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## Subtle shifts: using the brightest to darkest modal concept to express jazz harmony

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**SUBTLE SHIFTS:  
USING THE BRIGHTEST TO DARKEST MODAL CONCEPT  
TO EXPRESS JAZZ HARMONY**

Written Document  
Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
In partial fulfillment of the  
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In  
The School of Music

by  
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B.M. Louisiana State University 2005  
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December, 2011

## **DEDICATION**

To my parents, Dale and Eleanor Madere, who did whatever was necessary to help me achieve my goals. I am forever in debt to you.

## **ACKNOWLEDGEMENTS**

This paper would be nothing without the help of all of my professors at Louisiana State University. I'd like to thank my professor and friend Brian Shaw for introducing this concept to me. It has changed the way I think about and write music. I'd also like to thank my other committee members Yung-chiao Wei, Bill Grimes, Willis Delony and Bill Demastes for helping me get to this point. I would not be where I am today without their help.

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## **ABSTRACT**

In this paper, I will outline a method of composition that I believe has been highly under-used in jazz composition. I have studied the work of composers Ron Miller and Maria Schneider, and have used their concept of brighter to darker modes to further my modal exploration. With explanation and musical examples, I will explain two possible ways to achieve 12 modes that progress from bright to dark, and then from dark back to bright. Another purpose of this paper is to provide a compositional aid to other composers interested in this concept and the subtle shades of major and minor that can be created. To help aid in composition, I have included appendices, which will show all possible modes for any given bass note or for any given Ionian mode. I will also show practical uses of this method by giving examples of it in my own compositions. Explanation will also be given as to how this method can be used to derive traditional tertian harmony from a simple modal voicing and therefore give the composer the option of keeping a composition purely modal or writing a composition that can be viewed as more traditional.

## CHAPTER 1: INTRODUCTION

When considering modal composition in Jazz, the first thing that probably comes to mind is the work of Miles Davis on his popular record *Kind of Blue*. Davis rejected the intricate chord progressions used during the bebop era, resulting in a musical genre that used harmony in its most basic and simplest form. For example, in “So What” he only uses one mode that alternates between two pitches, D and Eb. The result is a much slower harmonic rhythm in stark contrast to that of the traditional bebop tradition. Jazz writer Barry Ulanov believed that by slowing down the speed at which the chords changed, Davis was giving listeners a “welcome relaxation of tempo, further emphasizing the ‘linear,’ melodic aspect of the music.”<sup>1</sup>

Slowing down the harmonic rhythm in this and other modal compositions not only changed the feel from a quick one that was common in the bebop era to a more relaxed feeling, but it also changed the way a performer conceived of the chord changes. In bebop, performers were thinking more vertically in their solos, but began to think more horizontally with the advent of modal jazz. John Coltrane, tenor saxophonist and performer on *Kind of Blue*, said:

There was one time in his past that he [Davis] devoted to multi-chorded structures. He was interested in chords for their own sake. But now it seemed that he was moving in the opposite direction to the use of fewer and fewer chord changes in songs...this allowed the soloist the choice of playing chordally (vertically) or melodically (horizontally)...<sup>2</sup>

In addition to slowing down the harmonic rhythm, thereby giving soloists the option to think horizontally, Davis also strived to simplify the harmonic language used in bebop. Saxophonist Cannonball Adderly was quoted as saying “bebop’s discipline

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<sup>1</sup> Ashley Kahn, *Kind of Blue - The Making of a Jazz Masterpiece*. (New York: Da Capo, 2000), 69.

<sup>2</sup> Ibid, 66.

means that you have to have information to play bebop.”<sup>3</sup> Adderly was referring to the expanded harmonic palette that was created by bebop musicians like Charlie Parker and Dizzy Gillespie. These performers strived to add or alter as many chord tones as possible. Although there were many possibilities of new note choices in these sometimes heavily altered chords, this was not necessarily the case in modal jazz. One chord that frequently had notes added to it or altered was the dominant seventh chord. Over a dominant seventh chord, one could play the regular Mixolydian scale or alter the 9<sup>th</sup>, 11<sup>th</sup> or 13<sup>th</sup>. Also note that this can be viewed as a Db melodic minor scale.

#### Example 1



Davis sought to simplify the complex harmonies that were used in bebop and strip them down to their essential form – a scale or mode. When performers adhered strictly to one mode, there were only seven notes from which to choose, resulting in improvisers using these chord changes more horizontally than vertically. The long durations of the modal chord changes also allowed the soloist more time to fully develop ideas free of the restraints forced by quickly moving harmonies and essentially come up with their own “structured cadenzas.”<sup>4</sup>

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<sup>3</sup> Ibid, 67.

<sup>4</sup> Ibid, 68.



## CHAPTER 2: BRIGHTEST TO DARKEST MODAL CONCEPT

This paper addresses a concept that combines aspects of the vertical thinking found in bebop and the linear thinking found in modal jazz. This process cycles through the traditional church modes and beyond and was introduced by Ron Miller in his book *Modal Jazz Composition and Harmony*. Miller is a composer and professor of jazz studies at the University of Miami.<sup>5</sup> His work in this book deals primarily with the alterations of modes to achieve different tone colors and chordal voicings that are not possible with unaltered modes.

In addition to his alteration of modes, Miller also presents an ordering of modes that proceed from brightest to darkest. Miller uses all seven diatonic modes and discusses the different tone colors that can be achieved using each mode. He refers to these colors as "emotional generalizations."<sup>6</sup>

Typically, one thinks of the progression of modes related to C, in ascending order.

NAME	CONSTRUCTION	TONALITY
Ionian	C Major Scale on C	Major
Dorian	C Major Scale on D	Minor, raised 6 <sup>th</sup> , lowered 7 <sup>th</sup>
Phrygian	C Major Scale on E	Minor, lowered 2 <sup>nd</sup> , lowered 6 <sup>th</sup>
Lydian	C Major Scale on F	Major, raised 4 <sup>th</sup>
Mixolydian	C Major Scale on G	Major, lowered 7 <sup>th</sup>
Aeolian	C Major Scale on A	Natural minor, lowered 6 <sup>th</sup>
Locrian	C Major Scale on B	Minor, lowered 2 <sup>nd</sup> , lowered 5 <sup>th</sup>

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<sup>5</sup> Ron Miller, *Modal Jazz Composition and Harmony Volume 1*. (Rottenburg, Advance Music, 1996), 142.

<sup>6</sup> Ibid, 29.

Ron Miller, however, alters the progression and begins his discussion with the Lydian mode and proceeds in an order that he describes as advancing from brightest to darkest.

To compare the two presentations, we find the order

#	Typical	Miller	
1	Ionian	Lydian	Bright
2	Dorian	Ionian	↑   ↓
3	Phrygian	Mixolydian	
4	Lydian	Dorian	
5	Mixolydian	Aeolian	
6	Aeolian	Phrygian	
7	Locrian	Locrian	Dark

## FURTHER EXPLORATION OF CONCEPT

One contemporary composer who has developed the brightest to darkest modal concept is Maria Schneider. Schneider is a Grammy award winning composer who has studied with composers/arrangers Bob Brookmeyer and Gil Evans to name a few. She has released several albums of original music and has won much acclaim in reader's polls in *DownBeat Magazine*.<sup>7</sup> Schneider spoke about this concept at the Banff Centre Jazz Workshop in 2001.<sup>8</sup>

Schneider's use of the brightest to darkest concept takes the modal concept that was traditionally more linear and adds the verticality found in bebop and other traditional types of music. Schneider uses the concept to explore the dissonances that occur naturally throughout the modes. Using C Lydian as a starting point, Schneider stacks the pairs of

<sup>7</sup> Artist Share, "About," <http://www.mariaschneider.com/about.aspx> (assessed 28 September 2011).

<sup>8</sup> *Maria Schneider Master Class*. VHS. Filmed by Brian Shaw. 2001. Banff Centre Jazz Workshop, Banff, Alberta, Canada.

half steps that occur in the mode and voices them as chord tones, grounded with the C in the bass as seen in example 2.

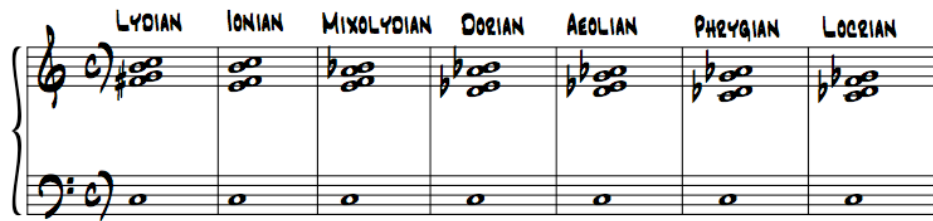
**Example 2**



Schneider is in effect, redefining the way we express or understand harmonic structures. Typically, a chord is defined as having a root, third and fifth with the third being the most important factor in determining the quality of the chord. As shown above, however, the harmony based on C Lydian does not follow that definition. The chord contains a root and a fifth, but also contains a major seventh and a raised 4th. Positioning a root next to a major seventh and a raised fourth next to a fifth is not the most common voicing, but the missing third of the chord makes this ambiguous, and therefore potentially more interesting. Even without the third of the chord present, an E of some sort, it is clear that some type of harmony is occurring.

The modal cells used in the brightest to darkest concept can be used to create complete harmonies that sometimes fit the traditional definition of a chord. In example 3, Ionian, Mixolydian, Dorian, and Aeolian all contain a root and a third, which resembles a traditional chord more than did the notes found in the expression of the Lydian mode.

### Example 3



The only complete chord that can be taken from the diatonic modes is C Aeolian, which contains a root, minor third and a perfect fifth. However, it also contains half steps that clash with the traditional chord tones, and thus make it sound significantly less stable than a regular C minor chord would sound. When we arrive at Locrian, the only note that would be found in some type of traditional C chord is the actual root. This chord could be more easily thought of as a Db chord over C, illustrating that we have progressed far beyond the brighter modes and at this point are have moved more to the darker side of the spectrum.

When comparing one modal voicing to the next, an interesting pattern ensues. Starting with C Lydian, we have two sets of perfect fourths a half step apart. In C Ionian, two common tones, B natural and C, are retained and the F# and G move down a whole step and become E and F. The B and C were the top two notes of a set of perfect fourths in C Lydian, but are now the top two notes of a set of perfect fifths. This pattern of a set of perfect fourths shifting to a set of perfect fifths with two common tones retained from the previous cell continues until we have reached the final diatonic mode of Locrian.

#### Example 4

Example 4 illustrates the transition between modes using a specific voice-leading technique. The notation shows three measures on a grand staff (treble and bass clefs). The first measure is labeled **LYDIAN** with a key signature of one sharp (F#). The second measure is labeled **IONIAN** with a key signature of one flat (Bb). The third measure is labeled **MIXOLYDIAN** with a key signature of two flats (Bb, Eb). Arrows indicate the movement of notes between measures: from Lydian to Ionian, F# and G move down a whole step to F and Gb, while B and C are retained; from Ionian to Mixolydian, B and C move down a whole step to Bb and Cb, while E and F are retained. The text "ETC." follows the third measure.

The first method relies on the alternation of sets of fifths and fourths with two notes being retained from one mode to the next, and two notes moving down a whole step. Another way to visualize moving from one mode to the next involves octave displacement. Instead of thinking of these shifts, each voicing can be transposed up a perfect fourth and still achieve the same results found in Example 3.

#### Example 5

Example 5 shows seven modes (Lydian, Ionian, Mixolydian, Dorian, Aeolian, Phrygian, and Locrian) over a single bass note. The notation is on a grand staff. The bass line consists of a single half note in the bass clef, which changes its pitch from measure to measure. The treble clef shows the corresponding mode for each bass note. The modes are: **LYDIAN** (one sharp), **IONIAN** (one flat), **MIXOLYDIAN** (two flats), **DIORIAN** (two sharps), **AEOLIAN** (three flats), **PHRYGIAN** (three sharps), and **LOCRIAN** (four flats). The bass notes are: C2, B1, Bb1, C#2, Bb2, C#3, and Bb3.

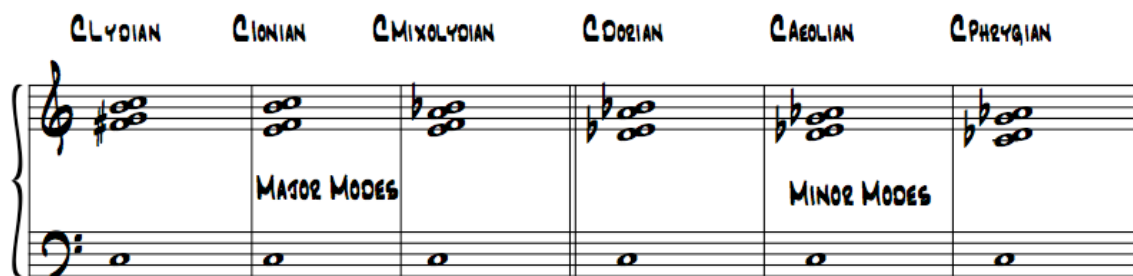
This type of modal thinking can lead to several harmonic possibilities. Seven different sonorities can be achieved with a single bass note. Keeping the bass note consistent while the modal cells on top change is commonly referred to as a pedal point. Also, since the modes all have some relationship to the bass note, it gives us a sense of foundation and can even imply some type of modal center.

## SHADINGS OF MAJOR AND MINOR

This method can also lead to subtle shifts of harmonic color. Within these seven modes, three modes have a major quality, three have a minor quality and one has a diminished quality. Adding notes to major or minor sonorities can slightly alter the sound of these traditional chords.

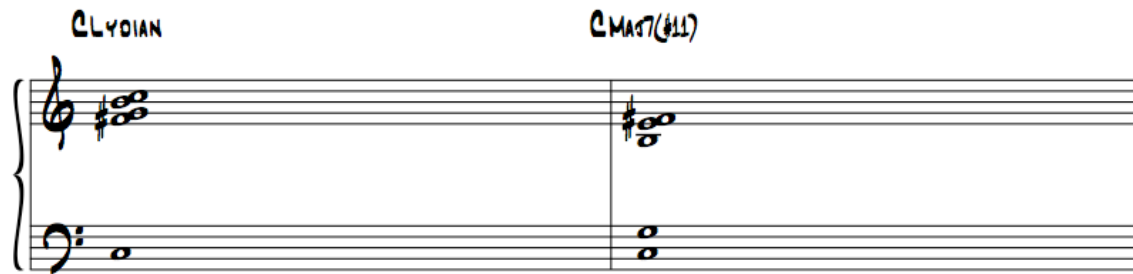
These slight alterations provide a different sound to chords that could not be attained with only the root, third and fifth. These differing degrees of major and minor are shown below in Example 6 and can offer a composer an interesting color palette from which to choose.

Example 6



These different shades of major and minor can be used to create subtle variations on traditional chords. The first of the major quality modes is Lydian. If based on C, this mode will have the notes C, F#, G and B. Although there is no third in this chord, since this mode has the same key signature as G major, it will have an E natural and thus form a major chord. Adding the other notes of this mode, a CMaj7(#11) chord can now be formed as seen in Example 7.

### Example 7



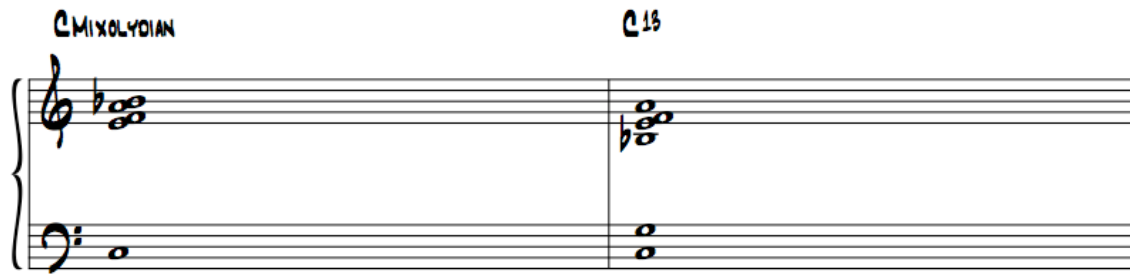
The next “shade” of major is the Ionian mode. This mode is used to form the typical major scale and thus forms a typical major chord with no variation. The third of the chord is already present, and the fifth can be found by moving up the scale. Note that the fourth of the chord will also be present. It can, however, be seen as an added note and does not affect the overall harmony as added notes do in other chords.

