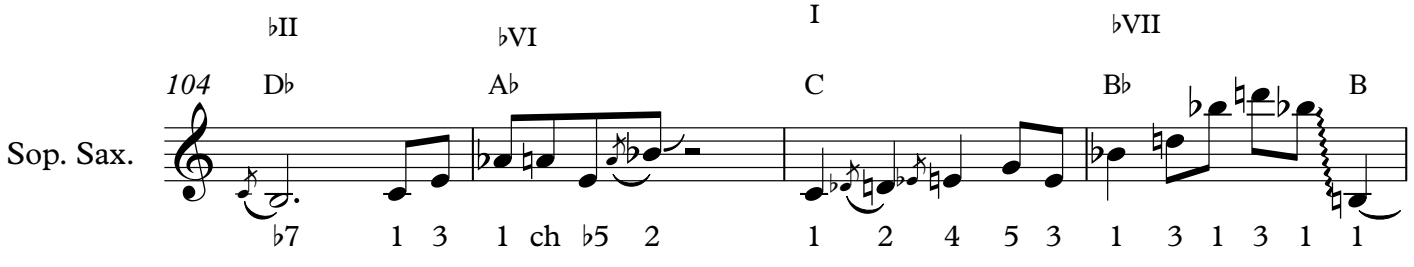

67
VI A
VI A
VI A
VI A
Sop. Sax.
7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 ♭71 ♭71 ♭7 1 ♭7 1 ♭7
71
VI A
VI A
V G
V G
Sop. Sax.
1 ♭7 1 ♭7 1 ♭7 1 ♭7 1 ♭7 1 21 1 ♭7 3 1 3 1 3 1 3 1 ♯5 1 ♯5 1
74
V G
49:04
V G
V G
Sop. Sax.
♯5 1 3 1 3 1 3 2 1 3 1 1 2 1 2 1 2 1 2 1 3 1 3 1 3 1 3
78
V G
V G
V G
V G
Sop. Sax.
1 ♯5 1 ♯5 1 ♯5 1 ♯5 2 1 2 1 3 1 3 2 1 2 1 3 2 1 3 1 3 1 ♯5 1 ♯5
82
V G
53:09
V G
♭III E♭
I C
Sop. Sax.
1 ♯5 1 3 1 3 1 2 1 2 1 3 3 4 3 1 2 2 1 4 1
87
I C
I C
I C
56:31
I C
Sop. Sax.
1 ♭3 4 1 3 ♭3 4 1 ♭13 1 4 ♭13 1 1


A♭/C ♭VI III III IV
91
A♭ E E F
Sop. Sax.
4 ♭136 ♭131 1 ♭131 4 1 ♭23 6 7 1 3 1 5 1 3 1 2 3 ♮3 1 6 1 ♯4

1:00:41


IVmaj ♭VII7 IIIm III
95
F B♭ Em E
Sop. Sax.
1 2 3 ♯4 1 2 1 1 ♭3 4 ♭6 ♭7 1 5 ♭7 1 ♭7 5 5 ♭6


♭VII7 III I ♭II
100
B♭ Em7(♭5) E C D♭
Sop. Sax.
1 2 5 ♭6 1 2 1 ♭3 ♭7 ♭5 ♭3 ♭5 ♭7 ♭3 1 ♭2 1 5 1 3 ♭6 4 1 3 4 1 ♭9 3 ♭7

