



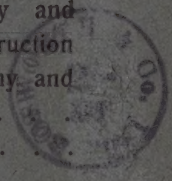
DR. T. H. YORKE TROTTER

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- „ II. Chromatic Harmony and Composition
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HARMONY AND FORM.

By T. H. Yorke Trotter.

Part II.

Chromatic Harmony and Composition.

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Part II.

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CHAPTER XI.

Chromatic Chords.

Asiatic music differs from European in that the one is based upon a variety of melodic types involving the use of intervals smaller than the semitone, while the other has developed an elaborate system of harmony, which is only possible when the semitone is the smallest interval.

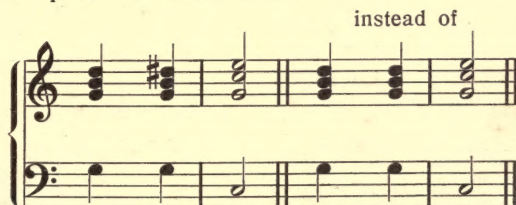
The basis of the one is dissonant, of the other consonant. But, although the small intervals beloved by the Eastern are unknown to the Western mind, yet the desire for the use of tones as near to each other as possible is very apparent, and has given rise to what is known as chromatic harmony. A chromatic chord is one that contains one or more notes not belonging to the diatonic scale; and the inclusion of these notes is due in the first place to that love of small intervals which is one of the moving powers in Asiatic music.

In the following example this desire for small intervals is apparent.



The D sharp in the Alto leads up to E, which thus is approached by a semitone, instead of by a whole tone. The inclusion of these chromatic notes also effects a considerable difference in the effect, and thus helps to give colour and variety to a composition.

Roughly speaking, the principle may be laid down that any note in a chord may be sharpened or (what is more rare) flattened in order to lead by semitone up to the next note.



The limitation is the obvious one that the altered note should not appear in its original state in any other part.

The following is not good, because of the D sounding against D sharp.



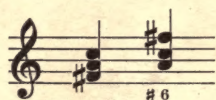
The origin of chromatic harmony is, therefore, the desire to approach notes by a semitone rather than by a whole tone. But it must not be supposed that all chromatic notes proceed only by semitone—on the contrary, once the chromatic chord has been found, its treatment is free. It may, as will be seen later, be used for the purpose of modulating to another key, or it may be treated freely without modulation, but the *tendency* of chromatic notes will be to move to the next sound.

Modern harmony is constantly adding to the list of chromatic chords that can be used, until at the present time it may be asserted that any chord may be used in any key, provided the treatment follows the lines proper to the use of chromatic harmony. By far the most common of such chords, however, are the ones that contain chromatic notes leading up to the most important notes in the key.

The most important notes in a key are tonic and dominant, so the chromatic notes most commonly used occur in juxta-position to tonic and dominant.

Dealing first with the dominant, we observe that in the major key the diatonic notes next to the dominant are a whole tone away while in the minor key, the note below is a whole tone, the note above a semitone away. In the major we can, therefore, obtain two chromatic notes next to the dominant, while in the minor key there can only be one. Thus in the key of C major we can get F sharp and A flat as chromatic notes: in C minor A flat appears as a diatonic note, and so F sharp is the only chromatic note next to the dominant.

If we consider in what chords F sharp is likely to appear, we see that if we make it the root of a chord we will get a diminished triad, which, as we have observed, is not satisfactory in its original position. This triad



may, however, be used in its first inversion.

If F sharp be taken as the third of a chord, we get a chord on the supertonic with a major instead of a minor third



This chord is very common both in its original position and in its first inversion. It must, however, be made clear that it may be the means of a modulation. In this case it will not be a chromatic chord, but diatonic in the new key. In order to find out which of the two it is, we must see how it is followed. If it is followed by some chord that is distinctive of the new key, it will be a modulating chord, but if the next chord either destroys the feeling of modulation by changing the chromatic Fsharp to F natural or simply leads up to a cadence in the old key, no modulation will occur.

Key G. Key G. Key C. Key C.

6 6 5
4 3

The appearance of the raised fourth of the scale as the fifth of a common chord is more rare. It can, however, be used in this way:—

Schubert, Sonata in A minor.

Exercise. In the keys of D, E, F, A flat and G flat major, play chromatic chords with the raised fourth and follow them by some chord which does not effect a modulation. It will be best to make the raised note either ascend to the dominant or fall a chromatic semitone, for the tendency of sharpened notes is to rise, but they *may* fall a chromatic semitone, while the tendency of flattened notes is to fall, but they *may* rise a chromatic semitone.

The note immediately above the dominant may be flattened, and appear as the root, third, or fifth of a chord.

The first two of these chords belong to the tonic minor. They do not therefore effect a change of key-centre and may be freely used. The minor chord on the sub-dominant is extremely common and often takes the place of the major sub-dominant in cadences. The major chord on the flattened sixth can be used instead of the sub-mediante in the false cadence.

Exercise. Play plagal cadences in major keys, using the minor instead of the major chord on the sub-dominant, and false cadences using the major chord on the flattened sixth instead of the sub-mediante.

The third chord contains two chromatic notes, one of which is immediately above the dominant. In its original position it is usually followed by a dominant discord or common chord inverted.



But by far the most common use of this chord is in its first inversion. In this case the bass note is doubled, because the sixth is a chromatic note, and the sixth, which, it will be observed, is a semitone above the key-note, is generally placed in the treble.

It is now known as the Neapolitan sixth, and can be used both in the major and in the minor modes, though it is far more common in the minor.

It may be followed by a cadential $\frac{6}{4}$ -chord on the dominant, or by a dominant common chord or discord or by an inversion of the chromatic chord on the supertonic. The sixth generally falls a second or a diminished third or rises a chromatic semitone.

Of course there are many other ways of dealing with this chord, its use in modulation will be at once apparent, leading as it does to or from flatter keys.

Exercise. Play and write Neapolitan sixths in different keys, following them by suitable chords.

The student also should note any Neapolitan sixths in the works of the great masters, and observe their effect and how they are treated.

The chromatic notes in the above-mentioned chords come above and below the tonic and dominant notes. It is equally possible to have chromatic notes above and below other degrees of the scale, in fact any chord may be introduced in any key provided it is approached either semitonically or from some other chord nearly related to it.

A few examples are given below.

A musical score for piano, consisting of two staves: a treble clef staff on top and a bass clef staff on the bottom. The music is in a minor mode and features several chromatic chords. Three asterisks (*) are placed above the treble staff, marking specific notes in the upper register. The bass staff provides a harmonic accompaniment with various chord voicings.

In the minor mode the most common chromatic chords are the major chord on the supertonic and the major chord on the flattened second. The former is useful in that it enables one part to approach the dominant by semitone from below; the latter appears in its first inversion as the Neapolitan sixth.

Exercise. Play and write Neapolitan sixths in B minor, C sharp minor, F minor, E flat minor, and follow them by cadences.

The effect of the major chord is more restful than that of the minor. Accordingly composers were in the habit of ending compositions written in the minor, with a major chord. This was called the Tierce de Picardie.

Basses and Melodies.

Five staves of musical notation, all in bass clef, showing bass lines and fingerings for various chords. The notation includes numbers 1-5 for fingers and sharp symbols (#) for accidentals. The staves are arranged vertically, showing a progression of chords and their corresponding fingerings.

Melody.

A single staff of musical notation in treble clef, showing a melody line. The melody consists of a series of eighth and quarter notes, with some accidentals (sharps) and a final note with a fermata.

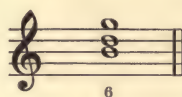
In the key of B minor write the following succession of chords, and with the aid of unessential notes build up a short composition. Tonic, second inversion dominant, first inversion tonic, sub-dominant, second inversion tonic, dominant seventh, sub-mediante, first inversion sub-mediante, first inversion dominant in D, tonic in D, first inversion supertonic in D,

first inversion chromatic supertonic in D, second inversion tonic, dominant seventh, tonic in D, first inversion D chord, first inversion dominant seventh in G, tonic in G, first inversion tonic in G, first inversion supertonic in G, dominant in G, sub-mediante in G, Neapolitan sixth in B minor, second inversion tonic in B minor, dominant seventh and tonic.

