

A Concentrated Course in
Traditional Harmony

*with emphasis on exercises and
a minimum of rules*

By

PAUL HINDEMITH

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Revised Edition

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ASSOCIATED
MUSIC PUBLISHERS, INC., NEW YORK
Schott & Co., Ltd., London

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PREFACE

Our old friend Harmony, once esteemed the indispensable and unsurpassable teaching method, has had to step down from the pedestal upon which general respect had placed her. This is not so much the fault of the attitude of those students who have never considered harmony study anything but a necessary evil. Rather it is owing to the increasing conviction on the part of many teachers (at last) that while one may follow its rules for a while out of pure respect for tradition, it is well, if one plans to undertake creative or even theoretical tasks of a higher order, to stand on one's own feet. Musical practice has taken paths along which the teaching of harmony could not follow. Principles of construction that embrace only a small fraction of chord possibilities; stylistic limitations; excessive dependence on notation; an insufficient acoustical basis—these are the reasons why the study of harmony is being left behind in the race between musical practice and theoretical instruction. I have written at length on this subject. In *The Craft of Musical Composition* I have devoted hundreds of pages to a criticism of the conventional theory of harmony and suggestions for its improvement, so I may spare myself any extensive discussion of the subject here.

Despite the evident loss of prestige which conventional harmony teaching has suffered, we must still count on it as the most important branch of theory teaching, at least so long as it has not been replaced by any generally recognized, universally adopted, more comprehensive, and altogether better system. And even after the introduction of such a system, it will maintain a high rank as a historic method which once had great importance—no longer a part of the curriculum of the harassed violin or piano student, but all the more important in the education of future theory teachers and music historians.

In both situations—the present one, in which faith in the magic power of the old rules of harmony is fast disappearing, and the future one, in which such rules will have interest only for the backward-glancing and analytical student—hardly anyone will feel a great desire to spend more time in the acquisition of harmonic knowledge than is absolutely necessary. Thus the cardinal principle for instruction in this field must be: give the student the material he needs in condensed form and with constant emphasis on the purely historical basis and only relative practical value of his study of harmony, and then try to make him acquainted with more far-reaching methods of harmony. The instruction should be speedy; but that does not mean that it should be careless. Brevity and thoroughness may very well be combined if one omits mention of things which are uncertain, exceptional, or based purely on stylistic or personal considerations. Fortunately, the situation is not what we would be led to believe by many harmony text-books, which make of harmony a deep and difficult science—almost a secret art. On the contrary, harmony is a simple craft, based on a few rules of thumb derived from facts of history

and acoustics—rules simple to learn and apply if they are not obscured by a cloud of pseudo-scientific bombast. It may therefore be presented to the pupil without any difficulty, and in simple, concentrated form.

The fact that, despite the need for brief, clear instruction, great thick harmony text-books continue to appear and find their readers is in my opinion not a sign of continual extension and perfection of the method. Harmony, as a theoretical system and as a pedagogic method, has been explored and perfected in every nook and cranny; its material has been gone through, taken apart, and rearranged hundreds of times; with the best will in the world no paths will be discovered that have not been trod. It seems to me rather the prickings of conscience that most musicians seek to allay when they continue to read and study the endless re-groupings and re-publications of the old truths. No one is really satisfied with what he learned long ago in his study of harmony. For one thing, the material was presented to him in unenjoyable form; for another, every other activity seemed more important than theoretical study, which in general has so pitifully little influence on the practical musical accomplishments that have to be learned in the early years. So one buys the latest harmony book, as one has bought others before it, in order finally to make up for what one has missed (usually the intention is the end of the matter!), and thus perhaps at last to discover some of the secrets whose presence more or less every musician suspects behind the curtain of music theory. It is as if one had only to draw this dark curtain aside to behold the mystery of the creative spirit! But no matter how many harmony books one reads, they make no new revelations; and even the greatest minds will not succeed in making any, if by chance they undertake to write a harmony text-book.

“Why this new attempt, then, if, as follows from what has been said, it is just as useless and worthless as all the rest?” The answer to this question is that I am consciously taking this step backwards in full realization of its relative unimportance. Its purpose is not to provide a traditional underpinning for the principles set forth in *The Craft of Musical Composition* (which is not necessary, since for the understanding reader tradition is present on every page of that work) but to facilitate the speedy learning mentioned above, and this in as little scholastic a manner as possible, so that a close connection with living music may be continuously felt. It is true that even in this book there are rules enough, but they have been held to the absolute minimum; while on the other hand particular care has been devoted to supplying material for practical work in actual writing. Pieces of music of all sorts and styles (insofar as a style may be represented by the use of a particular set of chordal materials) have been provided in great number, so that a student who works through this collection of problems of all sorts, without having too much in the way of rules drummed into him, will in all probability achieve a better and more thorough knowledge of harmonic work than after plowing through many a heavy, profound, and learned treatise on harmony. No gift whatever

for composition is required of the student. Being limited strictly to the technical process of connecting harmonies, this book makes it possible for any musician or music-lover without the slightest creative idea to master the exercises it provides.

It is in the nature of the material that even the most condensed teaching plan must follow approximately the historical development of musical writing, as it was practised in free composition, unregulated by school-book rules. This is true at least to this extent: that the exercises employing simple chord materials correspond to an earlier epoch in the technique of composition, while with increasing mastery of chords, progressions, and tonal relations the student approaches more closely the practice of the last few decades. But since our exercises serve primarily neither historical nor stylistic purposes, this very rough correspondence with the evolution of writing from 1600 to 1900 is fully sufficient. Looking back as we do, from a time in which the materials dealt with are fully known, to a still searching and discovering technique, we can afford to spare ourselves many roundabout ways and side paths that had to be taken by the original seekers and discoverers; in fact, in order to achieve greater mastery of our materials we may stress certain technical procedures and neglect others as compared with the real practice of composers in the past. The historical, physical, and physiological bases of our working procedure are of no consequence here. Those who are interested may look up these things in the appropriate literature. The adducing of explanatory illustrations from musical literature, too, has been sacrificed here; it is the task of the teacher to show the pupil where the models of his work are to be found.

The exercises provided lead the student from the very first steps of harmonic writing to the most advanced contortions of the technique of alteration. For small classes of normally gifted pupils, meeting twice a week, this material should provide one to two years' work. For slow workers, for whom there are not enough exercises, the teacher can provide supplementary ones, while gifted students will perhaps gain a considerable facility by working only part of the material given.

The fact that harmony can be taught along these lines has been proved by the class for which and with whose active participation this brief manual was written. In the Yale Music School we went through the material in this book thoroughly in a few weeks. The wish to help other teachers and students who may have felt acutely the need of plentiful and varied exercise material is what has impelled me to publish this little book.

PAUL HINDEMITH

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January, 1943*

PREFACE to the SECOND EDITION

To the author of a harmony book, phrases like "60th Thousand," "20th Edition," "Popular-Priced Reprint," will always sound like some legendary song of the sirens. In general he can be happy if the comparatively few copies of the first printing find buyers without too much trouble. With this prospect in mind, I hardly expected anything more for the present little work than a moderate interest, particularly since it came into being in the first place only as a by-product of more important labors, and had no further purpose than to present to a few teachers and students struggling with similar problems some teaching material that had been found practical. Yet only a year after the first publication a second edition is needed! Whether that fact is due to the nature and arrangement of the book, or present conditions are particularly favorable to the distribution of such a work, or the sales have resulted from mere curiosity: these questions must remain unanswered here. I content myself with wishing the Second Edition good luck, too, as it sets out upon its road.

In the exercises themselves nothing has been changed, except for the elimination of misprints and inaccuracies. In the text, on the other hand, additions have been made: unclear formulations have been improved and additional explanations inserted where necessary.

New Haven, April, 1944

PAUL HINDEMITH

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CHAPTER I

PREPARATORY

1. *Prerequisite:*

Knowledge of

Major scale

Minor scale (the different forms)

Keys, and the circle of fifths

Accidentals

Note- and rest-values

Measure-signatures

Treble- and bass-clef

Intervals in all forms

2. *Voices*

We write for four voices: soprano, alto, tenor, bass.

Their ranges are as follows:



We use two staves, the upper for soprano and alto, the lower for tenor and bass.

3. *Triads*

The material to be used is the triad in its two principal forms:



Names of the tones of the triad:

Lowest—root

Middle—third

Upper—fifth

Triads are named according to their roots, *e.g.*, C major, e minor.

Terminology: capital letters = major (C = C-major triad), small letters = minor (a = a-minor triad).

— EXERCISE 1 —

Play at the keyboard: A, a, C#, d♭, B♭, b, G♭, f#.

4. *Doublings*

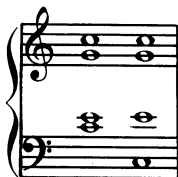
Distribution of the triad tones among the four voices: one tone must be doubled.

Permissible doublings: root (preferred), or fifth. (No third-doubling.)

No crossing of the voices (maintenance of the natural order: Soprano, Alto, Tenor, Bass).

5. *Spacing*

Close position of triads: no tone of the same triad can be inserted between soprano and alto, or alto and tenor.



Open position: tones of the same triad can be inserted between soprano and alto, or between alto and tenor.



Distance of the voices: between soprano and alto, or alto and tenor, no more than an octave; between tenor and bass any distance.

Positions determined by the soprano tone: position of the octave, of the fifth, of the third, all close or open.

<p>close open</p>	<p>close close open open open</p>	<p>close open open open</p>
Position of the Octave	Position of the Fifth	Position of the Third

— EXERCISE 2 —

Write the following triads in all possible open and close positions:
D, B \flat , F \sharp , A \flat , G, e, g \sharp , eb, f, b.

6. *Triads in the Scale*

Triads can be constructed on all the tones of a scale. Only the scale-tones can be used.

In major:  C major

The image shows a musical staff in treble clef with the label 'C major' above it. Seven triads are shown on the staff, one on each scale degree (C, D, E, F, G, A, B). Each triad is represented by three notes beamed together. The triads are: C major (C-E-G), D minor (D-F-A), E minor (E-G-B), F major (F-A-C), G major (G-B-D), A minor (A-C-E), and B diminished (B-D-F).

In minor:
(the harmonic
minor scale
is used)  a minor

The image shows a musical staff in treble clef with the label 'a minor' above it. Seven triads are shown on the staff, one on each scale degree (A, B, C, D, E, F, G). Each triad is represented by three notes beamed together. The triads are: A minor (A-C-E), B diminished (B-D-F), C major (C-E-G), D minor (D-F-A), E minor (E-G-B), F major (F-A-C), and G major (G-B-D). The notes C, E, and G are marked with a sharp sign.

The degrees of the scale (and the triads built upon them) are designated by the Roman numerals I-VII.

In major: I, IV, and V are major triads;
II, III, and VI are minor triads;
VII is a diminished triad.

In minor: I and IV are minor triads;
V and VI are major triads;
II and VII are diminished triads;
III is an augmented triad.

Names of the most important scale tones:

- I Tonic
- V Dominant
- IV Subdominant
- VII Leading Tone

The dominant in both modes is a major triad. It contains the leading tone as its third.

— EXERCISE 3 —

Play at the keyboard the following triads in all possible open and close positions:

D I, E \flat V, F \sharp IV, D \flat II g I, c \sharp VI, a \flat V, b I

CHAPTER II

THE TRIADS OF THE PRINCIPAL HARMONIES

1. *Connection of the principal triads I-V, V-I and I-IV, IV-I.*
Simplest form: Root doubled in both chords, in the octave or unison.
 Procedure:

- (a) Write the bass progression from the first to the second chord.
- (b) Complete the first chord.
- (c) Hold over to the second chord the tone common to both chords.
- (d) Lead the two remaining tones of the first chord stepwise to the nearest tones of the second chord.

E I V b^b IV I A^b V I

Types of motion:

- (a) Similar motion: Two or more voices move in the same direction.

- (b) Contrary motion: Two voices move in opposite directions.

- (c) Oblique motion: One voice remains stationary while another moves.

———— EXERCISE 4 ————

Write the following progressions:

A	I-V	e	I-V
F	V-I	f#	V-I
B	I-IV	c	I-IV
E _b	IV-I	g	IV-I

———— EXERCISE 5 ————

Play the following progressions:

G	I-V	c#	I-V
B _b	V-I	f	V-I
E _b	I-IV	a	I-IV
D _b	IV-I	b	IV-I

2. *More complicated form of the progressions I-V and I-IV: first chord with fifth doubled, second chord with either permissible doubling.*

Procedure:

- (a) as above.
- (b) as above.
- (c) If two tones can be held over into the second chord, hold one and lead the other the shortest way (skip of a major or minor third) to the nearest tone of the second chord.
- (d) If no tone can be held over, lead each of the three upper voices the shortest way (stepwise, or by skip not larger than a fourth) to the nearest tone of the second chord.

Rules of voice-leading:

- (a) Avoid leading any two voices in parallel octaves or unisons:

also

etc., and etc. (both voices approaching an octave by skip in the same direction.)

- (b) Avoid parallel fifths.

etc.

- (c) Skips of all four voices in similar motion are not to be used. Even skips of three voices in the same direction need careful handling. The excessive forward impetus created by such an accumulation of skips can be restrained by keeping one or more voices stationary or leading them in the opposite direction.

Simultaneous skips of three voices in the same direction which are nothing but a change of position of the same chord are permitted without limitation if the fourth voice remains stationary or moves in the opposite direction. (See Exercise 11, below.)

———— EXERCISE 6 ————

Write progressions of the kind discussed:

E _b I-V	a I-V
G V-I	g [#] V-I
G _b I-IV	b _b I-IV
D IV-I	d _b IV-I

———— EXERCISE 7 ————

Play progressions of the kind discussed:

B _b I-V	b I-V
A _b V-I	e V-I
F [#] I-IV	f I-IV
E IV-I	d [#] IV-I

3. Progressions of the triads IV-V and V-IV.

Simplest form: both chords with root doubled.

