

Analysis of modal music

Modal vs. Tonal harmony

*Here I use the term 'Tonal' for 'Functional' music.
I hate the term (as if modal music has no tonal center), but
the use of the term 'Tonal' in relation to 'Modal' is widespread*

Similarity:

Both have a tonal center. (Sometimes more tonal centers occur in one piece)

Both make use of a seven-note scale as a basis (although modal music can be defined more broadly, other scales can be seen as a mode too).

Difference:

Tonal music uses functional harmony (three functions: Tonic, Subdominant and Dominant)

In functional harmony, the movement D-T is the most important movement. The dominant chord in functional harmony is always a major triad, with or without the minor 7th.

There is no real functional harmony without the dominant.

There is more to functional harmony, that we discussed throughout the year. Functional harmony is all about *direction*. The need to eventually resolve to the Tonic.

Tonal music mainly uses major and/or minor keys

Modal music doesn't use functional harmony (or hardly). All harmonies of a modal (part of a) piece together sound like one mode, with one rootnote, but there is no necessity for harmonic resolution or harmonic development in the way tonal music tends to develop. It is in a way more static. Modal music can be built on any of the church modes, or on other modes as well.

Mixed

Not all music can be easily categorised under Modal or Tonal. Some music is partly modal, partly tonal. Other music is ambiguous.

There are more categories of use of harmony than tonal and modal!

For example: (some of these terms are not in common use, but I like them)

Chromatic music

Free Atonal music

Serial Music

Floating tonality

(this is a term translated from dutch. Not in use in english I think)

Extended tonality

Chord painting (this is my own term)

Harmonic parallelism or harmonic planing

In analysis, don't think that music has to be either functional or modal. It might be something completely different...

Review: Modes, scale degrees, important sounds and chords

	I	II	III	IV	V	VI	VII	essential notes
C ionian	Cmaj7	Dm7	Em7	Fmaj7	G7	Am7	Bø	
C dorian	Cm7	Dm7	Ebmaj7	F7	Gm7	Aø	Bbmaj7	m3, m7, M6
C phrygian	C7sus4b9	Dbmaj7	Eb7	Fm7	Gø	Abmaj7	Bbm7	m2 (and m3,6,7)
C lydian	Cmaj7#11	D7	Em7	F#ø	Gmaj7	Am7	Bm7	#4 (or #11)
C mixo-lydian	C7	Dm7	Eø	Fmaj7	Gm7	Am7	Bbmaj7	m7 (in a major context)
C aeolian	Cm7	Dø	Ebmaj7	Fm7	Gm7	Abmaj7	Bb7	m6 (and m3 and m7)
C locrian	Cø	Dbmaj7	Ebm7	Fm7	Gbmaj7	Ab7	Bbm7	b5

Some ideas in analysing modal music

In analysing a (part of a) song:

- Listen for the rootnote. Sometimes the rootnote is clear, sometimes different perspectives are possible
- Group harmonies together. Can you find a mode with this rootnote that contains (most of) the harmonies of this piece?
- Are important sounds of the mode present? (for example a lydian mode must have a #4)
- Harmonies within this (part of) the song that don't fit the mode can be described in terms of modal interchange, short functional passages etc. The fact that a piece of music is modal doesn't mean every detail fits
- A song can consist of more parts, each with their own mode, or maybe one part is more functional, another part modal etc.
- Watch out for key signatures. They do not always mean the same thing in modal music!

LATIN

[BOOGALOO]

OYE COMO YA

TITO PUENTE

[INTRO] Am Am D Am/E Am D Am/E Am/E

A Am D7 A3 D7

B Am Am Am/E C Am D7

PLAY A AND B BETWEEN SOLOS FOR CODA-PLAY INTRO

analysis

LATIN
[BOOGALOO] OYE COMO VA TITO PUENTE

The score is written on three staves. The first staff is the treble clef, the second is the bass clef, and the third is a continuation of the bass clef. The key signature is one sharp (F#). The tempo/style is indicated as 'LATIN [BOOGALOO]'. The title 'OYE COMO VA' and the composer 'TITO PUENTE' are written in large, bold letters. The score includes an intro, two main sections labeled A and B, and a coda. Chords are written above the notes. Red annotations highlight the A dorian mode and the I-IV progression.

