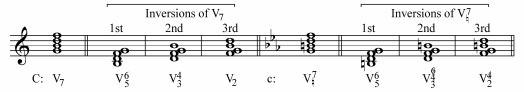
### Identification

 $V_7$  has 3 inversions: in the 1<sup>st</sup> inversion, the 3<sup>rd</sup> is in bass; in the 2<sup>nd</sup>, the 5<sup>th</sup>; in the 3<sup>rd</sup>, the 7<sup>th</sup>.



In the 1<sup>st</sup> inversion,  $V_5^6$ , the figures represent the intervals of the root (6) and 7<sup>th</sup> (5) above bass.



In the  $2^{nd}$  inversion,  $V_3^4$ , the figures represent the intervals of the root (4) and  $7^{th}$  (3) above bass. The figure 6 with a slash is used in a minor mode to indicate the alteration of the leading tone. A slash through a figure means that the note is to be raised a half step.



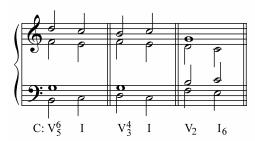
In the  $3^{rd}$  inversion,  $V_2$ , the figure represents the interval of the root (2) above bass. The figure 4 with a slash is used in a minor mode to indicate the alteration of the leading tone.



### Resolutions of the Inversions

The inversions of  $V_7$  are usually used in a *complete form* and resolve to I in the way similar to the resolution of the root position  $V_7$ , with only *one* difference:

- 1) the 7<sup>th</sup> and 5<sup>th</sup> move by step down;
- 2) the 3<sup>rd</sup> moves by step up;
- 3) the root remains stationary.

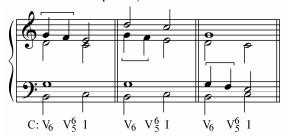


As seen from the examples,  $V_5^6$  and  $V_3^4$  normally resolve to I;  $V_2$  resolves to  $I_6$ .

#### Preparation and Use

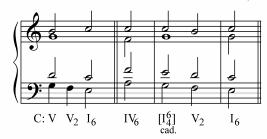
The inversions of  $V_7$  are used in the same way as  $V_7$  in root position; the  $7^{th}$  may be approached smoothly (passing, prepared) or with a leap. The passing  $7^{th}$  is usual for  $V_5^6$  and  $V_2$ .

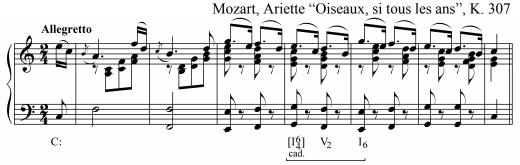
In such case,  $V_5^6$  is used after  $V_6$  in which the root is doubled (the passing  $7^{th}$  is in upper voices, more often in soprano).



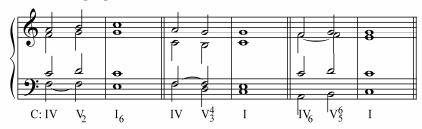
Haydn, Piano Sonata in C major, Hob. XVI: 35, III

V<sub>2</sub> is often used after V or cadential (rarely after passing) I<sup>6</sup><sub>4</sub> (passing 7<sup>th</sup> in bass).

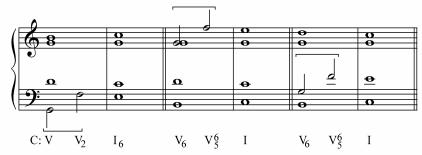




The  $7^{th}$  is *prepared* if there is the harmonic connection of IV with any inversion of  $V_7$ .



The 7<sup>th</sup> may be approached with a *leap* if V is used. A leap in bass when connecting  $V-V_2$  or a leap in upper voices (often in soprano) when connecting  $V_6-V_5^6$  are all not rare.



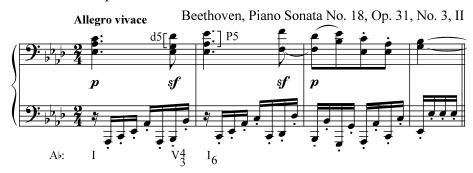
The use of the inversions of  $V_7$  significantly increases the possibilities of the melodic behavior of each voice (especially the bass line). Thus, it is recommended to use the inversions of  $V_7$  as much as possible while saving  $V_7$  in its root position mostly for cadences.

## Passing $V_3$

 $V^4_3$  is often used as a *passing chord* (instead of  $V^6_4$ ) between I and I<sub>6</sub> (or vice versa). In order to avoid doubling of the  $3^{rd}$  in I<sub>6</sub> in  $I-V^4_3-I_6$  progression, the  $7^{th}$  moves up parallel to bass. Such progression with the unresolved 7<sup>th</sup> became acceptable due to its characteristic motion of parallel 3<sup>rd</sup>,'s (or 10<sup>th</sup>,'s) between bass and an upper voice (often soprano).



In open spacing, a diminished 5<sup>th</sup> would move to a perfect 5<sup>th</sup> (or vice versa). These 5<sup>th</sup>'s are *not* considered to be parallel and are *allowed*.



### Interchange of the Chords

Like any triad, V<sub>7</sub> and its inversions can be interchanged. It is always better to keep the 7<sup>th</sup> in the same voice. It is not allowed to move the 7<sup>th</sup> by step up.



In rare cases it is possible to *exchange* the 7<sup>th</sup> with the 5<sup>th</sup>.

Beethoven, Symphony No. 7, Op. 92, III



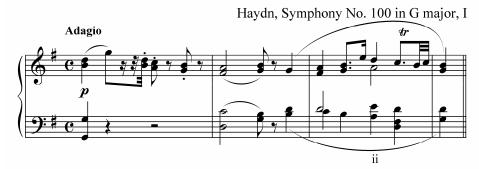
# Exercises

1. Analyze the following music.

a)



b)





2. Realize the following figured basses and harmonize the melodies.

