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THE EVOLUTION OF HARMONY

A TREATISE ON THE MATERIAL OF MUSICAL
COMPOSITION, ITS GRADUAL GROWTH
AND ELEMENTARY USE

BY

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PREFACE

TWELVE years' experience in the teaching of harmony both of an elementary and advanced type has convinced me that old methods of study are very unsatisfactory, both from a positive and a negative point of view. A careful review of all the important treatises that have been issued shows that later theorists have been alive to some of the most glaring defects of earlier systems, but they have not seen fit to depart in any appreciable degree from the traditional method of study. This is probably due to their view as to the bounds of the subject. If it be held that the harmony text-book does not pretend to do more than show the use of chords in an abstract fashion, there is nothing more to be said beyond the fact that such a limited study is of little musical and educational value, and there are no books to bridge over the gulf between this stage and that represented by the standard required at University examinations. There are some excellent books dealing with this later stage, but none lead up to it.

Even in their own limited sphere the early treatises had two grave defects:

1. No attention was paid to ear-training. It is ridiculous to attempt to write by rule what one cannot hear mentally. Dr. Shinn, in his *Harmony based on Ear-training*,

was the first to put this matter on any systematic basis, and it is obvious that all future text-books must give great importance to this branch of the subject. Much of the crudity of students' work arises from the fact that they do not hear what they write. This condition of things is fostered by the figured bass, which can be worked mechanically by rule. And this leads to a statement of the second defect.

2. The use of the figured bass as a means of teaching chord progression has the fatal defects that the chord progressions are already thought out for the student, and he can add his parts by mechanical rule. The result is that a student can work through a harmony book without being able to write even half a dozen chords on his own initiative. These defects have been to a certain extent remedied by the setting of melodies to be harmonized, and unfigured basses. But yet the figured bass still remains as the chief method of study.

In this treatise the figured bass is discarded as a means of teaching harmony. It does not teach chord progression at all, but only the progression of parts with the chord progression fixed. The figured bass *ipso facto* does all the important thinking. But some one will say, what is to take its place? Here the sphere of ear-training comes into play. Lists of good chord progressions are given. These are to be memorized, just as one memorizes the idioms of a language. Then with a given part the choice of the chord progression is left to the intelligence of the student. The student must be compelled from the very

start to think out his own chord progressions. Four types of exercises ensure this :

(a) Short examples in which a given chord is to be preceded and followed by other chords.

(b) Melodies to be harmonized.

(c) Unfigured basses.

(d) Original work.

But the figured bass is not entirely discarded. It is used :

(a) As a basis for decorative work.

(b) As an exercise in the manipulation of many parts.

But if the study of harmony is to lead up to anything more than the writing of a double chant, a great many more innovations are necessary.

1. The figured bass is often a formless thing. Form is to music what sense is to language. In this treatise form is discussed from the very first. It is neither presumed nor ignored. In the early work help is obtained from the analogy between metre and accent. The student begins with phrase formation, gradually building up a sentence, and finally working exercises in binary or ternary form, with regular and irregular phrase formation. Some attention is also paid to thematic development.

2. Most treatises commit the extraordinary error of treating the unessential in a very scant manner. That is, we get a chapter on suspensions, and one on passing notes, &c., and then they disappear for good. The use of the unessential is a matter quite apart from chord formation, and should permeate everything. Thus the unessential

is consistently used throughout this book, forming the decoration of the chords discussed.

The various procedures are gradually introduced, and there is a chapter dealing with the complex use of the unessential, a matter that has hitherto been left untouched. It corresponds to combined counterpoint in the study of sixteenth-century methods.

3. Differentiation of style is considered. There are chapters on the treatment of the common means of expression, the pianoforte, the organ, strings, and voices.

4. This inevitably leads to the discarding of any set of absolute rules as to melodic or harmonic progression. Differentiation of style implies differentiation of technique.

Over and above all this the mere statement of dogma is a very bad system of teaching anything. An intelligent student wants to know the origin and the reason of rules. He will then apply them not from sheer memory, but from ordinary intelligence. Now it must be obvious to any one who has studied the history of music that the growth of harmonic resource is a natural evolution. And it is of the utmost importance that the student should grasp the basis of harmony, that is, the conditions that obtained at the close of the Polyphonic Period (1600). Any one who has studied strict counterpoint historically will have a very firm grasp of essential principles. Later procedure is but a logical extension of them. This point has been carefully kept in the foreground all the way through. And it will prove to illuminate many things in which the student has hitherto merely acquiesced as dogma. It will specially dictate the

right use of such a *bête noire* as the chord of the six-four, and indeed all second inversions. It is not possible, nor is it necessary, to trace the first use of each new procedure, but the principles of extension are the same. And this leads to another point. The history of the evolution of harmonic resource is of course the history of the infraction of rules. Thus the innovation of one period becomes the commonplace of the next, so that in such matters it is absurd to attempt to give absolute rules. What refers to one period may be totally inapplicable to another. Further, this treatise differs from others in some detail of order of study and classification of resource. For example, the chord of the six-four is not introduced till there can be no possibility of its nature being misunderstood. It is to be sincerely hoped that the chapter on it will effectually eradicate its crude use. The same refers to augmented and diminished triads. Augmented sixths are classified as variants of supertonic and dominant harmony, as being a more obvious explanation of them.

A detailed consideration of the use of the unessential leads to a clearer perception of the nature of the higher discords, and facilitates a grasp of their use.

There are special chapters on harmony in two, three, five, six, and eight parts. Finally, there is a chapter on modern tendencies. A student must learn to write in the idiom of his own age. This becomes perfectly easy if he grasps in a broad way the natural evolution of resource. He will also be in the strong position of being able to make new experiments for himself. The principles of

evolution are the same for all time. Theory must always move behind practice. But it should move immediately, and not remain dormant for fifty years or so. It is inevitable but that a book of this nature must evoke much criticism. But unbiassed criticism will be most welcome. The book is at any rate a sincere attempt to make the study of harmony practical and rational, as well as interesting and artistic. Much of the abhorrence of both strict counterpoint and harmony on the part of students is simply due to bad methods of teaching.

My thanks are due to Prof. J. C. Bridge for the use of a figured bass set at Durham in September, 1908; also to Messrs. Novello & Co. for permission to print extracts from the works of Elgar, Parry, Walford Davies, Lloyd, and Coleridge-Taylor; to Messrs. Boosey & Co. for Stanford's 'Ancient Lullaby'; to Messrs. Peters for some extracts from Grieg; to Messrs. Enoch, Messrs. Breitkopf and Härtel, and Messrs. Durand for various quotations which are acknowledged elsewhere.

I am again indebted to Dr. Stocks for much help in revising the proof-sheets.

C. H. KITSON.

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CHAPTER I

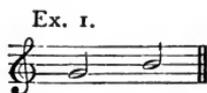
THE PRINCIPLE OF CHORDS

1. IN its broadest sense, harmony may be defined as the scientific combination of two or more different sounds. It originated in the early Christian Church, and was the musical counterpart of the congregational attitude of mind, that is, the idea of common public worship. Melody, or the employment of various single sounds consecutively, naturally existed before harmony. The art of the Greeks never developed beyond this point. In these early days the art of music was nursed by the Church, and the use of melody only was simply the reflection of the Greek idea of worship, which was the very antithesis of the Christian point of view.

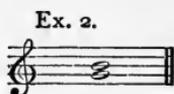
2. Obviously the first step in the evolution of harmony is the duplication of some preconceived melody at some other pitch, and this cardinal idea of melodies in combination ruled the methods of musical composition up to the end of the sixteenth century. All the music of this period was written for unaccompanied voices, and the course of its development naturally falls into three main divisions, the whole being known as the Polyphonic Period. These divisions are as follows :

- (a) The period of Organum or Diaphony, up to 1150.
- (b) The period of Discant, 1150-1400.
- (c) The period of Counterpoint, 1400-1600.

3. It is unnecessary to consider these periods in detail, but it is important to take note of certain points that have a direct bearing on later developments. It should be explained that when two different sounds follow one another they are said to form a melodic interval :



When two different sounds are struck simultaneously they form a harmonic interval :



In composers' first attempts to duplicate a melody they would naturally choose a harmonic interval that seemed to them agreeable in effect, in fact, one that did not appear to require to be preceded or followed by any other combination in particular, producing in itself an effect of completeness. Such a harmonic interval is termed a consonance or concord. The first intervals to be chosen were the fourth and fifth. The former, as will be seen later, soon lost its position as a concord. Organum in its simplest form consisted of a melody sung by what is termed the *vox principalis*, duplicated at the fourth or fifth below by the *vox organalis*, or 'organizing voice' :

Ex. 3.

Musica Enchiriadis. (10th century.)

Vox principalis.

Tu pa - tris sem - pi - ter - nus es fi - li - us

Vox organalis.

4. Such a principle would not seem to open out a course which was capable of expansion. A difficulty in the application of it, however, led to the discovery of some new elements. The movement of the two parts in parallel fourths would, at some point, produce the harmonic interval of the augmented fourth, called the tritone, e.g. F to B, or B flat to E, and it was the universal view that '*mi* (i. e. B) contra *fa* (i. e. F) est diabolus in musica'. Some means of avoiding it had to be devised. If the opening of the *principalis* in conjunction with the *organalis* caused it, the latter began on the same sound as the former, and maintained it till the *principalis* had passed the crucial point. Thus, instead of starting as follows :

Ex. 4.

Musica Enchiriadis.

Rex coe - li Do - mi - ne.

the two parts would proceed thus :

Ex. 5.

Rex coe - li Do - mi - ne.

When parts proceed in the same direction, whether in parallels or not, they are said to employ similar motion :

Ex. 6.

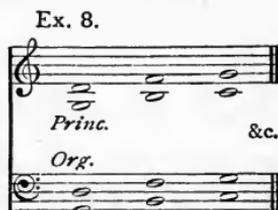
But this opening causes a new kind of movement, one part remaining stationary while the other proceeds to different sounds. This is termed oblique motion :

Ex. 7.

5. Further, the harmonic intervals produced by the oblique motion in the example from the *Musica Enchiriadis*, quoted above, are new. At the syllable 'coe' the interval of a second is produced, at 'li' that of a third. The latter sounds satisfactory in itself, and was soon catalogued as a concord. But the interval of the second is not satisfactory in itself, and in fact requires special treatment. Such intervals are termed generically dissonances or discords. As a matter of fact the particular treatment that was later regarded as appropriate for discords was not at this early stage appreciated, and it is merely an accident that the procedure here accords with later theory. It will be observed that the discordant interval is preceded and followed by concords, and that the discordant note (D) is approached and quitted by step. In the later period of organum this oblique use of discords disappears, and the chief developments to be noticed are the increased number of concords and the frequent progression of parts in opposite directions, termed contrary motion.

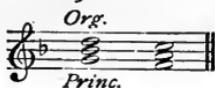
6. The period of Discant need not be considered here. It

was mainly concerned with the development of an intricate system of rhythm. The period, of course, exhibits a considerable advance on the crude methods of organum. In this earlier era, when harmony in more than two parts was attempted, the *vox principalis* was duplicated at the octave below, and the *vox organalis* at the octave above :



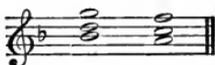
But when composers had learnt the use of contrary and oblique motion, when they had evolved some method of combining voices moving in sounds of different time-values, and had enlarged the group of concords, they were enabled to produce something much more artistic and musical. But it was unfortunate that they allowed their ingenuity to degenerate into indiscretion. The *vox principalis* used the old ecclesiastical melody or plain-song as it is often termed, but in order to meet the new conditions of elaborate textures interwoven round it, the sounds forming the plain-song were often so altered in time values that it became unrecognizable as such. The added parts were termed the 'discant', and the singers often improvised it, generally, it may be assumed, with no sense of the fitness of things. Composers even went so far as to use secular tunes as discant over the plain-song. In 1322 Pope John XXII prohibited the use of discant, except on certain festal occasions, when he permitted the employment of the consonances of the fourth, fifth, and eighth above the melody. This was practically a return to the original principles of organum, but with this difference, that the *vox principalis* was the lowest part, whereas in organum it was an upper part. The French, however, kept the letter of the law while evading its spirit. The interval of the third was placed between the *vox principalis* and the *vox organalis* :

Ex. 9.



This produces the parallel fifths between the principalis and organalis, and this was an essential feature of organum. But the principalis was allotted to the singer with the highest voice, and he was compelled to sing the part an octave higher, so that the actual effect was :

Ex. 10.



This produces a progression as pleasant as the other is crude, and reveals a distinct feeling for harmonic effect as such. This device is an example of what is known as *Faulx-bourdon*, or organizing in thirds and sixths, so called, probably, because it was contrary to traditional methods.

7. In due course composers learnt how to apply their technique in accordance with the demands of the situation. They pruned their florid passages, controlled their expression, and in the counterpoint of Palestrina (d. 1594) the technique turned to 'purpose strong'.

The whole trend of the art of the Polyphonic Period was to make every part melodically and rhythmically independent. Thus, while one part was proceeding slowly, another would be moving more quickly. While one ascended, another would descend or remain stationary. As one part receded from a point of climax, another would be approaching its crisis. Composers were primarily concerned with the individual motion of their parts, rather than with the effect of simultaneous sounds. Thus it became a characteristic feature of the music, not that the several parts should be singing the same melody at the same time at different pitches, as in the early organum, but that they should sing passages imitating each other at different moments, or that if they were moving simultaneously, they should be well contrasted in their contours. The following is a typical example of the art in its perfection :

The image shows a musical score for a vocal piece. It consists of four staves. The top staff is a vocal line in G major, with lyrics 'San . . . ctus San . . . ctus'. The second and third staves are counterpoint lines, with the second staff having lyrics 'San . . . ctus San . . . ctus'. The bottom staff is a bass line. The score is in 4/4 time and features various melodic and harmonic patterns.

In this, its latest phase, the art is known as Counterpoint. The original part is called the Canto Fermo, and the added parts the counterpoints.

8. An exhaustive consideration of the details of this technique belongs to the sphere of strict counterpoint. But it is important to discuss here certain aspects of the method, as they have a direct bearing on the early work of this treatise. The principles of discordance may be reserved for future consideration. But the study of the future development of harmony demands at the outset a knowledge of (1) the principles of concordance during the Polyphonic Period, (2) the scalic system, and (3) the general laws of melodic progression.

Palestrinian principles of concordance :

(a) In two parts the consonances were the unison and octave, the major and minor third, the perfect fifth, the major and minor sixth :

Ex. 12.

The image shows a musical example labeled 'Ex. 12'. It consists of a single staff with a treble clef. The staff contains six measures of music, each showing a pair of notes (dyad) representing a consonance: unison, octave, major third, minor third, perfect fifth, and minor sixth.

(b) In three or more parts the consonances were :

(a) the major or minor third, and perfect fifth from the bass :

Ex. 13.

The image shows a musical example labeled 'Ex. 13'. It consists of a single staff with a treble clef. The staff contains six measures of music, each showing a triad of notes representing a consonance: major third and perfect fifth from the bass, minor third and perfect fifth from the bass, and major third and perfect fifth from the bass.

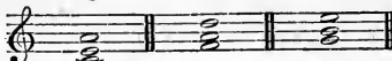
(β) the minor third, and major or minor sixth from the bass:

Ex. 14.



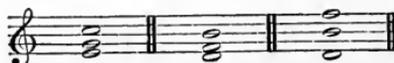
(γ) the major third and major sixth from the bass:

Ex. 15.



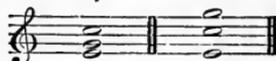
It will be observed that though the fourth from the bass is a discord, both the perfect and augmented fourth may occur between two upper parts, if each is concordant with the bass. The same freedom is allowed to the diminished fifth:

Ex. 16.



The reason is that both the following are only different arrangements of the same combination considered from the bass:

Ex. 17.



In each case there is a third and a sixth from the bass.

No mention is made of the diminished fourth and augmented fifth. When the modes which form the scalic system of the period have been studied it will be seen that these intervals did not enter into the scheme of harmony.

These, then, were the essential combinations, or consonances of the period, and any of the components might be approached or quitted by step or leap within the bounds of melodic elegance. This statement, however, has to be qualified in one case. The close of a period of music is marked by the use of two definite melodic idioms. The Canto Fermo invariably moved one step down to the Final of the mode, and at the same time some accompanying part had to proceed one step upwards to the Final:

He then might add the soprano :

Ex. 22.

8 5 8 8 6 5 8
5 3 3 6 3 3 8

Finally, the alto may be added :

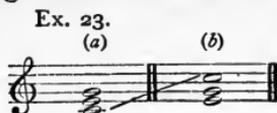
Ex. 22 a.

1 2 3 4 5 6 7

Now such writing as this led composers to consider not only the particular effect of each melody, but also the effect of the simultaneous percussive of the various sounds, e. g. the blocks of harmony 1, 2, 3, 4, 5, 6, 7. To each of these blocks they gave the generic term 'chord'. That is to say, the combinations are regarded as separate entities, not as being the accident of the part-writing, but as actually regulating it.

10. Any bass note with its major or minor third and perfect fifth is termed a common chord, and it is named from its bass note. Thus (1) is the common chord of C. But it is more particularly defined in accordance with the character of the third from the bass note. From C to E is a major third, (1) is therefore called the major common chord on C. From D to F is a minor third, (3) is therefore termed the minor common chord on D. The bass note of each of these chords is termed its root. Any bass note with any third or fifth above it is termed generically a triad. Thus C, E, G is both a triad and a common chord. But B, D, F, though a triad, does not satisfy the definition of a common chord, B to F being a diminished fifth. It is termed a diminished triad. Likewise C, E, G sharp is an augmented triad, named from the character of the fifth C to G sharp.

Rameau, in his *Traité de l'Harmonie* (1722), revealed the fact that both the following were referable to the same root :



in fact that (b) was merely an inverted form of (a) with the root placed higher, leaving the original third as the bass ; (b) was termed the first inversion of the major common chord on C. Chord (4) is therefore thus designated ; (6) is the major common chord on G, (7) is the same as (1), and (5) is the first inversion of (3).

11. The new possibilities that this view opens out will be seen best by examples.

Firstly, it must be understood that the chords implied are indicated, so far as the present examples are concerned, as follows :

(a) No figures under or above a bass note indicate the common chord in root position.

(b) The figure 6 thus placed indicates the first inversion of a common chord.

Three procedures could be adopted in writing a short piece of music according to the principle of chords.

(a) A bass might be conceived, and as it is written the composer would mentally picture merely the masses of harmony above it, with no consideration of any melodic developments.

(b) A melody might be conceived, but at the same time the composer would regulate it by what he felt to be a natural sequence of chords and a suitable bass.

(c) A bass might be conceived and at the same time a melody implying with it certain pre-considered chords.

In all these cases it is assumed that the chords move simultaneously with the bass or melody. The following might result from any of the above procedures, the harmony being subsequently filled in :



It should be observed that at (a) the D is no longer compelled to fall to C. It is no longer a question of the progression of a melody, but of a factor of a chord. It is also to be noted that the alto and tenor in this example are poorer as melodies than in the former illustration. They merely fill in the harmony. The above is merely an example of plain harmonic progression with a tolerable soprano which might serve as a melody.

Next, take these chords as the basis of more elaborate texture. A composer might, for example, evolve a melody for the violin with pianoforte accompaniment :

Ex. 25.

VIOLIN.

PIANO.

or he might weave imitative parts that move in accordance with these preconceived chords :

Ex. 26.

The student will at once see that decorations of the chords are being produced. Strict Counterpoint is a system of intervals, Harmony is a system of chords, and the trained musician will instinctively write any single part with a due consideration of its harmonic possibilities. The first step, then, is to gain a sound grasp of chord progression as such.

12. The system of chords was at its inception termed Homophony or Monodia. Sometimes these terms are used in

the same sense, namely, to designate music in which the melody is assigned to one part only, the other parts accompanying it with chords. The use of the lute, which was very prevalent at the beginning of the seventeenth century, naturally encouraged such a style, while the needs of dramatic expression in the secular music afforded a stimulus to experiment in new chords and new melodic progressions. Sometimes the term Homophony is used to designate the use of plain blocks of chords, in contrast with the characteristic features of Counterpoint. The term Harmony really refers to composition based on the theory of chords, that is, the method in vogue since the beginning of the seventeenth century. When the system of chords had come to some maturity, composers began to incorporate the features of the older style under new conditions, as, for example, in the work of J. S. Bach. Thus modern music illustrates the contrapuntal as well as the homophonic and monodic sides of technique, and it is customary to define a section of music as being contrapuntal or harmonic in so far as it displays the one characteristic or the other, irrespective of the period to which it belongs. Thus the terms Counterpoint and Harmony are transferred from the sense in which they define historic periods to that in which they define a particular style which was characteristic of the period from which they take their name. Lastly, as the salient feature of harmony is its formation on a system of chords, the term Harmony gets narrowed down to indicate a statement of the principles of chord formation and chord progression. It must, therefore, be borne in mind that in this treatise it is used in its wider sense to designate the principles underlying the writing of music based on a system of chords, as opposed to its precursor, Counterpoint, which was a system based, so far as combined sound is concerned, on a calculation of intervals.

CHAPTER II

THE ECCLESIASTICAL MODES AND THE MODERN SCALIC SYSTEM

I. IF only the white notes of the pianoforte be used, and a succession of eight such notes be played in consecutive order upwards from any given note, we produce what is termed a mode :

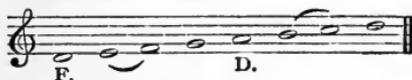
Ex. 1.



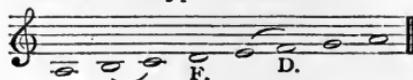
As any two consecutive sounds of a mode must be either a tone or a semitone apart, it is obvious that the cardinal difference between the various modes, from the point of view of melody, lay in the relative positions of the tones and semitones. Thus in (a) the semitones occur between the second and third and sixth and seventh degrees. At (b), on the other hand, they occur between the first and second and fifth and sixth sounds. The modes were of Greek origin, and formed the basis of the music of the Polyphonic Period. They were fourteen in number :

Ex. 2.

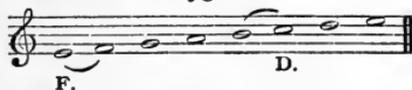
Mode i. Dorian.



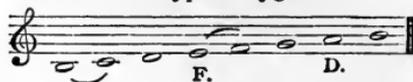
Mode ii. Hypo-Dorian.



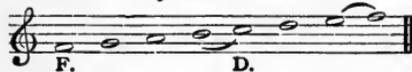
Mode iii. Phrygian.



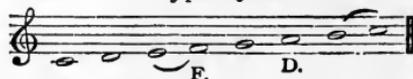
Mode iv. Hypo-Phrygian.



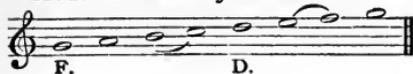
Mode v. Lydian.



Mode vi. Hypo-Lydian.



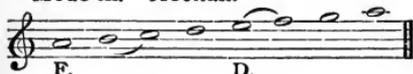
Mode vii. Mixolydian.



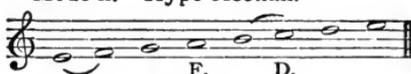
Mode viii. Hypo-Mixolydian.



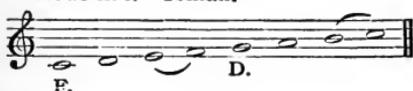
Mode ix. Aeolian.



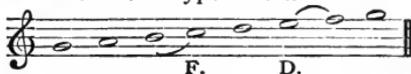
Mode x. Hypo-Aeolian.



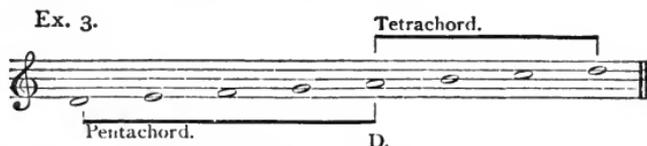
Mode xiii. Ionian.



Mode xiv. Hypo-Ionian.



2. Modes i, iii, v, vii, ix, and xiii are called Authentic. The first note of each is called its Final, signified in the above by the letter F. Each authentic mode is regarded as a pentachord (or series of five consecutive white notes) with a tetrachord (series of four consecutive white notes) above it. Thus in the Dorian mode D to A is the pentachord, A to D is the tetrachord. The point where they overlap is called the Dominant, signified above by the letter D:



But in the Phrygian mode the position of the Dominant is moved up one degree to C, because B is dissonant with F, and would cause complications in the harmony. This dissonance was also the cause of Modes xi and xii not being used. The Final in each case was B.

Modes ii, iv, vi, viii, x, and xiv are termed Plagal, and each is regarded as a tetrachord with a pentachord above it:

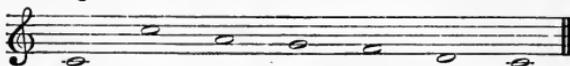


Each Authentic mode has as its companion a Plagal mode, from which it differs in that (1) it begins a fourth below the Authentic form, (2) its Dominant is a third below that of the Authentic

mode, unless this produced a B, as in the Hypo-Mixolydian mode; in this case it is raised to C. Both the Authentic and its companion Plagal mode have the same Final, and this must always be the last note of a modal melody.

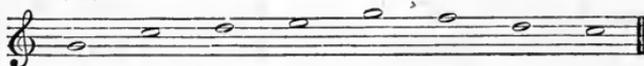
Thus the following is in the Ionian mode:

Ex. 5.



And the example below is in the Hypo-Ionian mode:

Ex. 6.

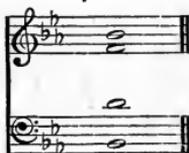


It will thus be seen that a melody that lies between the Final and its octave is Authentic, but one that lies between the fourth below and the fifth above the Final is Plagal. If, however, it extends throughout the range of both modes, it is termed Mixed.

3. The mode in which a composition of the Polyphonic Period is written can be found by turning to the last bass note, which is the Final of the mode. The tenor is usually the Canto Fermo, and an examination of this will show whether the mode be Plagal or Authentic. But it is quite possible for one voice to use the one form, and another voice the other. The key-signature of one flat is an indication that the mode has been transposed, and in this case the real Final is a fourth below the last bass note. This must not be confused with modern editing of modal music, in which a mode or transposed mode is placed at a pitch which is considered suitable for the voices. For instance, any modal music with the key-signature of four flats has been transposed by the editor.

In this case, the series of sounds in a mode corresponding with the transposed form must be found. Thus, suppose the last combination be:

Ex. 7.



the series of notes is :

Ex. 8.



This corresponds to the Mixolydian mode, and it will be Authentic or Plagal in accordance with the range of the Canto Fermo.

If, on the other hand, the final chord were :

Ex. 9.

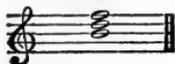


the presence of only one flat in the signature indicates that the mode has been transposed, and is therefore the Lydian.

4. The formation of modal harmony must be considered in some detail, in order to see how the modern scale is evolved.

In the earliest period, up to the end of the twelfth century, the modes were utilized exactly as they stood except that in order to avoid such a dissonance as

Ex. 10.



the B was flattened.

But composers soon began to find out that the use of other accidentals produced more euphonious effects, and their employment became systematized as a principle termed *Musica Ficta*. The ecclesiastical authorities were prone to look askance at these innovations, as they obviously tended to destroy the characteristics of the modes. So composers often wrote their music without the accidentals intended, and trusted to the musical sense of the singers. But in some cases it might be hazardous to omit the signs. When they were introduced the music was called *Musica Ficta*, or artificial music.

The following are the chief cases in which accidentals were employed :

(a) It has been pointed out that in the *Clausula Vera* the

Canto Fermo proceeded from the second degree of the mode to the Final, and that some accompanying part proceeded simultaneously from the sound below the Final up to it :

Ex. 11. Ionian Mode. C.F. Dorian Mode. C.F.

It was soon felt that the Clausula Vera in the Ionian mode sounded more satisfactory in effect than that in the Dorian mode. It was thus made a rule in Musica Ficta that the penultimate concordance should be a major sixth or minor third in the Clausula Vera of every mode. It will be found that Modes iii, v, and xiii naturally fulfil these conditions :

Ex. 12. Mode iii. Mode v. Mode xiii.

And if these be transposed they also keep the rule :

Ex. 13. Mode iii, transposed. Mode v, transposed. Mode xiii, transposed.

But in the other modes accidentals will be necessary :

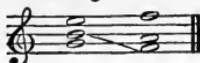
Ex. 14. Mode i. Mode i, transposed.

Mode vii. Mode vii, transposed.

Mode ix. Mode ix, transposed.

(b) Next, when a third part is added, it is necessary to avoid the false relation of the tritone ; this would occur in Mode v, when the Canto Fermo is in the lowest part :

Ex. 15.



The addition of a flat to the B softens the effect.

(c) The final chord of the Clausula Vera must have the major third from the bass, if the third be introduced at all. It is often omitted. The following is a table of the Clausulae Verae in all the modes.

Ex. 16.

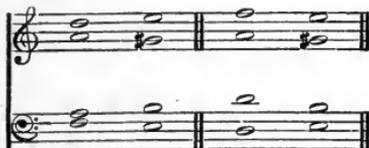
Mode i.



Transposed.



Mode iii.



Transposed.



Mode v.



Transposed.



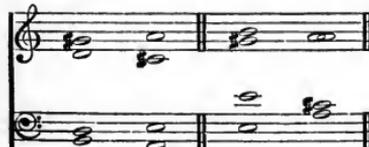
Mode vii.



Transposed.



Mode ix.



Transposed.



Mode xiii. Transposed.

(d) The interval of the augmented fourth or diminished fifth in melody must be avoided by altering the second of the two, forming the skip of a perfect fourth or fifth :

Ex. 17.

This interval was also likewise avoided at the extremities of a melodic passage :

Ex. 18.

(e) We have already shown that the false fifth between the bass and an upper part is avoided by flattening the bass :

Ex. 19.

(f) The tritone as an essential harmony must be avoided thus :

Ex. 20.

(g) Generally a B lying between two A's, or transposed an E lying between two D's, should be flattened :

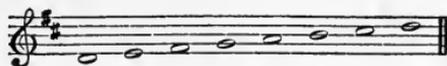
Ex. 21.

Now, let us transfer the accidentals used in forming the Clau-

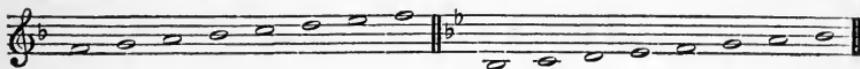
sulae Verae of some of the modes to the modes themselves, and see what the results are :

Ex. 22.

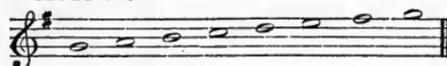
Mode i.



Mode v.

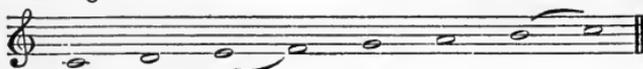


Mode vii.



It will be at once seen that these are exact reproductions of Mode xiii at different pitches :

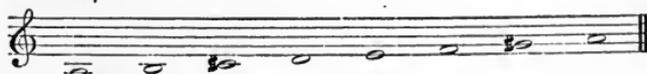
Ex. 23.



In all these the semitones occur between the third and fourth and seventh and eighth degrees. Thus we see how the modes tended to conform to a uniform pattern, and this is none other than our modern diatonic major scale. A scale is called major if the third degree be major in reference to the first, and each scale is named from its initial note, hence we have here the scales of D major, F major, B flat major, G major, and C major. It should be observed that the factors in this evolution are the feeling that it is much more satisfactory to lead up to the Final from a sound a semitone below than one a tone below, and that the final consonance is much more satisfactory with a major third from the bass than a minor third.

If Mode ix be written with the accidentals of Musica Ficta, we get :

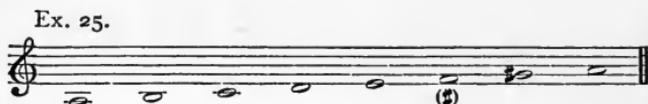
Ex. 24.



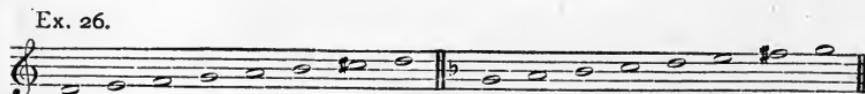
Then, to avoid the augmented second between the sixth and seventh degrees, the F was sharpened, producing the scale of

A major. Then Mode iii would be altered in order to conform to the uniform pattern.

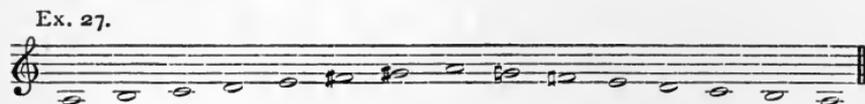
But it is to be observed that as the major third from the first sound was only used in forming the cadences, it would naturally occur to composers that it would be possible to evolve another type of scale as the companion of the major form, e. g. one in which, while the sound below the final was still a semitone from it, the third from the initial was minor. The Aeolian mode was taken as the model, with the seventh degree sharpened, and for purposes of melody the sixth degree was sharpened when necessary :



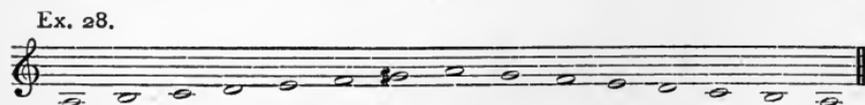
If Mode i be altered in this way, it gives this arrangement of sounds :



This is termed the melodic minor scale ; in descending the form of the Aeolian mode is used, as the seventh degree has not to perform its 'leading' functions :



The harmonic form of the minor scale is used for the purpose of forming chords :



As in the major series, each minor scale is named after its initial sound, thus the above is termed the scale of A minor. Each major scale has what is termed its relative minor, bearing the

same key-signature, and having its initial sound a minor third below that of the major scale. Thus the scale of F major has that of D minor as its relative, and both have the key-signature of one flat.

Music produced from the scale of C major is said to be in the key of C major, named after the common chord on the first degree, and arranged so as to give the effect of allegiance to this tonal centre. This matter will be discussed later. Formerly the terms major and minor were not used, but the key of C major was spoken of as the key of C with the greater third, and the key of C minor as the key of C with the lesser third.

5. At first composers of the Homophonic Period only used a few keys, those that did not require more than three sharps or two flats as key-signatures. All the music of the Polyphonic Period had been for voices unaccompanied. One of the chief characteristics of the new era was the development of music for instruments. Keyed instruments contained twelve notes to the octave: C, C \sharp , D, E \flat , E \natural , F, F \sharp , G, G \sharp , A, B \flat , B \natural . With this resource it was natural that composers should experiment with remote chords and extreme changes of key centre. But keyed instruments were tuned according to what is known as the Meantone system. Without going into the details of the method, it may be said that the result was that only the scales with the key-signatures of not more than three sharps or two flats could be used without extra keys, sometimes called quarter-tones. For example, the chord E, G sharp, B would sound quite well, because these sounds occur in the scale of A major. But the chord A flat, C, E flat would sound horrible, because the A flat was tuned as G sharp in reference to A (both A flat and G sharp being represented by the same key on keyed instruments). And in the system G sharp to E flat was much sharper than a perfect fifth. Hence in the early work the range of keys was restricted.

The system of 'equal temperament' obviated this difficulty. The octave is confined to twelve sounds only, this result being obtained by tuning upwards in fifths, each a little flat, until we come to a note that corresponds with that from which we started.

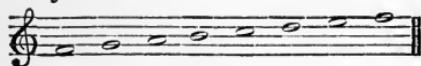
J. S. Bach wrote his *Das wohltemperirte Clavier* for a clavichord tuned in equal temperament, but the system was at that time quite exceptional. It is of course obvious that the Meantone system was but the counterpart of the gradual transition from the modes to the modern scales. Unaccompanied voices, of course, did not need 'temperament' at all, and all the music of the Polyphonic Period was of this nature. And it was natural that keyed instruments should in the first instance be tuned with a reference to the past, for the modes merged almost imperceptibly into the modern scales, and the need for equal temperament would not be suspected. Further, it may be observed that equal temperament has produced the modern chromatic scale, which now forms the basis of harmony.

6. In the music of the seventeenth century, and indeed up to the time of Handel and Bach, composers often omitted the last sharp or flat from the key-signature. The fact that it is not always so is somewhat puzzling. The procedure seems to be in the main a survival of modal methods.

(a) Composers often wrote in the Dorian mode transposed. Thus, commencing on G, the B would be flat, and the E natural. Similarly, commencing on C, the E and B would be flat and the A natural. This, however, does not account for the fact that Corelli's Second Sonata for Violin and 'Cello is in B flat with the signature of one flat. But under the modal system the presence of one flat in the key-signature was an indication that the mode had been transposed a fourth upwards. Applying this test to this sonata, the mode would be the Lydian :

Ex. 29.

Lydian Mode.



Transposed.



That is, the E would be constantly natural. But it would be flattened both in conjunct and disjunct movement if the Quinta Falsa or Tritone occurred ; also it would be generally flattened if used between two D's. The student will thus readily understand the following :

Ex. 30.

The image shows two musical examples, (a) and (b), each consisting of a treble and bass staff. Example (a) is the opening of the 'Grave' of Corelli's Second Sonata. The treble staff begins with a C major chord (C-E-G), followed by a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5. The bass staff begins with a C major chord (C2-E2-G2), followed by a sequence of notes: C3, D3, E3, F3, G3, A3, B3, C4. Example (b) is the ending of the piece. The treble staff begins with a C major chord (C4-E4-G4), followed by a sequence of notes: C5, B4, A4, G4, F4, E4, D4, C4. The bass staff begins with a C major chord (C2-E2-G2), followed by a sequence of notes: C3, B2, A2, G2, F2, E2, D2, C2.

(a) Opening of the 'Grave' of Corelli's Second Sonata.

(β) The ending of it.

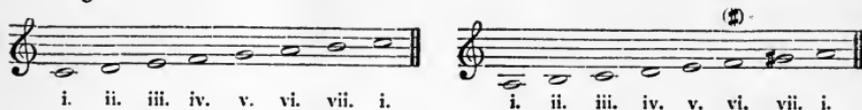
Then again, the Fourth Sonata is in F major, and the key-signature is correct according to modern notions, one flat. From the old standpoint it is the Ionian mode transposed.

(b) As regards keys with sharps for their signatures no such arguments can be adduced. For instance, Corelli's First Sonata is in D major with the signature of two sharps. The ninth, however, is in A with the signature of two sharps also. This is possibly a survival of modal methods, in which the note lying a semitone below the Final was constantly sharpened. Apparently no explanation of the procedure in reference to sharp keys has been attempted. It may be observed that in Corelli's Twelve Sonatas the sign of more than one flat is never used. This must be a survival of modal methods. Thus, if a piece be in D minor there is no accidental in the key-signature: if it is in G minor, there is one flat in the signature. If, however, the movement be in F major, the signature of one flat is used. Corelli seems to have applied this to the sharp keys with more than two sharps. Thus a movement in A major has the signature of two sharps; one in E major has the signature of three sharps. It can only be regarded as an arbitrary convention, due perhaps to speculation in order to reach some sort of uniformity of procedure. It almost looks as

if it were due to a misconception as to the use of the signature of one flat in modal composition.

7. Having seen the causes that led up to the evolution of the modern diatonic scales, it remains to state the names given to the various sounds forming these scales. They are the same in both the major and minor series :

Ex. 31.



The Roman numerals are here used, for the sake of brevity, to indicate the various degrees of the scale. The ordinary names, however, should be known.

I is called the Tonic, being the note from which the key is named.

If the seven sounds forming the scale be played in ascending order, it will be felt to be unsatisfactory to end with VII. It is felt that it leads naturally into a re-statement of I a step higher. This shows the origin of the term Leading Note as applied to VII, and also the function of I as being the point of finality. It is not necessary that a composition should commence with the tonic common chord (e.g. in the key of C, C, E, G), but it is unsatisfactory to end with anything else.

II is called the Supertonic, obviously because it lies one degree above the tonic.

III is termed the Mediant because it lies midway between the tonic and the dominant.

V is termed the Dominant. The common chord placed above this root (G, B, D in C major) contains the leading note, and when followed by the tonic common chord absolutely defines the key. Hence its importance.

IV is termed the Subdominant because it is the lower dominant. That is to say, as the dominant lies a fifth above the tonic, so the subdominant lies a fifth below it; and the common chords placed on I, IV, and V are the most important in the key.

Some object to this explanation of the term, and argue that

it means 'below the dominant'. If we accept the former explanation, it will be seen why VI is called the Submediant. It is the lower mediant. Those who do not accept this explanation call VI the Superdominant.

Ex 32.



The names of the degrees of the scale in order are :

I, Tonic. II, Supertonic. III, Mediant. IV, Subdominant. V, Dominant. VI, Submediant or Superdominant. VII, Leading Note.

CHAPTER III

PRINCIPLES OF MELODIC PROGRESSION, AND EAR-TRAINING IN THEM

1. No laws of harmonic or melodic progression are absolute. In considering them, two points must be carefully borne in mind :

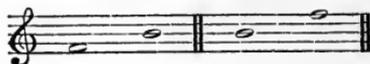
(a) A rule that applies to vocal style may have no *raison d'être* in reference to instruments: or again, a rule that applies to a String Quartet may be irrelevant when considering the technique of the Pianoforte.

(b) A rule that had significance at a certain period may be of no account at the present time, or certain conditions of one period may demand views that earlier conditions did not require.

2. As regards the laws of melodic progression, it will be well to commence with those of the Polyphonic Period, and it will be remembered that they refer to vocal style, unaccompanied. Modern extensions will also be considered.

3. Palestrinian principles of melodic progression.

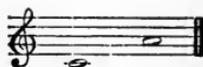
(a) All diminished and augmented intervals were forbidden :



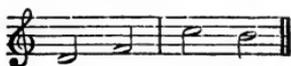
(b) One leap or two moves in the same direction should not produce an interval greater than an octave :



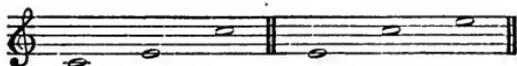
(c) The leap of a major sixth was forbidden. It was always inclined to be flat :



(d) The leap of the seventh was forbidden. But the minor seventh might form the extremes of two moves in the same direction if the part returned immediately inside the interval :



(e) The leap of a third followed by that of a sixth or a sixth followed by a third in the same direction is inelegant :



It must be remembered that these rules were framed for conditions of some difficulty. Instrumental music was unknown, and therefore not only were the voices unsupported, but they had not the help of instruments in making familiar to them intervals which are perfectly easy for an instrument, but difficult in the first instance for a voice.

(f) Not more than two leaps should be taken in the same direction. Further, after two or three conjunct moves, a part should not leap in the same direction to an accented note :



(g) A note half the value of an accent should not leap a sixth, major or minor, if the accents move moderately quickly :



undesirable.

4. The first step in practical work is to acquire the power of mentally hearing all the melodic intervals of the major and minor scale. It will be best, however, to learn first those that fall under the Palestrinian principles. It is of course obvious, that one must hear physically before one can hear mentally. The following intervals must be played on the pianoforte several times, and fixed well in the mind.

Next, the student should sing them from the score, unaided by the pianoforte. Then he should mentally hear them, e. g.

32 PRINCIPLES OF MELODIC PROGRESSION

In the following exercises—

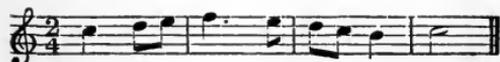
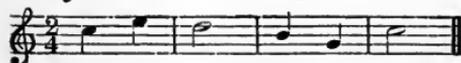
- (a) the time should be given ;
- (b) the tempo should be given ;
- (c) the examples should be played and sung by the student, and then mentally conceived ;
- (d) they should then be played by the master, and reproduced on paper by the pupil ;
- (e) any single sound may be chosen ;
- (f) the strong accent should be exaggerated.



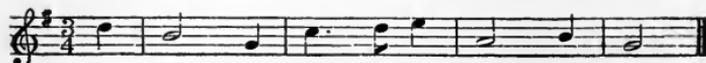
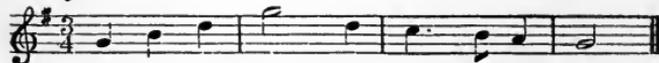
Other exercises may be added at the discretion of the master.

7. Time and tune may now be combined. Three or four notes at a time may be dictated. Further exercises may be added if necessary.

Key C.



Key G.



Key A minor.



Key D.



In the following examples the bars divide into weak and strong :

Key C.



Key C.



8. Some extensions of the Palestrinian laws of melodic progression.

There are two chief reasons for the extension of rules :

- (a) The advance of technique.
- (b) The demands of expression.

The use of instruments caused a great expansion of the rules of melodic idiom. But we have still to deal with them (a) in reference to voices, (b) in reference to the diatonic scale. All kinds of leaps are in the main easy for instruments, and their constant use under such conditions made familiar various intervals that were formerly untried ground.

The following extensions may be catalogued :

(a) When a part is repeating a melodic formula at different pitches, producing what is termed a sequence, an augmented interval may occur, if it is not in the original pattern :

PARRY. *Voces Clamantium.*

and ev - er - last ing joy

The augmented fifth, however, is extremely rare.

Appropriate expression is a valid reason for breaking any rule :

Ex. 1.

PARRY. *The love that casteth out fear.*

So far hath He re -

Here the purpose dictates an expansion of resource.

In the following example the interval occurs between the end of one phrase and the beginning of another, and the effect is excellent :

Ex. 2.

J. S. BACH. *Matthäus-Passion.*

schen - - - ken, sen - - ke dich.

But its use in a case like the following is simply a matter of inefficiency.

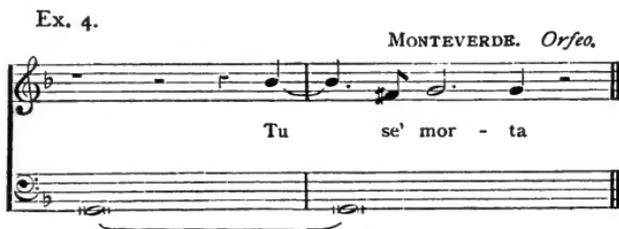


There is every reason why it should not be employed here.

(b) Diminished intervals may be freely used if the next sound is a note within such interval:



They are found very early in the seventeenth century:



Even earlier Tallis wrote:



ser - vant of . . . Thy ser - vant
Hear the voice and pray - er
Thy ser - vant that Thy
voice and pray - er of Thy ser - vant

(c) The needs of dramatic expression justify the leap of an octave being preceded or followed by notes outside its compass :

PARRY. *Voces Clamantium.*

Woe un - to them

(d) The leap of a major sixth is now perfectly easy, though it is better used when the notes forming it belong to the same chord :

Good. Not so good.

It is still undesirable for voices to leap a sixth if the first note be of short duration.

These extensions will suffice for the present.

9. Exercises in ear-training in the new intervals introduced. Apply the principles of study already detailed :

Key C major.

Key A minor.



Key G major.



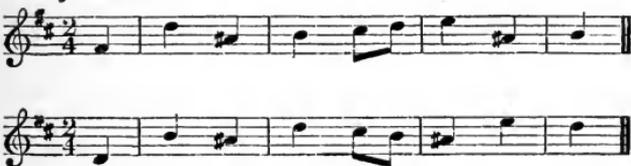
Key E minor.



Key D major.



Key B minor.



CHAPTER IV

FURTHER PRELIMINARIES IN EAR-TRAINING

1. IN the previous chapter the student was made familiar with elementary melodic progressions. The next step must be to acquire the power of mentally hearing harmonic intervals in two parts, and combinations of them in three and four parts. Finally the student must learn to hear mentally harmonic progression, that is, a succession of chords.

2. It will be well to cover only that ground which is immediately necessary, and to learn new resource as it occurs.

3. **Harmonic intervals in two parts.**

The harmonic intervals of the third, fourth, fifth, sixth, and octave, commencing on every degree of the major scale, should be learnt. It is presumed that the student has been through a preliminary course in rudiments, so that it will be unnecessary to go into the question of the quality of the various intervals.

The following is the course of study :

(a) **Preparation for lesson.**

The following intervals and their compounds should be played on the pianoforte several times, in several keys.

Before each group the common chord on the tonic should be played.

Then as each interval is played the student should name it to himself, as follows :



Major sixth on the supertonic, key G major. Next, he should read them, and attempt to hear them mentally, testing his

FURTHER PRELIMINARIES IN EAR-TRAINING 39

accuracy by afterwards playing them on the pianoforte. (Of course each interval should be played immediately it has been mentally conceived, and not a group after such group has been 'heard with the eye'.)

(b) The lesson.

The master should play the tonic chord before each interval that he requires, naming the key. He should vary the order of the intervals from that given here. The student should both name the interval and write it down at the pitch given, with the correct key-signature :

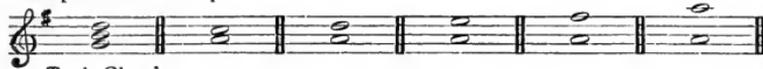
Key G major.

Tonic Group.



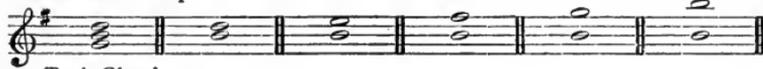
Tonic Chord.

Supertonic Group.



Tonic Chord.

Mediant Group.



Tonic Chord.

Subdominant Group.



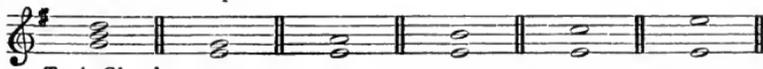
Tonic Chord.

Dominant Group.



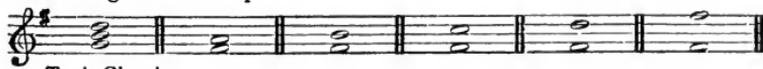
Tonic Chord.

Submediant Group.



Tonic Chord.

Leading Note Group.



Tonic Chord.

40 FURTHER PRELIMINARIES IN EAR-TRAINING

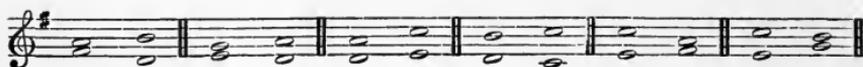
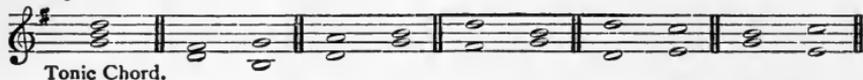
4. Next, harmonic progression in two parts should be studied.

No knowledge of harmony is required in order to reproduce the following examples on paper from dictation: it is simply a question of ear.