Chords and annotations:

- Intro: Am, Am, D, Am/F#, Am, D, Am/E, Am/E
- Section A: Am, D7, IV (A3), D7
- Section B: I (Am), IV (Am), Am/E, Am, D7
- Coda: PLAY A AND B BETWEEN SOLOS FOR CODA-PLAY INTRO

In the dorian mode, the progression $\parallel: I \quad IV : \parallel$ is very common. It looks like a $II \ V$ (in this case in G) but it isn't.

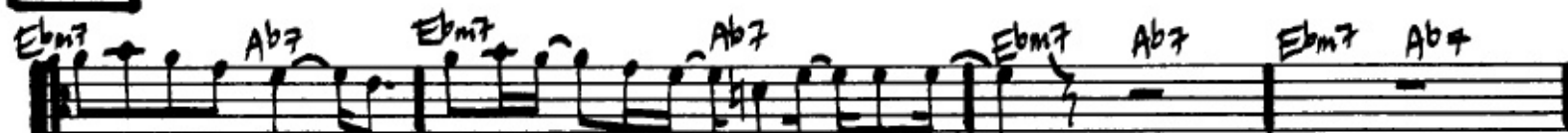
I WISH

INTRO

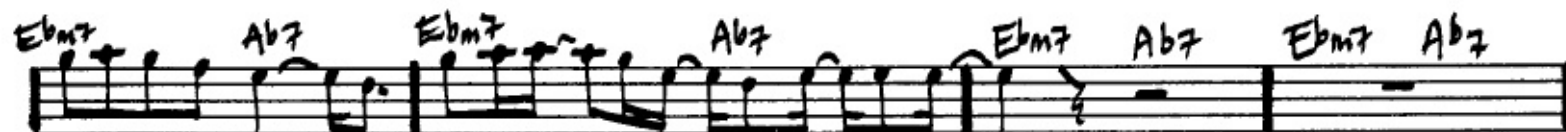
4 (BASS)

4 (BAND)