Play and write progressions introducing chromatic chords in E major and F minor.

Modulate from F major to E minor by means of the Neapolitan sixth in E minor and from G major to A flat major by means of the chromatic chord on the flattened sixth in G.

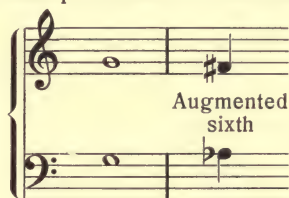
Show in what keys the following chord may occur either as a diatonic or a chromatic chord.



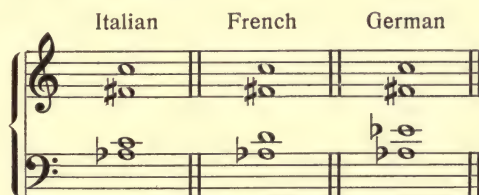
CHAPTER XII.

The Augmented Sixth.

On p. 92 it was said that chromatic notes were most commonly used in juxta-position to tonic and dominant, and it was also shown that in the major key there could be chromatic notes both above and below the dominant, while in the minor key the note a semitone above the dominant was diatonic, so that only the note a semitone below the dominant could be chromatic. A combination of the two notes, the one a semitone above, the other a semitone below, gives us the chord known as the Augmented Sixth. In its original position the note a semitone above the dominant is the bass-note. To arrive at this chord it is necessary first to take the dominant, then to write in the bass the semitone above, and in one of the other parts the semitone below. For example G is the dominant in the key of C; the bass of the augmented sixth will, therefore, be A flat, while there will be an F sharp in one of the other parts.



There are three forms of this chord to which distinctive names have been given. The first, called the Italian sixth, has the key-note in addition to the two notes already given. The key-note is doubled on account of the chromatic nature of the other notes, and also because it is always good to double the most important note. The second form, known as the French sixth, has the key-note and the second of the scale; the third form, to which the name German has been given, the key-note and the minor third of the scale.



These three forms can be freely interchanged.

Exercise. Write and play the three forms of the augmented sixth in D and E flat major, F sharp and B flat minor.

In the resolution it will easily be seen that the tendency of the bass is to fall, of the augmented sixth to rise to the dominant. But the bass note may remain or rise a chromatic semitone, while the augmented sixth may remain or fall a chromatic semitone.

Accordingly four ways of resolving the chord will appear:—

1. On the dominant common chord (but the German sixth is not usually treated in this way, as consecutive fifths occur).
2. On the $\frac{6}{4}$ on the dominant.
3. On the last inversion of the diminished seventh.
4. On a chromatic discord with a supertonic root. (This chord will be explained in the next chapter.)

In the first two resolutions the bass note and the augmented sixth proceed in the normal manner; in the third resolution the bass-note remains while the augmented sixth falls a chromatic semitone, while in the last case the bass note rises a chromatic semitone while the augmented sixth remains.

1. 2. 3. 4.

#6 6 # 6 5 #6 4 — —

4 3 2

&c.

Exercise. Play and write the augmented sixth in its three forms, and resolve in four ways in the keys of E and F major, G and C sharp minor.

The augmented sixth may be inverted in any way, but the inversions are not nearly so frequently used as the original position, because of the wish to approach the dominant by semitone in the bass. The last inversion with the augmented sixth in the bass has a peculiarly gloomy effect. In treating the inversions all that is necessary is to observe the tendency to semitonic movement, and the fact that the chord of resolution should be a dominant chord or dissonance, or an inversion of a dominant chord or dissonance, or a chromatic dissonance with a supertonic root, or an inversion.

#6 6 7 4 6 6 4 6 5 6

#4 # 5 # # 4 5 3 7 4 3 5

&c.

As time goes on, and chords like these become more and more commonplace, the treatment of them gets more and more free, so that the tendency to semitonic movement is ignored and the ordinary resolutions are little used. Moreover, other notes than the ones given above may be inserted in the chord, though the three forms called Italian, French and German are by far the most commonly used. It is necessary, however, to understand the original use of such chords before experimenting with them. The student should accustom himself to recognise chords in any music he is studying, and to observe unusual methods of treatment.

The chord of the augmented sixth in its three forms may also be written with its essential notes a semitone above and a semitone below the tonic. In this case it is customary to resolve it on the tonic major (rarely on the tonic minor) chord, or on a dominant discord. It may be inverted, and in the inversions the notes progress as in the original position.

The augmented sixth can easily be recognised by the fact that it contains two notes that do not belong to any one scale, and these two notes make the interval of an augmented sixth or a diminished third.

In the German form it is frequently used for the purpose of modulation to and from the key a semitone above. This is due to the fact that the dominant seventh of the higher key sounds exactly the same as the augmented sixth of the lower key. Thus the dominant seventh in C (G B D F) is identical with the German sixth in B (G B D E sharp). As a cadential effect is given by the $\frac{6}{4}$ on the dominant, the modulation is usually made from the higher to the lower key.

Exercise. Modulate from D to C sharp minor, from E to E flat, from G to F sharp, from A minor to A flat major.

Each modulation should be played on the piano and written. Also write original passages introducing the augmented sixth and its inversions in as many ways as possible.

Figured basses.

1.

2.

4 2 5 2 6 4 3 6 5 4 3 6 7 6

6 6 6 6 6 6 7 3

Unfigured basses.

1.

2.

Melody.

Harmonise the given melody and introduce the Neapolitan and augmented sixths.

Write and play the following succession of chords, and then with the aid of unessential notes &c. build up on them a composition.

Key E minor. Last inversion dominant seventh, first inversion tonic, second inversion dominant seventh, tonic, first inversion sub-mediante, Italian sixth in G major, dominant in G, last inversion dominant seventh in G (last inversion German sixth in F sharp minor), second inversion tonic in F sharp minor, dominant seventh in F sharp minor, sub-mediante, D minor chord, first inversion leading-note chord in C, first inversion tonic in C, sub-dominant in C. Neapolitan sixth in E minor, second inversion dominant in E minor, dominant seventh, tonic.

CHAPTER XIII.

Chromatic Sevenths on Supertonic and Tonic.

The Supertonic Seventh.

Chromatic notes, as we have seen, tend to come next to dominant and tonic. The commonest dissonance which contains a chromatic note is the one borrowed from the key of the dominant, in which key it is itself a dominant discord. Thus the dominant seventh of G can be used in the key of C. It is now called the supertonic seventh. It must be distinguished from the diatonic seventh *on* the supertonic, which begins with a minor third, while the supertonic seventh has the same intervals as the dominant seventh, and therefore begins with a major third.

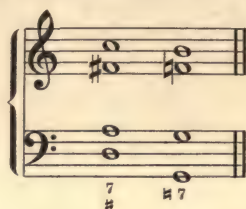
Chromatic chords and discords tend to resolve either on the cadential $\frac{6}{4}$ on the dominant, or on a dominant discord; for as they stand they are out of the key, and the dominant discord or $\frac{6}{4}$ on the dominant serve to bring them into the key. The first resolution of the supertonic seventh will, therefore, be on the $\frac{6}{4}$ on the dominant. In this case the seventh remains, and the third rises a second.

Musical notation showing the resolution of the supertonic seventh of G to the cadential $\frac{6}{4}$ on the dominant of C. The treble clef contains the notes G, B, D, F# (dominant seventh of G) in the first measure, which resolves to G, B, D, E (cadential $\frac{6}{4}$ on the dominant of C) in the second measure. The bass clef contains the notes G, B, D, F# (dominant seventh of G) in the first measure, which resolves to G, B, D, E (cadential $\frac{6}{4}$ on the dominant of C) in the second measure. The notes are labeled with numbers 7, 6, 5, 4, 3 below the staff.