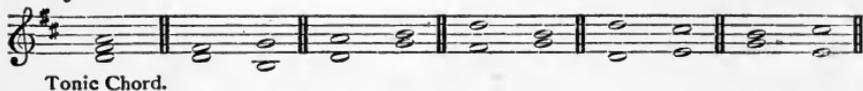
The same process as that already outlined should be gone through in all ear-training exercises.

The following exercises are only examples of the kind of study that should be undertaken. The master should add exercises of his own. Each example should be played by him twice or three times:

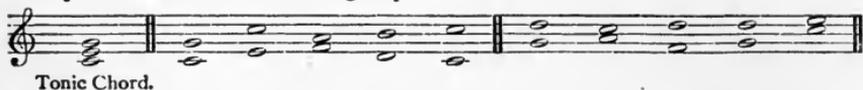
Key G.



Key D.



Key C. More intervals in a group.



Key F. The intervals grouped in accents.



CHAPTER V

THE TRIADS OF THE MAJOR KEY IN ROOT POSITION

1. IT has been seen that the method of composition of the Polyphonic Period was what is termed horizontal, and a moment's thought will show that the only means of classifying the technique was to consider it as consisting of various kinds of movement, e. g. note against note, two notes to one, syncopation, and so forth. But the theory of chords suggests at once a new method of classification. Just as in Counterpoint one learns the use of one sort of *movement*, at a time, so in Harmony one learns the use of one sort of *chord* at a time. Obviously, then, it is convenient to start with the concordances of the Polyphonic Period as *chords*, and to trace the gradual development from this limited scheme. It is best to consider the consonances separately, e. g. (a) the consonance of the third and perfect fifth from the bass, (b) that of the third and sixth from the bass. This chapter is concerned with the former scheme.

2. The meaning of the terms triad and common chord has already been explained. For the sake of brevity the sign (*a*) is used to indicate the root position of a triad. Thus *ia* in the key of C means C, E, G; *iva* in the key of G also means C, E, G; the Roman numerals, of course, referring to the degrees of the scale on which the triad is built.

3. If a third and fifth be placed above each note of the major scale, the combinations thus produced are termed the diatonic triads of the major key :

Ex. 1.
Key C.



The word diatonic, as applied to sounds, means that they comply with the scale that is being utilized.

4. In the above it will be noticed that there are three different kinds of triads :

(a) *i a*, *iv a*, *v a*, consisting of a root with its major third and perfect fifth. These are termed major common chords, and are the primary triads of a key.

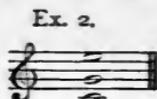
(b) *ii a*, *iii a*, *vi a*, consisting of a root with its minor third and perfect fifth. These are termed minor common chords, and are the secondary triads of a key.

(c) *vii a* consists of a root with its minor third and diminished fifth. This is not a common chord, but is termed a diminished triad, being classified according to the peculiar nature of its fifth. As it occurred in the Polyphonic Period it is here catalogued, but the peculiar circumstances of its use will require detailed consideration. These will be discussed in due course. For the present the triad will be considered as being unavailable.

5. Ear-training.

These triads should at once be committed to memory. It is of course obvious that they must be memorized in reference to some given sound or chord which remains fixed ; this is naturally the tonic. Before any chord is played the tonic chord should be struck, then the chord in question is localized by its distance from the tonic. The triads should be played in various keys. When they are fixed in the memory the master should play the tonic chord, and then one of the other chords, which the pupil must name in full, e.g. suppose the dominant chord were required, the pupil would describe it as the major common chord on the dominant. Next the varying quality of these chords with the upper notes, the third and the fifth differently arranged, must be carefully studied. The variations may take the following forms :

(a) Third and fifth reversed in position :



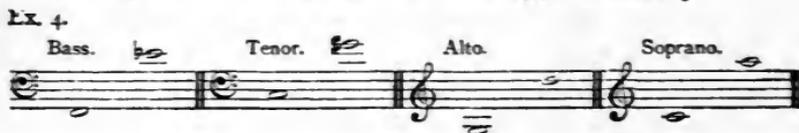
(b) Fifth or, rarely, the third omitted. This causes one note to be doubled :



Generally it is better not to double the major third. The leading note must not be doubled. These rules are not absolute, but they apply for the present (we are assuming that the technique is vocal).

(c) The distribution of the sounds for three or four different voices : (1) S. A. B. ; (2) A. T. B. ; (3) S. A. T. B. In this connexion it must be noted that (1) any wide gap should occur only between the two lowest parts, (2) in four parts the doubling of some sound is a necessity. The root (except vii), minor third, and fifth (except when vii) may always be doubled.

The compass of the various voices is approximately :



For the present S. and A. are written in the treble stave, T. and B. in the bass stave :



The following are typical exercises in ear-training. When they have been thoroughly memorized the teacher should play various chords in various keys, and the pupil should reproduce them on paper.

Submediant Group.

6. The student is now in a position to consider the principles underlying the progression from one chord to another when they are both in root position. The matter may be discussed under two heads: (a) the progression of the various parts in reference to one another, (b) the progression of the chords in reference to one another.

7. Elementary laws of harmonic progression.

Only those laws that are required for the immediate purpose will be here detailed.

A. If both the following be played as isolated examples,

Ex. 7.

it will be found that whereas (a) is bad in effect, (b) is not. This points to two lines of criticism: (1) the bass is the foundation of the whole, and the effect of a passage largely depends upon its formation. Upper parts may rearrange themselves without materially altering the harmonic effect, but if the bass be altered the effect is quite changed. Compare the following:

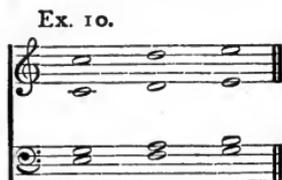
Ex. 8.

It will be found that *a* and *b* and *d* and *e* are respectively the same in harmonic effect, whereas *c* and *f* produce a new effect. Thus the bass holds an isolated position of supreme importance. To duplicate this in an upper part which is not adjacent is to

introduce a condition of things which is obviously wrong. There can only be one real bass, and only one position for it. In the following example



the bass is merely reinforced. That is, it is duplicated at the unison, and the tenor is therefore also the bass to the alto and treble. But such duplication should not occur spasmodically, else the balance of the parts is upset. Here there are not four parts, but three. The ground of objection is not that the effect is bad, but that the parts are not independent. Similarly, no one could condemn the duplication of an upper part in octaves, if continued for some time, on any aesthetic basis :

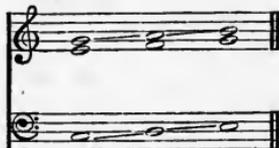


Such duplications are termed consecutives, and, as applied to this case, consecutive octaves. For the present the student must not use them at all. But the foregoing will have shown him that (1) a duplication of the bass by the soprano or alto is fundamentally wrong, (2) a duplication of an upper part by another upper part reduces the number of parts by one. Of course the duplication of the same octave in consecutive chords does not fall under the above ruling :



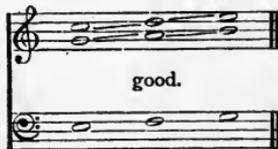
It will be remembered that the early organum consisted of parallel movement in fourths or fifths. The latter has for long been considered intolerable. There are cases in which it is quite good in effect; but we have here to consider the grounds of criticism as regards its evil effect. It is said in Grove's *Dictionary* that the bad effect is due to the parts moving 'simultaneously in two different keys'.

Ex. 12.



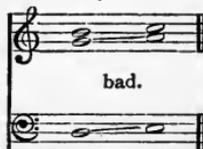
That is to say that in the above the soprano moves as if in the key of G, and the bass as in the key of C. If this were the real reason, then surely parallel fourths ought to sound as bad:

Ex. 13.



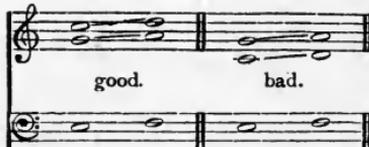
But the above are quite good in effect. Between the bass, however, and an upper part they are bad in effect:

Ex. 14.



There seems to be no logical reason for the differentiation between the following:

Ex. 15.



but one's ear at once accepts the former and rejects the latter.

B. When any two parts approach an octave or perfect fifth by similar motion, each octave or fifth is said to be exposed, or hidden. These two terms are seemingly paradoxical. It was formerly held that the following example was objectionable, because if the intermediate sounds were filled in, consecutives would occur :

Ex. 16.



But no one imagines the intermediate sounds to be filled in. This notion, however, explains the term 'hidden', meaning that the consecutives were really there. Moderns rightly take the view that any bad effect is caused by the approach of the octave or fifth in similar motion : this brings it into undue prominence ; it is therefore said to be exposed. It is impossible to find any basis of general agreement as to which exposed consecutives are objectionable, and which are not. No one, however, objects to the following generalization.

(1) They are good between the extreme parts of primary triads (i, iv, v) if the highest part move by step :

Ex. 17.



(2) They are never objectionable between two positions of the same chord :

Ex. 18.



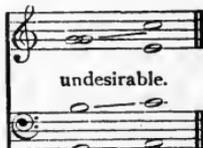
(3) Exposed fifths are unobjectionable between the extreme parts of *ii a* and *v a* when the top part leaps down a third from the third of *ii a* to the fifth of *v a* :

Ex. 19.



(4) As a general rule when two parts approach an exposed octave, one of them being an inner part, it is better that the higher part move by step :

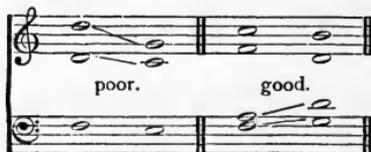
Ex. 20.



This, however, is only a recommendation, except in three parts, when it should be regarded as a rule.

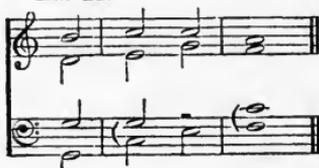
(5) In three parts, if an inner and extreme part approach a fifth by similar motion, the higher part should move by step. In four parts there is no such restriction :

Ex. 21.



C. A rest does not remove the effect of consecutives :

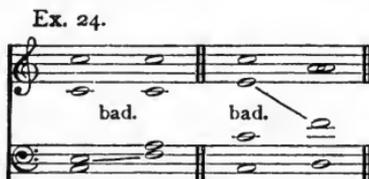
Ex. 22.



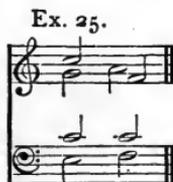
D. No two parts should approach the unison by similar motion:



This involves another fault. An adjacent part should not in the next chord move to a note higher than that employed by the part above it in the first chord, nor to one lower than that employed by the part below it in the first chord :

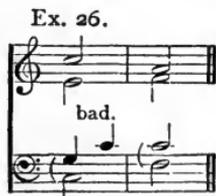


E. For the present the parts should not cross, i.e. reverse their respective positions in the score :



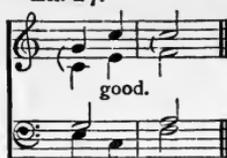
The following additional points may be observed :

(a) Such a procedure as follows does not prevent the effect of consecutives :



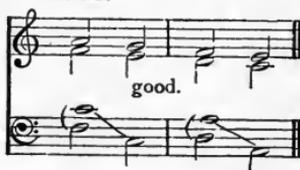
If, however, both the parts involved move to two different notes of the same chord before proceeding to the next consecutive, any evil effect is entirely obviated :

Ex. 27.



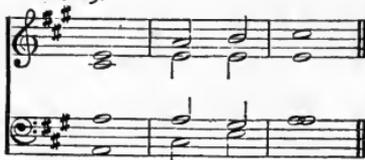
(β) It must be remembered that the term consecutive implies that the notes involved occur in consecutive different chords. Therefore the following are not examples of consecutives :

Ex. 28.



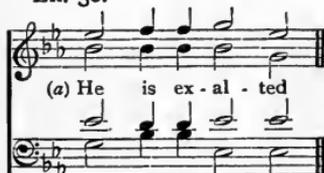
(γ) The unison by similar motion is often found between the bass and tenor, when the bass leaps up a fourth and the tenor rises a semitone :

Ex. 29.

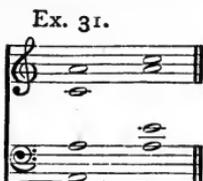


Here it would have been very tame for the bass to have returned to the lower A, hence the end justifies the means. In the following the bass at (a) is tame ; at (b) the alto is too high ; at (c), therefore, the unison by similar motion is justified :

Ex. 30.



(δ) Overlapping is not objectionable between two positions of the same chord :



(ε) When a note is common to two consecutive chords, it should generally be retained in the same part :



8. The leading note should rise except (a) in changing to a different position of the same chord, (b) in a descending scalar passage :

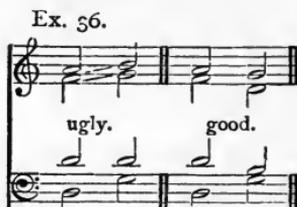


9. Having discussed the progression of the various parts in reference to one another, it remains to consider the progression from one chord to another. Omitting *vii a* from the present discussion, (a) roots rising or falling a fourth or fifth are nearly always good in effect :





In writing *ii a* to *va* it is better to avoid consecutive major thirds. This produces the false relation of the tritone. It is not a matter that need worry present-day students. But it is recommended that consecutive major thirds ascending should be avoided, at any rate for the present, between the extreme parts or between the two highest parts :

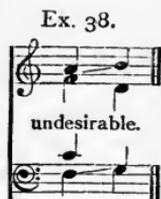


(*b*) roots rising a second are good in effect except *ii a* to *iii a*. The effect of consecutive major thirds downwards in *iii a* to *iv a* is not unpleasant :



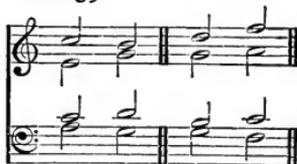
When roots move by step the upper parts should generally proceed in contrary motion with the bass. In using *va* to *vi a* the leading note must rise ; in *iii a* to *iv a* it must fall.

Try to avoid the following :



(c) Roots falling a second are poor in effect except *vi a* to *v a*, and *v a* to *iv a*. In the latter case the soprano should have the fifth in *v a* and leap a third up to the root of *iv a* :

Ex. 39.



(d) The effect of roots falling a third is better than that of roots rising a third, though both are possible. In either case the chords have two notes in common, and the effect is more vigorous if the chords be used from a strong accent (–) to a weak one (∪), or between two weak accents, rather than from a weak accent to a strong one :

Ex. 40.

Example 40 consists of two systems of two staves each. The top staff of each system is in treble clef and contains a sequence of chords: a triad of G4, B4, D5 (G major), followed by a dyad of G4, B4 (G major), and then a dyad of G4, D5 (G major). The bottom staff of each system is in bass clef and contains a sequence of chords: a dyad of G3, B3 (G major), followed by a dyad of G3, D4 (G major), and then a dyad of G3, B3 (G major). Vertical lines connect the notes between the two staves, indicating the harmonic structure.

10. Ear training.

All these progressions should be played on the pianoforte, the tonic chord being played before each pair. They should be memorized, and the master should then play them and other arrangements of them, the pupil reproducing them on paper.

11. Exercises.

(a) Write a chord in four vocal parts to precede and follow each of the following at the points numbered 1 and 3 :

Ex. 41.

(b) To the following bass and soprano add parts for alto and tenor:

Ex. 42.

(c) To the following basses add parts for S. A. T.:

Ex. 43.

CHAPTER VI

PHRASE FORMATION

I. THE principles underlying the progression from one common chord to another (in root position) having been discussed, the next step is to learn how to write a series of such chords so as to form intelligible music. One of the great characteristics of the beginning of the Homophonic Period was the secularization of music, and this involved the introduction of the important feature of rhythm, that is, the division of the music into well-defined periods. Music should be measured by accents, and not by bar-lines. For instance, both the following are identical :

Ex. 1.



And it seems absurd to say that the first is a two-bar phrase, and the second is a four-bar phrase, unless it is also taken into account that bars vary in the number of their accents, and that these are often contrary to the time-signature. A bar cannot be taken as a standard of measurement because of its inconstant nature. The accent is, so to speak, the prime factor of music. In this connexion there is some analogy between the metre of poetry and the accents of music. So far as the harmonic sub-structure of music is concerned there are only two arrangements of the accents, commonly known as duple and triple time, e. g. :

(1) - ∪ (2) - ∪ ∪

But these can be arranged in other orders so as to form different kinds of measures or feet, thus :

(1) $\overbrace{\cup - \cup -}$ (2) $\overbrace{\cup \cup -}$ $\overbrace{\cup \cup -}$

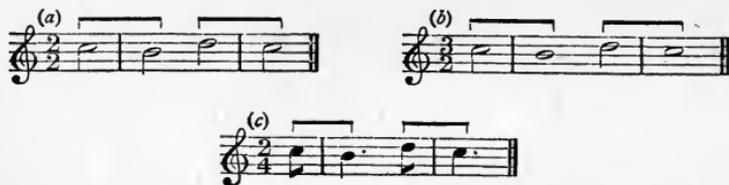
The times, however, remain the same, e. g. duple and triple.

2. A group (∪ -) is called in poetry an Iambic foot. As far as

- strong ∪ weak (see p. 55)

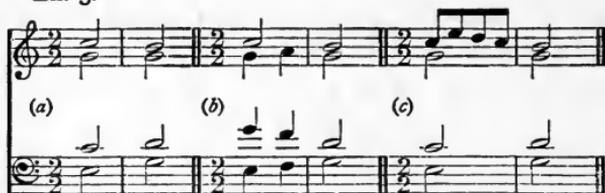
the duration of sounds and their accentuation is concerned, it would be true to say that all the following were Iambic feet :

Ex. 2.



But we are here purposely limiting the analogy to the case of accents which move uniformly. Obviously an accent may contain one chord or more, and it may contain one note or more over the same chord :

Ex. 3.



At (a) the accents coincide with the chords.

At (b) the first accent contains two chords and therefore two notes over it.

At (c) the first accent contains four notes.

We start with the simplest case, that of the chords moving with the accents. It must be carefully observed that in drawing the analogy between metre and accent it is of course not implied that in setting words to music the principle also applies. On the contrary, except in writing hymn tunes, it would be a fundamental error to attempt to make metre and accent coincide. But the *principles* of metre as applied to accent do really help the student to write intelligible music.

3. Four feet make a verse called a Tetrameter, which corresponds to the phrase in music.

Four metres will be considered.

(a) The Iambic Tetrameter :

The thirsty earth soaks up the rain.

It may be reproduced in music thus :



Now the above verse forms a complete literary idea, and is marked off by some form of punctuation. Music contains the same feature, and a phrase is marked off by the use of definite harmonic idioms at the last foot, and they form what is termed the cadence. Normally the cadence consists of two chords, the second of which occurs on the strong accent, and the first, therefore, on the preceding weak accent. The grouping of music into a definite period, with a cadence at the end, produces what is termed rhythm.

(b) The Trochaic Tetrameter :

Of this there are two forms :

- u - u - u - u

(1) Why so pale and wan fond lover.

Here the final syllable is unstressed.

If the cadence in music proceeds - to u it is termed feminine.

- u - u - u -

(2) All is best though we oft doubt.

Here the final unstressed syllable is omitted, forming what is termed the Catalexis. In music this would be reproduced thus :



That is, the first chord of the cadence overlaps the end of the third foot.

(c) The Dactylic Tetrameter, usually catalectic :

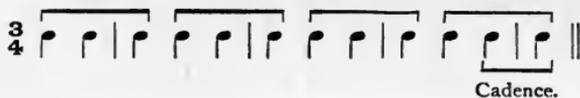
- u u - u u - u u -

Stars of the morning so gloriously bright.



(a) The Anapaestic Tetrameter :

∪ ∪ — ∪ ∪ — ∪ ∪ — ∪ ∪ —
 And the light that surrounds us is all from within.

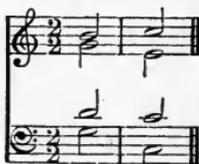


4. We have now to consider how to represent these metres in music with chords.

(a) The chords chosen must give the effect of allegiance to a fixed tonal centre. The cadential idioms are the greatest factors in gaining this end. The following are at present available :

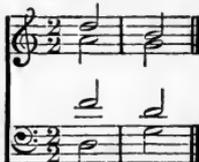
(1) The Perfect Cadence, *va* to *ia*, establishing the key and giving the effect of finality :

Ex. 4.



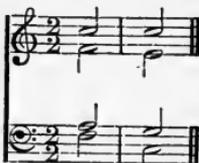
(2) The Half Close, *va*, preceded by any other chord (except perhaps *iii a*), corresponding to the colon in literature :

Ex. 5.



(3) The Plagal Cadence, consisting of *iv a* to *ia* :

Ex. 6.



(4) The Interrupted or Deceptive Cadence, consisting of *va* followed by any other suitable chord except *ia* or its inversions, generally *vi a* or *iv a* :

Ex. 7.



It is so called because the mind is led to expect the Full Close, and is deceived.

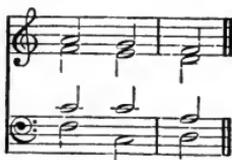
Now music is framed by adding phrase to phrase, and it will be obvious that the Half Close and the Deceptive Cadence would not be appropriate in the last phrase, because they both destroy the effect of finality.

As we are beginning with single phrases, we are therefore at present limited to the Perfect and Plagal Cadences. The arrangement of the parts is immaterial; but the last chord is best with the root in the soprano if the effect of absolute finality be desired.

The beginning also requires consideration. If the first chord occurs on a strong accent it is best to commence with *i a.*

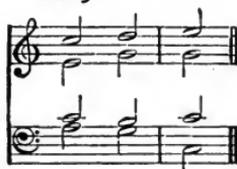
If we commenced as follows :

Ex. 8.



the effect would be that we were in F major and not C major. If the first chord is not the tonic it should be followed by a chord defining the key, e. g. the dominant :

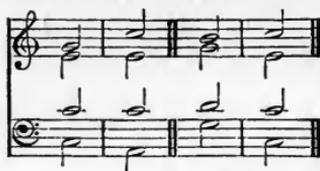
Ex. 9.



But the student will do well to start with the tonic chord on

the strong accent. If the first chord occurs on the weak accent it should be *i a* or *v a*, at any rate for the present :

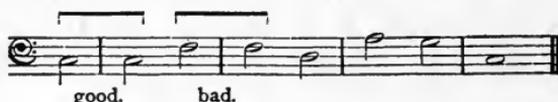
Ex. 10.



If the first two chords be $\vee \vee$, the first may be any chord if the second be *v a*.

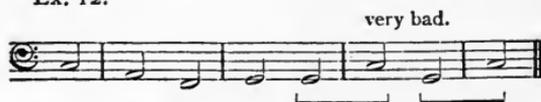
(b) The same chord should not be used \vee to — except in the first foot of the first phrase. Elsewhere it produces a bad halting effect :

Ex. 11.



(c) Do not anticipate, but lead up to the cadence. Never use *v a* to *i a* (\vee to —) except at the cadence or start :

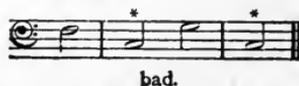
Ex. 12.



(d) Avoid at all costs—

(1) *i a* on the accent preceding the Perfect Cadence :

Ex. 13.



(2) *v a* of the cadence immediately preceded by *v a* :

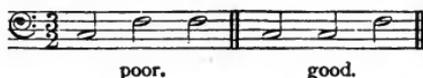
Ex. 14.



(e) In triple time, as a general rule, if two different chords are used for the strong and succeeding weak accents, the chord

used for the latter should not be repeated on the succeeding weak accent :

Ex. 15.

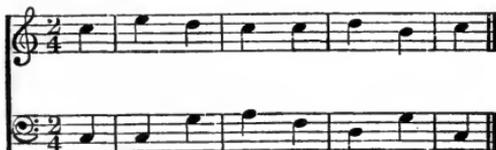


5. Exercises.

(a) Add A. T. to the following S. and B. :

Ex. 16.

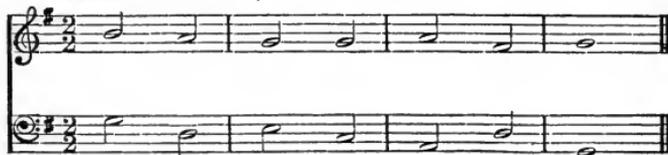
Iambic Tetrameter.



Trochaic Tetrameter.



Trochaic Tetrameter, with Catalexis.



Dactylic Tetrameter.



Anapaestic Tetrameter.

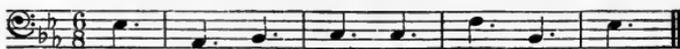


PHRASE FORMATION

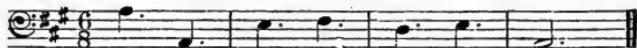
(b) Add S. A. T. to the following basses :

Ex. 17.

Iambic Tetrameter.



Trochaic Tetrameter, with Catalexis.



(c) Add A. T. B. to the following melodies.

Each note may be the root, third, or fifth of any chord except vii *a*, and the student must exercise discretion in his choice :

Ex. 18.

Iambic Tetrameter.



(1) Better use two different chords. (2) Avoid *v a*.

Ex. 19.

Trochaic Tetrameter.



(1) Use *i a*. (2) Avoid same chord, \cup to —.

Ex. 20.

Trochaic Tetrameter.



(d) Write original examples for S. A. T. B. of Iambic, Trochaic, Dactylic, and Anapaestic Tetrameters.

CHAPTER VII

FIRST INVERSION OF TRIADS IN THE MAJOR KEY

1. IF the bass of each of the triads of the scale be transferred to a higher part, and the original third of the chord be left as the bass, we produce what are termed the first inversions of the triads :

Ex. 1.
Key C major.

i *b*. ii *b*. iii *b*. iv *b*. v *b*. vi *b*. vii *b*.

The letter *b* added to the numeral indicates that the chord used is the first inversion of which the numeral is the root. All these were available in the Polyphonic Period.

The figure 6 under a bass note implies that the sounds to be added are the sixth and third from the bass, and that therefore the chord is a first inversion.

2. Ear training.

Each of these chords should be played on the pianoforte, the tonic common chord being struck before each. They should be played in three and four parts, and then reproduced on paper from dictation. The following are examples :

Ex. 2.

3. Progression of parts.

(a) One of the best uses of the first inversion of the triad is a succession of two a step apart :

Ex. 3.

In using a series of these, e.g. three or more, it is best to make the soprano move in parallel sixths with the bass, and to double the root and fifth alternately:

Ex. 4.

Care must be taken that the order is so arranged that the leading note in *vii b* is not doubled:

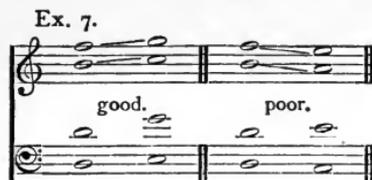
Ex. 5.

But this is not the only arrangement possible; the following are quite good:

Ex. 6.

(b) The diminished fifth followed by the perfect fifth, or vice versa, is allowed between two upper parts if the lower of the two parts involved proceed by step of a semitone:

Ex. 7.



good. poor.

(c) In using *vii b* it is better not to double the fifth from the root, but this is not forbidden. If the bass of *vii b* move by step, the fifth forming a third from the bass should move in similar motion with it, at any rate when it is in the soprano :

Ex. 8.



crude. good. good.

4. We are now in a position to consider the use of this chord. Of course no exercises will contain this chord alone, so that there are three possible combinations in forming a progression from one chord to another :

I. The first inversion of one triad followed by the first inversion of another.

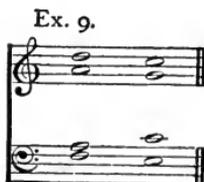
II. The root position of a common chord followed by the first inversion of the same or another triad.

III. The first inversion of a triad followed by the root position of the same (except *vii a*) or another triad.

5. Case I. The first inversion of one triad followed by the first inversion of another.

(a) These are always good one step apart ; so that whereas *ii a* to *i a* is poor, *ii b* to *i b* is excellent :

Ex. 9.



The following progressions should be memorized, and reproduced from dictation :

Ex. 10.

(b) These are generally weak with the bass leaping a third upwards. They may sometimes be used with the bass leaping a third downwards :

Ex. 11.

(c) They may be used occasionally with the bass leaping a fourth or fifth :

Ex. 12.

But as a general rule when the bass leaps a fourth or fifth it will be found in the large majority of cases that both chords should be in the root position.

6. Cases II and III. A first inversion followed by a chord in root position, or vice versa.

(a) The root position followed by the first inversion of the same chord, or vice versa, is always good (omitting *vii a*) from

a strong accent to a weak one, but not from a weak accent to a strong one unless the previous strong accent has also had the same chord or at the very start :

Ex. 13.

Example 13 shows two staves of music. The top staff contains three measures of chords: a common chord (C4-E4-G4), a first inversion (E4-G4-B3), and another common chord (C4-E4-G4). The bottom staff contains three measures of bass notes: C4, E4, and G4. Labels are placed below the top staff: 'good.' under the first measure, 'possible, but monotonous.' under the second measure, and 'halting.' under the third measure.

(b) A common chord followed by a first inversion on the same bass note, or vice versa, is good - to \cup , but not \cup to - :

Ex. 14.

Example 14 shows two staves of music. The top staff contains three measures of chords: a common chord (C4-E4-G4), a first inversion (E4-G4-B3), and another common chord (C4-E4-G4). The bottom staff contains three measures of bass notes: C4, E4, and G4. A label 'bad.' is placed below the top staff, centered under the second measure.

(c) The effect of a common chord in root position followed by one in the first inversion a step below is good :

Ex. 15.

Example 15 shows two staves of music. The top staff contains two measures of chords: a common chord (C4-E4-G4) followed by a first inversion (E4-G4-B3). The bottom staff contains two measures of bass notes: C4 and E4.

Reverse the order and the effect is equally satisfactory :

Ex. 16.

Example 16 shows two staves of music. The top staff contains two measures of chords: a first inversion (E4-G4-B3) followed by a common chord (C4-E4-G4). The bottom staff contains two measures of bass notes: E4 and C4.

(d) A common chord in the root position followed by one in the first inversion a step above is good in effect. But cases involving the use of *iii a* and *iii b* require discretion :

FIRST INVERSION OF TRIADS

Ex. 17.

poor. poor.

When using *iii a* precede and follow it by some chord with which it has one or two notes in common. When using *iii b* keep the above rule, or precede and follow it by a first inversion a step on either side.

Reverse the order of (*d*) and the effect is still good (with limitations in reference to *iii a* and *iii b*):

Ex. 18.

(*e*) A common chord in root position followed by one in the first inversion a third below is good :

Ex. 19.

&c.

The reverse order is also good in the main. But the following are weak, though possible :

Ex. 20.

(f) Other cases not already covered are not so good :

Ex. 21.



It has been said that when the bass leaps a fourth or fifth, both chords should generally be in root position.

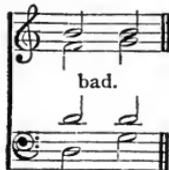
But much depends upon context. For example, the following are good :



The reason is that the progression 1 to 3 is in each case good (omitting 2), and as chord 2 is in each case only different from 1 by one note, the ear really accepts the progression as from 1 to 3, the soprano at 2 being in the nature of a passing note.

(g) Avoid *vii b* to *v a*, the one kills the other :

Ex. 22.



v a to *vii b* is possible – to \cup :

Ex. 23.



7. It will be obvious that the use of a $\frac{3}{3}$ in place of a common chord in root position ($\frac{5}{3}$) provides the opportunity of writing a better bass than is possible with root positions only. The judicious combination of the $\frac{5}{3}$ and the $\frac{6}{3}$ is the foundation of the whole scheme of harmony. If once the student can use these really well further progress is easy.

8. The use of *va* to *ib*, *vb* to *ia*, or *va* to *ia* produces inverted cadences, i. e. full closes in which either or both chords are not in root position :

Ex. 24

Example 24 shows three inverted cadences on a grand staff (treble and bass clefs).
 (a) Treble clef: G4-A4-B4 (chord); Bass clef: G3-A3-B3 (chord).
 (b) Treble clef: G4-A4-B4 (chord); Bass clef: G3-A3-B3 (chord).
 (c) Treble clef: G4-A4-B4 (chord); Bass clef: G3-A3-B3 (chord).

(a) may be freely used in the middle of a phrase ;

(b) may be used at the end of a phrase ;

(c) is clumsy, and is better avoided.

Thus though *va* to *ia* is bad in the middle of a phrase, *va* to *ib* is quite good. It will be seen that the objectionable point is the use of *v* to *i* with *i* in root position.

9. In writing tetrameters we may now occasionally use one chord held over a strong followed by a weak accent (e. g. not restruct). In this case the use of the dominant for two accents preceding the final is good (cf. p. 62) :

Ex. 25.

Trochaic Tetrameter.

Example 25 shows a Trochaic Tetrameter in 2/4 time on a grand staff. The melody in the treble clef consists of four chords: G4-A4-B4, G4-A4-B4, G4-A4-B4, G4-A4-B4. The bass clef accompaniment consists of four chords: G3-A3-B3, G3-A3-B3, G3-A3-B3, G3-A3-B3. There are accents (marked with a small 'v') under the first and third notes of the treble staff, and a dash under the first note of the bass staff.

10. Exercises.

(a) Precede and follow the given chords by a chord on each side in as many ways as you think appropriate. Add your own

time-signature and accentuation. The chords may be in any time-value :

Ex. 26.

3 parts.

(b) Add figures to the following basses so as to indicate the chords you deem appropriate. No figure indicates the common chord in root position, 6 indicates the triad in the first inversion. Then add S. A. T. :

Ex 27.

(c) Add A. and T. :

Ex. 28.

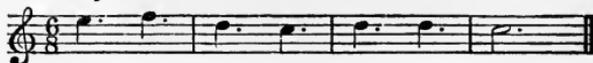
6 6 6 6 6 5
3

6 6 6

6 6 6

(d) Add A. T. B. :

Ex. 29.



Anapaestic, with first accent omitted.



(e) Write original tetrameters, introducing first inversions.

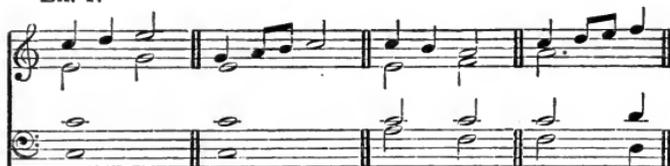
CHAPTER VIII

UNESSENTIAL NOTES. GROUP I

DIATONIC PASSING NOTES IN ONE PART ONLY

1. WHEN consecutive harmony notes are a third or fourth apart the intermediate steps (with certain restrictions) may be filled up by diatonic notes. Such notes are obviously foreign to the harmony and are called diatonic passing notes :

Ex. 1.



In other words, they may be defined as unessential notes, approached and quitted by step, linking together two different harmony notes. Their ultimate origin was seen in the first chapter.

2. If two in succession be used the second must proceed in the same direction to the next harmony note, and not return a step in the opposite direction :

Ex. 2.



3. But there are restrictions in the use of these notes. They may be considered under three headings: (a) harmonic considerations, (b) melodic idiom, (c) progression of the parts.

4. Harmonic considerations.

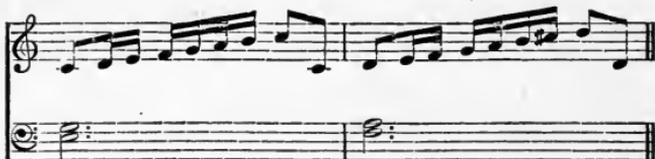
If the following be played it will be at once felt that there is something wrong with them :

Ex. 3.



The fact is that the ear is influenced by the scale of the chord that is being used. Thus, in writing a complete scale over a chord, we regard each chord as a tonic:

Ex. 4.



But such a principle cannot be applied in using only portions of a scale. The following are both equally unsatisfactory:

Ex. 5.



At (1) B \natural is foreign to the descending melodic scale of D minor.

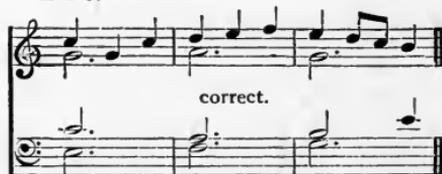
At (2) B \flat is foreign to the key we are using, C major.

At (3) F \natural is foreign to the scale of E minor.

At (4) F \sharp is foreign to the scale of C major.

There is then but one remedy, i. e. to avoid using the notes altogether:

Ex. 6.



Hence we get the rule that diatonic passing notes should be common to the scale of the chord over which they occur and that of the tonic. If the chord over which they occur be minor,

It should be observed that if the minor seventh be used it should eventually resolve on to the next note lower as a harmony note :

Ex. 11.

poor. good.

For the present do not strike any harmony notes with unaccented passing notes :

Ex. 12.

avoid.

But of course the passing note may be struck after an unaccented harmony note :

Ex. 13.

5. Melodic considerations.

(a) In the Polyphonic Period passing notes were not used on the first half of a strong accent :

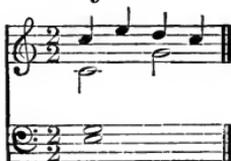
Ex. 14.

This restriction has now ceased to exist.

(b) Further, they were only used on the first half of the weak

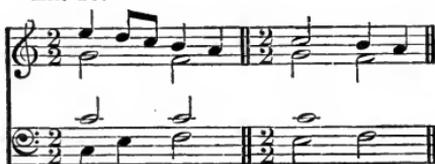
accent if the part that employed them moved for the previous strong and during the weak accent in notes half the value of the accents :

Ex. 15.



That is to say, it is very rare to find such procedures as :

Ex. 16.



In each of the above cases the change to a different kind of movement on the third crotchet rather accentuates the discord. Under modern conditions, however, the prominence of the discord is considered a virtue.

(c) Again, notes of the value of a quarter of an accent were never used on the first halves of the accents, even if harmony notes. Instrumental style developed such a procedure as :

Ex. 17.



This question is touched upon here because such an idiom would hardly occur without the use of unessential notes.

(d) Similarly, if movement were used on the strong accent, cessation was only allowed on the weak accent in order to introduce syncopation ; that is, a shifting of the accent from its normal position :

Ex. 18.



The student must use his own judgement.

6. Progression of the parts.

(a) Combinations incorrect without the insertion of passing notes are equally incorrect with them :

Ex. 19.



At (a) the fifths are not avoided.

At (b) the extreme parts are in essential features :

Ex. 20.



This produces an objectionable exposed octave.

(b) The insertion of a passing note may make an otherwise correct progression ungrammatical :

Ex. 21.



But in the following case direct fifths are not produced, and the passage is correct :

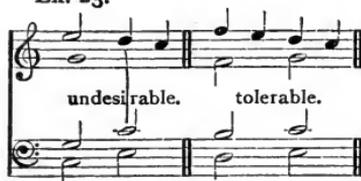
Ex. 22.



There are cases in which direct fifths caused by unessential notes are quite good in effect; but the matter need not be discussed here.

(c) In using passing notes on the first halves of accents, do not as a rule sound them against the notes they displace, except by contrary and conjunct movement :

Ex. 23.



The bass, however, may sound the note displaced by the passing note :

Ex. 24.



(d) Here we meet, for the first time, with the percussion of discords.

It is often stated in treatises that purport to set forth the technique of the Polyphonic Period that discords should only be taken by contrary and conjunct movement. The music of Palestrina, which is the standard authority for the period, exhibits no such restriction. Writers on harmony drop the restriction as to conjunct movement, but still advise that the discord should be approached by contrary motion, especially between the extreme parts. Macfarren gives it as an absolute

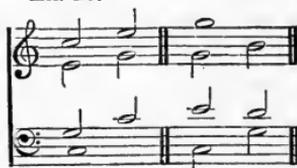
rule that the interval of the ninth may not be approached by similar motion. But he gives no reason for the stipulation. A little thought will show the student that the only point worth considering is, are the essential progressions grammatical? Thus, no one can reasonably object to:

Ex. 25.



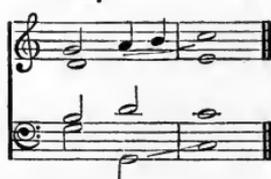
They are merely ornamental forms of:

Ex. 26.



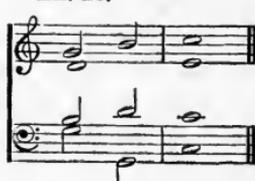
Similarly, because it is said that no two notes next to each other in alphabetical order may proceed by similar motion to the octave, some teachers are so unintelligent as to apply it to such a case as the following:

Ex. 27.



Of course this is merely an ornamental form of:

Ex. 28.



The ear fixes on the B, and not on the A, unless it has been misguided by Macfarren counterpoint.

There are of course cases in which the approach of a discord by similar motion is objectionable. But the approach of the ninth by similar motion from another position of the same chord is not evil in effect :

Ex. 28 a.



The student need not worry about the rest ; they are quite common by similar motion.

It may be said that the approach of the ninth by similar motion in the extreme parts is not good in effect between two different chords if the ninth rise :

Ex. 28 b.



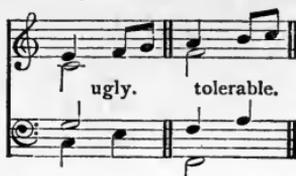
(e) If a part leave the third of a chord, another part should move to it as soon as convenient :

Ex. 29.



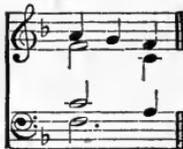
But do not strike the perfect fourth against the third when the fourth proceeds to the fifth :

Ex. 30.



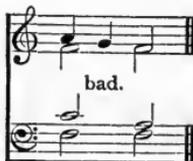
(f) Try to avoid the quitting of a second by similar motion. It causes congested writing :

Ex. 31.



- (g) Avoid consecutive seconds or sevenths for the present.
 (h) Avoid proceeding to the unison by oblique motion :

Ex. 31 a.



7. Ear training.

The following are typical examples of the kind of exercise the master should set. The same procedures as in former cases must be employed :

- (a) Play the examples, preceding each by the tonic chord.
 (b) Memorize them, and try to hear them mentally.
 (c) Reproduce them on paper from dictation.

Ex. 32.

Key F.

The first system of music consists of two staves. The treble staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature (C). The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes. The bass staff begins with a bass clef and a key signature of one flat. It features a series of chords and single notes, including a half note G3, a quarter note A3, and a quarter note B3.

Key G.

The second system of music consists of two staves. The treble staff begins with a treble clef, a key signature of two sharps (F# and C#), and a common time signature (C). The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes. The bass staff begins with a bass clef and a key signature of two sharps. It features a series of chords and single notes, including a half note G3, a quarter note A3, and a quarter note B3.

Key D.

The third system of music consists of a single treble staff. It begins with a treble clef, a key signature of two sharps (F# and C#), and a common time signature (C). The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes.

Key A.

The fourth system of music consists of a single treble staff. It begins with a treble clef, a key signature of three sharps (F#, C#, and G#), and a 3/4 time signature. The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes.

Key C.

The fifth system of music consists of two staves. The treble staff begins with a treble clef, a key signature of no sharps or flats, and a 3/4 time signature. The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes. The bass staff begins with a bass clef and a key signature of no sharps or flats. It features a series of chords and single notes, including a half note G3, a quarter note A3, and a quarter note B3.

Key G.

The sixth system of music consists of two staves. The treble staff begins with a treble clef, a key signature of two sharps (F# and C#), and a 2/4 time signature. The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes. The bass staff begins with a bass clef and a key signature of two sharps. It features a series of chords and single notes, including a half note G3, a quarter note A3, and a quarter note B3.

Key D.

The seventh system of music consists of two staves. The treble staff begins with a treble clef, a key signature of two sharps (F# and C#), and a 3/4 time signature. The melody starts with a quarter note G4, followed by quarter notes A4 and B4, then a quarter rest, and continues with eighth notes. The bass staff begins with a bass clef and a key signature of two sharps. It features a series of chords and single notes, including a half note G3, a quarter note A3, and a quarter note B3.

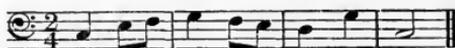
8. Point out the errors in the following, and correct them :

Ex. 33.



9. Up to this point all exercises have contained essential notes only. But the unessential is such an important factor in music that it will be used extensively in future exercises. Now as a general rule the chords do not move more quickly than the accents. Suppose the following were a given unfigured bass :

Ex. 34.



As the note E in bar one is approached by leap it must for the present be regarded as a harmony note. F is therefore a passing note. In the second bar either F or E could be essential or unessential. The choice must be decided by the question as to which note produces the best chord progression. Obviously we should choose E as the harmony note bearing a $\frac{6}{3}$.

Again, suppose the bass proceed :

Ex. 35.



It is hardly necessary to point out that D is here unessential.

10. As regards figuring.

(a) A horizontal line means that the chord indicated by the figures preceding it is to be kept so long as the line is continued.

If the chord requires no figures the line starts with the note bearing the $\frac{5}{3}^1$:

Ex. 36.

(b) Passing notes above an essential bass are indicated by giving the intervals such notes form with the bass, and also their resolution :

Ex. 37.

(c) When a bass is itself using accented passing notes the intervals accompanying them are given, and they will be found to be factors of the succeeding harmony note :

Ex. 38.

¹ Sometimes the line begins on the note following the chord used :

Ex 36 a.

II. Exercises.

Group I, in which all passing notes are unaccented :

(a) Add S. A. T. to the following unfigured basses.

The chords are of the duration of the accents, and all accented notes are essential. Introduce unaccented passing notes in the added parts where possible, only one to be used at a time.



(b) Add A. T. B.



(1) Use chord of E flat in minims.

(2) Use *v b* to *v a* in crotchets on second and third beats.

Group II, in which all passing notes are accented :

(a) Add S. A. T. to the following unfigured basses. Introduce accented or unaccented passing notes here and there.



(3) Use *vii b*.

(b) Add A. T. B.



Group III, in which accented and unaccented passing notes are both utilized :

CHAPTER IX

TRIADS OF THE MINOR KEY AND THEIR FIRST INVERSIONS. COUPLETS. PASSING NOTES

I. THE harmonic minor scale produces the following triads :

Ex. 1.
A minor.

i. ii. iii. iv. v. vi. vii.

Here there are four different kinds of triads :

(a) Major common chords, v and vi.

(b) Minor common chords, i and iv.

(c) Diminished triads, ii and vii.

(d) Augmented triad, iii (consisting of a root with its major third and augmented fifth).

We omit from the present discussion *ii a*, *iii a*, and *vii a*. These were not consonances in the Polyphonic Period, and they originated from procedures which have to be considered in later chapters.

This leaves, then, *i a*, *iv a*, *v a*, *vi a*.

The only point to be noticed about these is that in proceeding from *v a* to *vi a*, or vice versa, it will be necessary to double the third in *vi a*, in order to avoid faulty grammar :

Ex. 2.

TRIADS OF THE MINOR KEY

Ear Training.

Ex. 2 a.

Exercises on this resource.

Add A. T. :

Ex. 3.

(An accidental above or below a bass note indicates that the third above the bass is to be altered accordingly.)

Add A. T. B.

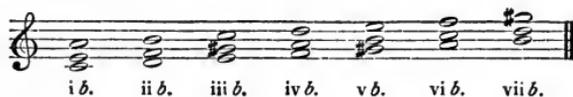
Ex. 4.



Ex. 5. Write original tetrameters in minor keys, using the resource discussed.

2. Next, we must discuss the first inversions of triads produced from the harmonic minor scale :

Ex. 6.



For the present *iii b* is omitted from the discussion, as it was not an original concordance. In the Aeolian mode the G would be natural except in cadences or cadential idioms, and *iii b* did not form a part of a cadence.

ii b is best preceded or followed by *i b*, *v a*, or *iv a*. *ii b* has two sounds in common with *iv a*, and these two chords should not be used \cup to $-$, as a bad halting effect is produced :

Ex. 7.

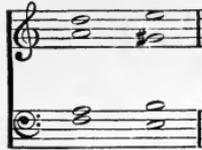


Play the above, memorize them, and reproduce them from dictation.

iv b to *v b*, or vice versa, is bad, as it causes the melodic interval of an augmented second in the bass.

iv b to *v a* forms a common half close in the minor key; it is known as the Phrygian Close. A reference to the Phrygian mode will explain the expression :

Ex. 8.



vii *b* is best preceded or followed by *i a* or *i b* :

Ex. 9.



v a to vii *b* – to *v* is good. But *v* to – it is bad, and vii *b* to *v a* is always bad. The reason for this ruling will be apparent when the second inversions have been discussed :

Ex. 10.



Play the above, memorize them, and reproduce them from dictation. Also the following :

Ex. 10 a.



Exercises.

Figure the following basses, and add A. T. B.

Ex. 11.

Four musical staves in bass clef. The first staff is in 2/4 time with a key signature of one flat (B-flat). The second staff is in 2/4 time with a key signature of one flat. The third staff is in 2/2 time with a key signature of one flat. The fourth staff is in 3/4 time with a key signature of two flats (B-flat and E-flat).

Add A. T. B.

Ex. 12.

Four musical staves in treble clef. The first staff is in 2/4 time with a key signature of two flats (B-flat and E-flat). The second staff is in 3/4 time with a key signature of two flats and a circled '(1)' above the final measure. The third staff is in 2/2 time with a key signature of two sharps (F-sharp and C-sharp). The fourth staff is in 2/2 time with a key signature of one flat (B-flat).

(1) Use two chords, ii b, v a.

Write original tetrameters introducing the resource discussed.
3. Common chords and first inversions derived from the melodic minor scale.

Ex. 13.

A minor.

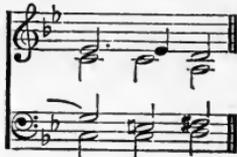
A musical staff in treble clef showing ten chord diagrams for A minor triads in various positions and inversions. The diagrams are labeled as follows: ii a., ii b., iii a., iii b., iv a., iv b., v a., v b., vii a., vii b.

If the harmonic minor scale be criticized from a melodic point of view it will be found to contain the interval of the augmented second (in A minor F to G sharp). There are two ways of avoiding this: (a) to sharpen the sixth degree of the scale, (b) to flatten the seventh degree. The latter procedure would be

unsatisfactory in effect in ascending, as it would remove the important 'leading' effect characteristic of vii. But in descending the leading note can be flattened without any unnatural effect. In early days composers often found themselves in curious dilemmas, the major and minor sixth coming into hazardous proximity, in fact sometimes occurring simultaneously. The following is quoted in Dr. Walker's *History of Music in England*:

Ex. 14.

FARRANT, *Benedictus*.
Service in G minor.



