

THE STYLISTIC DIVERSITY OF THE CONCERT SAXOPHONE

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ABSTRACT

This thesis examines the sonic parameters and musical versatility of the concert saxophone. Invented in 1840, the instrument failed to become a regular member of the symphony orchestra, and is thus underrepresented in classical music. This researcher argues that the saxophone's unique sonic design makes it an effective contemporary instrument in a wide variety of genres. Specifically, the techniques of subtone, harmonics, and false fingerings are examined from both a performance and compositional perspective. Additionally, the instrument's resemblance to the human voice is documented.

An examination of five original saxophone compositions highlights the instrument's flexibility as a solo instrument or as a member of an ensemble. This work adds to the number of original compositions for the saxophone and explores the reasons behind the instrument's success in contemporary music.

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INTRODUCTION

The saxophone was invented in 1840 by Belgian instrument maker Adolphe Antoine Sax (1814-1894). As a result of its late arrival, the instrument is underrepresented in classical music. Several celebrated composers, however, extolled the benefits of the new instrument when it appeared in mid-nineteenth century Paris. Master French composer Hector Berlioz (1803-1869) praised the instrument's tonal attributes and affinity with the human voice in the influential *Journal des Débats*:

It [the saxophone] cries, sighs and dreams. It possesses a crescendo and can gradually diminish its sounds until it is only an echo of an echo of an echo - until its sounds become crepuscular (Berlioz 1851, 2).

Prominent Italian opera composer Gioacchino Rossini proclaimed: “the saxophone “produce[s] the finest blending of sound that I have met with” (1848, 4). Even with such praise, only a handful of prominent nineteenth century compositions feature the saxophone¹.

As Berlioz suggested, the saxophone's tone resembles the human voice and is thus capable of wide variation. Eminent saxophone virtuoso Jean-Marie Londeix describes the sonic design of the instrument in his book, *Parameters of the Saxophone*:

Its most original expression is found in the variety and the flexibility of its dynamic possibilities; the variety of its tone quality and the diversity of its type of attack. Even more notable is the instrument's astonishing facility in playing extremely wide intervals . . . and in playing sounds and noises unique and peculiar to the saxophone (Londeix 1989, 1).

The “sounds and noises peculiar to the saxophone” include subtone, harmonics, and false fingerings. These musical idiosyncrasies enable the saxophone to be effective in a variety

¹ Arguably the two most important nineteenth century orchestral compositions which feature the saxophone are Georges Bizet's *l'Arlésienne Suite No. 1* (1872) and Jules Massenet's *Hérodiade* (1877).

of musical genres.

The instrument's sonic design will be examined in the context of an original collection of saxophone chamber music: 1) *Incantation and Dance for Solo Alto Saxophone*, 2) *Drop, Drop Slow Tears for Choir and Tenor Saxophone*, 3) *Kyrie for Choir, Alto Saxophone and Organ*, 4) *Three Moods for Soprano Voice, Alto Saxophone and Piano*, 5) *A Klezmer Colour for Saxophone Quartet*. For each original work, I will discuss other compositions or musical styles which influenced me. By examining the saxophone in a diversity of musical settings, I will highlight its stylistic versatility and contribute to the repertoire of contemporary saxophone compositions.

CHAPTER 1

INCANTATION AND DANCE FOR SOLO ALTO SAXOPHONE

Incantation and Dance for Solo Alto Saxophone (Appendix 1, 48-51) is a work for unaccompanied saxophone which is organized into two contrasting sections. As the title suggests, the work begins in a solemn and ceremonial fashion and concludes with a joyous and energetic dance. The composer's challenge is to keep the listener's interest in the single melodic line. The saxophone's vocality and timbral flexibility make it an effective instrument of choice for an unaccompanied work. The composition features extreme dynamics (louds and softs), frequent changes of tessitura, subtone, and harmonics.

Structurally and aesthetically, *Incantation* was influenced by Claude Debussy's (1862-1918) *Syrinx* (1913), a composition for solo flute. The work musically depicts the shepherd-god Pan, who unsuccessfully pursues the woodland nymph Syrinx. In his sadness, Pan fashions a flute made from a nearby bed of reeds and plays a lament (Heinemann 1994, 3). *Syrinx* is structured around a chromatic motif which is repeated numerous times in different octaves, and dynamic levels:

Figure 1: Flute, *Syrinx* (Debussy), m. 1



From this opening motif, Debussy creates several new ideas which are rhythmically or melodically similar to the original. For example in measure 13, a motif occurs which is repeated three times on different pitch levels:

Debussy utilizes a number of flute techniques in *Syrinx*. He employs legato phrases of varying lengths and tenuto and accent articulations to punctuate key points in the work. Grace notes and trills are used to call attention to changes in texture or structurally important places. He also uses a restricted range of dynamics from *p* (soft) to *mf* (medium loud). These parameters of flute performance help to give the work a particular sonic design, which was an important musical consideration to Debussy and other twentieth century French composers such as Maurice Ravel (1875-1937), and Paul Dukas (1865-1935).

Like *Syrinx*, *Incantation*'s opening motif appears numerous times at different pitch and dynamic levels:

Figure 3: Alto saxophone, *Incantation*, m. 1



The motif's ascending perfect fifth interval evokes a mystical quality. The sound of the fifth is associated with the earliest Western music, as well as the music of other cultures.

Yehudi Menuhin sheds light on the universality of this interval in *The Music of Man*:

Our scale system was probably derived from the circle of fifths . . . So far as we know, the Chinese were the first to examine the relationship between fifths. Surviving documents, predating 3000 BC, show the importance to them of these relationships . . . The discovery of the circle of fifths was a great one to the Chinese, for they honour the number as sacred (1986, 29).

The ensuing semitone from D-C# creates a melodic ambiguity by transforming the sound of the opening fifth (G-D) into the tritone (G-C#). The motif's chromatic aspect resembles the melodic language of *Syrinx*'s opening motif which consists of several semitones.

Incantation's sixteenth note triplet in its opening motif creates a rhythmic interest often associated with the melismatic style of ancient synagogue chant. In his recent book, *What to Listen for In Jewish Music*, musicologist Charles Heller defines melisma in the context of Jewish cantillation as "a melodic flourish, with many notes sung to a single syllable" (Heller 2006, 100). The following fragment of Jewish chant, which also outlines the perfect fifth interval, influenced the creation of *Incantation*:

Figure 4: Ashkenazic Temple Chant (Idelsohn 1948, 85)



As in Debussy's *Syrinx*, the treatment of the chant motif plays an important role in *Incantation's* continuity. The motif is inverted, transposed to the saxophone's high register, and marked forte. These three permutations of the original idea transform the mood from one of introspection to emotional fervour:

Figure 5: Alto saxophone, *Incantation*, m. 6



The triplet sixteenth idea becomes the basis of a new motif at measures 19-20. This melodic strand, which is based on the whole tone scale, serves to restore the contemplative mood, and creates a spontaneous atmosphere resembling Debussy's work:

Figure 6: Alto saxophone, *Incantation*, m. 19



Figure 7: Alto saxophone, *Incantation*, m. 32



After the descent, the chant concludes with a passage framed by the movement's opening motif. The return to the opening helps to define the movement's ternary (A-B-A) structure. The further descent into the saxophone's bottom register is a contrast to the boisterous quality of the forthcoming *Dance*.

Incantation also uses a distinctive set of parameters for the saxophone. Like *Syrinx*, the melodic texture is primarily legato, with articulations such as tenuto and accent. There are, however, timbral variations which serve to increase the saxophone's sound palette and highlight important musical events. For example, the frequent use of subtone contributes to the mystical quality of *Incantation*. Subtone obfuscates the saxophone tone, creating a sense of mystery. French saxophonists Claude Delangle and Jean-Denis Michat describe the subtone technique in their essay, *The Contemporary Saxophone*:

A surprisingly soft sound can be obtained in the low register with the use of subtone; lower jaw pressure is replaced by the tongue . . . the tongue lightly touching the reed . . . the reed is partially prevented from vibrating and the upper partials are subdued (Delangle and Michat 1998, 175).

The use of subtone in *Incantation* occurs in the saxophone's lowest register. In order to provide tonal contrast, the subtone technique often echoes material first played with conventional saxophone tone. In measures 9-10, melodic repetition is enhanced by timbral variation:

Figure 8: Alto saxophone, *Incantation*, mm. 9-10



The subtone technique gives the saxophone sound an amorphous quality which contributes to the effect of an incantation.

The technique of harmonic fingerings also adds timbral variation and helps to pinpoint areas of structural importance within the work. Harmonics occur naturally above the saxophone's fundamental pitches. The saxophonist can produce harmonics by overblowing the instrument and using alternate fingerings – rather than utilizing the saxophone's octave key and standard fingering set. According to Don Ashton, the saxophone's shape enables the player to easily produce the harmonics:

The use of a conical tube renders the sound wave richly harmonic, yet the fingering system rivals that of flute in simplicity. In common with other large bore instruments the fundamentals [harmonics] are easily formed, yet the reduction in bore towards the mouthpiece facilitates an evenness of timbre throughout the instrument (Ashton 1998, 24).