### Example 8



The final variation of major can be found in the Mixolydian mode. This mode is expressed more traditionally as a major chord with a flatted seventh or simply a dominant seventh. Keeping the sixth scale degree could also make this a C13 chord.

### Example 9



The minor diatonic modes can also produce different harmonic shading. The first minor mode is Dorian and contains the root, second, minor third, sixth and seventh scale degrees. Notes from this cell can be used to form a minor chord with an added sixth, ninth, and eleventh as seen in Example 10.

### Example 10



The next shade of minor, Aeolian, traditionally forms a natural minor scale. When the sets of half steps are sounded vertically, the result is more dissonant than a standard minor chord. As seen in Example 11, a harmony derived from the modal cell found in Aeolian can be used to make a minor ninth chord with lowered sixth.

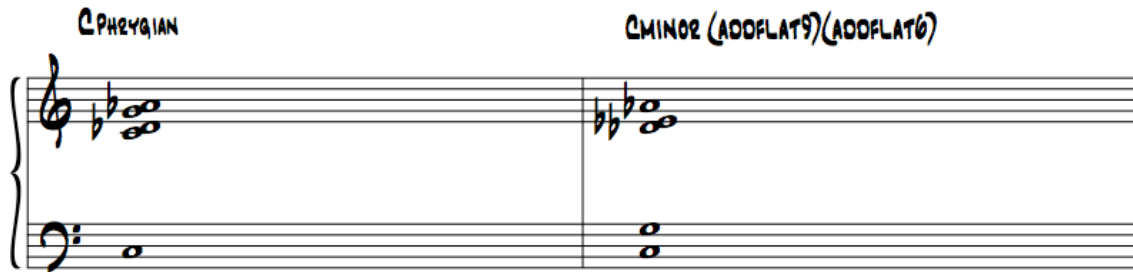


### Example 11



The last shade of minor found in the brightest to darkest modes concept is Phrygian. This mode is similar to Aeolian, but has a flatted second scale degree as well as a flatted fifth scale degree. If all notes of the modal cell are sounded simultaneously, a minor seventh chord with a flatted second and flatted sixth will be sounded.

### Example 12



These subtle shades of major and minor tonality can be used to add interest to traditional major and minor chords. However, notating these added-note chords can yield some confusing results. It may be more efficient to leave some of these subtle shades as modal voicings rather than change them to chords. For example, changing C Phrygian to Cmin add flat 6 and 9 may cause a performer more problems than necessary. Notating the specific voicing in the score may be more efficient, a detail that will be discussed further in later chapters.

## SYNTHETIC MODES

Many interesting sounds and color combinations can be made using the diatonic modes and the brightest to darkest concept first outlined by Ron Miller and further explored by Maria Schneider. Although tradition says that the modes stop at Locrian, several others are yet to be explored. Once having arrived the Locrian mode, it is possible to continue the same pattern of shifting half steps to the left, from fourths to fifths, to achieve five more modes. The first seven modes discussed could be described as a scale, altered to fit the key signature of another scale (ex. C Lydian is a G Major scale starting on C). This is not the case once we have crossed over to the Locrian mode.

Once we have passed Locrian, continuing to shift the half steps to the left results in the notes A#, B and E#, F#. To continue the pattern of basing this mode on C, there must also be a C in the bass, which makes labeling this mode quite difficult. The reason we cannot give this mode a label as some type of traditional scale is the occurrence of three half steps in a row. The half step cell we find in F# Ionian is A#,B and E#,F#. If we add the C natural to the mix, we have to try and label a scale that contains three consecutive half steps.

### Example 13



I have tried several combinations of altered scales to fit with these three notes. After many failed attempts, I have come to the conclusion that there is no effective label as a mode starting on C. A better way to describe this is to combine a mode with the foreign bass note and create some type of synthetic mode. The sets of half steps in this case more resemble an F# Ionian mode. Since we are trying to keep all of these modes consistent by using a C bass, the best solution to the problem is to just call it an F# Ionian mode with a foreign bass note of C.

**Example 14** (Note that the F, Gb in C Locrian has been respelled E#, F# in F# Ionian. The common tones are retained but it is easier to spell it in terms of F#.)



When we pass the Locrian mode, it is interesting to note the relationship occurring between one mode and the next. After the F# Ionian over C, comes B Ionian over C. Then comes E Ionian over C, A Ionian over C and finally D Ionian over C. To move from one of these modes to the next, we need only to follow the circle of fifths.

**Example 15**



Another interesting quality contained in these modes is that the type of mode never changes. These modes are all Ionian with a foreign bass note. The type of mode never changes as we progress through the circle of fifths as it did in the diatonic modes, but these modes differ from the six diatonic modes in that they progress from darker to brighter. When progressing to D Ionian over C, we have moved back closer to the brighter side of the spectrum. This mode is the brightest of the synthetic modes and one should notice that one set of half steps can also be found in the C Lydian mode.

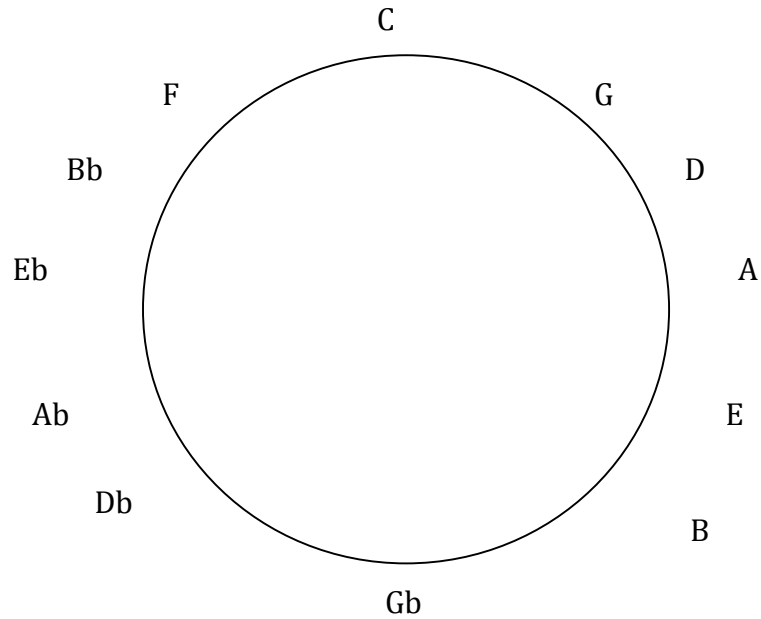
#### Example 16



#### PROGRESSION OF ALL MODES BASED ON C

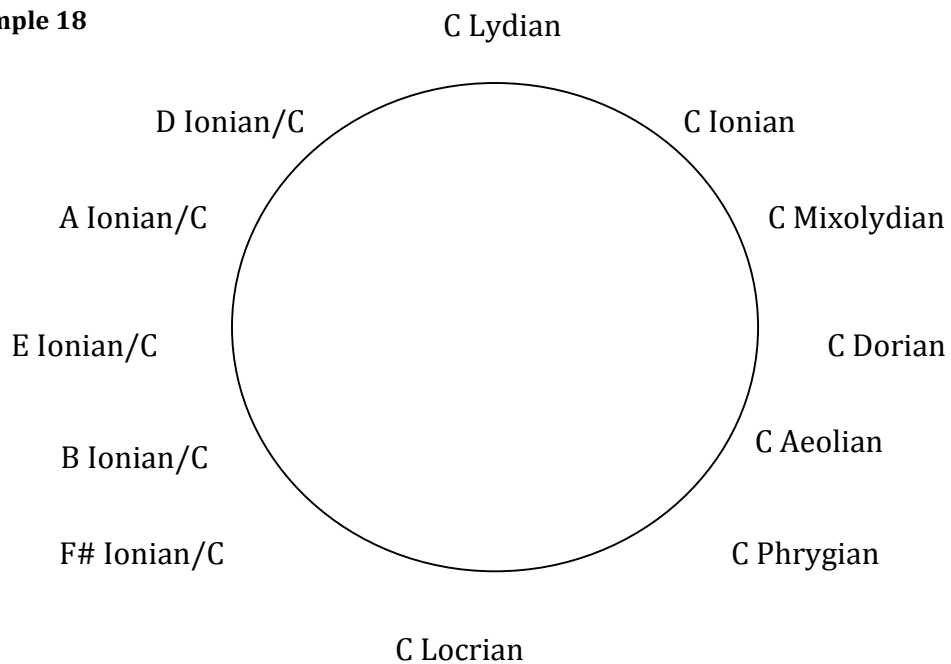
The synthetic modes have an interesting quality that cannot be found in the diatonic modes. Instead of progressing from brighter to darker, the synthetic modes begin darker and gradually get lighter as they get closer to Lydian. When looking at all twelve modes as a whole, one can see that the modes move in a way that is similar to the familiar circle of fifths progression.

**Example 17**



This also occurs in this brightest to darkest concept, except the focus is on modes rather than scales. We begin with C Lydian, progress to C Ionian and so on. We move through the diatonic modes and then go to the synthetic modes. After D Ionian over C, we return to C Lydian.

**Example 18**



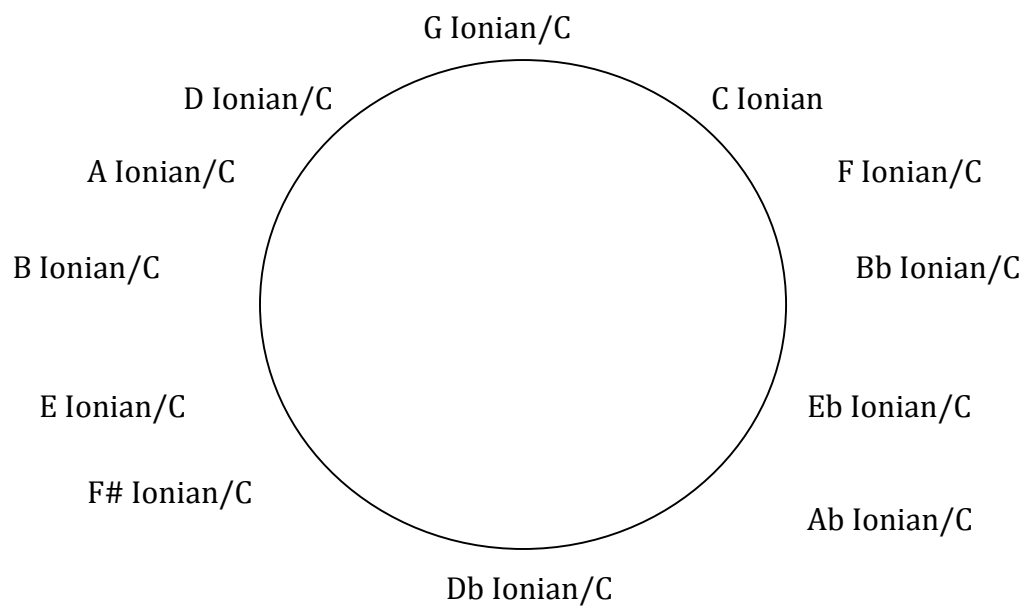
Since all of these synthetic modes consist of an Ionian mode over a foreign bass note, it is possible to label all of the modes in this manner. Since the diatonic modes are based on C with a key signature from another key, it is definitely possible to achieve this. The brightest mode, C Lydian, could be viewed as G Ionian over C. The next would be C Ionian, followed by F Ionian over C. This pattern of an Ionian mode, with circle of fifths movement, over a foreign bass note continues until we reach what was labeled C Locrian. We can now label this as a Db Ionian mode over C.

#### Example 19

G IONIAN/C	C IONIAN	F IONIAN/C	B $\flat$ IONIAN/C	E $\flat$ IONIAN/C	A $\flat$ IONIAN/C	D $\flat$ IONIAN/C
C LYDIAN	C IONIAN	C MIXOLYDIAN	C DORIAN	C AEOLIAN	C PHRYGIAN	C LOCRIAN

Changing each mode to an Ionian mode over a bass note is another way to organize the progression from the brighter modes to the darker modes, and then back to brighter, that moves more in accordance to the circle of fifths. The circle of bright to dark can now be used to show the progression from G Ionian over C to D Ionian over C, as shown in example 20.

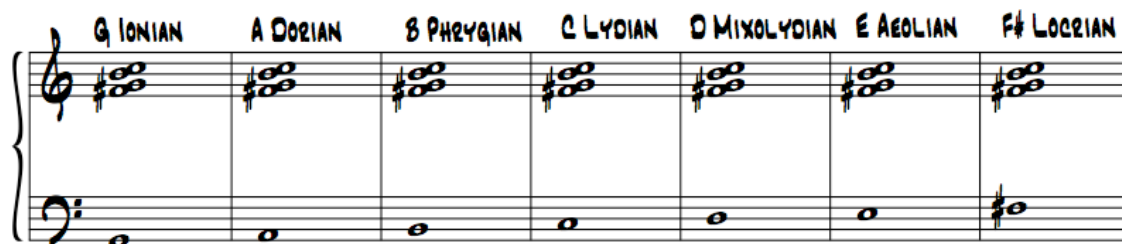
**Example 20**



### CHAPTER 3: TWELVE POSSIBLE MODES IN IONIAN MODE

Ron Miller's brightest to darkest concept can be used to find twelve modes for any given bass note. It is also possible to determine a relative order for the brightest to darkest modes within any given key or mode. In the example below, seven different modes can be derived from just one cell. In this case we will use the notes F#, G and B, C. This example uses a G Ionian mode as a starting point and in a sense harmonizes each pitch to form a different mode. All seven diatonic modes discussed earlier can be formed when using just one simple cell. This can be used to create many different harmonies, just by changing the bass note.

Example 21



The above example shows how versatile this technique can be when dealing with all of the particular modes in any key, or in this case, mode. Using this method, one can achieve all seven of the diatonic modes, all by using the same four-note modal cell. However, there are still five possible synthetic modes to be explored. These can be found between some of the diatonic modes and are as follows:



## Example 22

The image displays two rows of musical notation, each containing six modes. Each mode is represented by a treble and bass staff. The first row shows: G Ionian (treble: G-A-B-A-G, bass: G), G Ionian/Ab (treble: G-A-B-A-G, bass: Ab), A Dorian (treble: A-B-C-B-A, bass: A), G Ionian/Bb (treble: G-A-B-A-G, bass: Bb), B Phrygian (treble: B-C-D-C-B, bass: B), and C Lydian (treble: C-D-E-F#-C, bass: C). The second row shows: G Ionian/Db (treble: G-A-B-A-G, bass: Db), D Mixolydian (treble: D-E-F#-E-D, bass: D), G Ionian/Eb (treble: G-A-B-A-G, bass: Eb), E Aeolian (treble: E-F#-G-F#-E, bass: E), G Ionian/F (treble: G-A-B-A-G, bass: F), and F# Locrian (treble: F#-G-A-B-A-G, bass: F#).

Here, we are borrowing from other modes to find all the possibilities. Because of this there are few common tones shared, if any, between the Ionian mode and the bass note borrowed from another mode. Since there is little relationship between G Ionian and the bass note, varying degrees of dissonant sounds can be achieved using this technique. Each Ionian mode with a foreign bass note is taken from a different parent mode, and each parent mode has five of its own synthetic modes.

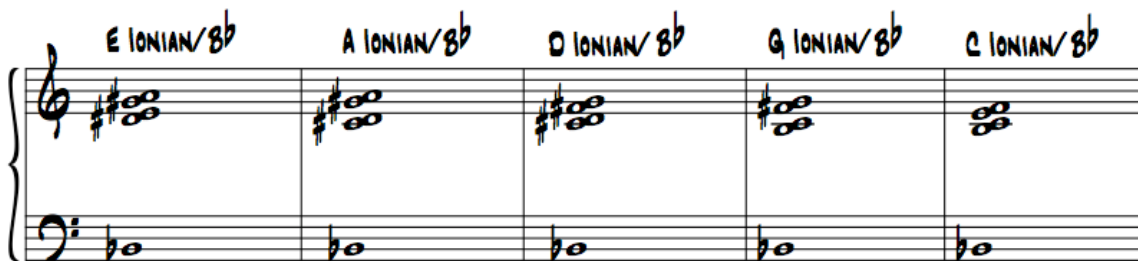
The first synthetic mode, G Ionian over Ab is taken from the parent mode of Ab, and is the second synthetic mode of Ab Ionian. These synthetic modes based on Ab, or any note, can be found by using the method discussed in the previous chapter.