This is, of course, due to lingering polyphonic principles, in which the contour of each part as a melody was of paramount importance. The use of the above chords is limited by one obvious consideration. One part that contains the note foreign to the harmonic minor scale should itself be proceeding in the melodic minor scale. Therefore the major and minor sixth, or major and minor seventh, should never be used in successive chords, causing a confusion between the two scales.

Further, when the minor seventh is used it should be followed in the next chord but one, or as soon after as possible, by a chord containing the major seventh.

The following examples should be played and memorized, and then reproduced from dictation:

Ex. 15.

A minor.

6. As regards figuring :

(a) \natural , \sharp , or \flat placed before a figure indicates that the note represented by the figure is to be altered accordingly ;

(b) a stroke through a figure indicates that the note represented is to be sharpened (\sharp) ;

(c) a sharpened fourth or second is indicated in three ways : $\sharp 4$, $\natural 4$, $4\sharp$, $\sharp 2$, $\natural 2$, $2\sharp$.

7. In a former chapter the formation of a verse has been considered. If two consecutive verses, forming a stanza, rime, they are collectively termed a couplet.

In music this riming would be represented by a rough parallelism between the melodies of each verse :

Ex. 20.



If a stanza of this length be considered as a complete whole, such parallelism is almost a necessity in order to produce organic unity. The smaller the dimensions of the music the more need is there for economy in use of thematic material. It is true that sufficient unity of effect can be obtained by continuity of style, and the repetition of some characteristic figure :

Ex. 21.



But it will be well at the outset to aim at a more definite parallelism, that is, the second verse should be an imitation of (not a strict reproduction of) the first.

Again, although a cadence at the end of each verse is not a necessity, nor indeed a virtue, feeling for cadential effect must first be fostered. Cadences are to music what punctuation is to literature ; without them, the music is unintelligible. Each verse, therefore, must be marked off by a cadence. As the couplet is intended to be a complete piece of music, the second verse will end with the Perfect Cadence, and this should be avoided in the first verse unless the final chord of the verse be in the first inversion.

8. Exercises.

(a) Precede and follow each of the following by two chords (five in all).

Prefix time-signatures, and add bar-lines. The given chord may be in any time-value :

Ex. 22.

Key E minor.

(b) Figure the following basses, and add parts for S. A. T. Aim at a rough parallelism in the melody between the two phrases (no passing notes):

Ex. 23.

Trochaic Couplet.

Iambic Couplet.

(c) Add parts for A. T. B. (no passing notes):

Ex. 24.

Dactylic Couplet.

Anapaestic Couplet.

(d) Write original couplets in A minor, F minor, and B minor, introducing the resource discussed.

9. Diatonic Passing Notes in the Minor Key. As it is necessary to avoid the melodic interval of the augmented second, passing notes are used in the minor key as follows:

(a) The melodic minor scale is used where necessary:

Ex. 25.



(b) Sometimes neither form of the scale is used, and the scale of the chord used is employed:

Ex. 26.

Musical notation for Example 26. It consists of two staves in treble and bass clefs with a key signature of two flats. The melody is written on the treble staff and includes notes labeled 'a', 'b', 'c', 'd bad.', and 'e'. The bass staff provides a harmonic accompaniment with chords. The melody starts on C4, moves to D4, then E-flat4, F4, G4, A4, B-flat4, and ends on C5. The notes are connected by slurs, indicating a continuous melodic line.

At (a) B flat is not a part of the ascending melodic or harmonic scale of C minor; it belongs to the scale of F minor. At (b) we return to the scale of C minor. Here the choice is influenced by the chord that follows and by the fact that no variation from the scale of C minor is necessary. At (c) A natural does not occur in the descending scale of C minor in either form; it is borrowed from the scale of G. At (d), however, A natural is intolerable, e.g. when proceeding to another chord. In such a case A should be omitted altogether. At (e) B flat does not occur in the ascending scale of C minor. It is borrowed from the scale of A flat.

10. Ear training. Play the following examples, memorize them, and reproduce them from dictation:

Ex. 27.

Musical notation for Example 27. It consists of two staves in treble and bass clefs with a key signature of two flats. The melody is written on the treble staff and includes notes labeled '(a)'. The bass staff provides a harmonic accompaniment with chords. The melody starts on C4, moves to D4, then E-flat4, F4, G4, A4, B-flat4, and ends on C5. The notes are connected by slurs, indicating a continuous melodic line.

(b)

(c)

(d)

(e)

(f)

Ex. 27 a.



In some of the above the dominant chord of the Full Close is struck twice. But the decoration of the passing notes removes the redundant effect.

11. (a) Add S. A. T. to the following unfigured basses. Chords move with the accents. Add passing notes :

Ex. 28.



(b) Add A. T. B. to the following melodies. Chords move with the accents :

Ex. 29.



(c) Write original couplets, introducing the resource discussed and getting parallelism in your melody in the verses.

4. The present practice is as follows :

(a) Auxiliary notes lying above harmony notes are diatonic. In the minor key, therefore, criticize according to the descending form of the melodic minor scale :

Ex. 4.

(b) Auxiliary notes below the root should be at the distance of a semitone from such note, unless in the next chord the harmony note leap down a third, in which case the auxiliary note may be diatonic :

Ex. 5.

In the case of first inversions of diminished triads the auxiliary note may be a tone or semitone below the root :

Ex. 6.

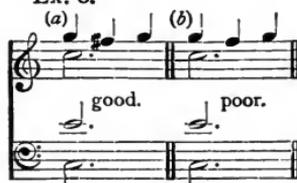
(c) The auxiliary note below the major third from the root may be at the distance of either a tone or semitone from such note, the matter being decided by the general character of the context. That below the minor third must be at the distance of a semitone :

Ex. 7.



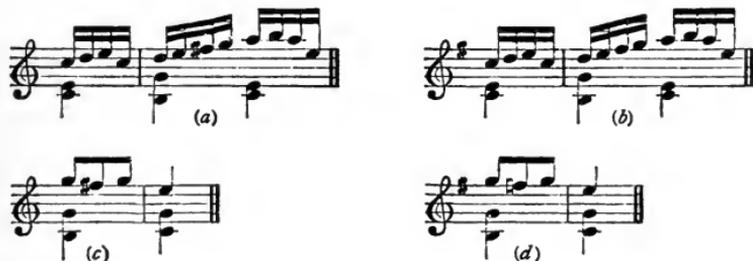
(d) The auxiliary note below the fifth of the root should be at the distance of a semitone from such note :

Ex. 8.



(b) is marked poor because the ear is left in suspense as to whether F is about to return to G or proceed to E. If it proceed to E the E in the tenor is somewhat hard against it. In the case (a) there is no doubt but that the F sharp must return to G.

5. The student must carefully distinguish between the treatment of passing notes and auxiliary notes :



At (a) the passing note F sharp is incorrect because the passage is in the key of C major. F natural would be equally bad, as it would be an unresolved seventh. Therefore another note must be chosen (D).

At (b) F sharp is a diatonic passing note, the key being G major. It is therefore correct.

(a) is incorrect because of the presumed anterior impression of the tonality of the key of C major.

At (c) F sharp is correct in any key, as it is a lower auxiliary note.

At (d) F natural is not an auxiliary note at all, but the minor seventh ornamentally resolved.

6. Ear Training.

Ex. 8 a.



7. Exercises.

(a) Add three parts in dotted minims to the following groups of three crotchets in as many ways as possible. The chords must all be in the key of C major:

Ex. 9.



(b) The same. The chords must all be in the key of C minor:

Ex. 10.



(c) Add A. T. B. to the following fragments, the chords to move in crotchets :

Ex. 11.

G major.



A minor.



(d) Add S. A. T. to the following unfigured basses, the chords to move with the accents :

Ex. 12.



(1) Keep up quaver movement in an inner part.



(e) Add A. T. B. to the following melodies, the chords to move with the accents :

Ex. 13.



7. It remains to consider another type of auxiliary note which is modern in its origin. An unessential note a step below or above a harmony note may be approached by leap :



When such auxiliary note is accented, as at (b), it is termed an appoggiatura.

Formerly it was written as an ornament :



and the rule was that it took half the value of the essential note. When, however, the essential note was dotted it took two-thirds of its value.



8. The rules as to the distance of these auxiliary notes from their essentials are the same as those given in paragraph (4).

9. Just as in the case of accented passing notes, progressions which are good without the appoggiatura are good with it, even though the taking of a discord by leap and similar motion be involved :



But if the appoggiatura resolve upwards, it is in any case clumsy to approach the discord by similar motion :



The following illustrations will be useful :

(a) Unessential fourth by similar motion :

BEETHOVEN.
Pianoforte Sonata, Op. 26.



It will be seen that an appoggiatura may be sounded against its resolution in an upper part ; but students need not go out of their way to do it.

(b) Unessential seventh by similar motion :

BEETHOVEN.
Pianoforte Sonata, Op. 28.



(c) Unessential ninth by similar motion :

BEETHOVEN.
Pianoforte Sonata,
Op. 22. (Minuet.)

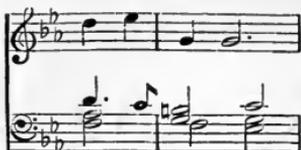


10. The leap of an augmented interval is allowed if the second of the two notes forming the interval be an auxiliary note :



11. The use of the appoggiatura was very common in the seventeenth century. Monteverde's works are full of this device. One idiom was very characteristic of the Restoration Period. After striking an essential note, an unessential note a step above

or below it would be taken, and then quitted by leap in the opposite direction. Blow was very fond of this device :



Exercises.

1. Ear Training. Play the following, memorize them, and reproduce them from dictation.



2. Add simple parts for A. and B. When the appoggiatura is of the time value of an accent, let the accompanying parts remain stationary for this and the succeeding accent.



3. Add simple parts for A. T. B.



4. Add simple parts for A. T. B.



5. Rewrite the melody of the following, displacing the crotchets by appoggiaturas where desirable, the given melody notes remaining as unaccented quavers. Add simple parts for A. T. Figure the Bass. Appoggiaturas may be introduced in the Alto and Tenor parts.



6. Add S. and A.



(1) Obtain continuity of style by maintaining quaver movement in the style of the opening bars of the bass.

7. Add S. A. T. above the following Basses, introducing the various kinds of auxiliary and passing notes; each part should contain its fair share of them, and the parts should maintain a fairly even flow.



The following is an example of the style :



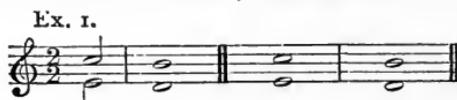
CHAPTER XI

UNESSENTIAL NOTES. GROUP III

SUSPENSIONS

A. Polyphonic Period.

1. A concord that would have normally fallen one degree on the strong accent from a previous concord on the preceding strong or weak accent could defer its movement to that concord till the next weak accent. Thus, instead of:



a composer might write:



(1) is termed a suspension, or prepared discord.

(2) is termed its preparation.

(3) is termed its resolution.

2. These discords could be ornamentally resolved by first proceeding to another concord on the second division of the strong accent, or by leaping a third downwards:



or the resolution could be anticipated in a plain or ornamental form:

Ex. 4. PALESTRINA.
Gloria. Aeterna Christi Munera.

(a) (b)



At (a) the resolution is merely anticipated. At (b) the anticipation is embellished by an auxiliary note.

3. Applying the principle of suspension to the resource we have at our disposal, the classification is as follows :

(a) Suspension of the root, third, or fifth of a chord in root position :

Ex. 5.

(a) (b) (c)

9 8 4 3 6 5

A suspension should not be sounded against its resolution, except the resolution be in the bass only ; (a) is an example. Occasionally, however, an upper part may do this if it approach the resolution in contrary and conjunct movement with the suspension :

Ex. 6. PALESTRINA.
Missa Brevis.

At (c) we regard A as a discord because it is no part of the chord C, E, G. The original view was, however, that A was a syncopated concord. There is no G present on the first accent to make A into a discord. Either view is possible. The fact, however, remains that A is not bound to fall.

As regards figuring, it will be noted that

9	8	implies	9	8
			5	—
			3	—
4	3	implies	4	3
			8	—
			5	—
6	5	implies	6	5
			8	—
			3	—

(b) The suspension of the root, third, or fifth of a chord in first inversion:

Ex. 7.

(d) (e) (f)

7 6 9 8 4 3

(e) in this particular case is not very good, as it produces the doubled major third. (f) was not used in the Polyphonic Period. If the discord of the fourth were accompanied by the sixth as a concord, the sixth always proceeded to the fifth as the fourth proceeded to the third. This may therefore be done, except over the supertonic and subdominant in the major key, and except over ii, iv, and vi in the minor key:

Ex. 8.

(g) (1)

Ex. 8 a. In using descending form of melodic minor scale only.

(g) This produces at the moment of resolution a new harmony. The combination at (1) ceases to be referable to the root A, but is the chord of C major. Later this procedure will be explained from a different standpoint. It is very important, however, to grasp the original view. Applied to (g) it is as follows: F is a prepared discord, and must fall to E. A is a concord, and is free to leap, provided that at (1) all the parts are concordant, but

composers almost invariably made it fall one degree with the suspended discord.

(c) The suspension of the root or third in the bass. The figures indicate the intervals above the discord:

Ex. 9.



In this case it is better to avoid altogether sounding in an upper part the note upon which the bass resolves. The effect is very harsh.

(d) The original view of the 5 6 was that it was an example of syncopated concord:

Ex. 10.



There is no discordant interval present. The modern view is that the G at (1) is an upward resolving discord, and it is termed a retardation. This is a stupid term because it conveys no meaning different from that implied by the term suspension. Under old conditions no upward resolving discord was allowed:

Ex. 11.



Once the mind accepts the perfect fifth as a discord if syncopated, and proceeding one degree upwards, the way is opened for the use of *real* upward resolving discords.

When the suspended discord was in the bass the part next above it was regarded as the real bass, and the combinations above it had to be concordant:

Ex. 12.

Incorrect 16th century technique. Correct 16th century technique.

4. The first of two tied notes could be of the same value as the second, or double the value. No notes of shorter time-value than accents could be syncopated.

As an alternative to syncopation the notes may be restruck.

5. The following examples may be used for ear training:

- (a) Play them through several times.
- (b) Memorize them.
- (c) Reproduce them from dictation.

Ex. 13.

6. Progressions that are incorrect without syncopation are equally incorrect with it:

Ex. 14.



7. From the modern point of view prepared discords fall into two classes. Originally the principle was simply :

- (a) that the discord be prepared ;
- (b) that it resolve downwards one step ;
- (c) that the notes accompanying the discord should be in themselves concordant ;
- (d) that those accompanying the resolution of the discord should form with it a concordant group.

A moment's thought will show that—

(1) the discord may resolve on another position of the same chord :

Ex. 15.



(2) the discord may resolve on an entirely new chord, though this may not be technically necessary :

Ex. 16.

PALESTRINA, *Missa Brevis*.

At (a) E could have remained as a concord for the whole bar. At (b) F is not an unessential note in reference to the previous concordance, but a *new* concord.

(3) Sometimes the concordance that is used with the discord would form a discordance with its resolution. In that case the sounds involved *must* move to a new concordance :

Ex. 17. *Ibid.* *Ibid.*

The combinations at *a*, *b*, *c*, and the combination of the suspended fourth with the sixth (provided that the sixth proceeds to the fifth as the fourth proceeds to the third) :

Ex. 18.

are now catalogued as chords, that is, the unessential has merged into the essential. They will therefore be discussed in a further chapter. This chapter is confined to the use of suspension in which the discord is still considered as being unessential. This includes cases (1) and (2) and the use of $\frac{6}{4}$ $\frac{5}{3}$ if both the fourth and sixth be syncopated :

Ex. 19.

Here the A may be regarded as being unessential, as it is no part of the chord C, E, G.

8. Before proceeding with the modern extensions it will be well to summarize original uses.

The chief points to bear in mind are :

(a) The discord should not be sounded against its resolution, except very occasionally when the two parts concerned proceed by contrary and conjunct movement.

(b) The sounds that accompany the discord must be capable

of being sounded with its resolution, but they *may* move to a new concordance.

(c) The double suspension $\frac{6}{4} \frac{5}{3}$ may be used with the limitations given in paragraph (3).

(d) The suspension must occur on the strong accent, and eventually resolve on the next weak accent.

9. The following recommendations should be noted :

(a) In triple time the discord may resolve on the second or third accent.

(b) Suspensions are often better untied.

(c) A bass note repeated, or tied, weak to strong, is to be regarded as a suspension.

(d) Avoid the progression 7 to 8 between any two parts :

Ex. 20.



(e) It is generally better to avoid approaching an octave by similar motion when one of the parts is resolving a discord :

Ex. 21.



(f) The $\frac{6}{4} \frac{5}{3}$ may be used in Trochaic metre as a decoration of the final chord of the half close, the $\frac{6}{4}$ displacing it and taking half its value. In the same way the $\frac{6}{4}$ may decorate the final chord in a Plagal cadence. It is also used in the full and interrupted close in Trochaic or Iambic metre on the strong accent preceding the cadence, thus preventing the clumsy effect of the anticipation of the undecorated dominant chord in the cadence :

Ex. 21 a.

Half Close. Decoration. Plagal Close. Decoration. Full Close. Decoration.

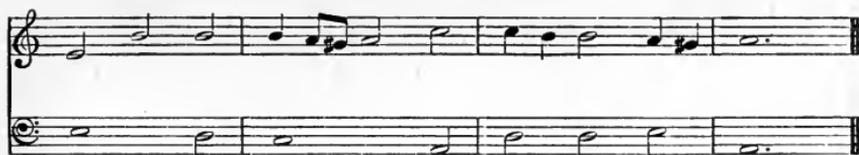
Exercises.

Follow the given chords by a suspension and its resolution (suspending the note indicated by a tie) in as many ways as are musical (see p. 117):

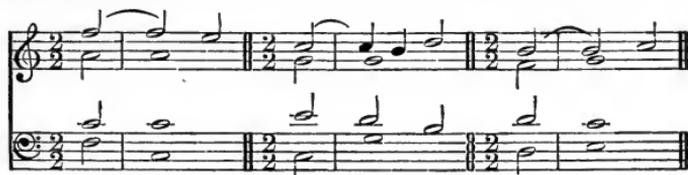
Key B flat major.

Key G minor.

Add A. and T. to the following, and figure the result:



Correct the following as sixteenth-century technique :



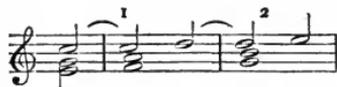
B. Homophonic Period.

1. The chief extensions in the use of suspensions under modern conditions are :

(a) There is no restriction as to the duration of a suspension or its preparation. It must, however, be more strongly accented than its resolution :



(b) It has been pointed out that the modern theory of chords, the principle of rhythm, and the actual appearance of the following :



led to the view that (1) and (2) were upward resolving suspensions, or retardations as they are called.

Some text-books on strict counterpoint catalogue the above as retardations. This is quite wrong. In the period no upward resolving discord occurred ; and they are not discords, though no part of the harmony used in the second half of the bar. We will presume for a moment that at (1) the harmony is D, F, A,

then even under harmonic conditions C could not resolve on D, because it is a *minor* seventh. But it is possible to regard the 5 6 on the supertonic and mediant as retardations:



And this consideration limits the use of retardations. The retardation of the root can only be used with the root present if the retardation be a semitone below the root:



It is better to regard all uses of 5 6 as the employment of two concords, except that on the mediant. A discord may be sounded against its resolution in an upper part if taken in the two parts by contrary and conjunct movement. But such a procedure is harsh if the resolution be the major third of the root:



The third may be retarded except over the mediant chord, where it is obviously ugly. In any case use this very sparingly:



The retardation 4 5 is so ugly that it is practically useless:



The perfect fourth always jars against the third. But the augmented fourth is tolerable:



The student must carefully guard against analysing the following as examples of retardations :



In these cases the discords are ornamentally resolved, and eventually fall. They require separate discussion.

(c) The suspension 4 3 may be used :

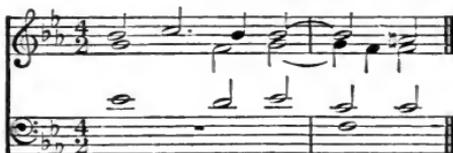
6 -



This is a familiar effect in the works of Elgar (see *Dream of Gerontius*, vocal score, p. 39, 'Proficiscere, anima Christiana').

(d) Burney says that Monteverde was the first to use double discords of suspension. This is hardly true.

PALESTRINA. *Lauda Sion.*



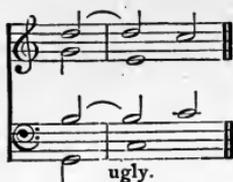
Double suspensions may be used if they move in parallel thirds or sixths :



3. When the 7 6 is combined with the 5 6 the fifth need not be treated as a retardation :



4. Do not combine 7 8 with 9 8 :

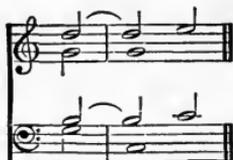


The reason is that B and D, not being quitted in parallel movement, give the effect of the chord of G, and the E as strongly suggests the chord of C. The fact is that here the bass C is a pedal, and above it we have a confusion of two chords.

In the following there is no confusion :

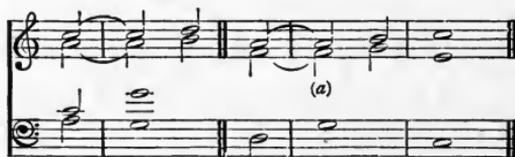


5. The following double retardation is possible :



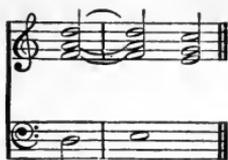
This can only be used on the tonic.

6. Similarly, the following can only be used on the dominant :



The F at (a) must eventually fall to E.

7. The use of complete suspended chords will be considered later, but three parts moving in parallel first inversions need not be regarded as the suspension of a complete chord :



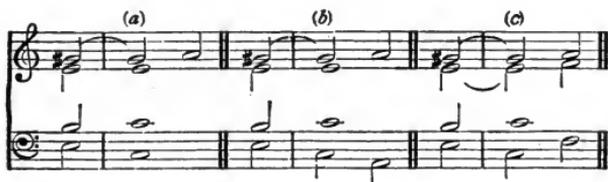
8. To sum up, the chief expansions in reference to suspensions are :

- (a) The use of retardations.
- (b) The regular use of double suspensions.
- (c) The use of double retardations.
- (d) The use of 6 —

4 3

9. The augmented triad in the minor key.

It will be remembered that this triad was omitted from discussion in chapter ix. We are now in a position to trace its origin and therefore to see the reason for the rules regulating its use. Consider the following examples :



At (a) we have a retardation resolving while the other parts remain stationary. At (b) some of the parts that accompany the retardation move, at the time of resolution, to different notes of the harmony implied. At (c) the resolution of the retardation is accompanied by a different harmony. All these are merely the principles that were employed in accompanying suspensions applied to retardations. (a) and (b) are still examples of retardation. But (c) is catalogued as an augmented triad. Rules for its treatment can now be deduced :

- (a) The augmented fifth should be prepared.
- (b) It should resolve one step upwards.
- (c) The chord should resolve on the submediant, or occasionally the tonic. There seems no reason why the combina-

tion at (b) should not be classified as a chord, just as well as that at (c).

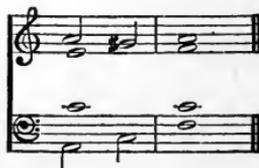
The chord could also be produced by the use of appoggiatura. Burney was considerably exercised over what he termed the crudities of Blow's work. Among them is a constant use of this effect :



In the following example from No. 29 of Scarlatti's Harpsichord Lessons the A sharp is merely a retardation :



Froberger (d. 1667) uses this frequently in his Organ Toccatas. If the fifth be unprepared it is better in the nature of an auxiliary note :



iii b was likewise impossible under strict conditions except as a prepared discord :



Here the C is the dissonance.

Thus in the first inversion the augmented fifth from the root need not be prepared. The following examples show the best ways of using it :



At (1) the C is really an appoggiatura ; at (2) the intermediate B has dropped out.

10. Some new points may be summarized :

(a) A long note, repeated or tied on a strong accent, should on that strong accent be regarded as a suspension :



(b) Generally if the same note be repeated or tied, weak or strong, on the stronger accent, it is a suspension :



(c) Sometimes the suspension may be of longer duration than the resolution or preparation :



(d) Ornamental resolutions may, of course, take new idioms :

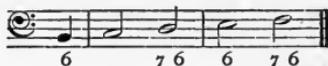


(e) Every care should be taken to change the harmony as a rule on strong accents.

Such a melody as :



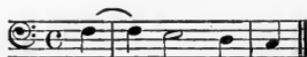
demands as its basis :



The following is simply nonsense :



Similarly, such a bass as :



should be harmonized in some such way as :



Even when the melody that is syncopated over a strong accent is not a suspended discord it is always best to try to change the chord, or to move the bass :



At (1) the chord is changed ; at (2) the bass uses accented passing notes.

Ear Training. (a) play, (b) memorize, (c) reproduce from dictation:

(1) Unobjectionable exposed octaves, because the F really displaces the E.

Exercises. (Tetrameters.)

1. Add parts for A. T. B.

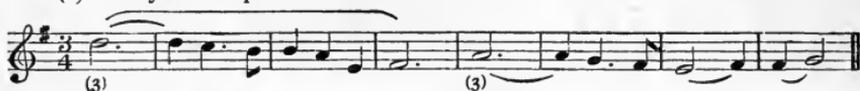
(a) Iambic Couplet (general pattern two chords in a bar).

(1) (2) Two separate chords.

(b) Trochaic Couplet.

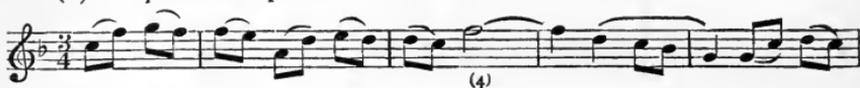


(c) Dactylic Couplet.



(3) Move some of the parts in crotchet time values.

(d) Anapaestic Couplet.



(4) Keep up quaver movement in some of the lower parts, introducing suspensions.

2. Add melodies for Soprano to the following Basses, taking care in each verse to preserve a rough parallelism in the couplets. Figure the Bass.

(a) Iambic Couplet.



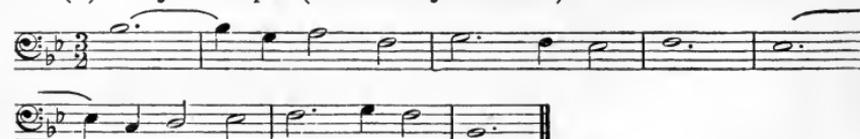
(b) Iambic Couplet, introduce suspensions in the Soprano (move mostly in quavers).



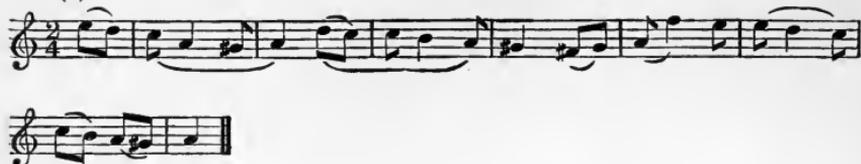
(c) Trochaic Couplet (move mostly in crotchets).



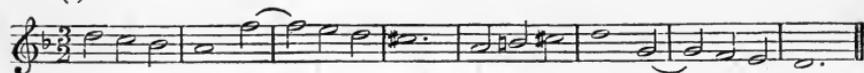
(d) Dactylic Couplet (move mostly in minims).



(b)

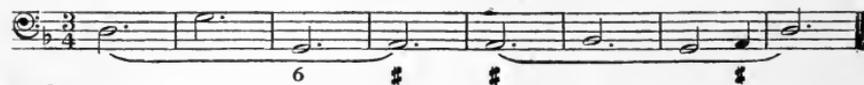


(c)

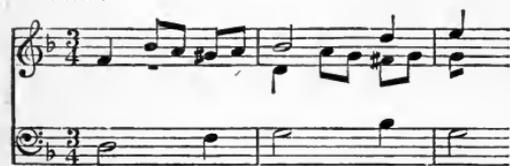


7. On the following Basses write three free parts for S. A. B. The given Bass may be elaborated: introduce the unessential resource considered:

(a)



Start



(b)



Start



CHAPTER XII

COMPLEX USE OF THE UNESSENTIAL

1. UP to the present, with the exception of suspensions, unessential notes have been used in one part at a time only, and under the simplest conditions, e.g. in which the chord is heard alone, and then the unessential note moves by itself towards the next harmony :



or in which the unessential note occurs simultaneously with the chord, and resolves into it before it moves on :



It is now time to consider more complex situations. These cases are so inadequately treated in text-books that the early work of students in this branch usually exhibits either confusion or obscurity of harmony. The following is an average attempt :

Ex. 1.



It would be hard to imagine anything more unmusical than this. In order to eradicate such writing, something in the nature of a musician's Athanasian Creed is necessary. That is to say, it will be wise to begin with some definite rules which, if not universal in their application, will at all events prevent such writing as the above.

2. Case I. Simultaneous movement in two or more parts.

(a) **Parallel movement :**

Ex. 2.



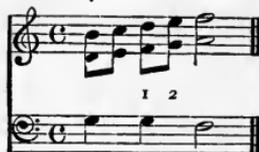
If the two parts that form essential harmony move in parallel sixths as at (1), or in parallel thirds as at (2), or if three parts move in parallel six-threes as at (3), they may all fill up the intervening distances in parallels :

Ex. 3.



But parallel thirds or sixths must be simultaneously essential or unessential. For instance, the following is bad :

Ex. 4.



The chord is G, B, D. At (1) F is unessential, D is essential ; at (2) G is essential, E is unessential.

The above rule being based upon effect, the result is that if the

be used together, that below the fifth may be a tone or semitone from its harmony note except in the case of chord iii, when both must be a semitone below :



If the auxiliary notes below the major third and root be used together, the former may be a tone or semitone below the harmony note, the latter must be a semitone below, except in the case of chord v, when both must be a semitone below :



(1) In the key of G, F♯ + A would be correct, but not in the key of C.

If the auxiliary notes below the minor third and root be used together, both must be a semitone below the harmony notes :



It was said in a previous chapter that it was very ugly for the perfect fourth to displace the fifth :



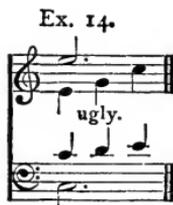
But if the second displace the third at the same time the evil effect disappears :



(b) Similar motion, but not parallel :



At (a) we get the combination of a harmony and passing note. Care should be taken that the note to which D passes, if it be the third of the chord, is not a long note in some other part :



The fact is that the simultaneous percussive of a true unessential note and a harmony note is very liable to produce the effect of separate entity as a chord.

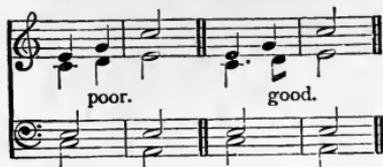
Thus one feels the following :



to produce the chord of G on the second crotchet. The bass is in the nature of a pedal (see chapter xxxi), and the decorating chord resolves back into the essential harmony.

But such a combination should be avoided on the point of moving to a new chord, because it is impossible for the trained ear not to accept the bass as a pedal quitted incorrectly (see chapter xxxi). This can be easily avoided by making the unessential note come after the harmony note :

Ex. 16.



The second case in which B and D are both unessential sixths (see (b) above) is not likely to cause any complications, as the parts proceed next in parallels.

(c) **Contrary motion.**

Here we may use (a) a harmony and unessential note, (b) two unessential notes :

Ex. 17.



It is obviously possible to obtain two variants of this :

(1) To begin in contrary motion, and proceed in similar motion :

Ex. 18.



(2) To begin in similar motion, and proceed in contrary motion :

Ex. 19.



If such combinations be quitted by contrary motion they produce the effect of having separate existence as chords. Therefore they should only be used over a bass pedal, or occasionally over an inverted pedal, between two statements of the original chord :

Ex. 20.



The root of the chord is the only note that should be regarded as a pedal. Thus in the following we produce what have been catalogued as chords, and are termed passing chords :

Ex. 21.



The following are therefore bad :

Ex. 22.

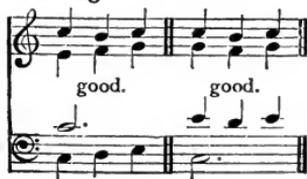


If the combination be approached by contrary, but quitted by similar motion, the effect is generally good.

It is better for the novice to regard a combination that is quitted by contrary motion (unless it be the same note) as producing a new harmony, which is allowable over a bass pedal, and of which other stationary parts are factors.

What to the eye may be three different unessential notes produce the effect of a chord, unless proceeding from the unessential combination in parallels :

Ex. 23.



But even in such a case it is possible to produce bad effects :

Ex. 24.

It is hardly possible to ignore the effect of the D, F, and B. The following produces a passing six-four, which will be explained later :

Ex. 25.

Of course the same unessential note taken in two parts by contrary motion has no harmonic effect at all :

Ex. 26.

The same refers to a pair forming thirds and sixths.

3. Case II. Combination of different kinds of movement.

The student will readily understand the figuring in the following example :

Ex. 27.

There are three separate chords here : at (1) the chord of C, at (2) the chord of F, and at (3) the chord of C again.

Suppose, however, that we are decorating the chord of C. We might proceed thus :

Ex. 28.

This is horrible. We have argued that A and B are passing notes, and that F is an auxiliary note. But the effect at (4) is the chord of F *plus* E. We cannot argue by theory, but by effect. And any musical person feels that with one or two exceptions the combination of the movement two notes to one

produces the effect of some chord, the longer note being essential, and one of the two shorter notes also essential. Of course still longer notes must be essential. Bearing this in mind it will be clear that a new chord may be formed over a pedal, and occasionally over an inverted pedal :

Ex. 29.

In other cases (except those to be stated in the next paragraph) stationary parts must be factors of the chords produced :

Ex. 30 (see chapter xix).

The movement two notes to one does not produce a new harmonic effect under the following conditions—

(a) Between two positions of the same chord :

Ex. 31.

(b) When one part is using arpeggio-(instrumental style) :

Ex. 32.

(c) When one part moves in parallels with the longer notes, and alternates with the same harmony note or with changing notes (see chapter xv) :

Ex. 33.

or when in using the former device the same unessential note be taken :

Ex. 34.

(d) When the longer note is an accented discord resolving into concordance :

Ex. 35.

chord of G.

In moving against a suspension the suspension may be ignored, but it should not be doubled except by contrary and conjunct movement :

Ex. 36.

good. bad.

It is better at present to avoid combining suspensions and other accented unessential notes. When using accented unessential notes avoid two simultaneously if proceeding in notes of different time-value, and contrariwise :

Ex. 37.

confused. good.

Two notes in concord may proceed by contrary and conjunct movement until they again reach essential harmony. Groups of thirds and sixths may adopt the same procedure :

Ex. 38.

In fact, any two groups that are concordant in themselves and in combination at the start may adopt the procedure.

Exercises in Ear Training. Procedure as previously explained.



The use of rests.

Rests are used for three chief purposes—

(a) to define the limits of a period :



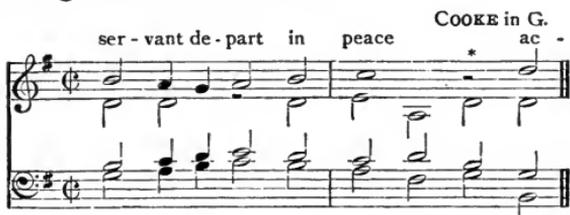
Of course a composer might have written the above passage without the rests, and the phrasing marks would have defined the periods sufficiently :



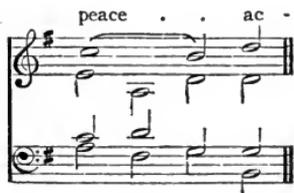
But in actual performance, whether sung or played, the minim C would be slightly shortened, in order to make the phrasing clear to the ear. In other words, the minim C, though shortened in time-value, is still mentally implied as a minim. This points to the fact that in such cases the use of a rest does not imply the immediate cessation of the effect of the note or chord preceding it.

The beginner should regard the last note before a rest inside a bar as lasting in effect over the remaining rests of the bar.

The following causes a bad clash :



At the point *, though the soprano rests, the ear mentally carries on the C, and it jars with the chord of G. It should be amended thus :



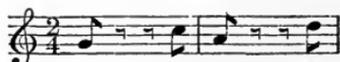
(b) to form figures.

In this connexion the above rule still holds good, e.g. write as if the rests were not there, and imply the previous note or chord.

Thus, the following :



is formed into a new figure by using rests :



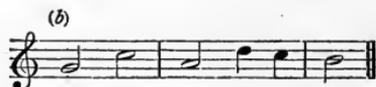
but the mental effect of both is identical. This can be proved by ignoring this principle. Nothing could be worse than :



When a rest occurs on the first beat of the bar followed by a sound on the second or following beats, thus :

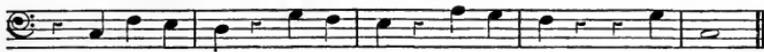


it is possible to regard it as having two equivalents :

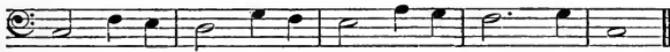


Usually questions of harmonic rhythm will settle the matter. It is safer for the beginner to use (b).

It will now be seen that in adding parts to such a bass as the following:



they should be written as if it were:



The following are examples of figures formed by the use of rests:



(c) for artistic relief.

Whether the music be polyphonic or harmonic, variety in texture is necessary. Thin chords may be used as a contrast to thick ones; few parts may be used in contrast to many. Special care will be required at the point where the part begins its rests so as to avoid the pitfall mentioned under heading (a). Further, a rest should never be used because it is impossible to insert a note. This merely means that the previous texture must be rearranged.

A rest used when in difficulties is sure to reveal its cause in some crudity. The true test of the good use of rests, except of course those that cover a long period, is to see that so far as harmony and, as a rule, grammar are concerned, they need not have been used.

Exercises.

1. Take the following as a *basis*:



Elaborate it in the following ways, maintaining the pattern (not necessarily in melodic curve) except in the final chord.

(1) Produces a passing chord, which resolves back into the original harmony.

The above is to be regarded as abstract work.

2. (a) Add S. A. T., introducing parallel thirds and sixths. (Case I (a).)

(b) Add A. T. B. as above.

(c) Add S. A. T. as above.

(d) Add A. T. B. as above.

3. (a) Add S. A. T., introducing similar but not parallel motion between two moving parts in accordance with Case I (b). Notes asterisked are to be treated as unessential.



(b) Add A. T. B. as above.



4. (a) Add S. A. T., introducing the unessential in accordance with Case I (c).



(b) Add A. T. B. as above.



(c)



5. (a) Add A. T., illustrating Case II.



(b)

Exercise (b) consists of two staves in 6/8 time with a key signature of one flat (B-flat). The upper staff features a melodic line with eighth-note patterns and slurs. The lower staff provides a bass line with a mix of eighth and quarter notes.

Continuation of exercise (b) showing the final measures of the upper and lower staves, ending with double bar lines.

(c)

Exercise (c) is in 3/4 time with a key signature of one flat. The upper staff has a melodic line with eighth-note runs and slurs. The lower staff has a bass line with eighth-note patterns.

Continuation of exercise (c) showing the final measures of the upper and lower staves, ending with double bar lines.

(d) Add an Alto moving uniformly in quavers.

Exercise (d) is in 3/4 time with a key signature of one flat. The upper staff shows a melodic line with eighth notes and slurs, including the notation "&c." below it. The lower staff has a bass line with quarter notes.

Continuation of exercise (d) showing the final measures of the upper and lower staves, ending with double bar lines.

6. Take the following as a basis :

Exercise 6 is a single staff in 3/4 time with a key signature of one flat, showing a sequence of quarter notes with slurs.

Elaborate it in the following ways, maintaining the pattern except in the final chord (abstract work):

(a)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(b)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(c)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(d)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(e)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(f)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(g)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(h)

Three staves of music in G minor. The top staff has a melody of G4, A4, Bb4, A4, G4, F4, E4, D4. The middle staff has a piano accompaniment of eighth notes: G4, A4, Bb4, A4, G4, F4, E4, D4. The bottom staff has a bass line of G3, F2, G2.

(f)

(b)

It will be seen that the important thing is to learn how to maintain the patterns. It would be impossible to maintain the pattern *and also* the particular use of resource given. The particular device chosen at any moment must depend upon the various conditions that arise.

7. Elaborate the following basis according to the patterns given above :

CHAPTER XIII

DIFFERENTIATION OF STYLE

(a) PIANOFORTE WRITING. (b) ORGAN WRITING

1. UP to the present we have regarded all the practical work as being in a vocal style, but we have not troubled about the setting of words. It is now time to consider some of the various means of presenting music, and the particular technique applicable. We begin with pianoforte writing, as being the most useful and at the same time the most neglected by the student. One would think, to judge by the crude attempts at pianoforte writing that are offered by students who know all the rules of harmony, that the pianoforte was some obsolete instrument, the technique of which, as regards composition, was only known by a few antiquarians. And again, students do not read half enough music. Many who attempt writing for strings have never seen the score of a String Quartet, and have probably never heard one played. Students must remedy this for themselves.

2. The first point that must be obvious to any one is that on a keyed instrument there is no difficulty in taking any interval, however awkward or impossible it might be for a voice :



This sort of thing is only limited by the dexterity of the hands.

As most students play the pianoforte it is hardly necessary to do more than mention some of the points that affect technique, e.g. (a) that the hands may help each other in performing a part :



In the above the sections bracketed will be played by the left hand.

(b) It is impossible to play such a passage as :



Both staves contain combinations beyond the span of the hands; and at (1) one hand cannot sustain and another reiterate the same sound.

(c) The use of the sustaining pedal enables one to get an effect approximate to that intended in the left hand :



(d) Repeated thirds or sixths or chords moving quickly are not advisable.

Thus, although the following is excellent string technique :



it is bad pianoforte writing. It would be arranged for the pianoforte thus :



Various arpeggio formulae are characteristic of the pianoforte, chiefly as accompaniment. But the Alberti Bass type of formula has had its innings, and had better be left alone :



(e) The crossing of hands is an effective device :



Also the overlapping of hands :



3. The technique of pianoforte writing as regards the ordinary laws of part-writing.

(a) We have already pointed out that intervals that are difficult for a voice present no difficulty at all on a keyed instrument. But this does not give the student permission to write anything. For example, the following is perfectly easy to play :



But it is abominable writing.

The leap of an unusual interval should only be used for the purpose of effect, and as there are here four real parts, the overlapping is bad.

(b) The unison by similar motion, if necessary in real part-writing, is harmless, because on the pianoforte all the parts are of the same timbre :



(c) Apart from this, when writing real parts the ordinary laws apply.

For real part-writing it is best to use three parts ; though of course music in two or four parts can be written. The Fugues in Bach's *Das wohltemperirte Clavier* should be studied.

As regards the distribution of the parts, the wide gap need not necessarily be between the two lowest parts. In the Fugue No. 8 of *Das wohltemperirte Clavier* the wide gap is often between the two upper parts, and, as a contrast, is an effect to be borne in mind. Brahms often studiously avoids the conventional distribution of the harmony for the purpose of sombre effect.

(d) Unless the style be contrapuntal, writing for the pianoforte is seldom real. That is, the number of parts varies in accordance with the particular effect required.

Thus Beethoven begins the Minuet of his Pianoforte Sonata, Op. 2, No. 1, in three parts, but in the second bar he adds a fourth part :



Ibid.

But no higher part should double the bass, unless the passage be entirely in octaves or a mere duplication of two parts :

Ex. 5.

4. The accompaniment of a melody with detached chords is often effective with the chords removed some distance from the melody :

Ex. 6.

BEETHOVEN.
Sonata, Op. 2, No. 1.

Ibid.

5. Unessential notes clashing with arpeggio are harmless in effect (see last bar in the above example).

6. Consecutive discords caused by the maintenance of a formula are harmless, provided that the dissonance resolve into concordance :

Ex. 7. *Ibid.*

were the melody doubled an octave lower, the fifths resulting with the inside part would have no evil effect :

Ex. 10.

BERTHOVEN. Op. 2, No. 3.



10. The use of staccato and legato touch as means of effect should not be overlooked, and in employing the former the following is an idiom characteristic of the pianoforte :

Ex. 11.

Ibid., Op. 10, No. 2.

These are some of the chief points to be remembered in writing for the pianoforte. The important matter of correct phrasing cannot be discussed here. Macpherson's *Studies in Phrasing* (Williams) should be consulted.

Classics should be studied under the following headings :

1. Real part-writing.

2. Melody and accompaniment.

(a) Melody in top part.

(b) Melody in any other part.

3. Passage writing, e.g. arpeggios and scale passages.

4. The use of the pedal, and the various kinds of touch.

5. Effects obtained by the interlacing or crossing of hands.

6. Effects due to register, and particular distribution of the harmony.

Besides being used as a solo instrument, the pianoforte is of course largely used for the purpose of accompaniment ; and also in conjunction with various combinations of strings or other instruments forming trios, quartets, and so forth.

It will suffice here to mention three important principles of accompaniment.

(a) The solo part is not to be considered as a real component of the score, that is to say, it may be doubled in the accompaniment either as it stands or in an ornamental form:

Ex. 12.

(a)

SCHUMANN. *Waldesgespräch.*

Es ist schon spät

(b)

SCHUMANN. *Die beiden Grenadiere.*

Ge - währ mir, Bru - der, ei - ne Bitt'

(c)

STANFORD. *Ancient Lullaby.*

The winds lie lulled on blue - est bil - lows.

In example (a) the voice part is doubled as it stands. In (b) we have the same thing, only in broken chords. In (c) the voice

part is ornamented in the accompaniment. Some teachers say that the voice part should not be doubled in the accompaniment at a lower pitch than that at which it stands. There is no trace of any such restriction in the classics.

(b) Clashes which would be inadmissible between two voices are harmless between parts of different timbre :

Ex. 13.

SCHUMANN. *Das ist ein Flöten.*

Das ist ein Flö - ten und Gei - - gen

(c) The pianoforte part must be complete in itself, unless it be a single part :

Ex. 14.

VOICE.

bad.

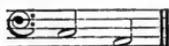
It must also be remembered that in such passages as the following :

Ex. 15.

the lowest bass note in each case lasts in effect till the next bass note in the same register.

That is to say, the bass implied in each is :

Ex. 16.



Both the following are incorrect :

Ex. 17.



In each of them a new bass note in the same register should be supplied on the second and fourth crotchets.

The case is altered when the bass is a pedal, but this must be left till pedals have been discussed.

(b) Organ Writing.

As much of the technique of pianoforte writing is also applicable to the organ, *mutatis mutandis*, it will suffice to point out the salient differences.

1. The organ can sustain a sound at the same gradation of tone so long as the key is pressed down. Immediately the key is released the sound ceases absolutely. Thus an arpeggio played on the pianoforte even without the sustaining pedal is quite different in effect when played on the organ. Thus an arpeggio accompaniment on the organ would be arranged generally as follows :

Ex. 18.

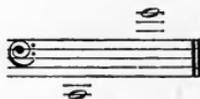


Of course arpeggio passages are often written just as on the pianoforte; the student must only bear in mind that the effects are not the same.

2. The compass of the organ is limited. The usual compass of the manuals is :



of the pedals :



3. The pedals take as a rule the bass; and the student must of course remember that feet are not so agile as hands.

It is inartistic to use the pedals incessantly, and also to use 16 ft. tone without relief. The pedal part need not always be the bass; in Brahms's Choral Prelude 'My inmost heart doth yearn' the pedal has the chorale in the middle (8 ft. only).

4. The existence of at least two keyboards and many combinations of colour will at once make obvious to the student many procedures that are impossible on the pianoforte. It is unnecessary to detail them, and the student will not be asked to use them in the early stages of his work. Enough has been said to enable him to make his exercises of real practical value. It should be added that the left hand should never double the pedal part, for it is both a waste of energy and incorrect technique; but it often duplicates two parts in the right hand when a full effect is required.

Further note on rests.

It is sometimes thought that the rule that a note preceding a rest lasts in effect for the remaining weak beats of the bar concerns a bass note only. This is not so. It concerns all parts. A middle part that disregards this rule is always clumsy, and a top part is positively bad :

Ex. 19.

very bad. good.

Before the student works the following exercises it is necessary to insist on what has been said previously.

Rests are used for three chief purposes:

(a) For artistic relief. It is monotonous and styleless to keep all the parts incessantly moving.

(b) To define the limits of a phrase, and to bring into prominence points of imitation:

Ex. 20.

(c) To form 'figures':

Ex. 21.

&c.

Rests should never be used merely because a move cannot be found for the part.

Elementary Exercises in Pianoforte Technique.

1. Write a decoration of the following substructure for pianoforte in the ways indicated:

6 6 6 6 6 6 6

(a)

(b)

3. The same with the following basis :

Iambic Tetrameter.



(a)

(b)



(c)

(d)



4. Accompany the following melody for Violin in the ways indicated. The basis is added :



(a)

(b)

(c)



5. Regard the above as a melody for Pianoforte, and accompany as follows :



Elementary Exercises in Organ Technique.

6. Take basis (1) and work as follows :

(a)

8 ft. only.

(b)

8-16 ft.

(c)

(d)

(e)

7. Take basis (2) and work as follows:

(a)

Swell.

Choir.

(b)

8 ft. *mf.*

(uncoupled.)

(c)

Maintain the style, but vary the pattern here and there.

(d)

(e) Choir.

Swell.

Maintain the style, but vary the pattern here and there. Let bars 3 and 4 correspond roughly with bars 1 and 2.

CHAPTER XIV

DIFFERENTIATION OF STYLE (*continued*)

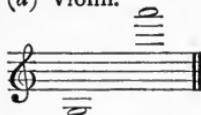
(c) STRING WRITING

1. THE most obvious way of obtaining a thorough grasp of the idiosyncracies of string writing is to learn to play one of the group of stringed instruments. Two years at the viola as a second study would be time well spent, and the student might also find it worth his while to continue. In the country even a moderate viola player would be a great acquisition.

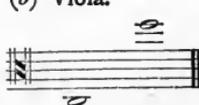
We must assume, however, that the student has no practical acquaintance with the technicalities of the strings. Of course he must read string trios and quartets, and he must take every opportunity of hearing them. A vast amount can be learnt in this way.

2. The compass of the various instruments for ordinary purposes is as follows :

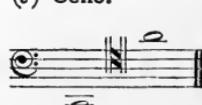
(a) Violin.



(b) Viola.



(c) 'Cello.



None of the instruments can go below the lowest note given, but higher notes are possible.

