

## THE PRIMARY TRIADS (I, IV, and V)

### The Tonic Chord (I or i)

The root-position tonic triad serves as the most stable structure in tonal music. Although it is important as a point of departure (phrases often begin on the tonic, which can progress to any other chord), the tonic's most critical role is a point of arrival: compositions rarely end on any chord other than a root-position tonic. The tonic is like a kind of home base, and its gravity-like pull can be felt long before the tonic is actually heard.

Inverting the tonic weakens it considerably. Although a  $I^6$  chord is still able to resolve harmonic tension (for instance, a sense that a leading-tone in the soprano needed to proceed to  $\hat{1}$ ), it is unlikely to sound like a stable resting point. Thus,  $I^6$  chords are unlikely to appear at the ends of phrases, but they are common within phrases, where a sense of forward motion is desirable.

When the tonic is in root position, it is unusual to double any chord member other than the root. If the triad is incomplete (missing a fifth), then normally the root is tripled. However, when the chord is in first inversion, sometimes the fifth is doubled (especially if the fifth is in the soprano). The third is rarely doubled in a functional tonic chord. Poor doubling often leads to serious voice-leading errors such as parallel octaves, so be careful to consider this as you part-write.

In a minor key, of course, the tonic is minor. This does not undermine its stability in any way. However, there is a long-standing tradition of ending minor compositions with a major tonic triad. This use of the major tonic in an otherwise minor key is known as the "Picardy third." It does not affect our overall sense of mode.

### The Dominant Chord (V)

Although the tonic is the most stable chord in tonal music, the dominant is arguably the most important chord, because it is the dominant that actually enables us to locate the tonic. When we sense the tonic, it is usually because we detect the presence of the leading-tone, and we can hear the leading-tone pulling us toward the tonic. Chords that lead back to the tonic are often described as having a "dominant function." The name "dominant" is used because V is the strongest and most important member of this harmonic category.

Given that the dominant function arises from the pull of  $\hat{7}$  to  $\hat{1}$ , it is clear that a functional dominant chord must contain a leading-tone rather than a subtonic. Thus, you can expect that V will be major in both major and minor keys. (Although minor v chords do occur in minor keys, they are unusual and inherently non-functional.) Don't forget to raise  $\hat{7}$  in minor keys! Always resolve the leading-tone to the tonic when it occurs in an outer voice. If the leading-tone appears in an inner voice, you may decide not to resolve it if doing so would lead to an incomplete chord (although there is nothing wrong with omitting the fifth of a root-position chord).

Paradoxically, despite the fact that V gravitates so strongly towards I, it also serves well as a temporary resting point (the "half cadence," discussed later). A phrase whose harmonic goal is the dominant makes us expect to hear another phrase whose harmonic goal is the tonic. A longer passage leading to a dominant may serve as an introduction, leading us to expect an important musical beginning (perhaps a new theme, or the return of the main theme, or the entrance of a soloist, etc.). Often such a dominant will be greatly expanded, increasing the listener's sense of anticipation.

Inverting the dominant weakens it considerably, although it never loses its pull toward the tonic.  $V^6$  works well in the middle of a phrase, but only root-position V is suitable for a strong cadence. When the dominant is in root position, it is unusual to double any chord member other than the root. However, when the chord is in first inversion, sometimes the fifth is doubled (especially if the fifth is in the soprano). Do not double the third, because the third is the leading-tone, and we never want to double unstable notes!

## The Subdominant Chord (IV or iv)

The subdominant is one of many chords that leads to the dominant (and is therefore often described as having a pre-dominant function). Because the motion from a pre-dominant to a dominant to a tonic forms the strongest possible progression in tonal music, it is very likely to occur at a strong cadence. In fact, it is difficult to create a suitably conclusive feeling without using a pre-dominant such as IV. If the pre-dominant to dominant to tonic motion is used in the middle of a phrase, either the dominant or the tonic (possibly both) is likely to be inverted in order to avoid an unwanted cadential effect. For this reason, many phrases do not contain a pre-dominant until the cadence.

The subdominant is most commonly found in root position, although the first inversion also produces a pleasant effect. In major keys, IV<sup>6</sup> sounds somewhat weak and is therefore unlikely to lead to a cadential dominant. However, in minor keys, the motion from iv<sup>6</sup> to V sounds much stronger because of the half-step pull in the bass (from  $\hat{6}$  to  $\hat{5}$ ), and may therefore occur even at strong cadences.

There are voice-leading hazards associated with any IV-V progression (regardless of the inversions used). The greatest dangers are parallel fifths and parallel octaves. Contrary motion in the outer voices will greatly reduce the risk of making such an error, but careful proofreading is always appropriate. One must exercise particular care in resolving the subdominant to the dominant in minor keys because an augmented second can be produced between  $\hat{6}$  and  $\hat{7}$ . To avoid this error, keep in mind that  $\hat{6}$  normally resolves down to  $\hat{5}$  and  $\hat{7}$  is approached by  $\hat{1}$  instead. (This voice-leading pattern applies to major keys as well, even though the augmented second is not a problem.) If for some reason it is very important for a single voice to move from  $\hat{6}$  to  $\hat{7}$  in a minor key, then it will be necessary to use a major subdominant (IV rather than iv); otherwise, iv is much more typical in minor keys.