Procedure:

- (a) as above.
- (b) as above.
- (c) Lead the three upper voices, in contrary motion to the bass, the shortest way to the tones of the second chord. (This rule applies fully only to the simplest form of IV-V and V-IV progression.)

Rules of voice-leading:

- (a) Two voices should not move upward into an octave from a smaller interval (hidden octaves).



- (b) The two outer voices should not move upward into a fifth from a smaller interval (hidden fifths).



———— EXERCISE 8 ————

Write the following progressions:

A IV-V	f V-IV
G [#] V-IV	b IV-V
D IV-V	d _b V-IV

———— EXERCISE 9 ————

Play the following progressions:

E	IV-V	f#	V-IV
B \flat	V-IV	g	IV-V
C#	IV-V	e \flat	V-IV

More complicated form: first chord with doubled fifth.

In some cases this progression is possible only if the fifth of the second triad is omitted and the root tripled.

Procedure:

- (a) as above.
- (b) as above.
- (c) Lead each of the three upper voices in either direction the shortest way to the tones of the second chord. (Skips greater than that of the fourth will thus not occur.)

Rules of voice-leading:

- (a) No voice should skip a diminished or augmented interval.
- (b) Avoid in the three upper voices skips of more than a fifth.

———— EXERCISE 10 ————

Write the following progressions, with the fifth doubled in the first chord:

A \flat	IV-V	c	IV-V
B	V-IV	e	IV-V
E \flat	V-IV	a \flat	IV-V

What was said above about the second chord in these progressions applies from this point on to all major and minor triads: the fifth may be omitted.

———— EXERCISE 11 ————

Write the following progressions (numerals and meter given):

G	$\frac{4}{4}$	
B	$\frac{3}{2}$	
D \flat	$\frac{4}{4}$	
A	$\frac{3}{2}$	
f	$\frac{3}{4}$	

— EXERCISE 13 —
 (Bass Given Without Numerals)

Upon every tone of the unfigured bass, the appropriate triad is constructed.

A musical staff in bass clef with a key signature of three flats (B♭, E♭, A♭) and a 3/2 time signature. The notes are A♭, B♭, C♭, D♭, E♭, F♭, G♭, and A♭. The triad A♭ is indicated below the first note.

A musical staff in bass clef with a key signature of three sharps (F♯, C♯, G♯) and a 4/4 time signature. The notes are B, C, D, E, F, G, A, and B. The triad B is indicated below the first note.

A musical staff in bass clef with a key signature of one flat (B♭) and a 4/4 time signature. The notes are F, G, A, B, C, D, E, and F. The triad F is indicated below the first note.

A musical staff in bass clef with a key signature of four sharps (F♯, C♯, G♯, D♯) and a 3/4 time signature. The notes are C♯, D, E, F, G, A, B, and C♯. The triad C♯ is indicated below the first note.

Accidentals below a bass tone refer to its third.

A musical staff in bass clef with a key signature of one sharp (F♯) and a 4/4 time signature. The notes are a, b, c, d, e, f, g, and a. Accidentals below the notes are: a sharp below 'a', and a sharp below 'd'. The triad 'a' is indicated below the first note.

A musical staff in bass clef with a key signature of four sharps (F♯, C♯, G♯, D♯) and a 3/2 time signature. The notes are d♯, e, f, g, a, b, c, and d♯. Accidentals below the notes are: a sharp below 'd', and an asterisk below 'f' and 'g'. The triad d♯ is indicated below the first note.

A musical staff in bass clef with a key signature of three flats (B♭, E♭, A♭) and a 4/4 time signature. The notes are b♭, c, d, e, f, g, a, and b♭. Accidentals below the notes are: a flat below 'b', and a flat below 'a'. The triad b♭ is indicated below the first note.

A musical staff in bass clef with a key signature of one flat (B♭) and a 3/4 time signature. The notes are d, e, f, g, a, b, c, and d. Accidentals below the notes are: a sharp below 'a', and a sharp below 'c'. The triad d is indicated below the first note.

— EXERCISE 14 —
 (Soprano and Roman Numerals Given)

F# I IV I IV V V I

Eb I I IV IV I V I

A I I V IV I I IV V I

F I V I IV I V* I IV V I

* There is no reason to avoid the fifths by contrary motion which result from such melodic passages (and which are forbidden in many text-books).

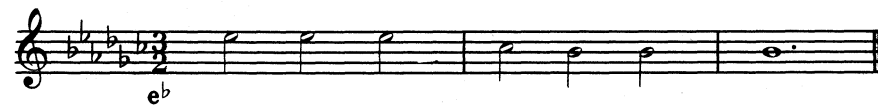
e I IV V IV IV V I

c# V I IV I IV I V I

g I IV I V IV V I

a# I V I IV I V I

— EXERCISE 15 —
(Soprano Given Without Numerals)

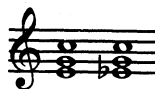


CHAPTER III

SIXTH CHORDS

1. *Inversion of the major and minor triads.*

The third of the chord is in the bass.



Figured-bass symbol: \flat_6

Doublings: root or fifth (for the time being, not the third).
Position of the octave or fifth (not third).



— EXERCISE 16 —

Write and play the following sixth chords in different positions:

A I_6	a \flat V_6
F \sharp V_6	e I_6
E \flat IV_6	d \sharp IV_6
B I_6	b \flat V_6

The fifth can be omitted, and the root tripled:

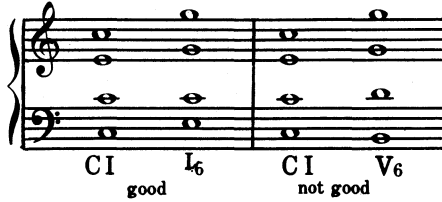


2. *Progressions of consecutive sixth chords or of sixth chords with triads, treated from the same point of view as progressions involving triads only.*

Recommended procedure for making simple and correct progressions:

- (a) If two chords have a common tone, hold it over.
- (b) Lead each voice by the smallest interval possible.

Hidden octaves which form a broken triad may be used in the three upper voices when the harmony does not change:



EXERCISE 17
(Numerals and Meter Given)

E $\frac{4}{4}$ I V₆ | I₆ IV | V V₆ | I ||

A^b $\frac{3}{4}$ I I₆ | IV I | V V₆ | I I₆ | Ṿ | Ị ||

G $\frac{2}{4}$ V | I V₆ | I I₆ | IV V | I ||

E^b $\frac{3}{4}$ IV₆ | V₆ I | IV I₆ | V V₆ | I ||

F[#] $\frac{6}{8}$ I V₆ | Ị IV Ị | Ṿ Ị IṾ | Ṿ V₆ | Ị ||

B^b $\frac{2}{2}$ I₆ I | V₆ V | IV IV₆ | V I ||

e $\frac{3}{4}$ I I₆ IV | V I₆ | IV I IV₆ | V I ||

g $\frac{6}{8}$ Ị IṾ | Ṿ Ị | IV₆ Ị IṾ IV₆ | Ṿ Ị ||

In the bass the following are permitted:

- (a) Skips of an octave or a sixth.
- (b) Augmented and diminished progressions to the leading tone.

— EXERCISE 18 —
(Figured Bass Given)

Meaning of the figures:

Note without figure = triad

6 = Sixth chord

Bass staff 1: Bb 4/4. Notes: Bb , D , F , Bb , D , F , Bb , D , F , Bb . Figures: D^{\flat} , 6, 6, 6.

Bass staff 2: E 4/4. Notes: E , G , B , E , G , B , E , G , B , E . Figures: E , 6.

Bass staff 3: G 2/4. Notes: G , B , D , G , B , D , G , B , D , G , B , D , G , B , D , G , B , D , G . Figures: G , 6, 6, 6, 6, 6, 6, 6.

Bass staff 4: Bb 6/8. Notes: Bb , D , F , Bb , D , F , Bb , D , F , Bb , D , F , Bb , D , F , Bb , D , F , Bb . Figures: B^{\flat} , 6, 6, 6, 6.

Bass staff 5: a 4/4. Notes: a , c , e , a , c , e , a , c , e , a , c , e , a , c , e , a , c , e , a . Figures: a , 6, \sharp , 6, \sharp .

Bass staff 6: f 4/4. Notes: f , a , c , f , a , c , f , a , c , f , a , c , f , a , c , f , a , c , f . Figures: f , 6, \natural , 6, \natural , 6.

Bass staff 7: b 3/4. Notes: b , d , f , b , d , f , b , d , f , b , d , f , b , d , f , b , d , f , b . Figures: b , 6, 6, 6, \sharp , 6, \sharp , 6, \sharp .

Bass staff 8: c 4/4. Notes: c , e , g , c , e , g , c , e , g , c , e , g , c , e , g , c , e , g , c . Figures: c , 6, \natural , 6, 6, 6, \natural , \natural .

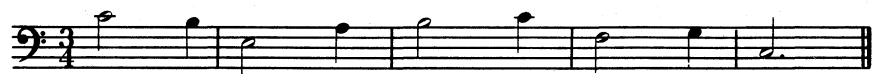
— EXERCISE 19 —
(Unfigured Bass Given)



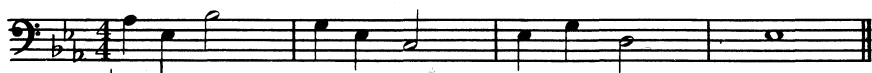
A



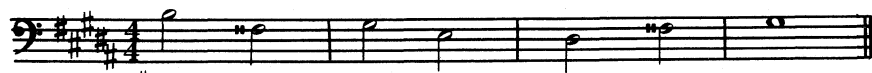
F



C



E^b



g[#]



b^b



a[#]



e

— EXERCISE 20 —

(Soprano and Numerals Given)

From this point on it is no longer necessary always to lead the three upper voices the shortest way from one chord to the next, or to hold over common tones.

Skips of an octave or a sixth may also occur in the upper voices.

D I V I₆ IV V V₆ I I₆ V V₆ I

F I IV I I₆ V I₆ I IV V V₆ I

F# I IV I V₆ I IV₆ IV I I₆ V IV I

A I V₆ IV₆ V I V I IV IV V* I₆ V I

^c I V₆ I IV₆ V I IV₆ IV V IV₆ V I I₆ IV V I

f# I V₆ V I IV₆ I V₆ I

a^b I IV I IV₆ V V₆ I IV₆ IV V I

^d I V₆ V IV₆ V V₆ I

IV IV₆ V V₆ I IV I

* Bass and tenor in unison.

— EXERCISE 21 —
(Soprano Given Without Numerals)

Musical score for Exercise 21, Soprano part, measures 1-10. The score consists of ten staves of music. The first staff is in C major, 2/4 time, with a 'C' time signature. The second staff is in B major, 2/4 time, with a 'B' time signature. The third staff is in E-flat major, 6/8 time, with an 'Eb' time signature. The fourth staff is in B-flat major, 3/4 time, with a 'Bb' time signature. The fifth staff is in F major, 3/4 time, with an 'f' time signature. The sixth staff is in A major, 8/8 time, with an 'a' time signature. The seventh staff is in A major, 4/4 time, with an 'a' time signature. The eighth staff is in A major, 4/4 time, with an 'a' time signature. The ninth staff is in A major, 4/4 time, with an 'a' time signature. The tenth staff is in A major, 4/4 time, with an 'a' time signature.

After clearly perceptible caesuras in a melody or a figured bass, all four voices may skip in the same direction.

Musical score for Exercise 21, Soprano part, measures 11-14. The score consists of four staves of music. The first staff is in A major, 4/4 time, with an 'f#' time signature. The second staff is in A major, 2/2 time, with a 'b' time signature. The third staff is in A major, 2/2 time, with a 'b' time signature. The fourth staff is in A major, 2/2 time, with a 'b' time signature.

CHAPTER IV

THE DOMINANT SEVENTH CHORD

1. *The dominant seventh chord* consists of the dominant triad with the 7th of its root added.



Possible positions: third, fifth, seventh (not octave).

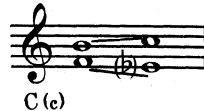
Characteristic feature: the diminished fifth, or, in positions other than that of the seventh, the augmented fourth (tritone).

2. *Diminished fifth and augmented fourth* demand resolution.

Resolution of the diminished fifth:



Resolution of the augmented fourth:



In both cases the leading tone moves upward to the tonic.

3. *Connection of the dominant seventh chord with the tonic triad.*

Procedure:

- (a) Write the bass progression.
- (b) Complete the first chord.
- (c) Resolve the diminished fifth or augmented fourth.
- (d) Lead the remaining voice the shortest way into the next chord.

The fifth of the dominant seventh chord may be omitted, and when it is, the position of the octave is possible. When the dominant seventh chord contains its fifth, the chord of resolution is a triad without its fifth. The converse is also true: V_7 without fifth—I with fifth.

———— EXERCISE 22 ————

Write the following progressions:

(a) Seventh chord *with* fifth, triad *without*.

E	V ₇ -I	b	V ₇ -I	D	I-V ₇
D ^b	V ₇ -I	a	V ₇ -I	A ^b	I-V ₇
B ^b	V ₇ -I	e ^b	V ₇ -I	c	I-V ₇
G	V ₇ -I	f [#]	V ₇ -I	g [#]	I-V ₇

(b) Seventh chord *without* fifth, triad *with*.

A	V ₇ -I	c [#]	V ₇ -I	E	I-V ₇
F	V ₇ -I	e	V ₇ -I	F [#]	I-V ₇
B	V ₇ -I	g	V ₇ -I	b ^b	I-V ₇
C	V ₇ -I	a ^b	V ₇ -I	d [#]	I-V ₇

———— EXERCISE 23 ————

Play similar progressions.