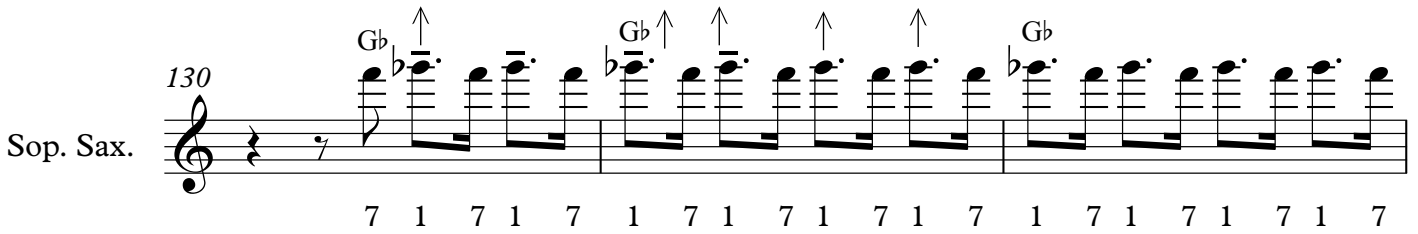

♭II ♭VI I ♭VII
104
D♭ A♭ C B♭ B
Sop. Sax.
♭7 1 3 1 ch ♭5 2 1 2 4 5 3 1 3 1 3 1 1

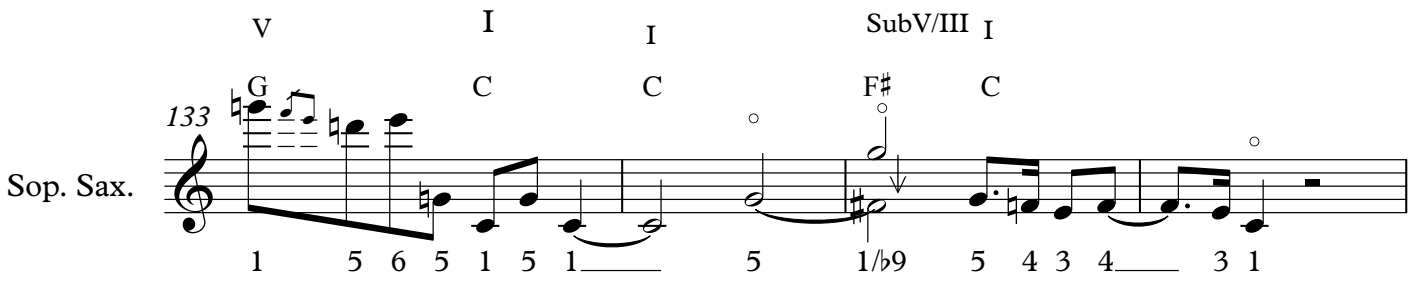
1:08:86


♭II ♭III SubV/III ♭III
108
D♭ E♭ F7 E♭
Sop. Sax.
1 1 5 1 5 ♯11 3 1 1 2 3 5 ♭7 1 2 3 2 1 6 ♯11 3 1

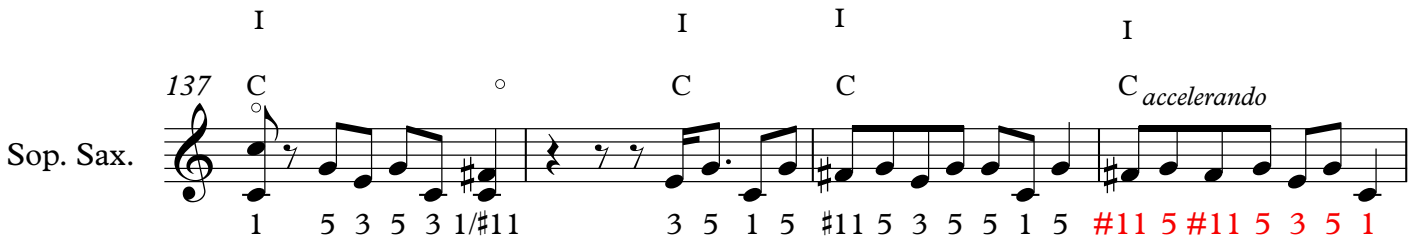

SubV/III
♭IIImaj
SubV/III
♭IIImaj
♭IIImaj
112
F7
E♭
F7
E♭
E♭
Sop. Sax.
1 2 3 5 ♭7 1 2 3 2 1 6 ♯11 3 1 1 2 3 5 1 6 ♯11 3 1 2 3 ♯11 6 1 3
1:13:29
III-7
♭VImaj
♭VImaj
116
Em
A♭
E
A♭+
Sop. Sax.
♯11 1 ♭3 1 ch 3 1 1 4 1 ♯5 3 1 ♯5 1 3 ♯5 1 ch
♭VImaj
V/VI
V/VI
V-7
119
A♭
E(sus4)
E
Gm
1:17:22
Sop. Sax.
1 1 ch 1 ♭13 1 4 1 4 1 1 3 ♭9 1 5 ♭13 3 ♭9 1 1 ♭21 ♭7 1 ♭3 6
1:18:20
♭VII7
♭VII7
V
V
122
B♭
B♭
G
G
Sop. Sax.
1 6 1 4 6 1 ♭3 1 4 6 4 1 7 1 7 1 5 6 6 2 4 5 4 1
VI-
I-7
VI-
V/III
♭II
VI/III
V/III
Am
Cm
Am
A
D♭
A
A
126
Sop. Sax.
1 ♭3 4 ♭3 ♭7 1 ♭3 2 1 ♭3 4 ♭3 1 5 ♮3 4 ♮3 1 ch 3 1 3 1 3 1 3 1 3 1 3 ♭9

