

Print Preview Harmony (music)

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I. INTRODUCTION

Harmony (music), the combination of notes (or pitches) that sound simultaneously. The term *harmony* is used both in the general sense of a succession of simultaneously sounded pitches and for a single instance of pitches sounding together. In this second meaning, the term *harmony* is synonymous with *chord*. Harmony stands in contrast to melody (pitches sounding one after another); with melody and rhythm (the stresses and durations of sound), it is one of the three primary elements of music.

Harmony of some sort occurs whenever two or more notes sound at one time in any music: in the interaction of simultaneous melodies in a fugue or in a melody with a descant; in a guitarist's chords accompanying a sung tune; in the blocks of shimmering mouth-organ chords played above the melody in Japanese court music; and in the sustained or insistently repeated pitches (called drones) that provide a background in genres as diverse as Scottish bagpipe music and classical Indian music (*See also* Polyphony). In Western music, however, especially after the Renaissance, harmony assumed a central role in musical structure and expression.

II. CONCEPTS OF WESTERN HARMONY

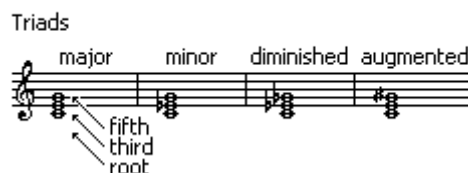
Most Western music of the 17th to the 19th century is tonal—that is, it has a central, or “home,” tone, called the tonic, toward which all other tones seem to gravitate. In tonal music of this period the effect of a tonic is created largely by the interaction of different harmonies with one another. This harmonic language, known as functional harmony, is the subject of much of the following discussion. *See also* Tonality.

A. Intervals and Triads

Intervals, or pairs of notes, are the building blocks of harmony, and intervals of different sizes have different qualities. Some intervals are consonant (that is, the two notes blend with each other), whereas others are dissonant (that is, the two notes clash, often creating an expectation that they will resolve to a consonance). *See also* Interval.

The fundamental harmony in tonal music is a kind of three-note chord called a triad (which means a unity made up of three parts). The three notes of a triad, in Example 1, are called the root, third, and fifth. The third lies above the root by the interval of a third; the fifth lies above the root by the interval of a fifth. *See also* Chord.

Example 1



Triads exist in four varieties. Two of these are consonant, that is, they contain only consonant intervals; these two types are the stable chords in tonal music. They are the major triad (for example, C–E–G), in which a major third (C–E) and a perfect fifth (C–G) are formed with the root; and the minor triad (for example, C–E $\flat$ –G), in which a minor third (C–E $\flat$) and a perfect fifth are formed with the root. The remaining two types of triad are dissonant. A diminished triad (such as C–E $\flat$ –G $\flat$) is formed by a minor third and a dissonant diminished fifth (C–G $\flat$). An augmented triad (such as C–E–G $\sharp$) is formed by a major third and a dissonant augmented fifth (C–G $\sharp$).

B. Keys

In functional harmony, in order for a pitch to be a tonic, it must be the focal point of a group of pitches that fall into either of two patterns: the major scale or the minor scale (*see* Scale). A key consists of a tonic note together with its scale and the triads built on the notes of that scale. Thus, a composition in the key of C major has the note C as its tonic and is structured around the C-major scale.

Triads can be built on any note of a scale, and they are named with Roman numerals according to the scale note that is their root. The triad built on the first note of the scale (the tonic chord or I chord) is the “home” chord. The chord that most often leads to a return of the tonic chord is the triad built on the fifth note of the scale (the dominant chord or V chord). Chords built on the other notes of the scale (the II, III, IV, VI, and VII chords) each have roles to play, both in preparing for the tonic or dominant and in interacting among themselves.

Every triad can be sounded with any of its three notes in the bass, or lowest-sounding part. In root position (with the root in the bass, as in Example 1) the triad is in its most stable form. The inversions of a triad, sounded with other notes of the chord in the bass (such as E–G–C and G–C–E for the root-position triad C–E–G), are more mobile forms of the same harmony.

