VOLUME TWO

The Shaping of Musical Elements

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University of Hawaii

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PREFACE

everal interrelated concerns have been influential in giving this volume its final form. First, the ordering of the chapters reflects the historical development of music since the seventeenth century. The early chapters on polyphony emphasize Baroque models (though Classic and Romantic examples have been included where possible), then the chapters on chromatic harmony and the larger forms emphasize the Classic and Romantic eras, and in the final chapters the focus shifts to the Impressionists and composers of the twentieth century. Hence this volume can be divided into two parts, with chapters 1–13 dealing with the music of the common practice period, and chapters 14–20 covering the transition into this century and continuing up to the present

Another concern that has had a formative impact on this text is our desire to give the student a broadly based, systematic procedure to use in analysis. The various theoretical elements of music are dealt with in systematic order, with the hope that consistency of approach will benefit the student engaging in analysis. Our method, which we call an *integrating analysis*, is presented fully in chapter 13, by which point the student has the basic technical background needed for the analysis of traditional tonal music. The elements of an integrating analysis are, in order: pitch and rhythm (conceived in broad terms), followed by melody, harmony, texture, timbre, and dynamics. The reason for placing these elements in this particular order is partly logical and partly to insure that no contributing factor will be overlooked in the analytical process. After these areas have been examined in more or less depth (depending on the purpose of the analysis), the analysis focuses on two synthesizing considerations: form and tension. The analysis thus moves from the general to the particular and back to the general.

The final concern of the authors has been to relate theoretical studies to performance as closely as possible. This is reflected in the numerous discussions of tension, the rise and fall of which is of primary concern to the performer.

It is unlikely that one would use volume 2 of this text without having gone through volume 1, but for those who do, and for those who would like to survey some of the materials covered in volume 1, the appendix of volume 2 contains summary material including lists of terms and symbols, a chart of normal progressions, a sample analysis, and a glossary.

Prior to publication the two volumes of this text were tested for several years in music theory classes at the University of Hawaii at Manoa. The authors wish to express their gratitude for the numerous corrections and suggestions made by our students and by the following colleagues: Professors Gary Danchenka, E. Takeo Kudo, R. Neil McKay, and Byron K. Yasui.



CHAPTER ONE

Polyphonic Techniques

Terms Introduced in This Chapter

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tonal polyphony

tonal counterpoint

period of common practice

polyphonic sequence

invertible counterpoint olyphony after 1600 was based on the principles of tonality combined with techniques of counterpoint such as imitation, invertible counterpoint, and polyphonic sequences. The study of two-voice counterpoint and imitation that was begun in the first volume will now be extended and will come to include polyphonic sequences and invertible counterpoint.

TONAL POLYPHONY

tonal polyphony

Before 1600 musicians used a polyphonic style that was based on the system of diatonic modes; after that date, however, the modal system was gradually replaced by the present system of major and minor keys. The development of the majorminor system together with advances in harmony brought tonal music and *tonal polyphony* into prominence. The tonal system assumed a dominant role that it maintained until the end of the Romantic era, around 1900.

Tonal Counterpoint

tonal counterpoint As tonality emerged there also arose a contrapuntal style of writing, which remained the model for polyphonic texture until well into the nineteenth century. Stylistically, *tonal counterpoint* combines tonality with contrapuntal techniques, most of which had been used before 1600 in modal music. It retains wide applicability even today; hence it is used as the model for present-day study.

The Style of the Period of Common Practice

period of common practice Tonal counterpoint was developed during the *period of common practice,* the period between 1600 and 1900 in which composers in the Western world shared a more or less common musical style. Using the major-minor system of keys, this style included modulations and harmony with stereotyped, "normal" progressions. It will be advantageous to review the chart of normal progression that appeared in volume 1 (see table 1-1).

	group 5	group 4	group 3	group 2	group 1
	iii	vi	ii IV	V vii°	Ι
n minor key	ys				
group 6	ys group 5	group 4	group 3	group 2	group

TABLE 1-1. The normal progression of chords

-----: :

In addition to chord progressions, cadence patterns and many other facets of music became "normalized" during the period of common practice. A common vocabulary of familiar patterns provided the listener with clear tonality, that is, with tonal or key orientation, throughout a piece of music.

COUNTERPOINT IN THE STYLE OF THE PERIOD OF COMMON PRACTICE

We began a study of basic counterpoint in volume 1, where it was shown that harmony is a coordinating element that enables us to combine independent melodies, each with its own contour, direction, and rhythm. We shall now review this information in preparation for the study of polyphonic techniques. Our discussion will center on the procedure for writing a contrapuntal line with a given soprano. This procedure, which is illustrated using the melody shown in example 1-1, consists of two stages: (1) an analysis of the given melody with which the counterpoint will be written and (2) the actual writing of the counterpoint.





Analyze the Given Melody

In order to write tonal counterpoint, it is necessary to have an analytical understanding of both the harmonic implications and the melodic structure of the given line.

Step 1—Harmonic Analysis

First, identify the harmonic implications of the given line. Your decisions at this point may be tentative, subject to later adjustment. Usually preferable is a relatively simple harmonic background, with few altered chords and an emphasis on those chords lying close to the tonic in the chart of normal progressions (in the lower-numbered chord groups). Rather short harmonic cycles are also preferable, as longer progressions may create unwanted restrictions on melodic flow. If the analysis shows ambiguous moments, you should make tentative decisions, which are subject to later revision as the added melodies begin to take shape. Normal progressions are expected, of course, as is a moderately placed harmonic rhythm. Keeping the harmonic analysis rather basic, labeling primarily harmonies on the strong beats will allow greater freedom for melodic activity as voices are added (see ex. 1-2).

EXAMPLE 1-2. Basic harmonic analysis of given melody



Step 2—Melodic Analysis

Identify the more prominent chord tones in the given melody. These are usually emergent tones (see "Guide to Analytical Symbols" in the Appendix). In simple textures one emergent tone per measure is sufficient, but more may be needed, depending on the pace and contour of the melody and its harmonic implications. In locating these emergent tones, identify tones that will be significant in building sonorities with the added voices. The duration and metric location of these tones will be very important. In example 1-3 the emergent tones are indicated with upward arrows.

EXAMPLE 1-3. Location of emergent tones in given melody



Write the Second Voice

Step 1—Sketch Pitches

Make a sketch of the important pitches of the next most important line (after the melody) which is, in this case, the bass. As the new voices are added the more salient lines will be determined first, and the less salient parts will make any necessary accommodations as the texture becomes thicker. (See *emergent tones* in "Guide to Analytical Symbols.") Using stemless note heads, plot the important tones that are to be set against the emergent tones of the given melody. The exact rhythm will be determined later; our purpose now is to develop the overall shape of the second-most salient line. Although there are many examples in the literature in which the second line moves obliquely or parallel with the first, contrary motion will assure greater independence of the parts. Note the emphasis on the harmonic intervals of the third and sixth. These intervals are most useful in representing a chord in fewer than four voices. At this stage in the process, when locating the emergent tones, one seeks a balance between linear and vertical considerations. We must consider good voice leading, and since the part being added is the bass line, we must pay attention to the chord inversion that will be formed. Example 1-4 shows a sketch with these factors taken into account.

EXAMPLE 1.4. Sketch of important tones of the second voice



Step 2—Sketch Rhythm

The next step is to plan the rhythmic features of the second line. Several factors must be taken into account:

- 1. The "resultant rhythm," that is, the rhythmic pattern that is formed by the two voices sounding simultaneously, is given first consideration. Rhythmically weak or "dead" areas should be avoided. Usually a rather constant rhythmic flow is desirable, such that the attacks of the tones of the two lines are relatively evenly spaced. Gaps in the rhythmic activity that arise at this point may be filled later by the third part, but it is usually best to limit the responsibilities of the third voice, in order to preserve the salience of the second line.
- 2. When salient lines occur simultaneously the agogic accents often occur at different times. If the agogic accents coincide too often, the contrapuntal effect will be weakened. (See *agogic accent* in "Guide to Analytical Symbols.")
- 3. The second line may stress unity with the first line and borrow motives from it, or it may be differentiated and introduce one or two new motives of its own. Example 1-5 illustrates a moderately differentiated line.



EXAMPLE 1.5. Sketch of the rhythm of the second voice

Step 3—Complete the Second Voice

Having determined the most important pitches to be used and the broad rhythmic outline of the second part, you may complete the line by choosing and placing non-emergent pitches. The contour must remain "correct" in its details, that is, it must avoid forbidden parallels, allow leading tones to resolve, and so on. The basic sonority will be consonant, but nonharmonic tones, particularly passing and neighbor tones, will appear. Suspensions may also be used with good effect, but appoggiaturas and escape tones should be used sparingly lest they obscure the harmony. The chord representation should be clear, and non-emergent chord tones may become quite prominent in the course of completing the second voice. In example 1-6 the completed bass is given, with rhythm and all pitches specified. The selection of harmonic intervals shows some preference for thirds and sixths, but less than in the earlier sketch.