1:22:20

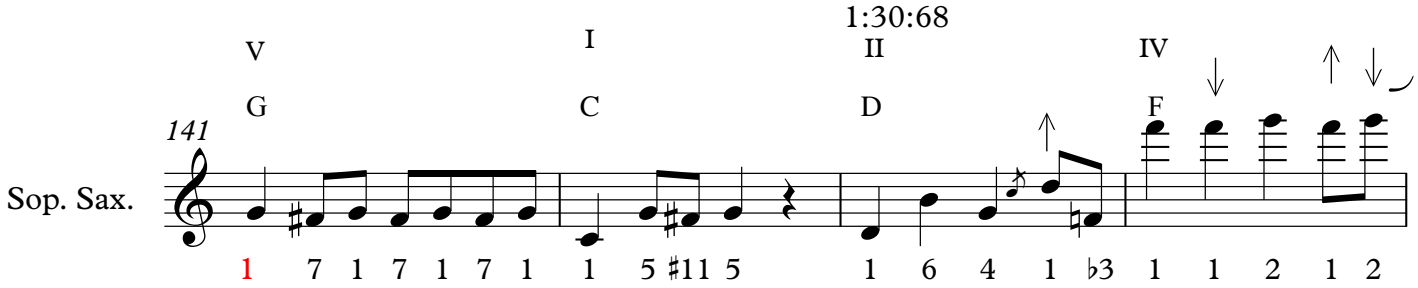


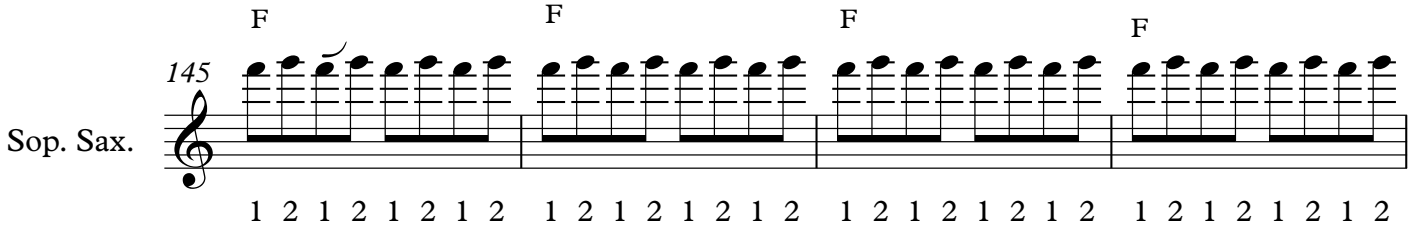


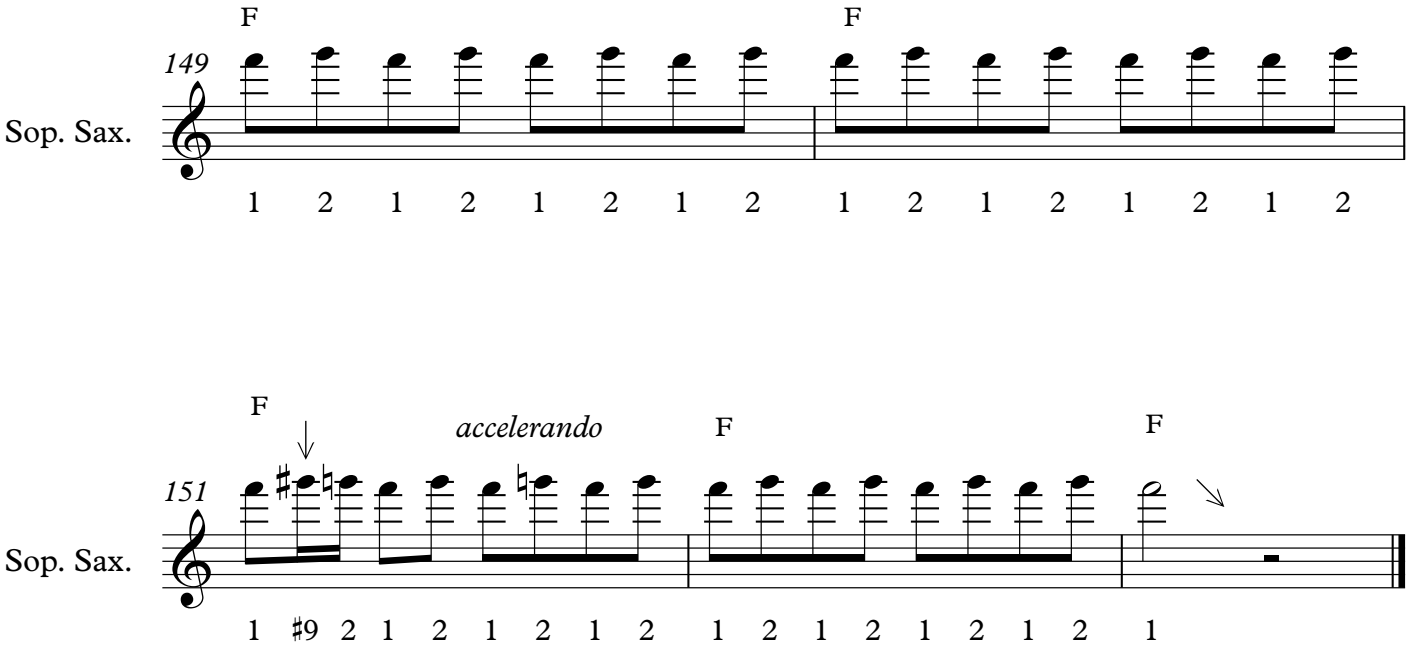
1:26:33 1:27



1:30:68






F
F
149
Sop. Sax.
1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
F
accelerando
F
F
151
Sop. Sax.
1 #9 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1