C. Harmonic Progressions

The movement from one chord to another, called a harmonic progression, creates much of the sense of motion in tonal music. Harmonic progressions include the departure from the tonic, the motions leading to the dominant, the resolution to the tonic or a deceptive resolution to another harmony, and the extension of a single chord. These progressions coordinate with other aspects of the music, such as the beginnings and endings of phrases and the large sections within compositions. The ends of phrases and sections (called cadences) are usually points of arrival on important harmonies—typically a full cadence (ending on the tonic) or a half cadence (ending on the dominant). Indeed, through many different eras, styles, and genres, tonal music tends to present phrases or sections in pairs, the first phrase (or section) having an “open” ending on a half cadence, and the second phrase (or section) having a “closed” ending on a full cadence.

Within phrases, the points of harmonic change are often coordinated with accented beats in the musical meter. To put it another way, the placement of harmonic changes is one of the elements that causes the listener to hear the meter's regular alternation of strong and weak beats. Tonal harmonic progressions lead the listener to expect certain kinds of resolutions. In tonal music, the strong and weak beats of the meter recur regularly, and they reinforce these harmonic expectations by adding an anticipated time point for the resolution.

D. Diatonic and Chromatic Harmony

Harmonies and harmonic progressions that contain only the notes of a given key are called diatonic. Chromatic notes—that is, notes not members of that key—can modify entire chords as well as individual notes within a chord (*see* Chromaticism).

Chromatic notes are typically borrowed from other keys in order to lead more definitively from one harmonic goal to the next. For instance, a V chord in the key of C major (that is, the G chord), instead of being prepared (preceded) by another chord from the key of C major, can be prepared by a chord from the key of G major, in which C's V chord is tonic. This process, by which a chord is temporarily treated as a tonic, is called tonicization. When a tonicization incorporates a progression of several harmonies and is sufficiently extended, the new tonic actually replaces the previous tonic as the focal pitch of the passage. When that happens, a change of key, or modulation, has taken place.

E. Nonharmonic Tones and Dissonant Chords

Harmonies are used to support and help shape melodies in tonal music. A given melody note may be a member of the harmony that sounds with it; or it may be a nonharmonic tone—a note extraneous to that

harmony. Nonharmonic tones often elaborate on the pitches that are members of the harmony. Frequently, they melodically connect chord notes to one another. They can also add activity that proceeds faster than the harmonic rhythm (the pace of the changes in harmony).

Many commonly occurring combinations of nonharmonic tones with triads have come to be considered standard chords. Particularly common in this category are seventh chords (triads with an additional note lying a seventh above the root, for example, G–B–D–F) and ninth chords (triads with two additional notes a seventh and a ninth above the root, for example, G–B–D–F–A). These dissonant chords, like triads, occur as harmonic units in tonal music. In the mid-20th century, however, many musicians came to consider them as triads with added “frozen” nonharmonic tones, rather than as independent, stable harmonies such as major and minor triads. Unlike traditional tonal music, jazz and 20th-century popular music utilize these chords as basic elements, along with other dissonant chords such as eleventh and thirteenth chords, triads with an added sixth, chromatically altered chords, and suspensions (chords substituting a note of the previous harmony for one of their own).

F. Harmony and Texture

Harmonies can appear with all the notes sounding together and sustained until the next harmony. They can also occur in other textures, in which the notes alternate or repeat in various accompaniment patterns that are heard as a unity. (Example 2 contains two common accompaniment patterns, the Alberti bass and the waltz bass.)

Example 2



The interaction among the many aspects of harmony is what creates the enormous potential for variety that characterizes tonal music of the 17th to the 19th century. Although composers of art music in the 20th century have moved away from traditional tonal harmony, this musical language continues in use in much contemporary popular music. Within this language the harmonies can direct musical gestures toward specific tonal goals, can step back from such goals to prepare new motions, can remain static—the possibilities are infinite. In addition to harmonic motion, composers have drawn on such resources as the use of varied accompaniment textures, of nonharmonic tones, and of different musical forms and have exploited the interactions among the many musical textures that lie along the continuum between homophony (chords plus melody) and polyphony (interwoven melodies). These resources have allowed composers of tonal music to develop their own musical styles throughout the centuries.