### Example 23



The next synthetic mode in G Ionian is taken from the parent mode of Bb Ionian. This mode, G Ionian over Bb, is the fourth synthetic mode of Bb.

### Example 24



The mode after the diatonic C Lydian mode, is G Ionian over Db. The parent mode is Db Ionian and this is the first synthetic mode from Db.

### Example 25



The second to last synthetic mode is G Ionian over Eb. This mode is taken from the parent mode of Eb Ionian. It is synthetic mode number three in Eb.

#### Example 26



The last of the synthetic modes in the G Ionian mode is G Ionian over F. This mode is taken from F Ionian and is the fifth, or final, synthetic mode based on F.

#### Example 27



These five synthetic modes that can be found within G Ionian occur between the diatonic modes that naturally occur. The only exception to this rule occurs between F# Locrian and G Ionian, and B Phrygian and C Lydian, where half steps naturally occur. Just as it is possible to put diatonic modes in order from brightest to darkest, it is also

possible to achieve a similar ordering with these synthetic modes, however the order goes from darkest to brightest.

#### Example 28

Example 28 displays five synthetic modes of G Ionian, each represented by a two-staff musical notation (treble and bass clef). The modes are labeled above the staves: G IONIAN/D<sup>b</sup>, G IONIAN/A<sup>b</sup>, G IONIAN/E<sup>b</sup>, G IONIAN/B<sup>b</sup>, and G IONIAN/F. The first mode (G IONIAN/D<sup>b</sup>) is labeled 'DARKER' in the bass staff, and the last mode (G IONIAN/F) is labeled 'BRIGHTER' in the bass staff. The notation shows the triads for each mode: G IONIAN/D<sup>b</sup> (G, B<sup>b</sup>, D<sup>b</sup>), G IONIAN/A<sup>b</sup> (G, A<sup>b</sup>, B<sup>b</sup>), G IONIAN/E<sup>b</sup> (G, E<sup>b</sup>, F), G IONIAN/B<sup>b</sup> (G, B<sup>b</sup>, C), and G IONIAN/F (G, F, A).

Now that all twelve modes found within an Ionian mode have been discussed, a bright to dark and dark to bright hierarchy is now possible. As shown in Example 27 above, the same modal cell is used to form, or even harmonize, each mode. In Example 29, all twelve diatonic and synthetic modes of G Ionian are shown. Notice how after F# Locrian, the modes begin dark, but start to move back to the brighter side of the spectrum. Also notice how the bass line follows the circle of ascending fifths.

### Example 29

The image displays two rows of musical notation, each containing six modal voicings. The first row shows the progression from C Lydian (Brighter) to B Phrygian (Darker). The second row shows the progression from F# Locrian (Darker) to G Ionian/F (Brighter). Each voicing is represented by a grand staff with a static bass note and a triad in the treble. The modes are labeled above each staff, and the relative brightness/darkness is indicated by text within the staves.

Mode	Brightness
C LYDIAN	BRIGHTER
G IONIAN	
D MIXOLYDIAN	
A DORIAN	
E Aeolian	
B PHRYGIAN	DARKER
F# LOCRIAN	DARKER
G IONIAN/D $\flat$	
G IONIAN/A $\flat$	
G IONIAN/E $\flat$	
G IONIAN/B $\flat$	
G IONIAN/F	BRIGHTER

### BASS NOTE PEDAL VS. CONSISTENT MODAL CELL

Each method listed is effective in assembling twelve modal voicings. The methods differ, however, in the way they achieve all twelve. The first method relies on a static bass note, or pedal point, while the type of mode changes. The modes progress from the brightest diatonic mode, C Lydian, to the darkest diatonic mode, C Locrian. Then, they move from the darkest synthetic mode, F# Ionian/C, to the brightest synthetic mode of D Ionian/C.

To move from one mode to the next, this method relies on one set of half steps that shift to the left of the piano keyboard while the other set remains stationary. As shown in Example 30, when moving from C Lydian to C Ionian, F# and G from Lydian have moved down a whole step to the left of the piano keyboard while B and C remain

stationary. When moving from Ionian to Mixolydian, the B and C have moved to the left a whole step and the E and F from Ionian have remained stationary.

### Example 30

Bass Note Pedal                      Consistent Modal Cell

These shifting half steps basically defined the previous method that relied heavily on a bass pedal point. In the second method, the modal cell stays consistent and in a sense forms its own type of pedal point. Instead of the root being consistent while the mode changes, the modal cell remains the same while the bass note changes. The modes still progress from bright to dark and dark to bright, but the root of each mode changes instead of remaining the same. The root motion follows the ascending circle of fifths.

## CHAPTER 4: CONCEPT IN PRACTICE

### NOTATION

The concept of brightest to darkest modes proves to be a very versatile and diverse aid in composition. When considering a particular mode, a composer has several possible ways to notate it. For example, to include C Dorian, the composer could also achieve similar results by listing Eb Ionian with a C in the bass. It is up to the composer to decide how to notate these particular modes. There are several issues that should be considered when putting the musical ideas on the score.

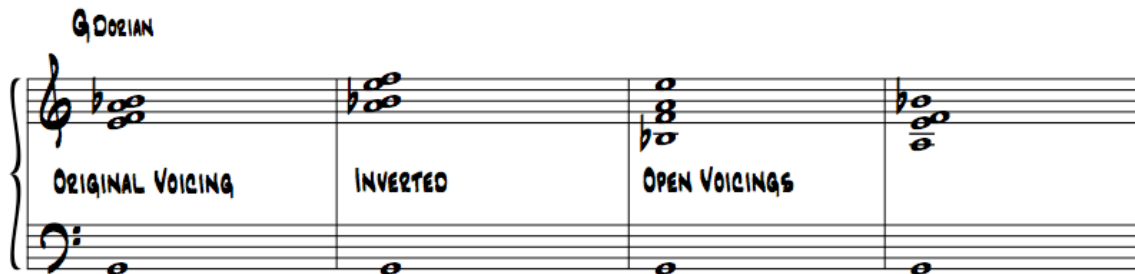
Since the concept of relying on modal cells to determine the harmony of a piece is not common, the composer should strive for clarity. Most rhythm section players would be able to determine the location of half steps in a mode whether it was labeled as C Lydian or G Ionian over C. However, this is still not as common as asking a player to read chord symbols. A skilled jazz pianist could realize satisfactory voicings for any type of chord notated, but may have problems locating the half steps in the D Phrygian mode. Since this is not a commonly needed skill in current jazz performance practice, the composer should notate desired voicings somewhere on the score, exactly as they should be performed. This is illustrated well throughout one of Maria Schneider's compositions titled, "Hang Gliding."

#### Example 31

The image displays a musical score for the piece "Hang Gliding" by Maria Schneider. It features two staves: a guitar staff (Gtr) and a piano staff (Pno). The guitar staff contains melodic lines with various articulations and dynamics. The piano staff provides harmonic support with block chords and arpeggiated figures. Above the guitar staff, there are several modal labels: "COL PIANO CHORDS", "DE COLORES - COMP", "E DOR", "E LYD AUG", "E AEO", "SIMILE", and "E LYD". These labels likely refer to specific modes or chord types used in the composition. The score is written in a standard musical notation style with a key signature of one flat (Bb) and a common time signature (C).

Listing the actual cell that is desired by the composer is much more efficient than just indicating the mode in the hope that the player can derive the half steps from it. This tells the players exactly what notes are to be played and then gives them the option to put their own take on the music by octave displacement, inversion or revoicing in a more open way. It is important for the composer to take the air of mystery out of this technique and give the rhythm section performer the exact information they require to deliver a successful performance of the piece.

### Example 32



Giving specific voicings to rhythm section players in the melody section of a composition can prove to be a very efficient practice. This method strips away the linear nature of a mode and notates in a more vertical manner, much like a chord. Stacking these modal cells vertically will effectively outline the harmonies the composer desires, but may not be the most helpful to players during the solo section. During the melody of a composition, seeing C Locrian can aid in finding the modal cell required by the composer. For the solo section, C Locrian would probably be much easier to read if it were marked as Db Ionian over C, Db Ionian or even just a Db major seventh chord. Each of these ways listed will achieve the same results, although some ways may be a



little easier for a soloist to understand. Again, the composer should indicate what is required to make the performance of this piece as easy to perform as possible.

Another issue to consider when composing in this manner is the level of the musicians. When writing for a professional group, it is sufficient to provide a mode and writing out the modal cell. When using this method for a younger group, giving as much information as possible is necessary. Just as an arranger indicates simply-voiced chords for the pianist or guitarist and bass lines for the bassist, so should as much information be given to a younger group. Writing in this style for a younger group could prove challenging, but also very beneficial to the players. A piece in this style could be considered more advanced than tunes such as “So What,” in that there are additional modes to navigate. Using this method in compositions can prove to be a useful teaching method for younger musicians. In addition, this style could also benefit more seasoned players since it is not as common.

## **DERIVING CHORDS FROM MODAL VOICINGS**

This modal concept can also be used to create compositions that are based entirely on modal cells or be used to derive more traditional tertian harmonies. The previous examples all deal with using modal cells to form the harmonic progressions. There were very few instances of an actual chord being written above the measures of music. In place of chords, only modes and specific voicings were provided. This information gave the performers the exact information required to perform the piece. There are instances, however, where these modes and modal voicings can be used to derive more traditional chord progressions. Using the brightest to darkest method, it is possible to find sets of

half steps in modal cells that can be sounded vertically to form something that more accurately resembles a chord. These modal cells may be missing certain pitches that define a traditional chord, but the missing information can be deduced by looking at the notes that comprise the particular mode or parent mode.

When figuring out what chord is being implied by a modal cell, one must first examine the notes of the cell. If the mode G Mixolydian is given, the notes in the modal cell will be B, C, E and F. G, will of course, be considered the root of this chord. That gives us the root of the chord, the third, fourth, sixth and seventh. To derive chords with this method, we must find the most important notes and omit those that are not as relevant. In this case, most of the notes can be used to identify some type of chord, thus only one note need be discarded. To make a chord based on the G Mixolydian cell, we should leave out the C and call this chord a G7 chord, or even a G13 chord since there is an E natural in the chord.

#### Example 33

The image shows three musical staves, each representing a different chord. The first staff is labeled 'G MIXOLYDIAN' and shows a G4 in the bass and a B4 in the treble. The second staff is labeled 'G7' and shows a G4 in the bass and a B4 in the treble. The third staff is labeled 'G13' and shows a G4 in the bass and a B4 in the treble.

There are certain modal voicings however, that are missing important information required to derive a traditional chord. The modal cell from C Lydian is a good example. This cell contains the notes C, F#, G, and B, the root, raised fourth, fifth and a major seventh. With the information it is clear that this could be some type of major seventh chord, but we are missing a valuable piece of information - no type of third.

#### Example 34



The C Lydian mode itself comes from the parent mode of G Ionian. In fact, when a musician thinks of C Lydian, they think of it as a G major scale, or Ionian mode, but starting on C instead of G. This means that we have to use the notes from the key of G to determine the chord. The notes of the scale are G, A, B, C, D, E and F#. Since the third note of any C chord is some type of E and there is an E natural in the scale, it is safe to call this some type of C major chord.

The other notes in the cell outlined a raised fourth, fifth, major seventh and root. We can safely call this a C major seventh chord since we now know what the implied third is, what the fifth is, and what the seventh is. As shown in the G Mixolydian example, we chose to leave one of the notes from the modal cell out. We will not be doing this for C Lydian and will use the F# in the chord as well. This would make the chord a CMaj7#11 chord.

### Example 35



Some modal cells form complete chords such as the cell based on E Aeolian. The notes in this cell are E, F#, G, B and C. In this case we will omit the C and just call this cell an E minor chord. There are some chords that are a little more difficult to put a label on. Take F# Locrian for instance. This cell has the notes F#, G, B and C and proves difficult to label when thinking of it as some type of F# chord. If we were to add an A natural to the chord, it could be an F# diminished chord. It is difficult to not take the G into account however. For a cell like this, I believe it can be labeled either as an F# diminished chord or as GMaj7/F#.

### Example 36



It is also possible to achieve 12 chords from an Ionian mode. The first seven chords are all taken from the diatonic modes of G Ionian in this case. As stated earlier, some notes are omitted from a modal cell to derive a chord. Extra notes are also added in some cases to fill out the chords and make them fit in more accordance to traditional jazz performance practice.

#### Example 37

Example 37 displays seven chords derived from the G Ionian mode, each with its traditional label above the staff:

- GMA7**: Treble clef, G4, A4, B4, C5, D5, E5, F#5.
- AMin7**: Treble clef, A4, B4, C5, D5, E5, F#5, G5.
- BMin7**: Treble clef, B4, C5, D5, E5, F#5, G5, A5.
- CMA7(#11)**: Treble clef, C5, D5, E5, F#5, G5, A5, B5.
- D7**: Treble clef, D5, E5, F#5, G5, A5, B5, C6.
- EMin**: Treble clef, E5, F#5, G5, A5, B5, C6, D6.
- F#Dim**: Treble clef, F#5, G5, A5, B5, C6, D6, E6.

The bass line for each chord is shown in the bass clef, with the root note (G, A, B, C, D, E, F#) in the bass position.

The five synthetic modes of G Ionian can be used to create chords as well. These synthetic modes consist of an Ionian mode over a foreign bass note. Although these modes may be unfamiliar to some, it is possible to form chords with these modes and put a more traditional label on each of these modal cells.

Since all of these modes are based on G Ionian, the same modal cell is used in each synthetic mode. To derive a chord symbol from the modal cell contained in G Ionian, F#, G, B and C, we would omit the C, and simply list this chord as a G major seven chord. That would in turn make each of these hybrid modes in G Ionian a G major seven chord over a foreign bass note.

Example 38

Example 38 displays five measures of music, each featuring a G major 7 chord with a different bass note. The notation is as follows:

- Measure 1: G major 7/D $\flat$ . Treble clef, key signature of one sharp (F#). Treble staff shows a triad of G4, B4, and D5. Bass staff shows a half note D $\flat$ 3.
- Measure 2: G major 7/A $\flat$ . Treble clef, key signature of one sharp (F#). Treble staff shows a triad of G4, B4, and D5. Bass staff shows a half note A $\flat$ 2.
- Measure 3: G major 7/E $\flat$ . Treble clef, key signature of one sharp (F#). Treble staff shows a triad of G4, B4, and D5. Bass staff shows a half note E $\flat$ 2.
- Measure 4: G major 7/B $\flat$ . Treble clef, key signature of one sharp (F#). Treble staff shows a triad of G4, B4, and D5. Bass staff shows a half note B $\flat$ 2.
- Measure 5: G major 7/F. Treble clef, key signature of one sharp (F#). Treble staff shows a triad of G4, B4, and D5. Bass staff shows a half note F2.

## **CHAPTER 5: USE OF THE MODAL METHOD IN MY COMPOSITIONS**

### **“CHEMISTRY”**

As stated above, the composer has the option to keep the brightest to darkest method purely modal or to use these modal voicings to derive more traditional chords. As a composer, I have used both methods and will discuss two of my pieces below that use this method.

My original composition, “Chemistry,” was composed using the brightest to darkest modal concept. In the entire composition, there is only one chord symbol listed, occurring during the bridge, the section where the modal method can be seen most clearly, and will be discussed later. All other harmonies outlined in this piece rely on modal cells.

The modes used in the bridge resemble one method discussed earlier, which relies on a pedal point to ground the modes as they move from brightest to darkest. The bridge, however, differs from this method slightly. The modes of the bridge move in the aforementioned brightest to darkest modes order, but the bass note changes instead of remaining stationary.

The bridge starts out on an Ab Lydian mode to contrast the G Dorian mode that is so prevalent at the beginning. Next, it goes to Gb Ionian. E Mixolydian is the next mode followed by Eb Dorian.

### Example 39

The image displays two systems of musical notation for piano accompaniment. Each system consists of a grand staff with a treble and bass clef. The first system is labeled 'Ab LYDIAN' and 'Gb IONIAN'. The second system is labeled 'E MIXOLYDIAN', 'Eb DORIAN', and 'D7FLAT6'. The notation includes chords in the treble staff and a melodic line in the bass staff. The key signatures are Ab major (three flats) and Eb major (three flats). The first system has four measures, and the second system has four measures. The bass line in the first system starts on Ab and moves stepwise, while the bass line in the second system starts on E and moves stepwise.

