

UNIT X: FULL-DIMINISHED AND HALF-DIMINISHED SEVENTHS SECONDARY DOMINANTS

The Full-diminished seventh: $\flat\text{o}\text{vii}^7$

The seventh chord built on the leading-tone in minor has a structure of three superposed minor thirds; the outermost interval in this arrangement is a diminished seventh. The chord is a common element of the harmonic vocabulary in tonal music from at least 1700 onwards. Since it shares most of its pitches with the V^7 , and frequently behaves much the same way, and since the chord contains no perfect 5th, many theorists prefer to call it a “ V_0^9 ”, a dominant ninth chord without its root. We will, however, refer to it simply as $\flat\text{o}\text{vii}^7$ – for simplicity, and because the concept of “rootless chord” seriously calls into question the concept “root”.

Since $\flat\text{o}\text{vii}^7$ uses the lowered 6°, it is technically a chord of the minor mode, and so (in the 18th century) used mostly with a minor tonic. The chord can, however, resolve as well to a major triad, and this is frequently the case when $\flat\text{o}\text{vii}^7$ is used as a secondary dominant - see below, p.4. In the harmony of later periods, $\flat\text{o}\text{vii}^7$ is used virtually as often with the major as with the minor tonic. (We will discuss this “modal borrowing” – the use of pitches from the minor mode in a major context, and vice versa – in more detail later. Another familiar example is the “Picardy third”.)

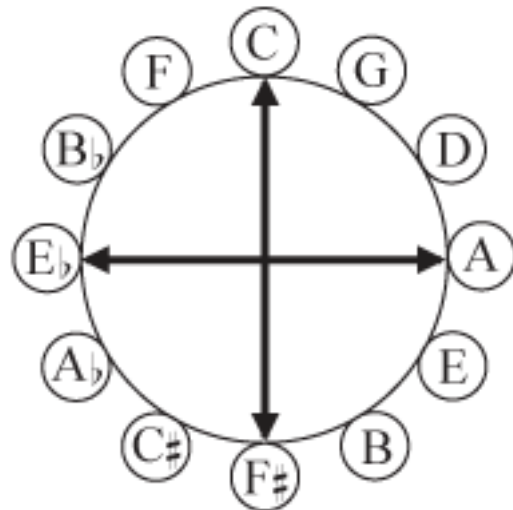
In the resolution to the (major or minor) tonic, $\flat\text{o}\text{vii}^7$ behaves like V^7 : the tritone 4°-7° resolves in contrary motion to 3° and 1°, and the lowered 6° descends to the 5°. Thus a complete tonic triad results: [EX 1](#). (The other tritone, 2°-6°, may contract also, producing a doubled third: [EX 2](#).) Almost always, the $\flat\text{o}\text{vii}^7$ is written complete; when a tone must be omitted, it is generally the 3rd. In some distributions of the chord, direct fifths result in the tonic resolution: [EX 3](#). Bach generally disguises these - [EXX 4-5](#) - and avoids altogether such a succession of tritone-fifth when one of the voices involved is the bass.

The resolutions of the inverted $\flat\text{o}\text{vii}^7$ to the tonic are, with some care, unproblematic: [EX 6](#). Note that in the progression $\flat\text{o}\text{vii}_5^6$ -i, direct fifths with the bass are unavoidable. Therefore $\flat\text{o}\text{vii}_5^6$ virtually always progresses to i^6 (or I^6).

The $\flat\text{o}\text{vii}^7$ is frequently used as a passing chord, or with a passing chord, in a pattern known as a “diminished seventh exchange”: [EX 7](#).

One of the remarkable features of the full diminished seventh is its symmetry; this is easily observed if we diagram such a chord on the circle of fifths: [EX 8](#).

If we imagine transposing – “rotating” - the chord, we can see that in term of pitch-content, there are but three distinct diminished sevenths. Because of this symmetry, any diminished seventh is enharmonically equivalent to an inversion of three other diminished 7ths; alternatively, any given set of four pitches in this configuration has (without using double flats or sharps) four different spellings that preserve the structure in thirds: [EX 9](#). This gives the



chord great versatility as a pivot chord for remote modulation: the chord need only be enharmonically re-interpreted (re-spelled) with a different note as leading-tone: [EX 10](#). Such modulations are naturally more a characteristic of later music than of a repertory like the Bach chorales.