When the subdominant is in root position, it is unusual to double any chord member other than the root. However, when the chord is in first inversion, any doubling is possible. The best choice of doubling depends on where the chord is leading. If IV<sup>6</sup> progresses to a root-position V, then doubling the fifth of IV<sup>6</sup> is probably best. On the other hand, if IV<sup>6</sup> progresses to V<sup>6</sup>, then doubling the third of IV<sup>6</sup> may be better. (Notice that root-position IV is very unlikely to progress to V<sup>6</sup> because this would necessitate a tritone leap in the bass.) If IV<sup>6</sup> simply changes inversion to IV before progressing, then doubling the root is probably a good idea.

## Cadence Types involving I, IV, and/or V

The two most important cadences in tonal music are the authentic cadence and the half cadence. An authentic cadence is a dominant-tonic motion at the end of a phrase. When the cadence is especially strong (involving root-position V resolving to root-position I with  $\hat{1}$  in the soprano), it is described as a **perfect authentic cadence** (often abbreviated PAC). If the chords involved are not root-position V and I, or — more likely — if the soprano ends on  $\hat{3}$  (or perhaps  $\hat{5}$ ), it is described as an **imperfect authentic cadence** (often abbreviated IAC). Notice that when the soprano descends in an authentic cadence, it will be necessary either to use an incomplete chord (i.e., omit the fifth) or to invoke the so-called “leading-tone drop” ( $\hat{7}-\hat{5}$ ) in an inner voice.

The **half cadence** is simply a cadential motion to V. As described earlier, a half cadence is only a temporary resting point, and a phrase whose harmonic goal is the dominant makes us expect to hear another phrase whose harmonic goal is the tonic (that is, a phrase ending with an authentic cadence). When the dominant of the half cadence is approached by a half-step descent in the bass ( $\hat{6}$  to  $\hat{5}$  in a minor key), it is often described as a **Phrygian cadence**. Although not required by definition, Phrygian cadences are almost always harmonized as iv<sup>6</sup>-V, and  $\hat{4}-\hat{5}$  is the most typical soprano line. (Don't forget to double the fifth of the iv<sup>6</sup> chord, or there will be voice-leading problems!)

The **plagal cadence** (sometimes informally described as an “amen” cadence) is a motion from IV-I. Because this cadence is non-functional (i.e., the IV chord does not fulfill its normal role as a pre-dominant chord), it almost always follows an authentic cadence. Expect one voice (very often the soprano) to maintain  $\hat{1}$  as a common tone while the two remaining upper voices resolve from  $\hat{6}$  to  $\hat{5}$  and  $\hat{4}$  to  $\hat{3}$ . The bass leaps (either up or down) from  $\hat{4}$  to  $\hat{1}$ ; do not use inverted chords in a plagal cadence.

## EXAMPLES AND COMMENTS

$A\flat$ : I V<sup>6</sup> I I<sup>6</sup> IV V I

### Things to notice:

- all root-position chords have doubled root
- doubling the fifth of V<sup>6</sup> avoids leaps
- bass and soprano use voice exchange as the tonic changes inversions
- tenor leap across the barline is necessary because doubling fifth in IV would create voice-leading problems as it progressed to V
- contrary motion in outer voices combined with good doubling makes IV-V easy to part-write
- ends with perfect authentic cadence

G: I IV<sup>6</sup> V<sup>6</sup> I I<sup>6</sup> IV V I

### Things to notice:

- all root-position chords have doubled root
- parallel motion in outer voices between IV<sup>6</sup> and V<sup>6</sup> is obviously possible if we double the third of IV<sup>6</sup>, but one must be careful
- alto could also have remained on D throughout measure 2
- the contrary motion in the outer voices makes IV-V near the end easy to part-write
- ends with imperfect authentic cadence

b♭: i V I<sup>6</sup> V<sup>6</sup> i iv<sup>6</sup> V

### Things to notice:

- all root-position chords have doubled root
- all leading-tones are raised and approached from above
- doubling fifth in V<sup>6</sup> would be smoother, but it would cause parallel octaves with the soprano, so the tenor leap is necessary
- doubling the fifth of iv<sup>6</sup> in the Phrygian cadence at the end is normal, as is the  $\hat{4}-\hat{5}$  melody

f: i iv<sup>6</sup> iv V V<sup>6</sup> i iv V i (iv) I

### Things to notice:

- all root-position chords have doubled root
- all leading-tones are raised and approached from above
- doubling root of iv<sup>6</sup> is reasonable because it moves to root-position iv before progressing to the dominant
- doubling fifth of V<sup>6</sup> creates smooth motion into i
- inverted V in measure 2 is appropriate to avoid an inappropriate sense of cadential motion in the middle of the phrase
- contrary motion at iv-V makes part-writing easy
- leading-tone drop at perfect authentic cadence was used in order to reach a complete tonic triad (notice that the soprano resolved down — when the soprano rises, this is rarely necessary)
- plagal cadence follows perfect authentic cadence
- because iv in the plagal cadence is non-functional, its Roman numeral is placed in parentheses; this helps distinguish it from the functional iv chords earlier in the progression
- upper voices are as smooth as possible during plagal cadence
- Picardy third at the end