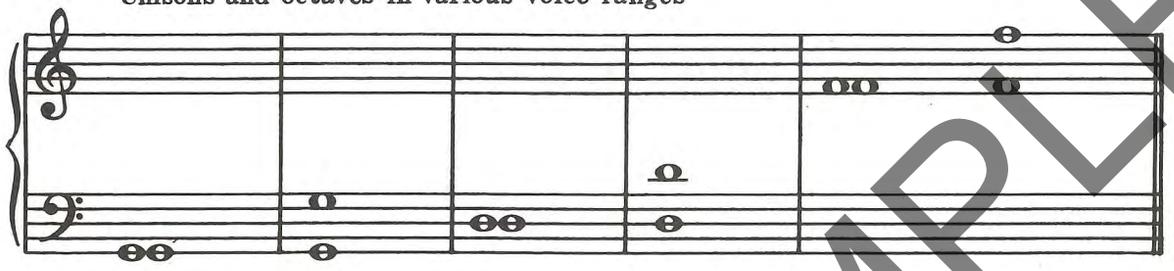
SECTION I

INTERVAL SENSING AND IDENTIFICATION

An *interval* may be defined as a measurement of distance between two tones. This distance may vary from a unison, which is the sounding of two voices at the same pitch, to as wide a space as the ear can distinguish. For practical purposes this section is concerned primarily with intervals from unison to octave sounded within the range of the human voice.

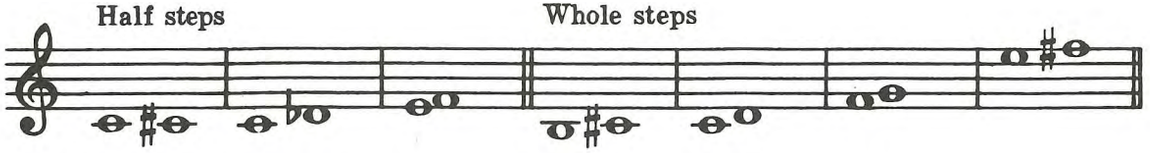
Unisons and octaves in various voice ranges



Intervals are named in two ways: first, in a broad sense, thirds, fifths, sixths, etc.; secondly, in a more definitive sense, minor thirds, major thirds, perfect fifths, augmented fifths, etc. The determination of a particular interval is made according to the exact measurement of distance between the two tones in terms of the number of half steps separating them.

A *half step* (also called half tone or semitone) is the smallest interval in traditional harmony, one-twelfth of an octave. In other words, the octave is divided into twelve equally spaced half tones, which are easily seen to be the notes played by the twelve white and black keys found in any one octave on the piano keyboard. A whole step (also called a whole tone, or sometimes the single term "step" or "tone") is the sum of two half steps.

Half steps **Whole steps**



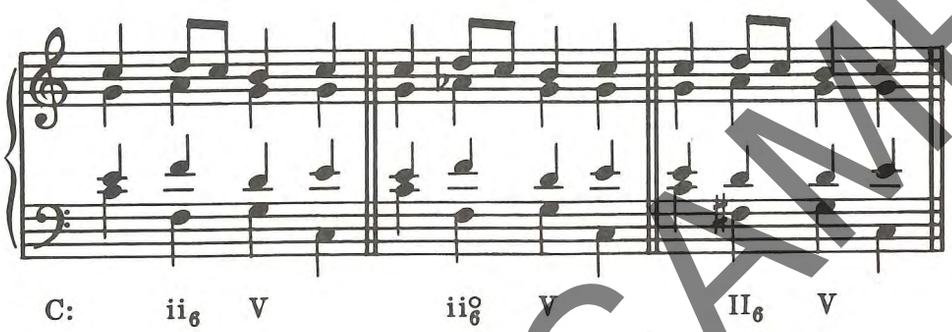
SECTION 13

BORROWED CHORDS

So far this study has been concerned strictly with diatonic harmonies. The only chords containing accidentals have been used in modulation from one key to another. However it is not only possible but desirable to use chromatically altered chords *within* the framework of an established key.

An altered chord may be defined as a chord containing one or more altered notes (notes with accidentals not found in the scale of the given key). Such a chord progresses in the same manner as it would without the alteration.

The following illustration shows the use of a supertonic triad, first as a diatonic chord, and then in two chromatically altered forms. In each instance the progression is to the dominant.

