

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 define 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...

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 YA** TITO PUENTE

A dorian: I **IV**

I **IV**

PLAY A AND B BETWEEN SOLOS FOR CODA-PLAY INTRO

In the dorian mode, the progression ||: I IV :|| 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

CH

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

INTERLUDE

DAYS COULD COME BACK ONE MORE, WHY DID THOSE DAYS EVER 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 presented in three systems, each with a grand staff (treble and bass clefs) and guitar chord diagrams above the treble clef. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The first system begins with a mezzo-forte (*mf*) dynamic marking. The guitar chords are: B (x24232), C#m (x34332) 4 fr., B (x24232), A (x02020), B (x24232), and C#m (x34332) 4 fr. The second system continues with chords: B (x24232), A (x02020), C#m (x34332) 4 fr., and B (x24232). The third system concludes with chords: A (x02020), B (x24232), C#m (x34332) 4 fr., B (x24232), A (x02020), and B (x24232). The piano accompaniment features a steady eighth-note bass line and a treble line with chords and melodic fragments.

The image shows a musical score for a piece in the C# aeolian mode, 4/4 time, with a mezzo-forte (mf) dynamic. The score consists of two staves: a treble clef staff and a bass clef staff. Above the treble staff, four guitar chord diagrams are provided: B (x24321), C#m (x24321, 4 fr.), B (x24321), and A (x0202). The music features a sequence of chords: B in the first measure, C#m in the second measure, B in the third measure, and A in the fourth measure. The bass line consists of a simple eighth-note pattern: C#2, D#3, E#4, F#5, G#6, A7, B8, C#9.

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.

John Lennon and Paul McCartney.

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(Organ: Registration No. 5)

Moderately

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

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.

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

— 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. —————

— ple, Where do they all come from? All the lone - ly peo -

— 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
2. Fa - ther Mc Ken - zie,
3. El - ea - nor Rig - by

picks up the rice — In the church — where a wed - ding has been,
writ - ing the words Of a ser - mon that no - one will hear,
died in the church And was bur - ied a - long with her name.

E aeolian: I dorian

mf

Lives in a dream, —
No one comes near.
No - bod - y came.

Waits at the win - dow,
Look at him work - ing,
Fa - ther Mc Ken - zie

wear - ing the face — That she keeps
darn - ing his socks — In the night
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.

(MED. SACS)

SO WHAT

399.
- MILES DAVIS

Handwritten musical notation for the first system. The top staff is in treble clef with a 4/4 time signature. The bottom staff is in bass clef. A double bar line with an 'X' above it is present. Chord annotations include "D-7 (DORIAN)" and "(BASS LINE ONLY)".

Handwritten musical notation for the second system, continuing the bass line and accompaniment.

Handwritten musical notation for the third system, featuring first and second endings marked "1." and "2.".

Handwritten musical notation for the fourth system, including a "DOR." annotation.

Handwritten musical notation for the fifth system, ending with the instruction "D.S. al f".

Handwritten musical notation for the sixth system, including the instruction "SOLOS ON ENTIRE FORM:" and a chord progression: "D-7 || Eb-7 || D-7".

(MED. SACS)

SO WHAT

399.
- MILES DAVIS

D dorian

(BASS LINE ONLY)

D-7 (DORIAN)

1.

2.

Eb dorian

Eb-7 (DOR.)

D.S. al ♩

SOLOS ON ENTIRE FORM:

(D-7)

D-7 || Eb-7 || D-7

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

E- Cmaj7

A-

E- D-

Bbmaj7

G- D-

Abmaj7

C-

Abmaj7

F- (a) C-

A SOLOS: E-7 (ARBUAN) C (lyd.) E-7

B D-7 (ARL) Bb (lyd.) D-7

C Ab (lyd.) **D** C-7 (ARL) Ab (lyd.) C-7

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

Handwritten musical notation on a staff. The key signature has one sharp (F#). The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "E-" above the first measure and "C maj?" above the last measure. The name "-STEVE KUH" is written in the top right corner.

E Aeolian: I

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "A-" above the fourth measure and "VI" above the last measure.

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "E-" above the first measure and "D-" above the last measure.

D Aeolian: I

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "Bb maj?" above the fourth measure and "I" above the last measure.

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "G-" above the first measure and "D-" above the last measure.

IV

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "Ab maj?" above the fourth measure and "I" above the last measure.

C Aeolian: VI

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "C-" above the last measure and "I" above the last measure.

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "Ab maj?" above the fourth measure and "I" above the last measure.

Handwritten musical notation on a staff. The notes are: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. Above the staff, there is a handwritten "F-" above the first measure and "VI" above the last measure. There are also handwritten notes "(a)" and "C-" above the last measure.

IV

I

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

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-

"BILL EVANS AT THE MONTREUX JAZZ FESTIVAL"

E phrygian'ish'

Handwritten musical score with guitar chords and annotations. The score consists of six staves of music in a key with one sharp (F#). The chords and annotations are as follows:

- Staff 1:** Chords: E- (I), Fmaj7 (Emaj7) (II), B7 (V7), Cmaj7 (VI). Annotations: "E phrygian'ish'", "functional", "1. E-", "2. E-".
- Staff 2:** Chords: A-7 (IV), Fmaj7 (II), A-7 (IV), Fmaj7 (I). Annotation: "I phryg major".
- Staff 3:** Chords: D-7 (IV), G7 (II), Cmaj7 (IV), Fmaj7 (II).
- Staff 4:** Chords: E- (VII), Fmaj7 (Emaj7) (III), B7 (VI), Cmaj7 (II).
- Staff 5:** Chords: A-7, Fmaj7, Emaj7, E-.

The notation includes various rhythmic values, accidentals, and fingerings (e.g., "3" for triplets). The piece concludes with a double bar line on the final staff.

- 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?