G. Harmony and Counterpoint

Most musicians in the mid-18th through the early 20th century, in a tradition dating from the French composer and theorist Jean Philippe Rameau, thought of harmonies as independent units of sound. The melodic connections that arise between the notes of one harmony and those of the next were considered the domain of counterpoint. In recent years, however, largely through the influence of the German theorist Heinrich Schenker, many musicians have come to view harmonies rather as the result of the motions of the individual parts as they move from the notes of one essential chord to those of another. According to this view, the chords of a four-part hymn setting, or a string quartet, or a piano texture are understood, not as a series of autonomous units, but rather as the harmonies produced by the soprano, alto, tenor, and bass melodies as they simultaneously progress from note to note. This perspective unites the previously separate disciplines of harmony and counterpoint. In addition, it allows the listener to isolate underlying harmonic progressions at several levels (background, middle ground). It thus provides a unified perspective that encompasses the local or surface harmonic progressions as well as the underlying long-range harmonic motions that occur within sections and entire pieces.

III. HISTORY

Harmony first appeared in Western music in the Middle Ages as composers began to add contrapuntal parts to plainchant, which had developed as a monophonic (unharmonized single-part) music. Over the centuries composers explored different combinations of intervals and different ways of connecting them. Harmonies evolved from more or less coincidental occurrences between contrapuntal lines, with stable intervals occurring only at beginnings or endings of sections. Eventually, composers began to regulate carefully the interactions of consonances and dissonances. At first only fourths, fifths, and octaves were considered consonant; later, thirds and sixths were added to this category.

A. Functional Harmony: Growth and Dissolution

By the 16th century, in the music of such composers as the Italian Giovanni da Palestrina and the Flemish Orlando di Lasso, the triad had become the preferred sonority. In music of this era the motion from one triad to another is so arranged in the parts that a complete triad (with root, third, and fifth present) is sounding almost all the time. Functional harmonic motion appears at many cadences. Within phrases, however, the use of modes (scales other than major and minor) prevents the sense of directed harmonic motion that is found in later eras throughout phrases of tonal music. By the second half of the 17th century, functional harmony had become the established musical language. This is the language in which composers such as the Germans Johann Sebastian Bach and Ludwig van Beethoven, the German-English George Frideric Handel, and the Austrians Joseph Haydn and Wolfgang Amadeus Mozart wrote their music.

By the 19th century functional harmonic progressions had been in use so long that composers considered them too commonplace for many of their individual needs. Within functional harmony, composers such as the Polish-French Frédéric Chopin and the Germans Robert Schumann, Johannes Brahms, and Richard Wagner explored new sounds. Their techniques included connecting chords hitherto considered only distantly related to one another; adding nonharmonic tones that last for most of the duration of a chord; employing dissonant chords more often than triads; using chromatic notes ever more frequently; and moving rapidly from one key to another without firmly establishing any one of the keys passed through. Novel harmonic effects became a primary interest.

B. 20th-Century Replacements

As a result of these 19th-century trends, functional harmony had ceased to be a potent force in new music by the early 20th century. Some composers, such as the Frenchman Claude Debussy, the Hungarian Béla Bartók, and the Russian-born Igor Stravinsky, continued to write music based on a tonal center. These composers, however, projected the sense of a tonic by means other than functional tonality. Such techniques included frequently repeating the tonic note; centering melodies around it; and employing an ostinato (a repeating pattern) that featured the tonic.

Other composers, such as the Austrians Arnold Schoenberg, Alban Berg, and Anton Webern, abandoned a sense of tonality altogether and began writing atonal music (that is, music without a tonic; *see* Atonality). In this music the earlier distinction between consonance and dissonance no longer holds, because, depending on the context, all chords and intervals have the potential to sound either stable or in need of resolution. The term *harmony* can still be used to describe a group of notes sounded together in this music. The triads and other chords that are common in tonal music, however, hold no special status—they are simply various three- or four-note chords among many others. No harmonic progressions exist that are common to many pieces; instead, in each piece an individual harmonic language is developed. In recent writings the term *simultaneity* has replaced *harmony* to describe notes that sound together in this music.

IV. CATEGORIES AND NAMES OF TONAL CHORDS

The first and second sections of this article discussed the essential qualities and history of the traditional harmonic system of Western music. This final section is a summary of technical information about chords and their nomenclature.