The seventh, dissonance though it is, may be doubled because it is the key-note, and in the resolution one seventh remains, while the other goes to be the sixth in the $\frac{6}{4}$ chord.

Musical notation showing the resolution of the supertonic seventh of G to the cadential $\frac{6}{4}$ on the dominant of C, with a doubled seventh. The treble clef contains the notes G, B, D, F# (dominant seventh of G) in the first measure, which resolves to G, B, D, E (cadential $\frac{6}{4}$ on the dominant of C) in the second measure. The bass clef contains the notes G, B, D, F# (dominant seventh of G) in the first measure, which resolves to G, B, D, E (cadential $\frac{6}{4}$ on the dominant of C) in the second measure. The notes are labeled with numbers 7, 6, 5, 4, 3 below the staff.

The second resolution is on to a dominant discord. In this case the seventh falls a second, while the third falls a chromatic semitone.



The supertonic seventh can resolve on the first inversion of the tonic common chord, because the bass simply moves up a second, and, as has been seen, when the bass moves by step of a second only, progressions that would otherwise have not been good, are allowed.



The first and second inversions will resolve both on the $\frac{6}{4}$ on the dominant and on a dominant discord; the last inversion can only resolve on a dominant discord, for the dissonant note should not skip.

The supertonic seventh can also be used in the minor key. In this case both the third and the fifth are chromatic. The treatment is exactly the same as in the major key.

Exercise. Play and write supertonic sevenths and inversions in G, E and A flat major, B, G and F minor. Resolve them in all possible ways.

The Tonic Seventh.

The supertonic seventh is borrowed from the key one degree sharper, the tonic seventh from the key one degree flatter. Thus in the key of C, the key of G provides the supertonic, the key of F the tonic seventh. The former is, however, by far the most useful, for it leads directly up to the $\frac{6}{4}$ on the dominant, or to a dominant discord. The tonic seventh, though it resolves on a dominant discord, contains no note directly leading

up to the dominant. Its first resolution is on to a dominant discord. In this case the seventh rises a chromatic semitone, while the third rises a second.

Its second resolution is on to a supertonic discord, which is simply a roundabout way of coming home. In this case the seventh falls a second, the third rises a major second.

All the inversions will resolve in both ways.

The tonic seventh can be used in the minor key, but here it is even less useful on account of its major third, which is in disagreement with the minor third of the key. Thus the E natural of the following tonic seventh will make a bad effect with the E flat of the key chord.

The best way to use this chord in the minor key is to defer the sounding of the tonic, by resolving on a supertonic discord.

Exercise. Play and write tonic sevenths and their inversions in D, E, F and A flat, and in G minor.

From the foregoing it will be seen that every chord with the intervals of a dominant seventh may be used in three keys; as the dominant seventh in one key, the supertonic seventh in another, and the tonic seventh in a third. This chord, therefore, which as a diatonic chord can only come in one key, can be freely used as a chromatic chord. Moreover a seventh may be struck as a dominant and quitted as a supertonic or tonic, or the reverse may be the case. In the following example the sevenths are struck as dominant and quitted as supertonic sevenths, so that, without stopping in any key, the dominant sevenths of every key are introduced.

A musical score for piano, consisting of two staves (treble and bass clef). It shows a sequence of chords in various keys, demonstrating chromatic movement. The chords are: D7, Eb7, E7, F7, F#7, G7, Ab7, A7, Bb7, B7, C7, C#7, D7. The notation includes accidentals and stems for each note of the chords.

Tonic sevenths may be treated in like fashion. In this case the motion will be to sharper keys.

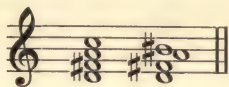
A musical score for piano, consisting of two staves (treble and bass clef). It shows a sequence of tonic seventh chords in various keys, demonstrating chromatic movement to sharper keys. The chords are: D7, Eb7, E7, F7, F#7, G7, Ab7, A7, Bb7, B7, C7, C#7. The notation includes accidentals and stems for each note of the chords. The text "&c." is written to the right of the second staff.

Exercise. Resolve the following chords in three major keys and three minor keys.

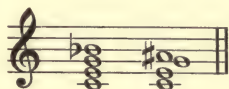
A musical score for piano, consisting of two staves (treble and bass clef). It shows a sequence of chords for resolution exercises. The chords are: D7, Eb7, E7, F7, F#7, G7, Ab7, A7, Bb7, B7, C7, C#7. The notation includes accidentals and stems for each note of the chords.

The student has been shown (page 99), how to modulate to a key a semitone higher or lower by using the dominant seventh of the higher key, which sounds exactly the same as the German sixth in the lower key. The supertonic and tonic sevenths may be used instead of the dominant seventh, thus giving means of modulating to other keys. The supertonic seventh sounds the same as the German sixth in the key an

augmented fourth (or diminished fifth) higher. Thus the supertonic seventh in C sounds the same as the German sixth in F sharp.



The tonic seventh sounds the same as the German sixth in the key a major third higher. Thus the tonic seventh in C sounds the same as the German sixth in E.



Exercise. Modulate from B minor to F minor, and from A major to D flat major.

In the key of D major write the following succession of chords, and on them build up a composition by the aid of unessential notes, suspensions, &c. Tonic, first inversion tonic, supertonic seventh, dominant seventh, sub-mediante, French sixth, second inversion tonic, dominant, tonic, second inversion dominant seventh in B minor, tonic B minor, first inversion tonic B minor, second inversion tonic in A, dominant seventh and tonic in A, A minor chord, first inversion tonic seventh in D, last inversion dominant seventh, first inversion tonic, second inversion dominant, tonic, first inversion dominant seventh, tonic, first inversion tonic, sub-dominant, first inversion supertonic seventh, second inversion dominant, dominant seventh, tonic.

Figured basses.

1.



2.



Unfigured basses.*Melody.*

CHAPTER XIV.

Supertonic and Tonic Ninths.

Just as chromatic sevenths may be borrowed from the keys most nearly related, so also may ninths.

The supertonic ninth is the dominant ninth of the key on the sharp side of the original key. It may be either major or minor, but the major ninth is uncommon in the minor key. As in the case of the dominant ninth, the ninth itself may be got rid of by making it fall to the root or rise to the third of the same chord, and in the last case the third must not be sounded with it.

When the whole chord resolves together the chord of resolution is the $\frac{6}{4}$ on the dominant or a dominant discord. In the first case the ninth may remain or rise a chromatic semitone, in the second case the ninth falls a second.

In the inversions the root is almost invariably omitted. The chord then appears on the augmented fourth of the scale with the intervals of a leading or diminished seventh.

The seventh, which is the original ninth, may be got rid of by making it fall a second while the other parts remain, or the whole chord may resolve on the $\frac{6}{4}$ on the dominant or on a dominant discord.

When the root is omitted the seventh, consisting altogether of minor thirds making a diminished seventh, is by far the most common, both on account of the semitonic approach to the bass and sixth in the $\frac{6}{4}$ chord, and also on account of the ambiguous nature of the chord, which makes the resolution come as a welcome relief. The two last inversions cannot resolve on a $\frac{6}{4}$ and are therefore not so useful.

In all cases the ninth may resolve while the other parts remain. The root may be inserted when the ninth resolves on the third, which must not appear in any other part.

Exercise. Write and resolve the supertonic minor ninth and its inversions in D major and G minor.

Play the supertonic minor ninth with the root omitted, in E and F, and in C and B flat minor. Resolve them on the cadential $\frac{6}{4}$ on the dominant. Play chords so as to approach this chord in the best possible manner.

The Tonic Ninth.

The tonic ninth belongs to the key flatter than the original key. As in the case of the other ninths, the ninth which may be either major or minor may resolve on the root or third of the same chord while the other parts remain, but when it resolves on the third, the third should not be sounded in any other part.