Harmonic fingerings tend to sound richer and produce intonational discrepancies (Liebman 1989, 19). Thus, like subtone, harmonic fingerings provide timbral contrast when they echo conventionally produced melodic material. A good example of this timbral “echo” occurs at measure 6:

Figure 9: Alto saxophone, *Incantation*, m. 6



These tonal contrasts occur in isolation in *Incantation* when they are created to pinpoint important events in the work. The listener is aware of the sudden timbre change and thus focusses on specific pitches which have structural significance. The harmonic “B” in measure 12 highlights an area of intensity at the end of a rhythmically vibrant section:

Figure 10: Alto saxophone, *Incantation*, m. 12



The use of timbral variation is much less varied in *Dance*, the work’s second movement. The movement begins with an energized rhythmic idea which is repeated and transposed several times:

Figure 11: Alto saxophone, *Dance*, m. 1



After a direct repetition of this figure in measure 2 (which is performed as an echo), the two sixteenth, eighth note idea is inverted in measure 4:

Figure 12: Alto saxophone, *Dance*, m. 4



In addition to borrowing compositional practices from Debussy’s *Syrinx*, I also was influenced by *Danse de la Chèvre* (1921), Arthur Honegger’s (1892-1955) work for solo

flute. Honegger's composition begins with a meditative opening and gives way to a quick motif which is repeated throughout:

Figure 13: Flute, *Danse de la Chèvre*, m. 14



Honegger's rhythmic figure is similar to my *Dance*'s opening motif. In both pieces, the use of short, quick rhythms provides a contrast to the works' meditative beginnings which consist of phrases with long note values.

Unlike my *Dance*'s opening idea, Honegger's opening motif is often repeated on exactly the same pitches. Throughout *Danse de la Chèvre*, Honegger alternates between the original motif and contrasting melodic material. For example, in measure 24, a chromatic sixteenth note flourish is followed immediately by the opening motif. Thus Honegger balances melodic freedom with melodic repetition:

Figure 14: Flute, *Danse de la Chèvre*, mm. 24-25



Similarly, my *Dance* contains varied rhythms which provide a contrast to the opening motif. For example at measure 5, a contrasting idea appears which is related melodically to the opening motif:

Figure 15: Alto saxophone, *Dance* (Rubinoff), mm. 5-6



This figure is rhythmically more static than the opening motif and thus provides some

relief to the vigorous dance rhythms which pervade the movement. *Dance*'s middle section (measures 30-91) is filled with brief silences which also provide contrast to the virtually steady stream of melodic figures which predominate in the first section (measures 1-29).

In the middle section (measures 30-91), the fragmentation of *Dance*'s melodic themes contributes to a sense of chaos and abandonment which further heighten the contrast to *Incantation*:

Figure 16: Alto saxophone, *Dance* (Rubinoff), mm. 71-72



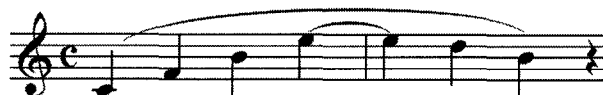
Toward the end of *Danse de la Chèvre*, Honegger also permutes the opening motif to create a change in mood. Honegger utilizes the flute's high register to bring attention to his treatment of the melodic material:

Figure 17: Flute, *Danse de la Chèvre*, mm. 45-46



The high range and accompanying forte dynamic level increase the energy of this work, and provide contrast to Honegger's meditative opening, which is set in the flute's mellow bottom register:

Figure 18: Flute, *Danse de la Chèvre*, mm. 1-2



By contrast, *Dance* concludes with a modified return to the opening material and finishes with an aggressive flourish. Both works are characterized by contrasts of mood, tempo and texture. *Incantation and Dance* also features timbral variation – in order to highlight the saxophone's sonic design.

CHAPTER 2

KYRIE FOR ALTO SAXOPHONE, ORGAN AND CHOIR

Kyrie for Alto Saxophone, Choir and Organ (Appendix 1, 52-56) stems from the musical tradition of the Catholic mass, which is the main worship service of the Catholic faith. The Kyrie comes from the Ordinary² section of the mass, which also includes the Gloria, Credo, Sanctus and Agnus Dei. The text of the Kyrie is short and repetitive:

Kyrie eleison (Lord have mercy)
Christe eleison (Christ have mercy)
Kyrie eleison (Lord have mercy)

The work explores the relationship between the solo voice (the saxophone) and the choral ensemble. Like many Kyries, it is set in a slow triple meter which reflects the tripartite nature of the text and helps to create a meditative mood. The saxophone is musically depicted as a solo voice. The saxophone's simple melodies are a contrast to the more complex polyphonic responses of the choral section which is scored in three parts (soprano, alto and bass). The tonal resemblance of the saxophone to the human voice is scientifically argued by French saxophonists Claude Delangle and Jean-Denis Michat: "with its concentration of harmonics around 2000 Hz, it [the saxophone] is very similar to the human voice" (Delangle and Michat 1998, 164). In addition to giving a scientific explanation for this affinity, these saxophonists chronicle the historical practice of using the saxophone in vocal music:

It is significant that the saxophone was introduced into vocal music in such a natural way. One of the first notable examples is the use of the alto saxophone to unite, sustain and guide the children's choir in Puccini's *Turandot*. The timbre obtained is highly effective, the flexibility of the instrument being so close to the purity of the children's voices (1998, 164).

² The mass is divided into two parts: the Ordinary and the Proper. The Proper contains the Introit, Alleluia, Offertory and Communion.

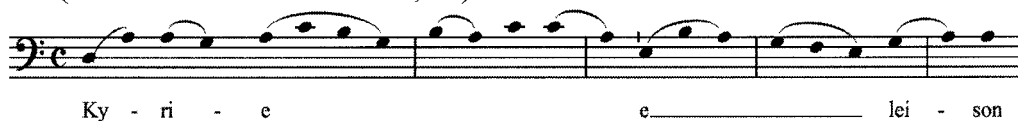
Thus the saxophone is an ideal instrument to play the role of the soloist in the context of *Kyrie*.

The alternation of soloist and choir has a long-standing tradition in Kyries, due to its association with the Catholic Mass. Claude Palisca and Peter Burkholder describe the musical traditions of the Kyrie in *The Norton Anthology of Western Music*:

After the Introit, the choir sings the Kyrie . . . The Kyrie was originally sung in processions and took the form of a litany, in which the whole group repeats a short prayer in response to a leader . . . A similar practice was often used for polyphonic settings, with alternation between soloists . . . and the choir (2006, 132).

The *Kyrie* from Guillaume de Machaut's (ca. 1300-1377) *La Messe de Nostre Dame* (ca. 1364) illustrates the relationship between soloist and chorus. Scholars agree that this mass is one of the finest early examples of a polyphonic mass (Grout 1980, and Palisca & Burkholder 2006). In a typical performance of Machaut's *Kyrie*, choirs and soloists alternate between singing the polyphony (a three voice texture) and a single line chant melody upon which the *Kyrie* is based.³ Machaut has the tenor intone *Kyrie Cunctipotents Genitor*, an ancient Gregorian chant melody:

Figure 19: Gregorian Chant, *Kyrie Cunctipotents Genitor*
(Burkholder & Palisca 2006, 56)



Similarly, in my *Kyrie*, the alto saxophone's opening phrase utilizes the first three notes from *Kyrie Cunctipotents Genitor*. The entire saxophone solo consists of phrases which resemble the melodic rhythm of the text. The short phrases, punctuated by silence, create an improvisatory effect akin to the manner in which an improvising jazz

³ This practice of using a Gregorian chant melody in a mass was common practice during this period.

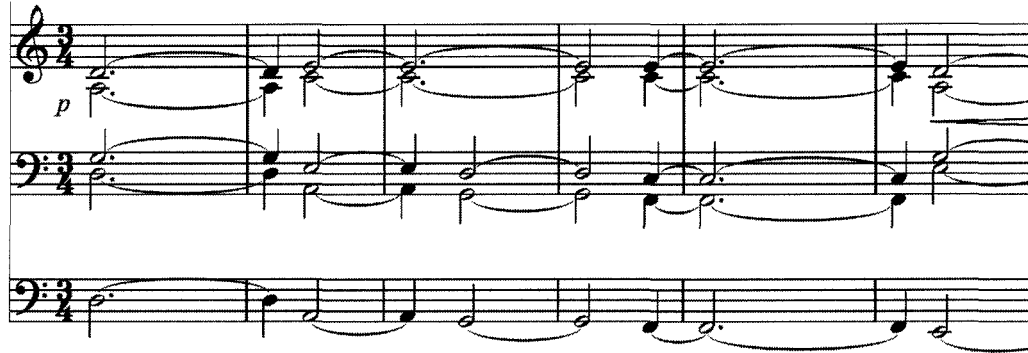
saxophonist might paraphrase a popular song:

Figure 20: Alto saxophone, *Kyrie* (Rubinoff), mm. 1-5



The simple organ accompaniment reflects the homophonic nature of the texture and provides a lush harmonic bedrock for the saxophone's rhapsodic melodies:

Figure 21: Organ, *Kyrie* (Rubinoff), mm. 1-5



Further, the organ's registration is limited to flute stops which evoke a meditative and religious mood – thus supporting the reflective tone of the text. Instrumental homophony gives way to pure vocal polyphony when the choir enters. The diverging musical textures throughout the work help to sustain listener interest and provide a contrast to the relative simplicity of the text.