3. A String Trio consists of Violin, Viola, and 'Cello, a String Quartet of Violin I, Violin II, Viola, and 'Cello.

4. In the early days of string writing madrigals were often played as string pieces, and they were described as being 'apt for voices or viols'. But true instrumental style soon began to assert itself in such things as the use of the tremolo :



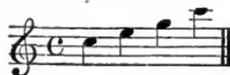
and in the use of figures and ornamental passages and wide leaps, which would be impossible in a vocal style.

One of the great characteristics of the violin is that it can 'sing', so to speak, so that from the very outset it was treated as a solo instrument supported by simple harmonies in a purely harmonic style on some accompanying instrument. This, then, forms a very practical means of studying harmonic style.

5. As phrasing is to the pianoforte and organ, so bowing is to string work. Bad bowing may easily ruin the meaning of a passage. The following are the chief points to be remembered :

(a) The down bow, the drawing of the bow over the string from the end close to the hand to the point, is indicated by \sqcup or \sqcap . The reverse, the up bow, is indicated by \vee or \wedge .

In the ordinary way, however, these signs are not used. It is assumed that such a passage as follows :



will be played with alternate down and up bows, commencing with the former.

But if a very powerful effect be required detached notes with the down bow would be indicated :



If these signs were not added the notes would be played with alternate down and up bows.

(b) When several sounds are to be played by the same bow they are slurred :

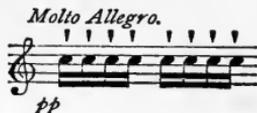


(c) When short portions of the bow are used for various notes, dots indicate this, and the slur over them indicates that the period is to be played with one bow-length :



The student may bear in mind the varieties of effect to be obtained by using in such cases various lengths of the bow for each note.

(d) The springing bow, e. g. rebounding after each note, is very suitable for quick reiterated sounds (piano), and is indicated thus :



(e) When longer portions of the bow are used for various notes covered by one bow, giving the effect of stress, short horizontal lines are used to indicate the device :



(f) In phrasing for the pianoforte and organ a slur should mark the dimensions of a rhythmic group thus :



But in string music the use of a new bow need not break the continuity of a phrase, and it is a general rule that normally a down bow should be used for the strong accent. The above would be bowed thus :



But the down bow for the strong accent need not begin on the strong accent, it should often begin before it if the anacrusis be used :

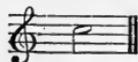
MENDELSSOHN. *Lobgesang.*



Especially if the first note of the bar represents the termination of a scalic passage a new bow should not be used for it :



written that it can be played on the fourth string of the violin. Such a melody should not go higher than :



The indication for this procedure is Sul G. Likewise we may have Sul D, Sul A, used for subdued tone, as compared with the brilliance of the E string.

9. The upper register of the 'cello is much used for a solo effect, the tone being exceptionally rich.

10. It will be useful to point out some features of style which are characteristic.

(a) Reiterated chords combined with melodic passages or pizzicato :

Ex. 1.

Quartette in E \flat , Op. 74. BEETHOVEN.

Ex. 2.

(b) Occasional use of three-part writing caused by first and second violins moving in octaves:

Ex. 3.

Ibid.

(c) 'Cello solo effect, crossing the other parts :

Ex. 4.

Musical score for four staves. The first staff has a long horizontal line above it. The second staff has a slur under the first few notes. The third staff has a slur under the last few notes. The fourth staff has a slur under the last few notes.

(d) The use of various arpeggio formulae :

Ex. 5.

(a) *Ibid.*

Musical score for example 5(a) showing four staves with arpeggio patterns. The first staff has a slur under the first few notes. The second staff has a slur under the last few notes. The third staff has a slur under the last few notes. The fourth staff has a slur under the last few notes.

pizz.

pizz.

pizz.

(b) *Ibid.*

Musical score for example 5(b) showing two systems of four staves each. The first system has a slur under the first few notes of the first staff. The second system has a slur under the first few notes of the first staff.

pizz.

Ibid.

(c)

HAYDN. *Quartet in B minor. Op. 64.*

(d)

Ibid.

(e) Constant wide distribution of the harmony for special effect:

Ex. 6.

BEETHOVEN. *Quartet in Eb major. Op. 74.**Adagio.*

(f) Constant crossing and the use of plenty of rests to give the phrases definition:

Ex. 7. *Ibid.*

The musical score for Example 7 consists of four staves. The top staff is in treble clef with a key signature of two flats (B-flat and E-flat). The second and third staves are in alto clef with a key signature of two flats. The bottom staff is in bass clef with a key signature of two flats. The music features a complex rhythmic pattern with frequent crossing notes and rests, creating a sense of constant crossing and definition.

(g) It is most important in even the simplest work to use distinctive formulae of accompaniment:

Ex. 8. *Ibid.*

The musical score for Example 8 consists of four staves. The top staff is in treble clef with a key signature of two flats. The second and third staves are in alto clef with a key signature of two flats. The bottom staff is in bass clef with a key signature of two flats. The music features a distinctive accompaniment formula with eighth notes and rests, marked with '8 8' above the notes. The score concludes with '&c.' in the top right corner.

In the last example none of the consecutive octaves are objectionable in effect; the parts, however, are not independent. The student should at first aim at real part-writing.

11. The matter of double-stopping is too intricate for a beginner who does not play any string instrument. The question is exhaustively considered in Widor's *The Modern Orchestra*.

12. As regards the laws of part-writing when the pianoforte accompanies a stringed instrument, the same principles as those referable to a voice and the pianoforte are applicable.

Exercises.

Take the following as a basis:



Write free parts for String Quartet as follows:

(a) See par. 10 (a).

(b) par. 10 (b).

(c) par. 10 (c).

(d) par. 10 (d).

(e) par. 10 (e).

Musical score for the first system, labeled "(e) par. 10 (e)". It consists of four staves. The top staff is in treble clef with a key signature of one flat (B-flat) and contains a few notes. The second and third staves are in treble clef with a key signature of one flat and contain a rhythmic pattern of eighth and sixteenth notes. The bottom staff is in bass clef with a key signature of one flat and contains a few notes.

(f) par. 10 (f).
Sul G.

Musical score for the second system, labeled "(f) par. 10 (f)". It consists of four staves. The top staff is in treble clef with a key signature of one flat (B-flat) and contains a few notes. The second and third staves are in treble clef with a key signature of one flat and contain a rhythmic pattern of eighth and sixteenth notes. The bottom staff is in bass clef with a key signature of one flat and contains a few notes. The text "Con sordini." is written below the second and third staves.

CHAPTER XV

UNESSENTIAL NOTES. GROUP IV

CHANGING NOTES, ANTICIPATIONS, AND CHROMATIC PASSING NOTES

A. Changing notes.

1. If two essential notes are a third apart, the second being lower than the first, the unessential note a step below the first may leap a third to that a step below the second, as follows :



This was a very common idiom in the Polyphonic Period.

2. In the Homophonic Period we find the following variants of this :

(a) the converse of the above :



(b) the use of unessential notes a step above and below the same harmony note.



(1) is found in Tielman Susato's *Dances* (1551).

(2) is to be seen in the works of Monteverde and Caccini.

3. The idiom can be used over one or two chords.



4. With the introduction of chromaticism, instead of



we get :



(1) Sometimes the initial note is omitted.

5. Appoggiaturas will produce the formula in curve :



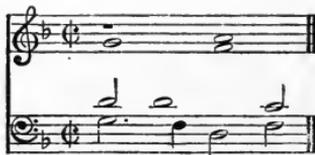
6. Soon the leap of a third was extended to that of a fourth :



and even a fifth :



7. Just as Willaert in his Motet *Ave Maria* forgot the last note of the Nota Cambiata :



so the following are examples of the same thing, resulting in a fixed idiom :



These are catalogued as cases of the exceptional leap from an unessential note.

8. Further, we get the approach of the first changing note by leap:



9. As the student knows, as yet, nothing about Modulation, he will happily not attempt to harmonize this fragment,



in some such way as follows :



very bad.

Of course, something like the following is required :



The student should always use the unessential freely in his work, and not employ it merely in one chapter devoted to the subject.

In such a melody as :



the chords, of course, move every half bar :



B. The use of anticipations.

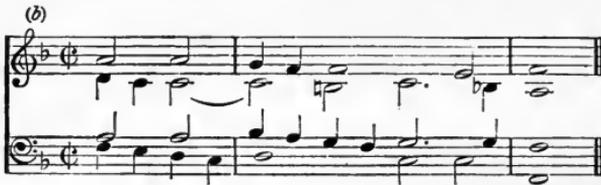
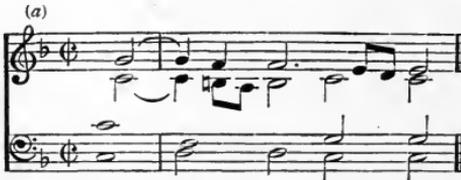
1. Under old conditions the use of the anticipation was due to a premature resolution of a prepared discord.



2. Under the Homophonic School the anticipation ceases to be a premature resolution of a discord. There are two stages in the evolution of the extension of the idiom :

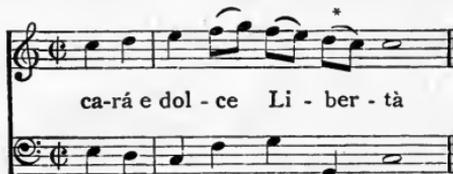
(a) In which the ordinary procedure merges into an appoggiatura.

The following are from the *Acts of the Apostles* by Tye (sixteenth century), quoted from Hawkins's *History of Music* :



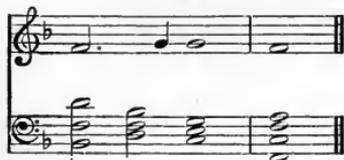
At (a) we see the ordinary anticipation of the resolution of a discord. At (b) an extension of the principle, in which we get the effect of an appoggiatura, and not an anticipation at all.

(β) The following by Cesti is a common procedure of the Italian composer of the early seventeenth century, and illustrates the modern use of anticipation :

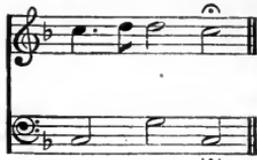


Two early examples of anticipation in the opposite direction are added :

PERI, *Euridice*, 1600.



MONTEVERDE, *Orfeo*.



Unessential notes may be anticipated.



Thus, such a passage as :



may be elaborated as follows :



C. Chromatic passing notes.

1. These may be introduced at any point, but once a chromatic passing note is used, the part must proceed in the same direction by semitones till it reaches the next harmony note :



2. Chromatic passing notes may of course be used in parallel thirds and sixths. Although we have not yet treated of modulation, it may be well to warn the student that an abrupt modulation at the end of the phrase is always bad; it is at its worst when the third of the dominant chord of the new key is immediately preceded by a chord contradicting it.

There is no harm in such a passage as :



But the following is atrocious :



The C and C sharp are of course unessential. Often the unessential note is longer in time value than the harmony note it displaces :



3. In reading poetry the reciter can make what pauses he likes, but in music the accents must keep on the move. If the student play through any long metre tune in duple time without any pauses the effect is absolutely breathless and unmusical. Therefore in music we shall rarely find trochees or dactyls without the catalexis.

3. Further, this consideration affects the reproduction of an Iambic tetrameter and trimeter in music.

For example :

Thou árt my lífe, my lóve, my héárt,
The véry thought of mé.

The addition of two parallel verses forms the common metre stanza.

But to write :



will be felt to be impossible. There must be a caesura and harmonic repose at any rate at the end of the trimeters.

Here, although we get the cadence at the third foot of the trimeters, we retain the harmony and spin out the phrase for another foot :



It is by no means necessary or advisable to work in regular two or four-bar phrases, or to put it more correctly in verses of two or four feet; variety is as desirable in music as in poetry. But there must be design underlying the variety, and a sense of balance must be cultivated. It would be merely freakish to follow a tetrameter by a trimeter. But to do it twice forms a larger pattern of two corresponding periods (4 + 3), (4 + 3).

Ear-Training Exercises.





Anticipation of
complete chord.



Exercises.

A. Harmonic style.

1. Add parts for the Pianoforte in the style given (real part-writing is not required).

Dactylic tetrameters.



Two staves of musical notation in treble clef. The first staff contains a sequence of eighth notes grouped into triplets, with slurs over each group. The second staff continues the sequence with similar triplet groupings.

Start

Two staves of musical notation. The top staff is in treble clef and the bottom staff is in bass clef. Both are in 3/4 time. The music begins with a triplet of eighth notes in the treble clef, followed by a series of eighth notes.

2. Add an accompaniment for Pianoforte.

Trochaic Tetrameters.

Two staves of musical notation. The top staff is labeled 'VIOLIN.' and is in treble clef with a 6/8 time signature. It begins with the word 'Andante.' and contains a series of eighth notes with slurs. The bottom staff is in bass clef and provides a simple accompaniment of eighth notes.

Start

Two staves of musical notation. The top staff is labeled 'VIOLIN.' and is in treble clef with a 6/8 time signature. The bottom staff is labeled 'PIANO.' and is in bass clef with a 6/8 time signature. The music begins with a series of eighth notes in the violin part and a simple accompaniment in the piano part.

3. Add three parts for Pianoforte.

Anapaestic Tetrameters.

A single staff of musical notation in treble clef with a 3/4 time signature. The music consists of eighth notes with slurs, representing anapaestic tetrameters.

Start



B. Contrapuntal style.

1. Add three parts for strings.

Trochaic Trimeters.



Start



2. Add two parts for the Organ.

Iambic Trimeters.



3. Add two vocal parts.

Trochaic Pentameters.



4. Begin as follows : and continue, forming couplets.

(a) Musical notation in 6/8 time, consisting of three staves (treble, alto, and bass clefs) with a melodic line and accompaniment.

(b) Musical notation in 3/4 time, consisting of three staves (treble, alto, and bass clefs) with a melodic line and accompaniment.

5. Write melodies to the following Basses, forming parallel phrases. Not more than one chord is to be used to each accent. When the melody has been written, add an interesting Alto part.

(a) Trochaic Tetrameters.

(1) (1) (1) (1) (2) (2)

(1) Accented unessential note.
(2) Changing note.

(b) Iambic Tetrameters.

(1) (2) (3) (2)

(1) Chromatic auxiliary note, semitone below root.
(2) Accented passing note.
(3) Retardation.

6. Fill in the following blank rhythms for Soprano and Bass, in Minor keys, using not more than one chord to each crotchet. Place under the working the underlying chord progression. Add an Alto part when completed.

(a) Trochaic Trimeters.

2/4 $\dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \quad | \dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \quad ||$

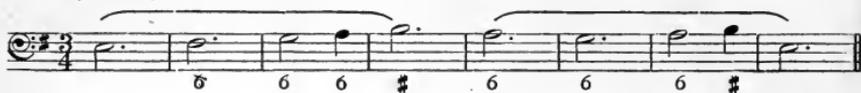
2/4 $\dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \quad | \dot{\bar{r}} \quad | \dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \quad | \dot{\bar{r}} \quad | \dot{\bar{r}} \dot{\bar{r}} | \dot{\bar{r}} \quad ||$

(b) Iambic Trimeters.



7. On the following bases, write three free parts for strings.

(a) Dactylic Tetrameters.



Start



(b) Anapaestic Tetrameters.



Start



8. Harmonize the following in three parts for Pianoforte. Do not use more than one chord to each crotchet.



CHAPTER XVI

THE CHORD OF THE SIX-FOUR

1. THE second inversion of the common chord is called the chord of the six-four because it consists of a bass note, its fourth, and sixth :

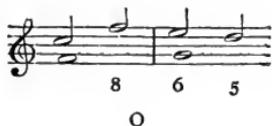


Almost invariably students use this chord crudely. There are two reasons for this: (a) the chord is inadequately explained, (b) the rules for its treatment are superficial.

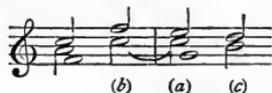
2. We have seen that under old conditions the five-three and six-three were essential harmonies, and as the term chord necessarily implies that the notes forming it are essential, there is nothing very novel in the new view so far. But the six-four was not an essential combination, so that we here meet with another example of the principle of the transference to the scheme of essential harmony of a combination which was not originally so considered.

3. Using the term six-four as the modern statement of the combination of the essential interval of the sixth with the non-essential interval of the fourth, it has been seen that it is true to say that the chord was a common feature of sixteenth-century technique. Those theorists who exclude it from their statement of the technique of strict counterpoint merely show that they do not understand it.

For the sake of clearness it will be well to restate the matter. Let us suppose that we are adding a part in second species to the bass, thus :



Some modern theorists would quite wrongly argue that the second bar implied a six-three on E, and that D was unessential. It is simply the use of two concords, 6 5, and that is how it was viewed. Now suppose that a part in fourth species was to be added:



the fourth at (a) is a discord, it is prepared at (b) and resolves at (c); it is further necessary that all the parts at (a) except the discord should be concordant with the bass, and that all the parts at (c) should be concordant with the bass. The following is an illustration:

PALESTRINA.
Sicut cervus.

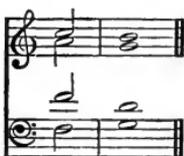


The simple reason why theorists have not catalogued this as a part of sixteenth-century technique is this. They have been told that the common chord and its first inversion are the essentials of the technique. The obvious deduction is that the six-four is not. But the statement that the essential intervals of strict contrapuntal technique form the common chord and its first inversion puts the matter in its right perspective. If we use the old terminology of intervals it is true to say that the essential intervals are the third, fifth, and octave from the bass, or third, sixth, and octave from the bass. If we use the modern terminology, then we are bound to say that the chord of the six-four can be used under certain conditions.

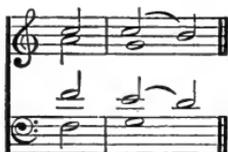
A chord of the six-four used in this way, that is, resolving on to a five-three on the same bass note, is generally used at the cadences, and is therefore termed a cadential six-four. But it is necessary to distinguish between its use in the half close, full, and deceptive close.

In the half close this chord temporarily displaces the dominant chord (the final).

The following is an ordinary half close :



Now it will be shown later how all elaborate texture is merely decorative work. One of the first principles of decoration is to displace a chord by another, which in its turn resolves into the original chord. Such chords may be conveniently termed *appoggiatura* chords; thus we may decorate this cadence as follows :



4. The first step in advance of this is to allow the fourth in this case to be taken *without* preparation :

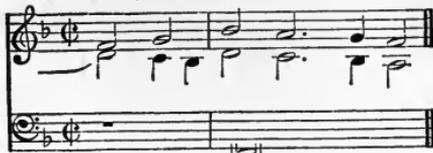


(a) is the undecorated half close ;

(b) is the way in which the decorated form was originally written, the C and E being regarded as accented unessential notes ;

(c) is the way in which it is played, and now written.

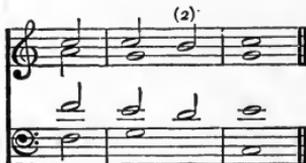
It is true that isolated examples of the use of the unprepared fourth are to be found in the music of the Polyphonic Period :

JOHN SHEPHERD (*circa 1540*).

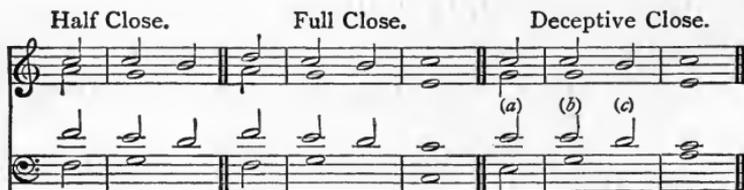
(See Burney, vol. ii, p. 587.)

Similar examples are to be found in Tye's mass 'Euge Bone'. But the mass of evidence points to the fact that such things were contrary to general principle, and they must therefore be regarded as interesting premonitions of the course of evolution.

In the full close it can hardly be said that this six-four displaces the dominant chord, but that it forms a new way of preceding it:

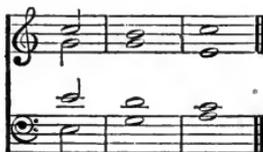


though it is quite true that it arose in precisely the same way as has been explained in reference to the half close. The difference lies in the fact that at (1) the dominant chord normally occurs at the point represented, whereas at (2) it is unnecessary to presume that the dominant chord should have normally occurred in place of the six-four. We may thus formulate an important principle. The cadential six-four may be used on the dominant in forming the half, full, or deceptive close. In every case the six-four occurs on the strong accent, and must not be preceded by any harmony on the same bass note:



5. It has been said that the same chord should not be used in the relation of weak to strong, but this argument does not apply

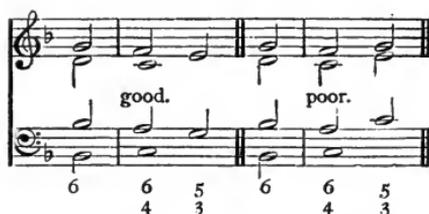
when the cadential six-four is preceded by another position of the same chord as at (a), for the simple reason that (b) is in the nature of an appoggiatura chord resolving at (c) into what would normally follow (a):



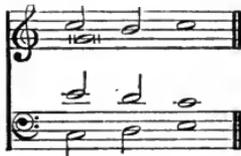
Note that the following are bad :



6. The chord of the six-four is indicated by the figures $\frac{6}{4}$, and the resolution on the same bass note is indicated by $\frac{5}{3}$; in writing the parts six falls to five, four to three, and the bass note is doubled in the same part in each chord:



7. We saw that the chord of the six-four also occurred as the result of the use of passing notes on the weak accents. First, we consider the case in which the bass uses unessential notes:



Contrapuntally B and D are unessential notes, harmonically they, together with the essential note G, form what is termed a passing six-four.

For the present this use will be confined to passing between i and $i b$ or $i b$ and i , iv and $iv b$ or $iv b$ and iv :

8. We have now two harmonies for the progression :

Either of these is equally good.

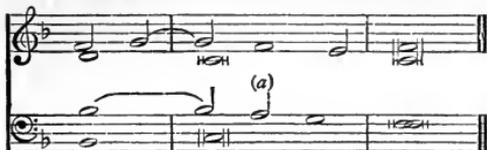
But the same does not apply to :

This forms an ugly use of the mediant chord; but the following is of course excellent :

9. Next, when the bass is stationary, the chord of the six-four may also be produced by the use of auxiliary notes :

Contrapuntally F and A are unessential notes (auxiliary). Harmonically they, together with the essential C, form what is termed an 'auxiliary' six-four; at present this should be confined to i and v . The auxiliary six-four should occur on a weak accent, and should be preceded and followed by the same harmony, e.g. i or v .

10. Thirdly, when the bass was a pedal, the six-four was used as follows :

PALESTRINA. *Aeterna Christi Munera.*

at (a) the Tenor is the real bass.

Harmonically it may be said that if in the bass V of the Perfect or Deceptive Cadence be reached three accents before its normal time, its six-four may be used—

(a) for all these accents :



(b) for the second and third accents :



(c) for the third accent only :



When the bass reaches the six-four of the cadence in this way before its normal time, it must remain on that note, and not proceed to other sounds :



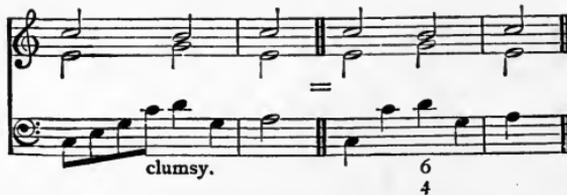
11. It remains to consider one other use of the six-four.



Mentally (a) and (b) are identical in effect. Contrapuntally (a) is possible, (b) is impossible.

At (b) the G in the bass forms a discord with the C in the treble, and it cannot be approached or quitted by leap.

Harmonically both are unobjectionable. This may be termed the arpeggio six-four. In using this care should be taken that the six-four should neither commence nor end the arpeggio unless such six-four be good without the arpeggio :



12. It may be well to mention one exceptional use of the six-four : we might decorate



with a double appoggiatura :



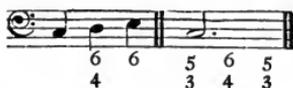
this would be played thus :



In proceeding from (1) to (2), care must be taken not to write consecutive fourths between the bass and an upper part.

Hence theorists say two consecutive six-fours may be used on ii followed by i if the second occur on the strong accent, and be followed by a five-three on the same bass note. The student will thus see how this procedure originates. Sufficient has been said to show the real nature of the chord of the six-four, that it is in its very essence unessential in the sense that it requires to be preceded and followed in certain definite and restricted ways. In other words, it is what may be termed a decorating chord.

(a) It forms an extra link between the same or two positions of the same chord :



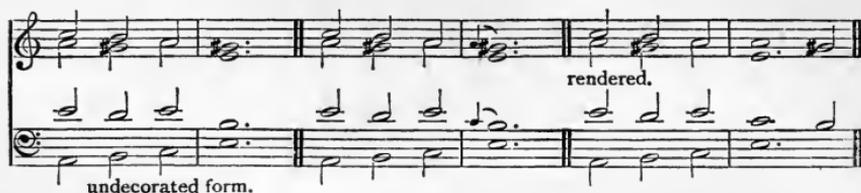
(b) It displaces, but resolves into another chord :



Here its two uses are combined :



When an appoggiatura six-four decorates a dotted note, it takes two-thirds of its value :



13. Principles of extension in reference to the use of the chord of the six-four.

In the early stages of his study it is recommended that the student should confine himself to the uses of the chord of the six-four that have been explained.

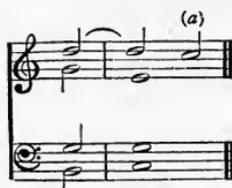
It will, however, be convenient here to state upon what principles it seems that composers are liberating themselves from the original restrictions in reference to the use of this chord.

14. Theorists usually say that the bass of a six-four may not be approached by leap from an inversion of another chord, and that it may only be quitted by leap if proceeding to another position of the same harmony. In one sense this statement of the case is not strict enough, for it allows of such atrocities as :



In another sense the statement is not wide enough. For there are many cases in which the bass of a six-four may be approached and quitted with excellent effect, though in direct violation of text-book rules.

We have shown that in the Polyphonic Period a prepared discord might resolve while the other parts remained stationary :



Or the other parts might move at (a) to other notes in concord with the C :

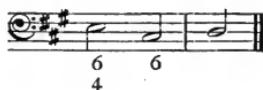


Applying this to the discord of the fourth accompanied by the sixth we get :



Hence, when the six-four is in effect an appoggiatura, the Bass can move to another position of the chord upon which it resolves.

15. By the same principle, if the Bass moved downwards, thus :



as a variation of this we might get :



Here the combination of a chromatic passing note E \sharp with diatonic passing notes G \sharp and B produces a new chord.

16. When the six-four is an appoggiatura, the chord upon which it resolves is the essential basis of criticism.

BACH.
St. Matthew Passion.



Here the six-four is *approached* by leap from an inversion of another chord.

Similarly, we explain:

LLOYD. *Come
tuneful friends.*

The musical score consists of two staves. The upper staff is in treble clef with a key signature of one flat (B-flat). The lower staff is in bass clef with the same key signature. The music shows a sequence of chords where a six-four chord is approached by a leap from an inversion of another chord.

17. When the six-four is auxiliary in effect we get:

WALFORD DAVIES.
Te Deum in G.

The musical score consists of two staves. The upper staff is in treble clef with a key signature of two sharps (D major). The lower staff is in bass clef with the same key signature. The music shows a six-four chord used as an auxiliary chord.

E and C are really auxiliary notes.

18. Again, suppose the following to be a basis:

A single staff in bass clef with a key signature of two sharps (D major). The notes are G, A, B, C, D, E, F, G. Below the staff are the numbers 6, 4, 3, indicating the positions of the notes on the strings.

If the two lowest parts were conceived as being

A single staff in bass clef with a key signature of two sharps (D major). The notes are G, A, B, C, D, E, F, G. Below the staff are the numbers 6, 6, 4, 3, indicating the positions of the notes on the strings.

they could be represented by one part in broken harmony:

A single staff in bass clef with a key signature of two sharps (D major). The notes are G, A, B, C, D, E, F, G, representing the broken harmony of the two lowest parts.

So that we get:

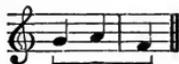
PARRY.
If I had but two little wings.

(1)

The musical score consists of two staves. The upper staff is in treble clef with a key signature of two sharps (D major). The lower staff is in bass clef with the same key signature. The music shows a six-four chord used in a broken harmony.

(1) This G is an appoggiatura of the F #.

19. Further, when two harmony notes are one step apart, as G and F, the G, before proceeding to the F, may move one step on the opposite side of F, and then leap a third to it:



This A is in the nature of a changing note; thus, instead of:



we might have:



It would be absurd to argue that (a) was a six-four incorrectly quitted.

20. Or again in the following:



the chord (d) actually resolves at (c), the chord (b) forming an ornamental resolution. Further, the consecutive fourths between the Bass and the Soprano at (e) are excellent in effect, despite the rules, the reason being that G is not essential.

21. In the following:



the mind accepts the chord (*a*) as being implied right through from (*b*) a pedal E : in the previous bar a low E has been sounded. The Bass moves down the arpeggio of the chord of E major, and one feels C # to be a kind of thirteenth of the root E.

22. Another example is noteworthy :

WALFORD DAVIES.
Everyman, p. 7.

The whole bar is really framed on the chord of C minor, (*c*) and (*d*) being decorating chords, so that the broad effect received by the mind is :

These examples will be sufficient to show the student the broad lines of advance. It is not that the old principles are being overthrown, but quite naturally expanded, by the use of the resources of harmonic decoration.

Ear-Training Exercises.

**Preliminary Exercises in the Use of New
Harmonic Material.**

1. Correct the following as sixteenth-century technique :

2. Explain the combinations marked 1, 2, &c. :

(a) as counterpoint.

(b) as modern harmony.

3. (a) Write a chord to precede and follow



as an accented passing six-four.

(b) Write a chord to precede and follow



as an accented unprepared six-four.

(c) Rewrite the following in modern form:



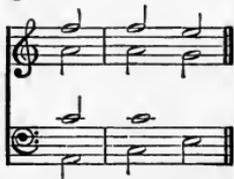
(a) Explain the following:



4. Point out the flaws in the following:



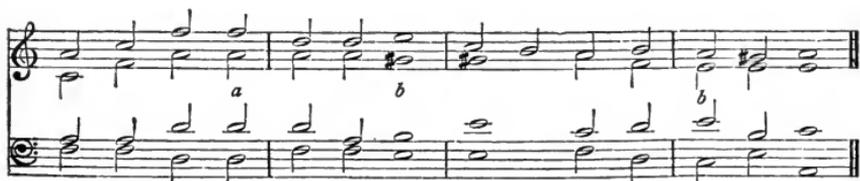
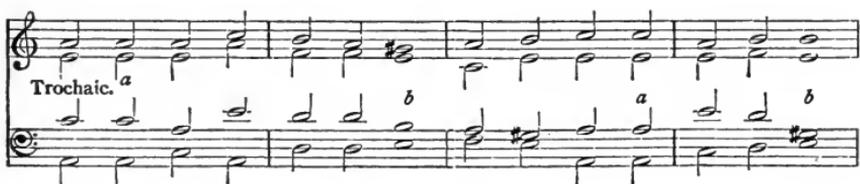
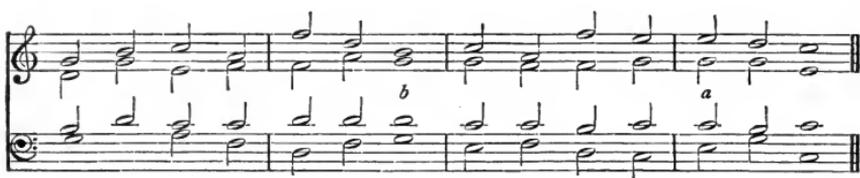
5. Justify the following:



6. Criticize :



7. Rewrite the following, substituting for the chords marked *a* decorative six-four chords, and displacing the chords marked *b* by six-fours resolving into the chords displaced, the two chords being each half the time-value of the chord displaced :



The altered form of these may be used as ear-training exercises.

The chord of the six-four having risen to the dignity of an essential combination, it can be decorated by suspension, or appoggiatura :

THE CHORD OF THE SIX-FOUR



(1) is a familiar idiom of the Polyphonic Period, the bass being regarded as a pedal. But the following is new resource :



(a) D here is viewed as an essential note. Thus what was unessential in one period becomes essential in another, and receives decoration. The following are additional uses :



We may now proceed to the writing of complete stanzas, e. g. four or more verses.

The student should learn how to write the 'four-square blameless' stanza; he should then strive by every possible means to avoid it. The previous exercises will serve to illustrate the former. The elementary principles of melodic form are : (1) statement of idea, (2) contrast of idea, (3) reiteration of idea, (4) development of idea. It will be obvious that to repeat an idea over and over again is not music, but mechanical futility. But statement demands response.

Suppose A 1 represents a statement of an idea,

A 2 , a reiteration of the same idea, at the same or another pitch, with or without variation of minor details,

B 1 „ a statement of another idea,
and so forth,

the following arrangements of a stanza are satisfying:

- (1) A 1 A 2 B 1 B 2 ;
- (2) A 1 B 1 A 2 B 2 ;
- (3) A 1 A 2 B 1 A 3 ;
- (4) A 1 B 1 B 2 A 2 ;

It will be seen that (2) is merely half of (1), double the size if :

$$a 1 b 1 = A 1$$

$$a 2 b 2 = A 2.$$

These formulae merely represent statement of idea, repetition of idea, and contrast of idea. Development of idea will be reserved for another chapter.

1. Find a Bass in crotchets to the following stanzas :

(a) Stanza of Trochaic Tetrameters. (A 1, B 1, A 2, B 2.)

- (1) Passing $\frac{6}{4}$, sixth suspended. (2) Appoggiatura $\frac{6}{4}$.
- (3) Accented passing note. (4) Passing $\frac{6}{4}$.
- (5) Minim bass.

(b) Stanza of Iambic Tetrameters. (A 1, A 2, B 1, B 2.)

- (1) Passing $\frac{6}{4}$. (2) Accented passing note.
- (3) Suspension. (4) Appoggiatura $\frac{6}{4}$.
- (5) When two harmony notes are a step apart, the unessential note one step the other side may leap a third to the next harmony note.

When the Bases are found, elaborate them into melodious parts, and add a third part, Alto or Tenor.

2. In the following Trochaic stanza (Tetrameters) (a) is the basis, (b) is the decorated Bass ; above the latter add a Soprano in the form A 1, A 2, B 1, A 3 ; when completed add an Alto.

THE CHORD OF THE SIX-FOUR

(a) A 1 (1) (2) A 2 (1)

(b) (4) (4)

B 1 (3) A 3 (1) (2)

- (1) Passing $\frac{6}{4}$. (2) Appoggiatura $\frac{6}{4}$. (3) $\frac{6}{3}$.
 (4) Changing notes, in opposite direction to the original Nota Cambiata.

3. Dactylic stanza of Tetrameters. (A 1, B 1, B 2, A 2.) Add a melody to the following Bass in the above form (every crotchet in the bass represents a chord). Then decorate the Bass and add an Alto :

A 1 (1) (1) B 1 (2)

B 2 (3) (3) (3) A 1 (1) (2)

- (1) Use pedal $\frac{6}{4}$ on second crotchet. (2) Not a regular cadence.
 (3) First inversion, not the regular deceptive cadence.

4. Point out the differences between the following in the use of the six-four; state which of them are incorrect, and give the reasons :

(a)

(b)

(c)

(d)



Harmonic decoration.

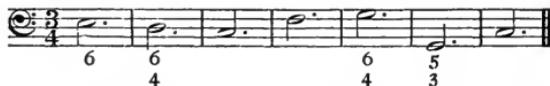
All the embellishment that has been used up to now has been in the nature of unessential notes decorating chords. It will be new to some to find that a chord can decorate another chord. The six-four in its origin is essentially a decorating combination, either displacing a common chord in its root position :



or acting as a link between two statements of the same chord :



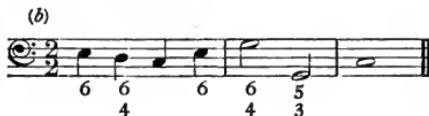
It can of course be used as an essential harmony :



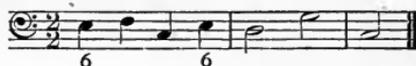
But when the accents are moving slowly, it is often introduced as an embellishment of harmony which would be quite satisfactory without it :



The following decorates the above, but does not disturb the harmonic rhythm of the accents :



The student must distinguish between a chord that decorates a centre, and one that is a centre itself. The harmonic rhythm generally settles the matter. Some one will say this is a distinction without a difference. It is not so. For suppose other chords be added to (a) above :



the original basis is quite upset, whereas (b) does not upset it, but merely decorates it. This question must be discussed at some length later. It is here sufficient to point out that the six-four is in its origin and very nature a decorating combination. We could not get along without the common chord and its first inversion, but we could well do without the six-four. As we gained experience in decoration we should soon produce it fortuitously, and this is of course what happened in actuality. But an ignorance of this fact causes students to use the six-four in almost every conceivable way except the right one.

CHAPTER XVII

SOME ELEMENTARY PRINCIPLES OF FORM

1. It has already been seen that the essentials of melodic form are (*a*) statement of idea, (*b*) reiteration of idea, (*c*) contrast of idea, (*d*) development of idea. The mere statement of a string of ideas, which may be represented by the formula A, B, C, D, is indefensible, unless it be intended merely as the basis of future developments. It is then preferable, for it avoids cutting away the ground from the later periods. But we are here dealing with miniatures, so to speak, as for example the stanza of a lyric, which is to be judged as a complete whole. The Irish Air 'Daniel the Worthy' is an illustration:

The image shows two staves of musical notation in 3/4 time, key of B-flat major. The first staff contains a melodic line with four phrases labeled A, A, B, and B. The first A phrase (bars 1-4) is a quarter-note sequence: G4, A4, B4, C5. The second A phrase (bars 5-8) is a quarter-note sequence: G4, A4, B4, C5. The first B phrase (bars 9-12) is a quarter-note sequence: G4, A4, B4, C5. The second B phrase (bars 13-16) is a quarter-note sequence: G4, A4, B4, C5. The second staff is titled 'Development of ideas in B.' and shows a melodic line with four phrases labeled 1, 2, 3, and 4. Phrase 1 (bars 1-4) is a quarter-note sequence: G4, A4, B4, C5. Phrase 2 (bars 5-8) is a quarter-note sequence: G4, A4, B4, C5. Phrase 3 (bars 9-12) is a quarter-note sequence: G4, A4, B4, C5. Phrase 4 (bars 13-16) is a quarter-note sequence: G4, A4, B4, C5.

Here are all the essentials of melodic form :

A A give statement and repetition of idea.

B B give contrast and repetition.

The fifth phrase consists of B stated directly, and a portion of it (2) stated by inversion (3), forming development of idea.

Note further that the B's are sub-phrases, shorter than the A's, and developed in rhythm from the beginning of A. Then the balance is restored by the final phrase (bars 7-8), and it is repeated to round off the whole.

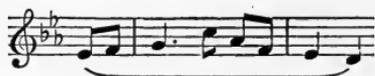
It may be fairly said that the whole is developed from A, B taking its rhythm from A, but with a new melodic curve which serves to evolve the succeeding phrases.

2. In miniature work economy in the use of thematic material is a virtue. A little thought will show that it is a necessity. If one were limited to a speech of two minutes, one would not state four or five subjects upon which one might discourse, and then stop: no one would be so stupid. And yet in music it is done over and over again by thoughtless students, who imagine that repetition or development of idea is a sign that the current of inspiration has been cut off. Or, as is often the case, the student is completely ignorant of the fact that there are any principles of development at all.

It will therefore be well to show how a complete stanza can be developed from one idea only. Suppose the following to be the first phrase of a stanza:



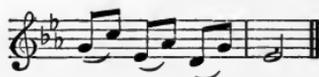
(It is quite possible to have a phrase of two feet.) Its response would be somewhat as follows:



Next, it will be artistic to make the last two phrases indivisible, and we develop first by repeating a portion of the initial formula:



and finally a smaller portion, the leap of a fourth:



The whole will therefore stand thus:

Ex. I.
Andante.

PIANO-FORTE.



It will of course be obvious that the original formula must be well varied in rhythm or melodic curve. Nothing could be done with such formulae as :



Variety in melodic curve alone will suffice. For instance, in the following :



we have (1) two upward leaps of a third, (2) two steps of a second downwards.

This could be developed as follows :



Many examples of this method must readily occur to the student. They are to be found on every page of a modern score, so that it is superfluous to quote examples. Beethoven developed the whole of the middle section of the Pianoforte Sonata in D minor, Op. 28 (1st movement), in this way ; see also the corresponding portion of the first movement of the Waldstein. The principle in a complete form may be thus stated :

A 1, A 2, $\frac{1}{2}$ A 1, $\frac{1}{2}$ A 1, $\frac{1}{4}$ A 1, $\frac{1}{4}$ A 1, $\frac{1}{8}$ A 1, $\frac{1}{8}$ A 1, $\frac{1}{16}$ A 1, $\frac{1}{16}$ A 1, till the process is exhausted. The following is an example :

Ex. 2.
Lento.



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The musical score consists of five systems of two staves each (treble and bass clef). The key signature has one flat (B-flat). The first system is marked A_2 . The second system is marked $1/2 A_1$. The third system is marked $1/2 A_1$. The fourth system contains four measures, each with a different rhythmic marking: $1/4 A_1$, $1/4 A_1$, $1/8 A_1$, and $1/8 A_1$. The fifth system contains four measures, each with a $1/16 A_1$ marking. The score concludes with the instruction "round off."

Development of this nature provides the student with an easy way of obtaining continuity, and of varying the length of

phrases. The normal length of the last example would be sixteen bars; the last phrase is naturally extended two bars, or more accurately four trochaic feet.

3. Although the feeling for response or reiteration is a natural one, exact repetition is instinctively felt to be inartistic.

Three common ways of avoiding this may be mentioned—

(a) a slightly decorated form of the antecedent :



(b) a shortening of the first note :



(c) a lengthening of the first note by throwing it forward an accent :



It will be observed that in none of these are the proportions disturbed.

4. Variety in proportion.

There are numerous ways of avoiding the squareness of effect which would be produced by exact symmetry in the proportions of the phrases.

(a) If only one phrase be varied it is usually the last, and extension is much more satisfactory than condensation. This is often accomplished by lengthening a prominent note of the melody just before the cadence.

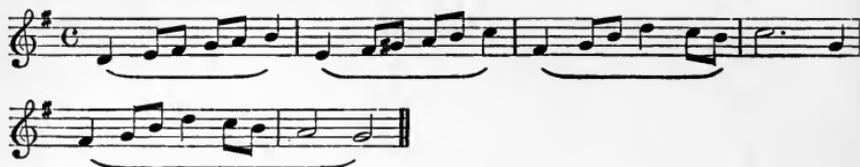
The following :



would become :



(b) The final cadence may be turned off into some other channel, then the concluding phrase or part of it may be repeated, this time with the cadence that was originally expected :



(c) A bar or more may be interpolated :



Contraction is most commonly caused by the overlapping of phrases, that is, the end of one phrase coincides with the beginning of another :



5. As regards the manner of introducing extensions or contractions of the normal type, the student must be guided by his sense of proportion, and here the metre of poetry will help him.

A few examples will illustrate this :

- (a) With ravished ears
The monarch hears,
Assumes the God,
Affects to nod,
And seems to shake the spheres.

DRYDEN.

Here there are four dimeters; these are rounded off by a verse with more feet in it. In music this could be reproduced thus :

Iambics, $\frac{2}{4}$ time.

Bars 1-2 A 1.
 3-4 A 2.
 5-6 B 1.
 7-8 B 2.
 9-11 A 3.

Ex. 3.

But in many the feeling for an even number of feet would lead them to follow the cadence by a plagal extension, thus :

Ex. 4.

- (b) Still thou art blest, compar'd wi' me,
 The present only toucheth thee:
 But, och! I backward cast my e'e
 On prospects drear!
 An' forward tho I canna see,
 I guess an' fear.

Here the metre is : $\overbrace{4 \cdot 4} \cdot \overbrace{4 \cdot 2} \cdot \overbrace{4 \cdot 2}$.

Now, contraction in music is hardly ever satisfactory. And if the above were exactly reproduced in music, it would sound ill-balanced. Still something of the effect intended by the poet can be obtained in two ways :

(1) By repeating the short verse as a sort of echo :

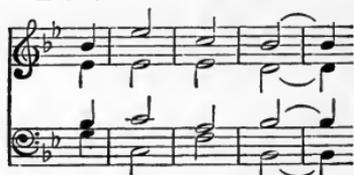
Ex. 5.



(1) The two phrases are here made indivisible to reproduce verses 3 and 4.

(2) by suddenly lengthening the accents, and making the time duration that of the previous four feet :

Ex. 6.



It must be remembered that the reciter would naturally pause here, and in music this must be reproduced in some such way as has been illustrated.

(c) The use of Catalexis will cause variety without altering proportions :

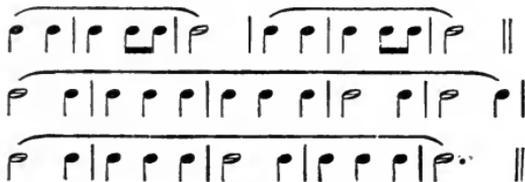
When like the early rose,
 Eileen Aroon!
 Beauty in childhood blows,
 Eileen Aroon.
 When like a diadem,
 Buds blush around the stem,
 Which is the fairest gem?
 Eileen Aroon.

Ex. 7.





6. Of course there is no need to consider a phrase of three or five feet as being necessarily a contraction or extension. It may form the normal type of the stanza, just as in poetry, e. g. 3·3·3·3 : 5·5·5·5 :



7. And again, a stanza need not consist of four verses. Five verses are often most effective thus :

- (a) A B A B B
- (b) A B A B A
- (c) A A B B B
- (d) A A B B A

or a third rime can be introduced, A B C C B :

With throats unslacked, with black lips baked,
 Agape they heard me call;
 Gramercy! they for joy did grin,
 And all at once their breath drew in,
 As they were drinking all.

S. T. COLERIDGE.

This is an expansion of the ordinary common metre, and would be reproduced thus, for example :



Exercises.

1. Develop the following into an eight-bar sentence (see Ex. 1):



2. Develop eight bars from the following :



3. Develop about eighteen bars from the following (see Ex. 2):



4. Show three ways of varying the last two bars of the following :

PIANOFORTE.

5. Add a response to the following, and show three variations of it:

PIANOFORTE.

6. Alter the following in three different ways, so as to avoid its angularity:

PIANO-FORTE.

7. Write stanzas for the pianoforte that reproduce the poetic devices of the following:

- (a) Cynthia, to thy power and thee
 We obey.
 Joy to this great company:
 And no day
 Come to steal this night away,
 Till the rites of love are ended,
 And the lusty bridegroom say,
 Welcome, light, of all befriended.

JOHN FLETCHER.

- (b) Sing his praises that doth keep
 Our flocks from harm,
 Pan, the father of our sheep:
 And arm in arm
 Tread we softly in a round,
 Whilst the hollow neighbouring ground
 Fills the music with her sound.

JOHN FLETCHER.

CHAPTER XVIII

DIATONIC CHORDS OF THE SEVENTH AND DIMINISHED TRIADS

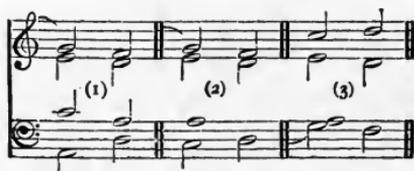
1. THE student is familiar with the device of resolving a suspended discord upon a combination different from that on which it occurred :



The movement of the Bass and Tenor to the two A's is not a matter of necessity, as G, C, and E are concordant with C. But in the following case the Bass and Alto must move, else they are discordant with the resolution of the discord :



Once the theory of chords is established it is not difficult to see that the following are merely different positions of the same chord :



- (1) is called a secondary seventh ; its root is A, and it consists of the root with diatonic third, fifth, and seventh ;
- (2) is the first inversion of this ;
- (3) is the third inversion.

2. Now, under old conditions the following is incorrect :



Here the old view is, G is a discord, therefore the lowest moving part is for the time being the bass, e.g. the tenor E. But this forms with an upper part the discord of the fourth. Under the new conditions, of course, such a consideration does not exist. The G is now catalogued as being essential.

3. But, some one will say, where is the second inversion? This particular combination did not occur under old conditions, because double suspended discords were not a regular part of the technique :



Under modern conditions both the E and the G are essential ; therefore the E is free to rise or fall by step, that is, it is treated exactly as the Bass of an ordinary six-four :



4. First point of advance.

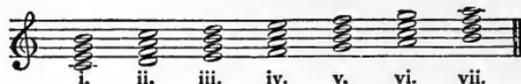
The first point of advance, then, is the adoption of the discord of the seventh as an essential combination ; and the vertical view leading to freedom as to the exact distribution of the chord. The chord is figured as follows :



7 stands for $\begin{matrix} 7 \\ 5 \\ 3 \end{matrix}$ from the bass note.

$\begin{matrix} 6 \\ 5 \end{matrix}$	" "	$\begin{matrix} 6 \\ 5 \\ 3 \end{matrix}$	" "
$\begin{matrix} 4 \\ 3 \end{matrix}$	" "	$\begin{matrix} 6 \\ 4 \\ 3 \end{matrix}$	" "
$\begin{matrix} 4 \\ 2 \end{matrix}$	" "	$\begin{matrix} 6 \\ 4 \\ 2 \end{matrix}$	" "

The key of C major gives the following series of diatonic sevenths:



Note—

(a) In i and iv the third from the bass is major, the fifth perfect, and the seventh major.

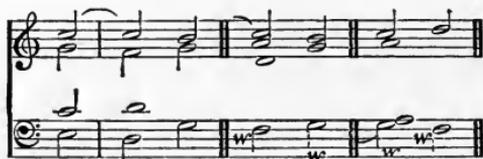
(b) In ii, iii, and vi the third is minor, the fifth perfect, and the seventh minor.

(c) In v the third is major, the fifth perfect, and the seventh minor.

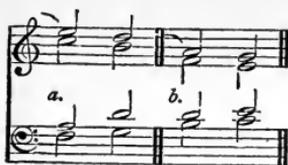
(d) In vii the third is minor, the fifth diminished, and the seventh major.

5. On account of special characteristics v has been singled out as of special importance, and is called the chord of the dominant seventh. It will be discussed separately.