When the whole chord is resolved, the chord of resolution may be a dominant or a supertonic discord. In the first case the ninth, if major, remains, if minor ascends a chromatic semitone. In the second case the ninth may remain, fall a second, or rise a chromatic semitone.



In the inversions the root is generally omitted. The chord now appears as a seventh, leading or diminished, on the major third of the scale. All the inversions can resolve both on a dominant and supertonic discord.

7 #4 6 7 6 6 5 6 7 6 #6 4 —
 ♭5 2 ♭5 5 4 3 ♭ ♭5 5 2 —

4 6 4 — #6 6 5 ♭6 #6 6 ♭6 #4 6 ♭5
 3 5 3 2 ♭5 4 3 4 2 3 4 2 ♭4 #4 6 ♭5

The ninth may always be resolved before the rest of the chord, in which case the tonic seventh or one of its inversions is left, and the root may be inserted whenever it is possible to make the ninth resolve on the third, while the other parts remain.

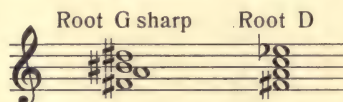
Exercise. Write and resolve tonic minor ninths and their inversions in A and E flat major. Play the tonic minor ninth (root omitted) in F major and resolve it both on a dominant and supertonic discord.

Both the supertonic and tonic ninths are chiefly used with the root omitted and with the minor ninth. In this form they appear as diminished sevenths, that is to say, chords built up of minor thirds. The ambiguous nature of such chords makes them extremely useful in composition. This ambiguity is caused by the fact that every diminished seventh may be four different chords according to the way it is written. Thus in the following example every chord sounds exactly the same, but they all belong to different keys.

♭7 ♭6 4 #6 #4 3 #6 5

The root of a diminished seventh is always a major third below the seventh in its original position. Thus the root of the first chord in D, of the second F, of the third G sharp, and of the fourth B. Now every diminished seventh may be used in three keys; as a dominant, supertonic or tonic discord. Therefore, the first chord may be resolved as a dominant discord in G major or minor, as a supertonic discord in C major or minor, or as a tonic discord in D major or minor. Similarly the second chord may resolve in B flat, E flat or F majors and minors; the third chord in C sharp (or D flat), F sharp and G sharp (or A flat) majors and minors. The fourth chord in E, A, and B majors and minors. Thus it is evident that one chord can be made to resolve in any key. Modulations may be easily effected by it, and as any diminished seventh may always be followed by any other diminished seventh, an effect of ambiguity may be created, which lasts until the last seventh is resolved. The device of effecting modulations to remote keys by the diminished seventh has become well-worn and stale. Still it is necessary that the student should understand it. As the diminished seventh can occur in any key, composers often do not trouble about its notation, but write it so as to save accidentals. As a result it is not always easy for an inexperienced person to see at first hand the connection of chords, more particularly as in modulating the chord is often written to suit neither key. The student should be quite clear what key is being left and what key is being approached; the manner in which the modulation is effected will then appear.

It is generally best, in making a modulation to a remote key, to choose the supertonic ninth of the new key, for the reason that the supertonic ninth can resolve upon a $\frac{6}{4}$ on the dominant, and the $\frac{6}{4}$ almost more than any other chord establishes the key. A dominant discord may belong to either a major or a minor key, but the $\frac{6}{4}$ shows at once if the key is major or minor. To modulate from F sharp major to C major it would be best to choose the following chord, which can be seen to be a supertonic ninth in C, and also a supertonic ninth in F sharp.

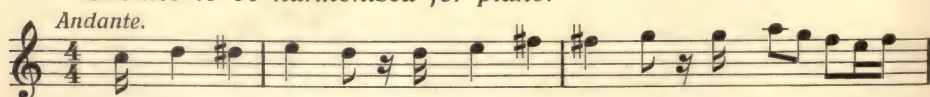


Exercise. Modulate from D minor to G sharp minor, from E major to B flat minor, from E flat major to F sharp minor by the diminished seventh.

Write the three diminished sevenths that can be used in D, and the three that can be used in A flat. Show how they coincide, and modulate from D to A flat by each of them in turn. The student should play modulations from C to every other key by the diminished seventh.

Write short successions of chords introducing the supertonic and the tonic ninth in various keys.

Melodies to be harmonised for piano.



Fill up the following figured and unfigured basses.

In the key of B minor build up compositions in different styles on the following successions of chords. Tonic, first inversion dominant with minor third, Italian sixth, dominant seventh, tonic, first inversion supertonic in D, dominant in D, diminished seventh in G, tonic in G, supertonic ninth (root omitted) in D, second inversion tonic in D, dominant seventh in D, tonic in D, chord of B flat, first inversion dominant of B flat, last inversion dominant seventh of E flat, first inversion tonic in E flat, Italian sixth in B flat minor, second inversion tonic in B flat minor, last inversion dominant seventh B flat minor, first inversion tonic in B flat minor, tonic in B flat minor, supertonic ninth (root omitted) in B minor, second inversion tonic in B minor, dominant, sub-dominant, last inversion German sixth, second inversion tonic, dominant seventh, tonic.

CHAPTER XV.

Pedals.

A Pedal is a note sustained in one part through harmonies to some of which it does not belong.

The principle of having one sound going on throughout the whole course of a piece is a very old one, and is found equally in Asiatic as well as European music. As instruments of percussion, such as the drum, were the first to be used in music, and as such instruments only give one sound, the pedal or drone going on continuously is found everywhere. And so in early vocal music the same effect is found, so that we find melodies sung, while another part is confined to one sound only. In such cases there is no feeling of harmony, but simply the repetition of a drone. Instruments such as the bagpipes are constructed on this design.

In modern music the use of the pedal is a very common device. The notes used for the pedal are generally tonic or dominant, but other notes are also found.

A double pedal is made by sustaining two notes, tonic and dominant in the lowest parts.

While the pedal goes on, modulations may be made in the upper parts. These should generally be made chromatically, that is to say without skips, and should be only to the keys in which the pedal is a harmony note. For example, it would not be good to modulate from C to A major above a pedal on G, for G sharp is the diatonic note in the key of A.

The pedal should begin and end by being a harmony note, though while it lasts any harmonies may be written above it. While the pedal continues the figuring is made from it, though it ceases to be the real bass of the chord.

In piano music it is not necessary to sustain the pedal note throughout. It may be left and struck again without ceasing to be a pedal.

An inverted pedal is a pedal in an upper part, and it is possible for the treble and bass to have the same note as a pedal.

The value of a pedal note in composition consists in several things. 1. The retention of the tonic at the beginning and end of a piece serves to accentuate the central point. 2. The retention of the dominant at any point in the piece serves to lead up to the tonic. Indeed, after a course of modulations to remote keys, a dominant pedal is the easiest way to prepare for the return of the central key, while near the end of the piece the same pedal note helps to accentuate the feeling of tonality. 3. The use of a pedal note takes away the necessity for motion to and from the same note. Motion backwards and forwards to the same note is rarely strong. Better effects are obtained by sustaining the same note instead of quitting and returning to it. For example, the following progression is weak:—



but by sustaining C the weak effect in the bass is taken away.



4. The pedal gives a dissonant effect which is often very useful, for by it even a succession of common chords can be made to produce a feeling of dissonance. 5. On account of the use of instruments with a drone bass throughout in pastoral countries, it has grown to be a convention in music to use a pedal bass in pastoral music. A Musette is a composition written chiefly on one bass note. It derives its name from an instrument of the same type as the bagpipes.

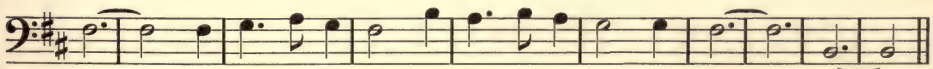
Write short compositions showing the use of the pedal.

Fill up the following unfigured basses.

1.



2.



Melodies for piano.

1. Schubert.

Musical score for Schubert's melody, 2/4 time signature, key of D major. The score consists of three staves. The first staff contains the main melody. The second staff shows two first endings: the first ending leads back to the beginning, and the second ending leads to the final cadence. The third staff shows the final cadence.