EXAMPLE 1-6. Second voice completed



IMITATION

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The procedure for composing imitative counterpoint in two parts was presented in volume 1 and will be reviewed here. The plan consists of three steps, illustrated in example 1-7. You may now follow procedures for writing counterpoint that are detailed earlier in this chapter. Steps 2 and 3 above are applied to succeeding portions of each voice if the imitation is to be continued: See (2) and (3) in example 1-7.

EXAMPLE 1.7. Two-voice imitative counterpoint



- (1) The given subject, the leader, appears in the first voice up to the point where the second (answering) voice enters. A harmonic analysis is included.
- (2) The second voice, the follower, is written at the chosen interval and delay, and a harmonic analysis is included.
- (3) The counterpoint of the leader is completed, using new material.

POLYPHONIC SEQUENCES

polyphonic sequence A motive or passage that is restated immediately in the same voice at a different pitch level is called a *melodic sequence*. When the sequencing process is extended to include all voices of a polyphonic passage it is termed a *polyphonic sequence*. The voices of a polyphonic sequence need not have the same motives.

The Two Essential Features

The *leg* is the element of a sequence that is restated at different pitch levels. A normal, unmodified polyphonic sequence consists of two or more voices simultaneously employing sequences that possess the same essential features, that is, the same pattern of pitch-level change and legs of the same length. Note how the pattern of pitch-level change is described for the polyphonic sequence shown in example 1-8. The length of each leg is also indicated.

EXAMPLE 1-B. J.S. Bach: Well-Tempered Clavier I, Prelude 20, BWV 889

polyphonic sequence: descending by seconds; 1-bar leg



The Leg

The leg is shorter than a phrase—typically two bars at the longest, and a metrically simple division of a measure at the shortest. Example 1-8 illustrates a one-measure leg, and example 1-9 shows one polyphonic sequence with a leg of one-half of a bar and a second sequence with a leg of one beat. Special care must be taken in identifying the first and last legs of a sequence, as different voices may take up or abandon the sequential pattern, or leg, at different times. Melodic sequences in individual lines become polyphonic sequences when all voices present participate in stating the sequential pattern. Often the polyphonic sequence will begin at a metrically weak point, as in example 1-8. In example 1-9, a motive taken from the first sequence (descending sixth with tied sixteenth notes and descending step) provides the basis for a second sequence using shorter legs.

EXAMPLE 1-9. Bach: Clavierübung, Partita II, Sinfonia



In order for a passage to be considered a sequence, of course, its leg must appear at least twice. However, a sequence is usually not used more than three times. Both sequences in example 1-10 end before the third legs are completed.

The Pattern of Pitch-Level Change

A sequence may be diatonic (as in ex. 1-10a in C major) or modulating. A sequence is modulating if its pitch-level change involves alterations of the scale and tonic or at least suggests temporary tonics through secondary dominants and such (as in ex. 1-10b in D major). Examples 1-10a and 1-10b illustrate polyphonic sequences in three voices. These passages are typical in that they maintain the sequential pattern in all three voices until the third leg, in which the voices abandon the pattern at different times.

EXAMPLE 1-10

Bach: Sinfonia No. 8
Bach: Sinfonia No. 3



Writing Polyphonic Sequences

The procedure for writing a contrapuntal sequence in two voices can be organized into four steps:

1. Give the subject to the first voice (ex. 1-11). This establishes the intervallic pattern of the first leg and the length of all legs of the sequence.

EXAMPLE 1-11. First leg in one voice



2. Repeat the leg in the first voice at a new pitch level (ex. 1-12). This establishes the interval of descent or ascent. As in example 1-12, it is common for a sequence to complete two legs and begin a third.

EXAMPLE 1-12. First leg and continuation



3. Assess the harmonic implications of the subject. With this harmony in mind, add a second contrapuntal voice to the first leg (ex. 1-13).



EXAMPLE 1-13. Addition of second voice to the first leg

4. Continue the counterpoint of the second voice with the later legs of the sequence (ex. 1-14). At this point you should check the melodic and harmonic continuity of the voices; some revisions may be necessary to assure a smooth transition from leg to leg. **EXAMPLE 1-14.** Polyphonic sequence in two voices



In example 1-15 the passage is continued to complete the harmonic cycle, and the analysis of the sequence is added.

EXAMPLE 1.15. Polyphonic sequence continued to cadence



INVERTIBLE COUNTERPOINT

Invertible counterpoint simultaneously satisfies two principles: variety and unity.

Basic Principles of Invertible Counterpoint

invertible counterpoint *Invertible counterpoint*, also called contrapuntal inversion, refers to the potential for exchanging voices within the vertical space of a polyphonic texture: Material that was originally lower in the texture can, at some later point, be placed higher, and the corresponding music that was originally above can be placed in the lower voice. The term is used whenever the restatement of material in the lower voice is exchanged with an upper voice; a third voice may be present but is not necessarily involved in the inversion process. The exchange of parts may occur at any point in

the music following their initial appearance. Sometimes the inversion occurs immediately after the initial statement, while at other times the inversion appears much later. However, the term invertible counterpoint is also applied to passages written so that any of three, four, or even five contrapuntal lines may be placed in the bass. If the music of two voices is treated as invertible counterpoint, it is called "double counterpoint"; if three voices, "triple counterpoint"; and so forth.

Inversion at the Octave

This is the most common type of inversion, and it illustrates the principle of intervallic inversion: Unisons became octaves, thirds became sixths, et cetera, as shown in example 1-16. Inversion in which these intervallic changes take place is called "inversion at the octave."



EXAMPLE 1-16. Inversion at the octave

If polyphonic lines are inverted so that these changes in intervals come about, it is said to be "inversion at the octave" also. In example 1-17 the principle of inversion has been applied to two polyphonic lines. Compare the bracketed portions of measures 3 and 4 with the corresponding portions of measures 5 and 6. Notice that the voices have exchanged positions and that the intervals between the voices have become inverted according to the relations shown in example 1-16. Because inversion at the single, double, or triple octave is virtually the same, all three are often referred to as inversion at the octave.

Inversion at Other Intervals

Inversion may also occur at intervals other than the octave. Inversion at the tenth and twelfth is found infrequently. The chart in example 1-18a applies to inversion at the tenth, and example 1-18b illustrates inversion at the twelfth.

EXAMPLE 1-17. Bach: Invention No. 15



EXAMPLE 1-18

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ь. Haydn: Mass No. 12. Contrapuntal Inversion at the twelfth



contrapuntal inversion at the twelfth, See mm. 1-2 in ex. b1

A careful scrutiny of the charts in examples 1-16 and 1-18a, showing each interval and its inversion, will reveal why inversion at the octave is so useful. In double counterpoint at the octave, most consonances remain consonances—that is, thirds become sixths, and unisons become octaves. One feature of double counterpoint at the tenth is that parallel sixths become parallel fifths.

**EXAMPLE 1-19.** Parallel sixths inverted at the octave, tenth, and twelfth



#### Writing Invertible Counterpoint

In writing invertible counterpoint we will limit ourselves to the octave as the interval of inversion. The procedure to be followed is based on that used in writing tonal counterpoint.

#### Analyze the Given Melody

#### 1. Harmonic Analysis

Select chords for the given melodic line, to which a lower part will be added later. Choose a relatively slow harmonic rhythm in order to keep the listener's attention focused on the melodic lines. You must take care to choose chords that, when inverted, will not produce an unwanted second inversion. For instance, a root-position IV chord (E-flat in the bass) in the first measure of example 1-20 would invert to become  $IV_4^6$  (B-flat in the bass). As explained in previous study, triads in second inversion are treated in very limited ways, so the inverted version must conform to such correct treatment.





#### 2. Melodic Analysis

Identify the more prominent chord tones in the melody. These tones are typically emergent tones. In example 1-21 the emergent tones are circled.

#### Write the Second Voice

#### 1. Sketch the Second Voice

Within the chosen harmonic framework, select the emergent tones for the added part. These tones are shown as stemless note heads in the bass in example 1-21. Certain intervals require special care. For instance, if a soprano note is harmonized so as to be the fifth of a triad, then under inversion it will become the bass note of a second-inversion chord, which must be handled correctly. Of course successive fourths in any passage would invert to become parallel fifths. Notice in example 1-21 that the original chords sketched in example 1-20 have been kept, although their inversions sometimes differ.



#### **EXAMPLE 1-21.** Sketch of the important tones of the second voice

#### 2. Complete the Second Voice

The second voice is completed using rhythms that are complementary to the first part. Attention to the resultant rhythm should prevent "dead spots," or unintended conflicts with the meter. Agogic accents in the two parts may coincide at strong metric points, but too frequent coincidence will weaken the independence of the added part. As example 1-22 shows, additional pitches are selected to provide melodic interest (a salient line) and correct harmony and voice leading.