The *a cappella* polyphonic choral texture provides a contrast to the saxophone's simple texture. Each of the three voices fulfill different roles. The soprano voice begins with a sostenuto melody which closely resembles the saxophone's melody:

Figure 22: Soprano, *Kyrie* (Rubinoff), mm. 10-13



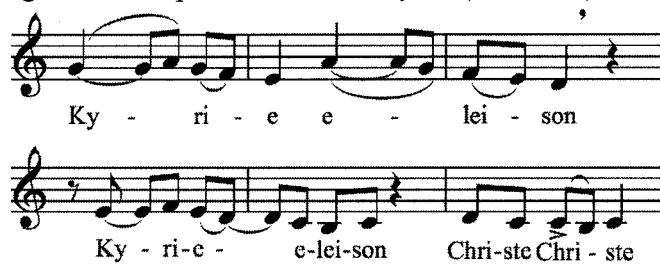
This melody is accompanied by an arching bass line which provides contrast to the soprano and alto voice above it:

Figure 23: Bass, *Kyrie* (Rubinoff), mm. 10-12



The combination of moving quarter notes and an ascending line contrasts to the more static soprano melody. The alto melody provides rhythmic interest by both interrupting and extending the soprano melody:

Figure 24: Soprano and Alto, *Kyrie* (Rubinoff), mm. 10-12



Thus the dynamic interplay between the three voices creates a complete musical texture which does not require any participation from the saxophone or organ.

Throughout this opening choral section (measures 10-22), the soprano voice intones a repeating rhythmic idea which is transposed to various registers. The repetition of this two measure motif (consisting of a quarter note tied to an eighth, which is followed by three more eighth notes and a quarter note) contributes to the structural unity of the entire

work:

Figure 25: Soprano, *Kyrie* (Rubinoff), mm. 10-13



This repetition of a rhythmic idea, (technically referred to as an isorhythm) was an important principle in 14th century choral composition. Musicologists David and Susan Ward-Steinman explain the concept of the isorhythm in their *Comparative Anthology of Musical Forms*:

The term isorhythm was originally applied to certain fourteenth century motets and masses organized structurally around a recurring pattern of time values. Though the term is not often applied to music past the fourteenth century, it embodies the concept of rhythmic ostinato . . . In a mass or motet section, one part, usually the tenor, repeats a rhythmic pattern called the *talea* throughout (1976, 27).

In Machaut's *Kyrie*, the isorhythm in the tenor voice is repeated six times. The tenor's melody is the plainsong chant, *Kyrie Cunctipotents Genitor*. Thus the isorhythmic technique helps to distinguish this original chant from the other voices' melodies:

Figure 26: Tenor, *Kyrie* (Machaut), mm. 1-3



In contrast to Machaut's tenor isorhythm, the soprano isorhythm in *Kyrie for Saxophone, Choir and Organ* is also intoned by the alto and bass voices. The distribution of the isorhythm throughout the entire choral texture diminishes its distinctiveness, but creates a cohesive structure.

The saxophone's melody in the second section (measures 23-36) of *Kyrie* is more active than the opening solo. This increase in energy also affects the subsequent choral texture and thus creates a unity between the saxophone and chorus. The consecutive eighth notes and upbeat syncopated phrases are a contrast to the prevailing reflective mood:

Figure 27: Alto saxophone, *Kyrie* (Rubinoff), mm. 23-28



The work's second choral section (measures 29-35) sustains the rhythmic energy created by the saxophone's preceding melody:

Figure 28: Choir, *Kyrie* (Rubinoff), mm. 29-32

Ky - ri - e e - lei - son

Ky - ri e e - lei - son

Ky- ri - e e - lei - son

The use of crescendo and forte also helps intensify the mood in this section. In measures 33-34, the syncopation introduced in the saxophone part is developed in the choral texture. The alternation of the agogic accent in the bass, with the upbeat accents in the soprano and alto voices, disrupts the legato choral quality present in measures 29-32:

Figure 29: Choir, *Kyrie* (Rubinoff), mm. 33-34



The saxophone begins the third section (measures 37-51) with a series of high register eighth notes which serve to sustain the vocal energy of the previous choral section. From measures 37-40, the saxophone intones pairs of eighth notes which become the basis of the choral texture at measure 42:

Figure 30: Alto saxophone, *Kyrie* (Rubinoff), mm. 37-39



Although the choral section utilizes the saxophone's eighth note motifs, the fugue-like treatment of the material signals a new development in the work. The three pairs of eighth notes in the soprano and alto parts consist of ascending and descending stepwise intervals. The parts enter at different points in time, creating a rich linear design which serves as the climax of the work.

The saxophone's final solo resembles the work's opening music. The first phrase at measure 52 is almost an exact inversion of the saxophone solo which begins the work:

Figure 31: Alto saxophone, *Kyrie* (Rubinoff), m. 52



The choral section which follows is a recapitulation of the opening material, and serves as a return to a mood of reflection. Although the saxophone's sonic language is less idiomatic than in *Incantation*, the purity of sound present in *Kyrie* contributes to the religious atmosphere. The vocal qualities of the instrument are paramount, and its melodies form the basis of the chorus's polyphonic material.

CHAPTER 3

DROP DROP SLOW TEARS FOR TENOR SAXOPHONE AND CHOIR

In *Drop Drop Slow Tears for Tenor Saxophone and Choir* (Appendix 1, 57-61), the saxophone becomes a part of the choral polyphony. The tenor saxophone was chosen because it has a lower range than the alto, and is thus capable of providing both harmonic and melodic interest:

Figure 32: Tenor saxophone range



The bottom register of the instrument supplies some of the bass register normally associated with the church organ. By contrast, there are several cadenza-like passages which feature the saxophone in the more traditional solo role. The varied use of the saxophone helps sustain listener interest and produces an interesting counterpoint to the four voice choir.

The text for the work is a three-verse poem by Phineas Fletcher (1523-1547), an important 16th century religious poet. The poem presents a sinner who weeps over past sins, and begs Christ for mercy. The “cry for vengeance” is a cry for redemption by the sinner for his/her sin (McNeil, 2007):

Drop drop slow tears and bathe those beauteous feet
which came from Heaven the news and Prince of Peace
Cease not wet eyes, His mercies to entreat
To cry for vengeance sin doth never cease
In your deep floods drop all my thoughts and fears
nor let his eyes see sin but through my tears.

English composer and organist Orlando Gibbons (1583-1625) was the first composer

to set the text to original music. He creates a meditative atmosphere by using long notes in structurally important parts in the text:

Figure 33: Voice, *Drop Drop Slow Tears* (Gibbons), mm. 1-4



The half and dotted notes on “drop,” “tears,” and “feet,” enable the listener to picture the image of the weeping sinner and feel his contrition. The use of long notes (half and dotted half notes) on these words gives them emphasis. By contrast, the second half of the setting consists of quarter notes. This section balances the heaviness of the opening:

Figure 34: Voice, *Drop Drop Slow Tears* (Gibbons), mm. 4-7



Gibbons’ setting is a strophic hymn which utilizes the above melody for all three verses of the text. The music is thus suitable for congregational singing: the presence of consonant intervals and rhythmic symmetry creates a meditative atmosphere which allows worshippers to focus on the text’s powerful imagery.

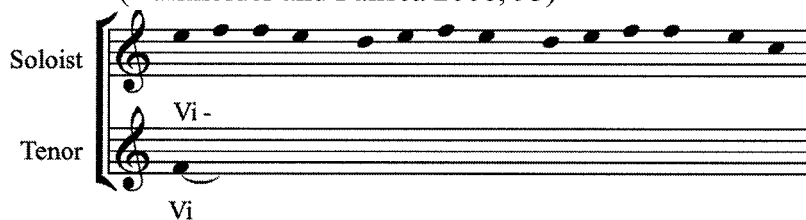
My setting of the text differs from Gibbons’s treatment in many respects. First, I have conveyed the image of the falling “tears” with quicker eighth notes which are heard in each voice and on the saxophone. The significance of the word “drop” is highlighted by using melismas, whereas Gibbons often uses the syllabic approach in which each word receives a separate note. The open “aw” vowel contained in the word “drop” allows for easy vocal production:

Figure 35: Choir, *Drop Drop Slow Tears* (Rubinoff), mm. 2-5



The saxophone part in the first section (measures 1-17) is a combination of a drone and a continuation of the melismatic choral texture. The work opens with the saxophone intoning a sustained note over which the choir begins its melismas. The use of the drone is an ancient practice which became prevalent in the Notre Dame school of polyphony. (Grout 1980, 84) Léonin (1150-1201), the chief exponent of this early form of polyphony, used the drone technique in the tenor voice in his two part vocal work *Viderunt Omnes*:

Figure 36: Tenor and soloist, *Viderunt Omnes* (Léonin), beginning (Burkholder and Palisca 2006, 93)



In *Drop Drop Slow Tears* the saxophone drone serves as a contrast to the high pitched melismas occurring in the choral parts. The saxophone's sustained "A" also

helps the singers find their opening pitches and gives them a fixed reference for intonation purposes. Thus the drone offers a combination of aesthetics and pragmatics. In measure 6, a saxophone solo passage begins which lasts for 12 measures. This section serves as a variation on the melismatic choral texture which precedes it. Comprised of a mixture of eighth, sixteenth and triplet notes, the solo increases the intensity of the work and is a contrast to the repetition of the work's opening choral material at measure 18. The saxophone part in measures 12-13 features the technique of augmentation (a quickening of the original theme) in order to increase the dramatic tension:

Figure 37: Tenor saxophone part, *Drop Drop Slow Tears* (Rubinoff), mm. 12-13



After a short solo passage which develops the choir's dotted eighth sixteenth note idea from measure 20, the saxophone ushers in an imitative choral section featuring anacrusis phrases which culminate in a cadence in the key of B-flat major:

Figure 38: Tenor saxophone and choir, *Drop Drop Slow Tears* (Rubinoff), mm. 25-28

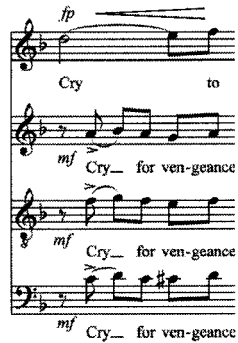
The consonant resolution of this section on the words “Prince of Peace” is meant to provide relief from the sadness portrayed by the preceding D minor section. Once again, at measure 29, the tenor saxophone intones a drone underneath an imitative choral part. The short fugal section beginning at measure 29 provides contrast to the mellifluous preceding section. The quartal harmonies in the choral part combined with the tenor saxophone’s low register drone create an ominous effect for the text, “Cease not, wet eyes:”

Figure 39: Tenor saxophone and choir, *Drop Drop Slow Tears* (Rubinoff), mm. 29-31

The musical score for Figure 39 consists of five staves. The first four staves represent the choir, and the fifth staff represents the tenor saxophone. The key signature is one flat (B-flat major), and the time signature is 3/4. The lyrics are: "Cease not, wet eyes Cease" and "Cease not, wet eyes his". The tenor saxophone part is in the bass clef, and the choir parts are in the treble clef. The lyrics are: "Cease not, wet eyes Cease" and "Cease not, wet eyes his".