Irregular Resolutions of ovii^7

The ovii^7 is too ambiguous a chord to have convincingly “deceptive” resolutions. In the case of the progression $\text{o}\text{vii}^2 - \text{vi}$, we would prefer to consider the diminished seventh the enharmonic equivalent of $\text{o}\text{vii}^7/\text{vi}$: [EX 11](#) (see below, secondary dominants). And in the case of $\text{o}\text{vii}^7 - \text{VI}$ or $\text{o}\text{vii}^7 - \text{IV}^6$, [EX 12](#), we again have a situation with an alternative interpretation, that is, as an “embellishing diminished seventh”, to be studied later. Finally, the progression $\text{o}\text{vii}^7 - \text{V}$ is not so much a real change of chord as an embellishment of the dominant: [EX 13](#).

Secondary diminished sevenths are involved in several irregular resolutions: see below.

The Leading-tone Seventh in Major: ovii^7

This chord is the second half-diminished seventh we've looked at; the other was oii^7 . The ovii^7 chord is not a typical chord in Baroque music, and it occurs in the Bach chorales mostly as a result of multiple NHTs: [EXX 14-15](#). The chord is really more characteristic of Classic music: [EXX 16-17](#).

The chord is rarely found in 3rd inversion (ovii^2), but the other positions are common. It resolves just like V^7 or ovii^7 : the tritone moves to the tonic and mediant: [EX 18](#). Note that $\text{o}\text{vii}^7 - \text{I}$ requires that the 3rd be doubled in the tonic triad, to avoid parallel fifths. For the same reason, ovii_5^6 usually resolves to I^6 rather than to I .

The ovii^7 chord is generally found only in major contexts; it is not “borrowed” for use in the alternate mode, as is ovii^7 .

Modulation using ovii^7 as a pivot is possible to the relative major/minor, in which advantage is taken of the fact that oii^7 and ovii^7 are both half-diminished sevenths: [EX 19](#).

Secondary Dominants

It frequently happens in common-practice music that a diatonic chord other than the tonic will be preceded (or at times followed) by a chromatically-altered chord functioning as its dominant: [EX 20](#). Such an altered chord is known as a secondary dominant (also as an “applied” or “borrowed” dominant); it can be any dominant-function chord in that key of which the chord to which it is applied is the tonic. That is, V/V (“five of five”), V^7/ii , $\text{o}\text{vii}^6/\text{IV}$, $\text{o}\text{vii}^7/\text{vi}$, V_5^6/iii , $\text{o}\text{vii}_5^6/\flat\text{VII}$, etc., are all possible secondary dominants. In 18th-century music, dominants are generally applied only to diatonic scale degrees which bear a major or minor triad, and so can readily act as a “local tonic”. Thus one finds only rarely V/vii , or in minor V/ii , or $\text{V}/\sharp\text{vi}$.

The most common secondary dominant is V/V : [EXX 21-22](#). As in these examples, it is common at cadences; it is heard so often that it hardly attracts attention as an “altered” chord at all. Dominants applied to other scale degrees are found in [EXX 23-30](#).

In the Chorales, very often secondary dominants are used in the harmonization of a chromatic conjunct bass: [EXX 31-33, 27, 29, 30, 39](#).

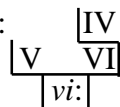
With respect to voice-leading, secondary dominants behave just like ordinary diatonic dominants. They are smoothly introduced in a number of ways: by following a chord that might be a pivot: [EX 26](#); or by smoothly-chromatic voice-leading: [EX 23](#). The latter is facilitated when the chord before the secondary dominant has the same root: [EX 30](#).

Each secondary-dominant usage could, of course, be considered a very local modulation, but theorists prefer instead to speak of “tonicization”, to draw attention to the temporary nature of this kind of key-change. The kind of chromatic appoggiaturas found typically in Mozart, [EX 34](#), are in a sense a reduction of the secondary-dominant principle to its essence: a given diatonic pitch is preceded by its own leading-tone.

Modulation by means of secondary dominants is quite feasible, but like any modulation that turns on a dominant, the new key will usually need to be confirmed by a cadence.

Less common resolutions of secondary dominants can be classified roughly into three types:

1. Deceptive resolutions: V-vi (VI) or V-iv (IV) in the local key. These are especially effective when the second chord is equivalent to a chord in the surrounding tonality. The most common pattern is (in the key of vi, the submediant):



– as in [EXX 35-36](#).

Other versions, however, are equally possible: [EXX 37-39](#).

Another possibility is to use the second chord in such a “borrowed deceptive cadence” as a pivot to modulate to a third key: [EXX 40, 74](#).