#### **Invert the Passage**

This passage can be inverted by moving the material of the upper voice down a fifteenth (two octaves) into the bass voice and the lower material into the upper voice, as shown in example 1-23.



**EXAMPLE 1-23.** Inversion at the fifteenth of example 1-22

The original distance between the voices is an important factor in writing invertible counterpoint. If the given voices move as far as, say, an octave or farther apart, then the contrapuntal inversion at the octave is impossible: The upper part will not become the lower. Example 1-24a would require inversion at the fifteenth for a real exchange of parts to occur. In example 1-24b the parts are not exchanged after the first beat of measure 1.

#### **EXAMPLE 1-24.** "Inversion" at the octave without exchange of parts



Since the intervals available for invertible counterpoint are somewhat limited, the two parts to be inverted may, taken by themselves, produce correct but not necessarily very appealing or harmonically rich results. Combinations of chord root and third are preferred, and doubled roots are used sparingly. Remember that other voices may be present to fill out the harmony.

#### Analysis of Inverted Counterpoint

Identifying a passage in invertible counterpoint is simplest, of course, when the passage is followed immediately by its inversion. When there is a great deal of intervening material, one must be quite alert to notice a recurrence of a particular melodic line in combination with the same counterpoint with which it appeared earlier. The difficulties of recognizing an inversion may be compounded by the passage's recurrence in a different key. To determine the interval of contrapuntal inversion, locate a particular interval in the original passage and the corresponding interval in the inverted passage. Add these intervals, and subtract 1 from the sum: The result will be the interval of inversion. In example 1-25, note that in measure 2 a tenth becomes a sixth: 10 + 6 = 16, and 16 - 1 = 15, the interval of inversion.





contrapuntal inversion at the octave. See mm. 2-4

Subtracting 1 is necessary because our system of naming intervals counts the unison as "one," even though the distance between its pitches is "zero." When analyzing passages in invertible counterpoint, keep these points in mind:

- 1. Locate the beginning and ending by comparing the original and inverted material. Enclose both passages in brackets.
- 2. Indicate the device and the interval of inversion above the second bracket, and give the measure numbers for the original passage: "inversion at the octave; see measures 2-4."

One final point: The devices and techniques discussed in this chapter are not mutually exclusive. They may be combined in various ways—for example, sequence and imitation, inversion and sequence, imitation and inversion.

The development of the major-minor system together with advances in harmony brought tonal music and tonal polyphony into prominence around 1600, at the beginning of what is now called the period of common practice.

The preceding chapter deals with the analysis and writing of polyphonic devices in tonal counterpoint, including imitation, polyphonic sequences, and invertible counterpoint. Each of these techniques is useful as a means of achieving a balance of unity and variety in the music. The procedures for composing with these techniques call for a melodic and harmonic analysis of the initial material. This is followed by an incremental completion of the contrapuntal voice, taking care to avoid "dead spots" in the rhythmic flow and unwanted parallel motion between the voices, and maintaining a desirable level of interrelationship between the voices. While agogic accents occasionally occur simultaneously in one, two, or three voices, too frequent coincidence of these accents will weaken the independence of parts that is at the heart of the polyphonic texture.

# CHAPTER TWO

# Fugue and Fugal Movements

### Terms Introduced in This Chapter

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| fugue            | ritornello      |  |
|------------------|-----------------|--|
| subject          | treatment       |  |
| fugal exposition | restatement     |  |
| bead (of a fucue | episode         |  |
| subject)         | false entry     |  |
| answer           | stretto         |  |
| real answer      | coda            |  |
| tonal answer     | ritornello form |  |
| countersubject   | fugato          |  |
| codetta          | fughetta        |  |
| central portion  |                 |  |

fugue

subject

fugal exposition

*fugue* is a polyphonic work or portion of a work that presents one or more initial melodic themes, called *subjects*, in a systematic way known as *fugal exposition*, and then restates the subject one or more times. A more specific definition of the term is not very useful, as differing characteristics may be found in works by various composers. It is often suggested that the term refers to a technique, and not a specific form. Generally two parts can be identified within any fugue: (1) an exposition and (2) a central portion. Although the term *fugue* was first used during the Renaissance, it is the Baroque fugue (particularly of Bach and Handel) that today is considered typical. The Baroque era extended from about 1600 to 1750.

### EXPOSITION

A fugue is written for a specific number of voices or parts, usually from two to five. The voices enter in succession, each stating the subject in imitation of the preceding voice. This general description may be indistinguishable from descriptions of round or canon; but the imitation in fugues is of a highly specialized sort, as a more careful examination of the fugal subject and other components of the exposition will reveal.

#### The Subject

Fugue subjects normally are quite distinctive and make a strong impression that gives them a clear identity throughout the work. This identity is necessary in the context of complex contrapuntal textures that characteristically pervade the fugue. The subject may be as brief as two beats or as long as several measures. Often the subject opens with a striking figure that sets it apart from the remainder of the subject, as in example 2-1. This opening figure is known as the *head* of the subject.

#### head (of a fugue subject)

#### EXAMPLE 2-1

a. J. S. Bach: Well-Tempered Clavier I, Fugue 7, BWV 852



b. Bach: Well-Tempered Clavier I, Fugue 11, BWV 856



#### The Answer

answer

real answer

tonal answer

Immediately after the opening voice completes its statement of the subject, a second voice enters with the same material. This imitation is known as the *answer*, and it is usually transposed up a P5; that is, the imitation is at the 5th above (or 4th below). An answer in which every tone of the subject is transposed exactly up a P5 or down a P4 is called a *real answer*. Normally the subject appears in the tonic key and the answer in the dominant key (see ex. 2-2).

#### EXAMPLE 2-2

a. Bach: Well-Tempered Clavier I, Fugue 4, BWV 849



**b.** Bach: Well-Tempered Clavier I, Fugue 1, BWV 846



Each of the real answers in example 2-2, by itself, appears to be in the key of the dominant. When answering certain subjects composers use a modified type of imitation known as the tonal answer. In example 2-3 notice that each answer imitates like a real answer most of the time; however, one or more tones of the subject are answered at the P4 above or the P5 below. The tonal answer is most often found with subjects that either (1) begin on the fifth scale degree, (2) skip from the first to the fifth scale degree, or (3) modulate. Subjects that emphasize the first and fifth scale degrees present the tonic key in its strongest light; the tonal answer also emphasizes these tones, at least initially, and thus reaffirms the tonic and the overall tonality. The reasons and techniques for writing tonal answers are quite complex, as these were developed in the Renaissance period and altered over the centuries. We will not undertake a full discussion of this topic here. For the present we shall focus on the means for identifying a tonal answer, and leave the writing of tonal answers to a more detailed study of counterpoint. In example 2-3 the notes circled in each tonal answer are those that deviate from an exact transposition of the subject.



No. 2 (BWV 847): subject



No. 7 (BWV 852): subject



No. 8 (BWV 853): subject



No. 13 (BWV 858): subject



No. 18 (BWV 863): subject



#### Counterpoint Appearing with the Answer

As the second voice states the answer, the first voice provides a contrapuntal accompaniment. This accompanimental material may not be particularly significant in the later development of the fugue, or it may become very important. If it consistently appears with the subject as a kind of associate or partner melody, then it is known as a *countersubject*. When a countersubject is used it is usually written in invertible counterpoint with the subject, so that it may appear above or below the subject. Note the ways in which the countersubjects are used in examples 2-4a and 2-4b.

#### EXAMPLE 2-4

countersubject

Bach: Well-Tempered Clavier I, Fugue 11, BWV 856













In example 2-4a the music of the alto (in the lower staff) in measures 5-7 is found a P4 higher in the soprano in measures 10-12. In measures 5-7 the alto has the countersubject while the soprano has the answer; in measures 10-12 the soprano has the countersubject while the bass has the subject. Each voice enters with the subject or answer and then presents the countersubject with the entrance of the next voice.

In example 2-4b the countersubject appears in the soprano in measures 3-4 and in the alto in measures 6-7. If one compares the details of the countersubject in these two statements it becomes apparent that the countersubject includes only the last eight notes of the soprano in measure 3 and the alto in measure 6, and the first nine notes of the soprano in measure 4 and the alto in measure 7.

#### Codetta

One can determine the exact length of the subject by observing how much of the material of the opening statement is used in succeeding presentations and how consistently it is used. The subject may not include the material immediately preceding the entry of the answer. One might expect to find a comparable delay before the entry of the third voice; but whereas the subject prepares the entry of the answer by moving toward or even modulating into the key of the dominant, the answer does not always end with a ready approach to the tonic (especially before

codetta

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the entry of the third voice). A passage delaying the entrance of the third voice is called a *codetta* or *bridge* and usually modulates back to the tonic key. In many cases it consists of a continuation of the motives already used in the subject, the answer, or the counterpoint accompanying the answer. Notice that in each of the previous examples (exx. 2-4a and b) a one-bar codetta provides this transition in preparation for the entry of the third voice, which thus seems to arrive "late."