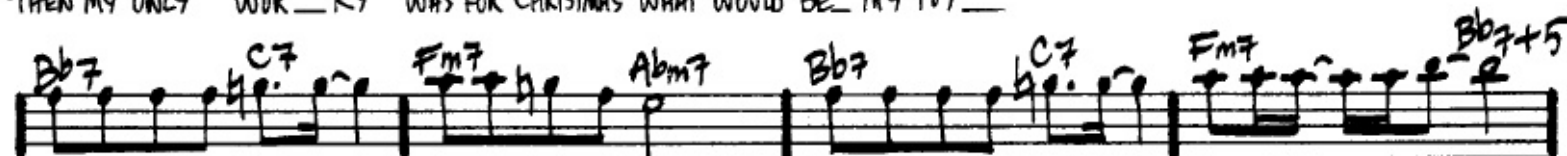
VERSE



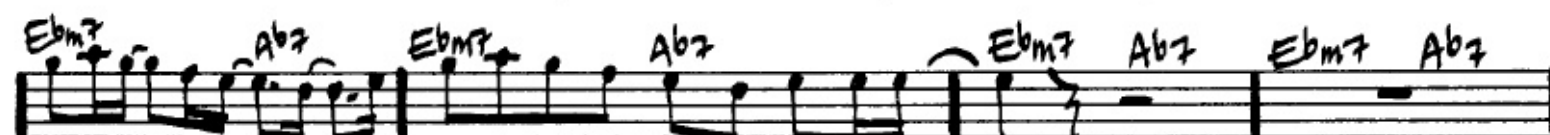
LOOKIN' BACK ON WHEN I WAS A LITTLE NAPPY HEADED BOY



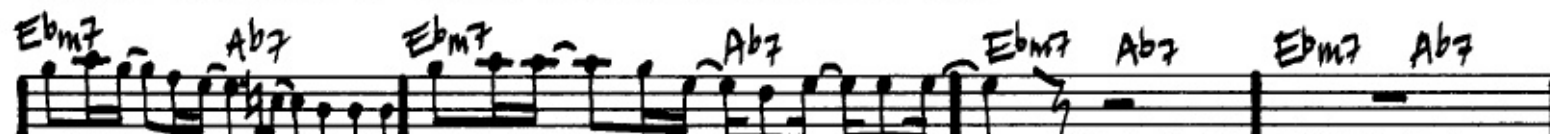
THEN MY ONLY WORRY WAS FOR CHRISTMAS WHAT WOULD BE MY TOY



EVEN THOUGH WE SOMETIMES WOULD NOT GET A THING WE WERE HAPPY WITH THE JOY THE DAY WOULD BRING



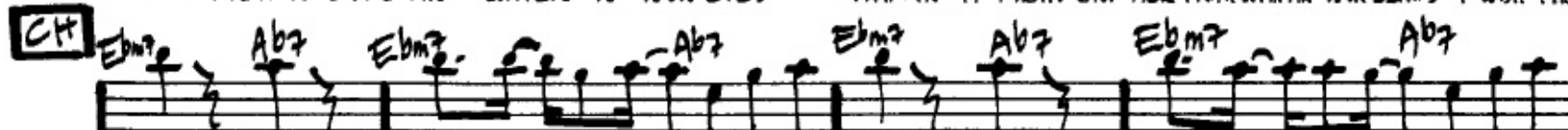
SNEAKIN' OUT THE BACKDOOR TO HANG OUT WITH THOSE HOODLUM FRIENDS OF MINE



GREETED AT THE BACKDOOR WITH 'BOY I THOUGHT I TOLD YOU NOT TO GO OUTSIDE'



TRYIN' YOUR BEST TO BRING THE WATER TO YOUR EYES THINKIN' IT MIGHT STOP HER FROM WHIPPIN' YOUR BEHIND I WISH THOSE



DAYS COULD COME BACK ONE MORE, WHY DID THOSE DAYS E- VER HAVE TO GO? I WISH THOSE



INTERLUDE

DAYS COULD COME BACK ONE MORE, WHY DID THOSE DAYS E- VER HAVE TO GO? 'COS I LOVED THEM SO



DO DO DO DO (cont. simile)

VERSE

LOOKIN' BACK ON WHEN I WAS A LITTLE NAPPY HEADED BOY

Eb dorian: I IV

EVEN THOUGH WE SOMETIMES WOULD NOT GET A THING WE WERE HAPPY WITH THE JOY THE DAY WOULD BRING

functional section, Eb: V (V) II IVaeolian V (V) II V

ALL ALONG THE WATCHTOWER

Words and Music by
BOB DYLAN

Moderate Rock

The musical score is written for guitar and piano. It is in the key of D major (indicated by two sharps) and 4/4 time. The tempo is marked 'Moderate Rock'. The piano part begins with a mezzo-forte (*mf*) dynamic. The guitar part features a series of chords: B, C#m, B, A, B, C#m, B, A, C#m, B, A, B, C#m, B, A, B. The C#m chords are marked with '4 fr.' indicating a four-finger fretting technique. The piano accompaniment consists of a steady eighth-note bass line in the left hand and a melody in the right hand, often using chords and single notes. The score is divided into three systems, each with a grand staff (treble and bass clef).

System 1: B, C#m, B, A, B, C#m. The piano part starts with a *mf* dynamic. The guitar part has a B chord, followed by a C#m chord (4 fr.), then B, A, B, and C#m.

