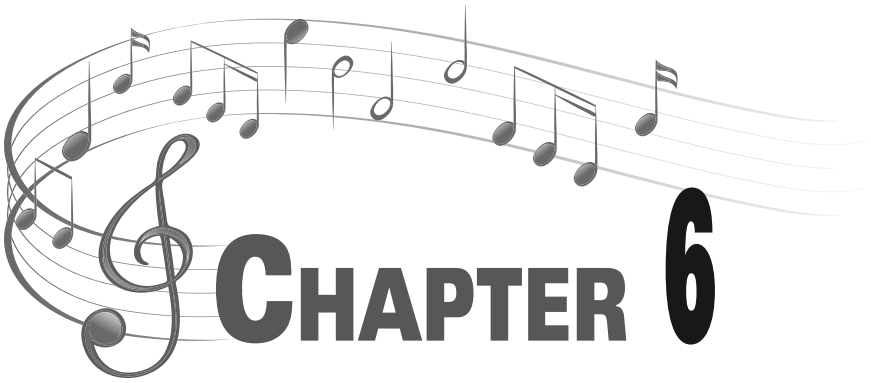


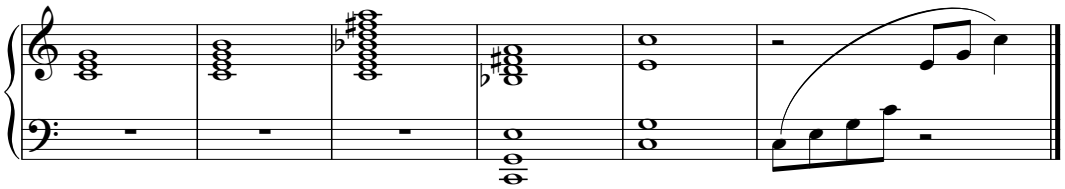
CHAPTER 6

Chords

Introduction

Intervals were defined as the distance between two tones. Three or more tones sounding together are called *chords*. Any collection of pitches that are played simultaneously fall under this definition. Chords are also perceived as pitches that are associated with one another by context while not necessarily sounding together. For instance a chord might be perceived within the context of an *arpeggio* ("broken" chord).

Figure 6.1 **Chords and Arpeggio**



Chords may range from any three-note collection to large tone *clusters*. Common Practice music predominantly employs three-note chords that are arranged on adjacent lines or adjacent spaces on the staff. These are called *triads*, discussed below. Larger chords of four or more notes came to be employed by degrees in the evolution of Western harmony, but the triad remains the predominant structure throughout tonal practice.

Music of the *fin de siècle* period (the crossover period between the 19th- and 20th centuries) and 20th Century employed larger chordal structures as a matter of course.

Section 1: The Harmonic (or Overtone) Series

Section Objectives

Understanding the Overtone Series:

~ As a model from which harmonies are derived.

~From a historical point of view in the evolution of harmony.

~How tone is perceived.

Any historical treatise on harmony has always begun with some explanation of how tone occurs in the natural world. A subsequent explanation of harmony is extrapolated from this. This takes the form of a diagram called the *Harmonic Series* (or *Overtone Series*).

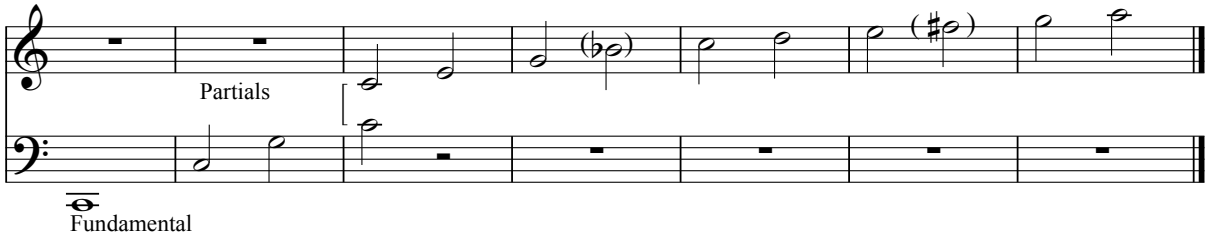
By analogy, think of the properties of natural light. When natural light (sometimes called "white" light) passes through a prism, it refracts: it separates into its constituent, component colors of the visual spectrum.

Tone has the same property. Any selected tone (called the *fundamental*) is comprised of component pitches called *overtones* or *partials*. These component overtones contribute to the acoustic and aural character of the fundamental tone. If any overtones were "absent," our ears would readily detect this. Hearing overtones can be demonstrated by playing harmonics on a guitar or other stringed instrument, by playing "higher" pitches on a wind instrument, or listening carefully to a pitch played on the piano. The overtones are clearly present and detectable.

Early theorists calculated overtones arithmetically by proportional divisions and ratios, and physically using a monochord: a single string with a moveable bridge stretched over a resonating "box" or chamber. Adjusting the bridge by different proportional divisions, specific overtones sounded.

Figure 6.2 shows the Harmonic Series based upon the pitch C2.[i]

Figure 6.2 Harmonic Series



Observe the series: note that successive overtones are consecutively smaller interval distances. An octave, a fifth, a fourth, a major third, a minor third and so on. Overtones are labeled by their order number above the given partial. Observe that some of the overtones are the same pitch class as the *fundamental* and others are the same pitch class as the lower *partials* in the series.

Also note that the seventh partial and the eleventh partial are represented as filled-in notes. In the natural world, these pitches would sound "out of tune" to our ear because we have become accustomed to hearing the compromise tuning of equal temperament. The Bb is "flat Bb," and the F# is a "flat F#."

Next, note that the fundamental pitch and the first five partials form the pitches C-E-G. This triad (see below) becomes the basis for any explanation of chords and harmony.

Some historians equate the evolution of harmony with the Harmonic Series as a loose timeline analog. Early *monodic* chant employed unisons and octaves, the early Medieval School of St. Martial *organum* style

added fourths and fifths, three-note triads are gradually employed, sevenths are added in the late 16th-early 17th Centuries, upper partials occur in the 19th- and 20th centuries.

Study and comprehension of the harmonic series as an analogy for harmonic evolution, as well as a paradigm for chord construction, is essential to understanding how harmony evolved in Western music.

Review Points from this Section:

~The Harmonic (or Overtone) Series maps out partials (overtones) from any given fundamental. The interval spacing is always consistent in any Harmonic series.

~Because of our assimilation of equal tempered tuning the seventh partial and the eleventh partial are perceived as being "out of tune."

~Comprehension of the Harmonic Series will become increasingly important in an extended discussion of harmony.

Sample Exercises

1. In your Thesaurus, construct Harmonic series (up to the 13th partial) on the following pitches:

   G, D, A, E, F, Bb, Eb, Ab

   a. Use open notes except for the seventh and eleventh partials
   b. Enclose the fundamental and first five partials under a bracket.

2. For the following fundamentals list the following:
   a. The seventh partial of D.
   b. The thirteenth partial of G.
   c. The twelfth partial of C#.
   d. The ninth partial of Db.
   e. The tenth partial of Gb.

Section 2: Triads

Section Objectives

~Triads: definition and types.

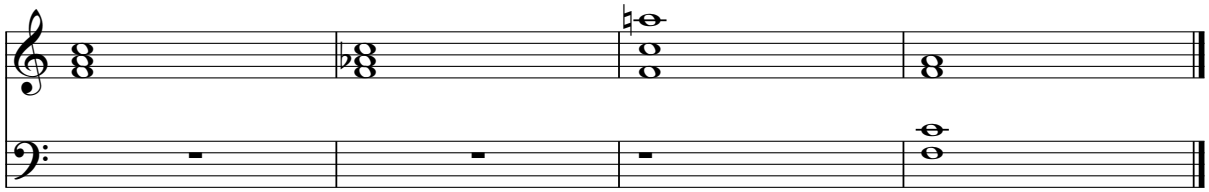
~Inversion and inversion labels.

~Symbolization and labels.

Definition of Triads

As an introductory definition, triads are three-note chords arranged on adjacent lines or adjacent spaces upon the staff. This is the closest intervallic ordering possible for the three members of the triad. Triads may be spread out, certain components may be doubled, or they may be placed in different order, yet still retain their basic identity and label.