#### The Second Statement of the Subject

In most fugues the first, third, and fifth (etc.) voice entries present the subject, while the even-numbered entries present the answer. On rare occasions, however, one finds a fugue in which the subject is followed by two successive answers. The vocal terminology SATB is normally used to identify the entries of a fugue. This terminology is employed even when the ranges involved do not correspond to vocal capabilities. The differences between the registers used by a subject and its answer do, however, make it logical to follow a subject in the soprano or tenor with an answer in the alto or bass, and vice versa. In most cases the third voice will enter an octave above or below the first entry. As the third voice states the subject, the second voice will proceed with the countersubject (if there is one) or other contrapuntal material. Concurrently, the first voice may move to other material, but it also may present a second countersubject. One can determine whether a second countersubject has been used only by looking ahead in the fugue to see if the material in question appears regularly in association with the subject.

The terminology for describing the structure of fugues varies. The term *double fugue* is especially problematic. This term sometimes denotes a fugue with a regularly recurring countersubject, which is viewed as a second (double) subject. In some fugues the countersubject—or second subject—always appears with the subject, even in its initial statement. The effect of the opening, then, is one of two-voice counterpoint, in contrast to the monophonic opening that characterizes most fugues. Example 2-5 presents the opening of a well-known fugue of this type.

#### Continuation and Completion of the Exposition

Each voice of the fugue enters in turn with the subject or answer. When all voices have thus presented the subject or answer the exposition is complete. The exposition in example 2-4b ends on the downbeat of measure 8, and the central portion begins immediately thereafter. Occasionally, as in example 2-6, one finds a fugue in which the initial presentation of the subject in all voices is followed by a relatively brief passage leading to a strong cadence. In such cases, the cadence marks the close of the fugal exposition.






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If, on the other hand, the passage leading to a strong cadence is extensive, then it is usually best to assume that the exposition is complete when the last entering voice has stated the subject or answer. In rare cases the number of voices may fluctuate. The number of voices in the exposition may gradually increase, but this happens in a flexible way that does not obscure the structure of the exposition. In example 2-7 the presentation of a three-voice fugue is regular until measure 11, after which the number of voices varies between two and four.



EXAMPLE 2-7. Bach: Sonata in C for violin solo, BWV 1005, Fugue

#### **Analytical Method**

The following graphic approach can be used to diagram the presentation of material by the various voices. Figure 2-1 shows an analysis of examples 2-4a and 2-4b. Sections are labeled at the top of the graph; in each example here only the exposition is diagramed, and its codetta is labeled in parentheses (the bracket beneath the label marks the duration of the codetta). Each barline is marked, and the first and every fifth measure is numbered. Voices are graphed in the order of their ranges, high to low, and capital letters indicate the principal material employed: S followed by a dashed line denotes the subject; A followed by a dashed line denotes the answer; and CS followed by a solid line denotes the countersubject. Other material is shown with a jagged line. Such material may include counterpoint that is motivically related to the subject, answer, or countersubject, or it may be new material. Keys are indicated if they are in effect for at least two measures and confirmed by a clear cadence. Transient keys are shown in parentheses. a. Bach: Well-Tempered Clavier I, Fugue 11, BWV 856

#### ь. Bach: Well-Tempered Clavier I, Fugue 7, BWV 852





## THE CENTRAL PORTION

central portion ritornello treatment restatement episode If the exposition of the fugue seems highly formalized, the central portion is much less so. We can make two very broad generalizations that will be true of the *central portion* of most fugues: (1) The pattern of key succession describes a tonal arch similar to that found in binary forms; this arch consists of the establishment of the tonic key, a departure into various related keys, and a return to the tonic. (2) Melodically the fugue uses a *ritornello treatment* or "returning" treatment in which the subject or answer clearly returns in the central portion as *restatements*, and alternates with *episode* passages that are less directly related to the principal subject.

#### Restatement

Restatements of the subject occur in various tonic-related keys and thus form the midsection of the tonal arch. Whereas the exposition of the fugue presents a pattern of alternation between tonic and dominant keys, the central portion explores other related keys. Usually the restatement is simply a transposition of the subject, but it may also involve other kinds of modification, such as melodic inversion, augmentation, or diminution.

#### Episode

An episode is a passage in which no complete statement of the subject or answer appears (such statements are confined to the restatement passages). The episode normally explores motivic material derived from the subject, answer, countersubject, or other material from the exposition, and serves to develop these motives. Its motivic exploration can take the forms that we studied earlier—sequence, inversion, augmentation or diminution—as well as other types of modification.

#### false entry

stretto

Sometimes a composer, relying on the listener's expectations for alternating episodes and restatements, presents a *false entry*. In a false entry, the subject or answer head is presented as if to begin a restatement, but the voice then departs from the expected material and the passage thus assumes an episodic role.

#### Stretto and Coda

In restatements after the exposition, the subject may be answered with the same delay in imitation as was used in the initial statement, or it may be answered with a shortened delay. A restatement of the subject involving shortened delay in imitation is called *stretto*. Compare the four-bar delay between the subject and answer in example 2-4a with the two-bar delay between the three statements (in soprano, alto, and bass) of the subject in example 2-8.





The effect of stretto is more intense in fugues where the delay is shorter than that shown in example 2-8. Not all fugue subjects lend themselves to stretto, however. One might guess that, in the fugue shown in example 2-8, Bach worked out the various stretto possibilities very thoroughly, and perhaps immediately after he composed the subject.

The central portion of the fugue usually concludes with a return to the tonic key for the final restatement(s) of the subject. This is the typical treatment, but there are several ways in which a fugue might deviate from this norm. In some instances, departures from the tonic are so few that the conclusive effect of a returning tonic key is weakened, and in rarer instances, there may be no restatement of the subject after the return to the tonic key.

Any material that follows the return to the tonic and the final restatement is called a *coda*. Various contrapuntal devices may appear in the coda, as is true of the episodes; pedal points are particularly common.

### A FUGUE ANALYSIS

The Mozart fugue given in example 2-9 contains several of the features discussed above. Its central portion contains two episodes and two restatement sections.

Figure 2-2 graphically summarizes the points annotated in the score (ex. 2-9). Locations of contrapuntal devices are indicated by particular numbers, each of which is explained below the chart. Examples of special melodic treatment are similarly flagged with letters that are explained below the figure.



**EXAMPLE 2-9.** Mozart: Fugue for Piano, K. 154

imitation: seventh below, 2-beat delay polyphonic sequence: descending by seconds, 1-bar leg



subject in melodic inversion (bass)

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FIGURE 2-2. Summary of fugue annotations (ex. 2-9)

#### **Summary of Sections**

The Mozart fugue can be divided into the following sections.

| Exposition          | measures 1–13  |
|---------------------|----------------|
| Central Portion     | measures 14–54 |
| episode 1           | measures 14–25 |
| restatement group 1 | measures 26–44 |
| episode 2           | measures 45-46 |
| restatement group 2 | measures 47–54 |

Episodes and restatements divide the central portion of the fugue into segments of irregular length. The first episode is especially long and begins with a polyphonic sequence that links it to the last bar of the exposition (m. 13). Episode 2 is particularly brief and more loosely structured.

#### Key Areas

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The exposition is presented in the tonic key of G minor, with brief excursions to B-flat major. The central portion of the fugue emphasizes the key of D minor in the first episode, but the tonic key of G minor returns with the first group of restatements. The tonic key persists thereafter, except for a suggestion of C minor before and during the very brief second episode.

#### **Contrapuntal Devices**

Numbers appearing in the row "Devices" (fig. 2-2) have the following meanings. ing meanings.

- 1. Imitation: measures 7–9 (soprano, alto), at seventh below, 2-beat delay (occurs in the exposition: codetta).
- 2. Polyphonic sequence: measures 7–9, descending by seconds, 1-bar leg (exposition: codetta).
- 3. Inverted counterpoint: measure 12 (see m. 5), at the octave (soprano, bass).
- 4. Polyphonic sequence: measures 13–15, descending by thirds, 1-bar leg (episode 1).
- 5. Imitation: measures 19–21 (alto, bass), at the seventh below, 2-beat delay (episode 1).
- 6. Polyphonic sequence: measures 20–21, descending by seconds, 1-bar leg (episode 1).
- 7. Inverted counterpoint: measure 38 (see m. 4), at the octave (alto, bass) (restatement group 1).
- 8. Stretto: measures 41–44, modified imitation (soprano, alto) with melodic inversion (soprano), 1-bar delay (restatement group 2).
- 9. Stretto: measures 47–52, modified imitation (soprano, bass) with melodic inversion and augmentation (bass), at the octave above, no delay; also (bass and alto) at the fifth above, 3-bar delay (restatement group 2).

