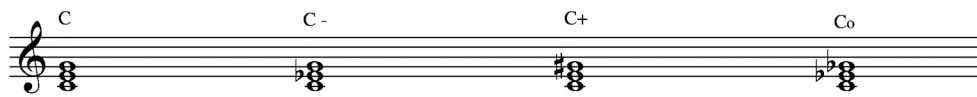


**Bard Conservatory Seminar  
Theory Component  
Basic Taxonomy of Chord Types**

**Triads and Inversions**

1) Triads are three note chords formed by superimposing major or minor thirds above a given note. The bottom note is called the root, the note a third above the root is called the third, the note above the third and a fifth above the root is called the fifth.

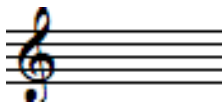
2) Triads are of four types:



- 1) The major triad formed by superimposition of a major and minor third.
- 2) The minor triad formed by superimposition of a minor and major third.
- 3) The augmented triad formed by superimposition of a major and major third.
- 4) The diminished triad formed by superimposition of a minor and minor third.

Exercise: write triads of the following type.

1) C



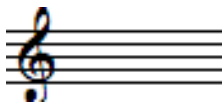
5) A-



9) E+



2) D-



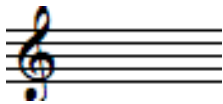
6) Abo



10) Do



3) F#



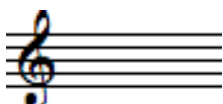
7) E



11) F-



4) Bb+

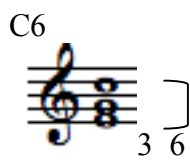


8) G#



**Inversions of triads.** The triads above are in root position, distributed so that the interval of a fifth is formed by the root and the fifth of the chord occurs between the outer notes. Frequently, the chord is rearranged so that the root is no longer the lowest note but rather the third or the fifth of the chord. When the root is no longer the bass of the chord, the chord is said to be inverted. There are two inversions of triads.

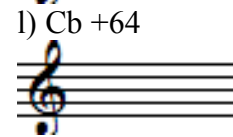
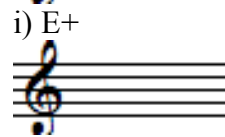
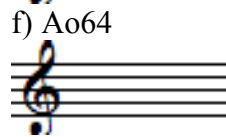
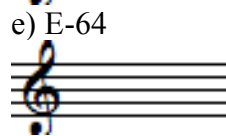
first inversion: the third of the triad is in the bass. The intervals between the bass and the upper two notes are now a third and a sixth. This chord will be referred to as a "six-three" chord, or more commonly, as a "six" chord.



second inversion: the fifth of the triad is in the bass. The interval of a fourth and a sixth defines what is called the "six-four" chord.



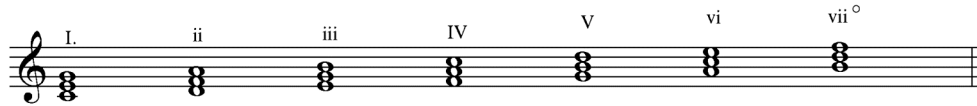
Exercise: write the following triads in appropriate inversion according to the figures



## Scale degree triads-functional harmony

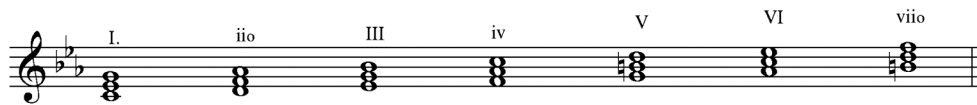
In the preceding, we identified triads by their structure-namely as superimposed major or minor thirds. Tonal harmony is concerned not just with structure but with function, that is the relationships of the triads to an underlying key. To indicate these functions, triads are identified by roman numerals corresponding to the scale degree on which they are constructed.

major scale functional triads:



The triads built on scale degrees 1, 4, and 5 are major chords and we will refer to them by upper case numerals, I, IV, V. Triads built on scale degrees 2, 3 and 6 are minor chords and we will refer to them by lower case Romans: ii, iii, and vi. The triad built on scale degree 7 is a diminished triad having two minor thirds. This will be indicated by vii°.

minor scale functional triads



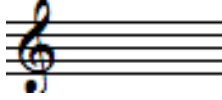
In the minor scale degrees 3, 6 are major triads indicated by III VI. Scale degree 1, 4 and 5 yield minor triads. The diminished triad is now displaced to scale degree 2.