4. *In the progression V₇ (with or without fifth)-IV, the diminished fifth or augmented fourth cannot be resolved. In this progression (or the opposite) the common tone may be held over, to connect the chords as closely as possible.*

———— EXERCISE 24 ————

(Numerals and Meter Given)

F $\frac{4}{4}$ ||

* 8 = octave, 7 = 7th, following it on the next beat.

A $\frac{3}{4}$ ||

E^b $\frac{2}{4}$ ||

F[#] $\frac{6}{8}$ ||

e $\frac{2}{2}$ ||

a^b $\frac{3}{4}$ ||

d[#] $\frac{4}{4}$ ||

b $\frac{3}{4}$ ||

— EXERCISE 25 —

(Figured Bass Given)

In figured basses, a 7 under a note indicates a seventh chord.

Staff 1: Bass clef, key signature of two sharps (F# and C#), 4/4 time signature. Notes: E4, F#4, G4, A4, B4, C5. Figured bass: E, 7, 6.

Staff 2: Bass clef, key signature of one flat (Bb), 3/4 time signature. Notes: F3, G3, A3, B3, C4, D4, E4, F4, G4, A4, B4, C5. Figured bass: F, 6, 6, 6, 6, 7.

Staff 3: Bass clef, key signature of two sharps (F# and C#), 9/8 time signature. Notes: D3, E3, F#3, G4, A4, B4, C5, D5, E5, F#5, G5, A5, B5, C6. Figured bass: D, 6, 7, 6, 7, 6, 7.

Staff 4: Bass clef, key signature of three flats (Bb, Eb, Ab), 2/4 time signature. Notes: Ab2, Bb2, C3, D3, Eb3, F3, G3, Ab3, Bb3, C4, D4, Eb4, F4, G4, Ab4, Bb4, C5. Figured bass: Ab, 6, 7, 6, 6, 6, 7, 6, 7.

Staff 5: Bass clef, key signature of two sharps (F# and C#), 3/4 time signature. Notes: F#3, G#3, A4, B4, C5, D5, E5, F#5, G#5, A5, B5, C6. Figured bass: f#, 6, 7, 6, 6, #, 7, 6, #, 6, #, 7.

Staff 6: Bass clef, key signature of four flats (Bb, Eb, Ab, Db), 3/4 time signature. Notes: Bb2, C3, Db3, Eb3, F3, G3, Ab3, Bb3, C4, Db4, Eb4, F4, G4, Ab4, Bb4, C5. Figured bass: bb, 6, b, 6, 6, 7, b, 6, 7.

Staff 7: Bass clef, key signature of two sharps (F# and C#), 6/8 time signature. Notes: a2, B2, C3, D3, E3, F#3, G#3, A4, B4, C5, D5, E5, F#5, G#5, A5, B5, C6. Figured bass: a, 6, #, 6, 7, 6, #, 6, 6, #, 7.

Staff 8: Bass clef, key signature of four flats (Bb, Eb, Ab, Db), 4/4 time signature. Notes: Eb2, F3, G3, Ab3, Bb3, C4, Db4, Eb4, F4, G4, Ab4, Bb4, C5. Figured bass: eb 6, 6, b, 6, 6, 6, 6, 7.

Many forms of the progression IV-V₇ (and the reverse) can be satisfactorily realized only by the use of an augmented or diminished melodic interval. It is therefore permitted from this point on to approach the lead-

From now on, the third can be doubled in triads and sixth chords.
 Instances in which the doubling of the third is particularly apt to be successful:

(a) Sixth chords.



(b) Resolution of the V₇ chord.



It is advisable not to double the third of a dominant chord, the leading tone (danger of parallel octaves). The seventh should also not be doubled.

— EXERCISE 27 —
 (Soprano Given With Numerals)

Exercise 27 consists of five staves of music, each with a soprano line and a bass line. The bass line contains numerical figures for the chords. The staves are as follows:

- Staff 1: *F* *I* *I*₆ *IV* *I*₆ *IV* *IV*₆ *V*₇ *I* *IV*₆
- Staff 2: *V* *I*₆ *IV*₆ *I* *IV*₆ *V* *V*₇ *I*
- Staff 3: *A* *I* *IV* *I*₆ *V* *V*₆ *V*₇ *I* *IV*₆ *I* *V*₆ *V*
- Staff 4: *I*₆ — *IV* — *IV*₆ *V*₇ *I*
- Staff 5: *D*^b *I* *I*₆ *V*₆ *I* *V* *V*₆ *I* *I*₆ *V*₆ *I* *IV*

V₆ I V₆ IV₆ — V V₆ IV₆ V₇ I

E I V₇ I V₇ I₆ — V₇ I I₆ —

IV₆ IV — I I₆ — V V₇ I

c IV IV₆ V₇ I IV IV₆ I I₆ V I₆

IV₆ IV IV₆ V₇ I I₆ V IV₆ IV V₆ — I IV I

f# I — V₆ V V₆ I — IV IV₆ IV

V₆ — I I₆ I V V₇ V₇ I(major)

b I₆ I IV I₆ IV₆ I₆ IV I

IV I₆ V I V₆ V₇ I

b I IV I₆ IV₆ I IV I₆ IV₆ V I IV₆ V₇

I I₆ IV₆ I₆ IV I₆ IV IV₆ I

— EXERCISE 28 —

(Soprano Given Without Numerals)

When there is no other indication, the last chord is always a tonic. The final chord is always in root position, never inverted.

The musical score consists of 12 staves of music. The first staff is in E-flat major, 4/4 time, with a dynamic of *mb* and a chord label E_b . The second staff is in A major, 3/8 time, with a chord label A . The third staff is in G major, 4/4 time, with a chord label G . The fourth staff is in B-flat major, 4/4 time, with a chord label B_b and a V label at the end. The fifth staff is in F major, 6/8 time, with a dynamic of *f*. The sixth staff is in E-flat major, 4/4 time. The seventh staff is in G# major, 9/8 time, with a chord label $g\#$. The eighth staff is in G# major, 3/8 time. The ninth staff is in E-flat major, 2/4 time, with a chord label c . The tenth staff is in E major, 3/8 time, with a chord label e . The eleventh staff is in E major, 3/8 time, with a chord label IV_6 and a sharp sign. The twelfth staff is in E major, 3/8 time, with a chord label V_7 and a V label at the end.

CHAPTER V

INVERSIONS OF V_7

1. *Three inversions* of the dominant seventh chord are possible, each in three positions:

V_5^6 chord = third in bass:
(position of the third impossible)



V_3^4 chord = fifth in bass:
(position of the fifth impossible)



V_2 chord = seventh in bass:
(position of the seventh impossible)



The figured-bass indications for these chords are, respectively: $\frac{6}{5}$, $\frac{4}{3}$, 2.

The fifth of the chord may be omitted in the $\frac{6}{5}$ and 2 inversions; in this case, the root (g, in the examples above) is doubled.

2. *Progressions* V_5^6 (V_3^4 , V_2)-I: procedure as in V_7 -I.

Normal resolutions:

V_5^6 to the I triad;

V_3^4 to the I triad or sixth chord;

V_2 to the I sixth chord.

EXERCISE 29

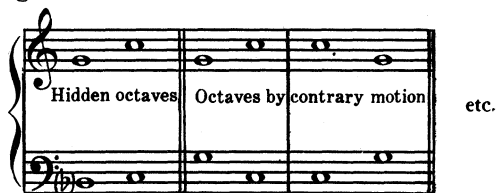
Write the following chords in any position:

E V_5^6	F V_3^4	a V_2	g V_5^6
D V_3^4	G \flat V_2	c V_5^6	e \flat V_3^4
B V_2	C \sharp V_5^6	d \flat V_3^4	c \sharp V_2
A \flat V_5^6	B \flat V_3^4	f \sharp V_2	g \sharp V_5^6

Play these chords on the piano and resolve each into its respective form of I.

Progressions V_5^6 (V_3^4, V_2)-IV: procedure as in V_7 -IV (no normal resolution of the diminished fifth and augmented fourth).

The following progressions in the outer voices are permitted from now on:



octaves by contrary motion only at the end of an exercise or a clearly articulated section.

EXERCISE 30
(Numerals and Meter Given)

In many progressions, no regular resolution of the diminished fifth (or augmented fourth) in the dominant seventh chord or its inversions can be accomplished. But even so it is possible by following the rules given to write these progressions in perfectly acceptable form.

A $\frac{3}{4}$ \dot{I} \dot{V}_2 | \dot{I}_6 \dot{V}_5^6 | \dot{I} \dot{V}_6 | \dot{V} | $\dot{I}\dot{V}_6$ \dot{V}_5^6 | \dot{I} $\dot{I}\dot{V}$ | \dot{V} \dot{V}_5^6 | \dot{I} ||

G $\frac{2}{4}$ \dot{I} \dot{V}_3^4 \dot{I}_6 $\dot{I}\dot{V}$ | \dot{V} \dot{V}_5^6 | \dot{I} \dot{V}_2 \dot{I}_6 $\dot{I}\dot{V}$ | \dot{V} \dot{V}_2 | \dot{I}_6 \dot{I} $\dot{I}\dot{V}$ | \dot{V} \dot{V}_2 | \dot{I}_6 $\dot{I}\dot{V}$ | \dot{I} ||

E \flat $\frac{6}{8}$ \dot{I} \dot{V}_5^6 | \dot{I} \dot{I}_6 | $\dot{I}\dot{V}$ $\dot{I}\dot{V}_6$ | \dot{V} | $\dot{I}\dot{V}_6$ \dot{V}_5^6 | \dot{I} \dot{V}_2 | \dot{I}_6 $\dot{I}\dot{V}$ \dot{V}_7 | \dot{I} ||

B $\frac{2}{2}$ \dot{I} \dot{V}_6 \dot{I} | \dot{V}_7 $\dot{I}\dot{V}_6$ \dot{V}_7 | $\dot{I}\dot{V}_6$ \dot{V} $\dot{I}\dot{V}_6$ | \dot{I} \dot{I} | \dot{V}_2 \dot{I}_6 \dot{V}_3^4 | \dot{I} \dot{V}_2 \dot{I}_6 | $\dot{I}\dot{V}$ $\dot{I}\dot{V}_6$ \dot{V}_7 | \dot{I} ||

d $\frac{2}{4}$ $\dot{I}\dot{V}$ \dot{V}_2 $\dot{I}\dot{V}$ | \dot{V}_2 | \dot{V}_3^4 $\dot{I}\dot{V}_3^4$ | \dot{I} | \dot{I}_6 $\dot{I}\dot{V}$ | $\dot{I}\dot{V}_6$ \dot{V} \dot{V}_2 | \dot{I}_6 \dot{V}_7 \dot{V}_7 | \dot{I} ||

E \sharp $\frac{4}{4}$ \dot{V} \dot{V}_5^6 | \dot{I} \dot{I}_6 | \dot{I} $\dot{I}\dot{V}$ | \dot{V} \dot{V} | \dot{I}_6 $\dot{I}\dot{V}$ \dot{V}_3^4 |

\dot{I} $\dot{I}\dot{V}_6$ \dot{V} | \dot{I} \dot{V}_2 \dot{I}_6 $\dot{I}\dot{V}$ | \dot{V} \dot{V}_7 \dot{I} ||

b^b $\frac{3}{8}$ I V₃ I₆ | V₂ | V₆ I V₃ | I₆ | V₂ V V₂ | I₆ |
V₃ V₂ V₃ | I | IV V₂ IV | I V₃ I₆ | V V₇ | I ||
g $\frac{4}{4}$ I V₃ I₆ IV | V IV₆ V₆ I | V₇ IV I₆ IV | IV₆ V₇ I ||

— EXERCISE 31 —
(Figured Bass Given)

The following tonal combinations can be used from now on:

1.



in all positions and doublings.

2.

No. 2 is used only at the end; No. 1 may occur anywhere (Caution: empty sound).

But neither is employed immediately after chords containing the diminished fifth or the augmented fourth (V₇, V₅⁶, V₃⁴, V₂, etc.).

G 6/5 6 6/5 6

2 6 4/3 6 7

Cb 2 6 4/3 6 6/5 6

6 4/3 6 6 7

A 6 4/3 6 6/5 6

6 4/3 6 7 6

6 7 6 6 7 6

6 6/5

Accidentals before a number refer to the interval indicated by it, counted from the bass.

e # #6/4/3 #4/2 6 #6/4/3 6 #

#4/2 6 #6/4/3 6/5 7 #

g # 6 6 6 6 # 7 6 #4 6 7 #

c# # 6 # #4 6 #6 6 # 6 5

#4 6 6 # 6 #6 6 #6 # 6 5

b b b q 6 q q4 2 q q4 2 6 6

q q4 2 6 q6 4 3 q 6 6 7 q

— EXERCISE 32 —
 (Unfigured Bass Given)

G^b

A

E^b

C[#]

B^b I _____ IV₆ _____ V₆ _____

I _____ V₂ I₆ IV₆ V₆₅ V₇ V₄₃ I _____ IV IV₆ V₇ I

G I₆ V₄₃ I V₆ V₆₅ I IV₆ V₆₅ I _____

I₆ _____ V IV₆ _____ V₆₅ I I₆ V₇ I

F[#] I _____ IV I₆ V₄₃ I IV₆ V₆ I _____ I₆ IV₆ _____

V₆ I IV V₇ I I₆ IV₆ V₆₅ I

c I V₆ V₄₃ I V₂ I₆ V₄₃ I IV IV₆ V

IV IV₆ I₆ IV V V₄₃ I IV V V₄₃ I

e I _____ V₂ I₆ _____ V₆₅ I IV IV₆ V V₆

I _____ IV V₇ _____ V₆ I _____ IV₆ V I₆ _____

IV _____ IV₆ I _____ I₆ _____ V _____ V₇ _____ I

a^b I V_2 I₆ ——— V V_5^6 I ———
 V_3^4 I IV I₆ IV₆ V ——— V_7 I
 b I ——— V_2 ——— I₆ ——— IV₆—IV V ——— I ———
I₆ ——— IV₆ ——— V ——— IV₆— V_7 — I ———

———— EXERCISE 34 ———
(Soprano Given Without Numerals)

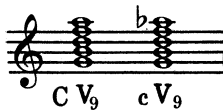
Seventh chords and similar combinations, as well as their inversions, should not be used as the final chords of exercises.