#### **Melodic Treatment**

The letters in the row "Melodic Treatment" (fig. 2-2) have the following meanings.

- a. Measures 13-15: episode 1 uses the head of the subject.
- **b.** Measures 19–21: episode 1 uses motives from the codetta (mm. 7–9) and motives presented in the counterpoint of the exposition (with the answer, m. 5).
- c. Measures 32–34: restatement of subject (bass) with melodic inversion.
- d. Measures 35–37: restatement of subject (alto) with melodic inversion.
- e. Measures 41–43: restatement of subject (soprano) with melodic inversion and the last tone an octave lower.
- f. Measures 42–44: modified restatement of answer (alto) with notes 3–7 lowered 1 step.
- g. Measures 45–47: episode 2 uses motives from the counterpoint of the exposition (m. 11 and m. 5).
- h. Measures 47–49: modified restatement of subject (soprano) with notes 3–7 raised 1 step.
- i. Measures 47–52: modified restatement of answer (bass) with melodic inversion and notes 3–7 raised 1 step.
- j. Measures 50–52: modified restatement of subject (alto) with melodic inversion.

We can make a few general observations about this subject and answer. The subject and answer are tonally unstable and include several altered chords (in mm. 2 and 5). Both subject and answer are modified frequently. The subject is characterized by the initial leap of a descending fourth (tonic to dominant tones), and the answer by the leap of a fifth (dominant to tonic tones); hence, this is a tonal answer (see ex. 2-10).

#### **EXAMPLE 2-10.** Forms of the subject and answer presented in example 2-9

**a.** S (subject): m. 1



ь. A (answer): m. 4



EXAMPLE 2-10. (continued)

c. S inverted: m. 32



d. S' inverted and modified (last note one octave lower): m. 41



•. S' modified (notes 3–7 one step higher): m. 47



r. A' modified (notes 3-7 lowered one step): m. 42



g. A' inverted, augmented, and modified (notes 3-7 one step higher): m. 47



The material in the final two bars (ex. 2-9, mm. 53–54) seems devoted to the cadential formula, which indicates that it is not a separate coda but rather an extension of the restatement passage preceding it.

#### FORMS

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The procedures used in the fugue became stereotyped somewhat after the Baroque period. Although the pattern of a regular exposition followed by a clear alternation of restatements and episodes may be found in many fugues, there are also examples in the literature that do not fit this "mold." The stereotyped pattern, sometimes referred to as the "school fugue," must be viewed in terms of "customary" and "typical," not "standard" or "required." There are fugues that have no episodes, but consist of a continuous stream of restatements (an example of this type is Bach's *Well-Tempered Clavier* I, Fugue 1). Sometimes, as in example 2-9, the tonal arch of a fugue may be altered by its spending much more time in the tonic key than in later departures. One may even find a fugue with two arches: the tonic returns well before the end, this is followed by further excursions to other keys, and then the tonic key is reestablished.

Evidence of this sort indicates that the fugue is not a "form" in the sense of a sectional scheme or plan. It is better understood as a procedure involving specific textural treatment. A fugue is often divided into two or three main sections such that the principal internal cadences of the movement occur within the central portion. The overall design of the "typical" fugue shares with other kinds of Baroque music the "returning" or "ritornello" treatment. *Ritornello form* consists of statements, called ritornello statements, in which earlier-used material returns at least once in a nontonic key, and at least once more in the tonic key. Episodes containing either related or contrasting material appear between some of these ritornello statements. In fugues the ritornello statements are termed restatements.

Not all fugues use even this very general plan, so a broad conception of the term *fugue* is necessary to avoid endless contradictions. In many Baroque suites the gigue movement is a fugue in binary form. The fugue shown in example 2-9 appears to be divided into two large sections, as is implied by the restatements and the return of the tonic key in measure 26.

#### APPLICATIONS OF THE FUGUE CONCEPT

Entire movements may be devoted to the fugal procedure without the term *fugue* appearing in the title. Larger choral works frequently include fugues. In Handel's *Messiab,* No. 25, "And with His Stripes We Are Healed," and No. 28, "He Trusted in God," are fugues. In Bach's Magnificat, No. 9, "Sicut erat," is an accompanied fugue in which additional supportive material appears simultaneously with the fugal procedures.

Sometimes a fugue comprises a portion of a movement. The overture of the Baroque period often consisted of a slow introduction followed by a fugal allegro. The term "fugal" is used in a general way to describe portions of works that are more than just contrapuntal or imitative, but exhibit other characteristics of the fugue as well. The term applies even when the treatment occurs within a relatively small part of a larger movement, or when the fugal sections are interspersed with homophonic passages. An interesting example of the latter usage is the last movement of Mozart's String Quartet, K. 387.

fugato

fughetta

There are other terms that refer to fugal concepts. The term *fugato* refers to a fugal exposition occurring in a piece that is not a fugue overall. Such passages appear in both choral and instrumental works. A *fughetta* is a small fugue. It is diminutive in scale and may contain the conventional elements of the fugue, or the central portion may appear shortened due to an absence of episodic passages.

#### ritornello form

## SUMMARY

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A fugue is a polyphonic work, or portion of a work, that presents one or more initial melodic themes, called subjects, in a systematic way known as a fugal exposition, and then restates the subject(s) one or more times. Generally two large formal sections can be identified: (1) the exposition, and (2) the central portion. Several concepts are associated with the exposition; these include the subject, answer, countersubject, and codetta. The central portion of the fugue typically contains episodes and restatements of the subject and may also contain stretto. A coda may be appended to the close of a fugue. In the organization of a fugue, melodic and motivic relationships, contrapuntal devices, and key relationships are important.

Pages 40 through 473 are available in the full version. Please see <u>www.shapingmusic.com</u> for information on obtaining this book.



Review



he following outline may be useful for reviewing the concepts presented in volume 1.

I. Musical elements

- A. Pitch organization (overall): scales, keys, modes
- B. Rhythmic organization (overall): tempos, meter
- C. Melody: melodic rhythm, contour
- D. Harmony
- E. Texture
- F. Timbre
- G. Dynamics
- H. Form
- I. Tension

II. Melody

- A. Agogic accents: arsis, thesis, subordinate agogic patterns
- B. Emergent tones: prominence from rhythm or contour
- C. Motives
 - 1. Motivic development
 - a. reappearance: recurrence, repetition
 - b. changes in pitch level
 - c. melodic sequence, legs
 - d. modified reappearance: inversion, retrogression, altered contour, altered rhythm, fragmentation, diminution, augmentation
 - 2. Motivic analysis (use of letters, brackets)
- D. Melodic cadences
 - 1. Conclusive
 - 2. Inconclusive
- III. Harmony
 - A. Chord types
 - B. Normal progression
 - 1. Chord groups

| Diatonic chords
in major keys | | | | | | |
|----------------------------------|---------|---------|---------|---------|---------|---------|
| group 7 | group 6 | group 5 | group 4 | group 3 | group 2 | group 1 |
| | | iii | vi | ii | V | |
| | | | | | | Ι |
| | | | 17 | IV | vii° | |

| | | ir | n minor key | ' S | | |
|-----------|-----------|----------------|-----------------------------|-----------------|---------------------------------------|---|
| | VII | III | VI | ii° | V | |
| | | v | i7 | iv | vii° | i |
| | | Seconda
ii | ry dominan
1 major key | nt chords
s | | |
| | V7/iii | V7/vi | V7/ii
V7/IV | V7/V | | |
| | | ir | n minor key | 7 S | | |
| | V7/III | V7/VI | V7/iv | V7/V | | |
| | | Secondary
i | y leading to
n major key | ne chords
's | | |
| | vii°7/iii | vii°7/vi | vii°7/ii
vii°7/IV | vii°7/V | | |
| | | ii | n minor key | /S | | |
| vii°7/VII | vii°7/III | vii°7/VI | vii°7/iv | vii°7/V | · · · · · · · · · · · · · · · · · · · | |
| | | Bo
i | rrowed cho
n major key | rds
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| | | P III | ₽VI | ii°
iv | vii°7 | |
| | | iı | n minor key | VS | | |
| | | | | ii | | I |
| | | | | IV | | |

