

UNIT V: $\frac{6}{4}$ - CHORDS; HARMONIZING A MELODY; HARMONIC RHYTHM

“Six-four” (second-inversion) chords have the 5th in the bass; usually the bass note is doubled, but at times it will be found convenient to double the root. *The fourth above the bass is a contrapuntal dissonance and must be treated as such*; that means the $\frac{6}{4}$ is an unstable chord, one that occurs only in certain specific situations:

1. The cadential $I\frac{6}{4}$:

This is the most familiar usage. The $I\frac{6}{4}$ occurs directly before the cadential V or V^7 , and the 6th and 4th resolve downward to the notes in the dominant harmony, in effect being treated like appoggiaturas: [EX 1](#). The doubled bass of the $I\frac{6}{4}$ becomes the doubled root of the dominant.

In duple meters, the $I\frac{6}{4}$ is accented relative to the dominant resolution – [EXX 1, 2](#) – as though the dominant harmony arrives essentially on the strong beat, although delayed by the appoggiaturas. In triple meter, it can occur that the $I\frac{6}{4}$ and V are on the same metric level – [EX 3](#) – but here, still, the resolution-chord is metrically *no stronger than* the $I\frac{6}{4}$. What one wishes to avoid is something that sounds like dominant harmony syncopated over a strong beat: [EX 4](#).

The $I\frac{6}{4}$ is typically preceded by subdominant harmony – IV, ii, $ii\frac{6}{4}$, etc. Also quite usable here is tonic harmony (I, vi) or a secondary dominant (V/V, ${}^{\circ}vii^6/V$, etc.). But the $I\frac{6}{4}$ is generally NOT preceded by V, ${}^{\circ}vii$, or iii – again, this would create an effect much like harmonic syncopation: [EX 5](#).

The $I\frac{6}{4}$ can be used in half-cadences just as well: [EX 6](#). Occasionally, the $I\frac{6}{4}$ will resolve upward: [EX 7](#). One of the most striking uses of the $I\frac{6}{4}$ is just before the cadenza in a classic instrumental concerto, usually in the progression ${}^{\circ}vii^7/V - I\frac{6}{4}$; the performer’s cadenza in effect enormously delays the resolution to V: [EX 8](#).

2. The appoggiatura $\frac{6}{4}$:

Like the cadential $I\frac{6}{4}$, this comes on a strong beat, usually resolving downward on the weak beat. The cadential $I\frac{6}{4}$ can be seen as a special case of this type. Most common is $IV\frac{6}{4}-I$: [EX 9](#). The kind of $IV\frac{6}{4}$ often associated with a plagal cadence in hymn style – [EX 10](#) – is an appoggiatura $IV\frac{6}{4}$.

3. The passing $\frac{6}{4}$:

This chord is *weak* relative to both adjacent chords; it’s formed by bass motion, as in $I-V\frac{6}{4}-I^6$; or $IV^6-I\frac{6}{4}-IV$: [EX 11](#). As in these examples, the passing $\frac{6}{4}$ in 18th-century harmony usually stands between different inversions of the same chord. The examples one can construct of passing $\frac{6}{4}$ s between chords *not* of the same root – [EX 12](#) – seem more typical of 19th-century practice. Please do not write “consecutive passing $\frac{6}{4}$ s” – [EX 13](#).

4. The neighbor or auxiliary $\frac{6}{4}$:

These are likewise metrically weak relative to both adjacent chords; they are formed by NT (neighbor-tone) activity in several voices. Typical of 19th-century American hymnody, and beloved of Charles Ives, is I–IV $\frac{6}{4}$ –I: [EX 14](#). The frequent occurrence of neighbor and appoggiatura $\frac{6}{4}$ s has quite the Chautauqua sound – [EX 15](#) – but in writing 18th-century harmony such idioms should be used sparingly.

A certain type of weak-beat I $\frac{6}{4}$ often found at suspension-cadences is a neighbor $\frac{6}{4}$: [EX 16](#).

5. “Incidental” $\frac{6}{4}$ s (my terminology) are produced by passing tones in upper voices, prior to a chord change: [EX 17](#).