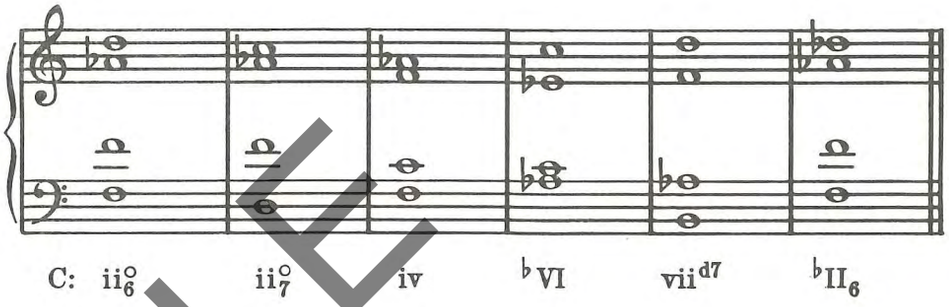


While it is conceivably possible to alter any note of any chord, only a limited number of chromatic alterations are practical. For the most part, *altered chords fall into the following classifications:*

1. Borrowed chords
2. Secondary dominants
3. Chords with raised or lowered fifths
4. Augmented sixth chords (those containing a diminished third which is usually inverted to an augmented sixth interval)

This section gives instruction and practice in the identification and writing of the first group, *borrowed chords.* The remaining types are covered in succeeding sections of this book.

In certain chords of a major key the sixth scale degree is often chromatically lowered. These chords then become identical with their counterparts (chords with the same root numbers) in the parallel minor key and, for this reason, may be considered as "borrowed" from that key. Included in this classification are:

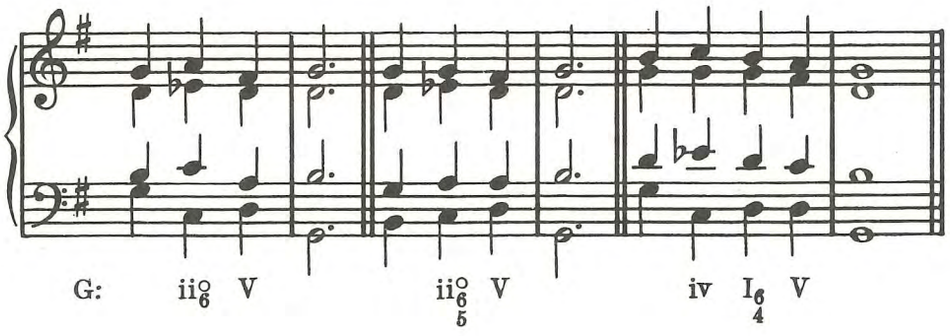


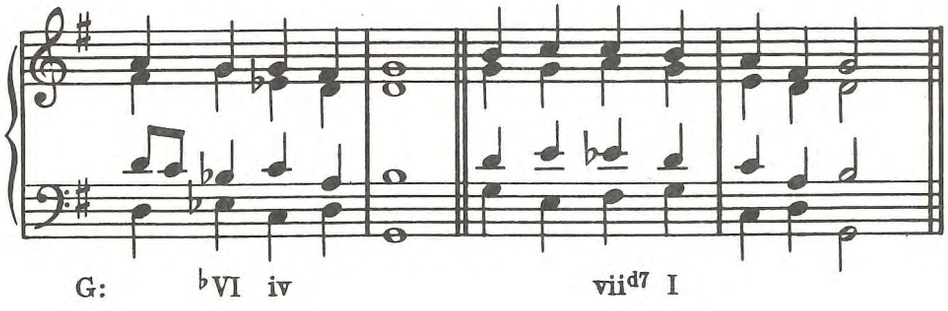
These are used in fundamental position or in inversions, except for ii°, which in this altered form becomes a diminished triad and as such is usually used in first inversion.

The ♭II$_6$, known as the *Neapolitan sixth*, is sometimes classified as a borrowed chord. Some resolutions of this chord call for the use of secondary dominants, not yet covered. This chord will therefore be discussed in a succeeding section (Section 15).

Borrowed Chords in Progression

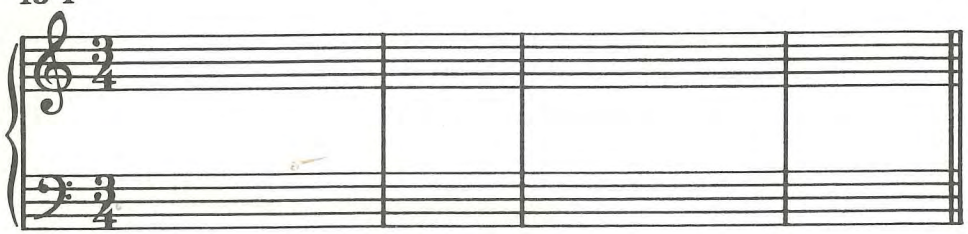
The illustrations below show the use of each of the above chords, except the ♭II$_6$. Notice that each progresses as it would have without the lowered sixth degree and that the voice carrying the altered note resolves downward. The ♭VI tends to progress to another borrowed chord before moving to the dominant.