(A tonic pedal must be kept through the whole of the first part.)

2. Musette.

Musical score for Musette's melody, common time signature, key of D major. The score consists of two staves. The first staff contains the main melody. The second staff shows the accompaniment.

CHAPTER XVI.

On so-called Faults in Part-Writing.

There are certain things that the student is always admonished to avoid as being faults. It will be as well to say a few words about these faults, in order that their nature may be understood; why they should at times be avoided, and when they can be admitted.

The student has already been told that in vocal writing the same two parts should never move in octaves with each other. The reason for this restriction is the obvious one that the octave is simply a reproduction at another pitch of the same note. If the same two parts move in octaves, one part is destroyed and the balance of the four parts at once upset. Suppose, however, that it was desired to make a melodic passage stand out. In this case it would be quite good to make two parts, say treble and tenor, sing the passage in octaves. The writing would now be in three and not in four parts. In instrumental writing, when the number of parts is not defined, it is always good to double up any passage in the octave in order to make it prominent. The bass, for example, being a most important part, may freely be doubled in the octave. It is, however, rarely good to let an upper part move for two or three notes in octaves with the bass, unless to gain any special effect, for this procedure interferes with the harmonic progression.

Similar motion between the extreme parts to an octave, tends to check the free flow of the parts. It is seldom good to give treble and bass the same note unless they proceed in contrary motion. In the cadence, on the other hand, when the effect aimed at is one of repose, the treble and bass generally both have the tonic.

The empty and unsatisfactory nature of the fifth has already been noticed. To make two parts move in fifths brings out this emptiness, more especially when the connection between the chords is not a close one. In instrumental music, in cases when the separate motion of the various parts does not appear, consecutive fifths are often used, more especially when the hollow sound is desired. In chords closely connected or in a succession of discords, consecutive fifths may even be used in vocal

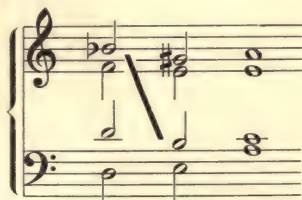
writing, for here they are either not noticeable or are not disagreeable. When one of the fifths is diminished little objection can be taken to their use.

Similar motion between the extreme parts to a fifth is objectionable again, because the hollow-sounding interval is made too prominent. But when the top part moves only one degree no objection can be taken, for the motion by conjunct degrees covers up anything that would otherwise not be good.

A common rule is, that the skip of an augmented interval or of a major seventh is forbidden. One reason for this prohibition is the dissonant character of the interval, for, as has been already shown, tones following each other have in certain particulars somewhat the same effect as if they were struck together. In instrumental music this dissonant effect is often to be desired, hence augmented skips are common. In vocal music the skip of an augmented interval or of a major seventh is unmelodious and difficult to sing with true intonation. But the skip of an augmented interval is quite good even in vocal music, (1) when both notes belong to the same chord, (2) when the skip is made to an unessential note, (3) in the case of the harmonic form of the minor scale. The reason for these exceptions will be fairly obvious. A change of position of the notes in a chord produces no inharmonious effect, nor is it difficult to sing, for both sounds belong to the one chord, and the ear hearing the one expects the other. Unessential notes are felt to be what they are, that is ornamental, and the skip is really made to the note on which the unessential note resolves. Lastly, the harmonic form of the minor scale is in such common use, that little or no difficulty should be experienced in singing the intervals of which it is composed.

By "False Relation" is meant the sounding of a chromatic alteration of a tone, in a different part from the one in which the original tone was sounded. The dissonant effect of, for example, sounding C sharp in the tenor, immediately after a C natural in the treble, will be at once evident. But even in vocal music, where the different tone-colour of the various voices makes false relation objectionable, exceptions are made to the general rule as follows:—

1. When one of the two sounds making a false relation belongs to a chromatic chord.
2. When one of the sounds is an auxiliary note or an appoggiatura.
3. In the case of the ascending and descending melodic minor scale.
4. When one of the sounds proceeds by semitone to the next note.
5. In the case of ambiguous chords like the diminished seventh. The first exception often appears when the Neapolitan sixth is followed by the dominant common chord.



In cases like this the chromatic note is felt to be simply the alteration of a diatonic note, and as the tendency of a flattened note is to fall, this tendency will be carried out in spite of the false relation.

Auxiliary notes simply convey the impression that they are ornamental notes leading up to the next note. They give, therefore, no feeling of false relation. Indeed, it is by no means an uncommon thing to find the raised auxiliary struck with the unaltered note. An appoggiatura cannot be an augmented second away from its harmony note. Therefore an appoggiatura to the sixth in a minor key must be the flat seventh of the key, and so we can get the raised and unaltered sevenths sounding together.



In the melodic form of the minor scale, the raised sixth should be considered either as a chromatic note or as an auxiliary. The third exception will, therefore, be covered by the first and second.

The fourth exception is due to the desire to approach important notes by semitones and not by whole tones. This is especially the case in the bass, when the semitonic approach to a strong note overcomes any desire to avoid false relation. A good example can be found in Sterndale Bennett's "May Queen."



The last exception need not detain us, for it is evident that chords whose constituent notes may be read in different ways cannot cause false relation.

Instrumental music stands in a different position from vocal. Where the tone-colour is the same, as on the piano, or between two or more violins, the dissonant effect caused by false relation is not nearly so apparent. The prohibition, therefore, is less important. Still where the colour on two instruments or sets of instruments is widely different, the effect of false relation will be extremely harsh.

In vocal music it is rarely good to sound a dissonant note and the note on which it is going to resolve together, unless the latter is in the bass. This limitation may be overlooked when the two are some distance apart, as in treble and tenor, and more particularly when the latter has

a sustained note. And in every case when the note on which the dissonance is going to resolve is some distance from the dissonant note, and is approached by step of a second up, the two may be sounded together. In instrumental music the prohibition is not nearly so important. Indeed the effect of the dissonance produced is often agreeable. The following passage from Beethoven will illustrate the difference in this respect between vocal and instrumental music.



Of course, on the piano, when the two notes are next each other, the effect will be harsh, but in orchestral music, where the tone-colour and force of the instruments is different, no objection can be taken. Thus it is quite possible for the flutes to be playing G while the violins play Fsharp, G. Experience is required to be able to say with certainty when such clashing are good and when the effect is bad.

CHAPTER XVII.

Polyphonic Music.

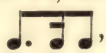
Hitherto we have discussed music entirely from the point of view of harmony, that is to say, of chords, their relations to each other, the resolution of dissonances, and so on. But there is another point of view. It is possible to write music, which is not so much a building up of themes on a harmonic basis, as a combination of melodies. Melodic progressions which begin and end at different times, may appear in all the parts so that the attention is not so much called to the harmonic structure as to the various melodies introduced in the different voices. The name in general use for music of this kind is "contrapuntal," but as the word counterpoint to many persons simply represents a species of academic, and not of practical, music, it is best to appropriate the word polyphonic to express what is meant in this chapter.

In the chapter on Construction in Music one of the fundamental principles of the art was said to be re-iteration with variety. Up to this point the re-iteration has been confined to the melody, but polyphonic music gives us the advantage of being able to work out our material not only in the top but in any part. Thus we can obtain variety by placing the subject in an inner or lower part, and writing contrasting subjects above it. It was on this method that the great composers before the time of Haydn chiefly worked. In the time of J. S. Bach the piano was in its infancy, and the instruments he used, the clavichord and the harpsichord, were not capable of sustaining tone or of giving strong accents. Consequently the rhythmic style of music which depends for its effect on strong accents was impossible on these instruments. On the other hand they lent themselves well to the polyphonic style, for on them subjects coming in an inner part can be easily distinguished. The organ, too, an instrument much used by J. S. Bach, is incapable of accent and is admirably suited to the polyphonic style. Consequently we find it paramount in his works, and as it was suited to his immense genius, it reached with him its highest point. A short quotation from one of Bachs' "Inventions" will show the general character of work of this kind.