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- 2. Harmonic cycles
- C. Nonharmonic tones: passing tone, neighbor tone, appoggiatura, escape tone, suspension, retardation, anticipation, double neighbor group, pedal point
- D. Harmonic rhythm: durations, agogic patterns in harmonic rhythm
- E. Harmonization
 - 1. Chord tones, nonharmonic implications
 - 2. Chord progression
 - 3. Harmonic rhythm
- F. Part writing
 - 1. Ranges, spacing, doubling, omission
 - 2. Inversions
 - 3. Voice leading: resolutions, relative motion
- G. Altered chords
 - 1. Borrowed chords
 - a. Changes in chord quality (ii°, iv)
 - b. Changes in roots (b III, b VI)
 - 2. Secondary dominants
 - a. Chord qualities
 - b. Root movement
 - c. Role in normal progression
 - d. Irregular progressions and resolutions
 - 3. Secondary leading-tone chords
 - a. Chord qualities
 - b. Root movement
 - c. Role in normal progression
 - d. Irregular progressions
- G. Harmonic cadences: perfect and imperfect authentic, half, deceptive, plagal
- IV. Tonality
 - A. Determination of keys
 - 1. Pitch complement and scale
 - 2. Harmonic implications (cadences and progressions)
 - B. Modulation
 - 1. Common chord (pivot chord) modulation
 - 2. Direct modulation
 - C. Key cycles
- V. Texture
 - A. Basic types: monophony, homophony, polyphony
 - B. Basic components (melodic roles)
 - 1. Salient line
 - S = salient line
 - 2. Recessive line
 - R = recessive line
 - 3R = three recessive lines
 - vR = variable number of recessive lines
 - 3. Implied lines
 - (S) = implied salient line
 - (R) = implied recessive line
 - (v)R = variable number of implied lines

1. Melodic doubling

Sx or Rx (also Sx2 or Rx2) = line doubled in octavesSx3 or Rx3 = line doubled in three octaves

- 2. Coupling
 - a. Partial (rhythmic only)

3R or R = three recessive lines, R R

coupled rhythmically

- b. Full coupling (rhythmic and in contour)
- 2R = two recessive lines, fully coupled
- 3. Heterophony

2R = two recessive lines in heterophony

- VI. Form
- A. Sectional or structural analysis (downward arrows)
 - 1. Level-1 phrases: length, cadences, arrows
 - 2. Higher levels: groupings of units, slashes on arrows, cadential relationships, unit relationships
- B. Forms: binary, ternary, bar, other sectional forms (three-part and fourpart, etc.)
- C. Tension analysis (upward arrows)
 - 1. Phrase crest: upward arrow
 - 2. Higher-level crests: slashes on upward arrows

SAMPLE ANALYSIS

A sample analysis of a short piece is given below, to allow you to review many of the analytical concepts discussed in volume 1. The music can be found in example 9-15. Also refer to that example to see how upward and downward arrows are used in this text, and relate that example to the following diagram of the sectional structure.



The work uses a two-part form, AB, with an introduction and coda. There are eleven phrases. The unit relationships are: a a' b a'' c c' d e f f. The keys used are all closely related to the tonic, D major.

Unity in rhythm and texture is achieved through the accompaniment pattern. Each of the two main sections is also unified by the melodic ideas revealed in the unit relationships of the phrases, in the melodic figures of cadential patterns (first in mm. 8, 16, and 24; and then in mm. 19–20 and 35–36), and in the cadential harmonic progressions in measures 19–20 and 35–36. An interlocking phrase is found in measure 12, and an overlapping phrase is seen in measure 36. Several other concepts are illustrated in the harmonic treatment:

Nonharmonic tones:

passing tones: measures 1, 2, 8, 28, 29, 30, 31, 43

appoggiaturas: measures 18, 45

anticipations: measures 16, 45

suspensions: measures 4, 8, 13

retardations: measures 10, 24

Diatonic seventh chords:

V7 and inversions: measures 14, 16, 19, 21, 23, 35, 37, 39, 41, 44

ii7 and inversions: measures 3, 7, 21, 23, 25, 27, 34, 37, 41

Borrowed chord:

G: vii $^{\circ}\frac{4}{3}$: measure 32

Secondary dominants: measures 38, 42, 43

Sample harmonic analysis: measures 37-45

| D: ii5 | V7 | V ⁶ _{5/vi} | vi | IV | V7 | | I | 16 |
|--------|----|--------------------------------|----|------|----|----|---|----|
| ii5 | V7 | V ⁶
5/vi | vi | V7/V | | V7 | I | [] |

Secondary leading-tone chords: measures 11, 32

Common chord modulations: measures 12, 24, 28

Sample harmonic analysis: measures 10-13

D: I IV V vii°7/V $\int_{f^{\sharp}} \left\{ \begin{array}{cc} V & V_3^4 \\ III \end{array} \right\} i$ Direct modulation: measure 21

Ambiguity of key: measures 28-34 (D or G?)

Texture:

| Introduction | A and B | Co | oda | |
|--------------|----------|----------|-----------------|---------|
| S
[2R | S
[vR | S
[3R | S
2R
π Rx | S
vR |
| | | | L R | |

Heterophony:

Between piano (soprano line) and voice: throughout, except for measures 32-33 and passages without voice

Between piano (tenor line) and voice: measures 9-10, 17-18, 32-33

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Guide to Analytical Symbols

Structural Analysis

First-level unit (phrase)

Volume 1, Chapter 3









Rhythmic and Melodic Analysis

Volume 1, Chapter 2



Tension Analysis

Volume 1, Chapter 3



Crests of higher-level units

Crests of phrase at first level

Volume 1, Chapter 24





Textural Analysis

Volume 1, Chapter 15



GLOSSARY

ADDED-TONE CHORD: A chord consisting of a triad plus at least one additional diatonic or chromatic tone other than the seventh; most common are added seconds and sixths.

AGOGIC ACCENT: The psychological emphasis that accrues to a tone that is preceded by one or more shorter tones.

AGOGIC PATTERN: A group of durations ending with the longest and including all the preceding shorter durations. The last tone is called the *thesis*; the shorter note(s) is termed the *arsis*. Agogic patterns within an arsis are called *subordinate* agogic patterns.

ALTERED CHORD: A chord containing a tone not in the prevailing diatonic scale.

ALTERNATE PROGRESSION: A

progression that does not appear on the chart of normal progressions but occurs with such frequency that it cannot be considered irregular; examples include IV–I, V–vi, vi–V, and iii–IV.

ANSWER: The initial imitation of the subject in a fugue. When the imitation is consistently at the fifth above or fourth below (or octave transpositions of these) the answer is called real, and an answer that departs from this is termed tonal. With more than two voices the answer is usually given to the even-numbered voices, and the subject to the odd-numbered voices.

ASYMMETRICAL METER: Meter in which the number of beats is not divisible by two or three. Sometimes termed irregular meter.

ATONALITY: Absence of tonality, implying that a tonal center has not been established. The two principal types of atonality are *free atonality*, for which pitch-class set analysis was designed, and *serial atonality*, for which the twelve tone system was designed.

AUGMENTATION: The appearance of a motive with the note values increased by a specific amount, often doubled.

AUGMENTED BIXTH CHORDS: Chords that contain the interval of an augmented sixth, usually formed by the lowered sixth degree (diatonic $\hat{6}$ in a minor key) in the bass and the raised fourth degree in an upper voice. The most common augmented sixth chords are: Italian sixth chord, It6 (iv6 with a raised root in a minor key); German sixth chord, Gr_5^6 (iv $_5^6$ with a raised root in a minor key, or doubly augmented as ii $_3^4$ with raised root and third); and French sixth chord, Fr_3^4 (ii $_3^4$ with a raised third in a minor key). A dominant chord with lowered fifth also contains an augmented sixth in any inversions other than the first.

BASSO OSTINATO: See ostinato.

BIMODALITY: Simultaneous use of two different diatonic modes, usually with the same tonic.

BITONALITY: See polytonality.

BORROWED CHORDS: Chords that contain tones borrowed from another mode; for example, in a major key, a chord that uses one or more tones found in the parallel minor key, such as the minor iv chord.

CHANGING METER: Relatively frequent changes in meter, often within phrases. Also called *mixed meter*.

CHROMATIC PIVOT CHORD: A pivot chord that is an altered chord within one or both of the keys involved in the modulation.

CODETTA: A brief passage that concludes a section or larger passage. The term is usually applied to internal portions of a composition, rather than endings.

COMBINATORIALITY: The property of a twelve tone series in which the first hexachord of an original form of the series contains the same tones as the second hexachord of at least one retrograde inversion or one inverted form of the series. If it has one such relationship and not the other, it is called semicombinatorial. If the series has such a relationship with at least one form of both the inverted and the retrograde inversion of the series it is termed all combinatorial.

COUNTERBUBJECT: The counterpoint accompanying the answer of a fugue, and successive statements of the subject or answer.

COUPLING: Two or more simultaneously sounding parts with identical rhythm with or without identical melodic contour. The coupling may be partial, or rhythmic, meaning the lines have identical rhythms; or the coupling may be full, in which case the lines have identical rhythm and contour. The lines may be an intervallic distance apart except the unison or one or more octaves, in which cases the device is termed *doubling*.

CREST OF TENSION: The point in a phrase or higher structural unit at which the tension reaches its highest level and the release of tension begins.