Figure 6.3 **Triad Examples**

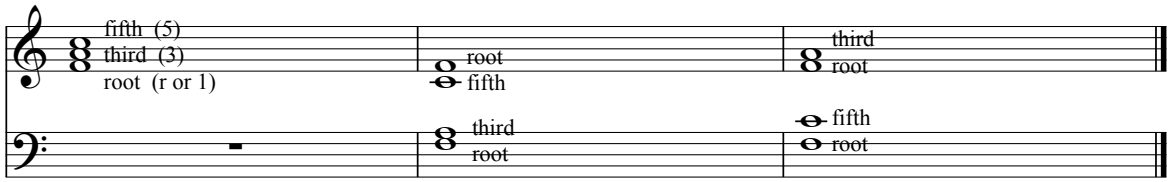


Triad Components

The constituent members of triads have specific labels. When triads are arranged in their lowest ordering (adjacent lines or spaces), the lowest member is called the *root* of the chord. Generally, we perceive the *root* as being the strongest triad member, the tone that asserts itself over the others, regardless of placement.[ii] The root of the chord is labeled "r" or "1."

The next higher member is the "third scale-step up" from the root. This is called the *third* of the triad, labeled "3." The last member, five scale-steps up from the root, is called the *fifth*, labeled "5." These labels are constant regardless of how the triads are arranged or ordered.

Figure 6.4 **Triad Member Labels**

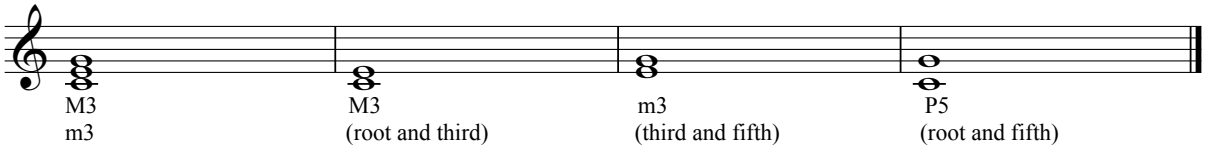


Triad Types and Construction

There are four types, or qualities, of triads, based upon their interval content, labeled *Major*, *Minor*, *Augmented*, and *Diminished*. Major and minor triads are considered to be stable triads, augmented and diminished triads are considered to be unstable.

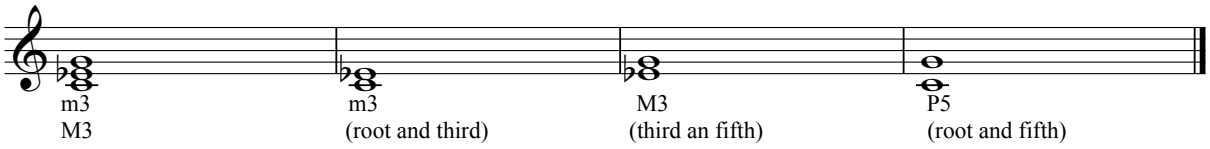
1. Major triads are comprised of (1) a major third between the root and the third, (2) a minor third between the third and the fifth and, (3) the "outside" interval between the root and the fifth is a perfect fifth. Initially, it may be helpful to recognize a major triad as the first, third, and fifth scale degrees of a major scale.

Figure 6.5 **Major Triad Construction**



2. Minor triads are comprised of (1) a minor third between the root and the third, (2) a major third from the third to the fifth, the "outside" interval between the root and the fifth is a perfect fifth. It may be helpful to recognize a major triad as the first, third and fifth scale degrees of a minor scale.

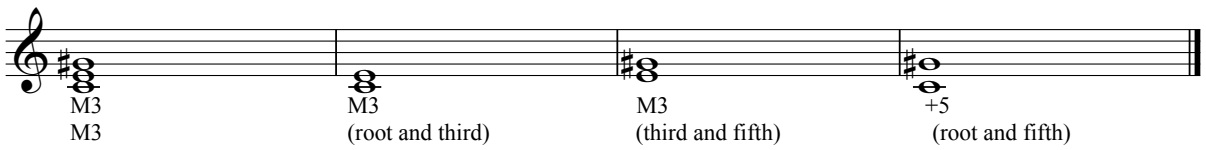
Figure 6.6 **Minor Triad Construction**



Some prefer to construct minor triads by altering (lowering) the *third* of the major triad. This is a perfectly acceptable procedure. Here, we advocate use of the minor scale for minor triad construction only for the purpose of reinforcing familiarity.

3. The Augmented triad takes its name from the quality of the augmented fifth measured from the root to the fifth of the chord. The quality of this augmented fifth gives the triad its perceived unstable character. It is constructed of all major thirds.

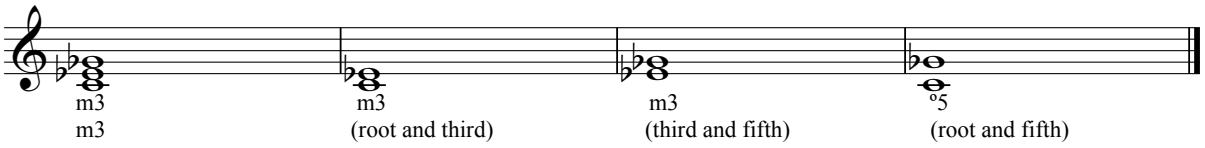
Figure 6.7 **Augmented Triad Construction**



Augmented triads have a special property in that they are symmetrical constructs. This property goes beyond merely being comprised of major thirds. The symmetrical property is that an augmented triad divides the octave evenly into three discrete portions of four half steps each. Also, augmented triads are subsets of the Whole Tone and (so-called) Augmented scales.

4. The diminished triad takes its name from the diminished fifth between the root and the fifth of the triad. This diminished fifth (heard as a *tritone*) causes the chord to be perceived as unstable. The triad is constructed of all minor thirds.

Figure 6.8 Diminished Triad Construction



Usually students have little trouble constructing and identifying major and minor triads because of their association with major and minor scales. Problems often arise with augmented and diminished triads. A common shortcut for constructing and identifying augmented and diminished triads compares each to a major or minor scale and makes adjustments accordingly.

1. For augmented triads: construct ("visualize") a major triad and **raise** the *fifth* of the chord a *chromatic* half step. This yields the augmented *fifth*.
2. For diminished triads: construct ("visualize") a minor triad and **lower** the *fifth* a *chromatic* half step. This yields the diminished *fifth*.

Triad Inversion and Figured Bass

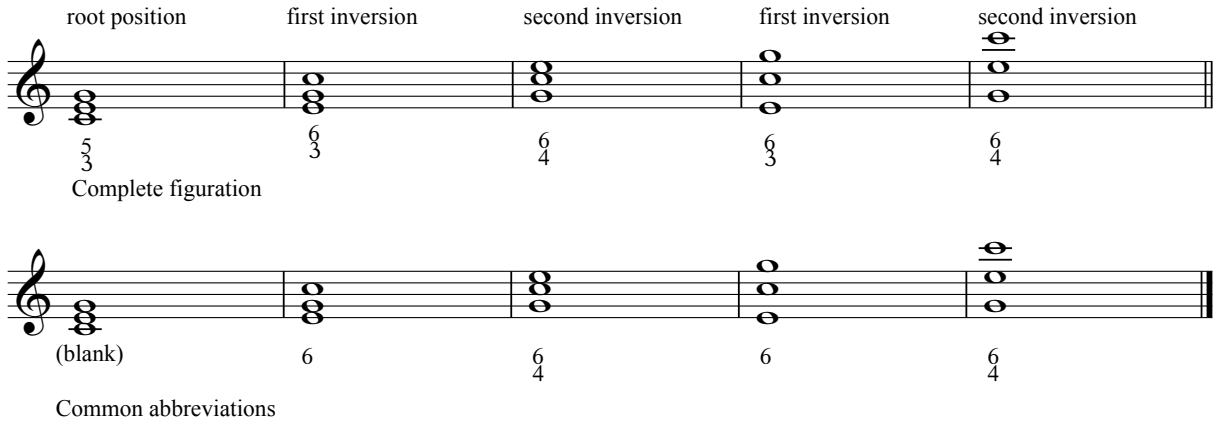
Like intervals, triads may subject to *inversion*. When a triad is ordered so that some chord member other than the root occupies the lowest voice, it is said to be "in inversion."[iii] Therefore, since there are three constituent elements that make up a triad, there are three possible positions:

1. When the *root* occupies the lowest voice, the chord is said to be in *root position*.
2. When the *third* occupies the lowest voice, the chord is said to be in *first inversion* (*1st inversion*).
3. When the *fifth* occupies the lowest voice, the chord is said to be in *second inversion* (*2nd inversion*).