Text-book rules as to the treatment of the diatonic chords of the seventh not only limit their use to what is practically their treatment ever since they existed, but also curiously impose further restrictions. It is stated (1) that the seventh should be prepared, (2) that the discord should resolve upon a chord whose root is a fourth higher:

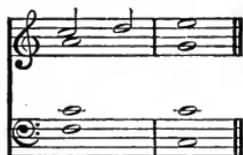


This use is no doubt the strongest, but there never was any reason why any discord should not resolve upon *any* concordance:

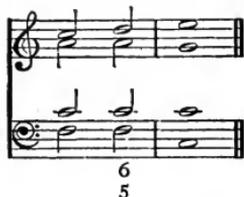


When (a) and (b) resolve in this way, theorists derive them from the dominant root. But terminology is of no account so long as we understand the principle of treatment. It is also further conceded that in these cases the seventh need not be prepared.

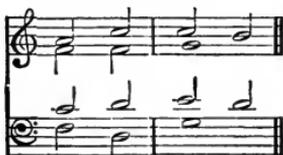
Again, the following is a familiar second species procedure :



In this way the following has been catalogued as a resolution of a diatonic discord :



And it is easy to see how it got the name of the chord of the added sixth. Here again the discord need not be prepared,



and it is generally derived from the root G.

6. This clears the air for some classified statement.

(a) The diatonic seventh on the fifth degree stands out alone as a special fundamental discord. It need not be prepared, nor resolve on to a chord whose root is a fourth higher.

(b) The rest, if resolving on to a chord whose root is a fourth higher, are prepared (except ii).

(c) iv and vii, if resolving on to a chord whose root is a note higher, need not be prepared, as both are considered as being derived from the dominant root; and all discords derived from this root are freed from preparation.

(d) ii, although resolving on to a chord whose root is a fourth higher, need not have its seventh prepared, as it, again, is derived from the dominant.

As the chord of the added sixth (first inversion) it has special treatment.

7. How does it come about that ii, iv, and vii can be derived from the dominant?

It is held that in every key there are three series of fundamental discords. The dominant is the root of one of these, and the complete series comprises every note of the diatonic scale (with others that can be reserved for later discussion), e. g. root, major third, perfect fifth, minor seventh, major ninth, eleventh, and major thirteenth :



Now this discord splits up into two distinct groups :

(1) The discord as far as the seventh, which resolves upon another chord :



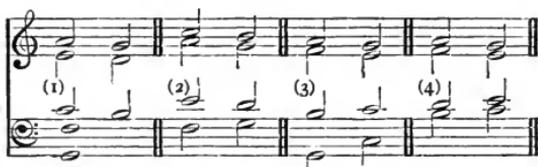
(2) The higher discords of the ninth, eleventh, and thirteenth, which either resolve into the chord of the seventh, or resolve with the seventh into a new chord.

In any case no higher discord should be sounded with the note upon which it is to resolve unless the latter be in the bass. Thus the eleventh and third should not be heard together, nor the thirteenth and fifth; hence we get :



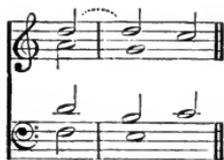
(x) when the root is omitted the lowest discords become concords. The derivation of (x) from the root G causes the relaxation of the rule as to preparation. At (y) A and C are clearly seen to be merely appoggiaturas of G and B.

Again, consider the following :



At (1) the dominant thirteenth resolves while the rest of the chord remains. At (2) we have an inversion of this; compare (x) above. At (3) the dominant ninth resolves on to the tonic. At (4) we have an inversion of it. In the inversions the root must obviously be omitted. It will thus be seen that all this is really only a re-statement of original principles, but the derivation from the dominant is the reason for the freedom as to preparation allowed in these resolutions.

8. Further, there is the following resolution of the prepared seventh :



Modern theorists would say that the B was an appoggiatura, or, if prepared, a retardation. One general principle covers practically all that has been explained in this chapter; the discord moves one step downwards on to another combination of which this resolution is an essential part.

9. Second point of advance.

It will be seen that by allowing the F at (1) in the following to remain to be the seventh at (2), and so forth, a chain of sevenths is produced:

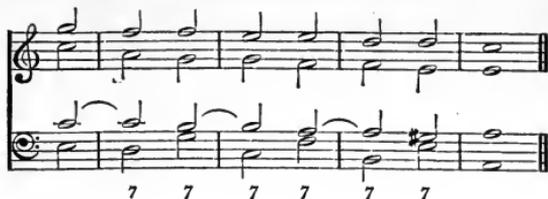
This procedure, however, is not common in the inversions, except the following :

Three fundamental principles are most important, as they make clear all further discords.

(a) The prepared discord may resolve while the harmony over which it is suspended remains either in the original position or in an inversion.

(b) The prepared discord may resolve while the other parts move to a new concord :

(c) The prepared discord may resolve while the other parts move to a new discord, and this in its turn will then require resolution :



Such progressions are very common in the works of Corelli and Scarlatti, and indeed in those of every subsequent composer, the third of one chord becoming the seventh of the next.

CORELLI. Sonata 3.

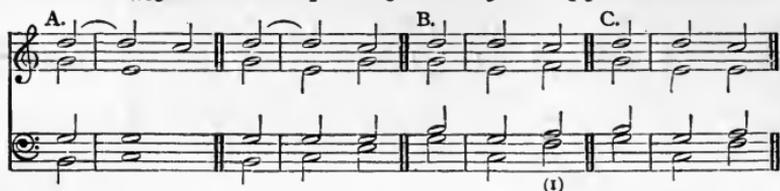
(i)

At (i) the diminished fifth remains unresolved. But it passes muster, because it occurs in the midst of a succession of five-sixes.

In the following the discords resolve on to concords:

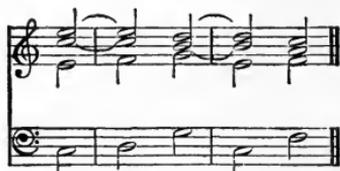
J. S. BACH. *Acht kleine Preludien und Fugen.*

10. Precisely the same principles may be applied to ninths :



(1) It is also possible for the root to fall a third, e.g. to A (chord of A minor).

When, however, the ninth is used according to principles B and C, it is usual to employ the seventh in conjunction with it :



It has been pointed out that when the ninth and seventh resolve while the other harmonies remain stationary, they are called double suspensions.



But the nomenclature of such things is of no importance. If the student have a firm grasp of principles, he cannot go astray.

11. It remains to point out :

(a) An extension.

The following is an allowable resolution of the diatonic seventh on the supertonic :



The explanation is that the chord is considered a derivative of the dominant. And the dominant ninth can resolve on to the root or the third. If it resolved on to the root the procedure would be quite normal.



But if it resolve on to the third, the resolution of the C on to the third also would be most unpleasant.

(b) A restriction.

In using the diatonic seventh on the leading note, the seventh must not be placed below the root, because of its ugly effect :



(c) That in a chain of sevenths the roots need not necessarily be a fourth apart ; there is nothing ungrammatical in the following :

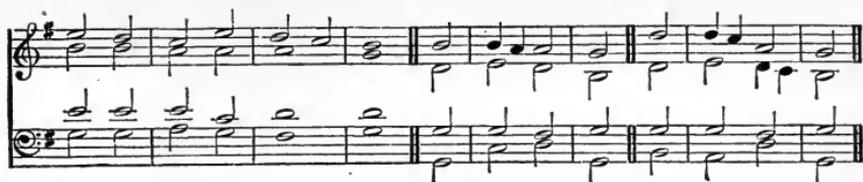


The further point of advance, the use of unprepared sevenths, will be considered in the next chapter.

(d) The use of these chords in the minor key does not require any separate consideration.

(e) A secondary seventh can always be used as a passing note.





Exercises.

(1) Point out the faults in the following, considered as sixteenth-century technique. Is there anything wrong with it from the modern standpoint? Correct it as sixteenth-century technique without altering any of the chords.



(2) Write a chord to precede and follow each of the following in as many ways as you deem artistic.



(3) Add three parts to the following unfigured basses, introducing secondary sevenths, besides various unessential notes. Make the parts interesting; asterisks denote diatonic sevenths.

(a) (A. B. C. B.)



(b) (A. B. C. B.)



(4) Add a pianoforte accompaniment to the following; do not use more than one chord for each crotchet.

Tenor. (1) (8) (2) (3)

My love o'er the wa - ter bends dream - ing; It glid - eth and

glid - - - eth a - way: She sees there her own beau - ty,

gleam - (7) ing Through shad - ow (5) and rip - ple and spray. (6) . . .

- (1) Diatonic seventh.
- (2) Added sixth.
- (3) Diatonic seventh on leading note.
- (4) Avoid full close in tonic.
- (5) Change the chord on the accent.
- (6) Pedal six-four.
- (7) The sense of the words demands that bars 9-16 should be indivisible.
- (8) Cadence, followed by a plagal extension.

Start:

This is three-part harmony. Maintain it.

(10) Such a rest implies the succeeding bass note as the basis.

Vary the rhythm of the Bass here and there for relief.

(5) On the following basis write a melody for Violin.

Andante.

A 1 A 2 B 1 B 2 A 3 (extended)

6 5 6 5 7 4 2 6 5 7

Add an accompaniment for Pianoforte. Start :

Note that the Bass is a broken form of:

and that the whole accompaniment is merely an ornamentation of:

(6) Rework the problem for String Quartet. All the parts must be real. Start :

12. The diminished triads in root position.

These are : *vii a* in the major key, *ii a* and *vii a* in the minor key.

The origin of these chords will now be apparent. They were prepared discords.



Such a combination might also occur through the use of un-essential notes, the movement two notes to one producing the effect of a chord.

PALESTRINA. *Gloria.*
Missa. Aeterna Christi Munera.



13. The use of these triads in root position may be thus summarized :

(a) *Polyphonic Period.*

(1) The discord must be prepared, and must occur on the strong accent.

(2) The resolution forms a new concordance.



(b) *Homophonic Period.*

(1) The time-value and position of the chord as regards accent are immaterial :



(2) The fifth may be unprepared in the course of a sequence :



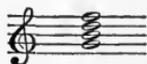
CHAPTER XIX

THE CHORD OF THE DOMINANT SEVENTH, AND OTHER UNPREPARED SEVENTHS

1. In the previous chapter it was stated that the prepared seventh on the fifth degree of the scale was very early singled out for special favour, in that the discord of the seventh was granted the privilege of being used without preparation :

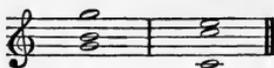


At (a) we have the usual procedure in the Polyphonic Period, at (b) we have Monteverde's innovation. The seventh (F) is considered as being derived from the root G ; in fact this chord is now as essential as the common chord and its first inversion were under old conditions. It will be observed that it consists in its entirety of a major third, perfect fifth, and minor seventh from the bass note :



thus being unique in its formation among the diatonic sevenths. This chord is termed the dominant seventh.

2. Another aspect of the evolution of the chord will enable the student to grasp its use. If two harmony notes happen to be a third apart, as G and E in the following :

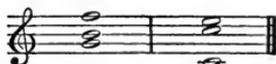


they may be connected by the interpolation of the intermediate sound thus :



But in the above case the F is not, from a modern view, unessential, but the seventh of the root G.

Omit the G, and we get :



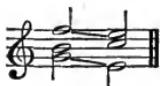
This serves to point to the fact that the seventh really stands in place of the root. But it is restricted in its movement. It must proceed one step downwards, direct or ornamentally :



Therefore just as



is faulty, so is

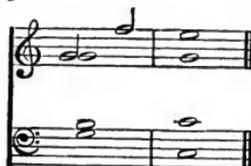


Hence we formulate the rule that no two parts may proceed from a seventh to an octave by similar motion between two different chords.

3. The resolution of a seventh may be transferred from one part to another if the same harmony be meanwhile retained. But the part that originally had the seventh should fall :



4. The leap of a minor seventh is excellent in effect, if used over the same harmony.

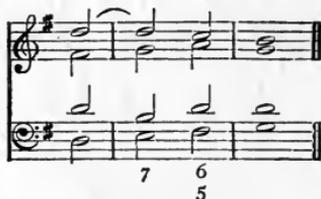


5. As the ordinary common chord is not figured at all, the chord of the seventh is indicated by the figure 7, which implies $\frac{7}{3}$.

6. It will be obvious that the fact that what was originally a prepared discord is now an essential harmony will materially enlarge the possibilities of harmonic progression.

For instance :

(a) The prepared discord on the submediant may resolve on to the first inversion of this chord :



(b) Suspensions may now contain the seventh as an essential note :

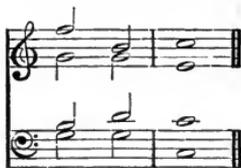
- (1) is called the chord of the dominant ninth.
- (2) is called the chord of the dominant eleventh.
- (3) is called the chord of the dominant thirteenth.
- (4) is called the first inversion of the chord of the dominant thirteenth.

These higher prepared discords come in their turn to be used without preparation, and they must be considered separately in subsequent chapters. But the student will see how they have arisen. Applying the principle that a discord may resolve upon a chord different from that which accompanies it, we get :



But the principle cannot be applied in the same way to the extensions (2) and (3).

7. If the seventh fall to some other note of the same harmony, its resolution in this way is considered sufficient :



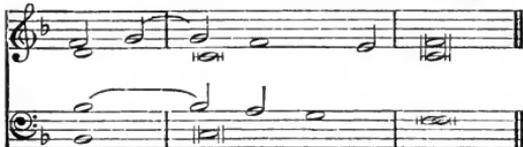
8. The student will have no difficulty in understanding the following resolutions of the chord of the dominant seventh.

(a) On to i or vi :



(b) On to the six-four of the tonic, followed by a four-three on the same Bass note. This is a fixed idiom of the Polyphonic Period :

PALESTRINA. *Kyrie.*
Missa. Aeterna Christi Munera.



BOYCE. *Save me, O God.*



T. L. DA VITTORIA.
Jesu, Dulcis Memoria.

(c) instead of:

we may decorate the tonic chord with an appoggiatura six-four :

9. The origin of the inversions of the chord of the dominant seventh will be readily grasped :

A. B. C. D.

6 6 6 6 4 6 4 6

5 4 3 2

A and D are the familiar prepared discords of the Polyphonic Period. Of course the preparation is now discarded.

We have already shown that :

was no part of the technique of the sixteenth century. But the

second inversion of the dominant seventh (B and C) has another origin. At B and C, D, B, and F are unessential notes approached and quitted by step, but they form with the tenor G the second inversion of the dominant seventh :

FARRANT. *Te Deum.*

From the point of view of the sixteenth century there is no reason why the F (in C) should not rise to G, for it is not a prepared discord but a passing note. Hence we get the rule that in the use of the second inversion the seventh may rise one degree if the bass rises in thirds with it :

10. It may be noted that many writers consider *vii b* :

to be in reality an incomplete form of this inversion.

If it were so, the following would hardly be considered as being possible :

11. It may be taken as a general rule that the ways of approaching and quitting the bass of the second inversion of any discord are identical with those stated in reference to the ordinary six-four. The following exceptions may be of interest :

PARRY. *Judith.*
fa - voir

6 4 3 4 3

Here the D in the bass is of little account, the mind really accepts the progression as being

4 3

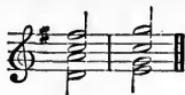
WALFORD DAVIES. *Everyman.*

(a) (b) (c)

In the above the F sharp at (a) merely ornamentally resolves on G sharp at (c) by first taking another position (b) of the harmony to which it is proceeding.

12. This is not the place to consider the various possibilities which the use of the chromatic scale opens out. But we may quote a remarkable use of fundamental sevenths by Dr. Walford Davies at the end of No. 2 in *Everyman* :

13. The seventh may remain stationary to be a part of the next chord :



14. It may be vicariously resolved :



This, however, is exceptional.

15. But the following idiom, in which the seventh is doubled and the seventh of shorter value rises in the top part, is quite common :



16. Again, in the time of Handel, the following was common :

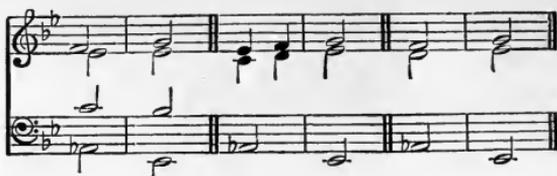


For example :

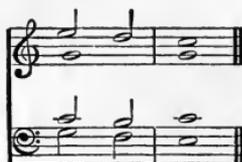
HANDEL. *Messiah.*

4
2.

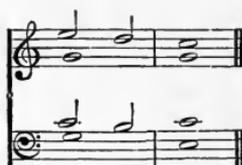
This occurs almost exclusively in recitative, and one cannot help feeling that it is really evolved from the common use of the added sixth in the plagal cadence :



17. As



is only an embellishment of:



it is allowable for the bass to form consecutive fourths with an upper part, provided that the first fourth be perfect and the second augmented.

18. The lower auxiliary note of the root may be sounded with the seventh :

SCHUMANN.
Andante and Variations for Two Pianofortes.

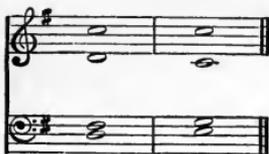


The doubling of the seventh in such a case as (a) is quite good in pianoforte work.

19. It is stated by many that the added sixth may not be used in the following form :



as it is forbidden to proceed obliquely into the octave. Similarly theorists condemn :

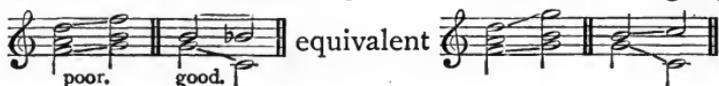


but allow :



It is really impossible to detect anything wrong with these.

20. There is diversity of opinion as to the approaching of the fundamental seventh by similar motion. The basis of criticism seems to be that the seventh is really a displacement of the root, and that therefore when a substitution of the root for the seventh would produce objectionable exposed octaves, the writing is poor :



But it is questionable whether composers trouble about the distinction, for no octave is heard or even mentally implied.

21. In the inversion, the seventh becomes a ninth, and the following is common :

· SCHUMANN.
Variations for Two Pianofortes.



22. It remains to state that moderns freely use all secondary sevenths without preparation. This together with accented unessential notes is what gives a piece of music that distinction of style which is called 'modern', though it is now quite old-fashioned. We have pointed out already that those sevenths which are derived from the dominant are freed from preparation. When sevenths are used without preparation they can be

regarded as appoggiatura chords, or else as the simultaneous percussion of harmony and passing notes :

PARRY. *War and Peace.*



Ibid.



23. There is no need to classify every possible combination as a chord : it engenders a wrong attitude of mind.

For instance, the tyro would probably say that in the following example :

Ibid.



at (1) we have the second inversion of a secondary seventh (root D) quitted by leap. But D is merely a passing note, and not a root at all.

24. The student will remember that parallel first inversions of common chords produce no harmonic effect ; that is, in the following :



although the combination at (a) has to be figured $\frac{6}{4}$, the three notes G, D, and B flat are merely passing notes.

Ear-Training Exercises.

The first exercise is in D major. The second is in G major. The third is in B-flat major. The fourth is in E-flat major. The fifth is in B-flat major. Each exercise consists of two staves: a treble staff with a melodic line and a bass staff with a harmonic accompaniment.

Exercises.

1. Write a chord to precede and follow each of the following, in as many ways as are artistic: the seventh in each case to be unprepared:

The exercise shows four measures of chords in B-flat major. The chords are labeled (a), (b), (c), and (d). The notation is as follows:

- (a) Treble: B-flat, D, F; Bass: B-flat, F
- (b) Treble: B-flat, D, F; Bass: B-flat, F
- (c) Treble: B-flat, D, F; Bass: B-flat, F
- (d) Treble: B-flat, D, F; Bass: B-flat, F

2. Write a melody in the key of A major in the following form (for Piano):

Bars 1-2, A 1

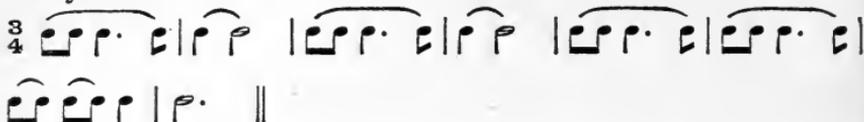
3-4, A 2

5, $\frac{1}{2}$ A 1

6, $\frac{1}{2}$ A 1

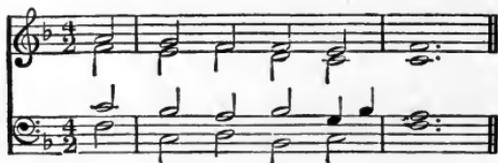
7-8, exhaust the condensation and round off.

Rhythm.



Add a figured Bass, and introduce the dominant seventh and its inversions (not all of them).

3. Point out the faults in the following as sixteenth-century technique:



4. Add an accompaniment for the Pianoforte to the following; explain the form as regards proportions:

We see them not, we can - not hear the mu - sic of their wing; yet
know we they so - journ here, the an - gels of the spring, the
an - gels of the spring.

- (1) Use dominant seventh second inversion. (2) Avoid full close in tonic.
 (3) Maintain movement in the accompaniment.
 (4) Use dominant seventh last inversion. (5) Secondary seventh on A.
 (6) Dominant seventh. (7) Subdominant chord.
 (8) On second crotchet use $\frac{9}{5}$ on A.
 (9) Change the harmony on the third crotchet.

Start:

5. Add a melody to the following Bass, setting the words as indicated in reference to rhythm :

Write an accompaniment as follows :

This is a broken form of

As a part the resultant Tenor is inexcusable, but when made into an accompaniment formula, there is no fault to find with it.

6. Write a melody for Tenor to the following words, and in the rhythm indicated. Add an accompaniment for Pianoforte. Introduce the dominant seventh here and there :

That which an an - gel's touch hath blest is meet my love for thee, is
 meet . . . my love for thee.

(1) Avoid a full close in tonic.

Contrapuntal Style.

1. Add three parts in free imitative style for voices. Do not use more than one chord each half bar :

2. Add three free imitative vocal parts. Do not use more than one chord each half bar :

3. Consider the following as a basis :

(a) Put it into $\frac{6}{8}$ time, and evolve four parts for Pianoforte, the two upper ones to be imitative and contrapuntal, the Bass to be the plain notes given, shortened, the Tenor to be an accompaniment. Start:

(b) Write on the same basis a sentence in $\frac{3}{8}$ time for Violin, Viola, and 'Cello. Start as follows:

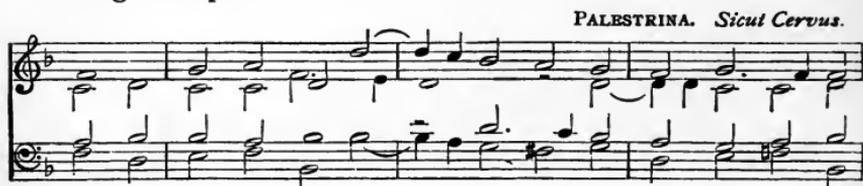


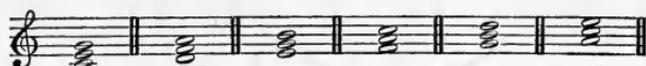
CHAPTER XX

THE ELEMENTARY MEANS OF MODULATION

FIRST PRINCIPLE

1. MODULATION is said to be 'the process of passing out of one key into another'.¹ Under the system of the modes the principle of modulation as we understand it had no *locus standi*, for the combinations we call chords were not considered in their reference to what we term the tonic. But the use of *Musica Ficta*, which became more and more prevalent, not only often produced what to us is the effect of a modulation, as in the following example :





C major. D minor. E minor. F major. G major. A minor.

A minor, and its nearly related keys:



A minor. C major. D minor. E minor. F major. G major.

3. *First principle of modulation. Pivot Chords.*

It must be quite obvious that the simplest means of modulation is to approach a chord as belonging to one key, and quit it as belonging to another.

The use of the dominant chord followed by the tonic, or submediant, confirms a modulation, provided that either chord contain a note foreign to the key quitted; if not, the minor seventh must be added to the dominant :

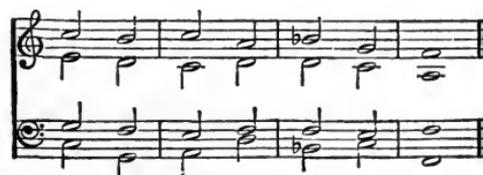


C major vi \flat 7 }
G major ii \flat 7 }



C major ii }
F major vi }

The addition of the minor seventh to the dominant of the new key is unnecessary if it be preceded by a chord which is characteristic of the new key, but foreign to that quitted.



C major ii }
F major vi }

Ear Tests.

C major to D minor. State the pivot chord. C major to E minor.

Musical notation for C major to D minor modulation. The treble clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and D minor (D-F-A). The bass clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and D minor (D-F-A).

Musical notation for C major to E minor modulation. The treble clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and E minor (E-G-B). The bass clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and E minor (E-G-B).

C major to F major.

Musical notation for C major to F major modulation. The treble clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and F major (F-A-C). The bass clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and F major (F-A-C).

C major to G major.

Musical notation for C major to G major modulation. The treble clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and G major (G-B-D). The bass clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and G major (G-B-D).

C major to A minor.

Musical notation for C major to A minor modulation. The treble clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and A minor (A-C-E). The bass clef contains a sequence of chords: C major (C-E-G), F major (F-A-C), Bb major (Bb-D-F), and A minor (A-C-E).

A minor to C major.

Musical notation for A minor to C major modulation. The treble clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and C major (C-E-G). The bass clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and C major (C-E-G).

A minor to E minor.

Musical notation for A minor to E minor modulation. The treble clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and E minor (E-G-B). The bass clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and E minor (E-G-B).

A minor to D minor.

Musical notation for A minor to D minor modulation. The treble clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and D minor (D-F-A). The bass clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and D minor (D-F-A).

A minor to F major.

Musical notation for A minor to F major modulation. The treble clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and F major (F-A-C). The bass clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and F major (F-A-C).

A minor to G major.

Musical notation for A minor to G major modulation. The treble clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and G major (G-B-D). The bass clef contains a sequence of chords: A minor (A-C-E), D minor (D-F-A), E minor (E-G-B), and G major (G-B-D).

Exercises.

Write verses of four feet (plain chords), modulating according to this principle from :

- (a) G major to E minor.
- (b) " C major.
- (c) " A minor.
- (d) " D major.
- (e) " B minor.
- (f) D minor to F major.
- (g) " G minor.
- (h) " A minor.
- (i) " B \flat major.
- (j) " C major.

4. *Principles of key distribution.*

In putting together a piece of music of any dimensions, two considerations have to be carefully kept in view :

(a) The arrangement of the melodic material, so as to give the effect of orderliness.

(b) The balancing of this by a corresponding system in the arrangement of the modulations.

Change of key is obviously a means of contrast, and as such it must be used. But the well-ordered mind does not demand contrast until the initial key has been firmly established. It is of course possible to write a complete stanza without any modulation, and by various other means prevent a monotonous effect. But we are here considering how to use modulation in a short stanza of sixteen bars or so.

General scheme of a small binary form.

The movement is divided into two halves, for example, bars 1-8, 9-16. The first half establishes the tonic, and modulates, sometimes with a subsidiary modulation, to the complementary key. It is generally agreed that this key should not be on the flat side of the tonic. Thus the scheme for bars 1-8 might be from C major through A minor to G major. It is better not to modulate before the tonic has been firmly established, so that A minor and G major would both occur in bars 5-8.

The second half works back again to the tonic. Much more

modulation is possible here, and it is usual to employ the keys on the flat side of the tonic; for example, bars 9-10, F major, 11-12, D minor, 13-16, back to C.

5. The following points are important:

(a) The modulations to the complementary key at the end of the first half and back to the tonic at the end of the second half must not be done abruptly, that is, the chords producing the change of key should be preceded for a reasonable time by diatonic chords which are not foreign to them.

For example a modulation from C to G could not be worse than as follows:



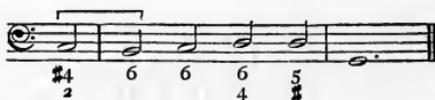
The F natural at * is in unpleasant juxtaposition with the F sharp at the cadence.

It will be found that the real trouble lies in a contradiction of the third of the dominant of the new key.

Hence it is bad to precede a modulation to G major by one to D minor at this particular point.

(b) A full close in the tonic should be avoided after the opening until the end, unless in the final bars the opening material be repeated.

(c) It is generally inadvisable to anticipate a modulation used at a cadence. If, however, the bass in the anticipation avoid the root position of the new tonic, the effect is tolerable:

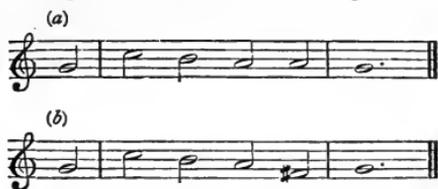


(d) It may be observed that it is awkward to modulate abruptly from a minor key to its dominant minor, the reason being that it causes the dominant major chord to be brought into unpleasant contact with it.

(e) In harmonizing a melody the student must bear in mind

that whereas some modulations are clearly expressed in the melody, others may be only implied.

For instance, compare the two following second verses :



In (b) the modulation to G major is clearly expressed by the F sharp, in (a) it is merely implied.



(f) It is important to remember that what is intended to be a diatonic passing note in a new key must not be so used, if foreign to the key quitted, until it has been heard as an essential note.



It is futile to argue that at (a) the chord of C is quitted as being in C major. The ear knows nothing about the proposed modulation till (b).

(g) When modulation occurs at any place except the end of the first half, it is better that the tonic of a full close be in the first inversion.

6. If any particular pattern of melody and harmony be immediately repeated at another pitch we have what is termed a sequence. It is conceded that this repetition justifies the occurrence of harmony that would otherwise be open to objection; for example:



the harmony at (a) is only tolerable because it is a repetition of the preceding phrase a note lower. Such a sequence, in which no modulation is introduced, is said to be tonal.

7. When, however, the qualities of the intervals in the original are exactly reproduced, we have a real sequence:



8. Again, when in the repetition of the sequence we produce modulation, but do not necessarily reproduce exactly the qualities of the intervals, we have what is termed a modulating or chromatic sequence:



Here, although there is a modulation to E flat major, the chord of C minor is reproduced a tone lower as the chord of B flat major. When a pattern is repeated a step higher or lower it is called a Rosalia.

Such a procedure if carried on to any extent becomes merely mechanical. Hence, it is wise to limit exact imitation of a pattern

to at most three statements, or better two. It would then be good to vary it:



Exercises.

1. Add parts for Violin and Viola to the following unfigured Bass:



Start:



The opening figure is taken from the bass of bars 2 and 3.

- (1) Modulate to B minor. Chord of E minor is the pivot chord.
- (2) False close in A major.
- (3) Imitate the opening figures in the upper parts.
- (4) Half close in G major.
- (5) This is an exact repetition of the concluding bars of the first half, a fourth higher. Hence simply transpose what you wrote there accordingly.
- (6) Modulate to E minor, cf. (1).
- (7) False close in D major, cf. (2).

2. Add parts for Viola and 'Cello to the following Violin part :

Minuet.

Start

- (1) Avoid full close in tonic. (2) Half close in tonic.
 (3) Here the opening is repeated, so that a full close in tonic is correct.
 (4) This is the end of the first half transposed a fifth lower. Cf. the second minuet of Mozart's *Pianoforte Sonata*, in E \flat major, No. 4.

3. Imitating the form of no. 1, write a Gavotte for Pianoforte in G minor; modulate to F major, D minor, E flat major, B flat major, and back to G minor.

4. Imitating the form of no. 2, write a Minuet for String Quartet in F major; modulate to A minor, C major, B flat major, G minor, F major, D minor, F major.

5. Extend the second phrase of no. 2, bars 5-8, by one bar by interpolating a sequential repetition of some portion of it.

6. Extend the last phrase of no. 2 by using a false cadence at bar 20 and repeating the final bars, varied to meet the case.

7. Extend the last phrase of no. 2 by augmenting the last two bars into three, and by repeating the final chord, e. g. :

bar 19 

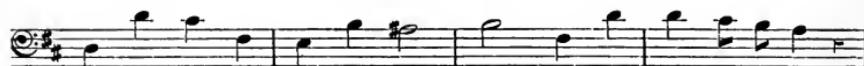
8. Add to the following :

(a) accompaniment for Strings.

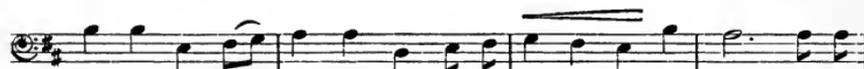
(b) accompaniment for Pianoforte.



Love's old songs shall ne - ver die, Yet the new shall suf - fer proof;



Love's old drink of Yule brew I, Was - sail for new love's be-hoof.



Drink the drink I brew, and sing till the ber - ried branch-es swing, Till our



song make all the Mer - maid ring, Yea, from rush to roof, from



rush to roof, from rush to roof.

Explain the construction of the above as regards :

- (1) proportions ;
- (2) harmonic scheme ;
- (3) melodic material.

CHAPTER XXI

TRANSITIONS

1. WHEN a change of key has been effected, and there is no pivot chord, chromatic, diatonic, or enharmonic, the procedure is termed a transition. In other words, there is a change of key, but not a modulation from one key to another.



In the above the chord (a) is not quitted as if in the key of A minor. The G would have to descend the melodic minor scale. Hence, as used, the chord of C has no *locus standi* in A minor.

2. But the tonic of one key may of course be the pivot for the next key :



This is a modulation, not a transition. And this is equally true if the chords (a) and (b) belong to different phrases :



3. With the resource at our disposal at present, then, transitions will be limited to (a) a major key and its relative minor :

C. A minor.

(b) a major key and its supertonic minor :

C. D minor.

The chord of C major *can* be used in the key of D minor, but not in this way. The C should come down the melodic minor scale of D.

(c) a minor key and its subdominant :

This effect is weak, and should only be used when the chords are of long duration, or between the end of one phrase and the beginning of another.

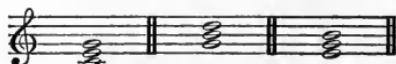
4. But it will be noticed that there are notes in common between the last chord of one key and the chord that marks the new key. Here there is a second principle—that of pivot notes.

5. It is obvious that a transition would be quite out of place at the end of a phrase.

It should only occur at the beginning of any phrase but the first, or in the course of a phrase :



6. Some theorists catalogue .



in A minor as being chromatic. This is obviously done in order to make the chords accommodate with a theory that a change of key necessarily implies a pivot chord, and that a change of key can only be produced by modulation.

The above chords can be used diatonically in the key of A minor (see chapter ix). It will be found that when they are not used in this particular way, they can be referred to the previous key, and that a transition takes place (see also chapter xxix). It seems difficult to catalogue the same chord as being both chromatic and diatonic in the same key according to the way in which it is used. It must be admitted that a change of key does not necessarily imply a pivot chord, or even a pivot note.

Ear Tests.



The image contains two systems of musical notation. The first system consists of two staves: the top staff is in treble clef with a key signature of one flat (F major) and a common time signature (C), showing three whole notes: F major, D minor, and F major. The bottom staff is in bass clef with the same key signature and time signature, showing a melodic line: F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4. The second system also consists of two staves. The top staff is in treble clef with a key signature of one flat and common time, showing a melodic line with eighth notes: F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4. The bottom staff is in bass clef with the same key signature and time signature, showing a rhythmic accompaniment: F4, G4, A4, Bb4, C5, Bb4, A4, G4, F4.

Exercises.

(a) Begin in F major, write a transition through D minor, and end with a full close in F major (tetrameter).

(b) Begin in F major, write a transition through G minor, and end with a full close in B flat major (tetrameter).

(c) Begin in C major, modulate to A minor in the first tetrameter; in the second use a transition to D minor, and end in C.

CHAPTER XXII

IRREGULAR CHORD DURATION

1. Thus far we have in the main considered chords as only moving with or on the accents. This is obviously the normal procedure, and any deviation from it is conveniently considered as a variation of the original progression.

2. The following are the chief means of variation :

(a) The suspension of a complete chord for a portion of an accent :

Ex. 1.

	Normal form.	Variation.
--	--------------	------------

The musical notation for Example 1 consists of two systems of staves. The first system is labeled 'Normal form.' and the second is labeled 'Variation.' Both are in 2/4 time. The top staff is in treble clef and the bottom staff is in bass clef. In the 'Normal form', chords are placed on the first and third beats of each measure. In the 'Variation', the chord on the first beat is suspended for the first half of the measure, starting on the second beat.

(b) The anticipation of a complete chord :

Ex. 2.

The musical notation for Example 2 consists of two systems of staves in 2/4 time. The top staff is in treble clef and the bottom staff is in bass clef. In the first system, chords are on the first and third beats. In the second system, the chord on the first beat is anticipated, starting on the second half of the first measure.

(c) The interpolation of passing chords between the accents :

Ex. 3.

The musical notation for Example 3 consists of two systems of staves in 2/4 time. The top staff is in treble clef and the bottom staff is in bass clef. In the first system, chords are on the first and third beats. In the second system, a passing chord is inserted between the first and third beats of each measure.

(d) The interpolation of a passing chord between a statement and re-statement of the accented chords :

Ex. 4.

Musical notation for Ex. 4, showing a treble and bass staff with chords and a passing chord.

(e) The displacement of the chord by an appoggiatura chord :

Ex. 5.

Musical notation for Ex. 5, showing a treble and bass staff with chords and an appoggiatura chord.

(f) Increase of emotional tension is often expressed by chords moving in shorter time-value than the normal procedure :

Ex. 6.

BEETHOVEN. *Leonore*, No. 3.

Musical notation for Ex. 6, showing a treble and bass staff with chords and figured bass notation.

Basis. 6 6 6 6 # 6

6 7 # 6 6 7 # 7 # 7

5 # 4 # 5 # 7 # 5 # 7 simile.

Here we have :

4	bars with one chord a bar.
4	„ two chords a bar.
2	„ four chords a bar.
2	„ eight chords a bar.

Such a procedure would be ludicrous if there were not some definite purpose underlying it. Any one can feel that it is analogous to the quickening of the pulse.

(g) Conversely, relaxation of tension is caused by using change of chord less frequently:

Ex. 7.

BRAHMS, *Requiem*.

This is a common procedure at the close of a movement.

(h) Artistic relief. A uniform pattern without relief is just as inartistic as a terrace of houses all exactly alike. Nevertheless there must be some unifying feature in the general design.

3. Of course no amount of theorizing as to harmonic pattern will enable an unmusical student to write really natural music, any more than a system of pianoforte technique will enable an unmusical player to produce beautiful tone. Nevertheless, just as there are scientific principles underlying touch, so there are certain definite methods of varying chord duration. If the above principles be followed the student will at any rate know that he must avoid such writing as:

Ex. 8.

4. As a general rule there must be uniformity in melodic movement and in the progression of the chords; and there must be some definite reason underlying variation from it. If the

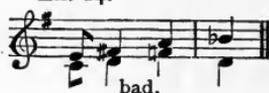
This has a very fussy effect. There are actually no more chords than in the Mendelssohn example. But the extra chords are not decorating chords. (2) and (4) are not links; they produce modulations. At (5) in the Mendelssohn example F natural is really an appoggiatura of F sharp (=E sharp). If (2) and (4) were links, the original progressions would be poor:

Ex. 13.



Neither are (1) and (3) appoggiaturas of (2) and (4). For appoggiatura chords necessarily feel that they require to proceed into the succeeding harmony. In this case, the original progressions would be:

Ex. 14.



This serves to show the distinction between change of chordal centre and decoration of centre. If the centres themselves are satisfactory, a little harmonic decoration of them will not produce the fussy effect caused by the use of chords which are not decorations, but which are in reality centres with the accents reduced in value by one-half. In other words, when we find chords moving more quickly than accents, in the large majority of cases they are decorations of a smaller scheme of harmony, which is the prime factor, so to speak, of the music.

Exercises.

1. Vary the following by deferring or anticipating some of the chords here and there as exemplified in (a) and (b):



2. Vary the following by adding a few passing chords between those given. See (c) and (d):

The musical notation for exercise 2 shows a sequence of chords in 2/4 time. The top staff is a treble clef and the bottom is a bass clef. The sequence consists of eight chords. The first four are marked with (1) and the last four with (2). The chords are: (1) G4-B4-D5, (2) G4-B4-D5, (1) G4-B4-D5, (2) G4-B4-D5, (1) G4-B4-D5, (2) G4-B4-D5, (1) G4-B4-D5, (2) G4-B4-D5.

(1) It is common to decorate a chord by its dominant.

(2) It is common to decorate a dominant by its tonic.

3. Displace some of the chords in the following by appoggiatura chords resolving into them. See (e):

The musical notation for exercise 3 shows a sequence of chords in 2/4 time. The top staff is a treble clef and the bottom is a bass clef. The sequence consists of eight chords. The chords are: G4-B4-D5, G4-B4-D5, G4-B4-D5, G4-B4-D5, G4-B4-D5, G4-B4-D5, G4-B4-D5, G4-B4-D5.

A chord is most frequently displaced by the six-four of a chord on the same Bass note or by the dominant of such chord forming a passing six-four.

differs from these higher discords in that the note of its resolution requires another root :



But these higher discords, it is seen, can resolve while the rest of the chord remains. So that in their first stage of evolution they are really suspensions or appoggiaturas.

2. This being the case, it will at once occur to the student that they may resolve upwards as well as downwards :



3. And thirdly, that they may resolve on to a different root, like suspensions :



At (a) the ninth falls one degree, and resolves on to the tonic chord.

At (b) the eleventh remains to be a part of the next chord.

At (c) the thirteenth omits the intermediate step of the fifth, and leaps down a third.

Having seen the broad principles, it remains to discuss these discords in detail.

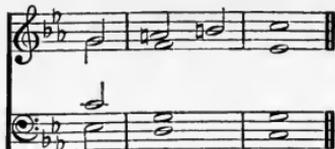
4. There are two forms of the dominant ninth :

(a) that which contains the major ninth from the root ;

(b) that which contains the minor ninth from the root.

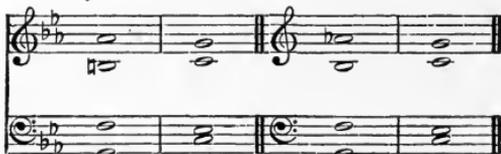
The former can only be used in the minor key if ascending, forming a part of the melodic minor scale :

Ex. 6.



The latter can be used in either the major or the minor key :

Ex. 7.



5. *Case I.* Ninth resolving downwards while the rest of the chord remains.

There are five sounds in this chord :

Ex. 8.



Hence in four parts some note must be omitted. It is a general principle that the discord (when not a suspension) must not be sounded against its resolution, except the ninth against the root, the latter being in the bass only, as a rule, and in root position the fifth will be omitted. The figures will explain themselves :

Ex. 9.



At the point of resolution the chord becomes a dominant seventh and is treated as such. In other positions the root is omitted:

Ex. 10.

$\begin{matrix} b7 & 6 & 6 & 6 & 6 & 6 & 6 \\ 5 & - & 5 & 4 & 4 & 4 & 4 \\ & & 3 & - & 3 & 2 & 2 & - & 2 & - \end{matrix}$

6. *Case II.* Ninth resolving upwards, while the rest of the chord remains.

Obviously the third must be omitted, and the root re-appears:

Ex. 11.

$\begin{matrix} 9 & 3 & 5 & 6 & 6 & 7 \\ 7 & - & 4 & - & 3 & 4 & 4 \\ & & 3 & - & 2 & - & 4 & - \end{matrix}$

When the ninth resolves upwards, the melodic interval of the augmented second is allowed:

Ex. 12.

$\begin{matrix} b9 & 3 \\ 7 & - \end{matrix}$

When the resolution is inverted, the melodic interval of the minor or diminished seventh occurs. The third can be sounded with the ninth if it moves as the ninth resolves:

Ex. 13.

$\begin{matrix} 9 & 3 & b9 & 3 \\ 7 & - & 7 & - \end{matrix}$

7. *Case III.* Resolution of the ninth upon some other chord.

The most usual example of this is the resolution of the ninth on the fifth of the Tonic Chord :

Ex. 14.

Musical notation for Ex. 14. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a dominant ninth chord (G7) with the notes G, B, D, F, and A. The second measure shows the resolution to a tonic chord (C major) with the notes C, E, G, and C. The chord symbols '9 7' and 'b9 7' are written below the respective measures.

Avoid :

Ex. 15.

Musical notation for Ex. 15. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a dominant ninth chord (G7) with the notes G, B, D, F, and A. The second measure shows a resolution to a tonic chord (C major) with the notes C, E, G, and C. The word 'bad.' is written below the first measure, and 'bad.' is written below the second measure, indicating a dissonant resolution.

And the major ninth below the third :

Ex. 15 a.

Musical notation for Ex. 15 a. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a dominant ninth chord (G7) with the notes G, B, D, F, and A. The second measure shows a resolution to a tonic chord (C major) with the notes C, E, G, and C. The word 'bad.' is written below the first measure, indicating a dissonant resolution.

The resolution upwards to another chord is also possible :

Ex. 16.

ELGAR. *Gerontius*.

Musical notation for Ex. 16. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a dominant ninth chord (G7) with the notes G, B, D, F, and A. The second measure shows a resolution to a tonic chord (C major) with the notes C, E, G, and C. The text 'Transition to A minor.' is written below the first measure. The chord symbols '9 7' and '7' are written below the respective measures.

8. *Case IV.* Interchange of major and minor ninth :

Ex. 17.

SCHUMANN. *Variations*.

Musical notation for Ex. 17. The top staff is in treble clef and the bottom staff is in bass clef. The first measure shows a dominant ninth chord (G7) with the notes G, B, D, F, and A. The second measure shows a resolution to a tonic chord (C major) with the notes C, E, G, and C. The chord symbols '9 7' and '7' are written below the respective measures.

In the last examples F sharp is written for G flat for convenience. This is termed 'expedient false notation'.

The use of the major ninth followed by the minor form requires much discretion. The student had better avoid it till his judgement is matured.

9. When the ninth is sounded against its root in an upper part the latter is generally used as an inverted pedal (see chapter xxxi).

Ex. 18.

ELGAR. *Gerontius*.

The musical notation for Ex. 18 consists of two staves. The upper staff is in bass clef with a key signature of one flat (B-flat). It features a series of eighth and sixteenth notes, with several triplets indicated by a '3' above the notes. The lower staff is also in bass clef with a key signature of one flat, showing a more rhythmic accompaniment with quarter and eighth notes, also including triplets.

10. In the first inversion, the dominant ninth has a special name.

In the major form it is called the chord of the leading seventh :

Ex. 19.

The musical notation for Ex. 19 shows a chord in first inversion in both treble and bass clefs. The chord consists of the notes G, A, B, and C. The bass clef version has G as the lowest note, while the treble clef version has C as the highest note. The number '7' is written below the bass clef staff to indicate the interval of a seventh between the root (G) and the seventh (F).

In the minor form the chord of the diminished seventh :

Ex. 20.

The musical notation for Ex. 20 shows a diminished seventh chord in both treble and bass clefs. The chord consists of the notes G, A-flat, B-flat, and C. The bass clef version has G as the lowest note, and the treble clef version has C as the highest note. The number 'b7' is written below the bass clef staff to indicate the interval of a diminished seventh between the root (G) and the seventh (F).

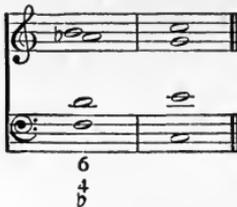
11. The irregular resolution of the seventh :

Ex. 21.

The musical notation for Ex. 21 shows a chord in first inversion in both treble and bass clefs. The chord consists of the notes G, A, B, and C. The bass clef version has G as the lowest note, and the treble clef version has C as the highest note. This is identical to Ex. 19.

can also be used with the addition of the ninth :

Ex. 22.



12. Unessential notes do not cause False Relation. Hence we often get the minor ninth against its major form as a passing note :



Or we may have them as consecutive notes in different parts :

SCARLATTI.



Further, in the following C natural is an auxiliary note :



Compare :

BEETHOVEN.
Leonore, No. 3.

A \sharp = B \flat .

13. We may often get combinations that produce the notes of classified chords, but which need not be analysed as such.

Compare the following cases :

Ex. 23.



At (a) we have the chord of the Leading Seventh. At (b) D and B are merely passing notes.

Again, a combination of parallel thirds in contrary motion produces :

Ex. 24.



There is no need to analyse the combination at (c) as a chord. It may here be pointed out that figures do not necessarily indicate chords, but rather intervals from the Bass.

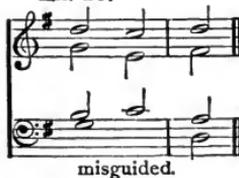
For example :

Ex. 25.



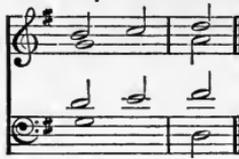
The six-four here cannot imply a chord, as the six-four would be wrongly quitted :

Ex. 26.



The figures merely indicate parallel passing notes :

Ex. 27.



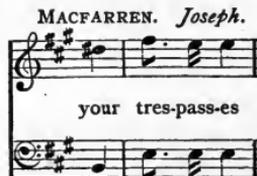
14. It is generally held that the fundamental ninth should not be approached by similar motion :



But that the seventh by similar motion, if the top part be the ninth of the root, is unobjectionable :



It is difficult to see the basis of such rules. In framing the rule it is evident that Macfarren did not refer to an unessential ninth, for he himself writes :



The only criticism imaginable is that framed on the progression formed with the essential note the ninth displaces. It is really difficult for an unprejudiced person to condemn :



If we accept :

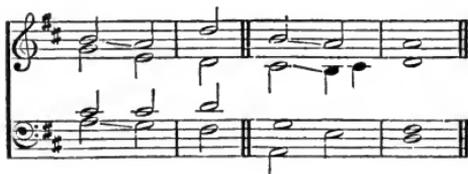


we ought also to accept :



Not one theorist gives any reason why a discord should not be approached by similar motion ; and students are too prone to accept a statement without thinking about its logic. It is hard to condemn the above on any logical or aesthetic basis, but the examination candidate must remember that if he knocks his head against a stone wall, it only hurts himself.

Consecutive discords may be used between different positions of the same fundamental harmony :



15. The chord of the diminished seventh is peculiar in this respect, in that by altering the names of one or more of the sounds forming it we may produce a diminished seventh with a different root :



These changes are said to be enharmonic.

Here, then, is a new means of modulation ; we can at present approach the diminished seventh as dominant in C minor or major, and quit it as :

- (1) dominant minor ninth in A major or minor.
- (2) " " " " E flat major or minor.
- (3) " " " " F sharp major or minor.
- (4) " " " " D sharp major or minor.

All these are possible, but not necessarily judicious modulations. The student must use his sense of effect.