2. Resolutions to a chord with the anticipated root, but which is itself made a dominant rather than a tonic: [EXX 4, 15, 21, 72](#); even in barber-shop quartets: [EX 41](#). Other secondary dominants so resolving occur in [EXX 29, 33](#).

A chain of secondary dominants linked in this fashion forms a familiar kind of sequence progressing around the circle of fifths: [EXX 42-43](#).

Some experimentation shows that when root-position dominants (major-minor sevenths) succeed each other like this, some will usually have to be written incomplete. But successive inverted dominants can usually be complete.

3. Other types:

a. V/V readily resolves to I_4^6 as a delay of the dominant at cadences: [EX 44](#).

b. The succession of two chords, the first with a root a third above the second, offers several secondary-dominant possibilities:

i) The so-called “bifocal cadence” of the Baroque slow movement, which in the key of the relative minor is V - III; in the relative major is V/vi - I: [EXX 45, 48](#). This chord succession is often found as an “incomplete half-cadence” [EXX 49-51](#).

ii) Both chords so related may be dominants: [EXX 46, 52](#).

iii) Or, only the second may be a dominant: [EXX 47, 53](#).

c. The use of “incomplete half-cadences”, as in [EXX 49-51](#), is not confined to V/vi: [EXX 23, 54-56](#).

One of the characteristic harmonizations in the Baroque of an ascending melodic-minor bassline uses a major-minor seventh rooted on the subdominant. This chord should not be considered a secondary dominant - not V/ VII - but rather just IV⁷ or IV₅⁶: [EX 57](#). [EX 37](#) shows an extraordinary extension of this progression, using three consecutive first-inversion major-minor sevenths.

Leading-tone sevenths as secondary dominants

The full-diminished ovii^7 is fully as useful as a secondary dominant applied to both major and minor triads, as is V or V⁷. No special considerations apply; the chord in such situations is extremely versatile: [EXX 58-60; 4, 5, 32, 37](#).

A number of irregular resolutions are possible in such cases:

1. Resolution to another diminished seventh, most typically in the progression $\text{o}\text{vii}^7 - \text{o}\text{vii}^7/\text{V}$: [EX 61](#).

2. As an extension of this, a chain of successive diminished sevenths moving stepwise is a device used since the Baroque to maximize tonal ambiguity: [EX 62](#).

3. Delaying the resolution of $\text{o}\text{vii}^7/\text{V}$ by interpolation of the I₄⁶ is common: [EX 63](#).

The half-diminished seventh, ovii^7 , is less common in the Baroque as a secondary dominant, and it can be applied only to major triads. It occurs in the Chorales mostly as a result of passing voices: [EXX 64-65](#).

But $\text{o}\text{vii}^7/\text{V}$ forms part of a Classic cadence formula: [EX 66](#). Again, notice the delay of the resolution by means of the I₄⁶.

The plain diminished triad, ovii , is also perfectly acceptable as a secondary dominant, especially of V: [EXX 32, 39, 65, 67-69](#).

Secondary dominants as alternative resolutions for V

The deceptive resolution V-vi is often expanded by the interpolation of a dominant of vi, as in [EXX 23, 29, 44](#).

Progressions of V to a secondary dominant of IV occur in [EXX 27, 32, 39, 43, 44](#), and [67](#); and to a dominant of ii in [EX 65](#).

In the Chorales, the succession V - V/V occurs mostly with the secondary dominant acting as a passing or neighbor-chord: [EXX 70-71](#). But in the Classic style, V - V/V is a useful deceptive cadence: [EX 72](#).

Finally, V-V/iii does not seem to occur, though its reverse, as we have seen, is a favorite Schubert progression: [EX 52](#).

Irregular resolutions of $\text{o}vii^7$ were discussed above.

* * * * *

The concept of “secondary dominant” leads to the speculation, can there be other such isolated secondary-function chords? We have seen in the examples such chords as “vi/IV” or “ IV_5^6 / III ”, but these have been part of progressions that continue on to the secondary dominant ([EXX 37, 65](#)). In 18th-century music it is really only as dominants that secondary-function chords occur by themselves. But there are passages in nineteenth-century music that seem to tonicize a local harmony without benefit of dominant: in [EX 73](#) occurs a “modulation” so abrupt that the B_b chord could, with justice, be called a secondary subdominant, and the E_b chord following, IV of that. With respect to the surrounding C-major, then, the E_b chord is IV/IV/IV!