It is customary to label inversions using stacked Arabic numerals. These represent the interval content of the chord in its given position.[iv] The use of numbers representing intervals originated in early opera accompaniments. Rather than notating complete accompaniments, composers employed a bass line with numbers beneath representing interval content (therefore chords) above. Performers *realized* this information, creating a semi-improvised accompaniment. This *Figured Bass* practice came to be employed as an analytical tool, showing chord position and inversion.[v]

It is also customary to use abbreviated figured bass. This shorthand figured bass became common practice among musicians. Figure 6.9 shows triad positions with complete figurations, then the commonly used abbreviations.[vi]

Figure 6.9 **Figured Bass**



Basic Chord Symbolization

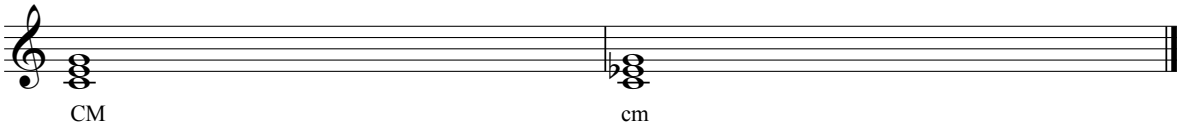
Chord symbolization takes on many forms: there is no recognized standardized practice as to labeling chords. Here, for now, we shall employ a simple system using letter names and symbols indicating triad qualities. (These change slightly when viewed in the context of Jazz chord symbolization.) A rule of thumb for chord symbolization: use symbols that are orthographically different, ones that substantially *look* different.

For the "stable" triads:

1. For major triads: use an upper case letter to identify the triad, followed by an upper case "M," indicating "major."
2. For minor triads: use a lower case letter to identify the triad, followed by a lower case "m," indicating "minor."[vii]

Triads in inversion are still labeled according to the perceived *root* of the chord (not the *bass*). If a triad is in inversion, label the chord using the appropriate letter name, the letter indicating quality, and the appropriate figures representing interval content and inversion.

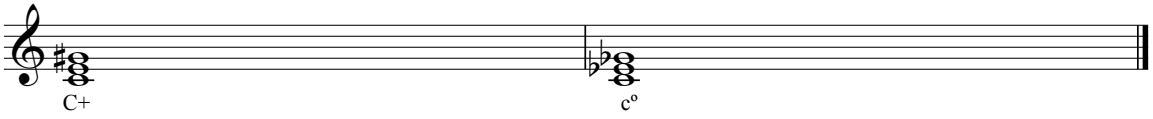
Figure 6.10 **Triad Symbolization: Major and Minor**



For the "unstable" triads:

1. For augmented triads: use an upper case letter, followed by a "plus" symbol (+).
2. For diminished triads: use a lower case letter, followed by a superscript "degree" symbol (°).

Figure 6.11 Triad Symbolization: Augmented and Diminished



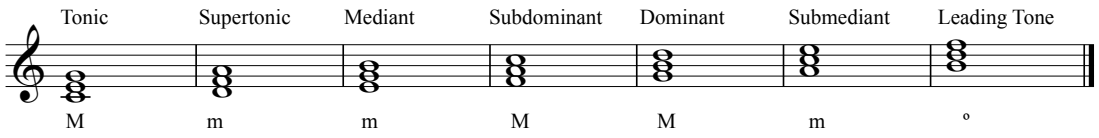
The same labeling conditions for inversion apply here as well.
Here is a procedure for identifying and labeling triads:

1. Arrange the component pitches in their lowest ordering (adjacent lines or spaces). This identifies the triad members, *root*, *third*, and *fifth*.
2. Identify the triad using the appropriate letter name, either upper case or lower case. Remember that the triad is labeled and identified by its *root*, regardless of inversion.
3. Identify the quality of the triad by its interval content. Label accordingly, using the appropriate symbols (M, m, +, °).
4. Lastly, if the chord is in inversion, label with the appropriate figures indicating (1) interval content and, (2) position (root position, first inversion, or second inversion).

Triad Qualities in Major and Minor Scales

Figure 6.12 shows root position triads built upon successive scale degrees in the key of C major. Each is labeled as to its quality. Just as scale degrees employ specialized names (*Tonic*, *Dominant*, etc.), these names are applied to the triads built upon these same scale degrees and are so labeled in the example.

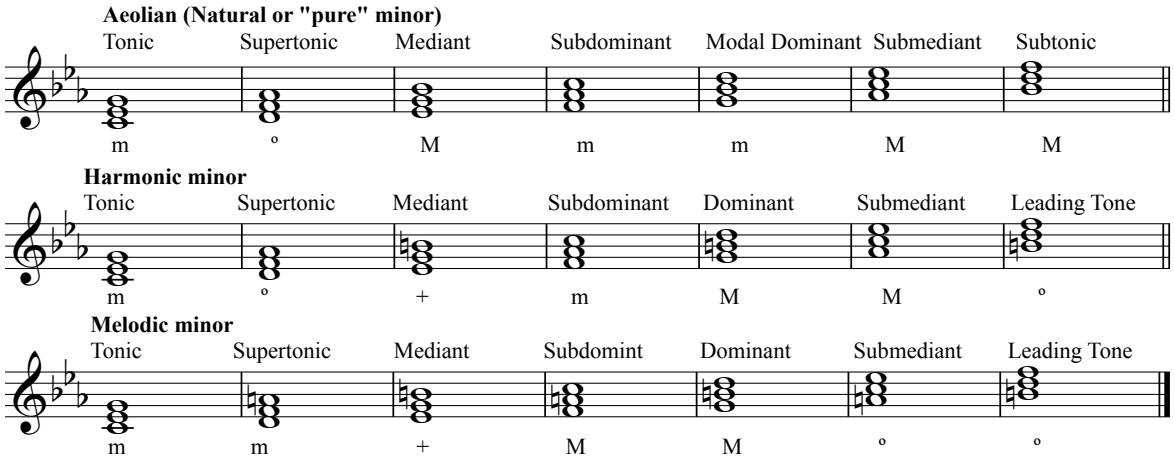
Figure 6.12 Triads in C major



Observe that the *Tonic*, *Subdominant*, and *Dominant* triads are major. These are called the **Primary Triads**. *Supertonic*, *Mediant* and *Submediant* triads are minor and the *Leading Tone* triad is diminished. These are called the **Secondary Triads**.

Figure 6.13 shows triads built upon successive scale degrees for each form of the parallel minor key. These are labeled as well.

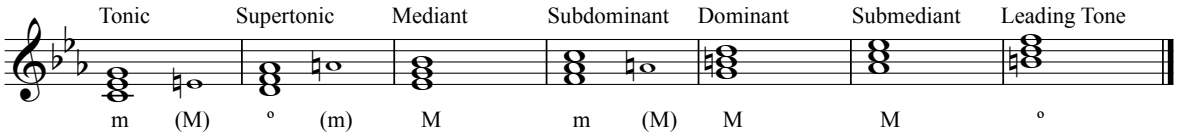
Figure 6.13 **Triads in c minor**



This figure shows various and sundry triad qualities that conform to the pitch content of the given form of the minor scale. This is only useful as a complete list of triads completing a theoretical argument. It must be modified in order to account for actual compositional practice in the context of Tonal music.