DERIVED SERIES: Twelve tone series that uses the same pitch class set for subsets within the series.

DIMINUTION: The rhythmic relationship between a motive and its reappearance with note values systematically shortened, usually by half the value.

DOMINANT, AUGMENTED: A dominant chord in which the fifth has been raised such that the triad is augmented.

DOMINANT WITH LOWERED FIFTH: A dominant chord in which the fifth has been lowered such the triad has a major third and a diminished fifth. Such a chord usually includes a seventh.

DYADS: Two tones forming a melodic or harmonic interval.

EMERGENT TONE: A melodic tone that achieves special prominence through its rhythmic location, duration, contour, or other feature.

EPISODE: In a fugue, a passage in the central portion in which the subject or answer does not appear. Usually includes motivic material from the exposition and often employs contrapuntal devices. In ritornello form, a passage between statements of the ritornello theme.

EXPOSITION: In a sonata-allegro, sonatina, or sonata-rondo form, the initial section, in which the main themes are presented. In a fugue, the initial section, in which the subject or answer appears initially in all the voices.

FIRST-LEVEL UNIT: A phrase that serves as the basic unit of musical form. The analytical method used in this text indicates the point between phrases by a downward arrow with single slashes.

FORMAL UNIT: A unit of musical structure. The smallest such unit is the phrase. Phrases combine to form periods, which group to form ever larger units, allowing the creation of huge musical works. Each unit is set off by the ending (cadence) of the preceding unit. Sometimes called structural unit.

FREE ATONALITY: See atonality.

FREE TONALITY: See tonality.

FRENCH SIXTH CHORD: See augmented sixth chords.

GERMAN BIXTH CHORD: See augmented sixth chords.

GROUND BASS: See ostinato.

HARBINGER CHORD: In a modulation, the first chord that is clearly not in the original key. This harbinger signals the approach of the key.

HARMONIC CYCLE: A chord progression extending from one appearance of the tonic chord (excluding tonic six-four chords) to the next. It includes one or more intervening chords.

HETEROPHONY: The simultaneous sounding of two or more differing versions of essentially the same melody.

HEXACHORD: A set of six tones that may appear harmonically and/or melodically. Particularly important in twelve tone serial technique.

INTERVAL CLABS: An interval, its inversion, all compound versions of these, and all enharmonic versions.

INVERSION (TWELVE TONE BERIES): The form of a twelve tone series in which the original pitch relationships (the prime form) are reversed in direction, up or down, starting with the first pitch.

INVERTIBLE COUNTERPOINT: A polyphonic passage that may be presented with the bass material used in an upper voice and the material from an upper voice changed to the bass.

IRREGULAR METRIC GROUPINGS: Meters in which the secondary accents create groups of more than one size, usually combinations of two- and three-beat groups.

ITALIAN BIXTH CHORD: See augmented sixth chords.

KEY CYCLE: A series of key changes that begins with a particular tonic key and returns to that key.

LINKING TONEB: A series of melodic tones in a variation that retains order similar or identical to that in the theme, thereby linking the melodic experiences through this similarity. Additional tones may appear around the linking tones, the rhythms may vary, and the associated harmony may or may not vary.

MELODIC DOUBLING: The reinforcement of a melodic line by another voice or instrument sounding the same melody in unison or octaves.

MELODIC INVERSION: The reappearance of a melodic line with the directions reversed—those intervals that at first were ascending are later heard descending, and vice versa.

MIXED METERS: See changing meter.

NEAPOLITAN SIXTH CHORD: An altered chord that is a first-inversion major triad on the lowered supertonic.

NONFUNCTIONAL HARMONY: A harmonic progression that deviates consistently from normal progression.

NORMAL PROGRESSION: A progression that has been traditionally used so often that it can be considered normal and expected. Such progressions are reflected in the chart of normal progressions. Harmony that uses predominantly normal progressions is said to be functional.

OBTINATO: A musical idea that is repeated without change in the same part. An ostinato can be rhythmic, melodic, or harmonic. A *basso ostinato* or *ground bass* is an ostinato in the lowest voice, and may be used as the main unifying basis for variations.

PALINDHOME: A musical unit in which the elements or relationships are the same forward and backward.

PANDIATONICIBM: Diatonic music that does not use functional harmony and often emphasizes melodic independence.

PANTONALITY: The treatment of all twelve tones with equal emphasis, so as to avoid establishing a tonal center.

PARALLELIBM: Parallel movement of intervals or chords going beyond the treatment of the period of common practice.

PENTATONIC SCALE: A scale consisting of five tones.

PERMUTATION: The appearance, in rearranged order, of a group of successive tones.

PITCH CLASS: A group of pitches represented by a letter name that includes that pitch in all octaves and all enharmonic forms.

PLANING: See parallelism.

POLYCHORD: A single chord that consists of two or more clearly identifiable chords. The most common polychord consists of two chords, and is called a *bichord*.

POLYTONALITY: The simultaneous use of more than one tonality. When two tonalities are used it is termed *bitonality*.

PRIME SERIES: The original form of a twelve tone series.

GUARTAL CHORDS: Chords that appear to be constructed by stacking fourths.

GUABI-CADENCE: A cadence effect created by any of various elements, such as contour or rhythm, but not reflected in the harmony.

GUINTAL CHORDS: Chords that appear to be constructed by stacking fifths.

RECAPITULATION: The return of a section of music heard earlier, usually the first part of a piece returning toward the end.

RETRANSITION: A passage that precedes the return of the main theme or section. It usually involves a change of key between the surrounding sections. In sonata-allegro and sonatina forms the term may refer to a brief, clearly defined passage preceding the recapitulation or preceding a repeat of the exposition. In forms such as the ternary and rondo forms, the term is applied to passages preceding a return of the main theme or section.

RETROGRADE INVERSION: The form of a twelve tone series in which the pitch relationships of the inversion of the series are taken in reverse order.

RETROGRADE BERIES: The form of a twelve tone series in which the original pitch relationships are taken in reverse order.

BALIENT LINE: A melodic line that captures the primary attention of the listener.

BECONDARY DOMINANT: A chord (other than V) that has been altered to have the relationship of dominant to a chord that is not tonic; for example, the dominant of the supertonic chord, V/ii.

BECUNDAL CHORDS: Chords that appear to be constructed by stacking seconds.

BEGUENCE: Repeated statements of a relatively brief musical passage at progressively changing pitch levels. The initial passage is less than a phrase in length and typically can be from one or two beats to two measures in length. If the sequence is in only one voice it is called a *melodic sequence*. If it is in all voices of a polyphonic texture it is called a *polyphonic sequence*.

STEP PROGRESSION: A stepwise relationship between emergent tones. Other emergent or nonemergent tones may intervene.

SUBPHRASE UNIT: A structural unit that forms a component division of a phrase. Not all phrases have subphrase units. In the Classical period subphrase units were often two measures in length.

TERTIAN CHORDS: Chords that appear to be constructed by stacking thirds. This includes triads, seventh chords, and higher tertian chords (ninth, eleventh, and thirteenth chords).

THIPD RELATIONSHIP: Used to describe a chord progression in which there is the distance of a third between successive chord roots. Or in key relationships, the distance of a third between successive keys.

TONAL ARCH: A pattern of key organization in which the initial key of a work returns at the end after modulating to other keys.

TONE CLUBTER: A chord that appears to be constructed of stacked seconds. Such chords are also termed *secundal chords*.

TRANSITION: A passage that leads from one section to another and usually involves a change of key between the surrounding sections. In sonata-allegro and sonatina forms the term refers specifically to the passage between the first and second themes, in the exposition and recapitulation. In other forms, such as the ternary and rondo forms, the term is applied to passages following the main theme and leading to new sections.

TRICHORDS: A set of three tones that may appear with harmonic or melodic treatment or both.

UNIT RELATIONSHIP: The thematic relationship of one formal unit to another. These relationships are expressed by letters of the alphabet. Two phrases that are identical have a unit relationship aa. If the phrases are quite different, the unit relationship is ab. If they are similar they might be called aa'. Such relationships are also seen in higher structural units, in which case capital letters are used—for example, ABA.