B^b
 D^b
A

CHAPTER VI

DERIVATIONS OF V_7

1. *The dominant ninth chord* consists of V_7 with the ninth of its root added:

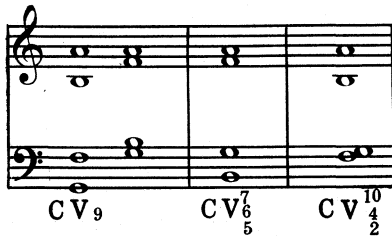


Inversions: V_6^7 and V_4^{10}

Figured-bass symbols: 9, $\overset{7}{\underset{5}{6}}$, and $\overset{10}{\underset{2}{4}}$

In four-part writing, the ninth chord and its inversions are usually used as follows:

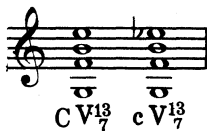
- (a) the fifth is omitted;
- (b) the ninth is in the upper voice;
- (c) the two upper voices should not form a second.



The two upper voices may, however, (in V_6^7 and V_4^{10}) be pitched a ninth apart, and therefore the rule that there must not be more than an octave between the two upper voices no longer applies with full force.

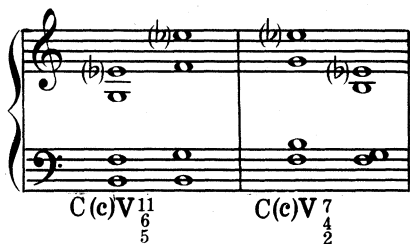


2. Dominant seventh chord with sixth:



The fifth is replaced by the sixth.

Inversions:



The sixth is almost always in the upper voice.

Figured-bass symbols: $\frac{13}{7}$, $\frac{11}{6}$, and $\frac{7}{4}$.

In progressions, the two derivations (V_9 , V_7^{13}) and their inversions are treated like V_7 and its corresponding inversions.

The characteristic tone of these dominant chords (9 in V_9 , 6 [13] in V_7^{13}) can be approached by a diminished or augmented interval.

— EXERCISE 35 —

Write the following chords:

A V_9	b V_9
E \flat V_5^7	f V_5^7
D V_2^{10}	a \flat V_2^{10}
G \flat V_7^{13}	g V_7^{13}
E V_5^{11}	d \sharp V_5^{11}
B \flat V_2^7	a V_2^7

Play these on the piano and resolve each to its own respective form of I (V_2^{10} and V_2^7 into I_6 ; see Chapter V, Section 2).

— EXERCISE 36 —

(Numerals and Meter Given)

To avoid unnecessary skipping around in all the voices, care should be taken in the choice of position of the chords.

A $\frac{3}{4}$ I V $_{10}^{4/2}$ | I $_6$ V $_6^5$ | I IV | V̇ |

IV V $_4^3$ | I I $_6$ | V̇ | V $_{11}^{6/5}$ | İ ||

F $\frac{4}{8}$ I V $_{7}^{6/5}$ I $_6$ I | V V $_{7}^{4/2}$ I $_6$ | IV I I $_6$ I |

V $_9$ V $_6^5$ I | I $_6$ I V $_9$ V $_{13}^7$ | I IV I ||

c C V IV | V $_{10}^{4/2}$ I $_6$ IV V | V $_{11}^{6/5}$ I | V V $_{7}^{4/2}$ I $_6$ IV | V $_9$ V $_7$ | İ ||

g# $\frac{3}{8}$ I V $_{7}^{6/5}$ I | V̇ $_2$ | I $_6$ V $_4^3$ I | V $_{10}^{4/2}$ |

I $_6$ V $_6^5$ I | IV $_6$ V V $_6^5$ | I V $_{13}^7$ | İ ||

— EXERCISE 37 —
 (With Partially Figured Bass)

Bass line 1: E 9 6 13 $_{7}^7$ 6

Bass line 2: 6 7 $_{6/5}^6$ 11 $_{6/5}^6$

Bass line 3: G^b 6 10 $_{4/2}^6$ 6 7 $_{6/5}^6$

Bass line 4: 6 11 $_{6/5}^6$ 7 $_{4/2}^6$ 13 $_{7}^7$

Bass line 5: f h 9 h 4 $_{2}^6$ 6 6 $_{5}^6$ 7 $_{6/5}^6$ 6

The hidden-octave and hidden-fifth progressions mentioned on p. 6 may be used

- between two inner voices, or
- between the top voice and an inner voice.

(See also p. 26). However they should be made less conspicuous by strong contrary motion in at least one of the other voices.

But the following hidden octaves and similar ones—produced when two voices move from a seventh or ninth into an octave—are still to be avoided, no matter in which voices:

From this point on, it is permitted to approach by augmented or diminished interval not only the tones already mentioned (9 in V₉, 6 in V¹³₇, and the leading tone), but other tones as well, when this results (especially in minor) in smoother voice-leading, or in the avoidance of more serious mistakes.

— EXERCISE 38 —
(Soprano Given with Some Numerals)

CHAPTER VII

NON-CHORD TONES

1. *Changing Tones* occur between a chord tone and its repetition, in weaker metric position than either, at the distance of a second above or below:



2. *Passing Tones* form one or more steps of a second between two different chord tones, occurring in weaker metric position than either of the chord tones:



3. *The Suspension* precedes its chord tone at the interval of a second. It is *prepared* by being included as a chord tone in a previous chord, and *resolved* by moving stepwise to a chord tone. The suspension occurs in stronger metric position than either its preparation or its resolution:



Suspensions resolving upwards occur more rarely than those resolving downwards:



If the suspension resolves into the third of a chord, there is no objection to the doubling of this third in a minor triad; such doubling can be disturbing, however, in a major triad; and it should always be avoided when the third involved is the leading tone (third of the dominant triad).



Between suspension and resolution other tones can be inserted:



Be careful about parallel octaves and fifths:



Possible only in slow tempo:



4. *The Anticipation* is a chord tone belonging to the second of two chords, which occurs in weak metric position at the end of the first:



5. *The Neighboring Tone* is a suspension without preparation. Everything said about suspensions, except as regards preparation, applies to it also:



6. *The Neighboring Tone Left by Skip* follows its chord tone at the interval of a second, proceeding to another chord tone by skip. It occurs in weaker metric position than the chord tones:



7. *The Neighboring Tone Approached by Skip* precedes its chord tone at the interval of a second, being separated from the previous chord tone by a skip:



8. Exceptionally, tones may occur which cannot be considered chord tones, and yet do not fit into any of the foregoing categories. These are to be considered free tones.



— EXERCISE 39 —
 (Soprano Given With and Without Numerals)

C I IV I₆ V₆ $\frac{6}{5}$ I
 V₇ I₆ V I V $\frac{4}{3}$ I₆ V₆
 I IV I₆ V $\frac{6}{5}$ I
 a I I₆
 V I IV
 IV₆ V₇ V $\frac{4}{3}$ I

It will be noted that the more complicated chords (*c.g.*, the ninth chord, and even at times the dominant seventh chord) are often explainable as simpler chords with the addition of non-chord tones. The presence of non-chord tones sometimes results in doubled leading tones or doubled characteristic tones in seventh chords (7), in V₉ (9 or 7), and in V $\frac{13}{7}$ (6 [13] or 7). These doublings are regarded as harmless, owing to the transitory character of the tones marked with a +.

G I I₆ IV IV₆ V₆ V I

V V₂ I₆ I V V₆₅ I

e I V₂ V₆₅ I

I₆ IV₆ V₆ I

V₂ I₆ V₇ V₁₃₇

D I I₆ IV V I IV₆ V₆ I

I₆ I IV₆ V₆₅ V V₆₅ I I₆

IV₆ V₆ I I₆ IV V V₆₅¹¹ I

b I IV I₆ V₄₃ V IV

I₆ V₄₃ I IV I₆ V₇ I

A I — I₆ — V — V₂ I₆ I — V₇ —

V₆₅ V₇ — I — IV₆ — V₆ V V₂ — I₆ —

IV — I₆ V₄₃ — I — IV — V₉ I —

f# I — V₄₃ — I₆ — V₂ — I₆ — IV — V₆₅ — I —

V₇ — IV₆ — IV — V₄₃ — I₆ — IV — V₁₃₇ — I

E I I₆ — IV₆ — V V₂ — I₆ IV₆ V₆₅ V₇ I IV₆ — I

V V₆ — V₄₃ — I₆ I — I₆ — IV₆ V₆₅ — V₇ I

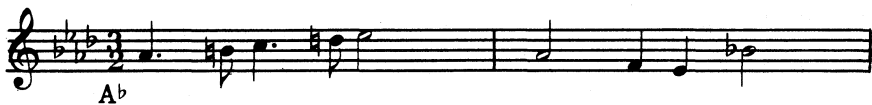
c# I V₄₃ — V₆₅ I — V₂ I₆ — V₆₅ I V —

I V₂ — V₄₃ I₆ — IV IV₆ — V₆₅ — I —

B I — V₂ — I₆ — V₆ — I — IV₆ — I₆ IV

I_6 V_6 — I V_3^4 I_6 — IV — I_6 I
 $g\# I_6$ — V_5^6 — I — IV_6 — I_6 — IV — V_3^4 — I_6 —
 V_7 — I — V_6 — V_2 — I_6 — V_3^4 — I — I_6 —
 IV — IV_6 — I_6 — V_7 — I — V_5^6 — I — IV —
 V_5^6 — I — V — V_2 — I_6 — IV — I
 $G^b I$ — IV — V_3^4 — I_6 —
 IV — I_6 — $V_6^{(6/5)}$ — I — IV — I
 $e^b I$ — V_6 — I — V —
 I — IV — V_7 — I —

In working out melodies for which no numerals are given, primary attention should be paid to the construction of a good bass line. It is advisable to construct the entire bass line first, but always considering the chords that may be built upon it in combination with the given melody.



Musical score consisting of 12 staves. The notation includes various rhythmic values, accidentals, and chord symbols. The chord symbols are: V_2 , I_6 , V_5^6 , B_b , IV_6 , V_7^{13} , F , V_3^6 , V_2 , I_6 , I , IV , and IV_6 . The page number [46] is centered at the bottom.

When non-chord tones are used, parallel fifths sometimes occur between them and chord tones. Such fifths may be used without hesitation. But parallel octaves occurring in this way are still to be strictly avoided. Parallel fifths occurring between non-chord tones of the same species (two suspensions, two passing tones, etc.) are, however, just as disturbing as between chord tones, and accordingly should be avoided.

Thus this progression is permissible:



but not this one:



CHAPTER VIII

$\frac{6}{4}$ CHORD, II^6_5 CHORD

1. $\frac{6}{4}$ chord: *the second inversion of a triad.*



The fifth is in the bass.

Figured-bass symbol: $\frac{6}{4}$

Doublings: fifth preferred; octave or third rarer.

Most frequent use of I^6_4 :

- (a) before a dominant chord in an ending. In this case the effect is of V with two neighboring tones:



- (b) as a passing or changing chord (having the same function as passing or changing tones):



IV^6_4 and V^6_4 are most commonly used as chords formed by changing tones, passing tones, or anticipations.

2. II^6_5 : *subdominant triad with added sixth.*



Particularly useful in endings (before I^6_4 , V, or V_7).

The tones forming the second (or ninth) characteristic of the chord cannot be omitted, while the tone establishing the major or minor character of the chord is at times left out.

The doubling in this case is optional:



This incomplete II_5^6 , like the I_4^6 , is often used as neighboring chord to a dominant chord that follows. In this case the tone which is treated as a neighboring tone (or suspension) resolving to the third of the dominant chord is not doubled:



— EXERCISE 40 —

Write the following chords in different positions:

F I_4^6 D V_4^6 g# IV_4^6 A \flat II_5^6
 e I_4^6 b IV_4^6 f# V_4^6 e \flat II_5^6

— EXERCISE 41 —

Play the following progressions:

A $I_4^6 - V_7 - I$. e $V - I_4^6 - IV$.
 G $I - IV_4^6 - I$. c $IV - I_4^6 - V - I$.
 E \flat $IV - V_4^6 - I$. c# $I_6 - II_5^6 - I_4^6 - V_7 - I$.
 F# $II_5^6 - V_7 - I$. e \flat $I_6 - V_4^6 - I - II_5^6 - I_4^6 - V_7 - I$.

To make this exercise easier, write out the bass progressions, and use them as an aid in playing.

— EXERCISE 42 —

(Figured Bass Given)

The soprano to be worked out over given figured basses must not just make its way awkwardly from chord-tone to chord-tone. Rather, the student should strive to make it a well-constructed melody-line. Write the entire soprano before working out the inner voices.



Bass clef, key signature of two flats (Bb, Eb). Fingering: 6/5, 5/3, 6/4, 5/3, 6, 6/4, 6/5.

Bass clef, key signature of three sharps (F#, C#, G#). Fingering: C#, 6/4, 6, #6/4, #4/3, 6/2, #6/4, #, 6, #, 6/4, #, 6.