Examples, Chapter X

EX 1

G: $\text{o}vii^7$ I $\text{o}vii^7$ i

EX 2

$\text{o}vii^7$ i

EX 3

$\text{o}vii^7$ I

EX 4

a: $V^6 \rightarrow IV$ V^7 VI^7 $\text{o}vii^7 \rightarrow \downarrow VII$ $\text{o}vii^7$ i $\text{o}vii^7 \rightarrow V^7$ I $\overset{367^7-9}{\circ}$

EX 5

a: III iv^7 $\text{o}vii^7 \rightarrow V^7$ VI $\text{o}vii^6 \overset{-7}{\rightarrow} V^7$ I $\overset{371^7-9}{\circ}$

EX 6

$\text{o}vii^6$ i^6 $\text{o}vii^6$? i

(EX 6 continued)

$\circ\text{vii}^4_3$ i^6 $\circ\text{vii}^4_3$ i^6 V $\circ\text{vii}^4_2$ i^6 (I^6) $\circ\text{vii}^4_2$ i^4 (I^4)

EX 7

[g]: $\circ\text{vii}^7$ i $\circ\text{vii}^6_3$ i^6 $\circ\text{vii}^4_3$ V $\circ\text{vii}^4_2$ V^7/V i^6_4

EX 9

$\circ\text{vii}^4_3$ i^6 $\circ\text{vii}^4_3$ i^6

EX 10

[c]: i V^4_3 i^6 $\circ\text{vii}^4_3$ $\circ\text{vii}^7$ $i^6_4 \rightarrow V^7$ I
 [B:

EX 11

[C: $\circ\text{vii}^4_2$ vi $\circ\text{vii}^7$ vi

EX 12

$\circ\text{vii}^4_2$ VI $\circ\text{e}^7$ VI

EX 13

C: $\text{o}vii^2$ V^7 $\text{o}vii^7$ V_5^6

(EX 13)

$\text{o}e^7$ iv $\text{o}e^7$ IV

EX 14

C: I V^7 IV $(\text{o}vii^7)$ I^6 IV^6 I V

EX 15

e : i V_5^6 IV^6 I V_5^6 V^7 I

EX 16

G: $\text{o}vii^7$ I

Haydn: Sonata H.27/ii, 29-34

EX 17

G: I $\text{o}vii^6$ $\text{o}vii^7$ I

Haydn: Sonata H.27/iii, 1-4

EX 18

C: $\circ\text{vii}^7$ I $\circ\text{vii}_5^6$ I⁶ $\circ\text{vii}_3^4$ I⁶ $\circ\text{vii}_3^4$ I⁴

EX 19

C: IV $\circ\text{vii}^6$ I $\circ\text{vii}_5^6$ $\circ\text{vii}_3^6$ i⁴ V i V₅⁶ i $\circ\text{vii}_3^6$ $\circ\text{vii}_5^6$ C: I⁶ IV I⁴ V⁷ I

EX 20

C: I ii₅⁶ V₅⁶ I

EX 21

e: $\circ\text{vii}^6$ $\circ\text{vii}_3^4$ IV⁶ $\circ\text{vii}^7$ i V₅⁶ V⁷ I

200¹¹⁻¹³

EX 22

E_b: V I⁶ V₅⁶ I ii (vii⁶) I⁶ V

154⁹⁻¹¹

EX 23

F: V⁷ vi V⁶ I IV V V⁶ vi V⁵ I V³ ii V vi I⁶

292⁴⁻⁸

EX 24

E \flat : I IV ii V³ vi vi V³ iii

286¹⁻²

EX 25

E: I V⁷ I V⁷ iii ii⁶ I₄ V⁷ I

Schubert, Symphony
D.759/ii, 268-274

EX 26

a: i V⁶ i i V III

11¹⁻²

EX 27

F: I I V⁶ V₂ IV⁶ V I

46¹⁻²

EX 28 194¹⁻³

E♭: I V⁷ vi V⁶ \downarrow I IV⁶ V⁶₅ IV iii⁶ ii⁴₃

EX 29 49⁷⁻⁸

d: V \downarrow i iii V⁷ V⁶₅ iv vi \downarrow d: **B♭:** \downarrow vii⁷ V

EX 30 203²³⁻²⁸

c: V iv⁶ \downarrow V⁶₅ VII \downarrow vii⁷ V⁶ \downarrow i ii **B♭:** IV⁶ V⁶₅ I vi ii⁶

EX 31 224¹¹⁻¹³

b: V⁶₅ i - \downarrow 6 V⁶₅ iv - \downarrow 6 V⁶₅ VII \downarrow vii⁷ i iv⁶ ii⁶₅ V i