The chord constructed on the scale degree 5 is understood as including the raised leading tone thus it will be a major rather than minor triad and indicated by V. The chord constructed from the seventh degree will be assumed to be make use of raised leading tone and it is therefore vii°.

Exercise:

Write the following functional triads:

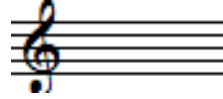
1) C minor iv



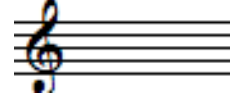
3) D minor viio



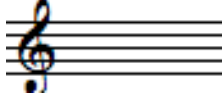
5) C# minor iio



7) Eb minor viio



2) A major ii



4) Ab major V

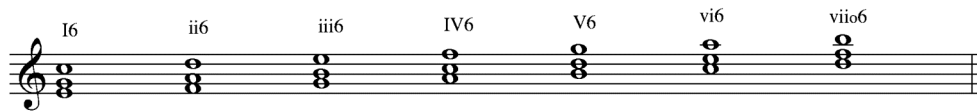


6) Gb major IV

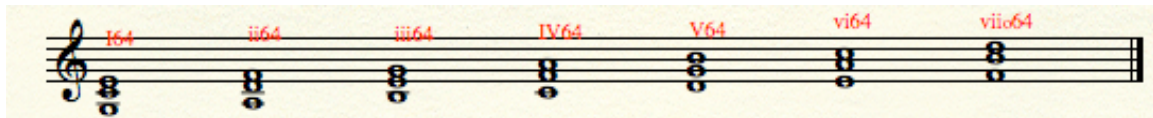


### Inversions of functional harmonies

The functional chords just defined can also appear in inversion and are defined in reference to the interval structure mentioned earlier. First inversions are referred to as a six-three chords or more commonly in abbreviation as "six" chords, indicated by the arabic numeral 6 assigned to the right of roman numeral identifying the chord's function.



Second inversion triads contain a fourth and a sixth above the bass and are referred to as six-four chords. This structure is indicated again by arabic numerals 6 and 4 to the right of the roman numerals which identify the chords' function.



The inversion of functional triads within the minor scale are as follows

First inversion.



Second inversion



Exercises:

Identify the following functional harmonies according to whether the key is major or minor as indicated.

A series of five musical staves, each containing six chords. The chords are labeled with their functional harmony and whether they are in a major or minor key. The labels are in red above the staff.

- Staff 1:  $iii6$  (major),  $ii0$  (minor), [unlabeled], [unlabeled], [unlabeled], [unlabeled]
- Staff 2: [unlabeled] (major), [unlabeled] (major), [unlabeled] (minor), [unlabeled] (minor), [unlabeled] (minor), [unlabeled] (major)
- Staff 3: [unlabeled] (major), [unlabeled] (minor), [unlabeled] (major), [unlabeled] (minor), [unlabeled] (major), [unlabeled] (minor)
- Staff 4: [unlabeled] (minor), [unlabeled] (major), [unlabeled] (major), [unlabeled] (minor), [unlabeled] (major), [unlabeled] (minor)
- Staff 5: [unlabeled] (major), [unlabeled] (major), [unlabeled] (minor), [unlabeled] (minor), [unlabeled] (major), [unlabeled] (minor), [unlabeled] (minor)

Write out the following progressions:

1)

Musical notation for progression 1, showing a sequence of chords in the key of B-flat major. The chords are labeled in red above the staff: vi, ii6, V, and I. The notation includes a treble clef, a key signature of two flats, and a bass clef. The chords are represented by notes on the staff, with the bass line showing the root notes.

2)

Musical notation for progression 2, showing a sequence of chords in the key of D major. The chords are labeled in red above the staff: i, i6, i64, V, and i. The notation includes a treble clef, a key signature of two sharps, and a bass clef. The chords are represented by notes on the staff, with the bass line showing the root notes.

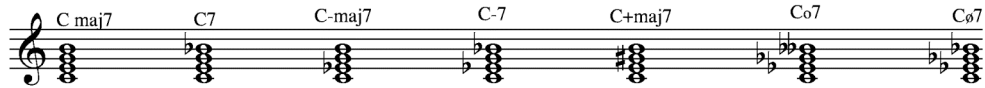
3)

Musical notation for progression 3, showing a sequence of chords in the key of B-flat major. The chords are labeled in red above the staff: I6, IV, I6, vi, ii6, V, and I. The notation includes a treble clef, a key signature of two flats, and a bass clef. The chords are represented by notes on the staff, with the bass line showing the root notes.