The last chord of the bridge does not fit into any of the naturally occurring diatonic modes I have discussed thus far. The previous methods dealt with either a static bass note or a static modal cell. This mode that makes up the D7 flat 6 chord comes from the harmonic minor mode, based on G. This mode also contains a flat 9, but I decided to omit it from the chord.

The interesting thing about the melodic minor mode is that instead of having two sets of half steps, there are three sets of half steps. Using the three sets of half steps to harmonize each bass note, several more modes can be discovered. Note that the modes based on the harmonic minor mode are alterations of diatonic modes. These altered modes are the basis of what Ron Miller deals with in his book *Modal Jazz Composition and Harmony, Volume 1*.



#### Example 40

Example 40 displays seven modes on a grand staff. The modes are:

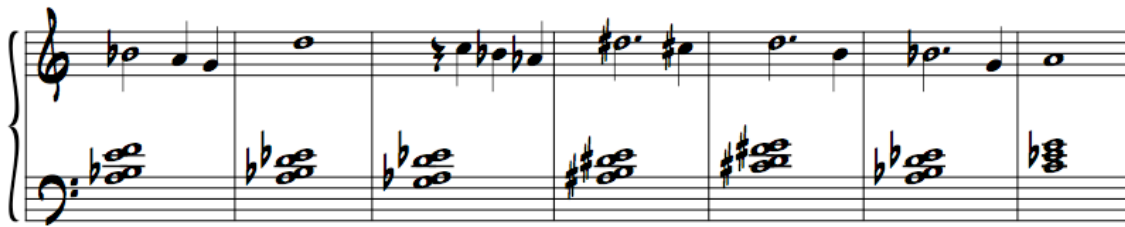
- G HARMONIC MINOR
- A LOCRIAN #6
- B<sup>b</sup> IONIAN #5
- C DORIAN #4
- D MIXOLYDIAN FLAT 2 FLAT 6
- E<sup>b</sup> LYDIAN #2
- \* NOT A TRADITIONAL JAZZ MODE

\* This mode resembles an altered scale, but has no dominant seventh and therefore, may not be very useful in jazz harmony.

#### “WITH DREW”

In “Chemistry,” I chose to keep the music almost exclusively modal. Even the typical “chord changes” listed during the solo section were listed as modes instead of chords. However, I have used the brightest to darkest concept to develop chord progressions in some of my compositions. One example is “With Drew.” This composition was written in several stages. I began with a simple melody. Under the melody, I began adding simple modal cells to begin formulating some type of harmony.

### Example 41



After I determined what type of sounds I wanted to accompany the melody, I began to realize which modes were being outlined and assigned them. As previously mentioned, there are several possibilities for each melodic cell. These are the modes I assigned to each particular cell.

### Example 42

Example 42 shows two rows of musical notation, each with four measures. The first row is labeled with modes above each measure: DORIAN, ELYDIAN, FODRIAN, and ELYDIAN. The second row is labeled with modes above each measure: BAELIAN, ELYDIAN, and D7sus(b9). The notation includes a melody in the treble clef and a corresponding chord progression in the bass clef.

**Row 1:**

- DORIAN:** Treble: Bb, A, G; Bass: Bb major triad (Bb, D, F).
- ELYDIAN:** Treble: F; Bass: Ab major triad (Ab, C, Eb).
- FODRIAN:** Treble: E, D, C; Bass: Gb major triad (Gb, Bb, Db).
- ELYDIAN:** Treble: B, A, G; Bass: F# major triad (F#, A#, C#).

**Row 2:**

- BAELIAN:** Treble: B, A, G; Bass: D# major triad (D#, F#, A#).
- ELYDIAN:** Treble: F, E, D; Bass: Ab major triad (Ab, C, Eb).
- D7sus(b9):** Treble: C; Bass: C# major triad (C#, E#, G#).

Determining which mode was being outlined aided me a great deal in figuring out the harmonies that were to be a part in the piece. For example the first mode, G Dorian, allows for an easy conversion to a common chord. This cell contains the second, third, sixth and seventh notes of the mode. Since a third and a seventh are present in this mode, it is clear that this could be labeled as Gmin7. In fact, no other option is possible.

Two other modes listed above are based on the Lydian mode. This mode contains a raised fourth, a fifth, a major seventh and the root. To convert these modes into some type of chord, the proper label would be an EbMaj7(#11), and EMaj7(#11).

There are two other melodic cells that assigned modes in the example above. The fifth mode, B Aeolian, contains a C#, D, F# and G. This mode could become simply a Bmin7(b6) chord. In the finished version, I removed the G natural and added an A natural to make this chord a Bmin7.

The last cell occurs in the seventh bar of this phrase is a little different from the others. When composing this piece, I always considered this cell more of a chord with a dominant function. It can, however, be broken down into a modal cell. Just as the D7 flat 6 chord found in “Chemistry,” this chord in “With Drew” is taken from the G Melodic Minor mode and thus behaves more like a G harmonic minor over D chord, rather than a D7 chord. Note that this chord does have a suspended fourth, and therefore the F# is omitted. That means that this chord only has two sets of half steps, rather than three.

### Example 43

The image displays two systems of musical notation for piano accompaniment. The first system consists of four measures, each with a handwritten chord label above it: G MIN7, Eb MA7(#11), F MIN7, and E MA7(#11). The second system consists of three measures, each with a handwritten chord label above it: B MIN7, Eb MA7(#11), and D7sus(b9). The notation is written on grand staves (treble and bass clefs) with various notes and chords indicated by stems, beams, and circles.

Describing the compositional process of “With Drew” illustrates how the piece began as purely modal and gradually became exclusively chordal. Due to this fact, I believe that using the modal method in compositions is very versatile. In order to demonstrate the versatility of this method of, I will now create an alternate set of modes, which will then evolve into chords taken from the given cells. I will list a few possibilities for each cell but ultimately settle on one to create a different set of chord changes to “With Drew.”

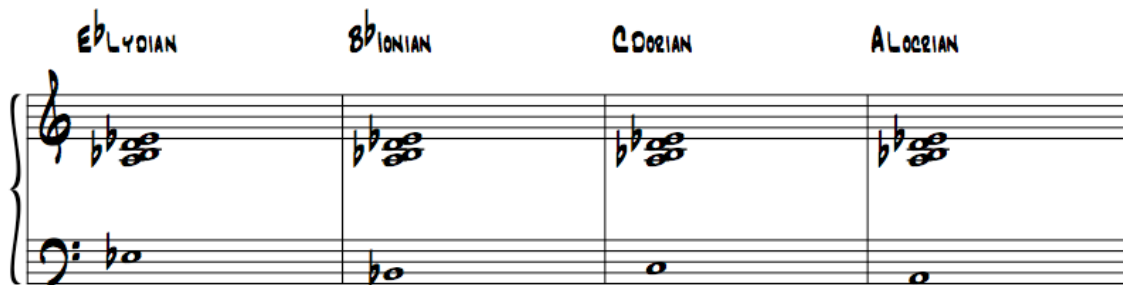
The first cell contains the notes A, Bb, E and F. This cell was originally used to form a G Dorian mode. One possibility for these four notes is F Ionian. All of these notes are found in this mode, which also happens to be the F major scale. Two other possibilities are Bb Lydian and D Aeolian.

#### Example 44



The next modal cell contains the notes A, B $\flat$ , D and E $\flat$ . This cell was originally used to form an E $\flat$  Lydian mode, but it has many other possibilities. A very simple mode that can be taken from these notes is B $\flat$  Ionian. C Dorian and A Locrian can also be taken from these notes and give a different sound than B $\flat$  Ionian.

#### Example 45



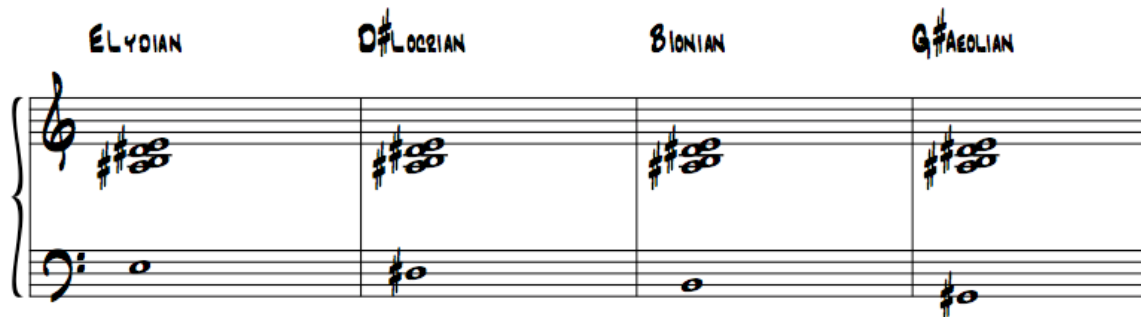
The third cell was originally used to outline the F Dorian mode and contains the notes G, A $\flat$ , D and E $\flat$ . Again we can form the most basic of the modes and label this as an E $\flat$  Ionian mode. The “dominant” sounding B $\flat$  Mixolydian could be formed using these notes as well as A $\flat$  Lydian.

#### Example 46



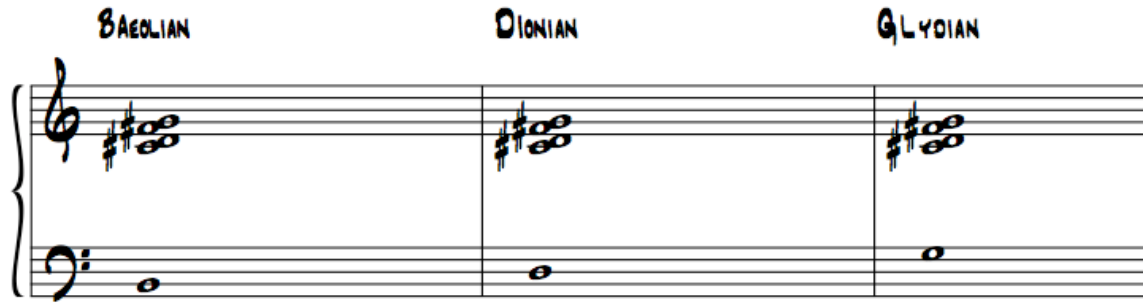
Next comes the cell used to form E Lydian in my composition “With Drew.” The notes found in this mode are A#, B, D# and E. One possible mode taken from these notes would be the very dark sounding D# Locrian. A much lighter mode would be B Ionian or the minor sound of G# Aeolian.

#### Example 47



B Aeolian was the next mode. The notes that form this modal cell are C#, D, F# and G. Although the original mode of B Aeolian had a dark quality to it, much brighter modes can be found. One of these brighter modes is D Ionian. Another mode that is a little brighter than D Ionian, is G Lydian.

### Example 48



The last modal cell that I will discuss is the cell that originally outlined A, Bb, D and Eb. Note that this is the same exact cell that was used in the second bar. This modal cell outlined Eb Lydian. Above, I listed some possibilities for this mode, Bb Ionian, C Dorian and A Locrian. Three other possibilities for this mode are D Phrygian, F Mixolydian and G Aeolian. The fact that we can combine all seven of the diatonic modes with just one four note modal cell shows the versatility of method and how many different harmonic possibilities can be achieved from it.

### Example 49



Now that different modes have been cited, a new set of chord changes can also be created. I will choose one of the newly outlined modes from above and create a chord with it. These new chords will be used in place of the original chords of “With Drew.”

Note that since these modes are coming from the same collection of pitches, the melody should also work with these new chord changes.

#### Example 50

The musical score for Example 50 consists of two systems of piano accompaniment. Each system contains three measures. The first system features the following chords: BbMaj7(#11), Cmin7, and Bb7. The second system features the following chords: BbMaj7, GMaj7(#11), and Dmin7. In each measure, the right hand plays a melody line, and the left hand plays a chord. The notation is in standard musical notation with treble and bass staves.

These chords were derived from the original cells used in With Drew. I chose a new mode for each measure and then determined the chord outlined by the mode.

Mode	Chord
Bb Lydian	BbMaj7#11
C Dorian	Cmin7
Bb Mixolydian	Bb7
G Lydian	GMaj7#11
D Phrygian	Dmin7b9



## CHAPTER 6: CONCLUSION

The modal concept developed by Ron Miller and Maria Schneider is still a highly unexplored concept. The method rank orders all seven diatonic modes from brighter to darker, starting with Lydian and progressing to Locrian. It is possible to continue the progression past Locrian and achieve five other modes that are synthetic in nature. These synthetic modes all have an Ionian quality and their relationship to the bass progresses from darker to brighter as they cycle.

One method of finding all twelve modes deals with a stationary bass note. The modes will continue progressing from bright to dark and dark to bright while the bass note stays the same. The bass note functions much like a pedal point would in any type of music; it stays constant while the sets of half steps used to form modal voicings work their way down in a stair-step fashion as they move to the left of the piano keyboard.

Another method discussed is in opposition to the first and is used to find twelve modes for any Ionian mode. Essentially, this method harmonizes each scale degree of an Ionian mode and uses the chromatic notes found between scale degrees to find the five synthetic modes. As found in the first method, it also has a type of pedal point, but now the modal voicing of the Ionian mode (scale degrees 1, 3, 4 and 7) stays consistent as the bass note changes.

These modal voicings found in each method can be used to create different shades of both major and minor chords. These voicings will add one or more notes to traditional major or minor chords and therefore, create subtle colors to these familiar sonorities. For instance, the modal voicing that makes up C Aeolian contains D, Eb, G and Ab. Traditionally, Aeolian would imply a simple minor chord. Including the pitches D and

Ab in the voicing adds to the traditional voicing, yielding a minor chord with an added second and flat sixth scale degree. Although the change from a regular minor chord is very slight, it adds an interesting color to a composition.

In my research, I have only mentioned two methods of finding modal voicings. One dealt with a consistent bass note and the other dealt with a consistent modal cell. The modal cell I chose to deal with was the Ionian mode. There are many other possibilities found in the various forms of minor. I briefly mentioned in Example 39 that the same approach to finding modes in Ionian may be used in harmonic minor as well. The same is true in melodic minor, as Maria Schneider mentioned in her master class. These differ from the modes of the Ionian mode by one note in most cases. The brightest mode in Ionian is Lydian, while the brightest in melodic minor is Lydian Augmented. If both modes were based on C, the only difference would be that the Lydian Augmented would have a G# instead of a G natural.

There are many more possibilities of finding modal voicings other than the ones I discussed. While doing this research, my interest has been peaked and I plan to further my study of this very interesting concept. There are still several modes of minor to be explored. There are also many more colors to achieve by studying the work of Miller and Schneider and studying the use of modes with alterations. The use of modal voicings as harmony and the use of different flavors or shades of major and minor chords is still vastly unexplored. Hopefully, this paper will spark interest in someone and help it reach a wider audience.

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## APPENDIX 1: SCHNEIDER MASTERCLASS

**Maria Schneider:** I looked into this whole thing with modes. Do any of you know Ron Miller? Have you heard of that book he has? Anybody?

**Class:** Yeah.

**MS:** Yeah, he has two books on modal. And he taught at the University of Miami where I went, but I never studied with him because I was only there one semester. But I found out that what I do is really similar to kind of his concept. You know, my very first lesson I ever had on piano my teacher played this.

(MS plays major arpeggio, then minor arpeggio)

**MS:** Then she sang, “bright the day,” then she sang “dark the night.” And the whole idea was to just kind of to show me that inside of music everything has you know, a feeling that results from what these notes do. You know that? Harmony is not separate from feeling and emotion or you know, some sort of whatever you want to call it. You know, I don’t want to say that music has to have lots of feeling or emotion, but it, it does. Basically, that’s what attracts us to it. Every piece I ever played, she made me analyze. And what I realized, you know, in subsequent years like, if you look at the modes based on... Let’s just talk about like, the white keys on the piano. What’s the brightest mode?