System 2: B, A, C#m, B. The piano part continues with the same bass line and melody. The guitar part has B, A, C#m (4 fr.), and B.

System 3: A, B, C#m, B, A, B. The piano part concludes with the same bass line and melody. The guitar part has A, B, C#m (4 fr.), B, A, and B.

C# aeolian: VII I VII VI

In the aeolian mode, any combination of I and VI, often with VII in between, is very common. The I makes it minor, the VI adds the m6 of the key.

Eleanor Rigby.

Sheetmusic-free.com

John Lennon and Paul McCartney.

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(Organ: Registration No. 5)

Moderately

First System: Chord: C. Lyrics: *f* Ah, look at all the lone - ly peo - ple!

Second System: Chord: Em. Lyrics: 1. El - ea - nor Rig - by picks up the rice - In the church where a wed - ding has been,
2. Fa - ther Mc Ken - zie, writ - ing the words Of a ser - mon that no - one will hear,
3. El - ea - nor Rig - by died in the church And was bur - ied a - long with her name.

Third System: Chords: C, Em. Lyrics: Lives in a dream, ————— Waits at the win - dow, wear - ing the face — That she keeps
No one comes near. ————— Look at him work - ing, darn - ing his socks — In the night
No - bod - y came. ————— Fa - ther Mc Ken - zie wip - ing the dirt — From his hands

Fourth System: Chords: C, Em. Lyrics: — in a jar — by the door. Who is it for? ————— All the lone - ly peo -
— when there's no - bod - y there. What does he care? —————
— as he walks — from the grave. No one was saved. ————— *f*

Fifth System: Chords: C, Em. Lyrics: — ple, Where do they all come from? All the lone - ly peo -

Sixth System: Chords: 1. 2. Em, 3. Em. Lyrics: — ple, Where do they all be - long? *rit.*

(Organ: Registration No. 5)

Moderately

f Ah, — look at all — the lone - ly peo - ple! —

E aeolian: VI

I

mf 1. El - ea - nor Rig - by picks up the rice — In the church where a wed - ding has been,
2. Fa - ther Mc Ken - zie, writ - ing the words Of a ser - mon that no - one will hear,
3. El - ea - nor Rig - by died in the church And was bur - ied a - long with her name.

E aeolian: I dorian

mf Lives in a dream, — Waits at the win - dow, wear - ing the face — That she keeps
No one comes near. Look at him work - ing, darn - ing his socks — In the night
No - bod - y came. Fa - ther Mc Ken - zie wip - ing the dirt — From his hands

VI

I dorian, because of the C# in the melody. Shouldn't it just be minor then?
No. Minor is a term we use for functional music.

The image shows a musical score for a song in D major. The score is divided into three systems, each with a vocal line and a piano accompaniment. The lyrics are: "in a jar by the door. Who is it for? All the lone - ly peo - ple, Where do they all come from? All the lone - ly peo - ple, Where do they all be - long?". The score includes several functional annotations in red: a red circle around the C# note in the piano accompaniment of the first system, a red circle around the C# note in the piano accompaniment of the second system, a red circle around the C# note in the piano accompaniment of the third system, and a red circle around the C# note in the piano accompaniment of the fourth system. The annotations are labeled with red letters: "T" (Tonic) and "S" (Supertonic). The text "T (or S, if you see this as A7 or C#otriad)" is written in red below the first system. The text "S" is written in red below the second system. The text "T" is written in red below the third system. The text "T" is written in red below the fourth system. The score also includes a red "rit." marking and a red "C" marking.

This part is open for a little variety in explanation. My explanation is that it is essentially Aeolian, with a dorian modal interchange (the C#). The fact that we have an inner voice descending chromatically is important too. I added some functions here. You see that when you use a functional perspective, you see no dominant, but a plagal movement.

Plagal movements are very common in modal music.

(MED. SACS)

SO WHAT

399.
- MILES DAVIS

(BASS LINE ONLY)

D-7 (DORIAN)

1.