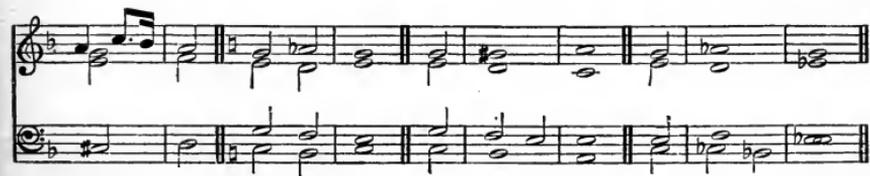
Ear Training.

Exercise 1: A two-staff musical exercise. The first staff is in treble clef with a key signature of one flat (B-flat). The second staff is in bass clef with a key signature of one flat. The music consists of four measures, each containing a pair of notes in the upper staff and a pair of notes in the lower staff, with a double bar line after each measure. The notes are: (1) G4, A4 in treble; B2, C3 in bass. (2) G4, Bb4 in treble; B2, C3 in bass. (3) G4, Ab4 in treble; B2, C3 in bass. (4) G4, Bb4 in treble; B2, C3 in bass.

Exercise 2: A two-staff musical exercise. The first staff is in treble clef with a key signature of one sharp (F-sharp). The second staff is in bass clef with a key signature of one sharp. The music consists of four measures, each containing a pair of notes in the upper staff and a pair of notes in the lower staff, with a double bar line after each measure. The notes are: (1) G4, A4 in treble; B2, C3 in bass. (2) G4, Bb4 in treble; B2, C3 in bass. (3) G4, Ab4 in treble; B2, C3 in bass. (4) G4, Bb4 in treble; B2, C3 in bass.

Exercise 3: A two-staff musical exercise. The first staff is in treble clef with a key signature of two sharps (F-sharp, C-sharp). The second staff is in bass clef with a key signature of two sharps. The music consists of four measures, each containing a pair of notes in the upper staff and a pair of notes in the lower staff, with a double bar line after each measure. The notes are: (1) G4, A4 in treble; B2, C3 in bass. (2) G4, Bb4 in treble; B2, C3 in bass. (3) G4, Ab4 in treble; B2, C3 in bass. (4) G4, Bb4 in treble; B2, C3 in bass.

Exercise 4: A two-staff musical exercise. The first staff is in treble clef with a key signature of two flats (B-flat, E-flat). The second staff is in bass clef with a key signature of two flats. The music consists of four measures, each containing a pair of notes in the upper staff and a pair of notes in the lower staff, with a double bar line after each measure. The notes are: (1) G4, A4 in treble; B2, C3 in bass. (2) G4, Bb4 in treble; B2, C3 in bass. (3) G4, Ab4 in treble; B2, C3 in bass. (4) G4, Bb4 in treble; B2, C3 in bass.



Exercises.

1. Precede and follow the chords given below by a few chords, forming complete phrases. The chords may be in any time-value. Write for voices in four parts :



2. In single phrases modulate by means of the chord of the diminished seventh from (a) F major to D major, (b) F major to A flat major.

3. Add a pianoforte accompaniment to the following, introducing the dominant ninth resolving while the chord remains.

VIOLIN.

Start :

4. Transcribe the result into the key of E flat minor.
5. Add three vocal parts to the following unfigured Bass, introducing the dominant ninth resolving on to another chord. All given notes are essential :

(1) Transition to B minor. (1) (2)
 (2) Transition to E minor.

6. Write sixteen bars commencing and ending in G major introducing the following procedures. Write in four vocal parts. The chords may occur in any time-value :

- (b) and (c) may be transposed and used in other keys. Modulation may be made to D major and C major. Start as follows :

CHAPTER XXIV

THE HIGHER DOMINANT DISCORDS

(b) THE DOMINANT ELEVENTH

1. THE addition of the eleventh to the chord of the ninth produces a chord of six sounds :

Ex. 1.

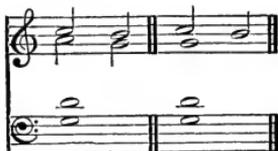


As we have already considered the seventh and ninth, it is only necessary to discuss the eleventh in combination with them.

2. *Case I.* Eleventh falling one degree while the chord remains.

Obviously the third must be omitted. The seventh must be present, else we produce a case of single or double suspension.

Ex. 2.



It is also clear that the first inversion cannot be used. The following are therefore the possible examples of its use. The figuring is obvious :

Ex. 3.

11 3 11 3 11 3 7 6 6 — 6 — 6 —
 7 — 9 8 b9 8 4 — 5 4 5 4 b5 4
 7 — 7 — 3 — 3 2 3 2 3 2

6 — 6 — 5 — 6 6 $b6$ 6
 4 — 4 — 4 — 4 — 4 — 4 —
 3 3 3 3 2 — 2 — 2 —

If the ninth be used with the eleventh it generally resolves with it; but it need not do so. The major ninth should not be sounded below the third:

Ex. 4.

7 6 7 6
 5 — $b5$ —
 3 — 3 —

3. *Case II.* Eleventh resolving upwards while the chord remains.

Obviously the third and fifth should be omitted:

Ex. 5.

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

The ninth should resolve on to the third as the eleventh resolves on to the fifth. The minor ninth is hardly ever used in such cases.

4. *Case III.* Derivatives.

If the root and third be omitted, we get:

Ex. 6.

(a) (b)

These are merely secondary sevenths in C major and C minor. The first new point is that (*b*) can be used in the key of C major.

The next point is that instead of proceeding direct to the dominant common chord or dominant seventh, an appoggiatura six-four may be interpolated :

Ex. 7.

Example 7 shows a musical phrase in C major. The treble clef staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of G4, B4, D5 (dominant seventh), and finally a triad of G4, B4, D5 (dominant seventh). The bass clef staff contains a melodic line: G3, B3, D4, G4, B4, D5, G4, B4, D5, G4, B4, D5. The first two measures of the treble staff correspond to the first two notes of the bass line, and the third measure corresponds to the last three notes.

This is an example of harmonic decoration. If the eleventh rises we get :

Ex. 8.

Example 8 shows a musical phrase in C major. The treble clef staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of G4, B4, D5 (dominant seventh), and finally a triad of G4, B4, D5 (dominant seventh). The bass clef staff contains a melodic line: G3, B3, D4, G4, B4, D5, G4, B4, D5, G4, B4, D5. The first two measures of the treble staff correspond to the first two notes of the bass line, and the third measure corresponds to the last three notes.

Next, the following :

Ex. 9.

Example 9 shows a musical phrase in C major. The treble clef staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of G4, B4, D5 (dominant seventh), and finally a triad of G4, B4, D5 (dominant seventh). The bass clef staff contains a melodic line: G3, B3, D4, G4, B4, D5, G4, B4, D5, G4, B4, D5. The first two measures of the treble staff correspond to the first two notes of the bass line, and the third measure corresponds to the last three notes.

condenses into :

Ex. 10.

Example 10 shows a musical phrase in C major. The treble clef staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of G4, B4, D5 (dominant seventh), and finally a triad of G4, B4, D5 (dominant seventh). The bass clef staff contains a melodic line: G3, B3, D4, G4, B4, D5, G4, B4, D5, G4, B4, D5. The first two measures of the treble staff correspond to the first two notes of the bass line, and the third measure corresponds to the last three notes.

This is the chord of the added sixth.

Hence we get the rule that the dominant eleventh may resolve on the tonic chord, the eleventh remaining stationary.

It will be seen that the original view that these are secondary sevenths ties down their progression to one definite procedure.

Whereas the Day theory serves to explain other resolutions and to show how it comes about that they can be used unprepared. All fundamental discords are freed from the necessity of preparation. Thus we can write:

Ex. 11.

Ex. 11 consists of two systems of musical notation. Each system has a treble clef staff on top and a bass clef staff on the bottom. The first system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass. The second system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass.

It will also be noted that the position of these discords, as regards accent, is of no account. Some of the ground already covered in the chapter on the secondary sevenths has been traversed again, but it will serve to show the student the nature of the evolution of the use of these chords. The following table may be useful in this respect:

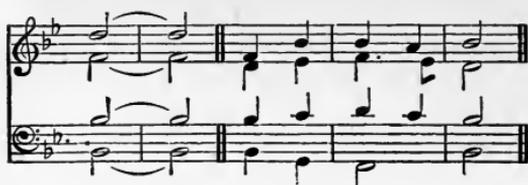
Ex. 12.

Original
procedure. Evolution.

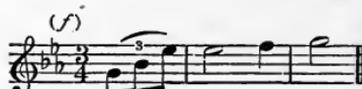
Ex. 12, Original procedure. Evolution, consists of two systems of musical notation. Each system has a treble clef staff on top and a bass clef staff on the bottom. The first system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass. The second system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass.

Retardation.

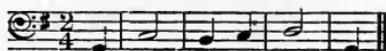
Ex. 12, Retardation, consists of two systems of musical notation. Each system has a treble clef staff on top and a bass clef staff on the bottom. The first system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass. The second system shows a sequence of four chords: a triad (C4, E4, G4) in the treble and a bass note (C3) in the bass; a dyad (E4, G4) in the treble and a bass note (C3) in the bass; a triad (G4, B4, D5) in the treble and a bass note (C3) in the bass; and a triad (B4, D5, F5) in the treble and a bass note (C3) in the bass.



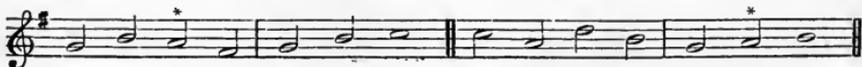
1. Harmonize the following fragments for String Quartet, introducing some form of the chord of the eleventh once in each section ; the section need not end with a cadence :



2. Add three vocal parts to the following unfigured basses, introducing the dominant eleventh (plain chords):



3. Harmonize the following for S. A. T. B., introducing chords of the eleventh at the points indicated with an asterisk. Add a few unessential notes :



CHAPTER XXV

THE HIGHER DOMINANT DISCORDS

(c) THE DOMINANT THIRTEENTH

1. THE thirteenth is the last discord that can be produced by adding a series of thirds above the fundamental note (the dominant):

Ex. 1.



It has been shown that the thirteenth was originally an appoggiatura of the fifth:

Ex. 2.



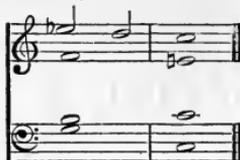
And this is its commonest use. It is obvious that the fifth of the chord cannot accompany the thirteenth. Neither should the thirteenth be placed below the seventh, because of the ugly effect:

Ex. 3.



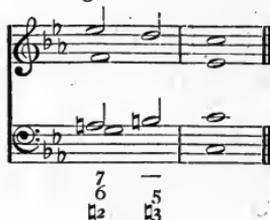
2. In a minor key, the thirteenth should be minor. In a major key it may be either major or minor, but the following is unpleasant:

Ex. 4.



The minor thirteenth may be combined with the major ninth as follows :

Ex. 5.



Here for the first time we have an example of the combination of upward and downward resolving discords. Obviously it is the first opportunity.

3. Just as in the chords of the ninth and eleventh, the seventh must be a factor, else we produce not a discord but a concord or augmented triad :

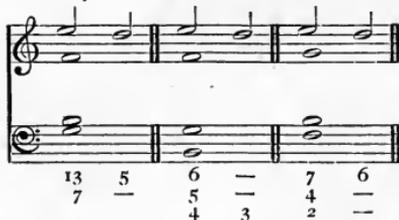
Ex. 6.



It is quite unnecessary to classify these as thirteenths, though they resemble them. They have already been discussed.

4. *Case I.* Thirteenth resolving one step downwards, while the chord remains :

Ex. 7.



If the seventh is absent when the sixth is present, but occurs when it falls to the fifth, the chord may be classed as a thirteenth :

Ex. 8.

8 7
6 5

The ninth and eleventh may be combined with the thirteenth. The figure 6 is often used to signify the thirteenth :

Ex. 9.

13 5 13 5 13 5 7 —
11 3 11 3 7 — 6 5 —
7 — 9 8 2 3 4 5 —
7 — — 2 3 2 3

When three parts move downwards in parallels, the two lowest should not form perfect fourths :

Ex. 10.

bad

5. *Case II.* Thirteenth resolving one step upwards to the seventh, while the rest of the chord remains.

Obviously the seventh cannot in this case be used with the thirteenth. This form of resolution is somewhat rare :

Ex. 11.

6 7 6 — 6 —
4 5 4 — 4 —
2 3 2 3

6. *Case III.* Thirteenth falling a third to a note of another chord. Here the intermediate step drops out :

Ex. 12.

These are not exposed octaves, as the progression is condensed from :

Ex. 13.

The following are inversions :

Ex. 14.

7. *Case IV.* Minor thirteenth rising a semitone to a note of another chord. In this case the thirteenth is written as the sharpened fifth from the root :

Ex. 15.

Obviously this can only be used in the major key. The progression probably arose from the case in which the movement from D to E was decorated by a passing note D sharp.

8. *Case V.* Thirteenth remaining to be a part of another chord :

Ex. 16.

But here the chord (*a*) is an *appoggiatura* chord, so that the thirteenth eventually falls. Care must be taken, in such a case, to avoid :

Ex. 17.

The thirteenth in this form is a derivative. It is in appearance a secondary seventh on B flat. And this, according to old theory, should be prepared, and resolve upon a chord whose root is a fourth higher. But it has been seen that this restriction is artificial. So long as the discord resolves there is really no restriction as to what harmony may accompany it.

9. Sometimes the thirteenth leaps to the third of the chord :

Ex. 18.

10. It is an anomaly in theory that what the ear appreciates as being varieties of the plagal cadence are all analysed as being derived from dominant harmony. However, the classification is not a matter of importance so long as we understand how to use the chords.

The following table will be useful :

Ex. 19.

Normal cadence.	Decoration.	Varied form resulting from it.
-----------------	-------------	-----------------------------------

Starting with (2).

In cadence (4) the first chord is termed the dominant minor thirteenth. It seems much more natural to regard it as a subdominant combination, even if it does not fit in with the Day theory. But it is waste of time to argue about root theories.

11. It is said that all secondary sevenths can be derived from dominant harmony. The same may be said of secondary ninths. It may be useful to have a table of those sevenths not resolving in accordance with old theory, and of some useful ninths :

Ex. 20.

The first system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a series of dyads: G4-A4, B4-C5, D5-E5, and F5-G5. The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a series of dyads: G2-A2, B2-C3, D3-E3, and F3-G3.

The second system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a triad of B4, D5, F5 (dominant seventh). The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a triad of B2, D3, F3 (dominant seventh).

Ear-Training Exercises.

The third system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a series of dyads: G4-A4, B4-C5, D5-E5, and F5-G5. The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a series of dyads: G2-A2, B2-C3, D3-E3, and F3-G3.

The fourth system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a triad of B4, D5, F5 (dominant seventh). The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a triad of B2, D3, F3 (dominant seventh).

The fifth system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a triad of B4, D5, F5 (dominant seventh). The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a triad of B2, D3, F3 (dominant seventh).

The sixth system consists of two staves. The treble staff contains a sequence of chords: a triad of G4, B4, D5 (dominant seventh), followed by a triad of A4, C5, E5 (dominant seventh), and then a triad of B4, D5, F5 (dominant seventh). The bass staff provides accompaniment with chords: G2-B2-D3, A2-C3-E3, and then a triad of B2, D3, F3 (dominant seventh).

correct.

1. Add parts for String Quartet, introducing the dominant thirteenth :

(1)

(1) Transition to C minor.

2. Add free accompaniment for Pianoforte :

rall. e dim.

(1) (2)

(1) Use Bass D.

(2) Use Bass C.

Start :

3. Write a sentence for voices, beginning as follows :

(1)

Introduce the following chords in any order. Figure the result:

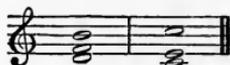
4. Begin as above in A minor, and introduce:

CHAPTER XXVI

THE HIGHER DOMINANT DISCORDS

(d) THE CHORD OF THE AUGMENTED SIXTH ON THE MINOR SECOND OF THE SCALE

1. If instead of writing



a chromatic passing note be inserted between D and C :



the combination thus formed, D flat, F, B, is catalogued as the chord of the augmented sixth. In order to fit the Day theory it is said to have two roots, the tonic (accounting for D flat) and the dominant.

2. As a matter of fact it is merely a dominant chord with the fifth flattened, and this view accords with its natural use. There are three forms of the chord :

	Incomplete dominant seventh.	Dominant seventh.	Dominant minor ninth.
	Italian sixth.	French sixth.	German sixth.
Variants forming augmented sixth.			
	6	6 4 3	6 b5 3

3. The resolutions are those of the dominant discord. The flattened fifth must proceed a semitone upwards or downwards ; the ninth does the same :



4. Inversions of the Italian sixth are so rare that they may be ignored.

Two inversions of the French sixth are in use :



The latter is rare, because the interval of the diminished third is harsh. These chords resolve quite normally.

All the inversions of the German sixth are possible, because they form the intervals of an ordinary fundamental seventh :



5. It is said that the German form in root position cannot resolve into the tonic chord, because of the resultant fifths :



But no unprejudiced mind can object to these fifths as an effect.

It is quite a different case from :



Elgar writes:

Dream of Gerontius.

(1) (2) (3) (4) (5)

We here meet with some harmony not yet discussed. But the following analysis will be clear:

(1) Tonic chord, key D flat major, quitted as chromatic chord on minor second of the scale key C.

(2) Tonic seventh, key C, quitted as augmented sixth on minor second of the scale key B (B flat=A sharp).

(4) Tonic seventh, key B, quitted as augmented sixth on the minor second of the scale key B flat.

B \sharp = C flat.

D \sharp = E flat.

F \sharp = G flat.

This series of consecutive fifths is excellent in effect, and it is time that examiners ceased to mark them.

We have to awake to the fact that many consecutive fifths are not evil in effect, and are therefore not wrong. The formulation of a theory is difficult, but one's ear should be an unerring guide. Fifths in plain diatonic progressions are generally crude in effect. But when we use discords, and chromatic harmony, the conditions are entirely changed. The following consideration may have something to do with the matter:

(a) (b)

(b) is merely a variant of (a), and as (a) is correct, the ear detects nothing wrong with (b). In other words, the fifths at (b) are not caused by faulty primary progression.

It is indeed quite possible that there is a distinction between the effect of fifths caused by diatonic progressions and those caused by chromatic procedure :



(a) is not nearly so offensive as (b).

In fact one might go so far as to say that the progression at (a) is really pleasant, even at the risk of being scoffed at by pedants. It is all very well to say that a student must write as a student ; but of what period ? Theory has, of necessity, to march behind practice. But it need not stop at Mendelssohn. A student of the present day ought at least to be allowed to follow the practice of Brahms, and he should be encouraged to look sympathetically at the latest developments.

6. The augmented sixth forms a new cadence, which is very effective as a quiet close to a movement :



7. As the German sixth is identical in sounds with the dominant seventh of the key an augmented fourth higher, it is an obvious means of modulation ; e. g. C to F sharp :

Start:

Ped..... * Ped...

2. Write a phrase for four voices in G major, introducing

CHAPTER XXVII

CHROMATIC SUPERTONIC HARMONY

1. When the modern diatonic scale was firmly established, and composers had got thoroughly accustomed to the harmonies that the scales would furnish, it is obvious that they would seek means not only of obtaining new kinds of chords, but of varying their qualities. And it would readily occur to them that whereas



properly belongs to the key of G, there is no valid reason why it should not be incorporated in a passage in the key of C :



Or, again, it may be said that the chord D, F sharp, A is a variant of D, F natural, A, the normal form. Whatever be the view as to its origin, it is termed the chromatic common chord on the supertonic (of the diatonic scale).

2. *Chromatic Common Chord on the Supertonic.*

(a) The term chromatic as applied to a chord signifies that the chord in question contains some note or notes foreign to the diatonic scale, but that the chord can be used without inducing a modulation to some other key. Thus, so far, the chromatic chords that we have discussed are those that contain the minor second from the tonic and dominant, and the minor sixth from the dominant of the major key, and in the minor key that which contains the minor second from the tonic. In other words, in

the major key the dominant minor ninth and thirteenth, and the augmented sixth on the minor second of the scale; in the minor key the last of these only. In this chapter we shall also use the augmented fourth and minor seventh from the tonic. Adding these to the diatonic scale, we produce the harmonic chromatic scale. The same notation is used for the minor as for the major key :

Ex. 3.



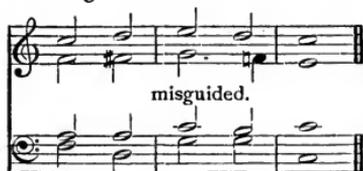
(b) It will be seen that if the chromatic supertonic common chord be followed by the dominant common chord, or by the mediant, we produce a full or false close in the key of the dominant. If, therefore, it be desired to use the chord without modulation, it should be followed by the tonic common chord, or dominant discord. The third in the supertonic chromatic common chord should rise a semitone, or fall a chromatic semitone. It must not be doubled :

Ex. 4.



(c) It is better not to precede the chord by a diatonic one containing the perfect fourth from the tonic (in the key of C, F \sharp) as root, third, or fifth :

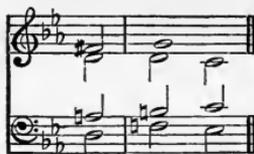
Ex. 5.



(d) The chord is specially useful in approaching the cadence. It can be used in either the major or minor key.

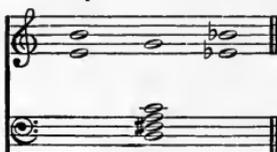
(e) The discord of the seventh never causes false relation ; hence the following is quite correct :

Ex. 6.



(f) Discords may be added to this chord in exactly the same way as we added them to the dominant root :

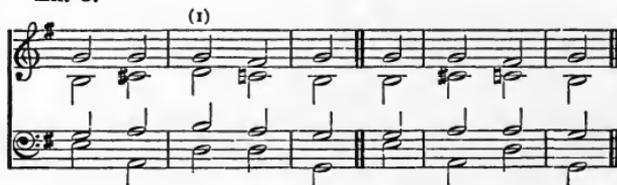
Ex. 7.



3. *The Chromatic Supertonic Seventh.*

(a) This chord resolves exactly as the common chord. The seventh may remain to be a part of the next chord, or fall at once :

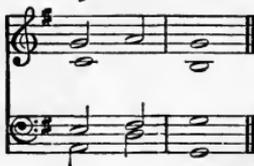
Ex. 8.



It will be seen that (1) is merely a decorating chord.

(b) Just as the diatonic seventh may rise in the following case :

Ex. 9.



So the following idioms are common :

Ex. 10.



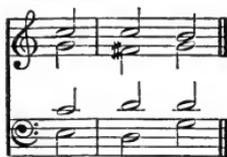
(c) It is unnecessary to say anything about the inversions of this chord.

The chord may of course be used in either mode.

(d) *Modulation.* It may be well to point out the present capabilities of this chord for the purposes of modulation :

(a) It may be approached as a chromatic seventh and quitted as a dominant seventh in a new key :

Ex. 11.



(β) It may be approached as a dominant seventh and quitted as a supertonic seventh in a new key :

Ex. 12.



It may be mentioned that this is one of the best means of modulation.

(γ) It may be approached as a supertonic seventh and quitted as the augmented sixth on the minor second of the scale (enharmonic modulation) :

Ex. 13.



(δ) Conversely, it can be approached as the augmented sixth and quitted as the supertonic seventh :

Ex. 14.

Augmented sixth in C. Supertonic seventh in B. Dominant seventh in B. Supertonic seventh in E. Dominant seventh in E.

But such a progression as this is not recommended as music. It is only given as a possibility. It is too mechanical in effect and obvious in construction.

The augmented sixth on the minor second of the scale in its German form is not of much use, as it does not suggest the key of the tonic so strongly as that of the subdominant. This will be seen shortly.

4. Chromatic Supertonic Ninth.

(a) Both the major and minor ninth may be used in the major key; the minor ninth only in the minor key.

(b) If the ninth resolve while the rest of the chord remains :

Ex. 15.

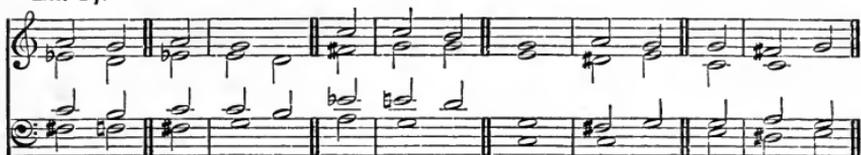
then the chord resolves into a supertonic seventh, and it is treated accordingly.

(c) If it resolves on to some other root, it follows precisely the procedure of the supertonic seventh :

Ex. 16.

(d) In the inversions the root is omitted. These are diminished sevenths:

Ex. 17.



In the last two examples E flat is written as D sharp. Here the chords are really appoggiaturas of the chord of C major.

(e) Consecutive diminished fifths are good between any two parts:

Ex. 18.



(f) The uses of this chord for the purposes of modulation may be conveniently discussed in a later chapter.

(g) When the root is absent, the treatment of the seventh from the root is much freer:

Ex. 19.

COLERIDGE-TAYLOR.
By the waters of Babylon.



But it is better for the seventh to rise or fall one degree.

When the chord is used over a tonic pedal, the doubling of the seventh is excellent in effect:

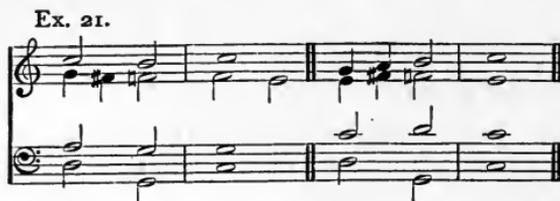
Ex. 20.



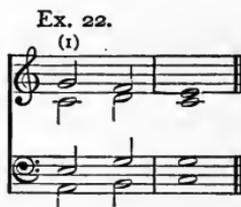
As a matter of fact, it is really more in accordance with natural feeling to regard A, D sharp, and F sharp as appoggiaturas. The root is not *felt* to be D.

5. *The Chromatic Supertonic Eleventh.*

(a) If the eleventh resolve while the rest of the chord remains, it is an appoggiatura, and requires no further consideration :



(b) If it resolve on to some other chord, the root is generally omitted :



But there is an objection to the classification of the combination at (1) as an eleventh. There is no reason why it should not be derived from the dominant. It is ambiguous. Hence it is really better to call it simply a secondary seventh resolving on to the dominant seventh. Macfarren, for example, does not mention supertonic elevenths.

6. *The Chromatic Supertonic Thirteenth.*

(a) The major form may be used in the minor key :



(b) If the thirteenth resolve while the rest of the chord remains, it is an appoggiatura :

Ex. 24.



(c) If it resolve on to another chord, it must be the tonic or dominant discord. The former case must be discussed later :

Ex. 25.



7. The major common chord on the minor second of the scale.

(a) It will be obvious that the second of the following examples is but a variant of the first :

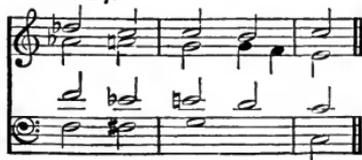
Ex. 26.



The combination at (1) is termed the Neapolitan Sixth, and is very common in approaching the cadence. It is used in both major and minor keys. The chord in its root position and second inversion is rare. The false relation between D flat and D natural is unobjectionable.

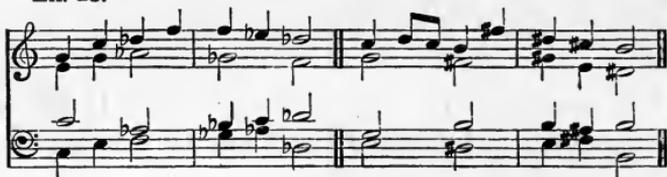
(b) The chord can be effectively followed by the supertonic ninth:

Ex. 27.



(c) It is a convenient means of modulation to a major or minor key a semitone lower, or to a major key a semitone higher :

Ex. 28.



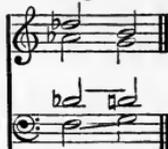
(d) It can be effectively preceded or followed by the chromatic chord on the major supertonic :

Ex. 29.



(e) Avoid :

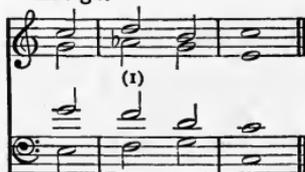
Ex. 30.



The effect is unpleasant.

8. The first inversion of the diminished triad on the supertonic of the minor key may be used in the major key as a variant of the normal form :

Ex. 31.



It is far-fetched to derive the chord (1) from the dominant. And the chord with the seventh added is better regarded as a diatonic seventh borrowed from the minor key.

9. The chord of the augmented sixth on the minor sixth of the scale :

Ex. 32.

Normal form.

Variation augmented sixth.

Italian sixth. French sixth. German sixth.

(a) This is merely the supertonic chromatic discord with the fifth flattened. It is said to have two roots, D and G, the latter serving to account for the A flat. Its resolutions are those of ordinary chromatic supertonic harmony :

Ex. 33.

(b) It will be felt that the progressions naturally arrange themselves as suggesting the key of C. If the augmented sixth on the minor second of the scale be similarly treated, it will lead into the subdominant channel. Hence its use is best reserved for those cases in which it can be followed immediately by the tonic or dominant chord :

Ex. 34.

good. suggestive of F major. (1) good.

At (1) D flat is felt to be an appoggiatura of D natural.

(c) As regards modulation, it will suffice to point out that the augmented sixth on the minor second of one key can be quitted as that on the minor sixth of another, or that on the minor sixth of one key may be quitted as that on the minor second of another. Further, that as the German form is in

actual sounds a fundamental seventh, an augmented sixth may be quitted as a dominant or supertonic seventh of a new key, or a dominant or supertonic seventh may be quitted as a German sixth in another key. The consideration of tonic chromatic harmony will open out further possibilities, and the whole matter may be reserved for another chapter. Meanwhile the student should experiment on his own account.

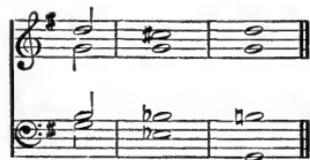
(d) The inversions are subject to the same limitations as those discussed when considering the augmented sixth on the minor second of the scale.

(e) The chord is useful as a cadence idiom :

Ex. 35.

ELGAR. *O hearken Thou.*

Ear Training.



Exercises.

1. Write a few chords to precede and follow each of the chords given below. Form definite phrases with cadential effects at the end. No modulation:



A musical score for piano accompaniment. The top staff is in treble clef and the bottom staff is in bass clef. The key signature is one flat (B-flat). The time signature is 4/4. The music consists of six measures, each with a chromatic supertonic harmony indicated by a letter in parentheses below the staff: (k), (l), (j), (k), (l), (m). The chords are: (k) F4-A4-C5, (l) G4-B4-D5, (j) A4-C5-E5, (k) F4-A4-C5, (l) G4-B4-D5, (m) F4-A4-C5.

2. Add a Pianoforte accompaniment to the following, introducing supertonic chromatic harmony :

VIOLIN.
 A violin melody in 4/4 time, starting on G4. The key signature is one sharp (F#). The melody consists of six measures: G4-A4-B4, A4-B4-C5, B4-A4-G4, F#4-G4-A4, G4-F#4-E4, D4-C4. The notes are: G4, A4, B4, A4, G4, F#4, G4, A4, G4, F#4, E4, D4, C4.

Start :

A piano accompaniment for the violin melody. It consists of three staves: treble, grand staff (treble and bass), and bass. The key signature is one sharp (F#). The time signature is 4/4. The accompaniment starts on G4 and consists of six measures: G4-A4-B4, A4-B4-C5, B4-A4-G4, F#4-G4-A4, G4-F#4-E4, D4-C4. The notes are: G4, A4, B4, A4, G4, F#4, G4, A4, G4, F#4, E4, D4, C4.

3. Add three parts for the Organ above the following unfigured Bass, introducing the resource discussed in this chapter :

PEDAL.
 An unfigured bass for organ accompaniment. It consists of four staves, all in bass clef. The key signature is one sharp (F#). The time signature is 4/4. The bass consists of six measures: G4-A4-B4, A4-B4-C5, B4-A4-G4, F#4-G4-A4, G4-F#4-E4, D4-C4. The notes are: G4, A4, B4, A4, G4, F#4, G4, A4, G4, F#4, E4, D4, C4.

Start :

4. Write a stanza of twenty bars for Pianoforte modelled on the opening of the Andante of Beethoven's Pianoforte Sonata, Op. 14, No. 2. Introduce :

- (a) Supertonic minor ninth.
- (b) „ „ seventh.
- (c) Neapolitan sixth.
- (d) Augmented sixth.

5. Taking the following as a basis,

write parts for String Quartet in three different ways, starting each as follows, and maintaining the style :

(a) *Andante.*

(b)

Musical score (b) consists of four staves. The top staff is in treble clef with a key signature of two sharps (F# and C#). It features a melodic line with eighth notes and triplets, including a chromatic supertonic interval (B4 to A#4). The second and third staves are in treble clef and contain accompaniment with eighth notes and triplets. The fourth staff is in bass clef and contains a simple bass line with quarter notes.

(c)

Musical score (c) consists of four staves. The top staff is in treble clef with a key signature of two sharps (F# and C#). It features a melodic line with quarter notes and a chromatic supertonic interval (B4 to A#4). The second and third staves are in treble clef and contain accompaniment with quarter notes and slurs. The fourth staff is in bass clef and contains a bass line with eighth notes and slurs.

CHAPTER XXVIII

CHROMATIC TONIC HARMONY

1. *Tonic Common Chords.*

The substitution of the tonic major common chord for the diatonic minor form in the minor key, and the minor chord for the major in the major key require careful discretion. Nothing could be in worse taste than the following :



In fact it may be laid down as a canon of good taste that the major and minor forms of the same chord should not be used consecutively in notes of short duration.

Three good uses of the chromatic tonic triad may be mentioned :

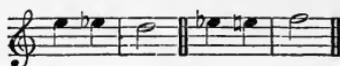
(a) In the minor key the minor form may be followed by the major form, producing a modulation to the subdominant, but the chords should each have time to make themselves felt :



(b) One may form the end of one phrase, and the other the beginning of the next :



In other cases, if the melody were:



some such harmony as:



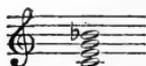
is preferable to the effeminate effect of the juxtaposition of the major and minor forms of the same chord.

(c) The student is of course familiar with the Tierce de Picardie:

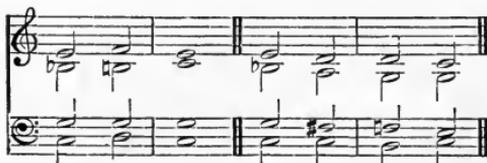


2. The Tonic Seventh.

This consists of the major tonic common chord with the addition of the minor seventh. C major or minor:

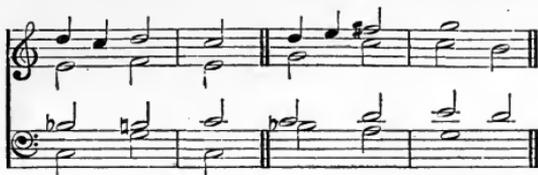


Obviously if this be followed by the chord of F we produce a modulation to F major. In order to avoid modulation, the chord must be followed by a dominant or supertonic discord. The seventh may rise a chromatic semitone, or fall one degree: the third should not be doubled.



3. *The Tonic Ninth.*

(a) If it resolve while the rest of the chord remains it becomes a tonic seventh, and is treated accordingly:



The minor ninth may of course be used in a major or a minor key.

(b) If the ninth resolve on another root, it may remain to be a part of the next chord, fall, or if minor rise a chromatic semitone :



(c) The following is a common idiom :

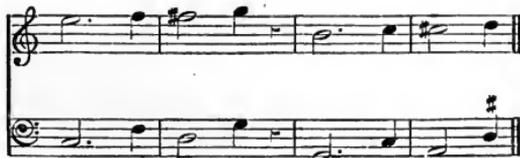


Of course C sharp and A sharp are really appoggiaturas of D and B, but the combination has to be called a chord, so C sharp is expedient false notation for D flat, and A sharp for B flat.

The majority of students would harmonize



as follows :



Of course it should be :



4. *Tonic Eleventh.*

This is very rare ; its best use is as follows :



Here D sharp and B sharp are merely chromatic passing notes, but those who require a name for everything can call D sharp E flat and B sharp C natural, and find the root D. But such analysis seems not only far-fetched, but unnecessarily complicated.

The student who is taught to decorate



with double appoggiaturas thus :

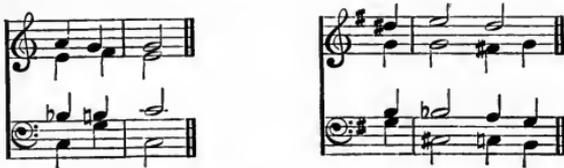


is far more likely to be able to write tolerable music than he who is required to worry out the false notation of everything he conceives.

5. *Tonic Thirteenth.*

If the thirteenth resolve while the rest of the chord remains we have a discord already discussed. Any other use is very rare. The thirteenth may of course be either major or minor. The major thirteenth should not be used in the minor key.

If the thirteenth resolve on another chord it will be upon a dominant or supertonic discord :



6. It will have been observed that the fundamental discords on the tonic, supertonic, and dominant are interdependent, that is to say, that to avoid modulation one resolves into another, the anchor being the tonic common chord or the dominant discord. The minor seventh of the tonic and the major third of the supertonic are the sounds that have to be contradicted to prevent modulation.

Thus the supertonic thirteenth may resolve on to a tonic discord ; the progressions, however, can hardly be called musical. They are possibilities :



Or a dominant discord may first proceed to a tonic discord :



Or, again, augmented sixths can resolve upon tonic discords :



7. The resources of modulation are of course enlarged by the introduction of tonic chromatic harmony. A dominant or supertonic discord can be quitted as a tonic discord, and vice versa. A German sixth can likewise be quitted as a tonic seventh. Or, again, the minor tonic common chord in the major key can be quitted as being diatonic or chromatic in some other key. A composer never worries himself about such technicalities; his ear is an unfailing guide. As a matter of fact a really musical ear is of far more value than scientific reasoning. But the student should know something of the principles that underlie natural instinct.

8. *Ternary form.*

As regards proportions, a binary form often consists of three sections, but the first section must not end in the tonic. A ternary form always consists of three sections. The first ends in the tonic, and the last is a repetition of the first section. The tonic should be avoided in the middle, and the return to it must mark the recapitulation.

The Scherzo of Beethoven's Pianoforte Sonata, Op. 2, No. 2, is a good example. The Trio is in binary form. These two illustrate clearly the essential difference between the two forms.

Ear-Training.

Exercises.

1. Write passages in four vocal parts introducing the following chords, one chord to be introduced in each passage. Let each passage form a complete phrase: introduce unessential notes:

Musical notation for exercise 1. It consists of two staves. The top staff has five measures, each containing a chord with a melodic line above it. The bottom staff has five measures, each containing a chord with a bass line below it. The chords are labeled (a) through (e) below the top staff. The key signature has two sharps (F# and C#), and the time signature is 4/4.

2. Add three vocal parts to the following Bass, introducing tonic chromatic harmony, and other chromaticisms:

Musical notation for exercise 2. It consists of three staves of bass lines. The first staff has a melodic line with chromaticism. The second and third staves provide harmonic support. The key signature has two sharps (F# and C#), and the time signature is 4/4.

3. Harmonize in four parts the following fragments:

Musical notation for exercise 3. It shows three fragments labeled (a), (b), and (c) for harmonization. Each fragment is on a single staff in treble clef. The key signature has two sharps (F# and C#), and the time signature is common time (C).

4. Harmonize the following for the Organ in three parts:

Musical notation for exercise 4. It consists of three staves of organ harmonization. The first staff has a melodic line with chromaticism. The second and third staves provide harmonic support. The key signature has two sharps (F# and C#), and the time signature is common time (C).

Start :

The musical score consists of three staves. The top staff is for SWELL OBOE, the middle for CHOIR, and the bottom for PEDAL. All are in B minor (two sharps) and 4/4 time. The SWELL OBOE part has a melodic line with a slur over the first two measures. The CHOIR part has a rhythmic accompaniment with slurs under the notes. The PEDAL part has a simple bass line with a slur under the first two measures.

Compose a middle section in B minor in contrasted style, introducing tonic chromatic harmony, and then repeat the given section treated differently, with the melody an octave lower in the left hand.

CHAPTER XXIX

THE REMAINING CHROMATIC RESOURCE ACCORDING TO ACCEPTED THEORY AND FURTHER POSSIBILITIES

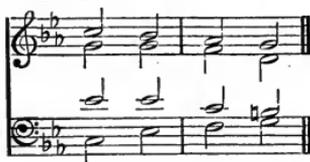
1. *Chords on the Mediant:*

Ex. 1.
Key C major.



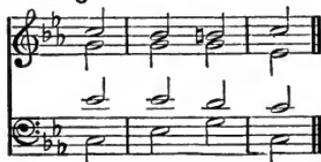
These three chords are classified as being chromatic in the key of C major, the first only in C minor. We have already seen how this chord can be used in C minor according to diatonic principles :

Ex. 2.



With a chromatic scale, however, it can be used as follows :

Ex. 3.



The classification does not matter. It is perhaps the simplest to say that this use induces a fusion of the melodic and harmonic minor scales. In the case of a transition from E flat to C minor it is unnecessary to analyse the chord as belonging to the new key :

Ex. 4.



It is difficult to give definite rules for the treatment of chromatic triads.

Three points may be useful:

(a) The chromatic forms are really variants of the diatonic forms. But it does not always follow that the chromatic form is good where the diatonic form is also good. In many cases, however, it is so.

(b) Any two chords may be used consecutively if they have at least one note in common.

Ex. 5.

GRIEG. *Papillon*.GRIEG. *Wedding Day*.

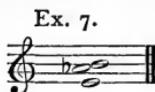
In both these cases the chromatic chords are quitted as new tonics. This is always an effective use of them, especially if, as in the Grieg example, the chromatic chord begins a new phrase.

(c) Chords whose roots are a semitone apart are always good in effect:

Ex. 6.

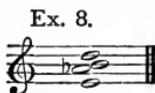


The chord labelled (*b*) above, e.g. the major chord on the major third of the scale, is classified as a false triad, because there is no G sharp in the harmonic chromatic scale of C. But it seems ridiculous to have to call G sharp A flat, and turn what is a concord into a discord theoretically:



The real truth must surely be that there can be G sharp in the key of C.

The chord (*c*) is really a fundamental seventh on the mediant. Again, theorists call it a dominant thirteenth:

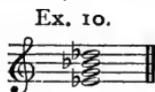


It resolves thus:

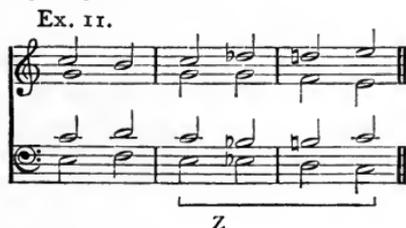


This shows how it probably originated—e.g. in the use of two unessential notes.

The student will at once ask, can we use



All these sounds occur in the harmonic chromatic scale, but the whole chord cannot be derived from one of the three fundamental series. There seems no valid reason why this should not be an augmented sixth borrowed from G major. That, of course, lands us in a difficulty with C sharp. But the real point is, can there be any objection to:



One really cannot analyse the section bracketed as being in G major, because that is not the effect.

2. *Chord on the Subdominant.*

In the major key, the minor common chord on the subdominant may be borrowed from the minor key :

Ex. 12.

Ex. 12 shows a musical example in G major. The treble clef staff contains four chords: G4 (G-A-B), B4 (B-C-D), G4 (G-A-B), and G4 (G-A-B). The bass clef staff contains four notes: G2, B1, G2, and G2. The B4 chord in the treble clef is a minor triad (B-C-D), which is the minor common chord on the subdominant (B) borrowed from the minor key.

3. *Chords on the Dominant.*

The minor chord on the dominant in the major key is so rare that it may be practically ignored. It is extremely difficult to use it in a musical way. The minor dominant can be used in the minor key thus :

Ex. 13.

Ex. 13 shows a musical example in G minor. The treble clef staff contains four chords: G4 (G-A-B), G4 (G-A-B), G4 (G-A-B), and G4 (G-A-B). The bass clef staff contains four notes: G2, B1, G2, and G2. The G4 chord in the treble clef is a minor triad (G-A-B), which is the minor dominant chord borrowed from the minor key.

But this is an edged tool, and had better be left alone.

4. *Chords on the Submediant.*

Ex. 14.
Key C major.

Ex. 14 shows two chords in C major. Chord (1) is the flat submediant (F major), and chord (2) is the natural submediant (F# major).

The chord on the flat submediant (1) is largely used.

(a) It is effective for the purpose of modulation, starting a new phrase :

Ex. 15.

GREENE. *God is our hope.*

Ex. 15 shows a musical example in C major. The treble clef staff contains six chords: C4 (C-D-E), F4 (F-G-A), C4 (C-D-E), F4 (F-G-A), C4 (C-D-E), and C4 (C-D-E). The bass clef staff contains six notes: C2, G1, C2, G1, C2, and C2. The lyrics are: "rage and swell, We will not fear, will not fear."

(b) It forms a new cadence:

Ex. 16.



There is a good example at the end of Grieg's *Au Printemps* for Pianoforte.

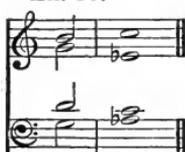
(c) It easily combines with other chromatic chords:

Ex. 17.



(d) It forms a new false cadence:

Ex. 18.

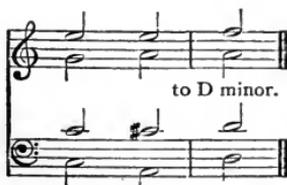


The chord on the major submediant (2) is catalogued as a false triad, C sharp being D flat.

The following uses will be readily understood:

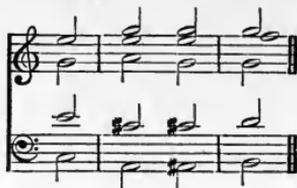
Ex. 19.

GREENE. *God is our hope.*



Again, there seems no reason why the seventh should not be added:

Ex. 20.

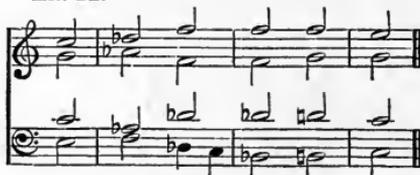


5. Chords on the Seventh Degree:

Ex. 21.
C major.

(a) is really an appoggiatura chord of the dominant:

Ex. 22.



(b) has its origin in sixteenth-century technique:

Ex. 23.



The following are characteristic uses:

Ex. 24.

Key G major.

WALMSLEY.

through - out all ge - - - ne - ra - tions.

WESLEY. *The Wilderness.*

joy . . . up - on their heads, their heads. . .

(c) is catalogued as a false triad, D sharp standing for E flat. It obviously resolves into the dominant:

Ex. 25.

There seems no reason why the seventh should not be added to both (b) and (c):

Ex. 26.

(d) can be used like (a) in the minor key. It will be observed that no mention is made of the chord

Ex. 27.

This contains two sounds foreign to the harmonic chromatic scale, A sharp and C sharp. It is difficult to see that there is anything wrong with:

Ex. 28.

At (a) the chord resolves naturally into a dominant seventh. At (b) it merely decorates the chord of F. At (c) C sharp and A sharp are really accented passing notes, forming a fundamental seventh on F sharp.

It may be well at this point to have a list of the resource generally accepted :

Ex. 29. Resource available in the Key of C major.

(1) Diatonic triads.

(2) Diatonic sevenths.

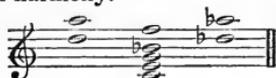
(3) Chromatic common chords.

(4) Other common chords, considered as false triads by Prout.

(5) Dominant fundamental harmony.

(6) Supertonic fundamental harmony.

(7) Tonic fundamental harmony.



(8) Augmented sixths.



Resource available in the Key of C minor.

(1) Diatonic triads (harmonic and melodic scales).



(2) Diatonic sevenths.



(3) Chromatic common chords.



(4) Dominant fundamental harmony.



(5) Supertonic fundamental harmony.



(6) Tonic fundamental harmony.



(7) Augmented sixths.



Now the first point that must strike any one is that in the major key we have a major common chord on every degree of the chromatic scale except one :

Ex. 30.
Key C.



This is not the place for enunciating new theories, but we have shown that it is difficult to see any reason why this chord on F sharp should not be used, at any rate as a decoration of the chord of F or G major. The fact probably is that the harmonic chromatic scale is inadequate. A moment's thought will show that a minor seventh added to each of these gives a fundamental seventh on each degree of the chromatic scale :

Ex. 31.

Cb = B \flat

Gb = F \sharp

Next experiment with the minor series :

Ex. 32.

It will be seen that those numbered 1, 2, 3, and 4, are outside the ordinary scheme. But the time will come when they must be incorporated. It is hard to see why the following progressions should not occur in C major :

Ex. 33.

= F \flat .

&c.

(a) (b)

Of course it will be said that we quit the chord (a) as belonging to A flat major, and (b) would be the dominant seventh quitted as augmented sixth in G, and so forth. But the fact remains that there is no suggestion of a modulation. It is probable that just as we borrow single chords from another key, so we can borrow a *series of chords*, and provided there is no effect of

modulation, we may say that certain chords hitherto uncatalogued may be used in a key.

Next, diminished triads are obviously incomplete chords, and the whole series seems quite workable. The notation may of course vary :

Ex. 34.

Nos. 2, 5, 8, and 11 are derivatives of the tonic.

Nos. 3, 6, 9, and 12 of the dominant.

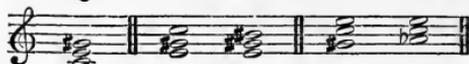
Nos. 1, 4, 7, and 10 of the supertonic.

In the same way we may treat the augmented triads :

Ex. 35.

It will be noticed as a peculiarity of augmented triads that the root position of one is the inversion of another under another name :

Ex. 36.



We have now a complete series of major common chords, minor common chords, diminished triads, augmented triads, and fundamental sevenths on each degree of the chromatic scale. It is obvious whither this is tending : it must be possible to use the whole series of fundamental discords on every degree of the scale.

Leaving out those that have been discussed, the following are possibilities :

Ex. 37. Ninths.

It will be observed that when the root is omitted we produce fundamental harmony of tonic, dominant, or supertonic, except in the cases asterisked :

Ex. 38.

Example 38 is a musical score for two staves. It consists of three systems. The first system has two staves: the top staff is in treble clef and the bottom in bass clef. The second system also has two staves in the same clefs. The third system has two staves, with an asterisk above the first measure of the top staff and another asterisk above the fifth measure of the top staff. The notation includes various accidentals and clef changes.