**Class:** Lydian.

**MS:** Lydian, right? F to F. (Plays F Lydian mode) The second brightest?

**Class:** Ionian.

**MS:** Ionian. C to C, and C is a fifth up from F, right? Okay. What’s the next bright, err dark mode?

**Class:** Mixolydian.

**MS:** Mixolydian. It’s up a fifth from Ionian. What’s the next dark mode? It’s up a fifth from Mixolydian. G, now we’re talking D to D, Dorian. Then A to A, Aeolian. E to E Phrygian. B to B Locrian. Now, each of those modes vary by one note. It gets dark, and that one note if we start with a common... All that modes are, are relationship of whole tones to half tones, relative to the root, right? And that’s what gives it the sound. So if I play, I’m gonna use C as our ground here. So, there’s C Lydian. (plays half steps from C Lydian stacked vertically). If I go down from a fifth from C, I get F natural, so the F# in C Lydian becomes F natural. This is Ionian. Now, if found this from that F, it takes me what note? B flat, right? That’s gives Mixolydian. A C scale with a Bb (plays scale). Down a fifth from Bb?

**Class:** Eb.

**MS:** Eb. Gives you Dorian. And this is the same sequence of what we talked about before. Dorian (plays voicing). Down a fifth from Eb is Ab, that gives you the Aeolian. Down a fifth from Ab is Db, Phrygian. Down a fifth from Db is Gb. Is everybody following?

**Class:** Yeah.

**MS:** Okay, so now listen to what they do. (MS plays modes from bright to dark with C in the bass) Do you hear how they slowly descend? And the thing that's fascinating to me is that there's not only is that something that we can all feel, that that's descending to darker, but that it's mathematical. You know? It's like going into a forest and finding a pine cone and see through the rings the Fibonacci, or whatever. You can see the mathematical that exists in everything in nature. So, if you use the melodic minor modes, it's going to get to harmony that's all related. If you use the melodic minor modes, there are melodic minor parent, if you talk about melodic minor as a parent. The modes derive from that. All have a counterpart you know in the sequence from bright to dark that varies from the Ionian mode by one chromatic tone, except for one of them has two. For instance, does anybody know what the brightest mode from melodic minor would be?

**Class:** Lydian Augmented.

**MS:** Lydian Augmented, correct (plays mode). And it's just like Lydian, except it's got a sharp five. Okay. Does anybody know what would be closest now? Ionian's the next one right, so what's the closest to Ionian? This one's a little tricky. Mixolydian with a sharp four. It's a dominant, it's this (plays mode). If you look at it in a modal context, you're not worried about (plays dominant seventh chord resolving to one), this tritone of third and seventh and the whole thing of, we're not dealing with tonicization, but we're dealing with the color tones and the tones that make a mode feel like a mode. So, Mixolydian sharp four, those tones make Mixolydian sharp four feel like that. Dorian, what's the closest melodic minor mode to Dorian? Melodic minor, the parent scale of Dorian scale but with a natural seventh. There it is, it's minor major seventh. How about Aeolian?

**Class:** Harmonic?

**MS:** No. No, because harmonic minor has a minor third in it and this mode doesn't have this.

**MS:** It's a minor flat five. Minor flat five. So instead of this (plays Aeolian) it's this (plays Aeolian with a flat 5) So, it's just half diminished.

**Class:** Is it Locrian?

**MS:** No no no, because it's got a natural two.

**MS:** And how about Phrygian? Does anybody know the closest melodic...this is a sound I absolutely love. What's the closest melodic minor mode to Phrygian? It's one you probably don't even think of very often. Oh wait, I missed one! I didn't do Mixolydian yet. Mixolydian is beautiful too. We played it in that piece today, it was all over the place. You'll know what it is (plays mode) Mixolydian flat 6. It's a Sus chord with a flat six, because normally a sus chord is (plays normal Sus chord voicing). Okay, how about the closest one to Phrygian? I'll play this for you. Phrygian natural six right? Because Phrygian normally has a flat six. And then the closest one to Locrian is Super Locrian, or diminished whole tone. So, some of those have like those dominant or some of them this one (plays dominant melodic minor voicings) The minor flat five and also the altered scale, right? So, the thing that makes modes characteristic of what we were saying is just the color tones of the modes. For instance, this voicing (plays 13<sup>th</sup> chord) right, this is the voicing we always use for thirteenth chords or sharp nine. But what if it put it over this? Do you know what mode that is? Sing that mode. You sang what mode?

**Class:** All sing Aeolian

**MS:** Aeolian. I didn't play any third or any seventh, but you heard minor because I played certain notes that implied it. I just played this tritone fourth voicing, but I put it relative to this bass. I played flat six, the two and the five and that gave the characteristic notes of Aeolian, which is the flat six and the two. If I don't play the two, it's confusing because it could be Phrygian. If I want to give the sound of Lydian, what gives the sound of Lydian?

**Class:** Sharp four.

**MS:** Coupled together with what else?

**Class:** Major seven.

**MS:** If I just play that (plays Lydian) it could be a lot of other things, but most likely that. Also that mode I did before could be a lot of things, but it has a flat six, a two and a five. What else could it be? Just imagine if you have a scale that has a two a fifth and a flat sixth. What other modes could that be besides Aeolian?

**Class:** Harmonic minor

**MS:** It could be harmonic minor or it could be harmonic major. It could be, let's see, F harmonic minor over C. No, couldn't, I'm wrong. I'm sure there's things you could find in there to make out from that. How about if I play this? (plays Phrygian natural six) No, it's Phrygian natural sixth. All I played was this sound. It kind of tests your ears in a way. So, basically in my writing, for instance, actually I brought these sheets. I can tell you a little bit for instance, Green Piece, how I used this but not in an intellectual way, but sort of an intuitive way? When I first wrote Green Piece, the first thing I wrote, you played it today. (plays mm. 9-40) What mode is this? It's all Ionian. So I thought, oh God, I have to have some B section that's gonna do something else. So I went to this (plays bridge of

Green Piece). What are all these parts? They're all modes that are still from this. (plays G Ionian) It's an Ab major chord, but it goes back to F, G, Db major chord. Now, I introduce Eb. Now we're at an Eb major chord going to Ab major, going to Db major, to five and back to one. So that was kind of my little departure from this. And I was, as I told you before, I was writing this for the Mel Lewis band. And the first thing I was like, oh my God, I'm devastated, I wrote the biggest girl tune you could write for the most testosterone driven band. So I thought, okay, I've got to... You know, like, when you come up with an idea and you think oh I've got to continue with this thing somehow because this is what I'm hearing. So I thought how can I take this melody that I'm stuck with that I had on this big piece of paper, this melody that somehow I can't seem to get out of my head. How can I take that into something dramatic and carry this piece into a chromatic world? And also it's in three. It's like waltzing along. I wanted to somehow get it into four and to get it into a chromatic world and then bring it back into peace again. So I thought, jeez, what can I do and use the melody to make it chromatic? And then I thought, well, I can use the melody but have it chromatic because I can change the bass, change the relativity of the bass and start creating contrary motion and some chromaticism on the inside. For instance, the first note doesn't have to be this (F Ionian) It could be, this (plays mm. 62). So, I started moving in contrary motion (mm. 62-71). Moving to darker chords, that's Phrygian. And somehow keep that pedal in the context, so I'm not taking a vast left turn (continues playing chromatic section). Do you guys want to come up here so you can see this? No, not really? Stay there. So I could have done anything, it was just creating blocks of sounds (continues chromatic possibilities).

**Student:** Are you thinking colors or planing, like linear?

**MS:** You know, here I'm thinking contrary motion. What I was thinking is, how will it move? I just wanted to get out of this. I wanted to do like if this was in the sweet world, it was like I just wanted to slap everybody. So then I thought, this is chromatic, but it's not leading you to some other kind of harmonic world and I wanted the thing to feel like it's going someplace. It's like these big posts but they don't carry you along. So I thought, ok how am I gonna somehow, how do I move myself to some other world. And the first thing I did was look at this melody, and the melody is just this (plays F G A F Bb A G A C, C D E C F C Bb C F). It's just this and this. And it's a very simple kind of thing so I thought, there's my motive. I'm going to develop it. And I'm gonna get myself into four. This thing, when it does this (plays mm. 62-66) (counts 1, 2 in measure of 2/4) and then moves back to three, that was to get you hearing that we're moving to a duple rhythm pretty soon – in a 4/4. So the way I started moving into harmony was to go alternate harmony was to start moving around the melody (plays beginning at mm. 80). And I wanted to give this feeling of rising so I picked all these optimistic Sus sounds. They're all kind of bright things where all these (mm. 62) were minor and intense. These are all kind of open. And the bass line goes (D Eb B Db E F Gb G Ab) that should have been minor. Do you hear what I'm saying? So that, together with the Sus chords and that we're in two now, so it kind of moves along. And the melody is in a different keys, it starts creating this feeling that we're moving somewhere else, we're not creating this kind of stuck sort of action (plays mm. 81 until 107). And that ends on this chord (Asus4). So the whole thing is just like building, and the idea was I wanted the first soloist to play in A

Phrygian, which is just F Ionian. But to somehow have it chromatic and not shift right to it, but move around so you actually don't realize that we're back where we started again. So, when I ended on this chord (Asus4) after all these optimistic sounds, what scale would that be. Do you think that's major or minor, what do you think that is?

**Class:** Major.

**MS:** Ok, I've fooled you into thinking it's major. Because all this optimism and these Mixolydian chords make you feel like this thing is lifting. But when we finally end up on this chord, this chord has one, four, five in it. It doesn't have anything else in it. So, all of a sudden it turns Phrygian. So that's how you can kind of play with modality by giving the notes of the chord that lead you to understand what the mode is or you can give the notes that are kind of nebulous, like the five or you know, a major third, but maybe it's got a flat two in it. Or maybe it's that Spanish scale. Or maybe it's got, I don't know, a flat seven or a major seven, but this is just kind of like a nebulous sound. (plays voicing) Now, the soloist is blowing over Phrygian and this is just coming from the melody. So does that sound Phrygian to you? Does that sound Phrygian basically?

**Class:** Yes.

**MS:** Okay, the voicings that she's playing on piano and that the horns play, actually have every chromatic note in it. This actually has a natural two in it. Because the melody is Phrygian, chromatically you can do almost anything harmonically. That's why, if you, if you kind of make people understand what type of mode you have in the melody, you can do almost anything on the inside – the same way that Herbie Hancock can comp all over the place chromatically, but inside you're hearing this greater harmonic context.

**Student:** Would you be careful to how much time you allotted to that sound before you depart from it? Like, would you either really voice out clearly a Phrygian sound, or would you just stay on a Phrygian type sound for long and then depart?

**MS:** See if I kept this all Phrygian, let's see how this would be (figures out example on piano). Actually, this chord is more along... I mean, if I'm on this for a long time, the soloist...who's got their tenor? Does anybody have a horn out? I want you to do something. When I play the last chord, I want you to play Phrygian over it. Solo on Phrygian over this.

(trombone plays over Phrygian mode)

**MS:** Now, when I hit that chord, use the natural two. So ok, 1, 2, 1 2 3... See, do you see what it does? All of a sudden it changes the harmony. I would much rather her play this chord.

**Student:** You told me to use the natural two.



**MS:** I know, I told you to do it just to show them that if the soloist copies every single chord, it's like you really get rid of the greater context. The way I see it, it's like a film kind of. If you're watching a film, you're not seeing the individual frames. You're not doing, it's this kind of overall context.

**Student:** I just came from a classical direction. I know about Phrygian and Lydian, but it's not so much... I just hear all the tones and know what to solo over it.

**MS:** You could play just chromatically over that. But a lot of my harmony, it kind of steps out. I think that in the jazz world, we learn so much about voicings. So much is emphasized about finding these vertical structures that all sound like they're ringing. And I think it's great in a way, but it gives us this feeling that everything has to line up. If you look at Gil Evans' music, you know, certain tones in the middle. For instance, I'm gonna go on. You know in this section, where we're walking in this A Phrygian section (mm. 115)? And they're all kind of dark. I want you to listen to them and really tell me if they're dissonant. Do those really sound dissonant?

**Students:** No.

**MS:** They don't right? Ok, let me tell you what's inside some of these. This chord has two minor ninths. They tell you in big band writing, "don't ever write a minor ninth." This has two of them. This is an example of my plaid shirt theory. For instance, he's got a shirt on. You know how sometimes you can see a shirt and it's got a stripe of orange and a stripe of green, and in the middle where the color intersects, it's some kind of horrible brown color? You know what I mean? But you don't see that color, you see that beautiful intersection of brown and green. The same thing goes with this kind of, this linear kind of music. If you have different elements that you recognize and that you are set up for, you can put anything, you can have them converge in the most bizarre ways and it feels wonderful. As a matter of fact, it creates this catapulting kind of thing that moves on. For instance, we've heard this a thousand times now (plays first few notes of Green Piece). And when you hear it in the context of triads, that's nothing complex. It's a sound we're secure with. And on the bottom, it's just this, in contrary motion (chromatic, descending bass line). It's chromatic, it's its own separate sound. You don't even notice that this is full of all sorts of stuff (minor ninths). Even earlier in this piece, there was something in this piece where I played this chord. That chord has an Eb and E, and an F. A double minor ninth – a big whammy fail your exam if you're in college. But because it's in the melody, with these fifths on top and the pedal we've been hearing since the beginning of the piece, this actually feels nice. So, it's all relative. Harmony is completely relative. If in your mind, if something makes sense for the story that you're writing or creating, you can play this (slides hand up piano keyboard) and have it be beautiful. And a major triad can sound incredibly dissonant if it's in the context of atonality. It can sound strange.

**Student:** When you're composing them, do you literally think of the modes as you're coming up with the chords, or do you just figure them out by ear?

**MS:** What do I do? You know, I, I might in certain instances to get me through things or certain places. Sometimes, you know, I'm just hearing sounds and I'm trying to make them modulate and move around. I certainly, I have this mode thing so much in my ear that I don't even have to think of it – it's there. You know, it's kind of...it's like anything. You know, you learn it, but if it's your language, you can do something that maybe if you weren't used to doing it, you'd have to think about it, but then once you get used to doing it, it just comes to you. I think it's really important to analyze what you do intuitively, because when you understand it, you can move to another level of intuition. So it was really good for me to start kind of analyzing this stuff. I'll just go through to the end to kind of explain how this goes on. After that whole section concludes, let's see.

**Student:** Is that a sketch you're looking at?

**MS:** Yes, this is just like a piano sketch that I had.

**Student:** Is that what you usually do first? Do you sketch first or go straight to score?

**MS:** I don't sketch things really intricately. I'll do chunks. I'll figure out some little section and then I'll go to score. Because when something's complete on the score then it helps me move on to the next creative struggle. But this thing finally comes out...To get back to F, I wanted, what I find intuitively is that I started getting out of these really intense modes that also had a lot of Phrygian and Locrian and minor ninths in it, and start work my way back to the first mode, Aeolian, which is just F over D. F scale with D in the bass. Now, the melody on C, which is Mixolydian. Then, I put an Eb in the chord. Now, Eb on the bottom. That's a harmonic minor scale. And now we're back to F. So, this B section, I used its chords behind the piano solo. So, at the end I decided just to finish this long story, to finish it I decided I wanted to bring back the melody. But I thought, how do I bring back this melody over F, but have it feel like it was somehow affected by this journey it's gone through? I could have done this (plays original melody). And had the band do this big, lush, pastoral thing. And I decided, if I have the melody over F, the melody that's Ionian and I have it over F, every single note of that melody could be a different mode. For instance, it starts on F. I could start on Phrygian, I could start on minor, I could start on Mixolydian. The first ones move parallel. This one has an E and and F#. This one has a fourth on the top. That could be just about anything. It can't be Lydian, but it could be Phrygian. I just voiced every note of the melody, so that the whole thing in relationship to F would have this really light dark, light dark. And then using the dynamics to just make it just come in and out. Phrygian = dark, light, Aeolian, Lydian = light, dark. Phrygian, to now, diatonic planing – all Ionian. Aeolian, Ionian, Mixolydian, Ionian, Phrygian, which is just the tense light, dark, light, dark. Dorian, Ionian, Phrygian...so you get the idea. I mean, you could do that with a standard tune, you know? Take three notes from a bar and figure out over this note what mode could those notes be or figure it out note by note or phrase by phrase, and not always thinking of ii/V/I and alternate harmony in that way. Most of my writing is very modal, I mean, the new thing we played has a little bit of ii/V/I harmony (plays unknown piece). Still things are shifting on the inside all the time. Tritone. But still, still I'm always shifting the modes and combining major sevenths and things just kind of turning on the inside

because I like those little shifts, those little impressionistic shifts of color. So, sorry, I bet you didn't want that kind of answer. If I answer another question, I'm never going to get out of here. Ha ha.