2.

(DOR.)

D.S. al fine

SOLOS ON ENTIRE FORM:

D-7 Eb-7 D-7

D dorian

(MED. SACS) 399. - MILES DAVIS

SO WHAT

(BASS LINE ONLY) D-7 (DORIAN)

1. 2.

E♭-7 (DOR.)

D.S. al ♩

SOLOS ON ENTIRE FORM:

D-7 E♭-7 D-7

E♭ dorian

D dorian, D dorian, Eb dorian, D dorian.

- We see the form is an AABA form, with a contrasting sound in the B part
- If you transcribe the bass during the solo's, you'll notice that the bass player actually doesn't play dorian at all, he plays in a more functional manner.
- If you listen closely to the bass in the B part of the theme, you'll hear that the transcription is actually wrong. Db tends to be higher (D) in the melody
- The piano plays quartal voicings, which are very common in modal jazz. Because the quartal voicings do not 'ask' for the next chord as much as traditional voicings, and their functions are often rather ambiguous, they lend themselves perfectly for music that doesn't need harmonic pull.

(JAZZ
WALTZ)

SAGA OF HARRISON CRABFEATHERS 385

- STEVE KUHN

Chords indicated in the first 10 staves:

- Staff 1: E-
- Staff 2: A-
- Staff 3: E-, D-
- Staff 4: Bb maj7
- Staff 5: G-, D-
- Staff 6: Ab maj7
- Staff 7: C-
- Staff 8: Ab maj7
- Staff 9: F-, C-
- Staff 10: E-7 (AQUAN), C (4d.), E-7

Section A (Staff 11):

- SOLOS: E-7 (AQUAN)
- Chords: C (4d.), E-7

Section B (Staff 11):

- Chords: D-7 (AOL), Bb (4d.), D-7

Section C (Staff 11):

- Chords: Ab (4d.), C-7 (AOL), Ab (4d.), C-7

STEVE KUHN - "LIVE IN NEW YORK" "CHICKENFEATHERS" (AFTER SOLOS, D.C. al ∞)

Handwritten musical notation on a single staff. The key signature is E-flat (B-flat major). The notation includes a treble clef, a 3/4 time signature, and a series of eighth and quarter notes. Above the staff, there are handwritten labels: "E-" at the beginning, "C maj 7" in the middle, and "- STEVE KUH" at the end.

E Aeolian: I

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "A-" in the middle and "VI" at the end.

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "E-" at the beginning and "D-" at the end.

D Aeolian: I

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "I" at the beginning and "Bb maj 7" in the middle.

VI

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "G-" at the beginning and "D-" at the end.

IV

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "Ab maj 7" in the middle and "I" at the end.

C Aeolian: VI

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "C-" at the beginning and "I" at the end.

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "Ab maj 7" in the middle and "I" at the end.

VI

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "F-" at the beginning, "C-" in the middle, and "C-" at the end.

IV

Handwritten musical notation on a single staff. Above the staff, there are handwritten labels: "C-" at the beginning and "I" at the end.

E Aeolian: I VI IV I
D Aeolian: I VI IV I
C Aeolian: VI
I VI IV I

An AABA form, melody is also AABA

- Some people analyse the B part as Ab lydian. Although I understand this, I disagree. I hear the B part as harmonically ‘floating’, and landing (tonic) on the first chord of the last A part. This is what a B part usually does. VI in Aeolian is a subdominant, a very common function for a B-part.
- Note the fact that in the beginning E feels as the tonic, and in the end C feels as the tonic. Usually people say this piece is in E, but that’s debatable. There are actually three tonal centers here. From E to D to C. This is called ‘progressive tonality’. Not very common.
- If you look at the three tonal centers E D C, you see the most important degrees in E aeolian! So the tonal centers themselves are organised in an aeolian way. Beautiful isn’t it? That makes me decide that the piece is in E after all.