Tonal composers, by default through established practice, employed the harmonic form of the minor scale. Natural minor (*Aeolian* mode) was considered to be an arcane sound, lacking a *Leading Tone*, and the Melodic form was too closely akin to the major scale. Harmonic minor is the preferred form of minor usage. The particular unique vestiges of the remaining forms were employed under specific conditions. This is reflected in the typical types of triads used in minor. Figure 6.14 shows triads in the preferred Harmonic minor form and then shows those alterations reflecting conditional vestiges of the Natural and Melodic minor forms. This in turn reflects actual compositional practice.

Figure 6.14 **Triads in Harmonic Minor and Alterations**



Observe the triad qualities. *Tonic* and *Subdominant* are minor triads, *Mediant* and *Submediant* are major triads, *Supertonic* is diminished, and the *Dominant* and the *Leading Tone* triads are altered (the raised seventh scale degree) to be major and diminished respectively.

Under certain conditions (usually for the sake of smooth voice leading from one harmony to the next), certain chords will be altered. Occasionally *Supertonic* will be altered from diminished to minor, *Dominant* will be returned to its diatonic spelling to become minor.[viii] On rare occasions the *Mediant* triad is augmented and the root of the *Submediant* triad is raised making it diminished. Modal *Subtonic* is extremely rare.

A device held over from Renaissance practice altered the *Tonic* triad. In Renaissance compositional practice, it was forbidden to end a "minor sounding" composition upon a minor *Tonic* triad: it was considered to be too dissonant. Composers routinely altered the final *Tonic* triad, raising the *third* to make it major in quality.

This so-called ***Tierce de Picardie*** (***Picardy***)[ix] was a special device, limited to the end of a composition, or occasionally the end of a passage. The device was commonly used in ***Tonal*** practice as well.

These alterations will come to full fruition when placed in the context of the analytical techniques.

Review Points from this Section:

~There are four triad types, major, minor, augmented, and diminished, identified and labeled from their interval content. Major and minor triads are perceived as being stable, augmented and diminished as being unstable.

~Each component of a triad is identified by a specific label, root, third, or fifth. These labels are constant regardless of position (inversion) or placement.

~Triads (chords) are subject to re-arrangement wherein the third of fifth may occupy the lowest voice. This is called inversion and figured bass is employed to show this.

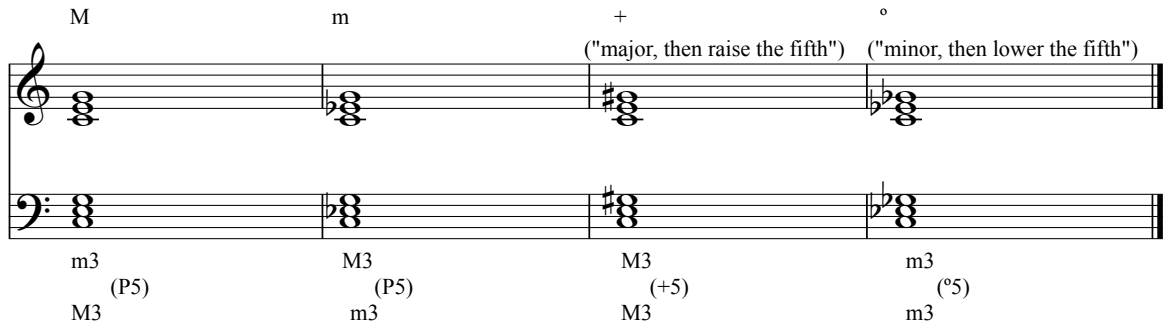
~There are three potential positions for triads, depending upon which member occupies the lowest voice: root position, first inversion, and second inversion.

~Triad are identified and labeled using letter names and symbols that indicate quality.

Sample Exercises

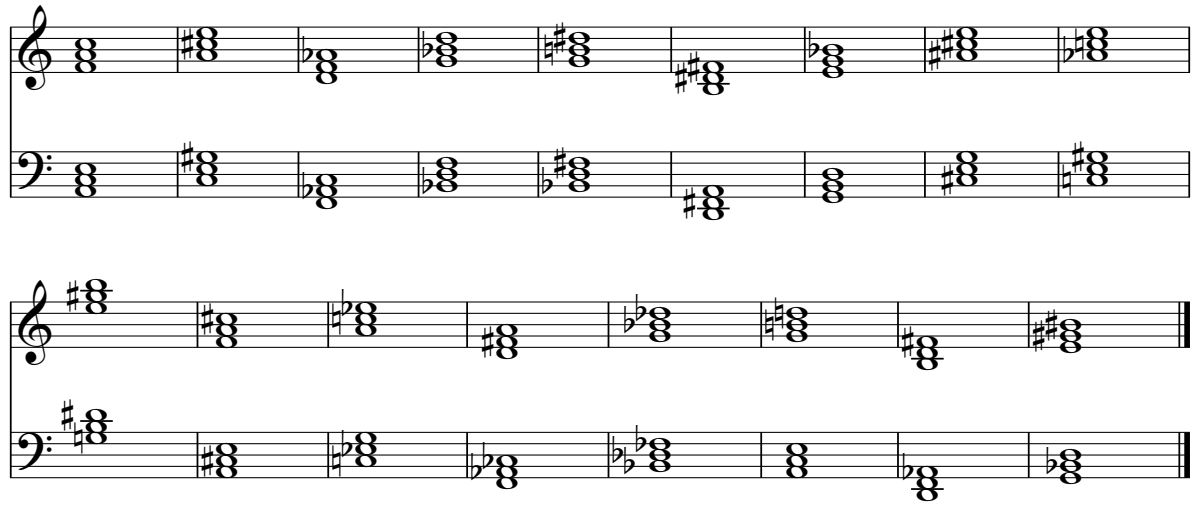
1. In your Scale Thesaurus, construct all triads following the rubric below (see example).
   a. Construct all major triads in treble and bass clefs. Use the Circle of Fifths to keep track. Use key signatures **and** accidentals for this exercise Label the interval content of each triad and label each appropriately.
   b. Construct all minor triads. Use the Circle for this as well. Label the interval content of each triad, and label each triad appropriately.
   c. Construct all augmented triads by adjusting the corresponding major triad. Label each accordingly.
   d. Construct all diminished triads by adjusting the corresponding minor triad. Label each accordingly.

Figure 6.15 **Triad Construction Sample**



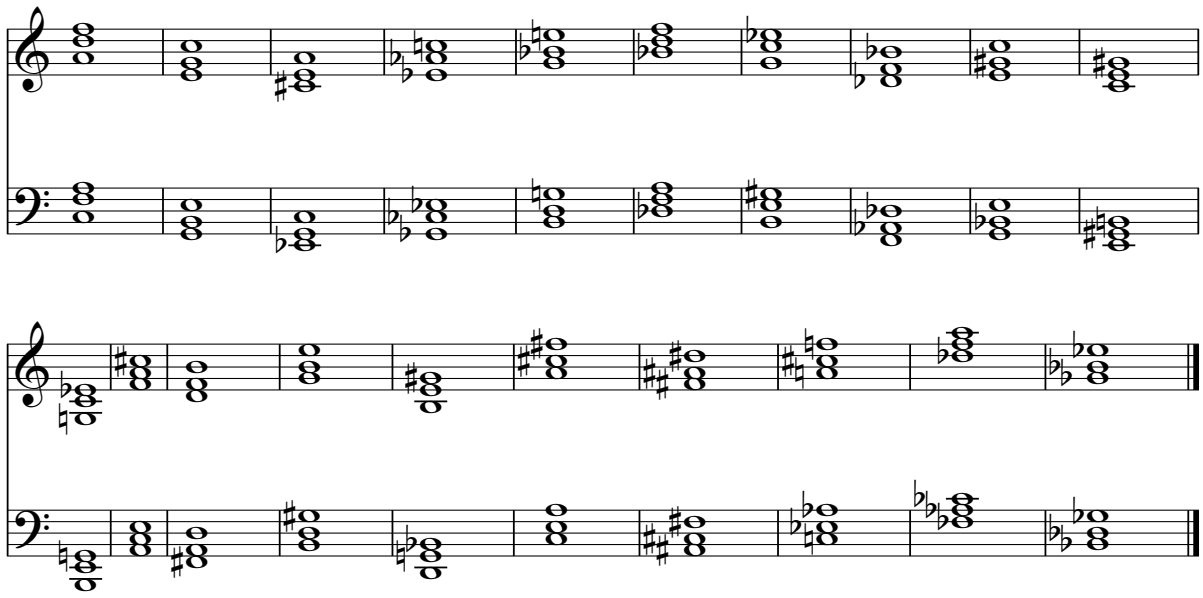
2. The example below lists various triads. Identify each using the appropriate symbols.