## APPENDIX 2: ALL TWELVE MODES FOR EVERY NOTE

All modes based on C:

C LYDIAN	C IONIAN	C MIXOLYDIAN	C DORIAN	C Aeolian	C Phrygian
C Locrian	F# IONIAN/C	B IONIAN/C	E IONIAN/C	A IONIAN/C	D IONIAN/C

All modes based on Db:

Db LYDIAN	Db IONIAN	Db MIXOLYDIAN	Db DORIAN	Db Aeolian	Db Phrygian
Db Locrian	G IONIAN/Db	C IONIAN/Db	F IONIAN/Db	Bb IONIAN/Db	Eb IONIAN/Db

All modes based on D:

D LYDIAN	D IONIAN	D MIXOLYDIAN	D DORIAN	D Aeolian	D Phrygian
					

D Locrian	A <sup>b</sup> IONIAN/D	D <sup>b</sup> IONIAN/D	G <sup>b</sup> IONIAN/D	B IONIAN/D	E IONIAN/D
					

All modes based on Eb:

E <sup>b</sup> LYDIAN	E <sup>b</sup> IONIAN	E <sup>b</sup> MIXOLYDIAN	E <sup>b</sup> DORIAN	E <sup>b</sup> Aeolian	E <sup>b</sup> Phrygian
					

E <sup>b</sup> Locrian	A IONIAN/E <sup>b</sup>	D IONIAN/E <sup>b</sup>	G IONIAN/E <sup>b</sup>	C IONIAN/E <sup>b</sup>	F IONIAN/E <sup>b</sup>
					


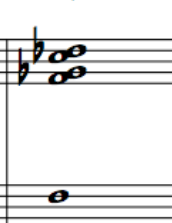
All modes based on E:

E LYDIAN	E IONIAN	E MIXOLYDIAN	E DORIAN	E Aeolian	E Phrygian
					


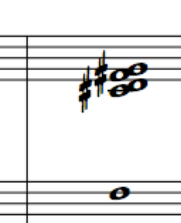
  

E Locrian	B <sup>b</sup> Ionian/E	E <sup>b</sup> Ionian/E	A <sup>b</sup> Ionian/E	D <sup>b</sup> Ionian/E	F <sup>#</sup> Ionian/E
					

All modes based on F:

F LYDIAN	F IONIAN	F MIXOLYDIAN	F DORIAN	F Aeolian	F Phrygian
					

F Locrian	B Ionian/F	E Ionian/F	A Ionian/F	D Ionian/F	G Ionian/F
					

All based modes on Gb:

$G^b$ LYDIAN     $G^b$ IONIAN     $G^b$ MIXOLYDIAN     $G^b$ DORIAN     $G^b$ AEOLIAN     $G^b$ PHRYGIAN

$G^b$ LOCRIAN    CIONIAN/ $G^b$     FIONIAN/ $G^b$     B $\flat$ IONIAN/ $G^b$     E $\flat$ IONIAN/ $G^b$     A $\flat$ IONIAN/ $G^b$

All modes based on G:

GLYDIAN    GIONIAN    GMIXOLYDIAN    GDORIAN    GAEOLIAN    GPHRYGIAN

GLOCRIAN    D $\flat$ IONIAN/G    G $\flat$ IONIAN/G    BIONIAN/G    EIONIAN/G    AIONIAN/G

All modes based on Ab:

Ab LYDIAN    Ab IONIAN    Ab MIXOLYDIAN    Ab DORIAN    Ab AEOLIAN    Ab PHEGYIAN

The first row of musical notation shows six modes based on Ab. Each mode is represented by a grand staff (treble and bass clefs). The notes are: Ab (bass), Bb (treble), C (bass), D (treble), Eb (bass), and F (treble). The modes are: Ab LYDIAN, Ab IONIAN, Ab MIXOLYDIAN, Ab DORIAN, Ab AEOLIAN, and Ab PHEGYIAN.

Ab LOCRIAN    DIONIAN/Ab    G IONIAN/Ab    C IONIAN/Ab    F IONIAN/Ab    Bb IONIAN/Ab

The second row of musical notation shows six modes based on Ab. Each mode is represented by a grand staff. The notes are: Ab (bass), Bb (treble), C (bass), D (treble), Eb (bass), and F (treble). The modes are: Ab LOCRIAN, DIONIAN/Ab, G IONIAN/Ab, C IONIAN/Ab, F IONIAN/Ab, and Bb IONIAN/Ab.

All modes based on A:

A LYDIAN    A IONIAN    A MIXOLYDIAN    A DORIAN    A AEOLIAN    A PHEGYIAN

The first row of musical notation shows six modes based on A. Each mode is represented by a grand staff. The notes are: A (bass), B (treble), C (bass), D (treble), E (bass), and F# (treble). The modes are: A LYDIAN, A IONIAN, A MIXOLYDIAN, A DORIAN, A AEOLIAN, and A PHEGYIAN.

A LOCRIAN    Eb IONIAN/A    Ab IONIAN/A    Db IONIAN/A    F# IONIAN/A    B IONIAN/A

The second row of musical notation shows six modes based on A. Each mode is represented by a grand staff. The notes are: A (bass), B (treble), C (bass), D (treble), E (bass), and F# (treble). The modes are: A LOCRIAN, Eb IONIAN/A, Ab IONIAN/A, Db IONIAN/A, F# IONIAN/A, and B IONIAN/A.



All modes based on Bb:

Handwritten musical notation for modes based on Bb. The first row shows six modes: BbLYDIAN, BbIONIAN, BbMIXOLYDIAN, BbDORIAN, BbAEOLIAN, and BbPHRYGIAN. Each mode is represented by a treble clef staff with a key signature of two flats (Bb and Eb) and a bass clef staff with a single flat (Bb). The notes for each mode are: BbLYDIAN (Bb, C, D, Eb, E, F, G, Ab), BbIONIAN (Bb, C, D, Eb, F, G, Ab, Bb), BbMIXOLYDIAN (Bb, C, D, Eb, F, G, Ab, Bb), BbDORIAN (Bb, C, D, Eb, F, G, Ab, Bb), BbAEOLIAN (Bb, C, D, Eb, F, G, Ab, Bb), and BbPHRYGIAN (Bb, C, D, Eb, F, G, Ab, Bb).

Handwritten musical notation for modes based on Bb. The second row shows six modes: BbLOCRIAN, EIONIAN/Bb, AIONIAN/Bb, DIONIAN/Bb, GIONIAN/Bb, and CIONIAN/Bb. Each mode is represented by a treble clef staff with a key signature of two flats (Bb and Eb) and a bass clef staff with a single flat (Bb). The notes for each mode are: BbLOCRIAN (Bb, C, D, Eb, F, G, Ab, Bb), EIONIAN/Bb (Bb, C, D, Eb, F, G, Ab, Bb), AIONIAN/Bb (Bb, C, D, Eb, F, G, Ab, Bb), DIONIAN/Bb (Bb, C, D, Eb, F, G, Ab, Bb), GIONIAN/Bb (Bb, C, D, Eb, F, G, Ab, Bb), and CIONIAN/Bb (Bb, C, D, Eb, F, G, Ab, Bb).

All modes based on B:

Handwritten musical notation for modes based on B. The first row shows six modes: BLYDIAN, BIONIAN, BMIXOLYDIAN, BDORIAN, BAEOLIAN, and BPHRYGIAN. Each mode is represented by a treble clef staff with a key signature of two sharps (F# and C#) and a bass clef staff with a single sharp (F#). The notes for each mode are: BLYDIAN (B, C, D, E, F#, G, A), BIONIAN (B, C, D, E, F#, G, A), BMIXOLYDIAN (B, C, D, E, F#, G, A), BDORIAN (B, C, D, E, F#, G, A), BAEOLIAN (B, C, D, E, F#, G, A), and BPHRYGIAN (B, C, D, E, F#, G, A).

Handwritten musical notation for modes based on B. The second row shows six modes: BLOCRIAN, FIONIAN/B, BbIONIAN/B, EbIONIAN/B, AbIONIAN/Bb, and C#IONIAN/B. Each mode is represented by a treble clef staff with a key signature of two sharps (F# and C#) and a bass clef staff with a single sharp (F#). The notes for each mode are: BLOCRIAN (B, C, D, E, F#, G, A), FIONIAN/B (B, C, D, E, F#, G, A), BbIONIAN/B (B, C, D, E, F#, G, A), EbIONIAN/B (B, C, D, E, F#, G, A), AbIONIAN/Bb (B, C, D, E, F#, G, A), and C#IONIAN/B (B, C, D, E, F#, G, A).

### APPENDIX 3: ALL MODES OF EVERY IONIAN MODE

All modes of C Ionian:

F L Y D I A N	C I O N I A N	G M I X O L Y D I A N	D D O R I A N	A A E O L I A N	E P H E Y G I A N

B L O C C I A N	C I O N I A N / G b	C I O N I A N / D b	C I O N I A N / A b	C I O N I A N / E b	C I O N I A N / B b

All modes of Db Ionian:

G b L Y D I A N	D b I O N I A N	A b M I X O L Y D I A N	E b D O R I A N	B b A E O L I A N	F P H E Y G I A N

C L O C C I A N	D b I O N I A N / G	D b I O N I A N / D	D b I O N I A N / A	D b I O N I A N / E	D b I O N I A N / B

All modes of D Ionian:

D LYDIAN	D IONIAN	A MIXOLYDIAN	E DORIAN	B Aeolian	F# PHRYGIAN
					

C# LOCRIAN	D IONIAN/Ab	D IONIAN/Eb	D IONIAN/Bb	D IONIAN/F	D IONIAN/C
					

All modes of Eb Ionian:

Ab LYDIAN	Eb IONIAN	Bb MIXOLYDIAN	F DORIAN	C Aeolian	G PHRYGIAN
					

D LOCRIAN	Eb IONIAN/A	Eb IONIAN/E	Eb IONIAN/B	Eb IONIAN/Gb	Eb IONIAN/Db
					

All modes of E Ionian:

ALYDIAN	EIONIAN	BMIXOLYDIAN	F#DORIAN	C#AEOLIAN	G#PHRYGIAN

D#LOCRIAN	EIONIAN/Bb	EIONIAN/F	EIONIAN/C	EIONIAN/G	EIONIAN/D

All modes of F Ionian:

BbLYDIAN	FIONIAN	CMIXOLYDIAN	G#DORIAN	DAEOLIAN	APHRYGIAN

ELOCRIAN	FIONIAN/B	FIONIAN/Gb	FIONIAN/Db	FIONIAN/Ab	FIONIAN/Eb

All modes of F# Ionian:

Row 1: B LYDIAN, F# IONIAN, C# MIXOLYDIAN, G# DORIAN, D# AEOLIAN, A# PHRYGIAN

Row 2: F# LOCRIAN, F# IONIAN/C, F# IONIAN/G, F# IONIAN/D, F# IONIAN/A, F# IONIAN/E

All modes of G Ionian:

Row 1: G LYDIAN, G IONIAN, D MIXOLYDIAN, A DORIAN, E AEOLIAN, B PHRYGIAN

Row 2: F# LOCRIAN, G IONIAN/D<sup>b</sup>, G IONIAN/A<sup>b</sup>, G IONIAN/E<sup>b</sup>, G IONIAN/B<sup>b</sup>, G IONIAN/F

All modes of Ab Ionian:

The image displays the first six modes of the Ab Ionian scale, arranged in two rows of three modes each. Each mode is represented by a grand staff (treble and bass clefs) with a key signature of two flats (Bb and Eb). The modes are labeled as follows:

- Row 1:
  - Db LYDIAN**: Treble clef has Bb, Eb, and Fb; bass clef has Bb.
  - Ab IONIAN**: Treble clef has Bb, Eb, and Fb; bass clef has Ab.
  - Eb MIXOLYDIAN**: Treble clef has Bb, Eb, and Fb; bass clef has Eb.
  - Bb DORIAN**: Treble clef has Bb, Eb, and Fb; bass clef has Bb.
  - Fa Aeolian**: Treble clef has Bb, Eb, and Fb; bass clef has Fa.
  - Cb Phrygian**: Treble clef has Bb, Eb, and Fb; bass clef has Cb.
- Row 2:
  - G Locrian**: Treble clef has Bb, Eb, and Fb; bass clef has G.
  - Ab IONIAN/D**: Treble clef has Bb, Eb, and Fb; bass clef has D.
  - Ab IONIAN/A**: Treble clef has Bb, Eb, and Fb; bass clef has A.
  - Ab IONIAN/E**: Treble clef has Bb, Eb, and Fb; bass clef has E.
  - Ab IONIAN/B**: Treble clef has Bb, Eb, and Fb; bass clef has B.
  - Ab IONIAN/Gb**: Treble clef has Bb, Eb, and Fb; bass clef has Gb.

All modes of A Ionian:

The image displays the first six modes of the A Ionian scale, arranged in two rows of three modes each. Each mode is represented by a grand staff (treble and bass clefs) with a key signature of three sharps (F#, C#, and G#). The modes are labeled as follows:

- Row 1:
  - D LYDIAN**: Treble clef has F#, C#, and G#; bass clef has D.
  - A IONIAN**: Treble clef has F#, C#, and G#; bass clef has A.
  - E MIXOLYDIAN**: Treble clef has F#, C#, and G#; bass clef has E.
  - B DORIAN**: Treble clef has F#, C#, and G#; bass clef has B.
  - F# Aeolian**: Treble clef has F#, C#, and G#; bass clef has F#.
  - C# Phrygian**: Treble clef has F#, C#, and G#; bass clef has C#.
- Row 2:
  - G Locrian**: Treble clef has F#, C#, and G#; bass clef has G.
  - A IONIAN/Eb**: Treble clef has F#, C#, and G#; bass clef has Eb.
  - A IONIAN/Bb**: Treble clef has F#, C#, and G#; bass clef has Bb.
  - A IONIAN/F**: Treble clef has F#, C#, and G#; bass clef has F.
  - A IONIAN/C**: Treble clef has F#, C#, and G#; bass clef has C.
  - A IONIAN/G**: Treble clef has F#, C#, and G#; bass clef has G.

All modes of Bb Ionian:

The image displays the six modes of the Bb Ionian scale, arranged in two rows of three. Each mode is represented by a grand staff (treble and bass clefs) with a key signature of two flats (Bb and Eb). The modes are labeled as follows:

- Row 1:**
  - Eb LYDIAN:** Treble clef has notes Gb, Ab, Bb, Cb, D, Eb, F. Bass clef has a whole note Eb.
  - Bb IONIAN:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note Bb.
  - F MIXOLYDIAN:** Treble clef has notes F, G, Ab, Bb, C, D, Eb. Bass clef has a whole note F.
  - Cb DORIAN:** Treble clef has notes Cb, D, Eb, F, G, Ab, Bb. Bass clef has a whole note Cb.
  - Gb AEOLIAN:** Treble clef has notes Gb, Ab, Bb, Cb, D, Eb, F. Bass clef has a whole note Gb.
  - D Phrygian:** Treble clef has notes D, Eb, F, G, Ab, Bb, C. Bass clef has a whole note D.
- Row 2:**
  - A Locrian:** Treble clef has notes A, Bb, C, D, Eb, F, G. Bass clef has a whole note A.
  - Bb IONIAN/E:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note E (Fb).
  - Bb IONIAN/B:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note Bb.
  - Bb IONIAN/Gb:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note Gb.
  - Bb IONIAN/D:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note D.
  - Bb IONIAN/Ab:** Treble clef has notes Bb, C, D, Eb, F, G, Ab. Bass clef has a whole note Ab.