Bass clef, key signature of three sharps (F#, C#, G#). Fingering: 6, #, #4/2, 6, #6/4, 6/4, 6, 6/4, 6/5, #3, 6/4.

Bass clef, key signature of two flats (Bb, Eb). Fingering: C, 6/4, 7/5, #6/4, 6, #, 6/4, #, 6/4, 6/5, 6/4, 6/5, 6.

Bass clef, key signature of two flats (Bb, Eb). Fingering: 6/4, #4/2, 6, #6/4, 6/4, 6/5, 6/4, 13/7.

Bass clef, key signature of three sharps (F#, C#, G#). Fingering: E, 6, 6/4, 6, 6/4, 6, 6, 6/4, 5/3.

Bass clef, key signature of three sharps (F#, C#, G#). Fingering: 6, 6, 6/4, 6, 6, 7, 6/4, 6/5, 6/5.

Bass clef, key signature of two flats (Bb, Eb). Fingering: a, 6/4, 6, 6/4, 6/5, 6, 13/7, #4/2, 6.

Bass clef, key signature of two flats (Bb, Eb). Fingering: #6/4, 6, 6/5, 6/4, 6, 6, 6/4, 6/4, #, 13/7.

— EXERCISE 43 —
 (Soprano Given, With and Without Numerals)

The musical score consists of ten staves of music, each with a set of chord symbols written below it. The notation includes treble clefs, various time signatures (6/8, 2/4, 4/4), and key signatures (B-flat major, D major, E-flat major, F major, G major). Chord symbols are written in Roman numerals with superscripts and subscripts indicating inversions and qualities. Some notes have a '+' sign above them, and some measures contain triplets.

Staff 1: c I_6 II_5^6 I I_6 IV I_4^6

Staff 2: IV_6 II_5^6 V_3^4 V_6^6 I I_6 II_5^6 I_4^6 V I

Staff 3: D I IV_4^6 I IV V_9 V_2 I_6 I V II_5^6 V_2

Staff 4: I_6 V_4^6 I IV I_4^6 V_9 I

Staff 5: g I IV_6 I_4^6 II_5^6 I_6 IV I

Staff 6: V V_2 I_6 II_5^6 V V_7^{13} IV_6 I_4^6 IV V_7^{13} I

Staff 7: E^b I V_4^6 I_6 IV I IV^+ I_4^6 V IV_6 V_5^6 I I_6

Staff 8: V_6 V_3^4 I I_6 IV I_4^6 IV_6

Staff 9: I_4^6 II_5^6 V_7 I IV_4^6 I

Staff 10: $f^\#$ I V_4^6 I_6 V_2

Staff 11: I_6 II_5^6 IV_6 V_7 I

a II_5^6 V_7^{13}
 I_4^6 II_5^6 V_5^{11} IV_4^6 I
 F II_5^6 I V_4^6 I_6 V_6^6
 IV_4^6 IV_6^6 I_4^6 IV I_6^6 IV_6^6 V_7^{13}
 A I IV_4^6 I II_5^6 I_4^6 IV_6^6 IV V_2^6 I_6 V_3^4
 V_7^{13}
 eb II_5^6
 V I_4^6 V_7 IV_4^6 V_9
 B I_4^6 II_5^6 IV_6^6 I_4^6 II_5^6

CHAPTER IX

TRIADS ON II, III, VI, VII

1. *In Major:*

II, III, and VI are minor triads.
VII is a diminished triad. (*Cf.* p. 3.)

In Minor:

VI is a major triad.
II and VII are diminished triads.
III is an augmented triad. (*Cf.* p. 3.)

The major and minor triads and their inversions are to be treated exactly like the triads on I, IV, V, and their inversions.

2. *Diminished Triad:* the inversions are preferable (especially the sixth chord). Doubling: in all forms the best tone to double is the one which does not belong to the diminished fifth (or augmented fourth). The most satisfactory treatment of the diminished triad and its inversions consists in the resolution of the diminished fifth (or augmented fourth).
3. *Augmented Triad:* the leading tone contained in it is not to be doubled. At times, the influence of the soprano or the bass (or both together) on the entire texture is so strong that even these precautionary rules cannot be followed. It is then simply impossible to keep these progressions free of poor voice-leading (*e.g.*, hidden fifths and octaves). In fact, there will often be times when even in other, more harmless progressions, one will have to accept weaknesses in voice-leading for the sake of other elements (melodic line, bass structure, root-progression, *etc.*). In such cases hidden fifths and octaves are often not the worst way out of a difficulty. Still, they had better be avoided so far as possible in the outer voices.

———— EXERCISE 44 ————
(Numerals and Meter Given)

E $\begin{matrix} 2 \\ 2 \end{matrix}$ 

G $\frac{6}{8}$ I II | III VI | $\overset{6}{V}_6 \overset{7}{V}_7 \overset{13}{V}_{13}$ | $\overset{6}{VI}_6 \overset{6}{V}_6$ | $\overset{6}{IV}_6 \overset{6}{III}_6$ | $\overset{6}{VI}_6 \overset{6}{V}_6 \overset{6}{I}_6 \overset{6}{VII}_6 \overset{6}{I}_6$ | $\overset{6}{II}_6 \overset{6}{V}_{13}$ | I ||
B \flat $\frac{2}{4}$ $\overset{6}{I}_6$ VI $\overset{6}{IV}_6$ VI | $\overset{6}{V}_6$ $\overset{6}{III}_6$ V $\overset{6}{III}_6$ | $\overset{6}{I}_6$ I $\overset{6}{IV}_6$ I | $\overset{6}{IV}_6$ $\overset{6}{V}_6$ |
I $\overset{6}{V}_6$ $\overset{6}{III}_6$ $\overset{6}{V}_6$ | VI $\overset{6}{III}_6$ $\overset{6}{I}_6$ $\overset{6}{III}_6$ | IV II $\overset{6}{VI}_6$ $\overset{6}{II}_6$ | I ||
g \sharp $\frac{3}{4}$ I $\overset{6}{VII}_6$ $\overset{6}{I}_6$ VI | $\overset{6}{I}_6$ $\overset{6}{V}_7$ | I $\overset{6}{II}_6$ | $\overset{6}{III}_6$ VI | IV II | V $\overset{6}{V}_{13}$ | I ||
f C I $\overset{6}{I}_6$ I | $\overset{6}{III}_6$ $\overset{6}{III}_6$ $\overset{6}{VI}_6$ | $\overset{6}{VI}_6$ II $\overset{6}{V}_6$ | I VI | IV II IV | $\overset{6}{I}_6$ IV $\overset{6}{I}_6$ | $\overset{6}{VII}_6$ V $\overset{6}{V}_{13}$ | I ||
e $\frac{3}{8}$ I | III | $\overset{6}{IV}_6 \overset{6}{III}_6 \overset{6}{IV}_6$ | $\overset{6}{I}_6$ | I VII I | $\overset{6}{II}_6$ | IV $\overset{6}{I}_6$ $\overset{6}{V}_7$ | I ||

— EXERCISE 45 —
(Figured Bass Given)


B \flat 2 6 6 5
F \sharp 6 6 6 5 4 3
A \flat 6 6 2 6 13 7
b #5 6 6 5 6 4 13 7 #
F \sharp 6 6 #6 6 5 #

g #6 6 # 6 6 # 6 4

#5 #6 6 6 6 4 7 #

e 6 6 # #5 #6 7 6 #

6 #6 # 6 #3 6 #5* 6 13 7 #

* Voice leadings like , etc., (a species of hidden fifths) are often unavoidable when the augmented triad is used. In such cases, see to it at least that they do not occur between the two outside voices.

Progressions frequently used:

- (1) VI instead of I, in endings headed towards I (Deceptive Cadence).
- (2) V as the conclusion of an ending, usually following IV₆ in minor (Phrygian Cadence, Half Cadence).

— EXERCISE 46 —
(Sopranos Given With Numerals)

The comparative richness of the harmonic material already at our disposal compels us to burst the bonds of strict vocal style to which we have hitherto confined ourselves. We shall continue to write in four-part style, but we need not keep strictly to the style or the ranges of actual voices earlier set forth. In playing examples on the piano (without having written them down) it is not even necessary to follow the strict rules of four-part writing. A more pianistic style may be adopted, using fuller forms of chords (chords with more than one doubling, complete ninth chords, etc.) or reduced harmonies, with only three parts.

G I VI III I V₆ IV₆ I₆/₄ V

IV VII₆/₄ III VI₆/₄ II V₆/₄ VI₆ IV₆/₄

V₆/₅ V₇ I III II VI V₇ I

E^b I — IV_6 — II V VI II V I II_6^5 VI_6^4
 IV_6 — III_6^5 — III — VI II_6 — II — V_7
— III_6 II_6 III — VI — IV — II_6 V_7 — V_2 I_6 IV I

The leading tone may be doubled with good effect

- (a) when it is not the third of a dominant chord;
- (b) when it is the third of a dominant chord which is followed by a chord other than the tonic (II, III, IV, VI). In this case the two leading tones should not move in the same direction;
- (c) when better voice-leading may be obtained by doing so (almost always by contrary motion of the doubled leading tone).

A I VI — III I_6 — II V_7 VI IV VII_6^5 —
I I_6 — II V_6 — VI I_6 — V V_2 —
 I_6 VI — II — III_6^4 V_6 VI II_6 V_7 — I
c I I_6 II_6 — I_6 I I_6 — IV — IV_6 V_5^{11}
I — I_6 — I_6^4 II_6^5 I_6 VII_6 — VI_6 — IV V_5^6 —
I IV V_7 VI II — I_6^4 II_6^4 IV_6 V

g# I — V VI — I₆ II₆₅ — V₇ I —

V₂ — I₆ — V₄₃ — I — IV II₆₄ — V

I VI₆ — IV — in octaves

VI₆ V₇ VI I IV₆ V₇ in octaves

V₇ I

e I I₆ VI — I₆ — V₆₄ — I₆ V₆₅ — V₄₃ —

V₆₅ I — V₇ — VI IV IV₆ I I₆ —

II — IV₆₄ — VII I₆₄ — VI — I₆ IV₆ — V₇₁₃ I

— EXERCISE 47 —
(Sopranos Given Without Numerals)





CHAPTER X

SEVENTH CHORDS ON I, II, III, IV, VI, AND VII

1. Secondary Seventh Chords

In Major: 

In Minor: 

These chords are used in all inversions ($\frac{6}{5}$, $\frac{4}{3}$, 2) and positions.

I_7 and III_7 in minor are infrequently used; VII_7 , on the other hand, is common.

Often the treatment of secondary seventh chords as independent chords is made unnecessary by considering certain tones as non-chord tones in triads or dominant seventh chords.

The often harsh effect of many secondary seventh chords may be softened by preparation, the characteristic tone (the seventh) occurring first as a chord tone in the same voice in the preceding chord.

The best treatment of VII_7 (in major and minor) and of II_7 (in minor), as well as of their inversions, consists in the resolution of the diminished fifth (or augmented fourth).

2. Secondary seventh chords are usually employed in complete, four-tone form. In particular cases where harmonic completeness is not desired, better voice-leading can sometimes be achieved by omitting one tone:

- (a) in chords containing no diminished or augmented interval (Major: I_7 , II_7 , III_7 , IV_7 , VI_7 ; Minor: IV_7 , VI_7), as well as in VII_7 in minor, either the third or the fifth may be omitted;
- (b) in all others (Major: VII_7 ; Minor: I_7 , II_7 , III_7), that tone may be omitted which neither belongs to the diminished (or augmented) interval nor constitutes the seventh of the chord.

When one of the chord tones is omitted, it is best to double the root and to place the seventh in the upper voice. But the leading tone is not doubled even when (as in VII_7) it is the root.

6 6/5 6/4 7 7 7 # 4/3

Pos. of 3rd

E^b 2 6/5 6/5 2 6/5 6/4 7

13/7 7 6/4 6 7 6/5 6 2 7 6

7 6/5 6/5 7 2 7 7 7

f# #4/2 #5 7 7 13/7 7 #

7 9/# #5 4/3 13/7 6/4 5/3

B 2 7 6/4 2 6/5 6 6/5 4/3 6/5 6 7 6 5

7 6/4 6/5 7 7 6/4 6/5 7 7 6/5 4/3 4/3 7

Pos. of 3rd

e 2 #7 6/4 6/5 4/3 6/5 6/# 6/5 4/3 #

6/# 7 4/3 6/4 7 7 # 13/7

— EXERCISE 50 —
 (Soprano Given With Numerals)

D I — I₆₅ IV₇ — V₂ — I₆ — II₇ — V — III₇ —
 VI — I₄₃ — VII₄₃ — III₇ I₆ II₆₅ — V₄₃ — VI V₇ I
 f I — VI₇ IV₇ — II₇ I₆ — II₆₅ —
 I₆₄ — II₄₃ II₇ — VI₂ IV₄₃ —
 II₆₅ V₄₃ — II₇ — IV₇ — I
 E I I₂ VI₇ VI₂ IV — II₇ — III IV — I₇ IV₇ — VI VI₂ —
 IV₇ — VII₇ — III V — II — VII₇ — VI — VI₂ —
 IV — II₇ — IV VII₆₅ — III IV — I IV₇ —
 VI — IV₇ VII₄₃ III II — IV₇ V₇ I
 c I — I₆ — II₆₅ V₉ VI₇ — IV₂

$\text{II}_7 - \text{II}_2 - \text{VII}_7 - \text{VI}_5^6 - \text{VI}_2 - \text{II}_6 - \text{IV}_2$
 $\text{II}_7 - \text{II}_2 - \text{V}_5^6 - \text{V}_2 - \text{I}_6 - \text{IV}_7$
 $\text{I}_4^6 - \text{VI}_7 - \text{I}_5^6 - \text{I} - \text{II}_5^6 - \text{II}_7$
 $\text{I} - \text{III}_7 - \text{VI}_5^6 - \text{VII}_3^4 - \text{I}_6 - \text{VII}_7 - \text{I}^+$
 A $\text{I} - \text{VI}_7 - \text{I}_2 - \text{III}_2 - \text{IV}_3^4$
 $\text{IV}_5^6 - \text{IV}_7 - \text{III}_7 - \text{II}_7 - \text{I}_5^6$
 $\text{II}_5^6 - \text{I}_3^4 - \text{VI}_7 - \text{VII}_7 - \text{II}_7 - \text{I}$
 b $\text{I} - \text{VII}_7 - \text{I} - \text{VII}_3^4 - \text{I}_6 - \text{II}_7$
 $\text{IV}_7 - \text{II}_3^4 - \text{V} - \text{VI}_5^6 - \text{V}_3^4 - \text{I}_6 - \text{IV}_6$
 $\text{I}_4^6 - \text{II}_5^6 - \text{I}_6 - \text{II}_7 - \text{IV} - \text{II}_3^4 - \text{I}$

— EXERCISE 51 —
 (Soprano and Figured Bass Given)

When suitable occasions present themselves, non-chord tones may be introduced into the inner voices. Care should, however, be taken not to overload the texture.