Figure 6.16 **Triad Identification**



3. The example below lists triads in inversion. Identify each using appropriate symbols and figures.

Figure 6.17 **Triad Inversion Identification**



4. Practice playing all triad types at the piano.

Section 3: An Introduction to Seventh Chords: Five Basic Types

Section Objectives:

~Origins of seventh chords.

~Basic common seventh chord types.

~Seventh chord labels.

~Seventh chord inversion and figures.

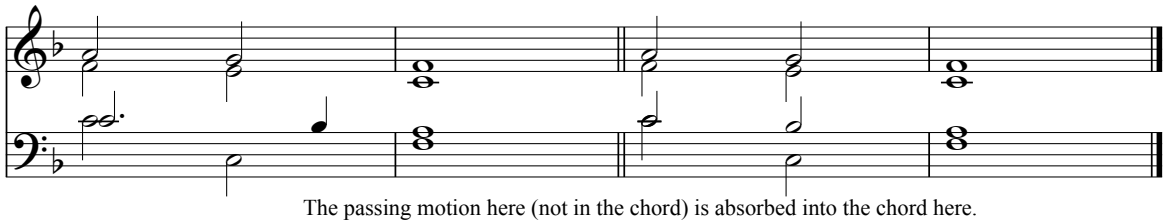
Definition and Origins

Seventh chords are four-note sonorities formed by appending an additional third above a triad. Since a seventh above a given root is a dissonance, these sonorities originated under special conditions. In Renaissance practice, sevenths were dissonances that had to be approached by common tone or stepwise motion and left by stepwise motion.

In the ***secunda prattica*** style of the early Baroque period, sevenths were gradually "absorbed" into the background chord, yielding a fully autonomous sonority. The dissonant seventh still resolved in the prescribed fashion, in acknowledgement of its non-chord origins.

Throughout Tonal practice triads still form the predominant gesture in composition. The addition of sevenths to triads serves to intensify a particular sonority, making its resolution more satisfactory. In 20th-century music (especially vernacular music and Jazz), seventh chords become the predominant compositional gesture that is embellished by further additions.

Figure 6.18 **Seventh Absorption Example**



The passing motion here (not in the chord) is absorbed into the chord here.

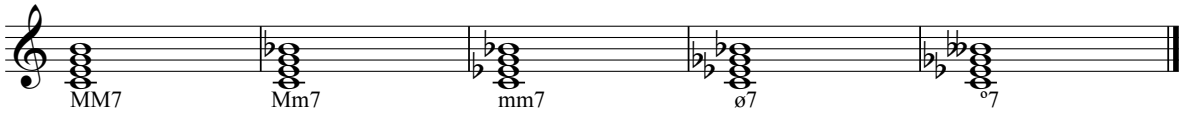
While there are numerous seventh chord types that potentially might be constructed, our list is restricted to five types initially. These five seventh chord types are commonly used extrapolations of major and minor scales and keys. Other less-common seventh chords are shown below in section 6.5.

Seventh Chord Labels

We label seventh chords by (1) identifying the quality of the basic triad and, (2) identifying the quality of the seventh appended to the triad.[x] The five types are labeled thus:

1. MM7 ("Major-Major seventh") A major triad with a major seventh appended.
2. Mm7 ("Major-minor seventh") A major triad with a minor seventh appended.[xi]
3. mm7 ("minor-minor seventh") A minor triad with a minor seventh appended.
4. ø7 ("Half-diminished seventh") A diminished triad with a minor seventh appended.[xii]
5. °7 ("Fully-diminished seventh") A diminished triad with a diminished seventh appended.

Figure 6.19 **Seventh Chord Types**



Initially, when constructing or identifying seventh chords, students may find it useful to construct the MM7 from scale degrees 1, 3, 5, and 7 of the major scale. Remaining types are then formed by successive alterations. For example:

1. MM7 (1, 3, 5, 7 from the major scale)
2. Mm7 (lower the 7th of MM7 by a chromatic half step)
3. mm7 (lower the 3rd of Mm7 by a chromatic half step)
4. ø7 (lower the 5th of mm7 by a chromatic half step)
5. °7 (lower the 7th of ø7 by a chromatic half step)

In time, with familiarization, these structures will be readily recognized. The best way to speed that process is by writing these chords and by playing them at the piano.

As with triads, there is no uniform recognized labeling system for seventh chords. Some of the more common examples are discussed at the end of this chapter. For now, employ the complete seventh chord labels indicated above.

Seventh Chord Inversion

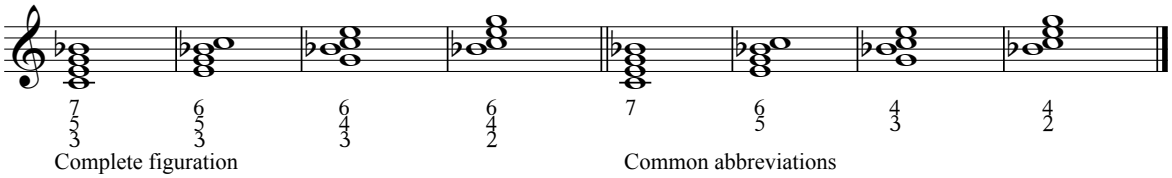
Seventh chords have four constituent elements, therefore four potential positions:

1. ***Root Position***: the *root* occupies the lowest voice.
2. ***First Inversion*** (*1st Inversion*): the *third* occupies the lowest voice.
3. ***Second Inversion*** (*2nd Inversion*): the *fifth* occupies the lowest voice.
4. ***Third Inversion*** (*3rd Inversion*): the *seventh* occupies the lowest voice.

As with triads, we show inversion by the use of figured bass, figures representing interval content above the lowest voice. And, like figured bass for triads, common abbreviations are used.

Figure 6.20 shows seventh chords in inversion, accompanied by complete figurations, as well as standard common abbreviations.

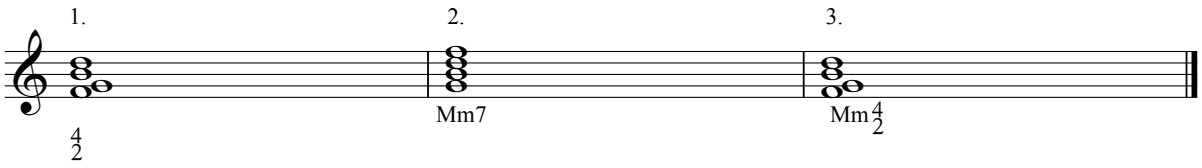
Figure 6.20 Seventh Chord Inversions and Figures



To identify seventh chords in inversion:

1. Identify the figures (interval content) first. This tells the inversion.
2. Re-order the pitches on adjacent lines or spaces. This temporarily places the chord in *Root Position*, allowing identification of the "letter name" of the chord.
3. Identify the quality of the chord by its component triad and the quality of the seventh.

Figure 6.21 Seventh Chord Identification: Inversions



Review Points from this Section:

~Seventh chords are four-note sonorities, an additional third appended to a triad.

~In common practice, the list of seventh chords is restricted (generally) to five basic types labeled thus: MM, Mm, mm, ø7, and °7.