The musical score is written for three voices: Treble, Alto, and Bass. It is in 3/8 time and has a key signature of one flat (B-flat). The score consists of four systems of staves. The first system shows the beginning of the piece. The second system continues the melody. The third system includes a trill (tr) in the treble. The fourth system ends with '&c.' in the bass line.

In this extract written for three voices the principal figure is



treated as a pitch figure. It appears in the treble in bar 1, in the alto in bar 2, in the bass in bar 4, again in the bass in bar 8, alto in bar 9, bass in bar 10, treble in bar 11, alto in bar 12, bass in bar 13, and treble in bar 14. There is a secondary figure, a time figure , which appears in the alto in bars 3 and 4, in the bass in bar 5, in the treble in bars 6 and 7, 10, 13 and 15, and in the bass in bar 14. Thus by the device of re-iteration in all three parts in the course of 16 bars, the first figure is made to appear 10 and the second figure 9 times. Besides its value in re-iteration, polyphony is useful in providing a

background for the principal subjects. An accompaniment in which melodic passages are prominent, is often more effective than a purely harmonic filling-in. Indeed, in vocal writing much of the effect is gained by the interest given to the inner parts by this method of treatment. The same applies to the orchestra, where melodic interest in the various parts largely adds to the effect of the whole. Here, however, a warning is necessary. The whole effect is the thing to be aimed at, and care must be taken lest the interest in the details detracts from the fundamental idea. Melodic passages of great interest in themselves may be out of place if they have no bearing on the general effect. Passages which are merely background should never be made to appear of consequence. Otherwise polyphonic writing is of great importance, especially in vocal and orchestral music. It enables the music to flow on without awkward pauses: it gives new points of interest, and so takes away monotony. In large works both the harmonic and polyphonic treatment can be used. In this way contrasts may be gained and new effects constantly be introduced without interfering with the unity of the piece.

A little thought will show that the different characters of polyphonic and harmonic music will effect the treatment of each. When the sounds in chords are struck together, or with only such additions as do not obscure the harmonic effect, the way chords follow each other will be the principal thing, and care must be taken that the laws of harmonic structure are obeyed. On the other hand, where the effect is gained by the combination of different melodies, the attention of the listener will be occupied with the melodic and not the harmonic progressions. He will listen to the melodies in each part and not to the harmonies. As a result, in polyphonic music, as long as the treatment of the separate melodies satisfies the ear, the harmonic progressions may be passed over. Indeed, in much polyphonic music, it is often extremely difficult to distinguish the harmonies at all. Progressions may be analysed in different ways, or indeed may not lend themselves to analysis at all. The function of the bass is here a melodic and not a harmonic one, and the whole perspective is thereby changed. This explanation will account for passages in modern works, where even the tonality of the various parts seems to differ. Whatever may be thought of the effect of such passages, it must always be borne in mind that polyphonic compositions must not be viewed in the same light as harmonic works. At the same time, we rarely get compositions that proceed in polyphonic lines throughout. The bass is not always a melodic bass, but frequently serves a harmonic purpose. It is therefore necessary to distinguish between the functions of the bass, so that we may see when harmonic effects are intended, and when the interest of the bass is purely melodic.

The following exercises are intended to give practice in polyphonic writing. Care must be taken that the writing is not vague and purposeless. To obtain a proper musical effect the material must be developed in each part on the lines of the Bach Invention quoted in this chapter.

Add an Alto part below the given Treble.

1.

Write a Treble part above the Alto.

2.

3.

Write two free parts above the Bass.

4.

Write one part above and one below the following.

5.

CHAPTER XVIII.

Ground Bass and Canon.

A very easy method of obtaining re-iteration is by repeating again and again the same phrase in the Bass, while the upper parts have varied harmonies. A Bass repeated in this manner is called a Ground-Bass. There are many examples of this device in the works of the great composers. Bach gets magnificent results in the Crucifixus of his B minor Mass, and Brahms has produced a fine example in the Finale of the Variations on a Theme by Haydn. The old dances—the Chaconne and the Passacaglia—were constructed on ground-basses.

The most effective method of writing upper parts above a ground bass is to treat the top parts by imitation with constant change of harmony. The imitations should not be stiff, but be used with a good deal of variety. Frequently it is effective to bring the parts on one by one, but not at the same place in the ground-bass. At each repetition the music should work up, becoming more florid till the close is reached.

Canon is the name used for the exact repetition of one part by one or more other parts. When there are only two parts, the first part is called the Antecedens, the second part the Consequens. The second part usually enters either one or two bars after the first. The repetition may be at the unison, in which case the canon is called two in one at the unison, at the octave (two in one at the octave), at the fourth above or below, or the fifth above or below. All these canons are absolutely strict, that is to say the intervals must exactly correspond. Canons at other intervals are not strict. Sometimes the canon is made so that the first voice can lead back to the beginning. In this case the canon is infinite. Three or more voices may be used in strict imitation, making canons three in one, four in one, and so on.

In writing canons in the octave or unison chromatic progressions should be avoided on account of the obvious false relation that would occur.



But in canons in the fourth or fifth chromatic progressions are good, for no false relation will occur.

Modulations to nearly-related keys may be made, but it must be remembered that in canons in the octave or unison, every thing that appears in the first voice must re-appear in the second. The notes, therefore, that make the modulation will be reproduced, and the new key cannot easily be left.

In canons in the fourth below, it will be noticed that the second voice appears in the key of the dominant, so that whenever the leading-note of the original key appears in the first voice, it will be answered by the leading-note of the key of the dominant. Similarly in a canon at the fifth below the key of the second voice will appear to be that of the sub-dominant, and the fourth of the scale in the first voice will be answered by the flat seventh of the original key. In these canons it will be as well to avoid these notes unless a modulation is effective.

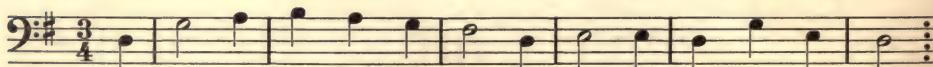
Sometimes canons are accompanied by a free part, usually the bass. The free part makes the task of writing the canon easier, for intervals like the fourth, that would not be good in two-part writing, are quite good with another part below. Moreover, the free part helps enormously to obtain variety by the use of chromatic notes, and modulations.

In writing canons it must be remembered that everything is repeated, so that it is not advisable to use much figure re-iteration, which must lead to monotony.

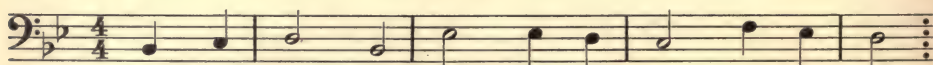
Sometimes two or more different canons go on at the same time. For example, the treble and the tenor may have one canon, the alto and the bass another. This device is called a canon four in two.

Exercises. Add three parts above the following ground-basses repeating each bass three times. Write a coda to conclude the exercise.

1.



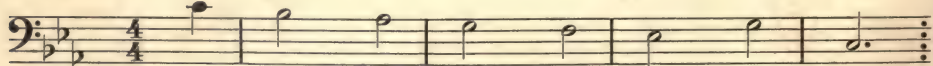
2.



3.



4.



Begin as follows, and continue the canon for about eight or twelve bars, ending with a coda.

1.



2.



The first part of the canon consists of two staves. The first staff is in 6/8 time with a key signature of one flat (B-flat). It contains two measures of music. The second staff is in 4/4 time with a key signature of one sharp (F-sharp). It also contains two measures of music.

With free bass.

3.



The third part of the canon is a piano accompaniment consisting of two staves. The top staff is in 6/8 time with a key signature of one flat (B-flat). The bottom staff is in 6/8 time with a key signature of one flat (B-flat). It contains two measures of music.

CHAPTER XIX.

On Composition.