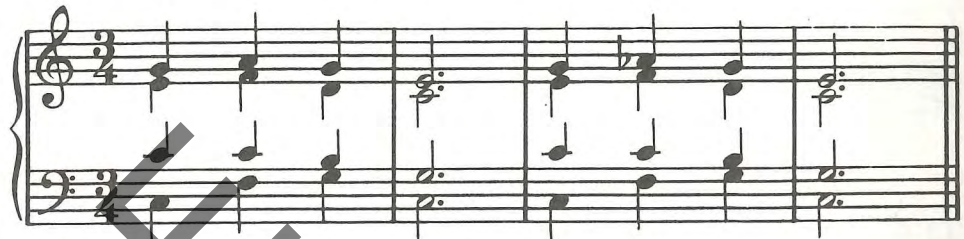


Write progressions as sounded on the tape. In each of the first four frames of this section a figure is repeated with an altered version of one of the chords in the second statement. Listen carefully to distinguish the sound of the unaltered and altered sonorities.

13-1



SOLUTIONS



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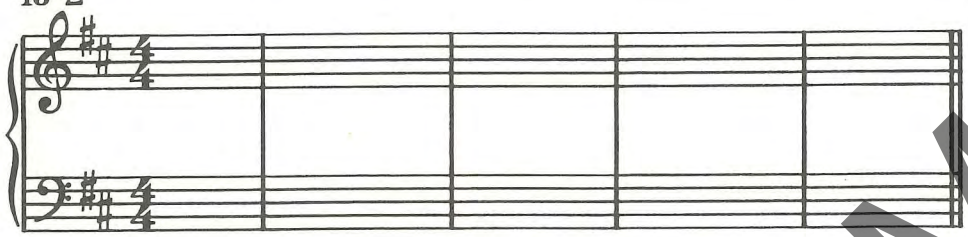

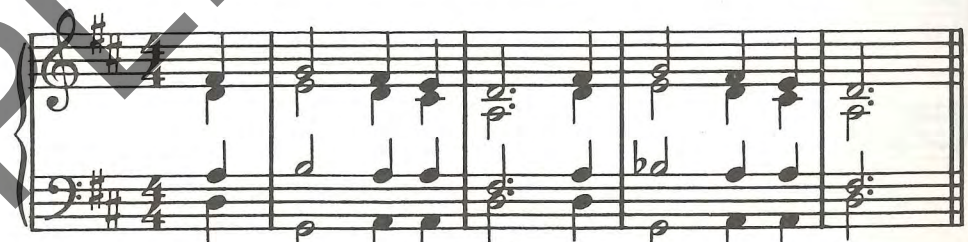

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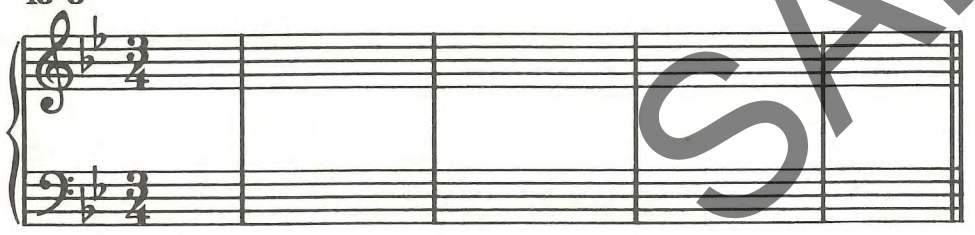

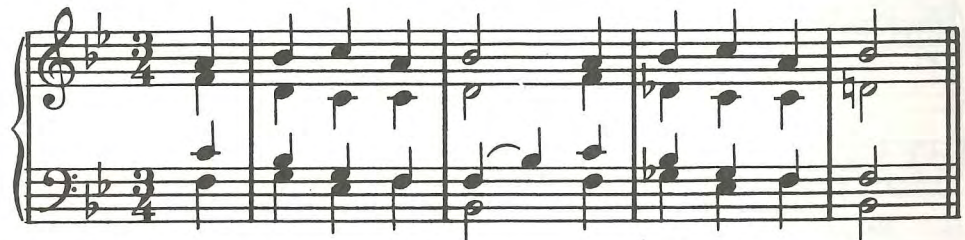

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