WHOLE-TONE SCALE: A six-tone scale in which there is a whole step between each scale tone.

| V | ol | Ш. |
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| Vol Book | Page | Change |
|----------|------|--------|
|----------|------|--------|

| | Text | | | |
|---|------|----|---------------------------------|--------|
| 2 | tx | 13 | ex.1-18 bracket should be UNDER | mm.1-2 |

- 2 tx 17 ex.1-25 bracket UNDER Inv. ctrpt. in mm.2-4
- 2 tx 21 ex.2-2a m.3 of answer = a#, not a natural
- 2 tx 34 chart, move Bass S----- from mm.10 12 to mm.11-13



2 tx 34 chart, add alto S----- from mm.26-28



2 tx34chart, extend alto ----- into m.442 tx34chart, move bass A'--- to m.47



- 2 tx 34 chart, the word "meiodic" in the LH border should be "melodic" (appears twice.)
- 2 tx 74 ex.4-8c key sig. = 3 flats
- 2 tx 81 ex.4-17c m.3 B natural in RH, not A natural
- 2 tx 110 ex.5-14 m.4 tie RH grace notes

- 122 ex.6-5 m.8 reduction, add B flat treble 2 tx
- 145 ex.7-5 m.15 B natural 2 $\mathbf{t}\mathbf{x}$
- 155 ex.7-15 m.14 needs c: with bracket for the pivot chord 2 tx
- 159 ex.7-18 move RH from m.10 to m.9 2 tx
- 161 ex.7-19 m.5 below the bIII & iff7 there must be a circled 5 (5), not a circled 6 (6) 2 tx
- 175 ex.7-26 m.23 LH piano bass = E-flat, not D 2 tx
- 177 ex.7-26 m.29 RH piano 4th beat = B-flat, not D 2 tx
- 186 ex.8-1a The instrument name C.ap. should really be C. a p. 2 tx
- 189 add x4 after S: for Fl(1&2) so that S:Fl(1&2) will be Sx4: Fl(1&2)2 tx
- 193 ex.8-7a omit text over vln I, mm.1-3 2 tx
- 194 ex.8-7 viola part, must omit m.5 number!! 2 tx
- 208 3rd paragraph m.29, not 28 2 tx
- 212 the word "dynamic" should be "dynamics" 2 tx
- 221 ex.10-1 m.66 LH 2nd note should be C, not B 2 tx
- 223 ex.10-1 m.102 RH 1st of the two 8ths should be G#, not G natural 2 tx
- 266 ex.12-2 m.24 downarrow with single slash 2 tx
- 267 ex.12-2 at end of m.40 change downarrow to have 2 slashes 2 tx
- 267 ex.12-2 at end of m.48 put downarrow with 3 slashes 2 tx
- 2 285 ex.14-1 d,e,f,g use c# f# g# tx
- 288 ex.14-4a place below the staff..."chromatic parallelism with M triads" 2 tx
- 288 ex.14-4b place below the staff "chromatic parallelism with enharm. M3s" 2 tx
- 288 ex.14-4c place below the staff "chromatic parallelism with Mm7" 2 tx
- 289 ex.14-5 place below staff "chromatic parallelism with M, m, A triads" 2 tx
- 311 middle analysis: Sx4 with (3)R & R with heterophony bracket 2 tx
 - Note below the dashed line that should be added:
 - Sx4
 - $\begin{bmatrix} 1 \\ 3 \end{bmatrix} R$
- 313 top analysis Svx Sx int and S int R combined with full coupling bracket [see separate sheet] 2 tx
- 352 ex.16-24 m.4 the top letter of the M/M should be a small m 2 tx
- 358 line 4 replace "the" with "they" 2 tx
- 360 ex.16-33 m.3 last beat in viola needs 8th beam slash for repeated notes 2 tx
- 396 paragraph 1 line 5 replace "the lowest tone" with "an end tone, the lowest tone if the ends are the same." 2 tx
- 396 paragraph 2 line 3:add "The normal form of the first set in example 18-12 is D-F#-A-Bb, closer to an end tone than F#-2 tx A-Bb-D"
- 400- paragraph 2 line 7: M3 should be m3, and m6 should be M6. 2 tx
- 2 404 ex.18-14 m.2 vln on beat 2 = [0,1,5] not [0,1,4]tx
- 406 ex.18-16b, top staff, m.1 last tone = E-flat 2 tx

| 2 | tx | 419 | paragraph 2 omit all words including and between "the phrase at; however." |
|---|-----|-------|---|
| 2 | tx | 419 | paragraph 2 change mm.51-58 to 1-8 and 56-69 to 9-19 |
| 2 | tx | 420 | ex.18-22 m.67 the down arrow should be an up arrow with 4 slashes |
| 2 | tx | 422 | ex.18-22 m.15 the dash-line after the up arrow should extend all the way to the down arrow |
| 2 | tx | 430 | ex.19-4 m.1 Kl.=A natural, not F natural |
| 2 | tx | 433 | ex.19-6a has asterisk demanding footnote: "* actual pitch" |
| 2 | tx | 436 | ex.19-8b 3rd note=C natural, not E natural |
| 2 | tx | 436 | ex.19-8b 3rd note = c natural not E |
| 2 | tx | 477 | In outline III.G.1.a. add just before final paren "etc." |
| 2 | tx | 485 | Glossary: free tonality needs definition: "music with tonal center but free, unscaled selection of 9 to 12 tones. |
| • | Wor | kbool | ς |
| 2 | wb | 15 | exr.15-6 sample $m.4 = Mm_M13$ in steps 6 and 7 |
| 2 | wb | 16 | exr.2-2d. refer to ex.2-11, also in exr.2-2d.2. |
| 2 | wb | 27 | exr.2-2e add barl;ine in sys.3 mm.268-269 (mm.4-5 of the sys.) |
| 2 | wb | 50 | exr.3-2 sample: change 2 [^] - 1 [^] to 7 [^] - 8 [^] |
| 2 | wb | 60 | exr.4-1b m.1 LH, F not A |
| 2 | wb | 61 | exr.4-1c m.7 LH GCEG, not Ab |
| 2 | wb | 77 | ewxr.5-1a(1b) m.2 top voice g#, not b# |
| 2 | wb | 81 | exr.5-1f m.13 vln c natural, no c# |
| 2 | wb | 86 | exr.5-3j add IV in progression; II6 V/IV IV V9 I |
| 2 | wb | 105 | exr.7-1a m.7 beat 4 RH last note in sop Ab, not Bb |
| 2 | wb | 105 | exr.7-1a m.9 beat 4 RH: last notes in RH = Ab, not G, and Cb, not Bb. |
| 2 | wb | 105 | exr.7-1a mm.4,5,6,7 all f natural, not f-flat |
| 2 | wb | 108 | exr.7-1d m.1 RH 3rd beat, G natural |
| 2 | wb | 165 | exr.10-2a m.1: "piuttostso" should be changed to "piuttosto" |
| 2 | wb | 195 | exr.11-1.b m.97, NO flat on the C in LH |
| 2 | wb | 202 | exr.11-1c m.40 LH = Ab, RH = Ab |
| 2 | wb | 205 | exr.11-1d m.114 RH sop = C, not E |
| 2 | wb | 226 | exr.12-1a m.68 1st note = E |
| 2 | wb | 230 | exr.12-1b systems 2 & 3 from p.231 belong at top of p.230 |
| 2 | wb | 233 | exr.12-1c tempo: dotted quarter = 84 |
| 2 | wb | 236 | exr.12-1c m.167 1st note in $LH = F#$ |
| 2 | wb | 237 | exr.12-1d m.7 LH, 1st beat down beat = G, not Ab |
| 2 | wb | 297 | exr.14-1.7. m.2 beat 3 RH top = G natural (g2) |
| 2 | wb | 299 | exr.15-2c.2. item f) MmM13 (two dash-lines must be seen, not one!) |
| 2 | wb | 308 | exr.15-1b m.10 LH bass = Bb |
| 2 | wb | 313 | exr.15-2e, f,g: change 14- to 15- |
| 2 | wb | 314 | exr.15-2a m.27 lowest alto = octaves with the sop, RH 3rd note of triplet = C #, not B |

- 2 wb 314 exr.15-2a m.32 RH last chord has C natural, not C#
- 2 wb 316 exr.15-2a m.65 should be F natural, not Fb
- 2 wb 317 exr.15-2a m.78 LH add E on top of middle note of the triplet; omit A below in 2nd tenor.
- 2 wb 317 exr.15-2a sys.2 m.78 LH beat 1, triplet middle note E# + C#, not E# + A#.
- 2 wb 318 exr.15-2a m.96 omit words etc. above staff.
- 2 wb 319 exr.15-2a m.118, 2 top tones in middle of triplet = B-& F#, not A & E
- 2 wb 323 exr.15-3a m.36: 8-----
- 2 wb 330 exr.15-6 sample m.4 Mm--M13, two dash lines must be visible
- 2 wb 345 exr.16-3a: d4 should be d5
- 2 wb 382 exr.18-2 sample: the a should be 1, and the b should be 2.
- 2 wb 382 exr.18-4b item 1 should have a bass clef, not treble
- 2 wb 391 exr.18-6 5) should say: © John Vander Slice Used by permission
- 2 wb 400 exr.19-1c m.2 delete (G) in cello part
- 2 wb 400 exr.19-1c m.2 : vln 1 & 2 = eb, not G natural
- 2 wb 400 exr.19-1c m.10 cello 2nd note = g#, not g natural, and 9th note = Eb, not E natural
- 2 wb 415 exr.20-1b mm.2-3: tie B to B

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