In Chapter III some ideas as to the best successions of chords were given, and as in Chapter II the common cadences were discussed, the student should from the first have gained some knowledge of the use of common chords and inversions in composition. The object of this book is to trace out methods of construction from a rhythmic basis, and with that end in view, phrase-divisions have been from the first insisted on and a scheme of chord relationships has been adopted, so as best to lead up to effects of cadence. With the same purpose the idea of the central key-note and of the central key has been taken, for it will easily be seen that a strong rhythmic basis in composition is only possible when there is a central point from and to which motion is made. It is necessary that the student should complete his course of study on these lines before touching on other styles in composition. What is exceptional should be left to the last, and not treated till the part that is the basis of most good music is mastered. It is the object of this chapter to discuss briefly the uses, both ordinary and exceptional, of the various chords that have been introduced, and to give a few hints about the art of composition.

Beginning with the common chord, it is essential that every student should master thoroughly the effect and the use of the ordinary triads, before proceeding to other chords. For, after all, the common chord is the basis of all harmony. Every triad has its own effect and its own use, and a knowledge and appreciation of these effects is invaluable. The ordinary progressions have been given, but the effects of exceptional progressions remain to be noticed. The following is from Palestrina's "Stabat Mater":—



Here we get a composition beginning with three major chords on roots a second apart. It must be remembered that in the time of Palestrina the Church music was written, not in the modern tonalitive scheme, but in the modal arrangement; and that in this the strong feeling of key-centre was practically non-existent. Successions of chords like his, will, therefore, be useful when the object is to produce an effect of vague tonality. Common chords whose roots are a second apart can be used when the intention is to produce a rough, detached, effect. But it is nearly always necessary to make the upper parts move in contrary motion with the bass.

Some writers seem to think the common chord on the mediant should be avoided. The chief use of this chord is to produce a quasi-modal effect, reminding us of Church music of the olden days.

Roots that go down a third are a commonplace of harmony, but the reverse, roots going up a third, is more rare. And yet very beautiful effects are obtained by this reversal of the normal progression, as in the following:

The image shows two musical staves. The left staff is a grand staff with a treble clef and a bass clef, both with a key signature of two flats (B-flat and E-flat). The music consists of a series of chords. The first chord is a major triad with a bass note of B-flat and an upper part of G. The second chord has a bass note of G and an upper part of B-flat. The third chord has a bass note of E-flat and an upper part of G. The fourth chord has a bass note of C and an upper part of E-flat. The fifth chord has a bass note of B-flat and an upper part of C. The sixth chord has a bass note of G and an upper part of B-flat. The seventh chord has a bass note of E-flat and an upper part of G. The eighth chord has a bass note of C and an upper part of E-flat. The ninth chord has a bass note of B-flat and an upper part of C. The tenth chord has a bass note of G and an upper part of B-flat. The eleventh chord has a bass note of E-flat and an upper part of G. The twelfth chord has a bass note of C and an upper part of E-flat. The right staff is a grand staff with a treble clef and a bass clef, both with a key signature of two flats. The music consists of a series of chords. The first chord is a major triad with a bass note of B-flat and an upper part of G. The second chord has a bass note of G and an upper part of B-flat. The third chord has a bass note of E-flat and an upper part of G. The fourth chord has a bass note of C and an upper part of E-flat. The fifth chord has a bass note of B-flat and an upper part of C. The sixth chord has a bass note of G and an upper part of B-flat. The seventh chord has a bass note of E-flat and an upper part of G. The eighth chord has a bass note of C and an upper part of E-flat. The ninth chord has a bass note of B-flat and an upper part of C. The tenth chord has a bass note of G and an upper part of B-flat. The eleventh chord has a bass note of E-flat and an upper part of G. The twelfth chord has a bass note of C and an upper part of E-flat. The name 'Stanford.' is written above the first staff.

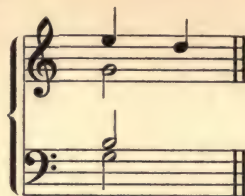
Cadences are made generally by a pause on a strong major chord, and it is to major chords that we owe the strongest feeling of key-centre. The use of the minor common chords is as a rule to lead up to the major. An effect of vague tonality will at once be produced by dwelling on the three minor chords on the supertonic, mediant and sub-mediant of the major key.

It has been seen that the effect of the key-centre is given by emphasising the key-note and by approaching it by a semitone from below. Accordingly the seventh note in a minor scale is raised. But if the idea of the composer is to convey the archaic feeling of Church music, he will use the flat seventh of the scale, thus producing at once the effect of the *Æolian* mode. In descending scale passages the use of the flat seventh is common and of excellent effect, nor is the feeling of key-centre weakened by its use.

The image shows a musical staff with a treble clef and a key signature of two flats (B-flat and E-flat). The music consists of a descending scale passage. The notes are G, F, E, D, C, B-flat, A, G. The bass note is B-flat. The upper part is G. The second chord has a bass note of G and an upper part of B-flat. The third chord has a bass note of E-flat and an upper part of G. The fourth chord has a bass note of C and an upper part of E-flat. The fifth chord has a bass note of B-flat and an upper part of C. The sixth chord has a bass note of G and an upper part of B-flat. The seventh chord has a bass note of E-flat and an upper part of G. The eighth chord has a bass note of C and an upper part of E-flat. The ninth chord has a bass note of B-flat and an upper part of C. The tenth chord has a bass note of G and an upper part of B-flat. The eleventh chord has a bass note of E-flat and an upper part of G. The twelfth chord has a bass note of C and an upper part of E-flat.

The first inversion of a common chord owes its character to the fact that its intervals are a third and a sixth above the bass note. The

effect, however, of first inversions varies. The first inversion of the mediant, on account of the strong effect of the dominant as lowest note, conveys the impression more that the sixth is a dissonant note, than of an ordinary first inversion. As a rule in this chord the bass is doubled and the sixth falls a second to the next chord. It can be used instead of the cadential $\frac{6}{4}$.



In the minor key the dissonant nature of this chord compels the doubling of the bass note and the resolution of the dissonance.



The dissonant effect of a second inversion has been explained. The chord may be used where it is sought to convey a wild and restless effect. The use of the pedal $\frac{6}{4}$ is common in modern music.

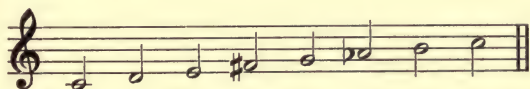
The necessity for resolving dissonances will be apparent, but it must be noticed that, supposing a section ends with a dissonant chord, it is possible to begin a new section without resolving the dissonance. The pause on the dissonant note will keep attention fixed, and the opening up of a new section will prevent a feeling of dissatisfaction for the non-resolution of the discord. The following is from Beethoven's Sonata in E flat Op. 31 No. 3.



Two of the chief uses of dissonances are to provide contrast and to serve as a connecting link between chords that would otherwise follow each other badly. The fact that a note is sustained through different harmonies will serve to bind together progressions that would otherwise lack coherence. Moreover, the incomplete feeling caused by dissonances serves to keep up the flow of the music where it is desired that there should be no feeling of rest until the proper time arrives.

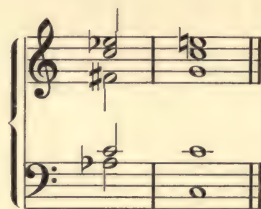
Unessential notes are of immense value as providing dissonant effects to the most simple harmonies. Indeed, they open up an enormous number of combinations, some of which appear abstruse and difficult of analysis, unless the nature of unessential notes has been thoroughly grasped. When it is considered that a chord may consist of five notes, and that to each or to all of these notes appoggiaturas or auxiliary notes may be added, the large number of effects to be obtained will be realised.