The quartal/quintal colour of this passage quickly dissolves into more tertian sounds in the following section. The climax of the entire work occurs at measure 34, when the soprano voice sustains a “D” against moving eighth notes in the other three voices:

Figure 40: Choir, *Drop Drop Slow Tears* (Rubinoff), m. 34



Following the intensity of the climax, the work concludes with a homophonic, chorale-like texture which resembles Orlando Gibbons's setting.

Despite its relatively short length (approximately four minutes), *Drop Drop Slow Tears for Tenor Saxophone and Choir* exposes the listener to a wide variety of musical textures: melismatic imitation, drone with fugal writing, quartal/quintal harmonies, solo passages and chorale-style homophony. The work is a deliberate contrast to Orlando Gibbons's classic setting, and the tenor saxophone proves to be a versatile musical instrument which interacts fluidly with the changing musical landscapes.

CHAPTER 4
THREE MOODS FOR SOPRANO VOICE, ALTO SAXOPHONE AND PIANO

The use of the saxophone in a song cycle presents a twofold challenge to the composer: the saxophone must not intrude upon the voice, yet it must assert a distinctive personality to contribute to the overall effect. The saxophone's innate vocality and wide variety of timbres makes it a suitable complement to the voice and piano.

Three Moods for Soprano Voice, Alto Saxophone and Piano (Appendix 1, 62-73) explores three contrasting moods which are reflected in the three poems set to music: a comical mood is created by W.E. Henley's *The Villanelle*; a tragic mood is evoked by W.H. Auden's *Autumn Song*; and a joyous mood is created in Christina Rossetti's *A Birthday*. This cycle of original songs is influenced by the songs of Franz Schubert (1797-1828), the famous 19th century Romantic composer. Like many of Schubert's songs, my song cycle features dynamic interplay between the voice and the instrumental textures.

Song No. 1: *The Villanelle* (W.E. Henley, 1849-1903)

The poem negatively assesses the literary value of the villanelle in a series of humorous vignettes. According to critic James Fenton, the poem's conclusion is that the villanelle is a minor and archaic literary form:

The poem consciously advises you not to be too ambitious with the form, which it suggests is no longer in its prime, but which will perhaps, produce something sweet (2002, 18).

The villanelle is a nineteen line poem organized in five tercets and a concluding quatrain. The first and third lines of the tercets rhyme throughout, creating a high degree of repetition. In the musical setting of *The Villanelle*, only four of the tercets were set to

music. Thus, the truncated text of the W.E. Henley's poem is as follows:

A dainty thing's the Villanelle.
Sly, musical, a jewel in rhyme,
It serves its purpose passing well.

A double-clappered silver bell
That must be made to clink in chime,
A dainty thing's the Villanelle;

You must not ask of it the swell
Of organs grandiose and sublime -
A dainty thing's the Villanelle;

And filled with sweetness, as a shell
Is filled with sound, and launched in time,
It serves its purpose passing well.

The song's introduction supports the humorous tone of the poem. A "rollicking" piano entry in duple meter creates a circus-like effect:

Figure 41: Piano, *The Villanelle*, mm. 1-3



The piano texture resembles the opening of Schubert's song, *Frühlingstraum* (Spring's Dream) Op. 89, No. 11 from the song cycle, *Wintereise*. Schubert's eighth note piano rolling pattern creates a cheerful backdrop for the description of the spring dream by the voice:

Figure 42: Piano, *Frühlingstraum* (Schubert), mm. 1-4



The repetitive accompaniment in the piano's lower register is transferred to the right hand when the voice enters. Further, the original upper register piano theme in fig. 37 is intoned by the voice one octave lower:

Figure 43: Piano and voice, *Frühlingstraum* (Schubert), mm. 5-8

Thus Schubert creates a feeling of unity and a variety of textures. The transference of texture from one voice to another also figures prominently in *The Villanelle*. The saxophone intones the song's main thematic material – a jerky eighth note/quarter note rhythm which adds another layer of humour:

Figure 44: Saxophone, *The Villanelle*, mm. 4-7



The transfer of texture occurs when the voice enters, paraphrasing the saxophone's melody:

Figure 45: Voice and piano, *The Villanelle*, mm. 8-9



At measure 10, the voice presents a new motif which resembles the piano accompaniment figure in measure 1:

Figure 46: Voice, *The Villanelle*, mm. 10-11



The above rhythm is the very opposite of “dainty” and the increased rhythmic activity in both the saxophone and piano contributes to the humorous tone of the text.

There are important melismatic exchanges between the voice and the saxophone beginning at measure 16. These legato eighth note groups engender an unexpected legato vocal colour on the words “sly” and “musical.” The saxophone answers with its own legato phrasing and then is featured in a solo beginning at measure 21. The effect approximates a vocal duet – either singer is trying to outdo the other. Thus, the opening material explores a variety of comic touches and the beginnings of a rich dialogue between the three parts.

The setting of the poem’s second tercet makes use of the sounds of the language. The “double-clappered bell” is explored in all parts in an attempt to fill the soundscape with

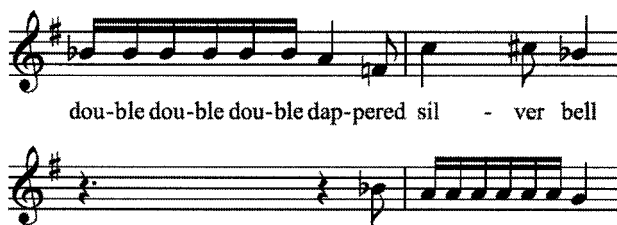
metallic ringing. At measure 28, the sustained chords in the piano's melody combined with a staccato bass line introduce the ringing of the bell:

Figure 47: Alto saxophone and piano, *The Villanelle*, mm. 28-29



The practice of word painting⁴ is prevalent in this section (measures 28-38). Word painting is a musical device in which the composer creates melodic ideas which convey the meaning of the text. The voice and saxophone again engage in a dialogue based on the repetition of the word “double.” The voice chants: “a double-double-double dappered silver bell” which is echoed by the saxophone:

Figure 48: Voice and alto saxophone, *The Villanelle*, mm. 30-31



The song's sonic climax, however, is the saxophone solo at measures 34-35. The use of the saxophone's harmonic fingerings creates a compelling bell quality – not only does the saxophone timbre imitate the sound of the bell, but the saxophone's melody resembles

⁴ Word painting is an established compositional technique. For example, Renaissance composers John Dowland (1563-1626) and Claudio Monteverdi (1567-1643) used the technique in many of their vocal works.

a church bell tune:

Figure 49: Alto saxophone, *The Villanelle*, m. 34



Starving through the leafless wood
 Trolls run scolding for their food;
 And the nightingale is dumb,
 And the angel will not come.

Cold, impossible, ahead
 Lifts the mountain's lovely head
 Whose white waterfall could bless
 Travelers in their last distress

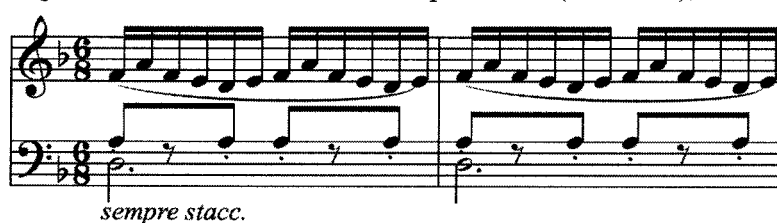
The musical texture of the song reflects the different energies which are present in the poem. Each instrument contributes to the vividness of Auden's imagery. For example, the impetuous motion of the falling leaves, rolling prams and running trolls are sonically represented by the piano's driving sixteenth note bass lines:

Figure 50: Piano, *Autumn Song*, mm. 1-2



The dramatic piano texture in Schubert's famous 1814 song, *Gretchen am Spinnrade* (Gretchen at the Spinning Wheel) is an important influence on *Autumn Song*. Schubert's ominously rolling piano 16th note passages, musically represent the continuous movement of the spinning wheel:

Figure 51: Piano, *Gretchen am Spinnrade* (Schubert), mm. 1-2



In my *Autumn Song*, the piano's dynamic quality is contrasted by the vocal melody which consists of sustained descending notes. The voice part is also set in the singer's low register in order to reflect the poem's themes of sadness and loss. The agogic accents in the opening voice entry are a contrast to the saxophone's upbeat eighth note jabs:

Figure 52: Voice and alto saxophone, *Autumn Song*, mm. 3-4



Although the three parts contain different musical textures, they come together in the song's opening measures to evoke the poem's despairing mood.