(MED. FAST)
JAZZ

NARDIS

— MILES DAVIS

Handwritten musical score for "NARDIS" by Miles Davis. The score is written on six staves. The first staff is in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The second staff is in bass clef. The third staff is in treble clef. The fourth staff is in bass clef. The fifth staff is in treble clef. The sixth staff is in bass clef. The score includes various musical notations such as notes, rests, accidentals, and dynamic markings. Chord symbols are written above the staves: E-, Fmaj7 (Emaj7), B7, Cmaj7, A-7, Fmaj7, Emaj7, 1. E-, 2. E-, A-7 -- Fmaj7, A-7 -- Fmaj7, D-7, G7, Cmaj7 -- Fmaj7, E-, Fmaj7 (Emaj7), B7, Cmaj7, A-7, Fmaj7, Emaj7 -- E-. The score also includes a double bar line at the end of the sixth staff.

"BILL EVANS AT THE MONTREUX JAZZ FESTIVAL"

E phrygian'ish'

Handwritten musical score with six staves. The notation includes various chords and Roman numerals, with some annotations in red.

Staff 1: Chords: E- (I), Fmaj7 (Emaj7) (II), B7 (V7), Cmaj7 (VI). Roman numerals: I, II, V7, VI. Annotations: "E phrygian'ish'", "functional".

Staff 2: Chords: A-7 (IV), Fmaj7 (II), A-7 (I phryg major), Fmaj7 (I). Roman numerals: IV, II, I, I.

Staff 3: Chords: D-7 (IV), G7 (II), Cmaj7 (IV), Fmaj7 (II). Roman numerals: IV, II, IV, II.

Staff 4: Chords: E- (VII), Fmaj7 (Emaj7) (III), B7 (VI), Cmaj7 (II). Roman numerals: VII, III, VI, II.

Staff 5: Chords: A-7, Fmaj7, E- (Emaj7), E-.

Staff 6: Chords: A-7, Fmaj7, E- (Emaj7), E-.

- Some people might disagree with this analysis
- Some people might analyse this as a functional piece, (with a lot of modal interchange) but in reality there is no dominant movement. The only dominant there is (bar 3) doesn't live up to its expectations, and the rest is plagal cadences.
- In the B part, the Dm7 G7 C movement can be seen as (II V) VI.
- In bar 4, there are f#'s in the countermelody, they do not fit the phrygian sound.
- VI (especially on the b6) IV and II are SD harmonies. You see the resolution to the final chord of the A part is one long plagal cadence.
- The B part again starts on the SD, a common movement
- The feeling of 'modulating' to C (B part) was already common in the phrygian music of the renaissance.

You see that the terms T S and D are still useful in characterising modal (and thus non-functional) music. The big difference between the two types of music is that modal music usually misses the dominant doing it's 'job'. Plagal cadences are much more common in modal music. D-T, S-D-T, DD-D-T, chains of dominants etc are not part of the modal way. That doesn't mean however that you can never ever find these kinds of movements in modal music.

The four-chord song. The ‘female sensitive chord progression’, the ‘pop punk progression’.

C G Am F (Ionian)

or

Am F C G (Aeolian)

(see the axis of awesome performance on youtube. A not-so-funny but very informative video on songs that use this progression)

Check the Ionian progression: We have a tonic. We have a dominant. We have a subdominant. But we miss the movement D-T. This fact itself tells us this is the color of the ionian mode, but there is no functionality. The fact that these blocks are usually just repeated without any harmonic development for a long time strengthens this thought.

Homework

‘Alive’ - pearl jam

- Write down a ‘lead sheet’ of the harmony of this song
- Melody not really needed, although writing down some important notes of the melody wouldn’t hurt
- The relation of the harmony to the form/rhythm should be clear
- analyse the harmony of the song. Listen carefully!
- Pay attention to the last part (guitar solo) too. something funny happens there harmonically. Can you identify it? And how did this happen?