The original use of chromatic tones was, no doubt, to provide a semitonic approach to important tones, such as the dominant and the tonic. But as time went on the function of chromaticism became much enlarged and new effects arose, which resulted in modifications and rearrangements of the old formal scheme. The relationship between keys that appear absolutely unrelated is now clear, and as a result the province of modulation has been much enlarged. It is now possible to pass through foreign keys without losing the perception of the key-centre. Transient modulations may be made to remote keys without any feeling of crudeness and abruptness. Not only so, but by the use of chromatics, chordal progressions have been so much altered that now it is possible for a skilful composer to use any chord in any key, thus adding largely to his resources. As a consequence the various tones in the scale lose their importance in the tonalitive scheme. As long as the key-centre is made obvious, it is no longer necessary to use the other tones that appear in the diatonic scale. Thus we get compositions that apparently are written in another scale-system from the ones designated as major or minor. The sounds most commonly altered are those which appear a semitone above and below the dominant. When the one is raised and the other lowered, the following will be the scale used:—



And many other alterations can be made. The rise of chromaticism has therefore introduced a new element into music, establishing key-relationships that formerly were unknown and enlarging the functions of chords to a very great extent. The frequent use of chords in remote keys has also led to startling innovations in chord progressions, more especially when a change of idea is intended. Even when this is not the case, we get progressions that a few years ago would have been considered impossible. Sir Hubert Parry's cantata, "The Love that Casteth out Fear," opens with the second inversion of the diminished seventh on D followed by the first inversion of the common chord of A major. But the next chord is the C minor common chord, which is not only remote from the key D, which is the key of the piece, but has no apparent connection with the chord which precedes it. A similar progression occurs in bars 5, 6. Such progressions at the present time are not only allowable, but have a strong emotional significance, when used with judgment.

As regards the treatment of chromatic chords, the old method was to follow them by dominant discords or by the cadential $\frac{6}{4}$ on the dominant. Such chords as the augmented sixth were extremely useful, particularly in the minor key in leading up to the cadence. At the present time the treatment has been much enlarged. It is no longer felt to be necessary to follow chromatic chords by dominant harmony. Effective cadences may be made by moving straight on to the tonic as in the following:—



The same tendency may be seen in the treatment of dissonances generally, that is to say, the chord of resolution may be implied and not actually struck, and thus the law of the resolution of dissonances may be widened. The more certain progressions are used, the more commonplace they appear, and composers strive to find new ways out of the old paths. Particularly what we may call the elliptical treatment of dissonances is in evidence, that is to say, resolutions are imagined or implied, not actually used.

Passing on to the subject of composition, we must first notice the initial difficulty the student has in conforming to the law of balance in inventing some second idea to balance his original conception. Many persons can think of an idea, but then they feel helpless; they cannot invent anything to answer their first conception. Now before going further it should be stated that real composition must always proceed from the individuality of the composer. No amount of rules or hints as to how to do it are of any avail, unless the composer himself *feels* what he wants. And yet, technical exercises are of great assistance in enabling the student to get a thorough mastery of the language he speaks, so that when the proper time comes he is able to express his own individuality without let or hindrance from his want of means of expression. To write an answering phrase to one that has been given requires the following points to be noticed. (1) The answering phrase must have some relationship with the first phrase, so as to produce a feeling of continuity. The easiest methods to gain coherence are by the repetition of one or more figures of the first phrase. This repetition should by no manner of means be a stiff re-iteration; it should be made with the object of making the figures stand out in a new light. By this means both contrast and coherence are gained. Time figures are more especially useful for this purpose, for such figures can be repeated on quite different notes. Many examples of the treatment of the time-figure as a means for obtaining continuity can be found in the works of the great masters.

Another means of obtaining coherence can be found in the use of the melodic curve. The curve of the original phrase may be answered by a corresponding curve or by an opposing curve. In both cases the fact of there being this curve in both sections will produce a feeling of coherence.

(2) In addition to coherence, there should be an element of contrast. The easiest way to obtain such contrast is by the use of a new key. In former times the new key was almost invariably that of the dominant. Nowadays much tonalitive latitude is allowed.

Supposing the phrases to be defined by cadences, it will be best to use contrasting cadences. But at the present time it is best to avoid cadential effects, interfering as they do with the flow of the music.

The amount of re-iteration or of contrast depends on the first phrase. If in it the figures are developed it will be necessary in the answering phrase to introduce new material. When this is the case, a sequential repetition of the new material is the ordinary course, for some development is necessary, and when the ideas are only of secondary importance a sequential repetition will provide all the development that is necessary.

When the figures of the first phrase receive little or no development, it will be necessary in the second phrase to dwell on them.

Contrasts of colour and of force are often very useful, but the use of such contrasts entirely depends on the character of the original ideas. In composition a sense of proportion is an absolute necessity. Violent effects are suited to strong emotional feeling, but are out of place when there is no such stress.

Time-variations are always immensely useful. The art of composition largely depends on the subtle use of variations in time. The amount of time-variation depends on the character of the ideas.

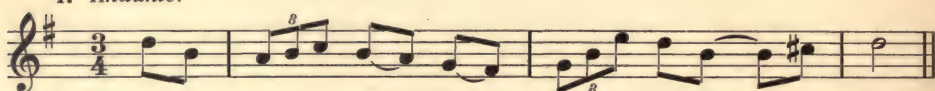
After writing two phrases the chief difficulty of the beginner consists in proceeding with the composition without any apparent break. The history of composition is the evolution from a series of detached sections to a continuous whole, and the highest art is that which welds into one homogenous piece contrasting ideas. To obtain this result the student must learn to take certain items—time- or pitch-figures—figures of accompaniment, etc., and by developing these in different ways to make the music flow on without a break. It is partly the aim of the analysis in the third part of this book to show how this can be effected. The best way to learn is to study closely and carefully the works of the great composers, so as to assimilate their methods and gain a mastery over the language of music.

At the same time the student should study the developments in harmony which appear in the works of modern composers. Analysis of modern works is a difficult task, for the innovations in the harmonic treatment seem at first sight to contradict the old principles. But if the student can distinguish between essential and non-essential notes, and if he has followed up the advance made in the treatment of chromatic notes,

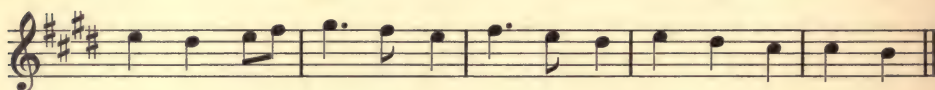
the task will not be an impossible one. The solution to much that seems obscure lies in two things, (1) the fact that semitonic movement can bring in chords and progressions that would otherwise be impossible, (2) the effects produced by different parts moving simultaneously, so that the attention being called to the combination of melodies, the harmonic effect counts for little. It would serve no good purpose to enter into an explanation of the treatment of chords by modern composers, for the object of this book is synthetic rather than analytic, but it may be said that the principles on which harmony is founded can be observed in all great works and that the ultimate test is the effect produced.

Harmonise the following melodies and add a corresponding section.

1. *Andante.*



2. *Vivace.*



3. *Andante.*

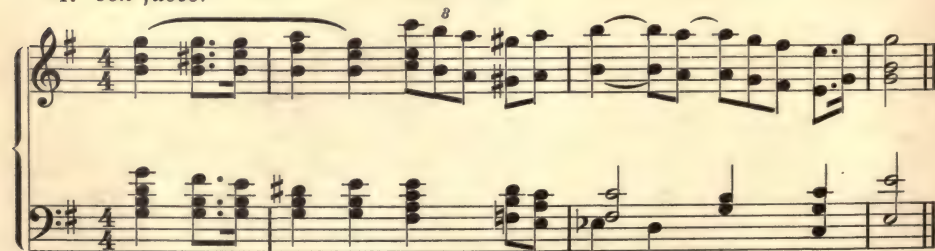


4. *Moderato.*



Continue the following as compositions for the piano.

1. *Con fuoco.*



2. *Andante.*

3. *Allegro.*

4. *Andante.*

All through the study of Harmony, the student should be encouraged to write original work. An easy way to obtain material for exercises is to take the harmonic basis of some work of one of the great composers, and require the pupil to write compositions of his own above the given harmonic scheme.

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