G Lively

f Slow

In the historical form of thoroughbass figuring (of which the figuring used in this book is a simplified form) there are special signs for raised and lowered tones (*e.g.*, ♯, ♭; *etc.*), but since these signs were not used consistently by all composers, they are here replaced by #, b, ♮, ♯, and ♭♭, in the interests of an unambiguous notation.

A Fast

g Moderately fast

6 II 7 6 7 7 7 #

6 7 6 4 #7 #6 #2

6 6 7 6 6 4 7 #6 5 4

A^b Very lively

(Parallel fifths)

2 7 6 2 7 6 5 7

7 6 5 6 2 7 2

6/5 4/3 6/4 6/5

Very slow

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

6# 6 7 #6/2 6/4 6/5 7 13/7 11/6/5 7

— EXERCISE 52 —
 (Soprano and Unfigured Bass Given)

Quietly

4
3

6
5

Slow

7

6

(+)

6 ()

6

6 6 6

4 #

(+)

(+)

In figured basses, dashes under two or more notes indicate that the harmony of the first chord (triad or other chord specified by the figuring) is sustained to the end of the dash (that is, that the bass line contains non-chord tones or a broken chord). Compare this use of dashes with their use in combination with Roman numerals, from Exercise 20 on.

Lively

(+)

Musical notation for the first system, featuring treble and bass staves. The key signature is two flats (B-flat and E-flat), and the time signature is common time (C). The bass line includes a fermata and a circled plus sign (+) at the end.

Musical notation for the second system, continuing the piece with treble and bass staves. The bass line has a fermata.

Musical notation for the third system, continuing the piece with treble and bass staves.

Fast

Musical notation for the fourth system, marked "Fast", in 2/4 time. The bass line has fingerings 2 and 6/4.

Musical notation for the fifth system, continuing the fast section with treble and bass staves. The bass line has fingerings 4/3 and 7/#.

6 4 2 2 6 6 #5

Lively

7 6/5 7 2

2

+

With quiet motion

First system of musical notation. The key signature is three sharps (F#, C#, G#) and the time signature is 3/8. The music is written for piano with treble and bass staves. The bass staff includes the following fingering: $\begin{matrix} *6 \\ 4 \\ 3 \end{matrix}$ and $\begin{matrix} 6 \\ 5 \end{matrix}$. There is a '+' sign above the first measure of the second staff.

Second system of musical notation. The key signature is three sharps (F#, C#, G#) and the time signature is 3/8. The music is written for piano with treble and bass staves. There is an 'x' mark above the first measure of the second staff and a '+' sign above the first measure of the third staff.

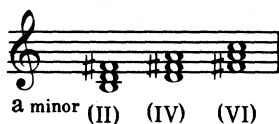
Third system of musical notation. The key signature is three sharps (F#, C#, G#) and the time signature is 3/8. The music is written for piano with treble and bass staves. The bass staff includes the following fingering: $\begin{matrix} 6 \\ 4 \end{matrix}$, $\begin{matrix} 9 \\ * \\ 4 \end{matrix}$, $\begin{matrix} 6 \\ 4 \end{matrix}$, $\begin{matrix} 7 \\ 5 \end{matrix}$, $\begin{matrix} 7 \\ 7 \\ * \end{matrix}$, and $\begin{matrix} 13 \\ 7 \\ * \end{matrix}$.

CHAPTER XI

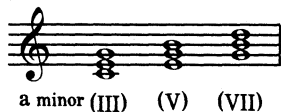
SIMPLE ALTERATION

1. The adoption of a scale other than the harmonic minor provides us with a number of additional chords which belong to the key.

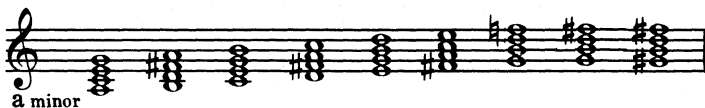
The ascending melodic minor scale yields the following triads (hitherto not employed in minor):



The descending melodic minor scale (natural minor) yields:

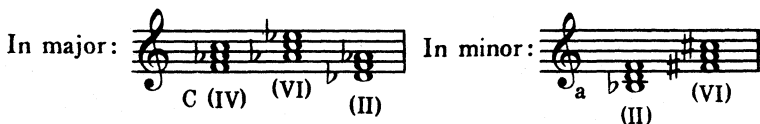


The following seventh chords are obtained from the ascending and descending melodic forms of the minor scale:



These secondary seventh chords produced by simple alteration are treated in respect to the question of parallel fifths exactly like the original, unaltered secondary sevenths dealt with in Chapter 10.

2. Through chromatic alteration of single scale-steps (raising or lowering by means of accidentals) still further chords may be added. Of the great number so obtained the most frequently employed are:



The triad on the altered VI is frequently used in a variation of the Deceptive Cadence mentioned on page 55: I-V₇-Alt. VI.

The triad on the altered II is used mainly in its first inversion ("Neapolitan sixth"). The very common connection of this chord with a dominant (Neap. II₆-V[7]) is characterized by two patterns, which, because of their conspicuousness, are usually avoided in other connections, but are to be recommended here as both necessary and of good effect:

- (a) diminished third in one of the voices (from the root of the Neapolitan chord to the leading tone in the dominant chord);
- (b) cross-relation.

3. The most frequently used seventh chords obtained through this form of simple alteration are:



Some of the chords mentioned above introduce minor elements into major (*e.g.*, the minor subdominant), and vice versa. Hence it is understandable that even tonic triads may be interchanged as long as a definite feeling of major or minor is not desired (rather in the course of tonal development than at the beginning or at the end; but a minor development often has a tonic triad in major form as its ending—containing the so-called "Picardy third"—the reverse being less frequent).

Altered chords cannot be expressed with Roman numerals without risking confusion with unaltered chords originally denoted by these numerals. Therefore from this point on Roman numerals are reserved for the few cases where other indications would be less correct (see pp. 107 ff.), and the more exact system of figured bass indications is used almost exclusively.

The attentive student, however, will have noticed a certain ambiguity even in figured basses. In general, the figures are abbreviated symbols for chords (*e.g.*, $\overset{6}{4}$, $\overset{6}{5}$, etc.), but in certain cases two consecutive figures indicate the progression of a single voice (*e.g.*, *s* 7, which occurred as early as Exercise 24, and others). This ambiguity is due to the fact that no figuration whatsoever can reproduce everything that takes place in progressions, as expressed in staff-notation. But with the experience gained thus far the student will not be in any doubt as to the meaning of the figures in each instance.

— EXERCISE 53 —
(Soprano and Figured Bass Given)

C Moderately fast

[74]

First system of a musical score. The treble clef staff contains a melodic line with a sharp sign above the final note. The bass clef staff contains a bass line with several chords indicated by numbers: 7, b5, 6, b6, b, 6, 4, 7.

b With quiet motion

Second system of a musical score. The treble clef staff contains a melodic line with a sharp sign above the final note. The bass clef staff contains a bass line with several chords indicated by numbers: #, 6, 4, 3, #6.

Third system of a musical score. The treble clef staff contains a melodic line. The bass clef staff contains a bass line with several chords indicated by numbers: 2, 6, 4, #6, 6, 4, 6, 7, #.

E^b Lively

Fourth system of a musical score. The treble clef staff contains a melodic line with triplets marked with a '3'. The bass clef staff contains a bass line with several chords indicated by numbers: b5, 6, b, 6, 6.

Fifth system of a musical score. The treble clef staff contains a melodic line with triplets marked with a '3'. The bass clef staff contains a bass line with several chords indicated by numbers: b5, 7, 6, b6, 7.

f Fast

5 6 7^b 7

b 6 4/3 b 11/6/5

6 7 6/5 7 6 b6 7

B Slow

b6/2 b6 2 6 7 4/3

b5 6/4 b6 #6 7

$\flat\flat$ Gay

7 6 7 6

6 6 7 6

6 5 4 3 6 7 4 3

4 4 6 5 7 6 4 b

4 5 7 6 4 3 7 4

— EXERCISE 54 —
 (Soprano and Unfigured Bass Given)

With lively rhythm

First system of musical notation for Exercise 54. The treble staff contains a melody with eighth and sixteenth notes, and the bass staff provides a simple accompaniment. The key signature is two flats (B-flat and E-flat), and the time signature is 2/4.

Second system of musical notation for Exercise 54, continuing the melody and accompaniment from the first system.

b

Third system of musical notation for Exercise 54, continuing the melody and accompaniment.

b 6
4
2

Quietly

Fourth system of musical notation for Exercise 54. The tempo marking is 'Quietly'. The key signature changes to two sharps (F# and C#), and the time signature is 4/4. The melody is more complex, featuring sixteenth-note runs and slurs. The bass staff includes figured bass notation: #, #5, 6, b6, q, 7.

Fifth system of musical notation for Exercise 54, continuing the quiet section. The bass staff includes figured bass notation: #, 7, q.

7 # 6 5 # 4 7 6 7 9 8 6 7

Gay

b⁶ b b⁴ + 2

11 6 5

Moderately fast

6
4

2

6
4

(Near II) #

3 3 3

Lively

b

b

b

7

b 7
5

b 7
5

b 5

4
3

b 7
5

b 7
5

b 7
5

b

6

+

+

Slow

+

+

+

The first system of music consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. Both staves are in the key of D major (two sharps). The music is written in a 4/4 time signature. The first measure contains a quarter note D5, a quarter note E5, a quarter note F#5, and a quarter note G5 in the treble; and a quarter note D4, a quarter note E4, a quarter note F#4, and a quarter note G4 in the bass. The second measure contains a quarter note A5, a quarter note B5, a quarter note C#6, and a quarter note D6 in the treble; and a quarter note A3, a quarter note B3, a quarter note C#4, and a quarter note D4 in the bass. The third measure contains a half note D5 with a slur over it, and a quarter note E5, a quarter note F#5, and a quarter note G5 in the treble; and a quarter note D4, a quarter note E4, a quarter note F#4, and a quarter note G4 in the bass. Below the second measure, there is a chord marking '7' with a sharp sign below it. Below the third measure, there is a chord marking '6'.

The second system of music consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. Both staves are in the key of D major (two sharps). The music is written in a 4/4 time signature. The first measure contains a quarter note D5, a quarter note E5, a quarter note F#5, and a quarter note G5 in the treble; and a quarter note D4, a quarter note E4, a quarter note F#4, and a quarter note G4 in the bass. The second measure contains a quarter note A5, a quarter note B5, a quarter note C#6, and a quarter note D6 in the treble; and a quarter note A3, a quarter note B3, a quarter note C#4, and a quarter note D4 in the bass. The third measure contains a half note D5 with a slur over it, and a quarter note E5, a quarter note F#5, and a quarter note G5 in the treble; and a quarter note D4, a quarter note E4, a quarter note F#4, and a quarter note G4 in the bass. Below the first measure, there is a chord marking '7' with a sharp sign below it.

CHAPTER XII

SECONDARY DOMINANTS

Any major or minor triad other than the tonic triad of a key (II, III, IV, V, VI in major; IV, V, VI in minor), as well as all major or minor triads created by alteration, can be emphasized by being preceded by a triad (major, less frequently minor) or seventh chord (mostly of the dominant seventh type—that is, consisting of major triad and minor seventh) which stands in the relation of a dominant to it.

These secondary dominant chords contain tones which do not belong to the main key (or, what amounts to the same thing, alterations of the tones of the key).

The dominant seventh chord of the main key can also be preceded by its dominant.

— EXERCISE 55 —

Play the following progressions:

V-I, V₇-I, IV-I, VI-I, III-I, altered VI-I, II-I, Neap. II₆-I, in various major and minor keys, and in the several positions, the first chord in each progression being preceded by its secondary dominant.

Example (f#: Neap. II₆-I):



The effect of a secondary dominant can be created not only by a chord standing in the relation of dominant to its successor, but also by a chord erected on a tone which is used as the leading tone to the root of the following chord, thus establishing an artificial VII, VII₆, VII₄⁶, or VII₇ (altered or unaltered, in root position or any inversion).