Certain poetic images give rise to colouristic effects in all three parts. In the second stanza, we are warned of neighbours "who pluck us from the real delight." This eerie image receives a corresponding staccato articulation from both the voice and the saxophone in measure 15. Thus, the sonic effect of the word "pluck" is intensified:

Figure 53: Voice and alto saxophone, *Autumn Song*, m. 15



Later in the song, when the "trolls run scolding through the wood," the song's meter

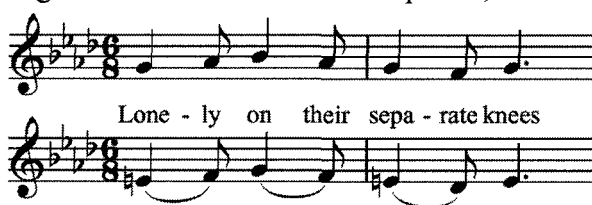
changes from 6/8 to the asymmetrical 5/8 meter to reflect the macabre image of supernatural trolls running through the forest in search of food. The unsettled rhythms in all three parts embody the poem's disturbing images:

Figure 54: Voice, alto saxophone and piano, *Autumn Song*, mm. 27-29



The relationship of the saxophone to the voice is an important aspect of this song. Often the saxophone harmonizes in thirds or sixths below the voice. This texture creates an illusion of two singers blending with the piano:

Figure 55: Voice and alto saxophone, *Autumn Song*, mm. 21-22



On other occasions the saxophone supplies a melodic commentary to the voice. This commentary occurs at the end of each stanza, or at the beginning of new sections of the poem. For example, when we learn about the “rolling prams,” the voice sings an eery melisma, and the saxophone comments with an outpouring of 16th notes:

Figure 56: Voice and alto saxophone, *Autumn Song*, mm. 9-11



Thus, the changing role of the saxophone in relation to the voice, creates a dramatic tension which contributes to the mood of anxiety and tragedy.

A Birthday (Christina Rossetti, 1830-1894)

This two stanza love poem presents a passionate lover who is bursting with the joyous knowledge of knowing that his/her lover is near. A beautiful series of arresting images leaves the reader with the conclusion that love is the greatest and most joyous human emotion:

My heart is like a singing bird
 Whose nest is in a watered shoot:
 My heart is like an apple tree
 Whose boughs are bent with thickset fruit;
 My heart is like a rainbow shell
 That paddles in a halcyon sea;
 My heart is gladder than all these
 Because my love is come to me.

Raise me a dais of silk and down;
 Hang it with vair and purple dyes;
 Carve it in doves and pomegranates,
 And peacocks with a hundred eyes;
 Work it in gold and silver grapes,
 In leaves and silver fleurs-de-lys;
 Because the birthday of my life
 Is come, my love is come to me.

The use of saxophone subtone at the outset of the song creates a romantic atmosphere, which complements the poem's sensuous imagery. Saxophonist David Roach describes the subtone technique in his essay, *Jazz and Rock Techniques*: "This [subtone] gives a very warm tone with much less definition than normal." (1998, 90) The subtone technique was championed by the jazz tenor saxophonist Ben Webster (1909-1973), who often featured the breathy, dark colour as a vehicle for slow ballads. (1957) The opening subtone solo in *The Birthday* is supported by quiet piano accompaniment which enables the saxophone's unique colour to predominate:

Figure 57: Alto saxophone and piano, *A Birthday*, mm. 1-3



The saxophone also musically conveys the meaning of the text in important places in the song. For example, the poem speaks of a "water shoot" and the saxophone solo at measures 13-15 consists of flowing triplets which are meant to be played as if they are cascading:

Figure 58: Alto saxophone part, *A Birthday*, mm. 13-15



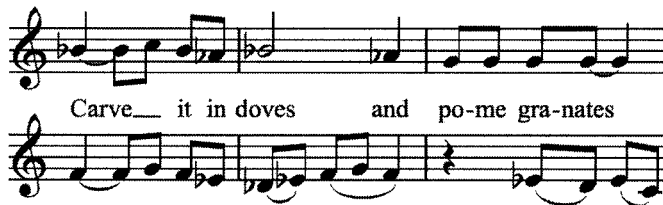
At measure 17, the speaker compares his/her loving heart to an apple tree “whose boughs are bent with thickset fruit.” The saxophone melody crescendos, ascends and climaxes with a forte dotted quarter note and a half note. The combined effect of an ascending melody, an increase in loudness and the presence of accents of duration evokes a passionate mood:

Figure 59: Alto saxophone, *A Birthday*, mm. 24-28



The saxophone also harmonizes with the voice’s melody to create the musical effect of two lovers singing together. The innate vocality of the saxophone is effective in its duet role from measures 53-55:

Figure 60: Voice and alto saxophone, *A Birthday*, mm. 53-55



The saxophone also provides a transition from the tranquil romantic atmosphere of the song’s first section (measures 1-39) to the passionate middle section (measures 40-59). The use of a crescendo and a series of continuous eighth notes helps to usher in the dramatic voice entry at measure 43:

Figure 61: Alto saxophone, *A Birthday*, mm. 39-43



Thus, the saxophone fulfills a variety of roles in *A Birthday* which contribute atmospherically and vocally to the song's romantic and passionate mood.

CHAPTER 5

A KLEZMER COLOUR FOR SAXOPHONE QUARTET

A Klezmer Colour for Saxophone Quartet (Appendix 1, 74-79) is inspired by the rhythmic energy of the traditional Klezmer band. Klezmer musician Peter Sokolow explains the European sources of the music in *The Compleat Klezmer*:

Klezmer music was originally an eastern European folk genre, heavily influenced by other existing native folk genres endemic to that area, i.e. Roumanian, Russian, Polish Ukrainian, Hungarian Bulgarian, with a strong dose of Gypsy. What makes this music particularly individual is that it was filtered through Jewish ears and consciousness (1987, 19).

Sokolow also lists some of the important elements of Klezmer music which include: dance forms, melodic modes, articulation, and instrumentation (1987, 20-21).

Each one of these musical elements plays a significant role in *A Klezmer Colour for Saxophone Quartet*.

The work is scored for a quartet of saxophones: soprano, alto, tenor and baritone. The genre is well established due to the early works of French composer Jean-Baptiste Singelée (1812-1875) who wrote his *Quatour No. 1* in 1875. Other prominent composers including Alexander Glazunov (1865-1936) and Gabriel Pierné (1863-1937) composed works for saxophone quartet. As Richard Ingham explains in his essay, *The Saxophone Quartet*, the ensemble is perceived to be unique among woodwind ensembles because it possesses a “well-balanced tessitura like a string quartet, and [is] homogenous in texture” (1998, 65). Arguably no other woodwind ensembles possesses this degree of homogeneity (Delangle and Michat 1998, 173).

A Klezmer Colour is based upon the Ahava Raba Klezmer mode which has affinities

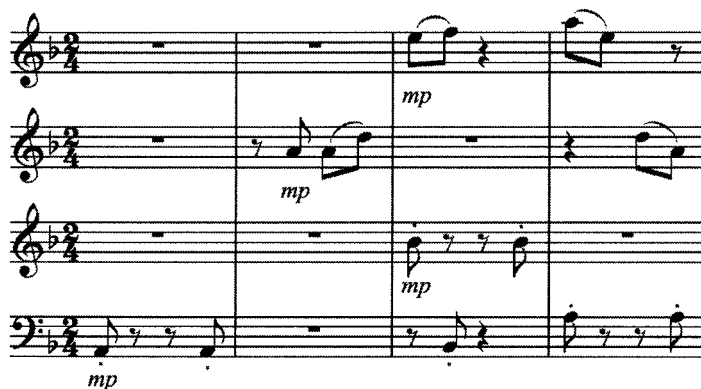
with the phrygian mode. Indeed, according to Peter Sokolow, some of today's Klezmer performers refer to this mode as the "altered Phrygian" (1987, 21). This scale is also synonymous with the fifth mode of the Western European harmonic minor scale:

Figure 62: Ahava Raba Klezmer mode



The A-D-Bb pitch set (derived from the Ahava Raba Mode) is an important melodic structure in the work and is the basis of the introductory section:

Figure 63: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 1-4



The rising fourth and falling third motif is fragmented, inverted and expanded by each member of the ensemble. The opening section's (measures 1-48) fragmentary texture conveys a rhythmic energy rather than a traditionally melodic approach. The fast tempo and strong articulations from each of the saxophones give the atmosphere of a duple Klezmer dance called a bulgar or freylekhs. The prominence of eighth note subdivisions in the typical bulgar distinguishes this dance from other Klezmer styles. *Varshaver Freylekhs (Warsaw Freylekhs)*, recorded in 1920 by the Abe Schwartz orchestra,

conveys a lively duple meter and eighth note syncopated style (Schwartz, 1920):

Figure 64: Melody, *Varshaver Freylekhs*, mm. 1-5



A Klezmer Colour for Saxophone Quartet shares many characteristics with the traditional Klezmer bulgar dance. For example, my work moves freely between duple and triple meters in a similar fashion to the bulgar's classic additive rhythm:

Figure 65: Dance rhythms in a typical bulgar dance (Sokolow 1987, 19)



The shift from 3/8 to 2/4 meter creates an exciting rhythmic ambiguity at measures 15-20:

Figure 66: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 15-20

Musical notation for Figure 66: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 15-20. The notation shows a full score for four staves, illustrating the shift from 3/8 to 2/4 meter. Dynamics include *f* (forte) and *mp* (mezzo-piano).

Time signatures of 6/16, and 4/16 occur later in the work (measures 115-191). Although these time signatures are unusual in Klezmer music, they still embrace the concept of a duple and triple metrical mixture.