All modes of B Ionian:

The image displays the six modes of the B Ionian scale, arranged in two rows of three. Each mode is represented by a grand staff (treble and bass clefs) with a key signature of two sharps (F# and C#). The modes are labeled as follows:

- Row 1:**
  - E LYDIAN:** Treble clef has notes G, A, B, C, D, E, F#. Bass clef has a whole note E.
  - B IONIAN:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note B.
  - F# MIXOLYDIAN:** Treble clef has notes F#, G, A, B, C, D, E. Bass clef has a whole note F#.
  - C# DORIAN:** Treble clef has notes C#, D, E, F#, G, A, B. Bass clef has a whole note C#.
  - G# AEOLIAN:** Treble clef has notes G#, A, B, C, D, E, F#. Bass clef has a whole note G#.
  - D# Phrygian:** Treble clef has notes D#, E, F#, G, A, B, C#. Bass clef has a whole note D#.
- Row 2:**
  - A# Locrian:** Treble clef has notes A#, B, C, D, E, F#, G. Bass clef has a whole note A#.
  - B IONIAN/F:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note F.
  - B IONIAN/C:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note C.
  - B IONIAN/G:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note G.
  - B IONIAN/D:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note D.
  - B IONIAN/A:** Treble clef has notes B, C, D, E, F#, G, A. Bass clef has a whole note A.

APPENDIX 4: CHEMISTRY

SCORE

CHEMISTRY

JOHN MADERE

Musical score for **CHEMISTRY** by John Madere. The score is arranged for Trumpet, Piano, and Bass. The key signature is B-flat major (two flats) and the time signature is common time (C).

The score is divided into two systems, each containing four measures. The first system includes staves for Trumpet, Piano, and Bass. The second system includes staves for Trumpet, Piano, and Bass, with a measure rest (5) indicated at the beginning of each staff.

**Trumpet:** The Trumpet part consists of whole rests in all measures of both systems.

**Piano:** The Piano part features a melodic line in the right hand and a bass line in the left hand. The right hand plays a series of eighth notes, while the left hand plays a series of quarter notes. The melody is: G4 (half), A4-B4 (quarter), C5 (quarter), B4-A4 (quarter), G4 (half). The bass line is: G3 (half), A3-B3 (quarter), C4 (quarter), B3-A3 (quarter), G3 (half).

**Bass:** The Bass part features a melodic line in the right hand and a bass line in the left hand. The right hand plays a series of eighth notes, while the left hand plays a series of quarter notes. The melody is: G4 (half), A4-B4 (quarter), C5 (quarter), B4-A4 (quarter), G4 (half). The bass line is: G3 (half), A3-B3 (quarter), C4 (quarter), B3-A3 (quarter), G3 (half).



# CHEMISTRY

2

9

TPT.

PNO.

BASS

9

## LYDIAN

12

TPT.

PNO.

BASS

12

# CHEMISTRY

3

**TPT.**

16

**PNO.**

**BASS**

16

**TPT.**

20

**PNO.**

**BASS**

20

25

TPT.

PNO.

BASS

29

TPT.

PNO.

BASS

The musical score is for a piece titled "CHEMISTRY". It is arranged for three instruments: TPT. (Trumpet), PNO. (Piano), and BASS. The score is divided into two systems. The first system starts at measure 25 and the second system starts at measure 29. The key signature is B-flat major (two flats). The TPT. part is in treble clef, PNO. is in grand staff (treble and bass clefs), and BASS is in bass clef. The music consists of eighth and sixteenth notes, with some chords in the piano part.

TPT.

33

PNO.

33

BASS

33

TO CODA

TPT.

37

PNO.

37

BASS

37

TO CODA

TO CODA

41

TPT.

PNO.

BASS

41

44

TPT.

PNO.

BASS

44

TPT. 47 **G DORIAN (8 BARS)**

PNO. 47 **G DORIAN (8 BARS)**

BASS 47 **G DORIAN (8 BARS)**

Measures 47-51. The TPT. part has a melodic line in G Dorian. The PNO. part has a harmonic accompaniment. The Bass part has a bass line. All parts end with a repeat sign and a fermata.

TPT. 52

PNO. 52

BASS 52

Measures 52-56. The TPT. part has a melodic line in G Dorian. The PNO. part has a harmonic accompaniment. The Bass part has a bass line. All parts end with a repeat sign and a fermata.

57

TPT. A LOCRIAN (4 BARS) D7 FLAT 6 (4 BARS)

PNO. A LOCRIAN (4 BARS) D7 FLAT 6 (4 BARS)

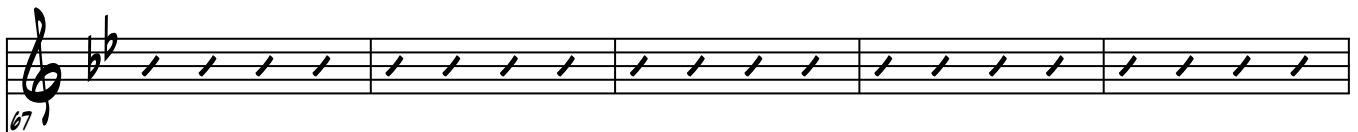
BASS A LOCRIAN (4 BARS) D7 FLAT 6 (4 BARS)

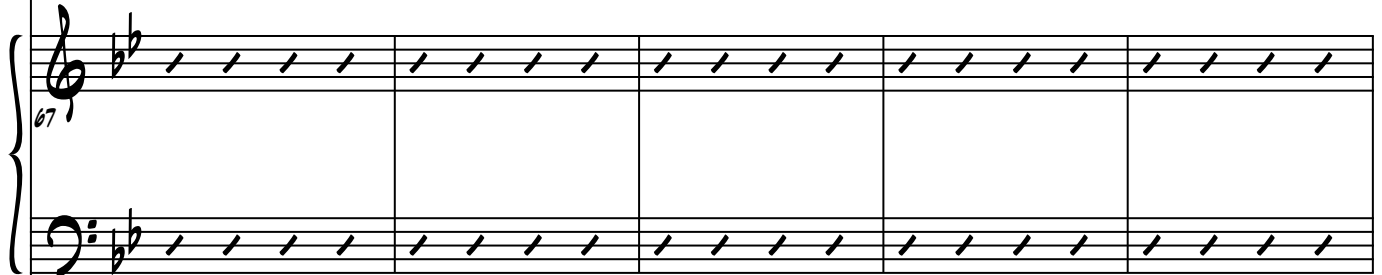
62


TPT. G DORIAN (8 BARS)

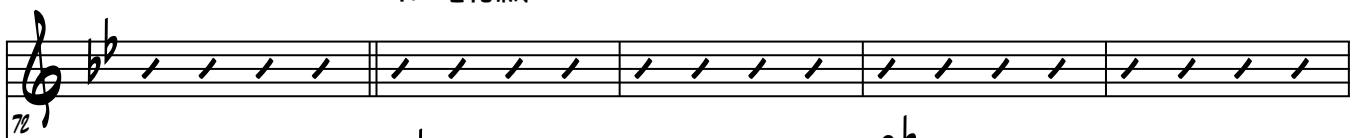
PNO. G DORIAN (8 BARS)

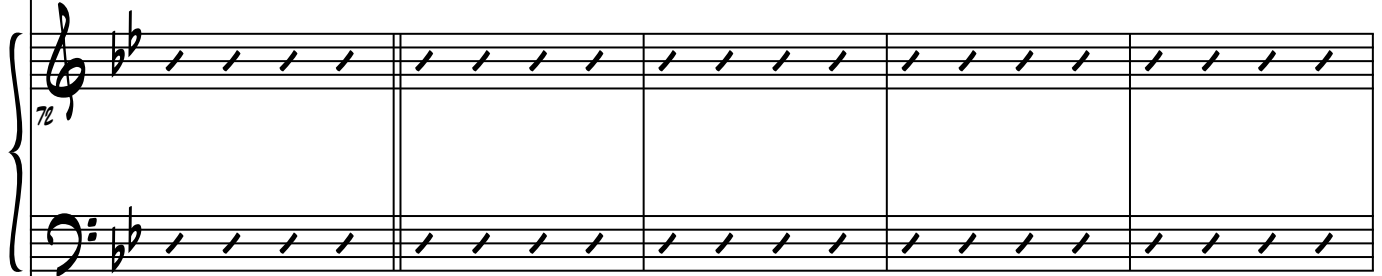
BASS G DORIAN (8 BARS)


TPT.  67

PNO.  67

BASS  67

TPT.  72

PNO.  72

BASS  72

$A^b$  LYDIAN  $G^b$  IONIAN



10

## CHEMISTRY

E MIXOLYDIAN

E<sup>b</sup> DORIAN

D7

G DORIAN (8 BARS)

TPT.

Handwritten musical notation for TPT. staff 10-11. Measure 10 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 11 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 11.

77

E MIXOLYDIAN

E<sup>b</sup> DORIAN

D7

G DORIAN (8 BARS)

PNO.

Handwritten musical notation for PNO. staff 10-11. Measure 10 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 11 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 11.

77

E MIXOLYDIAN

E<sup>b</sup> DORIAN

D7

G DORIAN (8 BARS)

BASS

Handwritten musical notation for BASS staff 10-11. Measure 10 has a bass clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 11 has a bass clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 11.

77

TPT.

Handwritten musical notation for TPT. staff 82-83. Measure 82 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 83 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 83.

82

PNO.

Handwritten musical notation for PNO. staff 82-83. Measure 82 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 83 has a treble clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 83.

82

BASS

Handwritten musical notation for BASS staff 82-83. Measure 82 has a bass clef, key signature of two flats, and a whole note chord marked with a diamond. Measure 83 has a bass clef, key signature of two flats, and a whole note chord marked with a diamond. A double bar line is at the end of measure 83.

82

# CHEMISTRY

11

PLAY FIGURE AT FIRST, THEN IMPROVISE

87

TPT.

PNO.

BASS

VAMP

VAMP, THEN GO CRAZY

91

TPT.

PNO.

BASS

94

TPT.

PNO.

BASS

94

This musical score is for the song 'CHEMISTRY' and is page 12 of the arrangement. It features three staves: TPT. (Trumpet), PNO. (Piano), and BASS. The key signature is B-flat major (two flats). The TPT. staff begins at measure 94 with a melodic line. The PNO. staff is marked with a piano (p) dynamic and features a chordal accompaniment. The BASS staff also begins at measure 94 and provides a bass line. The score concludes with a double bar line.

# APPENDIX 5: WITH DREW

SCORE

## WITH DREW

JOHN MADERE

**TENOR SAX.**

**PIANO**

**BASS**

Chord progression for the first system:

- Measure 1: A MIN7
- Measure 2: B<sup>b</sup> MA7(#11)
- Measure 3: A MIN7
- Measure 4: B<sup>b</sup> MA7(#11)

The piano and bass parts provide harmonic support with chords: G MIN7, A<sup>b</sup> MA7(#11), G MIN7, and A<sup>b</sup> MA7(#11) respectively.

**T. SX.**

**PIANO**

**BASS**

Chord progression for the second system:

- Measure 1: B MA7(#11)
- Measure 2: C MIN
- Measure 3: B<sup>b</sup> MA7(#11)
- Measure 4: E 7(b9)/G#

The piano and bass parts provide harmonic support with chords: A MA7(#11), B<sup>b</sup> MIN, A<sup>b</sup> MA7(#11), and D 7(b9)/F# respectively.



WITH DREW

**System 1 (Measures 19-22):**

- T. SX.** (Treble Saxophone):
  - Measure 19:  $B^b MA7(\#11)$
  - Measure 20:  $B MA7(\#11)$
  - Measure 21:  $B^b MA7(\#11)$
  - Measure 22:  $E7(b9)/G\#$  3
- PNO.** (Piano):
  - Measure 19:  $A^b MA7(\#11)$
  - Measure 20:  $A MA7(\#11)$
  - Measure 21:  $A^b MA7(\#11)$
  - Measure 22:  $D7(b9)/F\#$
- BASS** (Bass):
  - Measure 19:  $A^b MA7(\#11)$
  - Measure 20:  $A MA7(\#11)$
  - Measure 21:  $A^b MA7(\#11)$
  - Measure 22:  $D7(b9)/F\#$

**System 2 (Measures 23-27):**

- T. SX.** (Treble Saxophone):
  - Measure 23:  $A MIN7$
  - Measure 24:  $F MA7(\#11)$
  - Measure 25:  $G MIN7$
  - Measure 26:  $F\# MA7(\#11)$
  - Measure 27:  $C\# MIN7$
- PNO.** (Piano):
  - Measure 23:  $G MIN7$
  - Measure 24:  $E^b MA7(\#11)$
  - Measure 25:  $F MIN7$
  - Measure 26:  $E MA7(\#11)$
  - Measure 27:  $B MIN7$
- BASS** (Bass):
  - Measure 23:  $G MIN7$
  - Measure 24:  $E^b MA7(\#11)$
  - Measure 25:  $F MIN7$
  - Measure 26:  $E MA7(\#11)$
  - Measure 27:  $B MIN7$

4

WITH DREW

T. SX. 28

PNO. 28

BASS 28

Chord progressions for T. SX. and PNO. (BASS):

Measure	T. SX.	PNO. (BASS)
1	F <sup>MA7</sup> (#11)	E <sup>b</sup> MA <sup>7</sup> (#11)
2	A <sup>MA7</sup> (#5)	GMA <sup>7</sup> (#5)
3	A <sup>MA7</sup>	GMA <sup>7</sup>
4	B <sup>b</sup> MA <sup>7</sup> (#11)	A <sup>b</sup> MA <sup>7</sup> (#11)

# APPENDIX 6: MARIA SCHNEIDER'S "GREEN PIECE"

140

## GREEN PIECE

TRANSPPOSED SCORE

BRISK - FEEL TEMPO IN 1  
(SOPRANO)

ALTO Sax I  
(FLUTE)

ALTO Sax II  
(FLUTE)

TENOR Sax I  
(FLUTE)

TENOR Sax II  
(FLUTE)

BARITONE Sax  
(BASS CL.)

TRUMPET I  
(FLUGEL)

TRUMPET II  
(FLUGEL)

TRUMPET III  
(FLUGEL)

TRUMPET IV  
(FLUGEL)

TROMBONE I

TROMBONE II

TROMBONE III

TROMBONE IV

SPRINK

PIANO

BASS

DRUMS - 16/32 (LONG)

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9 (SOFTLY - EASY) (SOPRANO)

SOLO

FLUTE

TRUMPET 1

TRUMPET 2

SK. DR.

(SOFTLY - EASY) (FLUGEL)

FLUTE 1

FLUTE 2

FLUTE 3

FLUTE 4

TR. 1

TR. 2

TR. 3

TR. 4

GTR.

PIA.

SK.

DRUMS

SM.  
FLUTE  
TMR. 1  
TMR. 5  
SL. CL.

This system contains five staves. The Soprano (SM.) and Flute (FLUTE) staves are in treble clef and contain a melodic line with eighth and quarter notes. The Trombone 1 (TMR. 1), Trombone 5 (TMR. 5), and Snare Drum (SL. CL.) staves are in bass clef and contain whole rests throughout the system.

FLUTE 1  
FLUTE 1  
FLUTE 5  
FLUTE 4

This system contains four staves, all in treble clef. The first two staves (labeled FLUTE 1) contain a melodic line with eighth and quarter notes. The third staff (labeled FLUTE 5) and the fourth staff (labeled FLUTE 4) contain whole rests throughout the system.

TMR. 1  
TMR. 5  
TMR. 5  
TMR. 4

This system contains four staves, all in bass clef. All four staves (labeled TMR. 1, TMR. 5, TMR. 5, and TMR. 4) contain whole rests throughout the system.

GR.  
PNE.  
SL.  
CHS.

This system contains four staves. The Guitar (GR.) staff is in treble clef and contains a melodic line with eighth and quarter notes. The Piano (PNE.) staff is in bass clef and contains a bass line with eighth and quarter notes. The Snare (SL.) staff is in bass clef and contains whole notes. The Chorus (CHS.) staff is in bass clef and contains a series of eighth notes.

UE 70008

25

Gr.

Flute

Flute 1

Flute 2

Fl. Cl.

Flute 3

Flute 4

Flute 5

Flute 6

Fl. 1

Fl. 2

Fl. 3

Fl. 4

Gr.

Fl.

Fl.

Fl.

Fl.

Sheet music for measures 1-8. The score includes staves for Soprano (Sop.), Alto (Alto), Tenor 1 (Tenor 1), Tenor 2 (Tenor 2), Bass (Bass), Flute 1 (Flute 1), Flute 2 (Flute 2), Flute 3 (Flute 3), Flute 4 (Flute 4), Clarinet 1 (Clarinet 1), Clarinet 2 (Clarinet 2), Clarinet 3 (Clarinet 3), Clarinet 4 (Clarinet 4), Bassoon (Bassoon), and Double Bass (Double Bass). The music is in 4/4 time and features a key signature of one flat (B-flat). The Soprano and Alto parts have lyrics. The Flute 3 and Flute 4 parts have lyrics. The Clarinet 1, Clarinet 2, Clarinet 3, and Clarinet 4 parts have lyrics. The Bassoon part has lyrics. The Double Bass part has lyrics.