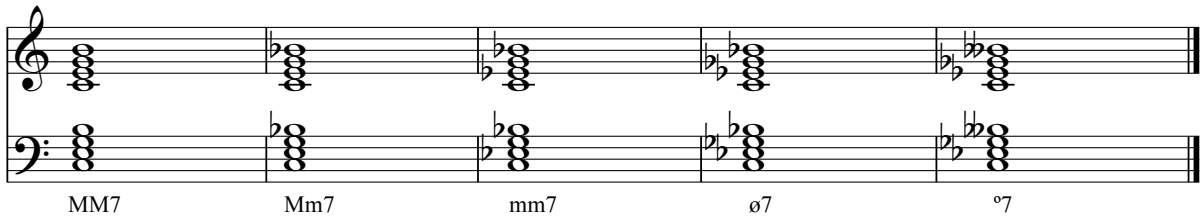
~Seventh chords have four elements, therefore four potential positions (inversions).

Sample Exercises

1. In your Scale Thesaurus:

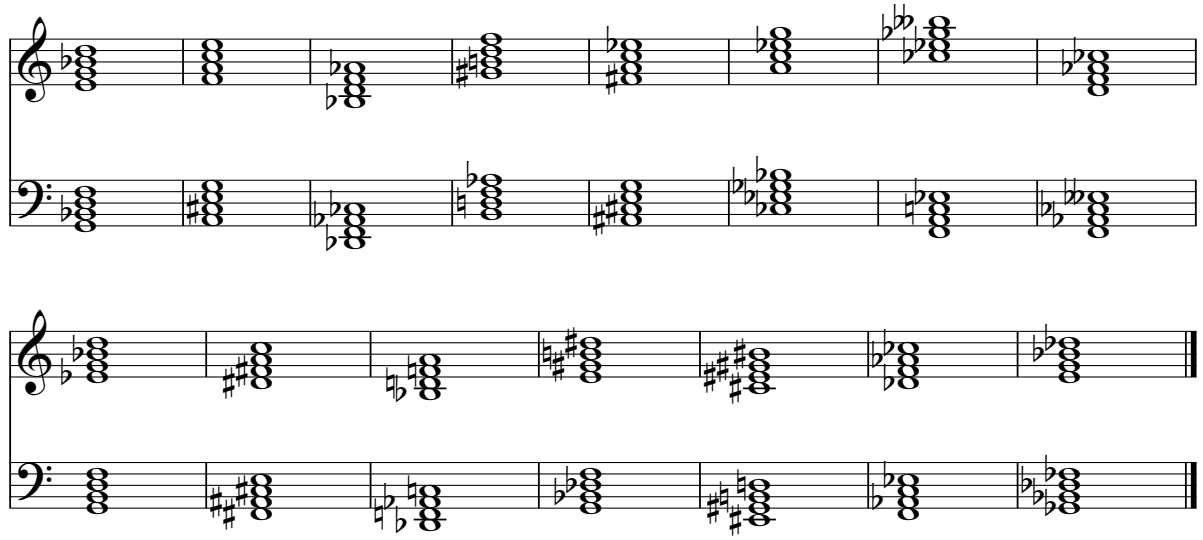
List the five basic seventh chord types for all pitches. Use the Circle of Fifths to keep track. Label each chord using the prescribed labels. See example.

Figure 6.22 **Seventh Chord Type Examples**



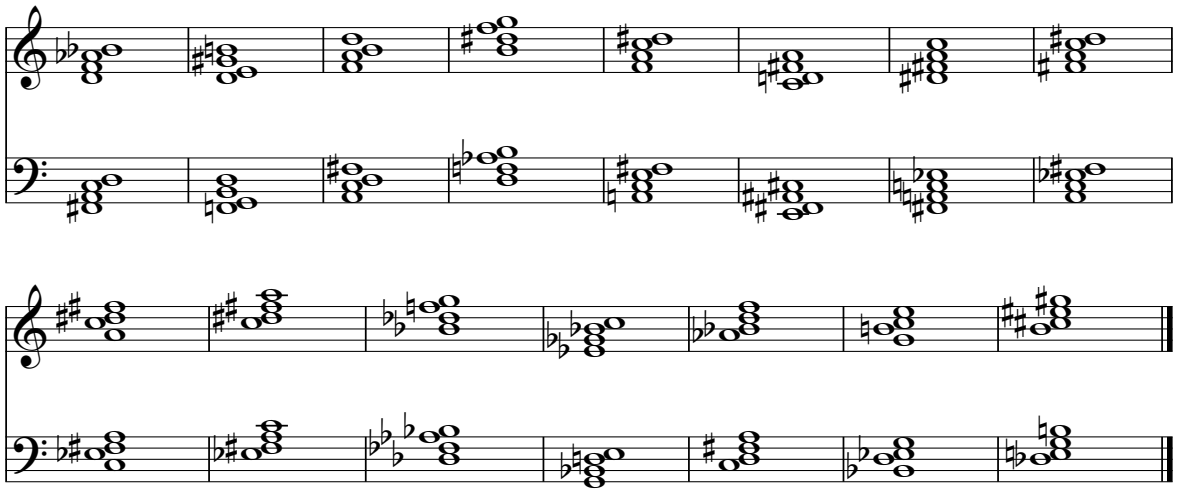
2. The example below lists various seventh chords. Label each according to its quality using the symbolization described above.

Figure 6.23 **Identify Seventh Chords**



3. The example below lists seventh chords in inversion. Identify each using the prescribed procedure.

Figure 6.24 **Identify Seventh Chords in Inversion**



4. Practice all seventh chords at the piano.

Section 4: Other Chords

Section Objectives:

~Larger chord structures: Upper Dominant Discords and Non-Dominant Upper Extensions.

~Examples of other seventh chord types.

~Examples of "added note" harmonies, "slash" chords.

Triads and the five basic seventh chords are the predominant harmonic resources for most of Tonal music. Other chords evolved and came into occasional use beginning in the 19th Century. Late 19th- and 20th Century harmonic practice increased this chord vocabulary and the use of more complex sonorities has since become common practice.

In each instance, new sonorities are formed by the absorption of non-harmonic dissonant elements into existing harmonies. Gradually, through familiarization and established practice, these new sonorities become fully autonomous chords.

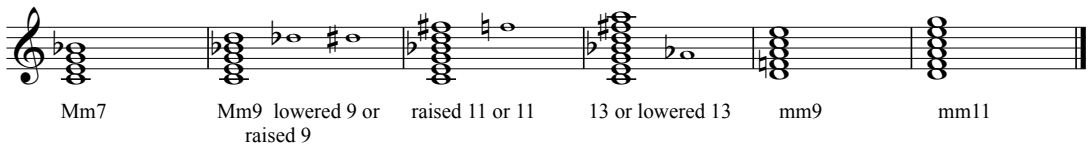
Larger Chord Structures

Observe the Harmonic series and review those partials that lie above the seventh. Most especially observe the ninth, eleventh, and thirteenth partials.

Just as dissonant sevenths were absorbed into triads to form new sonorities, partials beyond the seventh underwent the same evolution. Dissonant ninths, elevenths, and thirteenths above the root were added to seventh chords (especially Dominant sevenths) in order to increase harmonic tension or to add color to the sonority.

These additions, or *extensions*, first appear in *Dominant* harmonies and were gradually added to other harmonies. When these dissonant additions are used to intensify Dominant harmony they are called *Upper Dominant Discords*. When used to embellish or intensify other harmonies, they are called *Non-Dominant Upper Extensions*.[xiii] Figure 6.25 lists the upper extensions and their potential alterations.

Figure 6.25 **Upper Extensions**

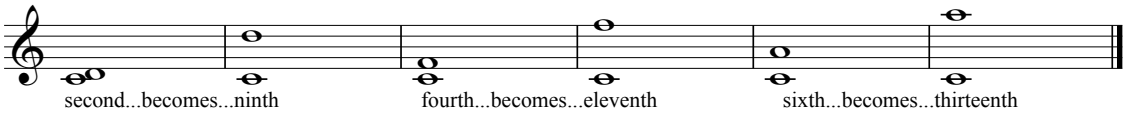


As shown, there are three potential qualities of ninths, two potential qualities of eleventhsand two potential qualities of thirteenths.

Upper extensions can be memorized by compounding (adding an octave) to scale degrees. The added octave is represented as seven scale steps distant.