The most common chords in tonal music are triads and seventh chords. Triads, as previously discussed, appear in four principal varieties: major, minor, diminished, and augmented. Seventh chords have five

principal varieties:

Diminished-diminished triads plus diminished seventh
(C-E $\flat$ -G $\flat$ -B $\flat\flat$)

Half diminished-diminished triad plus minor seventh
(C-E $\flat$ -G $\flat$ -B $\flat$)

Minor-minor triad plus minor seventh
(C-E $\flat$ -G-B $\flat$)

Dominant-major triad plus minor seventh
(C-E-G-B $\flat$)

Major-major triad plus major seventh
(C-E-G-B)

A. Functional Chord Names

Functional names show the placement of a given chord in a major or minor key. Such names include the Roman numerals used for chords, as well as the following terms:

- I - tonic
- II - supertonic
- III - mediant
- IV - subdominant
- V - dominant
- VI - submediant
- VII - leading tone

Whether any of these chords is major or minor depends on its position in the key. For a major key the chord types are as follows:

- Major triads - I, IV, V
- Minor triads - II, III, VI
- Diminished triad - VII
- Dominant seventh chord - V₇
- Major-seventh chords - I₇, IV₇
- Minor-seventh chords - II₇, III₇, VI₇
- Half-diminished-seventh chord - VII₇

For a minor key (built on a harmonic minor scale, such as A B C D E F G $\sharp$ A) the chord types are as follows:

Minor triads - I, IV
 Major triads - V, VI
 Diminished triads - II, VII
 Augmented triad - III
 Dominant seventh chord - V₇
 Minor-seventh chords - I₇, IV₇
 Major-seventh chord - VI₇
 Half-diminished-seventh chord - II₇
 Diminished-seventh chord - VII₇

(The III₇ chord is a less common type, an augmented triad with a major seventh: C-E-G#-B.)

In one common system major chords are indicated by capital Roman numerals (I, IV) and minor chords by lowercase Roman numerals (ii, vi); diminished chords are written in lowercase, followed by the symbol ° (for example, ii°) and augmented chords are shown in capitals, followed by the symbol + (for example, III+).

In a tonicization, the chromatic chord is shown either in parentheses or before a slash, followed by the Roman numeral for the note that has lent its key; an example is (V₇)V or V₇/V, read as "five-seven of five."

B. Inversions

The inversions of chords are indicated by small Arabic numerals (called figured bass numerals; see Basso Continuo) that follow the Roman numeral. These numbers indicate intervals in relation to the bass note.

Triads

Root position: $\frac{5}{3}$ or the absence of numerals

($\frac{5}{3}$ indicates root in bass, third and fifth above as in C-E-G)

First inversion: $\frac{6}{3}$ or $\frac{6}{\bar{3}}$ (read "six-three"); example E-G-C

Second inversion: $\frac{6}{4}$; example G-C-E

Seventh Chords

Root position: 7; example G-B-D-F

First inversion: $\frac{6}{5}$; example B-D-F-G

Second inversion: $\frac{4}{3}$; example D-F-G-B

Third inversion: $\frac{2}{\bar{4}}$ or $\frac{4}{2}$; example F-G-B-D

(The abbreviation IV₆ thus means a triad built on the fourth note of the scale and sounded in its first inversion; V₂⁴ means a seventh chord built on the fifth note of the scale and sounded in its third inversion.)

C. Jazz and Popular Music

In many songsheets chords are given for guitar or keyboard players. Functional names are not used for this purpose. Instead, the root and quality of the chord are given in what may be termed lead-sheet

notation (for example, A^{maj} and F#^{dim7}).

Several abbreviations and symbols are used: maj or M for major, min or m for minor, dim or ^o for diminished, ^ø for half diminished, and aug or ⁺ for augmented. (In another system, however, + and - are used for major and minor.) When a chord is to be played in one of its inversions, the bass note follows a slash after the chord root: A^{maj}/C# indicates an A-major triad (A–C#–E) with C# in the bass. This system can also show a chord played over a bass note that does not belong to that chord.

The numeral 7, when not modified by another symbol, stands for a dominant-seventh chord. Other numerals indicate a triad plus an added note: C^{maj6} means C-major triad plus a sixth above C (that is, C–E–G–A).

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