The fragmentary nature of the phrasing gives the work a contemporary quality but also places it in a traditional context. The saxophone is often used as a melodic instrument in the modern Klezmer ensemble, but its role, according to Peter Sokolow, is a rhythmic rather than melodic one: “The saxophone is purely a section horn – [it] fits between trumpet and trombone” (1991, 15). Many Klezmer musicians and scholars assert that the clarinet is the main melodic woodwind instrument in the ensemble (Netsky, 2002 and Sapoznik, 1987). This fact does not preclude the saxophone from creating the rhapsodic free melodies normally associated with the clarinet, voice or violin.

The middle section of the *Quartet* (measures 49-84) features an extended melodic passage in which all four instruments intone a melody based in the Ahava Raba mode. Beginning at measure 52, the alto saxophone intones a melody which is then paraphrased by each of the other saxophones:

Figure 67: Alto saxophone, *A Klezmer Colour for Saxophone Quartet*, mm. 53-58



This shift from rhythmic excitement to melodic expression creates contrast in the composition and gives the members of the ensemble the opportunity to demonstrate the saxophone’s unique vocal qualities.

The concluding section of the work (measures 85-193) marks a return to the fragmented rhythms of the opening. The development of a motif based on the minor sixth interval predominates:

Figure 68: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 148-150



The section also contains rhythmic tuttis which act as a contrast to the fragmented counterpoint. Beginning at measure 191, a motif which consists of two sixteenth notes, creates a heavy texture:

Figure 69: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 153-157



This technique of rhythmic tuttis, where the entire ensemble performs the same rhythmic figure, often occurs at the end of a Klezmer tune (Curtis 2002, 5). The chorale-like section (measures 164-174) which follows exploits the colouristic homogeneity of the ensemble and provides a moment of relaxation before the finale:

Figure 70: Full score, *A Klezmer Colour for Saxophone Quartet*, mm. 164-174

The musical score consists of four staves, each representing a saxophone part. The time signature is 2/4. The key signature has one flat (B-flat). The score shows a crescendo from *pp* (pianissimo) to *mp* (mezzo-piano) and then to *mf* (mezzo-forte). The dynamics are marked as *pp*, *cresc.*, *mp*, *cresc.*, and *mf*. The melody is primarily composed of quarter and eighth notes, with some rests. A sharp sign (#) is visible above the first staff in the third measure.

The work concludes with a series of staccato flourishes which punctuate the return to the opening material. Thus the varying textures of the work coexist to serve as a contrast to the traditional Klezmer melodic material.

SUMMARY

The saxophone's well-documented success in jazz and popular music (Ingham 1998, 125 and Segell 2002, 283) ensures its strong presence in contemporary musical life. The collection of music composed for my thesis and discussed in this paper demonstrates that the saxophone deserves a strong presence in the area of contemporary classical music. Furthermore, important contemporary composers such as Luciano Berio (1925-2003), Philip Glass (b. 1937) and Karlheinz Stockhausen (b. 1928) have used the saxophone in recent works, thus giving weight to Berlioz's early positive assessment of the saxophone as a compelling new sound in concert music circles. The instrument's strength lies in its unique sonic design, which includes subtone, harmonics, false fingerings and innate vocality. My compositions highlight the instrument's strengths and add further weight to the argument that the saxophone is a serious contemporary musical instrument.

APPENDIX 1

A COLLECTION OF MUSIC FEATURING THE SAXOPHONE

The following works are included in this collection: 1) *Incantation and Dance for Solo Alto Saxophone*, 2) *Drop, Drop Slow Tears for Choir and Tenor Saxophone*, 3) *Kyrie for Choir, Alto Saxophone and Organ*, 4) *Three Moods for Soprano Voice, Alto Saxophone and Piano*, 5) *A Klezmer Colour for Saxophone Quartet*.

Incantation and Dance

Freely ♩ = 68

Daniel Rubinoff

Alto Saxophone

4

7

10

13

15

17

19

21

24

p

accel.

ff

f with passion

mp

pp (subtone)

mf

mf

mp

poco rit.

poco accel.

accel.

p

freely

mp

accel.

p

mp

short

with passion

mf

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27 *accel.*

p *ff*

30 *f* *linger* *freely with great energy* *f*

32 *mp* *ppp subtone*

Allegro energico ♩ = 104

Dance

(echo)

mf *mp* *mf*

leggiero

9 *mp* *cresc.* *f* *mf*

14 *well defined* *f*

19 *mp* *mf* *p* *mp* *mp*

25 *mf* *p* *mf*

30 *f* *mp* *p*

36 *f* *mf* *ff* *mf*

41

47

53

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59 *mf* *f*

65 *p* *mf* *mp* *p*

72 *mf* *p*

78 *mf* *p* *pp*

84 *mp* *mf* *mp*

90 *mf* *mp* *mf* *mp* (echo)

97 *mp* *cresc.*

103 *mf* *cresc.*

107 *f* *poco cresc.*

Kyrie

Daniel Rubinoff

Sostenuto ♩ = 60

SOPRANO

ALTO

BASS

Alto Saxophone

prayerfully
p

Sostenuto ♩ = 60

Organ (soft flutes)
p

Pedal (8', 16')

8

S. *mp*
Ky - ri - e e - lei - son Chri - ste e - lei -

A. *mp*
Ky - ri - e - e - lei - son Chri - ste Chri - ste e - lei - son Ky -

B. *mp*
Ky - ri - e e - lei - son Chri - ste - e - lei -

Alto Sax. *mf* *mp*

Man. *p*

Ped.

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15

mf *dim.*

S. son Ky - ri - e e - lei - son Ky - ri - e e - lei - son Chri - ste e -

A. - ri - e e - lei - son Ky - ri - e e - lei - son Chri - ste *dim.* e -

B. *cresc.* *mf* son Ky - ri - e e - lei - son - Ky - ri - e e - lei - son - Chri - ste - e -

Alto Sax.

Man.

Ped.

22 *p*

S. lei - son

A. lei - son

B. *p* lei - son

Alto Sax. *mf* *mp* *cresc.* *f*

Man. *mf* *mp* *mf* *f*

Ped.

29

S. Ky - ri - e e - lei - son Chri - ste e - lei - son Ky - ri - e e -

A. Ky - ri e e - lei - son Chri - ste e - lei - son Ky - ri - e e -

B. Ky ri - e e - lei - son Chri - ste e - lei - son Ky

Alto Sax.

Man.

Ped.

36

S. - lei - son Ky - ri - e e - lei -

A. - lei - son Ky - ri -

B. ri - e Ky - ri - e e -

Alto Sax.

Man.

Ped.

44 *mf* *f* *mp cresc.* *f*

S. *son -* Chri - ste e - lei - son Ky - ri - e e - lei son

A. *mf* *f* *mp cresc.* *f*
 - e e - lei - son Chri - ste e - lei - son Ky - ri - e e - lei son

B. *mf* *f* *mp cresc.* *f*
 lei - son Chri - ste e - lei - son Ky - ri - e e - lei - son

Alto Sax.

Man.

Ped.

52

S.

A.

B.

Alto Sax. *mp* *mf* *p* *mp* *mf* *mp*

Man. *mp* *mf* *p* *mf* *mp*

Ped.

60 *mp*

S. Ky - ri - e e - lei - son Chri - ste e - lei - son Ky -

A. *mp* Ky - ri - e - e - lei - son Chri - ste Chri - ste e - lei - son Ky - ri - *cresc.*

B. *mp* Ky - ri - e e - lei - son Chri - ste - e - lei - son Ky -

Alto Sax.

Man.

Ped.

66 *mf* *dim.* *mp* *p*

S. ri - e e - lei - son Ky - ri - e e - lei - son Chri - ste e - lei - son

A. *mf* *mp* *p* e - lei - son Ky - ri - e e - lei - son Chri - ste e - lei - son

B. *mf* *mp* *p* ri - e e - lei - son - Ky - ri - e e - lei - son Chri - ste - e - lei - son

Alto Sax.

Man.

Ped.

Drop, Drop Slow Tears

Devotional ♩ = 64

SOPRANO
Drop - slow - tears Drop - slow - tears

ALTO
Drop - slow - tears Drop - slow - tears

TENOR
Drop - Drop - slow tears

BASS
Drop - slow tears

Tenor Saxophone
p

PIANO (for rehearsal)

7

S.

A.

T.

B.

Ten. Sax.
freely, with rubato
mf mp

Pno.
freely, with rubato

13

S. *mf* Drop drop slow

A. *mf* Drop drop slow

T. *mf* drop drop slow

B. *mf* drop drop slow

Ten. Sax. *ff* *ad lib.* *p*

Pno. *ff* *mf*

19

S. *mp* tears and bathe those beau-teous feet

A. *mp* drop - drop slow tears bathe those beau-teous feet

T. *mp* drop - drop slow tears bathe those beau-teous feet

B. *mp* drop slow tears and bathe those beau-teous feet

Ten. Sax. *mp*

Pno. *mp* add sax part *ad lib.*

25

S. *mf* which brought from heaven the news and Prince of Peace - *f*

A. *f* which brought from heaven the Prince of Peace

T. *f* which brought from heaven the news and Prince of Peace

B. *f* brought from heaven the Prince of Peace

Ten. Sax. *mp*

Pno.