But in these cases we can use the *appoggiatura* device, and resolve into fundamental harmony :

Ex. 39.

Example 39 is a musical score for two staves. It consists of two systems. The first system has two staves: the top staff is in treble clef and the bottom in bass clef. The second system also has two staves in the same clefs. The notation includes various accidentals and clef changes.

It will serve no useful purpose to carry this principle farther. It will remain to examine modern procedure in a succeeding chapter, and see if it bears out what appears to be the trend of theoretical evolution. Meanwhile the student may content himself with theory as it is at present accepted. It will, however,

have become more and more evident that new chords are arising through appoggiatura decoration of existing chords. And it is really unnecessary to materially enlarge the bounds of harmonic resource. The chords had better be left to form themselves fortuitously. What is wanted is a highly-trained ear and a keen imagination, not an encyclopaedia of chords. Chromatic harmony requires much discretion in its use; it is absurd to crowd a piece of music with it. And even when it is used, it is best for purposes of modulation. No attempt will here be made to force the student to use half a dozen chromatic chords without modulation in a hymn tune. In the first place, such chords are generally quite out of place in such a thing, and secondly the result is not music. Rather should the student read modern scores. Let him see there how chromatic chords are introduced, and let him introduce them in his own work naturally. The exercises generally given in harmony books are usually excellent examples of the ways in which these chords should not be used.

Ear Training.

A minor.

CHAPTER XXX

ADVANCED MODULATION

1. It will have become clear that modulation can be performed in the following ways :

(a) A chord may be approached as being diatonic in one key, and quitted as being diatonic in another.

(b) A chord may be approached as being diatonic in one key, and quitted as being chromatic in another.

(c) A chord may be approached as being chromatic in one key, and quitted as being diatonic in another.

(d) A chord may be approached as being chromatic in one key, and quitted as being chromatic in another.

2. It is obvious that if we adopted the scheme of harmony outlined at the end of the previous chapter, transition would be an impossibility. As a matter of fact there is some confusion of thought as to what constitutes a transition as opposed to a modulation. Some hold that a modulation cannot be performed in less than four chords, the second being the pivot chord. But this view ignores the fact that the tonic of a key can itself be the pivot chord, and so can the dominant of the new key. For example :

Ex. 1.

(1) (2)

(1) is the chord of the augmented sixth in C major quitted as the dominant seventh in D flat.

(2) is the tonic in D flat major quitted as the Neapolitan sixth in C major.

At (1) we have an enharmonic modulation, because in its

relation to C the chord is A flat, C, E flat, F sharp; in its relation to D flat F sharp becomes G flat. Such modulations as the above are termed *sudden*, as opposed to the 'gradual' method, in which the cadence in the new key is preceded by one or more chords common to both keys. But the term transition implies that there is no pivot chord. For instance, according to accepted theory there is no minor chord on the major seventh of the scale. Thus the following is a transition from B minor to C:

Ex. 2.

The chord (a) does not belong to C major, and the chord (b) does not belong to B minor.

But the following, though shorter, is a modulation:

Ex. 3.

The chord (c) is the augmented sixth in B minor quitted as the dominant seventh in C.

The first example is a transition produced by the principle of pivot notes.

3. It has been pointed out that sudden modulation should never be employed in approaching the cadence used at the end of the first half, or at the close of the stanza. For instance, the following is intolerable as an ending in A minor:

But sudden modulation may be used with good effect—

(a) in the middle of a phrase :



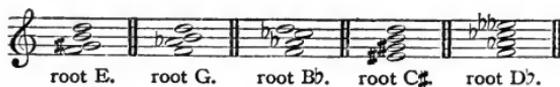
(b) in sub-phrases in the second half :



Elsewhere it is better to precede the cadence in the new key by at least one chord that has a dual relationship :

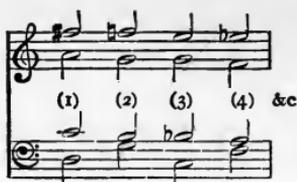


4. The chord of the diminished seventh is very useful as an enharmonic modulating chord. The following will illustrate the point :



Each of these can be a tonic, supertonic, or dominant ; thus each chord can belong to three tonics, which may be major or minor.

5. It is possible to write a sequence of fundamental sevenths without confirming any key :



- (1) The dominant seventh in G, quitted as supertonic seventh in C.
 (2) The dominant seventh in C, quitted as supertonic seventh in F, &c.

But it cannot be argued that any key is actually confirmed. Such a passage, however, is so palpably mechanical and monotonous, that a musician would shrink from using it.

It is unnecessary to give examples of the various methods of modulation: it is far better that the student should exercise his own ingenuity.

Exercises.

Modulate in a few chords:

- (1) from E flat major to G major—
 (a) by the chord of A flat;
 (b) by the tonic seventh in E flat;
 (c) by the diminished seventh (tonic in E flat, supertonic in G).
- (2) from G major to E flat—
 (a) by sudden transition;
 (b) by the chord of C minor;
 (c) by the diminished seventh, dominant in G, supertonic in E flat.
- (3) from E flat major to D major—
 (a) by the augmented sixth on B flat in D minor;
 (b) by the Neapolitan sixth in D minor;
 (c) by the diminished seventh, dominant in E flat, supertonic in D minor.

Choosing your own means, modulate in a few chords:

- (4) from C to E flat.
 (5) „ C to A flat.
 (6) „ C to E.
 (7) „ C to A.

- (8) from C to F minor.
- (9) „ C to D minor.
- (10) „ G minor to A flat.
- (11) „ G minor to F sharp minor.
- (12) „ G minor to B minor.
- (13) „ G minor to C minor.
- (14) „ G minor to C major.

(15) Resolve the diminished seventh on F sharp into all the keys possible, using the correct notation for each case.

In working the following problems the binary form will be generally required. The first half should not end on the flat side of the tonic. If a return to the tonic is made in the second half before the end, it is necessary to return to the opening material at this point. If a return to the tonic is made in the early period, then the form is ternary. Few modulations should be made in the opening periods. The second half or the middle section is the place for frequent modulation.

(1) Write a Minuet for Pianoforte modelled on the Minuet in Beethoven's Pianoforte Sonata, Op. 2, No. 1, in F minor.

Begin in B minor, modulate to D major, E minor, B minor.

Carefully analyse the form, noting the means of extension or contraction of phrase.

Begin :



(2) Write a Trio for Pianoforte modelled on the Trio of Beethoven's Pianoforte Sonata, Op. 2, No. 2. Begin in E minor, modulate to B minor, C major, A minor, E minor.

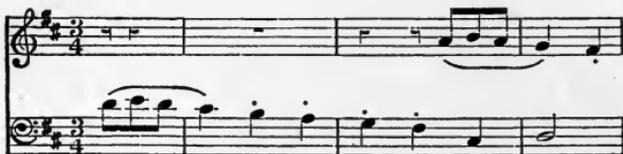
Begin :



(3) Write a Scherzo for Pianoforte modelled on that in Beethoven's Pianoforte Sonata, Op. 2, No. 3.

Begin in D major, modulate to A minor, E major, A major, D minor, C minor, B flat major, A major, D major, G minor, D minor, A major, D major.

Begin :



(4) Write a Minuet for Pianoforte modelled on the Allegro of Beethoven's Pianoforte Sonata, Op. 7, in E flat. Follow the form and use of thematic material, but use your own scheme of modulations.

(5) Write a Minuet for Pianoforte modelled on that in Beethoven's Pianoforte Sonata, Op. 10, No. 3.

Begin in C major, modulate to D minor, C major, A minor, D minor, C major, D minor, C major, D minor, F major, C major.

Start :



(6) Write a Minuet for Pianoforte modelled on that in Beethoven's Pianoforte Sonata, Op. 14, No. 1. (Allegretto in E minor.)

Use the same key, and the same order of modulations, but different material, treated however in an analogous fashion.

(7) Write a Scherzo for Pianoforte, Violin, and 'Cello modelled on that in Beethoven's Trio (for Pianoforte, Violin, and 'Cello), No. 2, Op. 1, No. 2.

Begin in F major, modulate to C major, F major (incidentally touched in beginning the second half), G minor, A minor, D minor, C major, F major.

Begin as follows :

Scherzo.

VIOLIN.

'CELLO.

N.B. (1) The Violin and 'Cello must be as satisfactory in effect as if heard alone.

(2) The same remark applies to the Pianoforte.

(3) The 'Cello and Pianoforte bass parts may move in octaves or unisons.

(4) The 'Cello may be an inner part to which the Pianoforte supplies the bass, or vice versa.

(5) Any upper Pianoforte part may form octaves with an upper String part.

(6) Unison by similar motion between String part and Pianoforte, or between two parts on the Pianoforte, is harmless.

6. As music gets more highly organized, composers feel the necessity of avoiding the breaking up of their music into sections, marked off by closes. The constant recurrence of stopping places becomes irritating. Of course the absence of any cadential effect at all will be as bad as a long sentence with no punctuation, but the obvious splitting up of the music can be avoided in many ways.

(a) By dovetailing phrases :

Ex. 4.

(b) By dovetailing harmony, that is, by making what would normally be a cadence the starting point of a new harmonic progression, and by adding some note which prevents the normal cadence :

Ex. 5.

Musical score for Example 5, showing a dovetailed harmonic progression. The score is in 2/4 time, with a key signature of one flat (B-flat). The melody is written in the treble clef and the bass line in the bass clef. The melody consists of eighth and quarter notes, with a final note marked with an asterisk (*). The bass line consists of chords and single notes, providing harmonic support for the melody.

(c) By extending phrases from their normal length by sequence and other devices.

All three methods are used in the following, in which we proceed for sixteen bars without any break :

Ex. 6. *Adagio.*

Musical score for Example 6, titled "Adagio". The score is in 2/4 time, with a key signature of one flat (B-flat). It consists of three systems of music, each with a treble clef and a bass clef. The first system begins with a piano (*p*) dynamic. The melody is written in the treble clef and the bass line in the bass clef. The second system includes a crescendo (*cres.*) marking. The third system includes a forte (*f*) dynamic marking and features triplet markings (3) in both the treble and bass staves. The score demonstrates various musical devices, including dovetailed harmony and extended phrases.

The first system consists of two staves. The upper staff is in treble clef with a key signature of one flat (B-flat). It features a melodic line with eighth and sixteenth notes, including a triplet of eighth notes. The lower staff is in bass clef, providing a harmonic accompaniment with eighth and sixteenth notes, also featuring a triplet of eighth notes. Both staves include dynamic markings such as *mf* and *f*.

The second system continues the piece with two staves. The upper staff shows a melodic line with a triplet of eighth notes. The lower staff features a more active bass line with eighth and sixteenth notes, including a triplet of eighth notes. Dynamic markings include *f* and *ff*.

The third system shows a change in texture. The upper staff has a more rhythmic, chordal melody with eighth notes. The lower staff has a bass line with eighth notes and rests. A dynamic marking of *ff* is present. The system concludes with a double bar line.

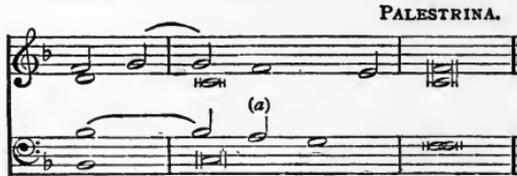
The fourth system features two staves. The upper staff has a melodic line with eighth notes and rests. The lower staff has a bass line with eighth notes and rests. Dynamic markings include *f* and *ff*.

The fifth system consists of two staves. The upper staff has a melodic line with eighth notes and rests. The lower staff has a bass line with eighth notes and rests. A dynamic marking of *pp* is present. The system concludes with a double bar line.

CHAPTER XXXI

PEDALS, AND OTHER SUSTAINED NOTES

1. IN the following example of sixteenth-century technique :



the bass C is what is termed a pedal, and the tenor for the time being becomes the bass. Thus the combination at (a) could not be used if the bass were the real bass. This points to one of the characteristics of a pedal—that we *may* use above it chords of which it is not an essential factor. Some argue that this is a necessity, but a pedal is surely an *effect*, quite independent of any question as to what harmonies are used in conjunction with it. According to the above view what was originally a pedal (see the Palestrina example) ceases to be a pedal, because the catalogue of essential harmony has been enlarged. But it is sheer waste of time to quibble at theories: the aim of this chapter is to teach students to use a sustained note as an effect. Others may argue as to whether some of them are pedals or not.

2. It may be as well to state the old rules as to the use of the pedal :

(a) It may be the tonic or dominant only.

(b) The first and last chords of the pedal must contain the pedal as an essential part.

(c) No modulation must be used on the pedal. Of course with the advance of the art it is obvious that such rules would have to be modified.

3. It will be convenient to consider the matter under the above heads :

(a) The notes on which a pedal may be used. It is true from one standpoint to say that for bass pedals the tonic and dominant are the only notes that can be used. But of course these notes need not remain as such; provided that they begin and end as such the passage is correct. This matter will be clear when we discuss modulation. Thus the following is an illustration of the old view as to the correct use of pedals:

Ex. 1.



Palestrina not infrequently closes a movement with a long sustained note in an upper part:

Ex. 2.



This is of course the ultimate origin of what is known as the inverted pedal.

Moderns use practically any harmony over a bass pedal, and there is very little that sounds harsh under this condition. But when the pedal is taken in an upper part discretion is required. No rules can be given. But in the first stages of study the tyro had better treat combinations of which the upper pedal forms no part as if they were unessential under strict conditions:

Ex. 3.



The dominant chord is specially offensive against an upper tonic pedal.¹

The following example is tolerable:

Ex. 3 a.

Example 3a consists of two systems of musical notation. The first system features a treble staff with a melodic line and a bass staff with a sustained pedal point. The second system continues the piece with similar textures.

It is only in the natural order of things that the effect of a sustained note should be attempted with other than tonic and dominant notes. This procedure is, however, confined to upper parts:

Ex. 4.

GRIEG. *Symphonic Dances I.*

Example 4 consists of three systems of musical notation. The first system features a treble staff with a melodic line and a bass staff with a sustained pedal point. The second system continues the piece with similar textures. The third system ends with a double bar line and the text '&c.'

¹ But when the pedal is given to an instrument of timbre different from that of the other parts, the objection fails.

When notes other than the tonic or dominant are used as sustained notes, they will be almost invariably a part of every chord used, though there seems no reason why students should not experiment in this direction.

Of course a pedal of this nature cannot be maintained for any length of time, as the range of harmony is obviously restricted :

Ex. 5.

Again, it is far more natural to say that the bass in the following is a pedal :

Ex. 6.

rather than to have to argue that (1) and (2) are dominant minor thirteenth in D minor. Double pedals are of course quite common :

Ex. 7. GRIEG. *Holberg Suite.*

There is no reason why they should not be notes other than tonic and dominant provided that they sound well.

On Dominant Pedal in Major key.

- (a) Supertonic minor, reckoning from tonic.
- (b) Tonic minor.
- (c) Subdominant major or minor.
- (d) Dominant major.
- (e) Submediant minor.

On Dominant Pedal in Minor key.

- (a) Tonic major.
- (b) Subdominant minor.
- (c) Dominant major or minor.

4. Before giving examples of these modulations it remains to state that specially in pianoforte or string music the pedal is either embellished or given in a rhythmic form :



5. Further, if both tonic and dominant pedals are used consecutively, obviously the latter should occur first. If the dominant be used alone, it can occur either just before the final section, or at the close of the final section. When it is followed by the tonic, the end is of course the appropriate place. Inverted pedals may be used almost anywhere. They are effective in the middle section, at the end, or at the beginning of the final section against the opening material. Suppose the opening bars were :



the final section might appropriately start :



6. When ending with a tonic pedal, and modulating to the subdominant, composers do not trouble to modulate back to the tonic ; the fact is the mind is so accustomed to the plagal close

that it does not realize that theoretically the tonic is not re-established :

Ex. 14.

WESLEY. *The Wilderness.*



As a matter of fact when the pedal is in an upper part it is impossible to modulate back ; in the above example the chord of B against the E in the Soprano would be atrocious. When, however, the tonic pedal is in the Bass, it is possible to re-establish the tonic. (See the close of the second Fugue of Bach's Forty-eight, Book I.)

Examples.

Modulation upon tonic pedal in major key :

Ex. 15.



Modulation upon tonic pedal in minor key:

Ex. 16.

PIANO.

Modulation on dominant pedal in major key:

Ex. 17.

1ST VIOLIN.

2ND VIOLIN.

VIOLA.

CELLO.

Modulation on dominant pedal in minor key :

Ex. 18.

A double tonic pedal (extreme parts) :

Ex. 19.

An inverted pedal :

Ex. 20.

It is hardly necessary to point out that a pedal should not start on a weak accent if in the bass.

Exercises.

1. Write a dominant followed by tonic pedal for Pianoforte modelled on those in Prelude No. 1, Book 1, of Bach's Forty-eight. Begin :

N.B.—The left hand duplicates the right hand.

2. Write a tonic pedal modelled on that in Fugue No 1, Book 1, of Bach's Forty-eight. Begin, using the figure bracketed :

3. Write a tonic pedal in the minor key, modelled on that in Prelude No. 2, Book 1, of the Forty-eight. Start :

4. Write a dominant pedal in the minor key, modelled on that in Prelude No. 12, Book 1, of the Forty-eight, using the figure bracketed:



5. Write a dominant pedal modelled on that at letter M (Peters) in Mendelssohn's Sonata No. 1 (first movement) for Piano and 'Cello; the pedal marks the beginning of the final section, the opening material being combined with it.

Start :



But such appoggiatura chords cannot be used indiscriminately. The following is atrocious:

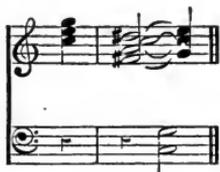


The dominant chord can only be used over the tonic bass as a suspension, or of course on a pedal.

The six-four is a common appoggiatura chord:



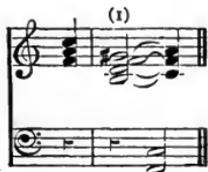
The supertonic minor ninth can be an appoggiatura of the tonic:



Similarly the tonic minor ninth decorates the dominant; also the supertonic:

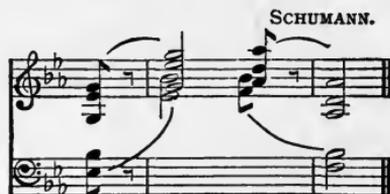


And the subdominant can be decorated as if it were a new tonic for the moment:



to decorate it, however, by its dominant seventh would imply a modulation, which the above does not. So that it is probably better to regard (1) as being merely appoggiatura notes.

3. Complete chords can also be used as anticipations :

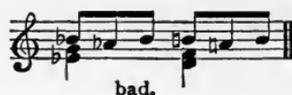


or retardations :



4. In decorating chromatic harmony, care must be taken to avoid clashing of diatonic and chromatic procedure.

For example (a) :



The auxiliary note below the fifth in chromatic harmony should certainly be a semitone below; and the pattern set should be maintained :



(b) Conversely :



although B flat is correct, C natural in the next bar should be C sharp. So we write :



But the following is correct :



(c) It is said that upper auxiliary notes should be diatonic. But there are cases in which the application of the rule would be impossible musically :



Here we use the Neapolitan Sixth in the key of C ; to use D natural at (1) would be most offensive.

But lower chromatic auxiliary notes do not cause clashes :



(d) In decorating a chromatic chord we generally write according to its scale :



But there are cases in which this cannot be done :



The chord (I) is borrowed from the key of C minor, but E flat clashes badly with the succeeding E natural.

(e) It has been said that when a chord lasts for some appreciable time it fixes itself on the mind as a temporary tonic, and the unessential material follows the notation of the scale of the chord used. But when nearing the point at which a new chord is about to enter the quasi-diatonic passing notes should be influenced by the succeeding essential harmony and its tonality:



In these cases the C natural and F natural are the seventh and ninth of their respective roots, and are therefore really essential notes.

In the following example the A flat, though correct according to the descending scale of C minor, clashes most offensively with the succeeding A natural:



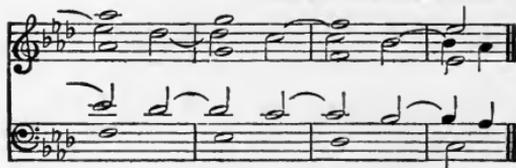
But A natural would be equally offensive in reference to the chord of C minor. Therefore an A descending to G must be avoided altogether. A natural ascending would be good if it reached C before the next chord:

(3) In using fundamental harmony :



(4) In using suspensions :

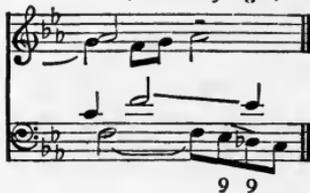
WESLEY. *Te Deum in E.*



(d) The use of consecutive discords :



BACH. Fugue VII
(The Forty-eight).



(e) Unobjectionable exposed consecutives :

BACH. *St. Matthew Passion.*



At (1) the bass is merely  decorated.

At (2) the F is unessential, displacing E flat.

Similarly the 7 to 8 is quite common between different positions of the same chord :



Exercises.

1. Add three parts for the pianoforte to the following bass, introducing suspension of chords and appoggiatura chords :



2. Add three string parts to the following melody :

1st VIOLIN.



3. Add two florid parts for organ above the following bass :



CHAPTER XXXIII

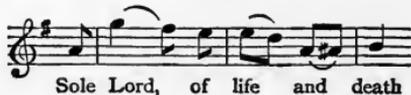
THE SETTING OF WORDS

1. IT is of course impossible in a treatise on Harmony to go minutely into the technique of the various means of expressing music. But it has been thought wise to treat in a broad way of some of the common mediums, so that the technical work need not be abstract. The writing for voices is considered last, because the setting of words is an additional difficulty.

2. When each syllable is set to a separate sound, the treatment is said to be syllabic :



When two or more sounds are given to the same syllable, the treatment is said to be melismatic :



All the notes assigned to one syllable are grouped together by a curved line. Quavers and shorter notes assigned to separate syllables are given separate tails.

3. The most important point to emphasize is that the accents of music and the metre of poetry are not analogous.

The following stanza will serve to bring out this point :

Still do the stars impart their light
To those that travel in the night :
Still time runs on, nor doth the hand
Or shadow on the dial stand ;
The streams still glide and constant are :
Only thy mind
Untrue I find,
Which carelessly
Neglects to be
Like stream or shadow, hand or star.

CARTWRIGHT.

A setting of the first two verses as if the metre and accent were analogous will at once reveal grave faults :



Still do the stars im-part their light to those that trav-el in the night.

In the first place, the monotony of the rhythm puts the whole thing out of court.

Next, it will be observed that the setting has produced the effect of recitation in a village school.

For the purposes of metre some syllables must be more strongly accented than others, and in this much licence is allowed; for example :

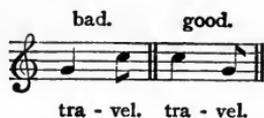
- ˘ -
Care-less-ly.

But in setting these words to music this must not be reproduced, but rather carefully avoided. The essential thing to do is to imagine the words well recited. The reciter will accentuate certain words or syllables and pass lightly over several, e. g.

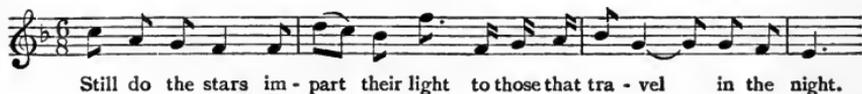
to those that \bar{t} ravel in the \bar{n} ight.

He will raise or lower the pitch of his voice in accordance with natural inflexion.

For example, he would not raise his voice for the second syllable of 'travel'. The composer must also be careful to use a fall in the music.

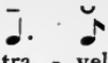


The following will be found to be analogous to good recitation. It is in fact measured recitation with definite sounds attached to the words :



As the above is in $\frac{3}{8}$ time, there are two strong accents in the bar - ˘ ˘ - ˘ ˘.

If however the music moves thus: $\bar{˘}$ $\bar{˘}$ $\bar{˘}$ $\bar{˘}$ the effect is $\bar{˘}$ $\bar{˘}$.

So that  is possible.
tra - vel

But the following is not good :


tra - vel in the night.

It is almost impossible to make 3 weaker in stress than 2.

Further, if perfection be the aim, it is really wrong to have any pause on either syllable of 'travel'; the following would be better :

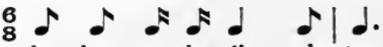

tra - vel in the night.

But this causes a further difficulty. The phrase will now stand :


Still do the stars im - part their light to those that tra - vel in the night.

This forms a three-bar phrase, and it sounds ill proportioned. It could stand if another phrase of the same length responded, or if the accompaniment or added vocal parts completed four bars (see also par. 6 (a)).

4. Although there can only be one correct placing of the strong accent, the weak syllables may be set in a variety of ways :


sha - dow on the di - al stand


sha - dow on the


sha - dow on the

All these are equally correct.

When setting words for more than one part, this is how variety is gained. The melisma is of course of great value also.

It may be pointed out that although it is bad to put an unstressed syllable on a strong accent, it is quite good to put a stressed syllable on a weak accent :

Again, in order to gain independence of movement, one voice may throw the strong accent forward :

Musical notation for the phrase "night, Still time runs on". The notation is written on two staves: a treble clef staff and a bass clef staff. The key signature has one flat (B-flat). The melody is written in a style that emphasizes the words "Still time runs on" with a strong accent on "Still".

5. The next point to observe is that the verse is not by any means necessarily analogous to the phrase :

Still time runs on, nor doth the hand or shadow on the dial stand ;

To have a cadence in the music at the words 'the hand' is too absurd to need comment.

The section :

Which carelessly
Neglects to be
Like stream or shadow, hand or star.

is difficult, because of the number of unstressed syllables. The following would stand :

Musical notation for the phrase "Care - less-ly ne-glects to be like stream". The notation is written on a single staff with a 6/8 time signature. The melody is written in a style that emphasizes the words "Care - less-ly ne-glects to be like stream" with a strong accent on "Care".

6. It is of course obvious that points such as those discussed may lead to trouble in the balancing of the phrases, especially when the composition is for more than one voice.

Suppose it be required to set the last five verses in imitative fashion :

Only thy mind
Untrue I find,
Which carelessly neglects to be
Like stream or shadow, hand or star.

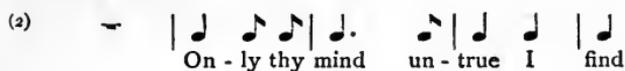
The ear is largely guided by the top part, so that if the soprano begin and the others enter successively, the soprano part must rule the phrasing from the start. Obviously if it go right through it will have ended before the rest, whose entries

are delayed. The Soprano must therefore extend its dimensions by (a) long notes, (b) repetition of words, (c) rests.

(a) It is important to choose appropriate words for long notes:

(1)  Musical notation for example (1). It shows a sequence of notes: 'On - ly thy mind' (four notes), 'un - true' (two notes with a long horizontal line underneath), a rest (represented by three dots), and 'I find' (two notes with a slur over them).

On - ly thy mind un - true . . . I find

(2)  Musical notation for example (2). It shows a sequence of notes: 'On - ly thy mind' (four notes), a rest (represented by a horizontal line), 'un - true' (two notes), 'I' (one note), and 'find' (one note).

On - ly thy mind un - true I find

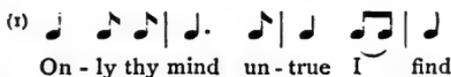
Every part should have some long notes in order to preserve the equilibrium, and in order to allow the rest to catch up.

(b) Never repeat incomplete sense. 'Only thy mind, only thy mind, thy mind,' is simply idiotic.

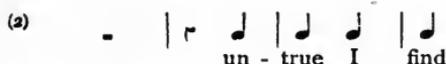
Think what words could be repeated by a reciter without producing an artificial effect, and utilize those; e.g.:

stream or shadow, stream or shadow,
hand or star, hand or star.

Again, do not let under parts enter with the latter part of a phrase only:

(1)  Musical notation for example (1). It shows 'On - ly thy mind' (four notes), 'un - true' (two notes), and 'I find' (two notes with a slur over them, starting after a rest).

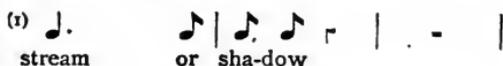
On - ly thy mind un - true I find

(2)  Musical notation for example (2). It shows a rest, followed by 'un - true' (two notes) and 'I find' (two notes with a slur over them, starting after a rest).

un - true I find

Voice (2) is merely singing nonsense. Imagine that each voice has only his own part before him, and see that it forms complete sense.

(c) The use of rests affords relief, and allows the under parts to catch up:

(1)  Musical notation for example (1). It shows 'stream' (one note), a rest, and 'or sha-dow' (two notes with a slur over them, starting after a rest).

stream or sha-dow

(2)  Musical notation for example (2). It shows a rest, followed by 'glects to be like stream' (four notes), and 'or sha - dow' (two notes with a slur over them, starting after a rest).

- glects to be like stream or sha - dow

The part which is for the moment the highest part rules the phrase. In the following frame the phrase as if it began with the Soprano:

Exercises.

I. Work out the following blank rhythms for S. A. T. B.
Choose your own modulations :

SOPRANO.	$\frac{9}{8}$		The	fie - ry			moun - tains			an - swer each
ALTO.	$\frac{9}{8}$		The	fie - ry			moun - tains			an - swer each
TENOR.	$\frac{9}{8}$		The	fie - ry			moun - tains . .			an - swer each
BASS.	$\frac{9}{8}$		The	fie - ry			moun - tains . .			an - swer each

	oth - er,		their thun-d'rings are			ech - oed		from zone to
	oth - er,		their thun-d'rings are			ech - oed		from zone to
	oth - er,		their thun-d'rings are			ech - oed		from zone to
	oth - er,		their thun-d'rings are			ech - oed		from

	zone, . . .		The fie - ry			moun - tains		an - swer each
	zone, . . .		The fie - ry			moun - tains		The fie - ry
	zone, . . .		The fie - ry			moun - tains		an - swer each
	zone to zone,		from zone to			zone,		The fie - ry

THE SETTING OF WORDS

(End of first half.)

sha - - - ken round	win - - - ter's
sha - - - ken round	win - - - ter's
throne, . . the ice rocks are	sha - ken round win - ter's
sha - - - ken round	win - - - ter's

throne	throne	throne	throne	When the
throne	throne	throne	throne	When the
throne	When the	Cla - rion	of the	Ty - phoon

Cla - rion of the	Ty - phoon is	blown, When the
Cla - rion of the	Ty - phoon is	blown, When the
Ty - phoon is	blown, When the	
blown, When the	Cla - rion is	blown, When the

Cla - rion of the	Ty - phoon is	blown.
Cla - rion of the	Ty - phoon is	blown.
Cla - rion of the	Ty - phoon is	blown.
Cla - rion of the	Ty - phoon is	blown.

2. *Oxford Book of Verse.*

No. 840. Set for Tenor and Pianoforte. Binary form.

When Death to either shall come,—
 I pray it be first to me,—
 Be happy as ever at home,
 If so, as I wish, it be.

Possess thy heart, my own;
 And sing to the child on thy knee,
 Or read to thyself alone
 The songs that I made for thee.

No. 850. Set for Bass and Pianoforte. Binary form.

The boat is chafing at our long delay,
 And we must leave too soon
 The spicy sea-pinks and the inborne spray,
 The tawny sands, the moon.

Keep us, O Thetis, in our western flight!
 Watch from thy pearly throne
 Our vessel, plunging deeper into night
 To reach a land unknown.

No. 282. Set for S. A. T. B. Binary form.

I got me flowers to straw Thy way,
 I got me boughs off many a tree;
 But Thou wast up by break of day,
 And brought'st Thy sweets along with Thee.

Yet though my flowers be lost, they say
 A heart can never come too late;
 Teach it to sing Thy praise this day,
 And then this day my life shall date.

No. 253. Set for S. A. T. B. Ternary form.

Fair pledges of a fruitful tree,
 Why do ye fall so fast?
 Your date is not so past
 But you may stay yet here awhile
 To blush and gently smile,
 And go at last.

What! were ye born to be
 An hour or half's delight,
 And so to bid good night?
 'Twas pity Nature brought you forth
 Merely to show your worth
 And lose you quite.

But you are lovely leaves, where we
 May read how soon things have
 Their end, though ne'er so brave:
 And after they have shown their pride
 Like you awhile, they glide
 Into the grave.

NOTES ON EX. I.

(a) The form is Binary, the first half ends at bar 9.

(b) After beginning in harmonic style, imitations should be introduced at bars 4-5. In bars 7-9 the soprano has long notes to enable the other parts to catch up.

(c) At bar 8 the tenor begins the new phrase before the previous one is completed in the other parts. This preserves the effect of continuity.

(d) Bars 9-16 give opportunities for imitative writing.

(e) The change to $\frac{2}{4}$ time at the end affords welcome relief in rhythm. The ending is of course purely harmonic in style.

The inexperienced student would be well advised to set out the last two problems in this form before composing the actual music. If the rhythm is correct, the outline will readily suggest the music.

CHAPTER XXXIV

HARMONY IN FIVE PARTS

1. WHEN the number of parts in the score is increased, it is obvious that there must be frequent doubling. The choice of the right note is merely a matter of common sense, and ought not to cause the student serious difficulty. However, it may be well to give some detailed information on the matter.

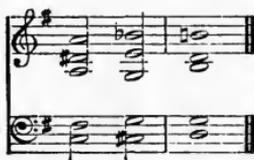
(a) In using common chords any notes may be doubled except the Leading Note. If, however, the Leading Note be a portion of the mediant chord its doubling may be unobjectionable :



(b) As a general principle, in using fundamental discords, double those notes that are free in their progression. Whether the generator be present or not, always aim at doubling the fifth from it :

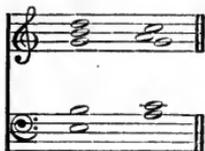


In writing supertonic harmony, however, the seventh from the root may be doubled if necessary :



(c) In writing diatonic sevenths, the root, third, or fifth may be doubled, provided that such note be not the Leading Note.

There is no objection to the doubled Leading Note if it be the fifth of a root:



beyond the fact that the distribution of the harmony is better thus:



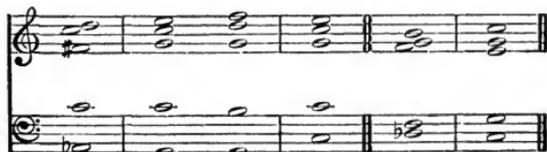
(d) As regards chords of the augmented sixth, obviously in the Italian sixth the only note to double is the third from the bass:



In the case of the French sixth the real root is obviously the note to double:



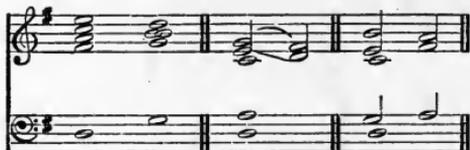
It is, however, quite possible to double the third from the bass:



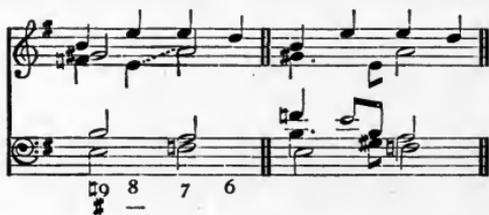
In the case of the German sixth the third from the bass note is the only possible note to double :



2. It is, of course, possible to obtain many combinations without any doubling :



3. Unison by similar motion is forbidden. Often a change of position while the first chord remains will obviate this :



4. The same device prevents overlapping :



5. Consecutives by contrary motion should generally be avoided.

6. It is better to avoid a perfect fifth followed by a diminished fifth, or vice versa, between upper parts when the lower of the two parts involved moves a whole tone :



7. Of the two following examples the second is the better. The leading note is eventually resolved :



8. When every note of a chord is suspended, and it is impossible to make the part that sounds the resolution against the discord move by conjunct and contrary motion towards it, it is generally possible to double the bass :



In the above case the lower of the two parts involved in the fifths moves a whole tone, but there is no evil effect, because the harmony of both chords is derived from the dominant (A).

9. In writing for voices it is usual to employ S. S. A. T. B. or S. A. T. T. B.

In writing for strings, two violas or two 'cellos are used.

If a solo instrument like the clarinet be added to the String

Quartet the latter must form complete harmony without the former.

The clarinet need not be a real part, and being of timbre quite different from the strings, may form with them clashes that would be intolerable between two instruments of the same quality of tone :

MOZART. *Quintet in A major.*

CLARINET IN A.

STRINGS.

At (1) the 2nd Violin runs into the unison (Clarinet part).

At (2) the 1st Violin and Clarinet are not independent parts.

10. Consideration here, however, will only be given to the writing of five real parts, as distinguished from the combination of five players.

The student should read the following String Quintets :

SCHUBERT. Op. 163.

BEETHOVEN. Op. 29 and 20.

MENDELSSOHN. Op. 18 and 87.

BRAHMS. Op. 88 and III.

II. Vocal work. The following may be studied :

BACH. *B minor Mass.*

SPOHR. *Azor and Zemina.* (Quintet in Act 1.)

PEARSALL. 'It was upon a springtide day.'

" 'Spring returns.'

" 'Waters of Elle.'

" 'Why should the cuckoo's tuneful note.'

LLOYD. 'Before me careless lying.'

" 'When at Corinna's eyes I gaze.'

" 'When first I came to court.'

STEVENS, R. J. S. 'It was a lover and his lass.'

" 'Sigh no more ladies.'

BRIDGE. 'Canticle to Apollo'.

MENDELSSOHN. 'The nations are now the Lord's.' (*St. Paul.*)

" 'But our God abideth.' (*St. Paul.*)

12. Before attempting five-part composition, strict counterpoint in five parts should be studied. The various numbers in the *Triumphs of Oriana* should be thoroughly well known. The value of writing madrigals in the strict style cannot be over-estimated. A student ought to be able to write fluently in five parts with no more liberty as regards grammar than is allowed in four parts.

13. In string work there is obviously more scope for latitude than in vocal work.

For instance, there is no harm in doubling a discord that has definite resolution, if one part merely pass through it, or if it make the harmony fuller :

MENDELSSOHN. *Quintet in A.*

The image shows a musical score for Mendelssohn's Quintet in A. It consists of two staves, likely representing the first violin and first viola parts. The music is in A major and 4/4 time. The first staff has a treble clef and the second has a bass clef. Both staves feature complex harmonic textures with many notes beamed together, creating a dense sound. A 'w' marking is placed above the second staff in the middle of the piece. The score ends with a double bar line.

In bars four and five the 1st Violin and 1st Viola proceed thus :

This image shows a close-up of the musical notation for the first violin and first viola parts in bars four and five. The first violin part is on a treble clef staff and the first viola part is on a bass clef staff. Both parts play a similar melodic line. A circled '1' is placed above the first violin staff, indicating a point where the two parts are separated. The notation includes various note values and rests.

These are not independent parts, and the fact that Mendelssohn wrote them does not place them above criticism. The effect here as blocks of harmony is of course perfectly good ; we are, however, criticizing the parts. It must be admitted, however, that the two phrases are separated at (1). Nevertheless Mendelssohn is often a careless writer. In the exposition of the first movement of this Quintet there are several things which a University examiner would blue pencil :

This image shows another close-up of the musical notation for the first violin and first viola parts. A circled '2' is placed above the first violin staff, indicating a point where the two parts are separated. The notation shows the interaction between the two parts, with some notes being shared or closely related.

Although there is a change of chord at (2), the two parts are not independent.

In the next bar but one we have:



Here the doubling is understandable, as being in effect probably preferable to anything else that could be done. But a candidate for a degree would probably be corrected thus, which is, however, far poorer music:



A little further on we have:



The duplication of the parts in octaves is intelligible, because it is carried on long enough for the purpose to be apparent. The fifths, however, would probably be blue pencilled.

A little farther on we have a procedure which has already been mentioned as being exceedingly common, and which has no evil effect:



Of course the truth is that the rule as to 7 to 8 refers to the use of two different chords only:



bad.

All the same the rule as stated has no limitations of this sort. 'No two notes next to each other in alphabetical order may proceed by similar motion to the octave or unison.' The interpolation of the fifth of the root in the above case does not remove the effect. Some probably would object to the above on the ground that no two parts should approach an octave by similar motion when one of them is resolving a discord.

Sir Frederick Bridge, however, seems to have no objection to this:



In fact he distinctly mentions it as a procedure, and quotes the above as an illustration. (Bridge and Sawyer, *Harmony*, p. 183.)

Next we have:

A complex musical score consisting of three staves: treble, alto, and bass clef. The music is in a key with two sharps (D major). The treble staff has a melodic line with many slurs and ties. The alto staff has a similar melodic line. The bass staff has a more rhythmic accompaniment. There are some markings like '5 5' under the bass staff. The score illustrates a procedure of harmonic resolution.

The figure  is hardly sufficiently established to justify the fifths.

The doubling of the seventh in the next bar is justifiable, e. g. to enrich the harmonic effect.

In the next two bars there are not consecutives between the Violin and 1st Viola; the passage really is:



It may be here noted that whereas a passage may be correct in unbroken harmony, it may be incorrect in the broken form. The above would be faulty thus:



On the contrary, a passage that is incorrect as harmony may be correct in the broken form:

Here the 2nd Violin duplicates the 1st. In bar 3 the seventh is doubled by the part that moves in the arpeggio of the chord.

Sufficient has been said to show that neither theory nor practice are above criticism.

It is the same in vocal work.

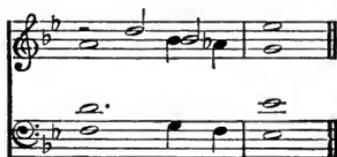
Take for example Mendelssohn's 'The nations are now the Lord's'. It will be unnecessary to comment upon the examples:



Students are accustomed to argue that the second harmony note, e.g. B flat at (1), makes the criticism invalid. It is not so. In Counterpoint the same student would not write:



Of course in a purely harmonic style no one would object to:



d d

First system of musical notation for five parts. The staves are arranged vertically. The top staff is in treble clef with a key signature of one sharp (F#). The second and third staves are in alto clef. The fourth and fifth staves are in bass clef. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Trills and triplets are indicated by the number '3' above or below the notes.

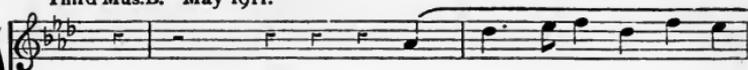
Second system of musical notation for five parts, continuing from the first system. The staves are arranged vertically. The top staff is in treble clef with a key signature of one sharp (F#). The second and third staves are in alto clef. The fourth and fifth staves are in bass clef. The music continues with various rhythmic patterns, including eighth and sixteenth notes, and rests. Trills and triplets are indicated by the number '3' above or below the notes.

HARMONY IN FIVE PARTS

405

Third Mus.B. May 1911.

1ST
SOPRANO.



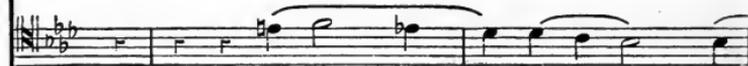
2ND
SOPRANO.



ALTO.



TENOR.



BASS.



C.F.

Continuation of the musical score for five parts. The first two staves are grouped with a brace on the left. The key signature remains two flats and the time signature common. The staves contain the following notes:
1st Soprano: G, A, B, A, G, F, E, D, C, B, A, G.
2nd Soprano: G, A, B, A, G, F, E, D, C, B, A, G.
Alto: G, A, B, A, G, F, E, D, C, B, A, G.
Tenor: G, A, B, A, G, F, E, D, C, B, A, G.
Bass: G, A, B, A, G, F, E, D, C, B, A, G.

First system of musical notation for five parts. The score is written in G major (one sharp) and 2/4 time. The parts are: Treble Clef (top), Treble Clef (second), Alto Clef (third), Tenor Clef (fourth), and Bass Clef (bottom). The music consists of a series of chords and moving lines across five measures.

Second system of musical notation for five parts. The score continues from the first system in G major and 2/4 time. The parts are: Treble Clef (top), Treble Clef (second), Alto Clef (third), Tenor Clef (fourth), and Bass Clef (bottom). The music consists of a series of chords and moving lines across five measures.

Exercises.

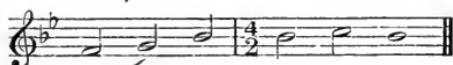
1. Add four vocal parts in the form of a hymn tune. The parts should not cross. Avoid chromaticisms :



God the Fa - ther, God the Son, God the Spi - rit, Three in One,

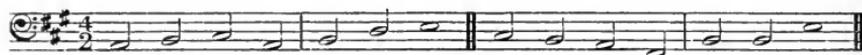


Hear us from Thy heaven - ly throne, Spare us,



Ho - ly Trin - i - ty.

2. Add four parts in Chorale fashion to the following unfigured bass. The parts should not cross. Introduce unessential notes :



(1) Use diatonic sevenths.

3. Write verses in plain chords in five parts (S. S. A. T. B.) introducing :



4. Add four vocal parts in free style to the following basses :

5. Add four parts for strings :

Adagio.

6. Begin as follows, and modulate to C sharp minor, D major, B flat major, A major, F major, A major :

coda.

(1) Harmless fifths.

CHAPTER XXXV

HARMONY IN SIX, SEVEN, AND EIGHT PARTS

1. SOME relaxation of the rules of part-writing is a necessity when writing in more than five parts. The following licences are generally agreed upon:

(a) The leading note may be doubled; but it is objectionable if one of the parts be the bass.

(b) The unison may be approached by similar motion, unless one of the parts involved be the highest or lowest.

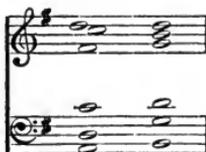
(c) In six parts, consecutive octaves may be taken by contrary motion. In seven and eight parts, octaves and fifths. But these should not occur between the same two parts consecutively.

(d) The diminished fifth followed by the perfect fifth, or vice versa, with the lowest part moving a tone, may be used between upper parts.

2. Fundamental discords should not be doubled as a rule.

There are, however, exceptions to this generalization—

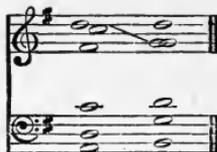
(a) When a discord is capable of two resolutions, one part may take one resolution, another the alternative:



(b) Or, one part can descend to another note of the same harmony:



But such doubling would be poor if one of the discords moved irregularly, e.g.:



Such things may be seen, but the mental effect of the part is bad. As a matter of fact such doubling is hardly ever necessary, and the student should aim at its avoidance rather than its use. (See Ex. 1.)

3. Of course when the root of a fundamental discord is not present, more notes become free in their progression. The aim in the following examples is to show those progressions which are least open to objection. (See Ex. 2.)

Ex. 1.

Ex. 2.

Ex. 1 consists of three examples, (a), (b), and (c), each shown in a system of four staves (treble and bass clefs). Example (a) shows a progression of chords with a leading note in the bass. Example (b) shows a progression of chords with a leading note in the bass. Example (c) shows a progression of chords with a leading note in the bass, which is doubled in the bass staff. Ex. 2 consists of two examples, (1) and (2), each shown in a system of four staves (treble and bass clefs). Example (1) shows a progression of chords with a leading note in the bass. Example (2) shows a progression of chords with a leading note in the bass.

The leading note is in the bass. Its doubling would be unpleasant. (Note in example (c) that the leading note is doubled.)

at the unison by two equal voices.) Any movement downwards to G will transgress the rule that when a part is resolving a discord, no part should move in similar motion with it to the octave of such resolution. In the majority of cases composers abide by this. In six parts no dilemma occurs. (See Ex. 3.)

In seven and eight parts we must double the original seventh (F); but as the root is not present it is not evil in effect. Being most objectionable when it is the diminished fifth from the bass, the ideal will be reached when it is trebled at the unison. (See Ex. 4.)

When, however, the chord resolve on to a six-four before proceeding to the five-three, the diminished fifth from the bass becomes the root of the next chord, and there is less need for criticism of this nature. But the diminished fifth should not be doubled in more parts than is necessary, and it is better as far removed from the bass as possible. (See Ex. 5.)

Ex. 3. Ex. 4. Ex. 5.

The image displays three musical examples, Ex. 3, Ex. 4, and Ex. 5, each showing a chord resolution in six, seven, and eight parts respectively. The notation includes treble and bass clefs, key signatures, and notes. Ex. 3 shows a resolution in six parts. Ex. 4 shows a resolution in seven parts, with the seventh (F) doubled. Ex. 5 shows a resolution in eight parts, with the seventh (F) trebled at the unison.

4. When the diminished fifth does not occur between the bass and an upper part, and when the leading note is not in the bass, there is no objection to the doubling of either. (See Ex. 6.)

5. Diatonic sevenths need not cause any trouble. The seventh should not be doubled, unless remaining to be a part of the next chord. (See Ex. 7.)

Ex. 6.

Ex. 7.

6. As regards the chord of the added sixth, if it resolve on to the tonic chord, any note may be doubled, though it is better not to double the sixth from the bass because the progression upwards to the third of the tonic seems its only natural resolution. (See Ex. 8.)

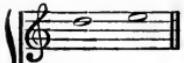
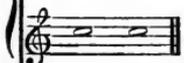
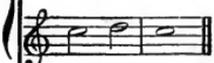
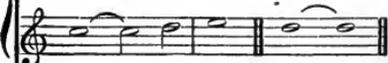
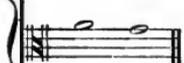
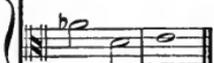
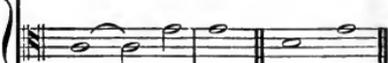
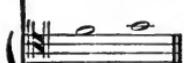
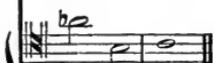
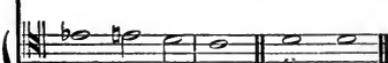
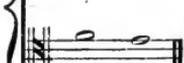
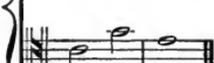
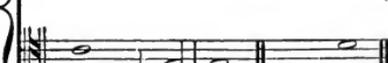
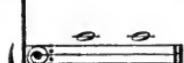
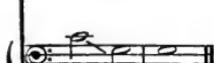
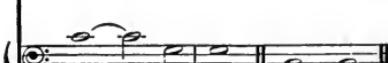
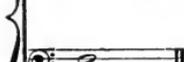
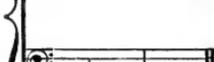
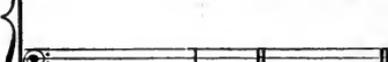
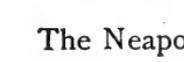
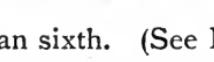
Mentally here D is discordant rather than C.