~ Scale degree 2 (+7) becomes 9
~ Scale degree 4 (+7) becomes 11
~ Scale degree 6 (+7) becomes 13

Figure 6.26 **Scale Degrees/Upper Extensions**

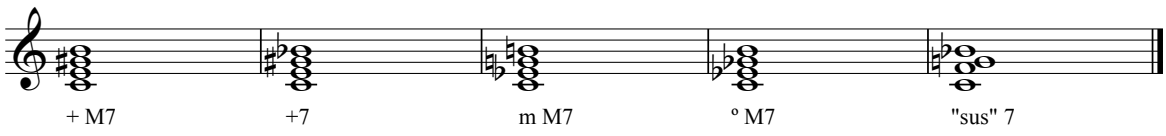


Upper extensions are used with increasing frequency throughout the 19th Century. They also form the basis of much 20th Century harmonic practice, especially Jazz harmony. For now, it is only essential to become somewhat familiar with these structures. Their use is the subject of more advanced study.

Other Seventh Chords

Common Practice harmony generally employs the five basic seventh chord types as they occur in the context of major and minor scales and keys. Many other potential seventh chord types may be constructed. These have come into increasing usage. Figure 6.27 lists some examples of other seventh chords and their labels.

Figure 6.27 **Other seventh chords**

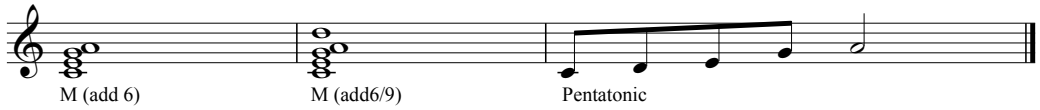


"Added-note" Harmonies and "Slash" Chords

Other coloristic dissonances may be added to triads, or may replace triad members. Also, pitches that are not sevenths may be added to triads to add color. The most common of these "added-note" chords emerging in the 19th Century was the "added sixth."

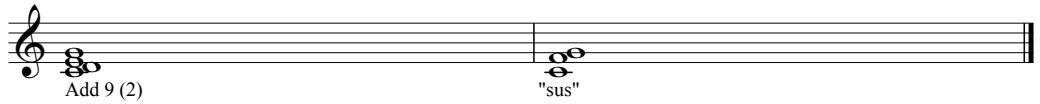
Originating as a neighboring melodic embellishment to the triad, a sixth above the bass became absorbed into the chord. This chord appears to spell a minor-minor seventh chord in first inversion. In context however, the lowest voice asserts itself as the root of the chord and the sixth above is a coloristic dissonance. In time ninths were also added. Originally appended to major triads, they may also embellish minor triads. A major triad with an added sixth and ninth may be extrapolated into a pentatonic scale.[xiv]

Figure 6.28 **Add 6, Add 6/9, Pentatonic**



An added ninth (sometimes called "add 2") has become quite common, as has replacing the third of the chord with a fourth above the root. This chord is commonly called a "sus" chord (from "suspension," a non-harmonic tone).

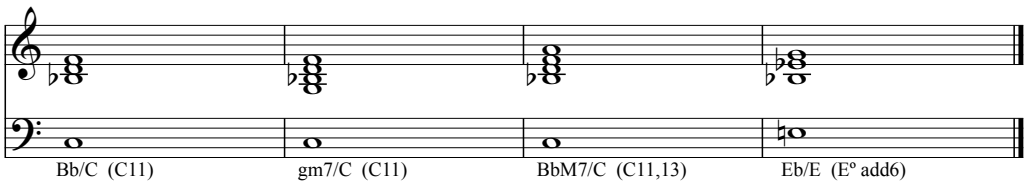
Figure 6.29 **Add 9 (2), "Sus" chord**



Another set of sonorities has become common that appear to be triads or seventh chords (or more) above a bass tone. Commonly symbolized by the use of a diagonal slash separating letter names or chord symbols, these have come to be called "slash" chords. From a theoretical point of view, these are better explained as upper extensions or particular chord voicings. Since they are expedient symbols to interpret, they have entered the language as independent sonorities.

The letter or chord symbol always appears to the left of the diagonal, the bass tone always appears to the right. Figure 6.30 gives a few common examples and the proper interpretation.

Figure 6.30 **"Slash" Chords**



The use of these various sonorities has greatly enriched the harmonic vocabulary of Tonal (or "centric") music, especially in the vernacular and Jazz idioms. Scrutiny of these sonorities will yield very familiar sounds.

Review Points from this Section:

~Harmonic vocabulary is enriched by the addition of Upper Dominant Discords, Non-Dominant Upper Extensions, added-note harmonies, and various seventh chord types.

~Upper extensions shall be examined later as to their importance in the evolution of Tonal harmonic practice.

Sample Exercises

Play each example from this section at the piano.

Section 5: Basic Chord Symbolization

Section Objectives:

~Overview of symbolization and disparate practices.

~Commonly used symbols in vernacular music and Jazz.

~Recommended symbols.

~Interpreting chord symbols.

Previously, it was stated that there is no uniform, recognized procedure for labeling chords. Various labels are assigned to chords that originate from various academic traditions, various vernacular traditions, even various regional practices.

Reading chord symbols therefore becomes a process of interpretation in context. Let us examine the major-major seventh chord as an example of these disparate practices.

Figure 6.31 **C MM7**

The "textbook" symbol is MM7, a major triad with a major seventh appended. As with any other set of symbols in music, this is subject to abbreviation or interpretation. Here are some examples:

Cmajor7
Cma7
CM7
CΔ7 or CΔ

In some schools of thought a European ("French") 7 (with a crossbar) represents major 7. Some Canadian arrangers draw a 7 enclosed within a circle. The author has discovered at various times thirty-three different chord symbol representations for the pitches C-E-G-B.

The same inconsistencies apply to other chords as well as to the interpretation of more complex sonorities. Each system of interpretation has its strengths and weaknesses and there is no "correct" system.

There are however several useful precepts:

1. Chord symbols should differ orthographically: they should *look* different at a glance.
2. At times, it is desirable to sacrifice "theoretically correct" symbols and spellings for the sake of clarity and convenience.
3. Context is all: any symbol should reflect the specific context in which it is placed.[xv]

Below is a list of commonly used chord symbols for triads, added-note chords, and seventh chords.

Triads and added-note chords:

C (major triad)
c- (minor triad)
C+ (augmented triad)
c° (diminished triad)
Csus (add fourth in place of the third)
Cadd9 or Cadd2 (a ninth is added but **not** a seventh)
C6 (a sixth is added to the triad)
C6/9 a sixth and a ninth are added to the triad)

Seventh chords:

CΔ7 (major-major 7th)
C7 (major-minor 7th)
c-7 (minor-minor 7th)
cø7 (half-diminished 7th)
c°7 (fully-diminished 7)
C+7 (augmented triad, minor 7th)
c-Δ7 (minor triad, major 7th)
c°Δ7 (diminished triad, major 7th)
C+Δ7 (augmented triad, major 7th)
C7sus (fourth replaces third, minor 7th)

To reiterate, there are many different ways of expressing these, and other, chord symbols, each with its perceived advantages. Most are similar enough to one another to be interpreted with ease, some must be interpreted by contextual setting.

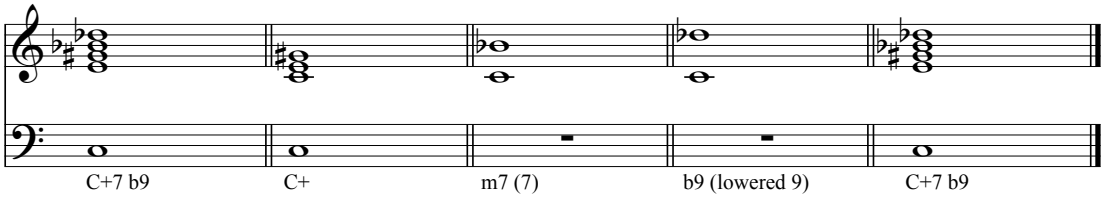
Interpreting Chord Symbols

In order to interpret and realize complex chord symbols, we recommend dividing the given symbol into discrete "information fields." These may be reduced to three task-specific regions:

1. First, identify the quality of the basic triad.
2. Next, identify the quality of the seventh (or, in some cases, the implied seventh).
3. Last, identify the extensions and/or chromatic alterations appended to the basic chord.