29

S. *mf* Cease not, wet eyes Cease *p* mer-cies to en - treat *fp* Cry to

A. *mf* Cease not, wet eyes Cease not, wet eyes his *p* mer-cies to en - treat *mf* Cry_ for ven-geance

T. *mf* Cease not, wet eyes Cease *p* mer-cies to en - treat *mf* Cry_ for ven-geance

B. *mf* Cease not, wet eyes his *p* mer-cies to en - treat *mf* Cry_ for ven-geance

Ten. Sax. *mf* *dim.* *mp*

Pno. *mf* *fp*

35 *f* *mp* *p*

S. cry for ven-geance ne-ver cease In your deep floods drown

A. *f* *mp* *p* sin doth ne-ver cease In your floods drown

T. *f* *mp* *p* sin doth ne-ver cease in your floods drown

B. *f* *mp* *p* sin doth ne-ver cease in your floods drown

Ten. Sax. *mp* *dim.* *pp*

Pno. *f* *mp* *pp* *p* sax part ad lib. *dim.*

42

S. all my faults and fears nor let his eyes see sin, but through my tears

A. all my faults and fears nor let his eyes see sin, but through my tears

T. all my faults and fears nor let his eyes see sin, but through my tears

B. all my faults fears nor nor let his eyes see sin,

Ten. Sax. *p*

Pno.

48

S. *rit. dim. pp*
nor let his eyes see sin, but through my tears

A. *rit. dim. pp*
nor let his eyes see sin, but through my tears

T. *rit. dim. pp*
nor let his eyes see sin, through tears

B. *rit. dim. pp*
nor let his eyes see sin, through tears

Ten. Sax. *dim. pp*
nor let his eyes see sin, through tears

Pno. *dim. pp*
nor let his eyes see sin, through tears

W.E. Henley (1849-1903)

The Villanelle

Daniel Rubinoff

rollicking ♩ = 50

Soprano

Alto Saxophone

Piano

legato

mp

mp

6

Sop. *dolce*

A. Sax. *mp* A dain - ty thing's the Vill - a-nelle *mf* a

Pno. *mp*

11 *more energy*

Sop. dain - ty thing

A. Sax. *mf*

Pno. *mf*

15

Sop. *mp* sly - sly - mu - si-cal so

A. Sax. *mp*

Pno. *mp*

19 *mp* *mf* *mp*

Sop. mu - si-cal a jewel - in rhyme

A. Sax. *mp* *p*

Pno.

23

Sop. it serves its pur - pose pas - sing well

A. Sax.

Pno.

27

Sop. A dou-ble dou-ble dou-ble dap - pered

A. Sax. *f*

Pno. *staccato*

31

Sop. sil - ver bell That must be made to clink and chime

A. Sax.

Pno.

35 *dolce mp* *p*

Sop. *o o o o o* A dain-ty thing's the Vil-a-nelle

A. Sax.

Pno. *organ-like*

40

Sop. You must not ask of it the swell of or - gans gran - di-

A. Sax.

Pno.

45

Sop. ose and su-blime A dain - ty thing's the vil-la-nelle

A. Sax. *p* *mp*

Pno.

50

Sop. And, filled with sweet-ness, as a shell is

A. Sax. *p*

Pno.

54

Sop. filled with sound and launched in time

A. Sax. *p*

Pno.

58

Sop. It serves its pur- pose pass - ing well It serves its pur- pose

A. Sax.

Pno.

63

Sop. pass - ing well

A. Sax.

Pno.

67

Sop.

A. Sax. *rit.*

Pno. *rit.*

Autumn Song

W.H. Auden (1907-1973)

Daniel Rubinoff

Mournful but moving ♩ = 120

mp *p*

Soprano

Alto Saxophone

Mournful but moving ♩ = 120

mf *mp*

Piano

5

Sop.

A. Sax.

Pno.

Nurse's flo - wers will not last Nurses to the graves are gone

9

Sop.

A. Sax.

Pno.

and the prams go roll ing on

13

Sop.

A. Sax.

Pno.

Whis-pering neigh-bours left and right pluck us from the

mp *mf* *p* *mp* *staccato*

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staccato

16 *mf*

Sop. real de-light; And the ac-tive hands must freeze

A. Sax. *staccato mf mp*

Pno. *mf*

20 *mp*

Sop. Lone-ly on their sepa-rate knees

A. Sax. *staccato mp p mf*

Pno. *p mp mp*

25 *mp mf p accel.*

Sop. Star-ving through the leaf-less wood Trolls run

A. Sax. *mp p mp p*

Pno. *mp*

32 *mf mp*

Sop. scol-ding for their food *tranquillo* And the night-in-gale is

A. Sax. *mf mp p*

Pno. *mf mp tranquillo*

39 *p* *mf*

Sop. dumb And the an-gel will not come

A. Sax. *mp* *f*

Pno. *p* *mf*

45

Sop.

A. Sax. *mf* *mp* *mf* *mp*

Pno. *mp*

50 *mf* *mp tranquillo*

Sop. Cold im-pos-si-ble a-head lifts the moun-tain's love-ly head whose

A. Sax. *p*

Pno.

54 *cresc.* *mf* *mp*

Sop. white wa-ter-fall could bless trav-ellers in their last di-stress

A. Sax. *mp* *p* *mf*

Pno. *mp* *mf* *mp*

61 *mp*

Sop. tra - vellers in their last di-stress *misterioso cresc.*

A. Sax. *p*

Pno.

69

Sop.

A. Sax.

Pno.

73 *mf* *mp*

Sop. trav- ellers in their last di-stress

A. Sax. *mf* *p* *pp*

Pno. *mp*

A Birthday

freely, as in a dream ♩ = 68

Tranquil but with movement ♩ = 100

Soprano

Alto Saxophone

Piano

6

Sop.

heart is like a sing - ing bird Whose nest is in a

A. Sax

Pno.

12

Sop.

wa - ter shoot cascading

A. Sax

Pno.

17

Sop.

My heart is like the ap - ple tree whose boughs are bent with

A. Sax

Pno.

24 *mf*

Sop. thick-set fruit *mp* My heart is like a

A. Sax *mf* 3 *cresc.* *f* *mp* *mp*

Pno. *mf* *f* *mp* *p*

30 *lazily* 3

Sop. rain-bow shell that pad - dles in a hal - cy - on sea *mf* My

A. Sax *mp* *mp*

Pno. *mp* *lazily* 3 *rit.*

34 *mp*

Sop. heart is glad - der than all these be - cause my love is come to me

A. Sax *mp* *p* *cresc.*

Pno. *mp* 3

39 *f a tempo appassionato*

Sop. Raise

A. Sax *mf* *mp* *mf* *poco rit.* *mf*

Pno. *mf* *mp* *mf*

44

Sop. *mp* *mf*
me a da - is of silk and down Hang it with vair and

A. Sax *p* *mp* *mf*

Pno. *p* *mp*

50 *mp* *dolce mp*
pur-ple dyes Carve it in doves and

A. Sax *> mp* *mf cantabile* *dolce mp*

Pno. *mf* *mp*

55 *p*
po-me- gra-nates and pea-cocks with a thou-sand eyes

A. Sax *p* *mp*

Pno.

60 *mp misterioso*
work it in gold and sil-ver grapes in leaves and sil-ver

A. Sax *p* *pp* *cresc.*

Pno. *mp* *p*

65 *mf*

Sop. fleur-de-lys

A. Sax *mp* *mf* *mp cantabile*

Pno. *mf* 3 *mf cantabile* 3

70 *mp* *freely*

Sop. be - cause the birth-day of my life is come my love is come to

A. Sax *p* *p*

Pno. *mp*

75 *mp* *mf* *allargando*

Sop. me my love is come to me my love is come to me

A. Sax *pp* *ppp* *mp poco rit.*

Pno. *p* *allargando* *dim.* *pp*

A Klezmer Colour for Saxophone Quartet

Daniel Rubinoff

With intensity ♩ = 120

The musical score is for a Saxophone Quartet, consisting of Soprano, Alto, Tenor, and Baritone saxophones. The key signature is one flat (B-flat major or D minor), and the time signature is 2/4. The tempo is marked 'With intensity' with a quarter note equal to 120 beats per minute. The score is divided into four systems, each containing four staves. Measure numbers 9, 19, and 29 are indicated at the start of their respective systems. Dynamics include *mp* (mezzo-piano), *p* (piano), *mf* (mezzo-forte), and *f* (forte). The score features various musical notations such as eighth notes, quarter notes, and half notes, along with slurs and accents. The copyright notice 'Copyright © 2007' is located at the bottom center of the page.