— EXERCISE 56 —
 (Soprano and Figured Bass Given)

Moderately fast

6 #5 # # b7

#₂ 6 7 2 6

6₅ # 7

Fast

7 6 47 6 13 7 2

6 + 4 6 # #5 # 7

Gay

4 6 b5 6 5

6 6 #4 3 6 4 6 4 b 4 3 b 5 6 5 b

Slow

6 #6 #4 6 4 3 2 6 7 # 11 13 6 5 # # 6

4 2 6 # 4 2 6 6 4 7 b 6 4 2 4 2 # 6 5 7

— EXERCISE 57 —
 (Soprano and Unfigured Bass Given)

Moderately fast

6

Musical score for the first system, featuring a treble and bass clef. The key signature has one sharp (F#). The music includes a triplet of eighth notes in the bass clef and a triplet of sixteenth notes in the treble clef. A plus sign (+) is placed above the first measure of the treble staff.

With quiet motion

Musical score for the second system, marked "With quiet motion". The time signature is 9/8. The key signature has two flats (Bb, Eb). The music features a melodic line in the treble clef and a bass line in the bass clef. A plus sign (+) is placed below the final measure of the bass staff.

Musical score for the third system, continuing the piece. The key signature remains two flats (Bb, Eb). The music features a melodic line in the treble clef and a bass line in the bass clef. A number "6" is placed below the final measure of the bass staff.

Musical score for the fourth system, continuing the piece. The key signature remains two flats (Bb, Eb). The music features a melodic line in the treble clef and a bass line in the bass clef. A number "6" is placed below the final measure of the bass staff.

Musical score for the fifth system, continuing the piece. The key signature remains two flats (Bb, Eb). The music features a melodic line in the treble clef and a bass line in the bass clef. A "b7" chord symbol is placed below the first measure of the bass staff, and a plus sign (+) is placed above the final measure of the treble staff.

First system of musical notation, consisting of a treble and bass staff. The treble staff features a melodic line with eighth and sixteenth notes, while the bass staff provides a harmonic accompaniment with eighth notes.

Second system of musical notation, continuing the piece. The treble staff has a more active melodic line with slurs, and the bass staff continues with a steady accompaniment.

Third system of musical notation. The treble staff shows a melodic line with some rests, and the bass staff maintains the accompaniment.

Fourth system of musical notation. The treble staff has a more complex melodic line with slurs and ties. The bass staff has two measures with a sharp sign and the number 5 below the staff, indicating a fingering or a specific note.

Fifth system of musical notation, the final system on the page. The treble staff has a melodic line with slurs, and the bass staff continues with the accompaniment.

CHAPTER XIII

EXTENDED ALTERATION

1. The dominant seventh chord and its inversions are frequently used in altered form. Alterations are made by
 - (a) enharmonic change of the seventh
 - (b) enharmonic change of the fifth
 - (c) use of the tone a half-step above or below the fifth instead of the fifth itself.

Original form Alterations.

1 2 3 4 5 6

7 8 9 10 11 12

Chords Nos. 6, 7, and 8 are not used as regular forms, owing to the doubly augmented or diminished intervals they contain.

2. The closest tonal affiliations of these altered dominant chords can be found in the major or minor triad (or sixth chord) immediately following, which must be written in its regular form—*i.e.*, without any augmented or diminished interval—and must be reached without any chromatic or enharmonic connection by one of the following progressions:
 - (a) Resolve the diminished fifth into a major or minor third (or the augmented fourth into a major or minor sixth), as described on p. 18. Treat the tone reached by an upward half-tone step in this resolution as the root of the triad, and complete this triad with the remaining two voices (more than one possibility in Nos. 5 and 12).
 - (b) Resolve as under (a), but replace the root of this resolution by another root, a major or minor third lower (as in a “deceptive cadence”—see pp. 55 and 74), treating one of the two remaining tones of the dominant chord as a leading tone (Nos. 3, 5, 11, 12) or as a subdominant (No. 2).

Thus we obtain the following resolutions:

2 3 4 5 9

10 11 12

Numerous other progressions are possible by disregarding the above instructions. But then the progression must consist of more than two chords to make its tonal significance clear.

In progressions involving chords introduced into a key by extended alteration (whether involving such chords exclusively or in connection with other chords) the ear is quite insensitive in the matter of parallel fifths. Here, too, the attention of the listener is distracted from the parallels by a more conspicuous element—the complex tonal relation.

- The inversions of these chords may often, by the introduction of chromatic progressions, be used in simpler and more legible forms. But they can be used in their unchanged forms, too, and some of them, *e.g.*,



are actually used here and there.

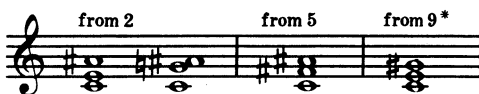
- Next to chord 2 (the augmented $\frac{6}{5}$ or “German sixth”) and chord 5 (the augmented $\frac{6}{3}$, or “French sixth”) No. 9 is the most frequently used. It appears almost invariably with the augmented fifth in the upper voice:



Two of its inversions are used the same way:



The following three-part chords, obtained by omitting one of the voices from Nos. 2, 5, and 9, are frequently used:



(“Italian sixth”)

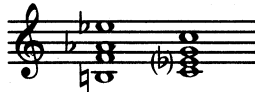
*This augmented triad is a dominant chord, while the original (unaltered) augmented triad mentioned in Chapter IX is a chord on III in minor.

All these chords have the same tonal resolution as the original chords from which they are derived.

5. Like the dominant seventh chord, the diminished seventh chord (VII_7 in minor) also occurs in altered forms. The enharmonic change of its tones permits direct resolution into four different major or minor triads or their inversions:



One of the chord tones (a different one in each case) is used as the leading-tone to the root of the next chord. The tone a third above this leading-tone may be replaced by a diminished fourth. The result is a chord which is similar to V^{11}_5 . The new tone is always in the upper voice.



Despite the great freedom in voice-leading made possible by these altered seventh chords of dominant character, care must still always be taken (in forms in which one tone is omitted, or in chord-formations in more than four parts) to avoid doubling the tone that acts as leading tone.

6. All chords containing diminished fifths or augmented fourths are especially susceptible to alteration. These chords have too many possibilities to be brought within an easily comprehensible system. One has to be content, therefore, with constructing these chords as needed, and using them according to their construction, even though some of them, through frequent use, have already found a definite place in tonal classification, such as this one:



It will already have been observed that the harmonic enrichment which alteration brings into the field of key-relations introduces also the danger of rank overgrowth, surfeit, and dissolution into chaos. For actually every tone of a scale may be altered, and this fact brings into being an unknowable host of ever further ramifying tonal relations. This does not mean that new sounds are created, but simply that the combinations already known appear in ever varying notations. Fortunately, however, we always have the possibility of substituting chromatic notation for leading-tone treatment and this reduces the great number of complicated altered chords to the manageable proportions of the series of the more usual and simpler alterations that we already know.

— EXERCISE 58 —
 (Soprano With Figured Bass)

Moderato

Slow

\sharp 6 5 $\sharp 6$ 5 9 $\sharp 6$ $\flat 5$

$\sharp 6$ 4 2 6 4 $\sharp 6$ 4 2 $\sharp 6$ 4 3

6 4 $\sharp 4$ 3 6 $\sharp 6$ \sharp $\sharp 5$ 3 2

\sharp 7 $\sharp 6$ 5 6 4 6 5 \sharp 7 $\flat 5$ $\flat 4$ $\flat 2$ $\flat 7$ $\sharp 5$ $\flat 4$ \flat

7 $\sharp 4$ 3 $\flat 7$ $\flat 5$ \flat $\sharp 6$ 4 3 7 \flat 6 $\flat 7$ 5 3 6 2

7 #4 #
 b6 4 3
 b7 5 3
 2 6 4

Lively

13 7 #
 7 #
 b7
 6 6 2 6 6 # 2-
 4

7 #
 b7 4 3
 b6 #
 #6 b5 4
 6 9 11
 #6 *4 7 5

#5 6 6 #6 7 #6 6 7 #6
 4 4 4 3 5 4 * 4 3

2 7 2 7 7 6 6 #

Quietly

Figured Bass Notation:

System 1: #6/4/#2 — b7 11/6/5 9/b6/4 7/b6/4

System 2: 7/# 7/b5 #7/#5 #6/4/3 # 6/4 b10/7/5

System 3: 6/4 b7/3 6/4 7/b6/# 6/4 6/# 9/#7/#5

System 4: #13/#7/# #12/# #9/#7/# 13/7/# b7/# #10/#7/#3 #

In such exercises it is easy to recognize the limitations of the figured-bass symbols. They begin to be unhandy when they consist of figures (or accidentals) representing three tones of a chord; and when they contain figures or accidentals representing *four* tones they lose their function completely. For then the figures, the original purpose of which was to provide a sort of short-hand substitute for staff-notation, have defeated that purpose by becoming more complicated than the staff-notation itself—and are thus a useless and burdensome addition.

— EXERCISE 59 —
(Soprano With Unfigured Bass)

Grazioso

The first system of musical notation for Exercise 59, marked 'Grazioso'. It consists of a treble clef staff and a bass clef staff. The key signature is one sharp (F#) and the time signature is 2/4. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final note of the second measure. The bass staff provides a harmonic accompaniment with a similar phrasing.

The second system of musical notation for Exercise 59. It continues the melodic and harmonic lines from the first system. The treble staff features a series of eighth and sixteenth notes, while the bass staff continues with a steady accompaniment.

The third system of musical notation for Exercise 59. The melodic line in the treble staff shows a sequence of eighth notes with some slurs. The bass staff continues with a consistent accompaniment.

The fourth system of musical notation for Exercise 59. The treble staff has a slur over the first two measures. The bass staff continues with a steady accompaniment.

Very fast

The fifth system of musical notation for Exercise 59, marked 'Very fast'. It features a treble clef staff and a bass clef staff. The key signature is two sharps (F# and C#) and the time signature is 2/4. The treble staff contains a rapid melodic line with a slur over the first two measures. The bass staff provides a harmonic accompaniment.

First system of musical notation. The treble clef staff contains a melodic line with a long slur over the first two measures. The bass clef staff provides a harmonic accompaniment with chords and moving lines.

Second system of musical notation. The treble clef staff features a melodic line with three distinct phrases, each under a slur. The bass clef staff continues the accompaniment.

Third system of musical notation. The treble clef staff has a melodic line with a slur over the first two measures. The bass clef staff includes a measure with a whole rest, indicating a moment where the bass line is silent.

Fourth system of musical notation. The treble clef staff contains a melodic line with a slur over the first two measures. The bass clef staff has a measure with a whole rest.

Fifth system of musical notation. The treble clef staff has a melodic line with a slur over the first two measures. The bass clef staff continues the accompaniment.

First system of a musical score. It consists of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two sharps (F# and C#). The music features a melodic line in the treble clef and a supporting bass line in the bass clef.

Slow

Second system of the musical score, marked "Slow". The key signature changes to two flats (Bb and Eb). The music continues with a melodic line in the treble clef and a bass line in the bass clef.

Third system of the musical score, continuing the piece in the key of two flats. The melodic line in the treble clef shows more complex rhythmic patterns.

Fourth system of the musical score. A triplet of eighth notes is marked with a "3" above it in the treble clef. The bass line continues with a steady accompaniment.

Fifth system of the musical score. The piece concludes with a final cadence. A measure in the bass clef contains a sharp sign and the number "6" above a "4", possibly indicating a fingering or a specific performance instruction.

The first system of music consists of two staves. The upper staff is in treble clef and the lower staff is in bass clef. The key signature has two flats (B-flat and E-flat). The melody in the treble staff is characterized by eighth-note patterns and slurs, with some notes beamed together. The bass staff provides a harmonic accompaniment with quarter and eighth notes.

Moderately fast

The second system is marked "Moderately fast" and is in 7/8 time. It features a treble and bass clef. The treble staff contains a melodic line with eighth-note runs and slurs. The bass staff has a simpler accompaniment with quarter notes and rests.

The third system continues the piece with two staves. The treble staff has a more active melodic line with eighth-note patterns and slurs. The bass staff continues with a steady accompaniment.

The fourth system shows further development of the melody in the treble staff, including slurs and some grace notes. The bass staff accompaniment remains consistent with the previous systems.

The fifth system concludes the page with two staves. The treble staff features a melodic line with slurs and various intervals. The bass staff provides a final accompaniment with quarter notes and rests.

CHAPTER XIV

MODULATION—I

1. Modulation is a progression from one tonality into another.

A modulation is clear and unambiguous if each tonality is purely and unmistakably expressed. The new tonality should not be approached before the old one is firmly established.

The simplest means of firmly establishing a tonality is the cadence. In its shortest form a cadence consists of three chords of a tonality, the last of which is always the tonic triad.

2. The strongest and accordingly the most common cadences are those in which the dominant precedes the tonic triad. The chord preceding the dominant may be built on any of the scale-steps.

— EXERCISE 60 —

Play the following cadences (figured basses):

C f# 6 # E^b 7
 d 6 7 # G 6 5 b^b 4 3
 D 7 c# 6 5 # 6 5 A b 6 7 #

3. Cadences with the subdominant preceding the tonic triad (plagal cadences) are less decisive, and therefore should not be used when the strongest cadential effect is called for.

— EXERCISE 61 —

Play the following cadences:

C a^b 4 3 E^b 6 5

b 6 # F b6 5 c# 7 #5 7

Db 6 bb B b7 # d #5 b

The decisiveness of a cadence decreases proportionately as the relationship of the penultimate chord to the tonic becomes more distant.

— EXERCISE 62 —

Play the following cadences:

C g F

e 7 # A 6 d b5 6/5 b

Gb 6 6/5 bb bb 6 6 B 6/5

G b5 a 6 b6 Eb 5 6/4 3

eb 7 E #6/5

- The half-cadence (Phrygian cadence) already mentioned (p. 55) is a cadence which aims not at the tonic triad but at the dominant. In minor, this dominant is usually preceded by the subdominant sixth-chord, and in major, by the altered subdominant sixth-chord. Since the tonal significance of this cadence is clear only in the light of a previous or subsequent principal cadence leading to the tonic, this cadence does not lend itself to the unambiguous definition of a tonality. It is more appropriate as a passing cadence in the course of a tonal development, or as a final cadence where the intention is to keep the ending open and indefinite.