6. Arpeggiated $\frac{6}{4}$ s are produced by the bass moving through the chord’s arpeggio, as in the “oompah” bass: [EX 18](#) – or in the cadence cliché of the classic symphonic style: [EX 19](#).

On harmonizing a given (chorale) melody

1. Look at the melody first as a whole – find its cadence points (usually they are long notes), and decide what (root-position) chords they require. Toward the end of a chorale, it is occasionally effective to cadence on a sixth-chord or some other unusual chord-type, but this is best directly before the end, at the penultimate cadence.

2. Pay special attention to the soprano-bass two-part counterpoint. The most conclusive bassline at a full cadence is 4°-5°-1°, and this should be aimed for, but not anticipated.

3. Skips in the melody line will usually occur within one harmony.

4. Chord choice is a complicated topic that we’ll discuss repeatedly; for now it is sufficient to remark that:

a) Each melody note implies (at present) three possible chord choices. It may at times help to list these possibilities, but often it won’t.

b) The first phrase generally will start with I, to establish the key. Other phrases need not begin with the tonic.

c) The primary triads should be used most often; other chords should be used mainly when the soprano-bass counterpoint *requires* them.

d) A change of chord is not always required; often a change of chord-position is sufficient.

e) The root-position augmented and diminished triads are difficult to use convincingly, unless they are in a “sequence” (to be taken up later). But diminished 6th-chords make excellent passing harmonies, often preferable to the root-position possibilities.

f) The V–IV “retrogression” is foreign to the style; it is not in common use until the late 19th century. But V–IV⁶, V⁶–IV, and V⁶–IV⁶ are perfectly fine.

Harmonic Rhythm

This is another complicated topic that is seldom discussed very well. For our purposes, chord-changes (including changes of position) will usually occur at a steady rate, which may at times accelerate, but only rarely slow down except at cadences. Do not “syncopate the harmony”: each strong beat should carry a chord change; none of the strong beats should be “harmonically suppressed”. Often, though, a change of position in the chord is change enough. Root-progressions up a 3rd are often classed as “weak” progressions, not to be used across a strong beat or over a barline. In general this is good advice, since such progressions represent a rather minimal harmonic change (of just one pitch in the triad), but one can invent counter-examples; we will discuss this topic again later.

Examples, Chapter V

EX 1

C: I⁶₄ V I

EX 2

F: I⁶ IV I⁶₄ V I

EX 3

Mozart, Sonata K.545/ii

G: ii⁶ I⁶₄ V⁷ ^ovii - I

EX 4

A^b: I V I I⁶ IV I⁶₄ V⁴⁻³ I

EX 5

g: V iv⁶ iv V i⁶₄ V i

EX 6

Mozart, Sonata K.545/ii

G: ii⁶ IV⁶₄ I⁶ V

EX 7

Mozart, Sonata K.533

F: I ii⁶ I⁶₄ V⁷ I

EX 8

Beethoven, Violin Concerto, Op 51/i

D: I⁶ (IV⁷) ^ovii⁷/V I⁶₄

EX 9

C: IV⁶ IV⁶₄ I

EX 10

A: IV IV⁶₄ I

EX 11

E: I V⁶₄ I⁶ IV⁶ I⁶₄ IV V I

EX 12

E_b: IV⁶ I⁶₄ V⁴₂ I⁶ ii⁶₅ V I

(EX 12, continued)

D: ii IV⁶₄ V⁶₅ I

C: IV vi⁶₄ ii V I⁶

EX 13

C: IV vi⁶₄ V⁶₄ I

EX 14

F: I IV⁶₄ I IV

EX 15

C: o^{vii}_4 IV IV⁶₄ I iii⁶ V⁷ IV⁶₄ I

EX 16

A: V I⁶₄ V⁴⁻³ I

EX 17

C: V I⁶₄ ii⁶ V⁷ I

A: vi ii⁶₄ iii⁶ ii⁶ I⁶

(EX 17, continued)

B_b: I IV⁶₄ V vi

C: IV o^{vii}_4 I

EX 18

Bizet, *Carmen*

F: I I⁴ I I⁴ etc.

EX 19

Mozart, Symphony (39), K.543/i

E \flat : I I⁴ I⁶ I