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39

S *fp* *f* *mp*

A *fp* *f* *mp*

T *mf*

B *f*

49

S

A *mp espressivo* *cresc.* *mf* *dim.*

T *p* *mp* *cresc.* *mf* *dim.*

B *p* *mp* *cresc.* *mf* *dim.*

58

S *mf* *cresc.* *f* *dim.* *mp* *mp*

A *mp* *mp* *mp* *mp* *mp* *mp*

T *mp* *mp* *mp* *mp* *mp* *mp*

B *mp* *mf* *mp* *mp* *mp* *mp*

67

S *mp cresc.* *mp* *mp*

A *mp cresc.* *mp* *mp*

T *f* *dim.* *p* *mp cresc.* *mp*

B *mf espressivo* *mp* *cresc.* *mp* *mp*

78

S *f* boldly *ff*

A *f* boldly *ff*

T *f* boldly *ff*

B *f* boldly *ff*

86

S *mf* energico e leggiero

A *mf* energico e leggiero

T *mf* energico e leggiero

B *mf* energico e leggiero

93

S *f* *mf* *f*

A *f* *mf* *f*

T *f* *mf* *f*

B *f* *mf* *dim.* *mp*

100

S *mp* *mp*

A *mp* *mp*

T *mf*

B *mf*

mf driving

107

S *mp* *f*

A *mp* *f*

T *p* *f*

B *mp* *f*

113

S *p* *mp* *mf* *mp*

A *p* *mf* *mp*

T *mp* *mf* *mp*

B *mf* *mp* *cresc.* *f*

121

S *mf* *p* *f*

A *mf* *p* *f*

T *f* *mf*

B *mp* *cresc.* *mf*

130

S *mp*

A *f*

T *f* *mf*

B *f* *mf*

138

S *mf*

A *mf*

T *mf* *mp*

B *mf* *mf sempre staccato*

146

S *mf sempre staccato* *p* *cresc.* *mf*

A *mf sempre staccato* *p* *cresc.* *mf*

T *mf* *p* *cresc.* *mf*

B *mf* *p* *cresc.* *mf*

154

S *f* *cresc.* *ff* *pp* $\text{♩} = 60$

A *f* *cresc.* *ff* *pp*

T *f* *cresc.* *ff* *pp*

B *f* *cresc.* *ff* *pp*

165

S *cresc.* *mp* *cresc.* *mf* *f with intensity*

A *cresc.* *mp* *cresc.* *mf* *f with intensity*

T *cresc.* *mp* *cresc.* *mf* *f with intensity*

B *cresc.* *mp* *cresc.* *mf* *f with intensity*

Allegro vivace $\text{♩} = 168$

179

S

A

T

B

accel.

accel.

Presto ♩ = 208

187

S

A

T

B

sempre staccato

cresc.

accel.

ff

cresc.

accel.

ff

cresc.

accel.

ff

cresc.

accel.

ff

sempre staccato

cresc.

accel.

ff

APPENDIX 2

CD RECORDING CONTENTS

The accompanying recording contains the entire music collection listed in Appendix 1.

Track	Title
1	<i>Incantation</i>
2	<i>Dance</i>
3	<i>Kyrie for Alto Saxophone, Choir and Organ</i>
4	<i>Drop Drop Slow Tears for Tenor Saxophone and Choir</i>
5	Three Moods for Voice, Saxophone and Piano: <i>The Villanelle</i>
6	<i>Autumn Song</i>
7	<i>A Birthday</i>
8	<i>A Klezmer Colour for Saxophone Quartet</i>

Credits

Marcus Ali, Baritone saxophone (*A Klezmer Colour for Saxophone Quartet*)

Esteben Cambre, Bass

Vania Chan, Soprano (*Three Moods*)

Michelle DeBoer, Soprano (*Kyrie*)

Tristan DeBorba, Tenor saxophone (*A Klezmer Colour for Saxophone Quartet*)

Ellen Meyer, Piano

Mark Laver, Alto saxophone (*A Klezmer Colour for Saxophone Quartet*)

Daniel Rubinoff, Conductor, Organ, Soprano, Alto, and Tenor saxophones,

Ben Stein, Tenor

Recording Engineers: Ferenc Szabo (*Three Moods*); Joseph Resendes (*Kyrie, Drop, Drop Slow Tears, A Klezmer Colour*); Daniel Rubinoff (*Incantation and Dance*)

Editor/Producer: Daniel Rubinoff

BIBLIOGRAPHY

Books

- Burkholder, P., and Palisca, C. (Eds.). *The Norton Anthology of Western Music*. 5th ed., 2 vols. New York: Norton, 2006.
- Cogan, Robert and Escot, Pozzi. *Sonic Design*. Englewood Cliffs: Prentice-Hall, 1976.
- Cooke, Nicholas. *A Guide to Musical Analysis*. Oxford: Oxford University, 1994.
- Copeland, Aaron. *Music and Imagination*. Cambridge: Harvard University, 1979.
- Curtis, Mike. *The Klezmer Repertoire*. Rottenburg: Advance Music, 1997.
- Fenton, James. *An Introduction to English Poetry*. New York: Farrar, Straus & Giroux, 2002.
- Grout, Donald Jay. *A History of Western Music*. 3rd ed. New York: Norton, 1980.
- Heller, Charles. *What to Listen for in Jewish Music*. Toronto: Ecanthus, 2006.
- Horwood, Wally. *Adolphe Sax*. London: Bramley Books, 1980.
- Idelsohn, A.Z. *Jewish Music in its Historical Development*. New York: Henry Holt, 1929.
- Ingham, Richard (ed). *The Cambridge Companion to the Saxophone*. Cambridge: Cambridge University, 1998.
- Kochnitzky, Leon. *Adolphe Sax and his Saxophone*. New York: Belgian Government Information Center, 1949.
- Kohs, Ellis. *Musical Composition: Projects in Ways and Means*. Metuchen: Scarecrow, 1980.
- . *Musical Form: Studies in Analysis and Synthesis*. Boston: Houghton Mifflin, 1976.
- Liebman, David. *Developing a Personal Saxophone Sound*. Medfield: Dorn, 1989.
- Londeix, Jean-Marie. *Saxophone Study*. Trans. William Street. Paris: Lemoine, 1997.

- . *Parameters of the Saxophone*. Trans. William Street. Paris: Leduc, 1989.
- . *125 Years of Saxophone Music*. Paris: Alphonse Leduc, 1971.
- . *Music for Saxophone Vol. II*. Cherry Hill: Roncorp, 1985.
- Menuhin, Yehudi. *The Music of Man*. London: Methuen, 1986.
- Reti, Rudolph. *The Thematic Process in Music*. Westport: Greenwood, 1951.
- Segell, Michael. *The Devil's Horn: The Story of the Saxophone, From Noisy Novelty to King of Cool*. New York: Farar, Straus & Giroux, 2005.
- Sokolow, Peter. *Piano and Keyboard Guide to Klezmer and Hasidic Music*. Cedarhurst: Tara, 1991.
- . *Guide to Klezmer Arranging and Orchestration*. Cedarhurst: Tara, 1991.
- Sapoznik, Henry. *The Compleat Klezmer*. Cedarhurst: Tara, 1987.
- Slobin, Mark (ed). *American Klezmer: its Roots and Offshoots*. Berkeley: University of California, 2002.

Articles and Essays

- Ashton, Don. "In the Twentieth Century," in *The Cambridge Guide to the Saxophone*, edited by Richard Ingham, 20-36. Cambridge: Cambridge University, 1998.
- Berlioz, Hector. "Instruments de musique – M. A. Sax," *Journal des Débats*, June 12, 1852, 2-3.
- Delangle, Claude and Jean-Denis Michat. "The Contemporary Saxophone," in *The Cambridge Guide to the Saxophone*, edited by Richard Ingham, 161-183. Cambridge: Cambridge University, 1998.
- Ingham, Richard. "The Saxophone Quartet," in *The Cambridge Guide to the Saxophone*, edited by Richard Ingham, 65-74. Cambridge: Cambridge University, 1998.
- Roach, David. "Jazz and Rock Techniques," in *The Cambridge Guide to the Saxophone*, edited by Richard Ingham, 88-93. Cambridge: Cambridge University, 1998.

Rossini, Gioacchino. "Adolphe Sax." *L'illustration*, Février, 17, 1864, 4.

Unpublished Material

Deans, Kenneth. "A Comprehensive Project in Saxophone Literature with an Essay Consisting of Translated Source Readings in the Life and Work of Adolphe Sax.," D.M.A. thesis, University of Iowa, 1980.

Interviews

Father Thomas McNeil, phone interview by author, June 7, 2007.

Scores

Britten, Benjamin. *Six Metamorphosis after Ovid, Op. 49*. London: Boosey & Hawkes. 1952.

Debussy, Claude. *Syrinx - La Flûte de Pan*. Edited by Ernst-Günter Heinemann. Paris: Jobert, 1927.

Glick, Srul Irving. *Three Songs of Light*. Corvallis: Earthsongs, 1999.

Honegger, Arthur. *La Danse de la Chèvre*. Paris: Salabert, 1932.

Schubert, Franz. *Der Hirt auf dem Felsen* (The Shepherd on the Rock), D965. New York: Schirmer, 1945.

———. *Lieder*. Kassel: Bärenreiter-Verlag, 1977.

Telemann, Georg Philip. *Fantasias for Solo Flute*. Rock Hill: Musica Rara, 1993.

The New Oxford Easy Anthem Book. Oxford: Oxford University, 2002.

Ward-Steinman, David and Susan Ward-Steinman. *Comparative Anthology of Musical Forms*. 2 vols. Lanham: University Press of America, 1986.

Recordings

Ameling, Elly. *Schubert /Schumann Songs*. Harmonia Mundi, 77085-2-RG, 1990.

Crakow Klezmer Band. *Remembrance*, Tzadik, 8116, 2007.

Delangle, Claude. *The Solitary Saxophone*. Bis, 640, 1994.

Horch, Kyle. *Chambersax*. Clarinet Classics, CC0029, 1999.

Hunt, Gordon. *Soliloquy - British Music for Solo Oboe*. BIS, 769, 1998.

Krakauer, David. *The Klezmatics: Rhythm and Jews*. Flying Fish, FLY, 591, 1992.

Savall, Jordi. *Hespèrion XX: Music from Christian and Jewish Spain 1450-1550*.
Virgin, 724356159129, 1999.

Stokes, Christopher. *Passiontide: Music for Solace and Reflection*. Naxos, 8.557025, 2002.

Verbruggen, Marion. *Telemann Solo Works*. harmonia mundi, 907158, 1997.

Webster, Ben. *Soulville*. Verve, 31452-14492, 1957.

Wimmer, Thomas. *Sephardic Romances - Ensemble Accentus*. Naxos, 8.553617, 1996.

Zukerman, Eugenia. *Incantation*. Delos, DE3184, 1996.