Measures 1-8:

- Measures 1-2: Soprano and Alto parts enter with a half note G4, followed by a half note A4. Flute 3 and Flute 4 enter with a half note G4, followed by a half note A4. Clarinet 1, Clarinet 2, Clarinet 3, and Clarinet 4 enter with a half note G4, followed by a half note A4. Bassoon enters with a half note G4, followed by a half note A4. Double Bass enters with a half note G4, followed by a half note A4.
- Measures 3-4: Soprano and Alto parts have a half note G4, followed by a half note A4. Flute 3 and Flute 4 have a half note G4, followed by a half note A4. Clarinet 1, Clarinet 2, Clarinet 3, and Clarinet 4 have a half note G4, followed by a half note A4. Bassoon has a half note G4, followed by a half note A4. Double Bass has a half note G4, followed by a half note A4.
- Measures 5-6: Soprano and Alto parts have a half note G4, followed by a half note A4. Flute 3 and Flute 4 have a half note G4, followed by a half note A4. Clarinet 1, Clarinet 2, Clarinet 3, and Clarinet 4 have a half note G4, followed by a half note A4. Bassoon has a half note G4, followed by a half note A4. Double Bass has a half note G4, followed by a half note A4.
- Measures 7-8: Soprano and Alto parts have a half note G4, followed by a half note A4. Flute 3 and Flute 4 have a half note G4, followed by a half note A4. Clarinet 1, Clarinet 2, Clarinet 3, and Clarinet 4 have a half note G4, followed by a half note A4. Bassoon has a half note G4, followed by a half note A4. Double Bass has a half note G4, followed by a half note A4.

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41

Soprano, Alto, Tenor 1, Tenor 2, Bass Clef

Flute 1, Flute 2, Flute 3, Flute 4

Trombone 1, Trombone 2, Trombone 3, Trombone 4

(IN STAND)

Saxophone, Piano, Bass, Double Bass

(DON'T WALK - SOFT FALL)

CHIT GHR 2/4 5/4 GHR FIVE/4 CHIT (HOLD) SHUT/D

SOFT BEGGERS

SATB Choir: Soprano, Alto, Tenor 1, Tenor 2, Bass. The vocal parts feature a mix of half notes, quarter notes, and eighth notes, with some measures containing rests.

Instruments: Flute 1, Flute 2, Flute 3, Flute 4, Trombone 1, Trombone 2, Trombone 3, Trombone 4, Saxophone, Piano, and Double Bass. The instrumental parts provide harmonic support with various rhythmic patterns, including eighth and sixteenth notes.

Lyrics (under Bass line):  
 Gull Gull Gull (chanted) Shout Oh Gull (chanted)

UE 70008

This musical score is for the song "The Sound of Silence" by Simon & Garfunkel, arranged for a full orchestra and vocal quartet. The score is written for SATB voices and includes parts for various instruments:

- Woodwinds:** Flute 1, Flute 2, Oboe 1, Oboe 2, Clarinet 1, Clarinet 2, Bassoon 1, Bassoon 2.
- Brass:** Trumpet 1, Trumpet 2, Trumpet 3, Trumpet 4, Trombone 1, Trombone 2, Trombone 3, Trombone 4, Euphonium, Tuba.
- Strings:** Violin 1, Violin 2, Viola, Violoncello, Double Bass.
- Percussion:** Snare Drum, Cymbal, Tom-tom, Bass Drum, Gong, Triangle, Tambourine, Castanets, Maracas, Claves, Conga, Bongo, Cajon, Conga, Bongo, Cajon.
- Vocalists:** Soprano, Alto, Tenor 1, Tenor 2.

The score includes various musical notations such as notes, rests, and dynamic markings. Key annotations include:

- Flute 1:** (OUT OF STAND)
- Trumpet 1:** (IN TRUMPET)
- Trombone 1:** (IN TRUMPET)
- Violoncello:** (IN TRUMPET)
- Double Bass:** (IN TRUMPET)
- Snare Drum:** (MORE ACTIVE - MIN 1' & 5' REEL)
- Cymbal:** LET RING

The score is a complex arrangement, likely for a professional recording or a high-level performance, capturing the essence of the original song with a rich orchestral texture.





UE 70008







80

Gen.    
 ALTO    
 Tenor 1    
 Tenor 2    
 Bass 

Ten. 3    
 Ten. 4    
 Ten. 5    
 Flute 4 

Ten. 1    
 Ten. 2    
 Ten. 3    
 Ten. 4 

Gen.    
 Perc.    
 Bass    
 Drum 

Score for SATB choir. The SATB parts (Soprano, Alto, Tenor 1, Tenor 2, Bass) are shown. The music is in 4/4 time and features a mix of whole, half, and quarter notes, with some triplet markings.

Score for Tuba 1, Tuba 2, Tuba 3, and Floor 4. The Tuba parts are shown in 4/4 time, featuring a mix of whole, half, and quarter notes. The Floor 4 part includes a section marked "GSLI W/STP & H. 10".

Score for Tuba 1, Tuba 2, Tuba 3, and Tuba 4. The Tuba parts are shown in 4/4 time, featuring a mix of whole, half, and quarter notes. The Tuba 4 part includes a section marked "GSLI W/STP & H. 10".

Score for Percussion (Perc.) and Drums (Drum). The Percussion part includes a section marked "GSLI W/STP & H. 10". The Drums part includes a section marked "GSLI W/STP & H. 10".

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90

GR.

ALTO 2

TENOR 1

TENOR 2

SUB.

TENOR 1

TENOR 2

TENOR 3

FLAUTA 4

TENOR 1

TENOR 2

TENOR 3

TENOR 4

GR.

PIA.

SA.

CON.

(COL. PIANO CORDS)

(COL. PIANO CORDS)

(SOL.)

UE 70008



115 *tr*

Sopr.  
Alto I  
Tenor I  
Tenor II  
Bass  
Tenor III  
Tenor IV  
Bass II  
Bass III  
Bass IV  
Guit.  
Pno.  
Sn.  
Dbl.

REHEARSE 'A' SEPARATELY

UE 70008

151

LEAD

157

Sn.

ALP. 1

TRM. 1

TRM. 5

Sn.

TRM. 1

TRM. 5

TRM. 5

TRM. 4

TRM. 1

TRM. 5

TRM. 5

TRM. 4

GR.

PA.

A PED. Cont.

Dr.

DRM.

155

159 (OPT.)  
(OPT. X ONLY)

Sopr. *(S ANYTHING CONT.)*

Alto 1 *(S PRELUDE (DE S ANYTHING))*

Tenor 1

Tenor 2

Bass

Ten. 1 (OPT. X ONLY)

Ten. 2

Ten. 3

Piano 4

Ten. 1 (OPT. X ONLY)

Ten. 2

Ten. 3

Ten. 4

Org.

Pno. *(OPT. CONT. A PRELUDE)*

*SOFTLY CHORD*

*A PRELUDE*

Dr. *WALK A PRELUDE (F SCALE)*

Cont. *OPEN SOL.* *SOLD UNITS. REEL ACTIVE*

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[illegible]

Sop.  
 Alto 1  
 Tenor 1  
 Bass  
 Tenor 2  
 Tenor 3  
 Bass 2  
 Bass 3  
 Bass 4  
 Soprano 2  
 Piano  
 Bass 5  
 Double Bass

Musical score for a choir and orchestra, page 151. The score includes parts for Soprano, Alto 1, Tenor 1, Bass, Tenor 2, Tenor 3, Bass 2, Bass 3, Bass 4, Soprano 2, Piano, Bass 5, and Double Bass. The music is in 4/4 time and features various musical notations including notes, rests, and dynamic markings.

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[illegible]

The musical score for four voices (Tenor 1, Tenor 2, Tenor 3, Bass 4) shows a sequence of notes and rests. The notes are primarily half notes and whole notes, with some rests. The Tenor 1 part starts with a half note G4, followed by a half note A4, and then a whole note B4. The Tenor 2 part starts with a half note F#4, followed by a half note G4, and then a whole note A4. The Tenor 3 part starts with a half note E4, followed by a half note F4, and then a whole note G4. The Bass 4 part starts with a half note D4, followed by a half note E4, and then a whole note F4. The score is written on four staves, each with a treble clef and a key signature of one sharp (F#).

The musical score consists of four staves labeled Tenor 1, Tenor 2, Tenor 3, and Tenor 4. Each staff begins with a treble clef and a key signature of one flat (B-flat). The notation includes various note values (quarter, eighth, and half notes), rests, and ties. A large brace at the bottom groups the first six measures of the music.

[illegible]

UE 70008

[illegible]

Score for 185, featuring vocal parts (Soprano, Alto I, Tenor I, Tenor II, Bass) and instrumental parts (Trumpet I, Trumpet II, Trumpet III, Trombone I, Trombone II, Trombone III, Trombone IV, Saxophone, Piano, Bass, and Drums).

The score is written in 4/4 time. The key signature has one flat (B-flat). The tempo is marked "Moderato".

**Vocal Parts:**

- Soprano:** Melodic line with lyrics: "I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer."
- Alto I:** Melodic line with lyrics: "I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer."
- Tenor I:** Melodic line with lyrics: "I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer."
- Tenor II:** Melodic line with lyrics: "I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer."
- Bass:** Melodic line with lyrics: "I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer, I'm a little bit of a dreamer."

**Instrumental Parts:**

- Trumpet I, II, III:** Harmonic support for the vocal melody.
- Trombone I, II, III, IV:** Harmonic support for the vocal melody.
- Saxophone:** Solo section in the middle of the score.
- Piano:** Accompanying the vocal melody with chords.
- Bass:** Accompanying the vocal melody with a bass line.
- Drums:** Rhythmic accompaniment.

**Chords and Harmonies:**

- Chorus:** G/E, F#m7b9, G/E, F#m7b9, G/B, C#m7b9, G/B, C#m7b9.
- Saxophone:** G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9.
- Piano:** G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9.
- Bass:** G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9.
- Drums:** G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9, G/B, C#m7b9.

UE 70008

190 (OPEN)  
(no FLUTE)

FLUTE

FLUTE

FLUTE 1

FLUTE 2

(no BASS CL.)

BASS

[illegible]

The image shows a musical score for the song "The Sound of Silence" by Simon & Garfunkel. It consists of four staves, each labeled "STAFF 1" through "STAFF 4" on the left. Each staff contains a single line of music, which is a single note (G#4) held for a duration of 4 measures. The notes are written on a five-line staff with a treble clef. The first staff has a "G#4" note on the first line. The second staff has a "G#4" note on the second line. The third staff has a "G#4" note on the third line. The fourth staff has a "G#4" note on the fourth line. The notes are connected by a horizontal line across all four staves, indicating they are part of the same melodic line. The score is presented in a simple, clean format with no additional markings or dynamics.

Sop.  
 Alto  
 Ten.  
 Bass

The Rose Tree

(IN CUE)

Flute 1

Flute 2

Tenor 1

Tenor 2

SA. C.

Ten. 1

Ten. 2

Ten. 3

Flute 4

Ten. 1

Ten. 2

Ten. 3

Ten. 4

Spt.

Fl.

SA.

Org.

UE 70008





235

(TO SOPRANO)

Sopr.

(TO ALTO)

Alto

(TO TENOR I)

Tenor I

(TO TENOR II)

Tenor II

(TO BASS)

Bass

Ten. I

Ten. II

Ten. I

Piano

END OF SOLO

Ten. I

Ten. II

Ten. I

Ten. II

GR.

(Est. Piano Cresc.)

PNO.

(Est. Piano Cresc.)

SO.

(Bell)

CON.

UE 70008

220

(RANDOM 2/4 ACCENT)

SOL.

ALTO 5

TENOR 1

TENOR 5

SOP.

TENOR 1

TENOR 5

TENOR 5

FLUTE 4

TENOR 1

TENOR 5

TENOR 5

TENOR 5

TENOR 4

QRT.

PIA.

SO.

CONY IN GUILLOT POSITION THROUGH ENDS.

DRUM.

UE 70008

227

(RANDOM 2<sup>nd</sup> ACCENT)

Sop.  
 Alto 1  
 Tenor 1  
 Tenor 2  
 Bass  
 Tenor 3  
 Tenor 4  
 Tenor 5  
 Flute 4  
 Violin 1  
 Violin 2  
 Violin 3  
 Violin 4  
 Cello  
 Double Bass  
 Piano

5 PED

UE 70008

084 (LONDON J'S ROBERT)

The musical score is arranged in systems. The first system includes SATB voices and Tuba, Euphonium, and Trombone. The second system adds Flare. The third system includes Bass. The fourth system includes Piano. The fifth system includes Snare and Double Bass. The score is in 4/4 time and features a variety of musical notations including notes, rests, and dynamic markings.

SATB

TUBA

EUPHON

TROMB

FLARE

BASS

PIANO

SNARE

DOUBLE BASS

245 246

Sopr. Alto I Tenor I Tenor II Bass

TRP. I TRP. II TRP. III

TRB. I TRB. II TRB. III TRB. IV

GR. (C)

PNO.

DR. (DR. PIANO CROON)

CONG. (CONG. BELL) DR. (DR. PIANO CROON)

UE 70008

This musical score is for the song "The Rose Tree" from the Broadway musical "The Sound of Music". It is arranged for a SATB choir, strings, and piano. The score is written in 3/4 time and features a key signature of one sharp (F#). The vocal parts (Soprano, Alto, Tenor 1, Tenor 2, and Bass) enter in the first measure with the melody. The instrumental parts (Violins 1 & 2, Violas, Cellos, Double Basses, and Piano) provide harmonic support. The piano part includes lyrics written below the notes, such as "GIVE", "SOUND/A", "S/A", "SOUND/A", "SOUND/A", "GIVE", "GIVE", "GIVE", and "SOUND/A". The score is divided into measures by vertical bar lines, and the lyrics are aligned with the corresponding vocal parts.

UE 70008

157 160 (Gtra. Pl.)

Sopr. Alto 1 Tenor 1 Tenor 2 Bass

Trumpet 1 Trumpet 2 Trumpet 3 Trombone 4

Tuba 1 Tuba 2 Tuba 3 Tuba 4

(Repeat to fade w/ RHYTHM SECTION)

Gtr. Bk. Bass Drums

Very gradually - ease up until count begins and finish "TH"

UE 70008



SATB

TRP. 1

TRP. 2

TRP. 3

TEN. 1

TEN. 2

TEN. 3

TEN. 4

TUBA

FLUTE

CLARINET

SAXOPHONE

DOUBLE BASS

INSTRUCTIONS FOR ALL HORN PARTS:  
 CONT. F# DIATONIC SCALE - HOLD NOTES - OR DEEP SCALEWISE BY d. -  
 CONT. GERMANY LOWER (LONGER AND SOFTER INTX. ALL HORN ARE DOY. UE 70008

175

Soprano  
Alto I  
Tenor I  
Tenor II  
Bass

Tenor I  
Tenor II  
Tenor III  
Bass

Treble I  
Treble II  
Treble III  
Treble IV

Soprano  
Piano  
Bass  
Organ

UE 70008

**REPERT AD LIB**  
(END/RE/TYPE : CONT. AND SIDE, THEN TO ENTHON)

**EXIT**

Sopr. 1  
Sopr. 2  
Contr. 1  
Contr. 2  
Bari

Ten. 1  
Ten. 2  
Ten. 3  
Bass 4

Ten. 5  
Ten. 6  
Ten. 7  
Ten. 8

**RHYTHM : FINISH AFTER WORDS ARE OUT**

**EXIT. AD LIB**

Grp.  
Pia.  
St.  
Dns.

UE 70008

## **VITA**

John Madere was born in Litcher, Louisiana. He began his musical studies on the saxophone at age ten, and began studying the double bass at the age of 17. Madere holds the Bachelor of Music degree from Louisiana State University (2005) and the Master of Music degree from the University of Cincinnati College-Conservatory of Music (2007). He performs frequently in both the classical and jazz fields and recently released a CD of all original jazz compositions. Madere is the Principal Bassist of the Baton Rouge Symphony Orchestra. He will receive the Doctor of Musical Arts degree in the Fall of 2011.