EX 32 141³⁻⁴

g: i \downarrow ii⁴₂ V⁶₅ \downarrow vii⁶₄ iv⁶ i⁶₄ \downarrow vii⁷ V

EX 33 77⁴⁻⁶

D: I V⁶ I \downarrow V⁶₅ ii \downarrow V⁶₅ V⁶₅ vi

Mozart, Pf Son
K.331/i

EX 34

EX 35

377¹²⁻¹⁴

b: i V $\left[\begin{array}{c} \text{IV} \\ \text{VI} \end{array} \right]$ $\left[\begin{array}{c} \text{D} \\ \text{D} \end{array} \right]$ ii⁶ IV⁶ V₆ I ii₅⁶ V⁷ I

EX 36

213⁹⁻¹¹

B \flat : I V vi V⁶ - $\frac{5}{3}$ $\left[\begin{array}{c} \text{V}_3^6 \\ \text{VI}^6 \\ \text{IV}^6 \end{array} \right]$ $\left[\begin{array}{c} \text{vi} \\ \text{VI}^6 \end{array} \right]$ $\left[\begin{array}{c} \text{V}_3^6 \\ \text{V}^7 \end{array} \right]$ I

EX 37

46-10

B \flat : $\left[\begin{array}{c} \text{V}_3^6 \\ \text{IV}_3^6 \end{array} \right]$ $\left[\begin{array}{c} \text{IV}_3^6 \\ \text{V}_3^6 \end{array} \right]$ V₃⁶ $\left[\begin{array}{c} \text{VI}^6 \\ \text{I}^6 \end{array} \right]$ B \flat : $\left[\begin{array}{c} \text{vii}^7 \\ \text{vi} \end{array} \right]$ $\left[\begin{array}{c} \text{V}_3^6 \\ \text{ii} \\ \text{v} \end{array} \right]$ $\left[\begin{array}{c} \text{V}_3^6 \\ \text{iv} \end{array} \right]$ - 6 - $\frac{6}{4}$ I

c: d:

EX 38

43¹⁰⁻¹²

[d:] V i v⁶ VI \circ ii⁶ i⁶ VI \circ ii⁶ V⁷ i
 [F:] vi iii⁶ IV \circ vii⁶vi⁶ IV \circ vii⁶

EX 39

239⁶⁻⁸

[E:] V \circ vii⁶ iv⁶ \downarrow VII \circ vii⁷I V I
 [f#:] V⁷ VI

EX 40

6⁹⁻¹²

[g:] IV \circ ii⁶ i⁶ V⁷ i
 [iv] [d:] V⁶ i V⁷ IV VI [F:] I⁶ ii \circ vii⁶ I

EX 41

[F:] V \downarrow V⁴₃ V⁶₃ I

EX 42

[D:] I⁴ V⁷ I \downarrow V⁶₅ vi \downarrow V⁶₅ \rightarrow V⁶₅ \rightarrow V⁶₅ \downarrow V⁴₃ IV⁶ V vi

Mozart, Pf Son
 K.283/iii, 71-89

ii⁶₅ V I \downarrow V⁷ \rightarrow V⁷ \rightarrow V⁷ \rightarrow V⁷ I IV V⁷ I⁶

EX 43

A: vi $\xrightarrow{V_3^4}$ IV $\xrightarrow{V_3^4}$ ii vi⁶ V⁶⁻⁷ I ii₅ $\xrightarrow{V_5^6}$ V₂⁴ $\xrightarrow{V_5^6}$ IV V⁷

Mozart, Pf Son
K.311/iii, 49-56

EX 44

G: I IV vi V $\xrightarrow{V_2^4}$ IV⁶ ii $\xrightarrow{V_2^4}$ V₂⁴ vi₃⁴ vii⁶ I⁶ I⁶ vi

C: $\xrightarrow{V_5^6}$ V₅⁶ I₄⁶ $\xrightarrow{V_5^6}$ V₅⁶ vi

EX 45

EX 46

EX 47

G: V/vi I C: V/iii V⁷ B: I V⁷/ii

E: V III V V⁷/VI V V⁷/vi

EX 48

Bach, Brandenburg
Concerto III, ii/iii

G: IV⁶ V I

vi:

EX 49

Louis Redner

F: I $\xrightarrow{\text{vii}^6}$ $\xrightarrow{\text{vii}^6}$ $\xrightarrow{\text{vii}^7}$ V $\xrightarrow{\text{vii}^6}$ vi i iv⁶ V I I I $\xrightarrow{V^7}$ ii⁶