2

3

4

Other modulations employ the dominant or subdominant triad of the original key as a pivot.

— EXERCISE 65 —

Play the following exercise in the manner of the previous one.

1

2

3



The common chord may appear in the rôle of

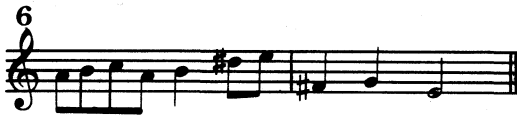
- (a) *secondary dominant* of the dominant or subdominant of the new key;
- (b) *secondary dominant* of II, III, or VI of the new key;
- (c) simply altered chord in the new key.

— EXERCISE 66 —

Play in the manner of the previous exercises.







Any other chord of the key of origin may serve as the pivot of the modulation, if it is made to perform any of the aforementioned functions in the key of destination.

EXERCISE 67

Play in the manner of the previous exercises.

A piano exercise in 3/8 time, consisting of two staves. The right hand plays a melody of eighth notes, and the left hand plays a bass line of eighth notes. The key signature has one sharp (F#).

Three variations of a piano exercise in 3/8 time, each on a single staff. The first variation is in G major (one sharp). The second variation is in A major (two sharps). The third variation is in B major (three sharps). Each variation shows a different fingering or articulation of the same melodic line.

etc.

A piano exercise in 2/4 time, consisting of two staves. The right hand plays a melody of quarter notes, and the left hand plays a bass line of quarter notes. The key signature has two sharps (F# and C#).

Three variations of a piano exercise in 2/4 time, each on a single staff. The first variation is in G major (one sharp). The second variation is in A major (two sharps). The third variation is in B major (three sharps). Each variation shows a different fingering or articulation of the same melodic line.

etc.

6. In many modulations, there is no attempt to provide for a clearly perceptible middle ground: the key of origin is first clearly established and then the key of destination is joined to it as a contrast. Obviously this may result in a fissure in the texture which, if it is not wisely employed as a special means to further the harmonic development, may easily destroy the smoothness of a progression.

Provided, however, that there is not too great a contrast in structure between the last chord in the key of origin and the first chord in the new key (as, for example, if the former were to be an augmented triad and the latter a secondary seventh chord; or the one a chord without third and the other a dominant chord with a sixth replacing the fifth; or one chord spread out widely and the other in the closest possible position; *etc.*) there will always be a perceptible relation between them, be it ever so tenuous. Thus this form of surprise modulation differs not so much in kind as in degree from the progressions previously described. To the extent that we depart from the norm of smooth and closely meshing modulation, the disjunct, interrupted character of a terrace-like modulation produces an increasingly conspicuous, obtrusive, and finally disturbing effect, which, even in cases where the entire tonal structure of the piece demands this effect, is apt to place a great burden on the understanding. The hearer follows only with difficulty the sudden jump from one closed tonal domain into another, and if he is upset by this trick too often and at too small distances, he will turn with a shudder from the achievements of the unbridled tone-manipulator to seek his salvation in a gentler style of music in which he is spared the unpleasantness of such shocks.

— EXERCISE 68 —

Play the following in the manner of the previous exercises.



CHAPTER XV

MODULATION—II

1. Modulations which lead very quickly into distant and surprising keys (modulations which accordingly cannot be used everywhere) result from making the final chord in the key of origin a chord with extended alterations in the key of destination.

— EXERCISE 69 —

Play the following in the manner of the previous exercises.

A piano introduction in 4/4 time, consisting of two measures. The right hand plays a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4. The left hand plays a sequence of eighth notes: F#3, G3, A3, B3, C4, B3, A3, G3. A fermata is placed over the final G3 in the left hand, with a '7' below it, indicating a seventh chord.

Five melodic lines in treble clef, 4/4 time, each starting with a D4 quarter note. The lines are numbered 1 through 5. Line 1 is labeled $D VI_4^6$. Line 2 is labeled $E V_4^6$. Line 3 is unlabeled. Line 4 is labeled $F\#II (A) VI_4^6$. Line 5 is unlabeled. Each line contains a sequence of eighth and quarter notes with various accidentals.

6
7
8

continue
continue
continue

etc.

2. The key of destination need not be arrived at directly. Other keys may be touched on in the course of the modulation leading to it. Each of these may be arrived at in any of the many ways previously described, and care must be taken always to define the tonal groups clearly if they are not to appear as simply belonging to one of the adjacent keys.

In the following exercise this technique is applied.

— EXERCISE 70 —

The following modulating melodies should be worked out. It is no longer absolutely necessary to keep strictly to four-part writing. Some of the writing may be in three parts or in more than four parts. In this connection it should be noted that it is often difficult in three-part writing to make clear the significance of harmonic progressions which are very close-packed with alterations. Writing in five or more real parts is suitable enough to the quietly moving lines of vocal style. But it hardly lends itself to our more animated instrumental style, in which the too independent movement of numerous individual parts, which in their self-willed motion would constantly be getting in each other's way, would hardly yield a pleasant result. In addition to writing in three, four, five or more real parts, the student should practise the mixed style idiomatic to keyboard instruments, combining chords of many tones with passages in thinner texture.

Andante

B^b

F V

dI₆₄

CV₆ aV₆ FV

B^bV

E^bV₇

B^b I₄⁶

Lively
c# g#II Neap.

F#V c#II Neap.

(C#) a#I

F# I

BI GI

c# I

F#V EV

g#VII

c#I

Moderately fast

Ab Eb I₆₄

f AbIV

CI aI

CIV EI₆₄

AbI

Musical staff 1: Treble clef, key signature of two flats (B-flat, E-flat), 2/4 time signature. The melody consists of eighth and sixteenth notes with slurs. The label *c#I (db)* is positioned below the first measure, and *DV* is positioned below the fifth measure.

Musical staff 2: Treble clef, key signature of two flats (B-flat, E-flat), 2/4 time signature. The melody consists of eighth and sixteenth notes with slurs. The label *Ab I* is positioned below the first measure.

Musical staff 3: Treble clef, key signature of two flats (B-flat, E-flat), 2/4 time signature. The melody consists of eighth and sixteenth notes with slurs.

Musical staff 4: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The tempo marking *Con moto* is positioned above the first measure. The melody consists of eighth notes with slurs.

Musical staff 5: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs.

Musical staff 6: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs.

Musical staff 7: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs. The word *fine* is positioned below the first measure.

Musical staff 8: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs. Measure numbers 12 and 13 are indicated below the staff.

Musical staff 9: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs.

Musical staff 10: Treble clef, key signature of three sharps (F#, C#, G#), 3/8 time signature. The melody consists of eighth notes with slurs. The instruction *D.C. al fine* is positioned below the staff.

With quiet motion

Musical score for the section 'With quiet motion'. It consists of eight staves of music in 4/4 time. The key signature has one flat (B-flat). The first staff begins with a treble clef and a 4/4 time signature. The music features a mix of eighth and sixteenth notes, often beamed together. There are several accents (>) and slurs throughout the piece. The eighth staff concludes with a long, sweeping slur over the final notes.

Presto

Musical score for the section 'Presto'. It consists of two staves of music in 3/2 time. The key signature has two flats (B-flat and E-flat). The first staff begins with a treble clef and a 3/2 time signature. The music is characterized by a faster tempo and features a mix of eighth and sixteenth notes, often beamed together. There are several slurs and accents throughout the piece.



CHAPTER XVI

SUPPLEMENTARY EXERCISES

Write piano accompaniments to the solo parts of the following sonatinas, which are conceived for flute or violin.

Here it is even less necessary than in the exercises of Chapter 15 to keep strictly to four-part writing. For the sake of convenience in playing or of sonority the harmonies may be filled out (care being taken to keep the doublings in good proportion) or reduced to two or three voices. Compact harmonies may be dissolved by broken chord figures into melodic lines. Unison passages, voice-crossings, strengthening of the bass, parallels, and numerous other devices may be employed to give the texture life and variety. They will all develop out of the four-part style which has been practised in the foregoing chapters, when we subordinate that style to our experience in the technique of keyboard performance. Examples of this kind of writing are to be found throughout the classic and modern literature.

The procedure in doing these exercises should be as follows:

- (a) Determine the tonal groupings. Note that some sections are held together within a key (the end of the section belonging to the same key as the beginning) while the harmonic characteristic of other sections is their modulatory nature.
- (b) Determine at the outset in what styles the various sections are to be worked out. As an aid in this procedure, Roman numerals indicate the different sections, corresponding sections being indicated by identical numerals.
- (c) Write out a bass line derived from the considerations under *a*: first the principal points in the harmony, and then the passages that connect them. Then add (sparingly) numerals which make the harmonic outline clear.
- (d) Work out the bass line according to the considerations under *b*.
- (e) Complete the harmony.

The completed piano part can be a very correct and orderly piece of work, in accordance with the rules of harmony. That is the goal that everyone who has mastered the foregoing exercises can reach. As was said in the Preface, no gift for composition is necessary in order to reach this goal. Once a student has reached this comparatively high degree of technical knowledge, he may with good conscience devote himself to technical problems of a different sort—problems which may also be solved without any creative talent but simply by intelligent calculation and combination. If, on the other hand, his completed versions of these sonatinas show that he can not only realize their possibilities correctly, but at the same time speak a personal and in the best

sense peculiar language, then he must consider whether the creative gifts thus evidenced should not be developed in the direction of original composition. The attempt can do no harm if he never forgets what a tiny percentage of those who compose are really gifted composers, and how with the best will in the world, and even with the severest judgment, the danger is ever present of mistaking for creative talent what is only a gift for adroit imitation or a highly developed skill in compilation.

To sum up, we may say that the completion of the exercises in this book proves nothing about the creative abilities of the student who has accomplished it. On the other hand, a composer, even a very gifted composer, is no more than half-grown and unskilled if he cannot do the exercises in this book with ease.

Sonatina I

Allegro

The musical score for Sonatina I is written in a single system with seven staves. The key signature has two flats (B-flat and E-flat), and the time signature is 2/2. The piece begins with a first ending bracket labeled '1' and a dynamic marking of *p*. The first staff contains the initial melody. The second staff continues the melody with a slur and a dynamic marking of *f*. The third staff features a second ending bracket labeled 'II' and a dynamic marking of *f*. The fourth staff has a third ending bracket labeled 'III' and a dynamic marking of *f*. The fifth staff has a fourth ending bracket labeled 'IV' and a dynamic marking of *pp*. The sixth staff has a fifth ending bracket labeled 'V' and a dynamic marking of *mf*. The seventh staff has a sixth ending bracket labeled 'VI' and a dynamic marking of *p*, with a *cresc.* marking below it.

Musical score for the first section of *Sonatina II*. The score consists of six staves of music. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a common time signature. The music is characterized by flowing, melodic lines with various articulations such as slurs and accents. Dynamics include *f* (forte) and *ff* (fortissimo). The second staff includes a *f* dynamic. The third staff includes a *ff* dynamic. The fourth staff includes a *p* (piano) dynamic and is marked with the Roman numeral III. The fifth staff includes a *p* dynamic and is marked with the Roman numeral IV. The sixth staff includes a *p* dynamic and is marked with the Roman numeral I. The final staff includes a *cresc.* (crescendo) marking, a *f* dynamic, and the instruction *unisono*. The score concludes with a final chord.

Sonatina II

Musical score for the second section of *Sonatina II*. The score consists of three staves of music. The first staff begins with a treble clef, a key signature of two sharps (D major), and a 9/4 time signature. The tempo is marked *Moderato*. The music features a melodic line with a *p* (piano) dynamic. The second staff includes a *pp* (pianissimo) dynamic. The third staff includes a *mf* (mezzo-forte) dynamic and is marked with the Roman numeral II. The score concludes with a final chord.

III
D#*p*

continue ...

IV
f

V
mf *p* *p*

continue

VI
f

III continue
G#*f*

I
ff
 IV
p subito
 continue
cresc.
 I
f
 continue
ff

Sonatina III

I
 Allegro assai
f
 continue

This musical score is written in D major (two sharps) and consists of ten staves. The notation includes various rhythmic values, slurs, and dynamic markings. The first staff begins with a treble clef and a key signature of two sharps. The second staff continues the melodic line. The third staff is marked with a second ending bracket labeled 'II' and a dynamic marking of *p* (piano). The fourth and fifth staves show further melodic development with slurs. The sixth staff features a treble clef with a flat sign (F) and a dynamic marking of *f* (forte). The seventh staff continues with a dynamic marking of *mf* (mezzo-forte). The eighth staff is marked with a third ending bracket labeled 'III' and a dynamic marking of *f*. The ninth staff is marked with a fourth ending bracket labeled 'IV' and a dynamic marking of *f*. The tenth staff concludes the piece with a double bar line and repeat dots.

Musical score for the first section of Sonatina IV, consisting of eight staves of music in G major and 2/4 time. The score includes various musical notations such as slurs, accents, and dynamic markings like *p* and *f*. It is divided into three sections labeled I, II, and III.

Sonatina IV

Moderato

Musical score for the second section of Sonatina IV, consisting of two staves of music in G major and 2/4 time. The tempo is marked *Moderato*. The score includes dynamic markings *p*, *mf*, and *f*.

mf

p

II

p

continue

p

cresc.

mf

III

pp

cresc.

mf

cresc.

f

cresc.

I

ff

continue

mf

ff

II

p

p

continue

cresc.

f

ff

mf

IV

p

continue

pp