## Seventh chords

Seventh chords result from a fourth note, the seventh, superimposed above the triads identified in 1.

These addition gives rise to the following family of seventh chords.



name: "major seventh"

structure: Major third superimposed above a major triad

label: C maj 7

name: "dominant seventh chord" or "seventh chord"

structure: Minor third superimposed above a major triad

label: C7

name: "minor major seventh"

structure: Major third superimposed above a minor triad

label: C- maj7

name: "minor seventh chord"

structure: Minor third superimposed above a minor triad

label: C-7

name: "augmented major seventh chord"

structure: minor third superimposed above an augmented triad

label: C+7

name: "half diminished seventh chord"

structure: major third superimposed above a diminished triad

label: Cø7

name: "diminished seventh chord"

structure: minor third superimposed above a diminished triad

label: Co7

Exercise:

Write out the seventh chords:

1) A maj7



3) Bb+ maj 7



6) Dø7



2) D -7



4) Eo7



7) Ab-maj7

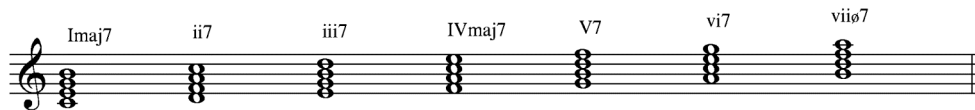


5) F-maj7



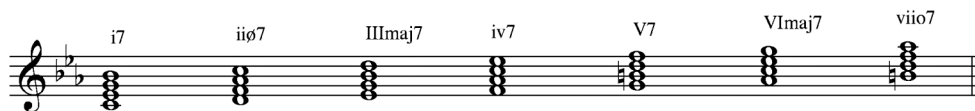
### Functional seventh chords

The major scale contains the following scale degree seventh chords:



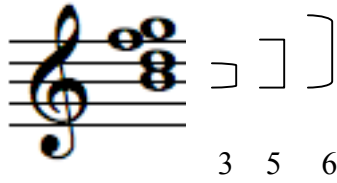
Of these scale degree harmonies the V7, the dominant seventh, is the most common. ii-7, iii-7, vi-7, and IVmaj7, are relatively common but generally appear in inversion. I maj7 is occasionally found, though usually the leading tone tends to resolve to the root before it is heard as a stable chord. vii<sup>o</sup>7 is rare; generally the seventh is lowered making it a fully diminished (as opposed to half diminished) seventh chord.

The minor scale yields the following:

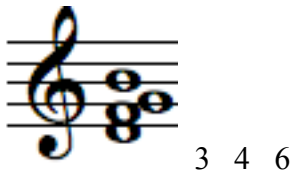


Seventh chords have three inversions

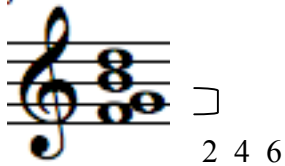
a) first inversion has the third in the bass. This results in the vertical intervals third, fifth, sixth above the bass note. Literally, it is a 653 chord but it is almost always referred to in abbreviation as a 65.



b) second inversion seventh chords have the intervals 3rd, 4th, and 6<sup>th</sup> above the bass. They are referred to in abbreviation as 43 chords.



c) Third inversion seventh chords result in the 6 4 2 chord, usually referred to in abbreviation as the "2" chord.



Exercises:

Write the following seventh chords:

1) F major-IV65



3) C# minor V65



2) C major- ii43



4) A major iii65



5) B minor ii65



7) E major I 65



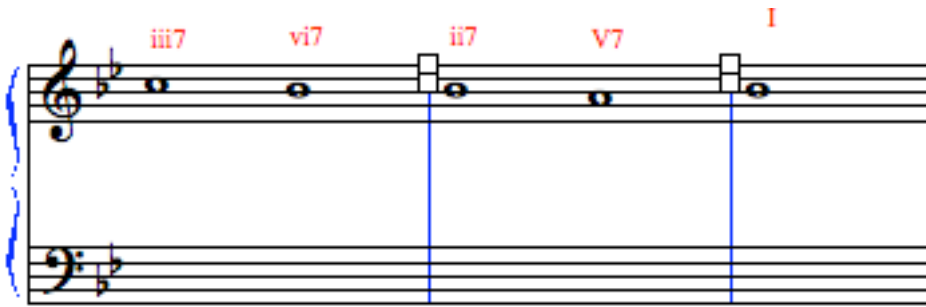
6) D# minor iv2



8) G# minor iiø2



9)



10)