Often the information in these fields will "overlap," or imply overlapping qualities. For example, CΔ9 implies a major-major seventh chord with a ninth added, C13 implies a major-minor seventh chord with a thirteenth (and potentially a ninth) added. These implicit interpretations become second nature in time. Below are examples of chord symbol interpretations and how they are realized.

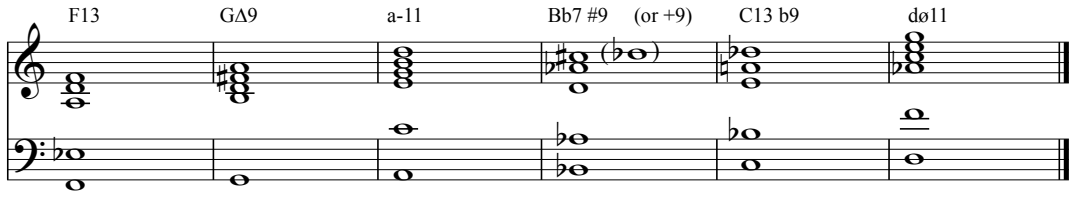
Figure 6.32 **Chord Symbol Interpretation: Information Fields**



In some traditions, it is customary to identify the basic seventh chord initially (as opposed to the triad). This can lead to confusion and inaccurate readings in some cases, in other cases there is no choice. For example, the chord symbol C7+ is read as "major-minor seventh with a raised 5th." In other words, an augmented triad with a minor seventh appended. The symbol C7b5 is similar in aspect, but in this instance there is really no other reasonably efficient way to express the chord.

Below are sample chord symbols and their realizations.

Figure 6.33 **Chord Symbol Examples**



The objective here (as before) is to introduce these common sounds. Upon hearing or playing these sonorities you will recognize them immediately. The task here therefore is familiarization, not necessarily mastery.

Review Points from this Section:

~Chord symbolization has many differing interpretive traditions: there is no "correct" method.

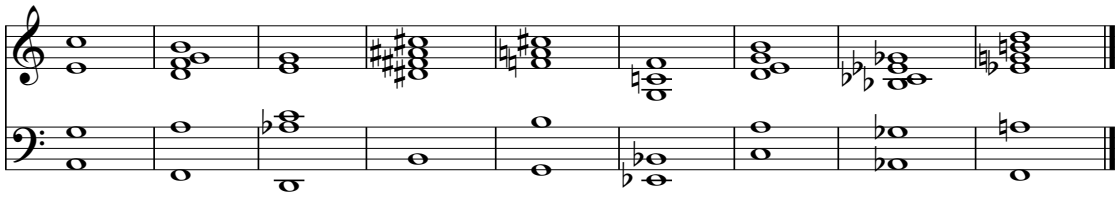
~There are commonly used symbols, as well as symbols that similar enough to be easily translated.

~Interpreting chord symbols in context uses "information fields" to realize complex chords in stages.

Sample Exercises

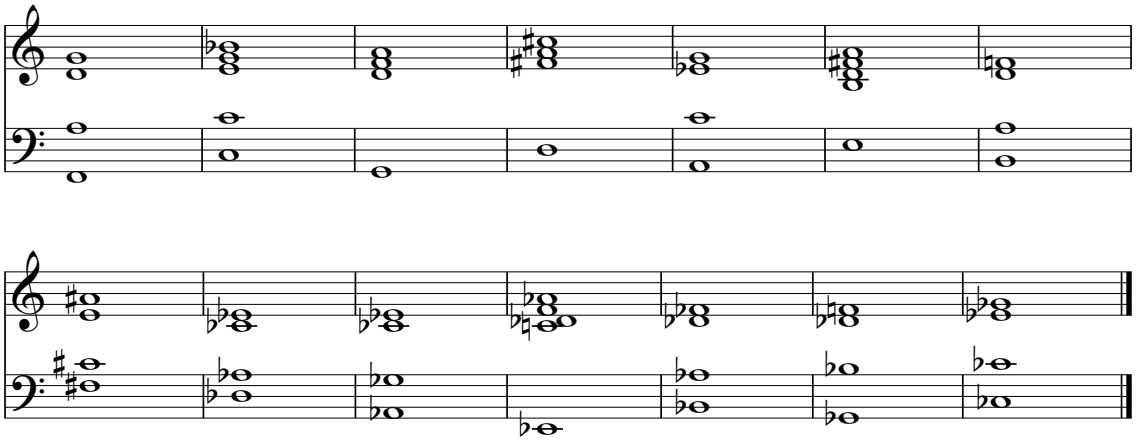
1. Play the examples above at the piano. As you play these sonorities, identify each chord member.
2. In the examples below, identify and label each chord member.

Figure 6.34 **Identify Chord Members**



3. In the examples below, label the given chord with the proper chord symbol. These are limited to triads, seventh chords, and a few "slash" chords.

Figure 6.35 **Identify chords**



Summary

In this chapter, we have introduced chords as independent structures. Purposefully, we have not placed them in the context of harmonic syntax. That task is held in abeyance until the fundamentals of analytical techniques are presented in the next chapter.

Endnotes

i The spellings used here for the Harmonic Series may be different from other diagrams. These spellings are used because they are more reflective of how harmony evolved over time.

ii There are conditional exceptions to this perception that are explained in the course of the chapter.

iii Make sure to say "*lowest voice*" **NOT** "*bass*" when speaking of triads in inversion. Often students use the terms *bass* and *root* as if they were interchangeable with one another. The *root* may be in the *bass*, but the bass isn't always the *root*!

iv Most students merely associate these numbers with chord position (inversion) as abstract symbols. Make sure that your first consideration of chord position is interval content.

v Figured Bass is also called Thoroughbass, Groundbass, and other less common terms.

vi Figured bass always lists higher numbers above lower numbers (descending order). There is one notable exception to this in Jazz chord symbolization (the "add 6, add 9" chord).

vii Some prefer to employ all upper case letters, and some prefer to employ a "dash" above lower case "m" when indicating minor. These are all valid symbols. Typically, upper case and lower case usage depends upon the quality of the third: is it a major third or a minor third. This is often referred to as the fundamental nature of the chord. Chords wherein the *fundamental nature* is a major third employ upper case, a minor third employs lower case.

viii When the diatonic *Dominant* is employed, it is referred to as "*Modal Dominant*," reflecting its *Aeolian* origins,

ix The term *Tierce de Picardie* has its origins in Middle French: *tierce* referring to the third of the chord, *picard* meaning "sharpened" or "pointed." A corruption in Elizabethan English comes from Shakespeare: the common linnod "…hoisted upon his own *petard*…" from "hoist with his own petar" from Hamlet. By this time it came to mean "lifted by a premature explosion."

x Some prefer to identify seventh chords as "chains of thirds." We do not recommend this tactic as it does not reinforce learning either triad qualities or interval qualities. Further, it does not reinforce the given labeling system for seventh chords.

xi Major minor is commonly called a "Dominant 7th chord." This is due to its unique and particular placement on the Dominant of major keys and Harmonic minor keys. This term is really a slang term unless so used, yet it is so common, it has entered the language as a specific term in and of itself.

xii The half-diminished seventh chord is often called "*minor seven, flat 5*" in some Jazz practices. This appellation stems from its use by the Berklee School for specific non-diatonic uses of the chord type. In time it became a common label. Gradually this practice is being phased out by Jazz practitioners in favor of the traditional label.

xiii A corruption of the word *extensions* is used in Jazz harmony. *Tensions* is used to describe these dissonant additions to chords, as well as being a general guideline as to where they are placed in relation to other chord members.

xiv There is some evidence that 20th Century tonal composers extended this additive process, formulating an "add 7" sonority. This chord is formed by the addition of a major seventh to a root and a third. This is speculation however.

xv An embarrassing example: the author once wrote a simple arrangement for a Union "casual club-date." The particular tune in question employed many simple chords in inversion. Rather than using "slash" chords (C/E etc.), the author employed traditional figured bass. In the context of the occasion, it proved unreadable and therefore impossible to perform.