7. The Italian sixth cannot be used in eight parts without the

infraction of some rules. It will be necessary to manipulate it somewhat as in Ex. 9.

Its use in more than four parts is exceedingly rare.

But the German and French sixths are easy to manipulate. (See Ex. 10.)

Ex. 8.	Ex. 9.	Ex. 10.
		
		
		
		
		
		
		
		
		

The Neapolitan sixth. (See Ex. 11.)

In six parts the writing ought to be as strict as in five, except that octaves by contrary motion and the unison by similar motion may be used.

8. Double suspensions and retardations are useful. The ninth can be doubled and resolve both ways. (See Ex. 12.)

9. In writing for double choir, the licences mentioned in this chapter should only occur between voices in different choirs.

Ex. 11.

Ex. 12.

10. The following works should be studied :

Six parts.

Strings. SPOHR. Sextet in C. Op. 140.

RAFF. Op. 178 in G minor.

DVOŘÁK. Op. 48.

BRAHMS. Op. 18 and 36.

Voices. PEARSALL. 'Take heed, ye shepherd swains', 'Summer is
y'coming in.' 'List! Lady, be not coy',
'O ye roses'.

LLOYD. 'Lord teach us to number our days'.

WEELKES. 'As Vesta was from Latmos hill descending'.

Eight parts.

Voices. BACH. 'Be not afraid'.

MENDELSSOHN. Psalm 114.

„ Psalm 2.

PARRY. 'Blest pair of Sirens'.

CORNELIUS. 'O Death! Thou art the tranquil night'.

LLOYD. 'The righteous live'.

„ 'The rosy dawn'.

„ 'To morning'.

Examples.

Figured Bass. As the study of the progression of many parts alone is good mental discipline, examples of figured bass are here for the first time given. It is not enough that the progressions should be grammatical. The parts should be as varied and elegant as it is possible to make them. Of course nothing in the nature of figure can be attempted; nevertheless no part should be lifeless. The last example (Mus.D. Oxon., 1908) is one of the most difficult figured basses ever set. The student would do well to work it out before examining the working here given. He need not be discouraged if at the end of two hours work several moves remain unsolved, and the parts seem as ungainly as possible.

1. Figured Bass. Mus.D. Oxon. 1901.

6 7 6 7 9 9 5- 6 6 6
7 4 3- 4 3

The first system of the musical score consists of six staves. The top two staves are in treble clef, and the bottom four staves are in bass clef. The music is written in a key signature of two sharps (F# and C#). The notation includes quarter notes, eighth notes, and rests, with various slurs and phrasing marks.

7	5	8	7	5	_____	b6	_____	5	-	7
5	-	-	6	3	_____	#3	_____	3	-	#5
4	-	#	-							

The second system of the musical score consists of six staves, continuing the notation from the first system. It maintains the same key signature and clef structure.

#9	8	6	6	b7	8	7	4	3
#7	8			b	4			
4	3							

AND EIGHT PARTS

2. Mus.D. Oxon. 1904.

6 6 6 7 6 - 4 3 4
5 5 # 5

6 #7 6 7 4 3 9 8 6 9 8 7 - -
5 # 7 6 4 7 6 5 - 6
4 - 4 3 -

(3) Mus.D. Dunelm. 1908.

6 - 6 - 7 6 6 6 - 5 7 6 6
 6 5 6 5 — 5 3 4 3 - 3 3 2 3 2

The image shows a musical score for eight parts. The first two staves are in treble clef, and the remaining six staves are in bass clef. The music is in a key with one flat (B-flat major or D minor) and a common time signature. The notation includes various note values, rests, and phrasing slurs. At the bottom of the page, there is a figured bass line with the following figures: 7, a dash, 7 6 5, a dash, b7, 4 3, and a dash.

7 — 7 6 5 — b7 4 3 —
 # — — 2 — —

The image shows a musical score with eight staves. The top four staves are grouped by a brace on the left and represent a six-part vocal work. The bottom four staves are grouped by a brace on the left and represent a six-part string work. The music is in 2/4 time and G major. The bottom staff includes figured bass notation: 6 - 4 3 7 8 6 7 8 # 6 6 - 7 9 8 / 5 4 - 2 - 5 6 6 5 4 7 4 3.

Six and eight-part vocal work. Six-part string work.

For the last examples we set a six-part string example and a melody from Dr. Buck's *Unfigured Harmony* (a) for six and eight parts, (b) for double choir. The student will find it helpful to compare the two, noting where the writing for eight-part chorus and double choir differs, and finding out the reasons. This will be best illustrated by copying out the original eight-part working as if for double choir; the student will then at once see that here and there licences occur between voices in the same choir, whereas they should only occur between voices in different choirs. Of course, when both choirs are moving together, both basses need not be real basses; but such things as consecutives by contrary motion and doubled leading notes or discords should not occur between voices in the same choir.

Mus.D. Oxon. Nov. 1905.
C.F.

The first system of the musical score consists of six staves. The top two staves are in treble clef, and the bottom four staves are in bass clef. The key signature is one sharp (F#) and the time signature is 9/8. The music features a complex rhythmic pattern with eighth and sixteenth notes. The bottom four staves include dynamic markings: *pizz.* (pizzicato) and *arco.* (arco). The first staff of the system has a fermata over the final note.

The second system of the musical score consists of six staves, continuing the piece. It maintains the same key signature and time signature as the first system. The notation includes various rhythmic figures and phrasing slurs. The bottom four staves continue with the *pizz.* and *arco.* markings.

The first system of the musical score consists of five staves. The top two staves are in treble clef, and the bottom three are in bass clef. The music is written in a key signature of two sharps (F# and C#) and a 3/4 time signature. The first staff contains a melodic line with eighth and sixteenth notes, often beamed together. The second staff continues the melodic line. The third staff features a bass line with notes and rests, including a dynamic marking of *pizz.* (pizzicato). The fourth staff continues the bass line with *pizz.* and *arco.* (arco) markings. The fifth staff continues the bass line with *pizz.* and *arco.* markings. Brackets on the left side group the staves into pairs.

The second system of the musical score consists of five staves, continuing the piece from the first system. The notation and clefs are consistent with the first system. The music continues with melodic and bass lines, featuring various rhythmic patterns and dynamics. The *pizz.* and *arco.* markings are used to indicate changes in playing technique. The staves are grouped with brackets on the left side.

HARMONY IN SIX, SEVEN

The first system of the musical score consists of six staves. The top two staves are in treble clef, and the bottom four staves are in bass clef. The music is written in a key with two sharps (F# and C#) and a 3/4 time signature. The first staff features a melodic line with eighth and sixteenth notes, often beamed together. The second staff provides a counter-melody with similar rhythmic patterns. The third and fourth staves contain arpeggiated chords and moving bass lines. The fifth staff continues the harmonic texture with chords and moving lines. The sixth staff, the bass line, begins with the instruction *pizz.* (pizzicato) and later transitions to *arco.* (arco). The system concludes with a double bar line.

The second system of the musical score consists of six staves, continuing the composition from the first system. The notation remains consistent with the first system, featuring treble and bass clefs, a key signature of two sharps, and a 3/4 time signature. The melodic lines in the upper staves continue with intricate rhythmic patterns, while the lower staves provide a rich harmonic foundation with arpeggiated chords and moving bass lines. The system concludes with a double bar line.

The first system of music consists of six staves. The top two staves are in treble clef, and the bottom four staves are in bass clef. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamics include *pizz.* (pizzicato) and *arco.* (arco). The notation includes slurs, accents, and fermatas.

The second system of music consists of six staves, continuing the piece. The notation is similar to the first system, with various rhythmic patterns and dynamics. Dynamics include *pizz.* and *arco.* The notation includes slurs, accents, and fermatas.

1st Soprano from Buck's *Unfigured Harmony*.

f

Down let him lie, Down let him lie, and
Down let him lie, and
Down let him lie, Down let him lie,
Down let him lie, Down let him
Down let him lie, and die, Down . . let him lie, and
Down let him lie, Down let him lie, and slum - -

rit.

slum - b'ring die, And change, and
slum - - - - b'ring die, and slum - b'ring die, And
. . . and die, and slum - b'ring die, And
lie, . . and die, and slum - b'ring die, And
slum - b'ring die, and slum b'ring die, And
- - b'ring die, and slum - b'ring, slum - b'ring die, And

Lento.

p

change his soul for har - mo - ny, his soul

change, and change his soul for

change his soul, and change his

and change his soul for har - mo - ny, . . .

change, . . . and change . . . his soul,

change, . . . and change his

and change his soul, and change his

change, and change his

HARMONY IN SIX, SEVEN

. for har - - - - - mo - ny.

har - mo-ny, for har - mo - ny.

soul, his soul for har - mo - ny.

. . his soul for . . har - mo - ny.

And change his soul for har - mo - ny.

soul for har - - - mo - ny.

soul, his soul for har - mo - ny.

soul, his soul for har - mo - ny

The same for Double Choir.

3.

Down let him lie, Down let him lie, and

Down let him lie, Down let him lie, and

Down let him lie, Down let him lie, and

Down let him lie, Down let him lie, and

Down let him lie, Down let him lie,

Down let him lie, Down let him lie,

Down let him lie, Down let him

Down let him lie, Down let him lie,

HARMONY IN SIX, SEVEN

slum - b'ring die, And change, and

slum - b'ring die, and slum - b'ring die, And

slum - b'ring die, and slum - b'ring die, And

slum - b'ring die, And change, and

and slum - b'ring die, and slum-b'ring die, And

And change, and

lie, and slum - b'ring, slum - b'ring die, And

and slum - b'ring, slum - b'ring die, And

4.

Lento.

change his soul for har - mo - ny, his soul

change his soul, and change his

change, . . . and change . . . his soul,

change, . . . and change, and

change his soul, and change his soul for

change, and change his soul for har . mo - ny,

change, . . and change . . . his soul, and

change his soul, and

HARMONY IN SIX, SEVEN

. for har mo - ny.

soul, his soul for har - mo - ny.

and change his soul for har - mo - ny.

change his soul for har - mo - ny.

har - mo - ny, for har - mo - ny.

and change his soul for har - mo - ny.

change his soul for har - mo - ny.

change his soul for har mo - ny.

Exercises.

1. Add (a) five vocal parts, (b) seven vocal parts, (c) seven vocal parts arranged as Double Choir :

(a)

6 6 5
 4 3

(b)

6 6 6 7
 5

(c)

6 6 b7 6 5
4 3 4 3

(d)

7 6 7 6 5
 5

(e)

#6 b7 6 b6 7
4 3 7

(f)

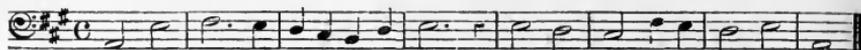
b b6 6 7 9 10
b3 4 3 9 8
 7 8
 4 3

2. Add seven parts for voices :

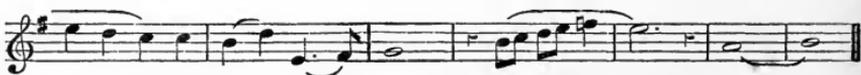
(a) *Slow.*

(b)

(c)



(d)

(e) *Slow.*

(f)



3. Add six parts for Double Choir.

(g)





CHAPTER XXXVI

TWO AND THREE-PART WRITING

1. UNACCOMPANIED two-part writing for any length of time is very rare, except when conceived for the pianoforte. It is, of course, often used for a short period in a work that is originally set out in more parts, as a means of relief from the more elaborate texture. The following well-known extract from the Amen Chorus in Handel's *Messiah* is an example :

Ex. 1.

1st VIOLIN.

2nd VIOLIN.

2. General principles of unaccompanied two-part writing.

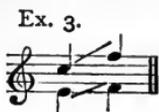
(a) The lower part must be a good bass :

Ex. 2.

(1)

The above example is faulty, because the combination at (1) is mentally a second inversion, with the bass incorrectly quitted by leap.

(b) The rules of harmonic progression referable to extreme parts apply to two parts :



(c) The harmonic interval of the perfect fourth should be avoided unless one of the notes forming it be unessential :



(d) The harmonic intervals of the augmented fourth and diminished fifth may be used if treated correctly as implied chords :



Similarly the minor and diminished seventh or their inversions may be used :



(e) Any discords may be used if one of the notes be unessential and correctly approached and quitted :



The following example for the pianoforte will serve to illustrate the main points :

Ex. 8.

Andante. HANDEL. Suite VII.



At (1) an implied six-four is incorrectly approached. But Handel was of course influenced by the old contrapuntal principle that, as no fourth was present, the writing was correct. At (2) consecutive discords are used. The effect is quite good, because C is essential.

3. *Accompanied two-part writing.*

(a) When two voices are accompanied by instruments, or when two instruments are accompanied by a keyed instrument or instruments of a different family, the two solo instruments or voices must form correct two-part harmony in themselves.

The following is bad :



(b) When the lower of the two solo parts is at the pitch of the ordinary bass, it may be considered as a bass momentarily, or for some considerable time, and the accompaniment can double it an octave lower :

Ex. 10.

VIOLIN.

'CELLO.

PIANO.

Detailed description: This musical example shows three staves. The Violin staff (top) has a treble clef and contains a melodic line with eighth notes and a slur. The Cello staff (middle) has a bass clef and contains a simple harmonic accompaniment with quarter notes. The Piano staff (bottom) is bracketed together and contains a treble and bass clef; the treble part has a melodic line with eighth notes and a slur, while the bass part has a simple harmonic accompaniment with quarter notes.

(c) When the lower of the two parts is out of the range of the ordinary bass it may be treated as an upper part to which the accompaniment supplies the bass :

Ex. 11.

Detailed description: This musical example shows two systems of staves. The first system has a Violin staff (top) with a treble clef and a Cello staff (bottom) with a bass clef. The Violin part has a melodic line with eighth notes and a slur. The Cello part has a simple harmonic accompaniment with quarter notes. The second system has a Piano staff (top) with a treble and bass clef and a Cello staff (bottom) with a bass clef. The Piano part has a melodic line with eighth notes and a slur, while the Cello part has a simple harmonic accompaniment with quarter notes.

or it may be the bass, and in that case it should generally be duplicated at the unison only :

Ex. 12.

Detailed description: This musical example shows two systems of staves. The first system has a Violin staff (top) with a treble clef and a Cello staff (bottom) with a bass clef. The Violin part has a melodic line with eighth notes and a slur. The Cello part has a simple harmonic accompaniment with quarter notes. The second system has a Piano staff (top) with a treble and bass clef and a Cello staff (bottom) with a bass clef. The Piano part has a melodic line with eighth notes and a slur, while the Cello part has a simple harmonic accompaniment with quarter notes.

There are examples where this recommendation is not observed, but the effect is usually unsatisfactory.

(d) If the accompaniment be well up in range, the lower solo part may be a bass to it:

Ex. 13. BEETHOVEN. Trio. Op. 1, No. 1.

4. Unaccompanied Three-part writing.

(a) Three-part writing is really more difficult than work in four parts, because of the danger of getting thin, incomplete, or ambiguous harmony. At the essential points the harmony should be as complete as possible. Such a cadence as the following should be avoided, though it is often found:

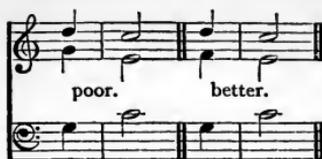
Ex. 14.

The next examples show better writing:

Ex. 15.

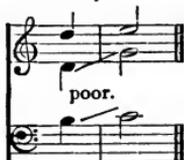
(b) The third should not be omitted on the accent unless the seventh be introduced with the fifth:

Ex. 16.



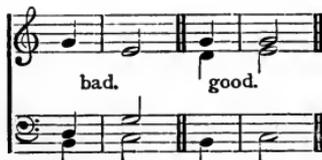
(c) When a fifth or octave is approached by similar motion between different chords, it is better that the higher part move by step:

Ex. 17.



(d) Any wide gap should occur between the two lowest parts:

Ex. 18.



(e) The lowest part, at whatever pitch, is of course the bass.

5. All that need be said about accompanied three-part writing is that the principle as regards the lowest part is the same as that of two-part accompanied work.

6. A study of the following will clear up any further doubts the student may have:

- Unaccompanied vocal trio. PARRY. 'O may we ne'er forget' (*Judith*).
 Accompanied vocal trio. PARRY. 'O that men would therefore praise the
 Lord' (*Judith*).
 String trio. BEETHOVEN. Op. 3 in E flat.
 „ „ Op. 9 in G.
 Keyed instruments.
 BACH. Organ sonatas.
 „ Any of the three-part fugues of the Forty-Eight.

7. A few words may be added on the distribution of the parts :

(a) In vocal work the parts should generally be equidistant. If any wide gap occur it should be placed between the two lowest parts.

(b) In string work, although this general principle holds good, there are some important exceptions.

(1) The viola and 'cello may form a complete and separate accompaniment to the violin, in the manner of a separate group :

Ex. 19. BEETHOVEN. Trio in G major. Op. 9, No. 1.

This, however, is not three-part writing. It serves, nevertheless, to illustrate a common procedure in string trios, e.g. double stopping. It seems as if composers were often conscious of the thin effect of three parts only, and strove in various ways to evade it.

The following example is more to the point at issue :

Ex. 20. BEETHOVEN. Trio in E flat. Op. 3.

(2) The consciousness of the thin effect of three parts mentioned above often leads composers to evolve arpeggio figures covering

a rather wide range, being really a broken form of the device illustrated in Ex. 19:

EX. 21.

BEETHOVEN. Trio in G major.
Op. 9, No. 1.

Musical score for Ex. 21, showing three staves of music. The top staff has a melodic line with a slur over a series of eighth notes. The middle and bottom staves have accompaniment with dotted rhythms.

(3) When a melodic figure is duplicated in thirds, the remaining part may be at some distance from the other two :

EX. 22.

Musical score for Ex. 22, showing three staves of music. The top staff has a melodic line with a slur and a triplet. The middle and bottom staves have accompaniment. The word "Ibid." is written above the final measure of the top staff.

It should be said that when writing in a certain definite number of parts it is not necessary that all the parts should always be independent. That is to say, that if asked to write a String Trio the student should not hesitate to introduce such a procedure as the following if the end justifies the means :

EX. 23.

Musical score for Ex. 23, showing three staves of music. The top staff has a melodic line with a slur. The middle and bottom staves have accompaniment. The word "Ibid." is written above the final measure of the top staff, and "&c." is written below the middle staff.

It is not three-part writing, but it is of course legitimate writing for String Trio. Thus in an examination, if the form of the question be 'write parts for Violin, Viola, and 'Cello', the above would be quite correct as one of the technical devices of String Trio work.

(c) Pianoforte writing.

(i) The following are models of effective part distribution :

Ex. 24.

J. S. BACH. Third English Suite.

(2) Just as in string work, two parts moving in thirds may be separated from the third part by a wide gap :

Ex. 25.

J. S. BACH. Fifth English Suite.

(3) Abnormal distribution may of course always be used for special effect. Observe the sombre feeling created by the low inside part of the following :

Ex. 26.

Ibid.

(4) Sometimes, too, a melody which lies somewhat high in compass is accompanied by the left hand. This enables the right hand to concern itself wholly with the melody. The Sarabande in the second of Bach's French Suites illustrates this. The opening bars may be quoted:

Ex. 27.

These points seem to cover the chief cases of abnormal part distribution. The procedures should of course be used with reserve, the normal distribution being the rule rather than the exception.

CHAPTER XXXVII

MODERN TENDENCIES

1. IT is almost a platitude to say that the art of an age reflects its spirit. The fundamental principles which underlay progress in the ordinary affairs of life are also those that regulate the evolution of art in all its spheres. The music is always re-adjusting itself to new conditions. As life becomes more complex, so the music becomes more intricate. The individual nature of the Greek religion was reflected in the use of single melody. The congregational element of the Christian worship found its counterpart in the polyphony of Palestrina. The Renaissance was signified in music by its secularization, and the formal spirit of the eighteenth century is very clearly visible in the stereotyped methods of Haydn and Mozart. Of course such a reflection must occur not only in the form in which the music is cast, but also in the contour of its melody and in the character of its harmony.

2. Art cannot remain at a standstill: it may not be that it is necessarily always advancing. Up to the present we have witnessed two main experimental eras, and it is of course natural that in those periods much of the work should be purely empirical. The first great crisis in the evolution of harmony came about the year 1600 when it seemed that the horizontal method had exhausted itself. The earliest attempts in the 'new music' appear to us crude and childish, and are not to be compared with the finished examples of madrigal, mass, and motet. But this descent into the valley, as Dr. Walker aptly terms it, was necessary before another peak could be climbed. That peak has been reached, and another descent into the valley has to be made. The resource of chromatic harmony has been exhausted, and composers are searching for new paths. And it is probable that much of this 'new music' will be regarded by future generations as crude and childish. But it is the beginning of a new

era, and it behoves us to withhold our judgement till the 'new music' has, so to speak, 'settled in'.

3. The resource thus far considered in this treatise is that which has been generally accepted as being possible with twelve sounds in the octave. It was hinted in a previous chapter that the Day theory was obviously inadequate to meet much that is common in modern procedure, and along with this there is a general disposition to set aside many of the laws of part-writing that regulated the use of this material. One important fact is clear, and that is that as harmony gets more complicated and chromatic, progressions, which under simpler conditions sound crude, lose their evil effect when utilized in these more delicately organized situations. A cultivated ear must be the final arbiter in all such matters. Theorists must now recognize that consecutive fifths may often be excellent in effect, and the consecutive discords may be quite satisfactory. This matter has already been mentioned. But it cannot be too strongly emphasized that laws of progression which referred to harmony which was mainly diatonic must be considerably modified when the whole gamut of chromatic resource is utilized.

4. In the present chapter it is intended to take a broad survey of the main features of evolution that have characterized the art during the last fifty years, that is so far as the material of composition is concerned. It will be convenient to discuss the matter under four main heads:

(a) New uses of old diatonic material.

(b) The exhaustion of the possibilities of chromatic resource.

(c) New paths.

(d) The aims of modern composers, and their influence on the idiom and technique, with special reference to the French School.

5. *New uses of old diatonic material.*

It is true that if the resource at the disposal of the composer remained stationary, yet there would always be men with sufficient personality to use that resource in a purely individual and distinctive way. It is also true that ingenuity in evolving new resource may be mistaken for genius. It is sometimes forgotten that it is really the ideas that are expressed that matter, rather

than the particular idiom that is used in expressing them. It has been said that a modern composer cannot do more than express what has been expressed before, but differently. This is true so far as the legitimate aims of music are concerned. But, again, it must be remembered that the success of this expression depends a great deal more upon the personality of the composer than on the number of colours he has in his paint box. This point is aptly illustrated in the work of Parry. He does not attempt to enlarge the bounds of harmonic resource, but he uses it in such a way that the style is quite distinctive. And any one who is intimately acquainted with his works must instinctively feel that an excursion into the field which is represented by Elgar would be so foreign to his personality as to produce at once the effect of artificiality. Both are giants, but of different temperament, and probably with totally different outlooks. What then are the purely technical devices that give Parry's music the distinctive note that is so genuinely characteristic? Undoubtedly the most prominent feature of his music is his constant use of diatonic discords.

If asked to harmonize :



in a plain style, the average student would write something of this sort :



Parry, however, writes as follows :

Ex. 3. PARRY. *There rolls the deep.*

This produces an effect that is quite new and characteristic. Again, just as Bach used a sequence of secondary sevenths in the following :

Ex. 3 a.

BACH. *St. Matthew Passion.*

Lord, is it I?

Lord, is it I? is it I? Lord,

Lord, is it I? is it I?

Lord, is it

is it I? is it I?

is it I? is it I?

Lord, is it I? is it

I? is it I?

&c.

so Parry uses a succession of diatonic ninths:

Ex. 3 *b.*

PARRY. *Judith.*

Hail, thou art high-ly fa-voured, king! . . . thou art high-ly fa-voured

Hail, thou art high-ly fa-voured, king! thou art high -

&c.

The opening choral section of Parry's 'The love that casteth out fear' illustrates his free use of diatonic discords:

Ex. 4.

O my peo - ple, what have I

O my peo - ple, what have I

O my peo - ple, what have I done to thee,

O my peo - ple, what have I done to thee,

done to thee, where - in have I wear - ied thee.

done to thee, where - in have I wear - ied thee.

where - in have I wear - ied thee. . . .

where - in have I wear - ied thee. . . .

Another important feature of all modern work is the use of accented unessential notes, and unaccented unessential notes struck with harmony notes :

Ex. 5.

PARRY. *Blest Pair of Sirens.*

The student should observe the approach of a diatonic seventh as a passing note, and then the quitting of it as an essential note. In bar one of the above the ear first accepts the D in the bass as a passing note, then it realizes it to be the seventh of the root E flat, and finally accepts it as the preparation of another discord.

In the next example :

Ex. 6.

PARRY. 'Put off, O Jerusalem.' (*Judith.*)

the noteworthy points are the striking of harmony notes with

unessential notes producing new harmonic effects. Next we get the appoggiatura without the resolution. The following diagram will make the evolution clear :

Ex. 6 a.



In the example quoted below the G at (1) displaces the F, and then becomes a seventh at (2) :

* Ex. 7. RAVEL. *Le Paon.*

In the next example the F similarly displaces the E flat :

* Ex. 8. DEBUSSY.
La Cathédrale engloutie.

This, of course, leads to the evolution of such chords as the following :

* Ex. 9. *Ibid.*

* By permission of the proprietors, MM. Durand et Cie, Paris.

These chords are due to Debussy's considerations of the harmonic series of a fundamental, and their bearing on the formation of new harmonic effects. Thus, again, what was formerly a dissonance becomes, or at any rate is treated as, a consonance. It is well known that this idea occurred to Debussy through his observation of the harmonics of bells and bugles. Several composers have used the ecclesiastical modes for special effect. This is a marked feature of Debussy. For example, the part-song 'Dieu! qu'il la fait bon regarder!' is written in the Mixolydian Mode. The cadence may be quoted :

* Ex. 10.

Dieu! qu'il la fait bon re - gar - der.

The musical score for Ex. 10 consists of two staves. The upper staff is a vocal line in G major (one sharp) and 3/4 time. It begins with a whole note 'Dieu!' followed by a series of eighth notes: 'qu'il la fait bon re-gar-der.' A triplet of eighth notes is marked above the 'la' and 'fait' syllables. The lower staff is a piano accompaniment in the same key and time, featuring a steady eighth-note bass line and chords that support the vocal melody. The piece concludes with a final cadence on the word 'der.'

Further, the methods of Diaphony are recalled in the following :

* Ex. 11.

DEBUSSY. *La Cathédrale engloutie.*

The musical score for Ex. 11 shows the piano accompaniment for Debussy's 'La Cathédrale engloutie.' It is written for two staves in G major (one sharp) and 3/4 time. The music is characterized by dense, block-like chords and a slow, atmospheric texture. The right hand plays chords with some internal movement, while the left hand provides a steady harmonic foundation. The piece ends with '&c.' and a double bar line. Below the staves, there is a marking '8va.' with a line indicating an octave shift.

To return to the work of Parry, two other features remain to be noticed. One is the frequent use of the pedal point ; this, together with the employment of diatonic discords and appoggiaturas, produces a certain richness and warmth in harmonic effect :

Ex. 12.

Lento.

PARRY. *Judith.*

The musical score for Ex. 12 shows the piano accompaniment for Parry's 'Judith.' It is written for two staves in G major (one sharp) and 4/4 time. The tempo is marked 'Lento.' The piece features a prominent pedal point on the G note in the bass, which is sustained throughout. The upper staves contain a melody with diatonic discords and appoggiaturas, creating a rich and warm harmonic effect. The accompaniment consists of chords and moving lines that support the melody.

Finally, it is common to find sections framed upon a scalar bass. In the chorus 'It is the God's decree' in *Judith*, in which the style is fugato, the first thirteen bars are framed upon a bass which moves up the diatonic scale of E in semibreves from D sharp below the stave to middle C sharp.

There is nothing new in actual resource, but the principle has an important bearing on future developments. Especially in working on a large canvas, such a method is useful, in that it gives some point to the march of the harmonies. One feels that it adds a stimulus and leads the mind to expect a point of climax. A few bars may be quoted to make the procedure clear:

Ex. 13.

The musical score for Ex. 13 consists of two staves. The top staff is a treble clef with a key signature of one sharp (F#) and a common time signature (C). It contains a melodic line starting on D4, moving up stepwise through E4, F#4, G4, A4, B4, C5, and ending on D5. The bottom staff is a bass clef with the same key signature and time signature. It contains a bass line starting on D3, moving up stepwise through E3, F#3, G3, A3, B3, C4, and ending on D4. The melody is marked with a forte 'f' dynamic and the word 'Ibid.' at the end. The bass line is marked with '8ves.' below it.

The extension of this principle may be conveniently discussed under the next heading.

6. *The exhaustion of the possibilities of chromatic resource.*

It was said in a previous chapter that the natural evolution of harmony pointed to the use of common chords, diminished triads, augmented triads, and fundamental discords on every degree of the scale. Before complete freedom in the use of resource becomes possible, composers invariably hang their new effects upon one of three props:

(a) A note in common:

* Ex. 14.

DEBUSSY. *Danseuses de Delphes.*

The musical score for Ex. 14 consists of two staves. The top staff is a treble clef with a key signature of one sharp (F#) and a common time signature (C). It contains a melodic line starting on D4, moving up stepwise through E4, F#4, G4, A4, B4, C5, and ending on D5. The bottom staff is a bass clef with the same key signature and time signature. It contains a bass line starting on D3, moving up stepwise through E3, F#3, G3, A3, B3, C4, and ending on D4. The melody is marked with a forte 'f' dynamic and the word 'Ibid.' at the end. The bass line is marked with '8ves.' below it.

* By permission of the proprietors, MM. Durand et Cie, Paris.

(b) Fortuitous occurrence, caused by contrary and conjunct movement :

EX. 15. ELGAR. *The Apostles.*



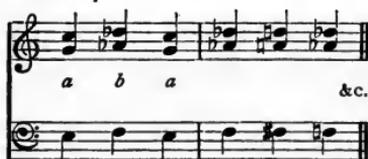
Here the contrapuntal principles come into play, the music being conceived primarily as strata of melodies. But this is after all only a logical extension of the familiar diatonic device :

EX. 16.



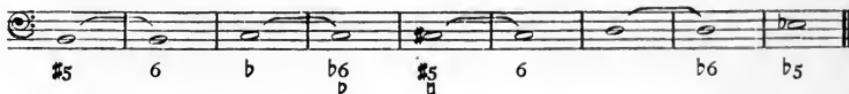
(c) The use of the chord of the Neapolitan Sixth accustomed men's ears to a sequence of chords a semitone apart :

EX. 17.



In the above, chord (b) may be regarded as auxiliary to chord (a). Hence we get the principle of chord sequences with some part or parts moving in semitones. No doubt the chromatic scalar bass had much influence in developing this feature. In Parry's 'The love that casteth out fear', at the section 'They all shall wax old as a garment', the score is founded on the following basis :

EX. 18.



The style of the texture is as follows :

Ex. 19.

They all shall wax old as a gar-ment.

Here the chords are held together by the principle of a note in common.

In the following example the same note remains common throughout, and forms an inverted pedal :

Ex. 20.

PARRY. *Judith.*

Examples, such as the following, in which contrary motion is combined with a note in common, are of course quite old fashioned now :

Ex. 21.

&c.

It is now easy to see how such progressions as the following arise :

EX. 22. ELGAR. *Dream of Gerontius.*



Ibid.



Ibid.



In the last example the extreme parts move by conjunct degrees *inwards*.

The scalic bass became almost a mannerism; and it is probable that it is the natural means by which composers so accustom themselves to the effects of these progressions that they eventually use them without such a prop :

* Ex. 23.

WAGNER. *Tristan.*



* By permission of Messrs. Breitkopf and Härtel, Great Marlborough Street, London, W.



Ex. 24.

ELGAR. *Dream of Gerontius.*

In the next example the scalic feature is transferred to an upper part :

Ex. 25.

ELGAR. *The Apostles.*

It remains to give examples of the free use of resource which this technique made possible, and also its expansion :

(a) The juxtaposition of common chords, not only unrelated,

but with the bond of connexion reduced to a minimum, e.g. an inside part moving in semitones :

Ex. 26. *Ibid.*

The example shows two staves of music. The upper staff features a complex texture with multiple voices, including a prominent inner voice moving in semitones. The lower staff provides a bass line with sustained chords and moving lines.

(b) Fundamental sevenths on various degrees of the scale :

* Ex. 27. DEBUSSY. *La soirée dans Grenade.*

This example illustrates Debussy's use of fundamental sevenths. The upper staff contains a melodic line with grace notes, while the lower staff features a series of chords, each a fundamental seventh, moving stepwise through the scale. The dynamic marking *pp* is present.

* Ex. 28. DEBUSSY. *La Cathédrale engloutie.*

This example shows Debussy's use of fundamental sevenths in 'La Cathédrale engloutie'. The upper staff has a melodic line with grace notes, and the lower staff consists of a series of chords, each a fundamental seventh, moving through the scale.

In the following example one fundamental seventh is the appoggiatura to the succeeding seventh (1 to 2):

* Ex. 29. DEBUSSY. *Prelude iv.*

This example demonstrates an appoggiatura seventh. The upper staff shows a melodic line with grace notes. The lower staff shows a series of chords, each a fundamental seventh, with the first chord acting as an appoggiatura to the second. Fingerings '1' and '2' are indicated for the chords.

* By permission of the proprietors, MM. Durand et Cie, Paris.

(c) Consecutive augmented triads :

* Ex. 30. DEBUSSY. *Danseuses de Delphes.*

The musical score for Ex. 30 consists of two staves. The right-hand staff features three augmented triads, labeled 1, 2, and 3, with a *pp* dynamic marking above the third. The left-hand staff has a bass line with a *8ve.* marking below the first measure.

It is surely rather clumsy to analyse thus :

- (1) Derived from tonic. B natural=C flat.
- (2) „ „ supertonic.
- (3) „ „ dominant. C sharp=D flat.

It is simpler to say that (1) is the subdominant triad with the fifth sharpened, (2) is the chromatic chord on the minor seventh with the fifth sharpened, (3) is the dominant chord with the fifth sharpened.

In the following example we get consecutive augmented triads combined with two parts proceeding in semitones by contrary motion outwards and inwards :

* Ex. 31.

DEBUSSY. *Jardins sous la pluie.*

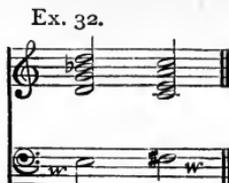
The musical score for Ex. 31 consists of two staves. The right-hand staff features a sequence of augmented triads, each marked with a '3' above it. The left-hand staff has a bass line with a *Db* marking below the first measure.

(d) Altered chords.

It is of course quite possible to regard the augmented triad as an altered form of the major common chord, e.g. with the fifth sharpened. And this point of view opens out a large field for expansion.

* By permission of the proprietors, MM. Durand et Cie, Paris.

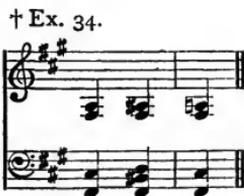
For example, instead of writing :



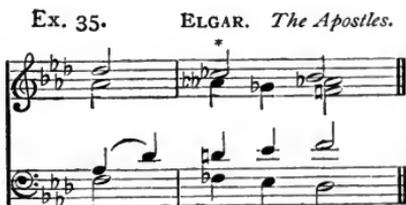
Debussy flattens the fifth of each root thus :



Cesar Franck, in his Symphonic Poem, *Les Djinns*, uses a new form of the chord of the augmented sixth, with the fifth from the D sharpened (A sharp in place of A natural) :



But it hardly seems necessary to catalogue such things as new chords. For example, it could be said that the following was a new form of the chord of the augmented sixth :



But it should suffice to say that F flat, D, and A double flat were all chromatic passing notes. There is a real danger in

† By permission of Messrs. Enoch.

attempting to catalogue every possible combination as a chord ; this is especially so when the texture is contrapuntal in character.

In the following :

Ex. 36. ELGAR. *Gerontius*.

(1)

it is unnecessary to argue that (1) is a fundamental seventh resolved in a new way. The passage is merely :

Ex. 37.

b^6 7

D natural and A being appoggiaturas of E flat and B flat respectively.

Similarly the following :

Ex. 38.

is but a broken form of :

Ex. 39.

Of course there may be regular resolutions of discords on unusual chords. There is nothing to prevent a composer writing if he chooses :

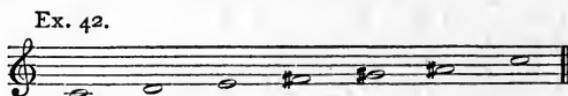
(a) A step forward. This would necessitate the use of quarter-tones. The obvious difficulties that lie in the way of such a course seem almost insurmountable. Technical difficulties would be so enormously increased as to be practically beyond human skill.

(b) Steps backward. Just as two faces are never alike, so the music of two men can never be identical. There seems no valid reason why the music of any number of men should not be wholly acceptable although it displays no novelty in resource or technique. It is surely quite wrong to judge of a man's music by the amount of new resource that he introduces. After all, that which is expressed is of more importance than the means of expression. Some critics are inclined to argue that a composer must not write in the idiom of a bygone age. Of course such critics cannot take up the position that the idiom of a bygone age is intolerable: that is absurd. Recently a rush has been made to the South Pole, so to speak, just for the sake of getting there. But it is inconceivable that a composer of real personality and distinction would fail to say something worth expressing with the technique and resource of Brahms. As the man is not Brahms, so it is not Brahms, and there is no crime in using his materials. Because a composer uses the limited resource of a period, it does not follow that he is a mere imitator. The charm of music does not lie primarily in novelty of expression, but in the personality of the writer: and this is quite apart from the means of expression.

(c) The *Via Media*.

If, however, it be held that both a step forward and a step backward are impossible moves, there is still another possibility left. That is the formation of new scalic systems from a fusion of the diatonic and chromatic formulae. For the present it will suffice to consider the whole tone scale.

This consists of a scale of six sounds:

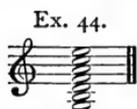


It will be obvious that if we start on any of the sounds of this

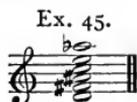
scale, except the first, we get the same series of sounds. Thus the only variety possible is a series beginning a semitone higher or lower than C :



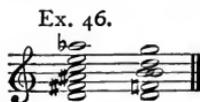
It has been shown that, for example, the scale of C contains all the notes of the diatonic fundamental dominant series :



The trend of modern harmony is to sharpen or flatten the fifth of the fundamental, thus the whole-toned scale of C gives us the supertonic series with the fifth both sharpened and flattened :



And the resolution of this is perfectly simple, the sharpened fifth rising, and the flattened fifth falling :



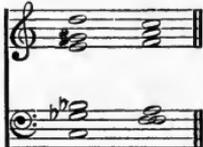
Or again, the chord may be explained as being the combination of two augmented triads, the one being a tone above the other :



But it is not imperative to regard the chord as being super-tonic only in its derivation. It has been shown that only two series of the scale produce different notes. Thus, if we regard

C as the tonic, the chord can be supertonic ; if we regard D as tonic, the same chord can be tonic. But of course the chord can be used on every degree of the tonal scale, and it will be found that if each bass note be regarded as a root, it is followed naturally by a chord whose root is a fourth higher. The only thing necessary is to write each chord with the major third, diminished and augmented fifth, minor seventh, and major ninth, thus :

Ex. 48.



In other words the chord is a fundamental major ninth with the fifth both flattened and sharpened.

In Debussy's *Voiles* the piece is in A minor, but the movement is based on the whole tone scale beginning on the minor second of the scale, B flat, C, D, E, F sharp, G sharp (A flat). This is really an extension of the principle of using the harmony of the chromatic chord on the minor second of the scale, and a group of chords are utilized round this centre, derived from the tonal scale. The following bars will illustrate the method :

* Ex. 49.

DEBUSSY. *Voiles*.

Ibid.

* By permission of the proprietors, MM. Durand et Cie, Paris.

It will be seen that the harmonies are quite logical, and when played they are perfectly satisfactory to the ear. Another example may be seen in 'Jimbo's Lullaby' by the same composer.

8. Finally, it remains to say a few words about the aims of modern composers, and their influence on the idiom and technique, specially with reference to the French school.

The expression of things or ideas external to music takes two forms :

(a) It may be imitative, that is to say, the aim may be to reproduce in terms of music something concrete, such as the bleating of a sheep, or the crowing of a cock. Those who aim at this take the view that anything is legitimate so long as it succeeds in accomplishing the end in view. Two examples must suffice, but they are enough to show what licence composers take in such cases even with the most advanced canons of art :

* Ex. 50. RAVEL. *Le Paon*.

Here Ravel aptly imitates the scream of the peacock.

* Ex. 51.

RAVEL. *Le Martin-Pêcheur*.

In the above, the king-fisher hops along the fishing-rod, and perches himself at the end of it.

(b) It may be illustrative. In this case the composer sets

himself to suggest certain conditions, in other words, to create an atmosphere. In the following example the consecutives actually provide the means of suggesting the conditions of a soul wandering in space :



These are, so to speak, the prime factors of expression. But in each case the intention is, as it were, labelled. In much of Debussy's work the medium between these two points of view is struck. That is to say, he often neither actually imitates nature, nor expresses certain definite conditions. Not only can the meaning be understood in various ways, but the ideas themselves are capable of varied development. His music is, from this point of view, analogous to the poetry of the Symbolists. It has also some features that are parallel with Impressionism in painting. And the idiom of Debussy is naturally suited to these conditions. Sounds are used as colours, and the chords based on the harmonic series have their counterpart in the nature of the ideas the poet expresses. Thus principles and the means of expression develop on parallel lines. It may thus be said that all Debussy's music is the very antithesis of the abstract. That is to say, he is always striving to give expression to some idea that has as its basis something external to music itself, as for example in the nocturnes. But they are not programme music in the old sense of the term: they are, in fact, 'impressions'; and they leave scope for every individual to interpret them in his own way. It might be true to say that Debussy's idiom was the outcome of his point of view as to what he wished to express: it might be equally true to say that the evolution of the resource was quite logical, and itself suggested the use to which it should be put. It is probably truer to say that poetry, painting, and music have developed on parallel lines in the ordinary course of evolution, so that when poetry and music are

wedded together they are exactly suited to each other. The important point to bear in mind is that the really great composers are not wilfully flouting canons of art. The student must approach a study of modern technique sympathetically. He must first understand what the composer is trying to do, and he must not judge of him by the criterion of current orthodoxy, but by that of appropriate expression. It is true that we are in the middle of a period of transition, analogous to that which occurred at the beginning of the seventeenth century. We are off with the old love, but we have not yet found the new one. But out of the present chaos, order will emerge. We must always admit that what is beautiful is right; and we have also to remember that the ear can accustom itself to almost anything. We must also admit that what is sincere is worthy of serious consideration. Previous experience should warn us not to scoff at what we do not understand. Something is coming of the new movement; we must watch sympathetically its gradual development, and wait for its maturity.

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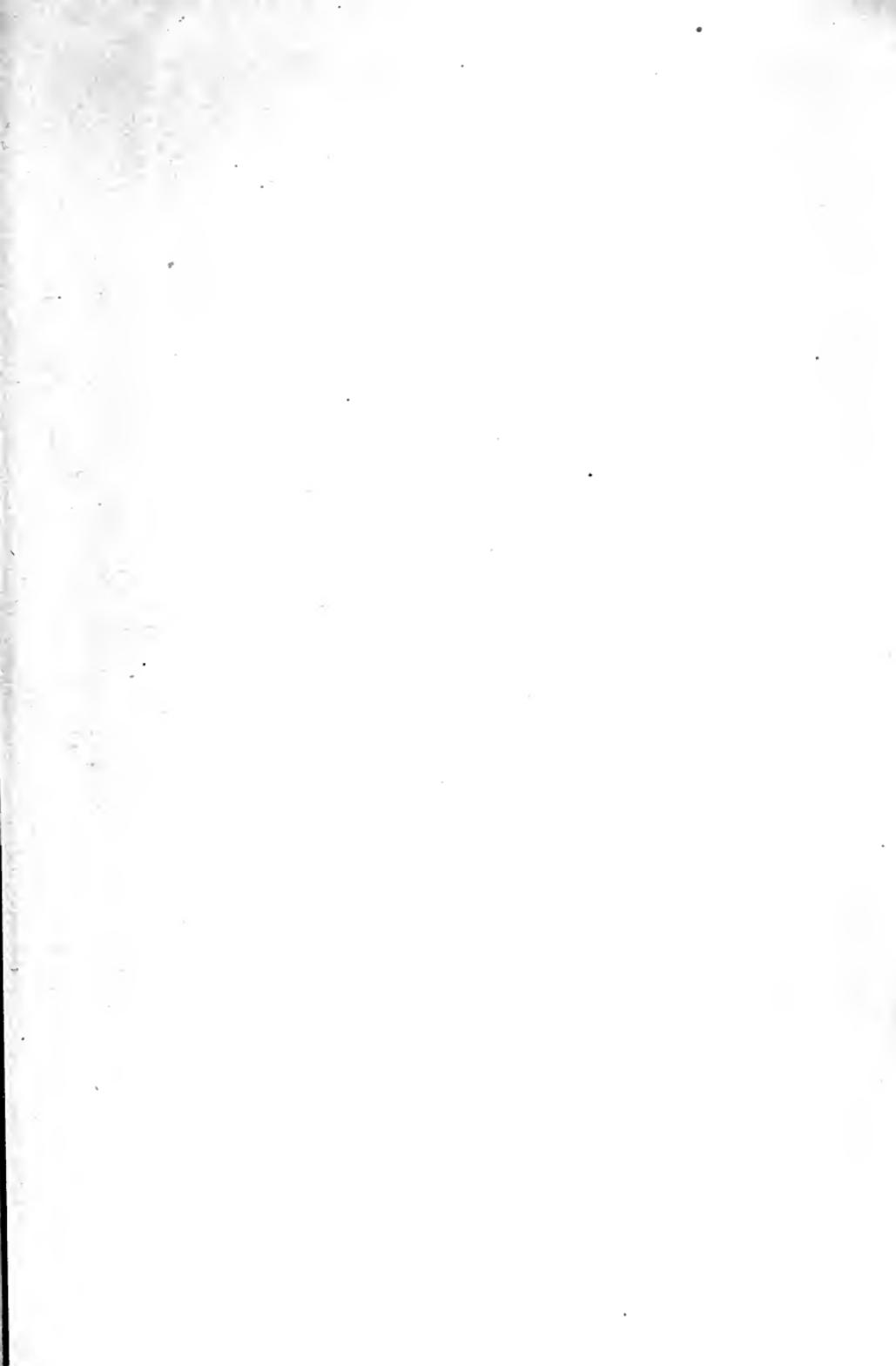
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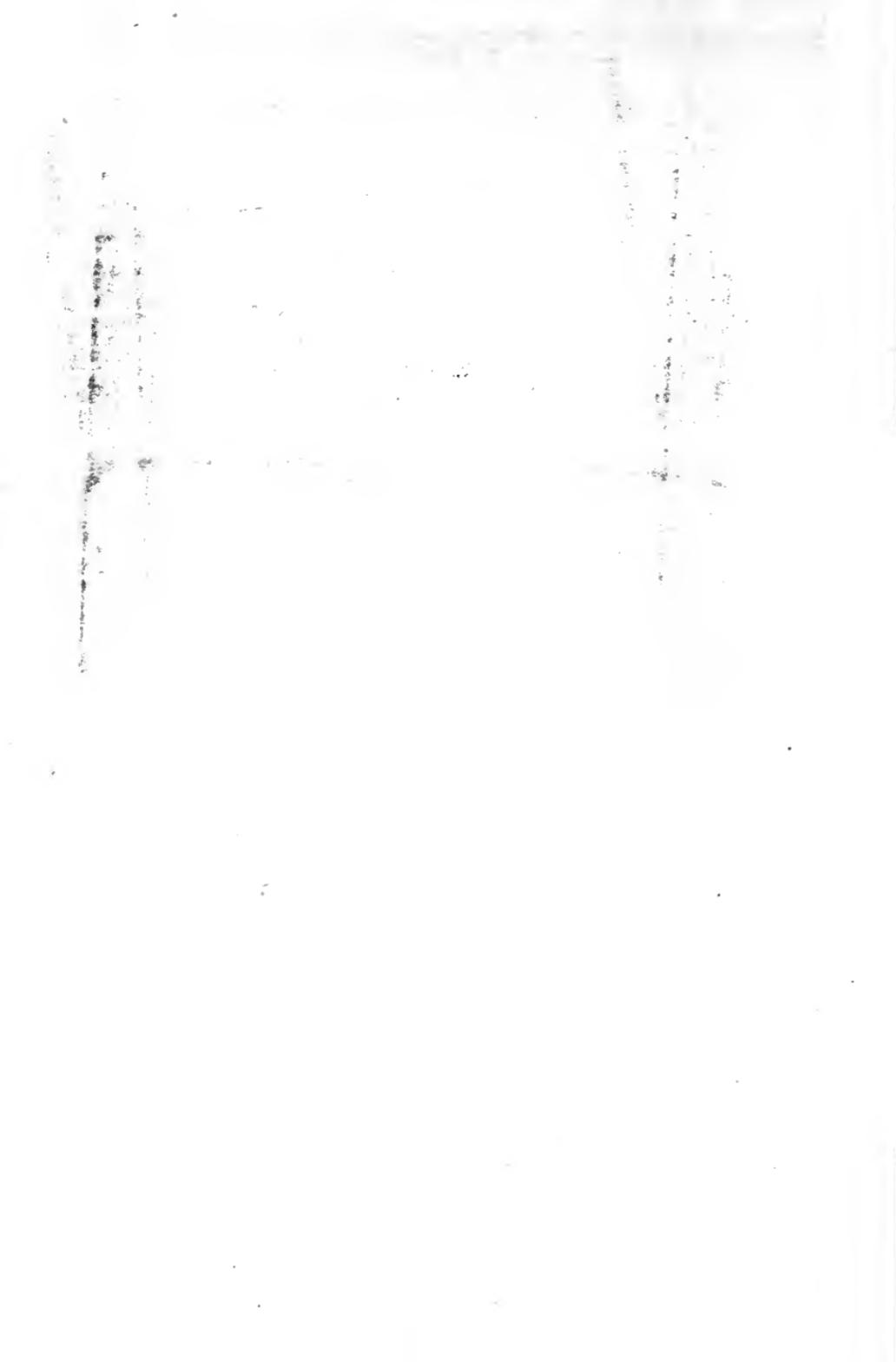
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