EX 50

336⁴⁻⁶

g: V i V₅⁶ V₅⁶ V III
 B \flat : V vi V I

EX 51

Schubert, Pf Son
D.850/iii, trio, 43-48

V₂⁴ V vi V₂⁴ I

EX 52

C: V - $\frac{4}{2}$ V vi ii I⁶ V I \circ ii₅⁶ V iii V i i V i iii

Schubert, Symphony
D.944/i, 21-29

V V⁷ I iii

EX 53

Chord progression for EX 53:

C: I V²/IV V → ii⁶₄ V → ii I⁶ V

in IV (F): V V² V → vi⁶₄ V → vi V⁶

EX 54

Chord progression for EX 54:

Bb: V - ²I⁶ ii⁷ vi⁴ vi ii⁶ V⁶₅ V V⁶ - vi³ vi | g: i V i

EX 55

Chord progression for EX 55:

D: V ii IV I V⁶₅ → ii ← V vi ii IV V

G: vi I V V⁶₅ → vi ← V iii

EX 56

Chord progression for EX 56:

B: III V⁶₅ → iv ← V i o.vii⁶ i⁶ V -⁷ I

EX 57

221-4

e: i IV₃⁶ V₃⁶ i v⁶ iv⁶ V

EX 58

336¹⁵⁻¹⁶

g: i i⁶ iv $\overset{\circ}{vii^7}$ V -⁷ i

EX 59

233⁶⁻¹⁰

G: iii IV⁶ vi iii⁶ ii⁶⁻⁵₃ V ⁻⁴₂ I⁶ $\overset{\circ}{vii^6}$ $\overset{\circ}{vii^7}$ V₃⁶ ii vi ii⁶⁻⁵₃ V ⁻⁷ I

EX 60

314²⁻⁴

D: I $\overset{\circ}{vii^7}$ vi $\overset{\circ}{vii^7}$ V I

EX 61

Bach, WTC I, Prelude 5

i $\overset{\circ}{vii^7}$ i $\overset{\circ}{vii}$ $\overset{\circ}{vii^7}$ V pedal $\overset{\circ}{vii^7}$ $\overset{\circ}{vii^4_3}$ V -⁷ I

Bach, Brandenburg
Concerto V/i, 196-202

EX 62

EX 63

255¹³⁻¹⁴

A: IV V₂⁴ I⁶vi $\text{\textcircled{o}}\text{vii}^7$ I₄⁶→V⁷ I

EX 64

361⁹⁻¹⁰

A: $\text{\textcircled{o}}\text{vii}^7$ →V

EX 65

1076-9

A: I V₃⁴(III)→V $\text{\textcircled{o}}\text{vii}^6$ ii $\text{\textcircled{o}}\text{vii}^7$ IV⁶→IV I⁶ $\text{\textcircled{o}}\text{vii}^7$ →V

EX 66

Mozart, Pf Son
K.333/ii, 12-13

E \flat : $\text{\textcircled{o}}\text{vii}^7$ I₄⁶→V

EX 67 51¹⁻²

[C]: I V⁶ $\overset{\circ}{\text{vii}}^6 \rightarrow$ V $-\frac{4}{2}$ V⁶ \rightarrow IV I

EX 68 84⁶

[A]: V I V⁶ \rightarrow vi V⁷ $\overset{\circ}{\text{vii}}^6 \rightarrow$ ii I⁶ V

EX 69 Mozart, Pf Son
K.331/i, 11-12

[A]: I V₅⁶ I $\overset{\circ}{\text{vii}}^6 \rightarrow$ I₄⁶ \rightarrow V₇

EX 70 86⁸⁻¹⁰

[E]: I V $\overset{\circ}{\text{vii}}^6 \rightarrow$ V I

EX 71 73³⁻⁵

V N⁶ $\overset{\circ}{\text{vii}}^7 \rightarrow$ V⁷ $\overset{\circ}{\text{vii}}^6_5 \rightarrow$ V₅⁶ i V⁷ i

EX 72

$F:$ $V^7 \rightarrow V$ V^7 I ii^6 $I_4^6 V^7$
 V_3^4 V_3^6 I^6

EX 73

$C:$ V^7 I V^7 ii IV IV IV V^4 -3 I $C:$ V
 I pedal $in IV (F):$

EX 74

A I V_2^4 I^6 IV_2^4 i V_5^6 V V vi ii V IV_3^6 vi^6 iv^6 iv^7 V ii