

Structural analysis and levels of harmonic importance

(or, "what do theorists *really* think about when they think about tonal music?")

As explained by Nicholas Cook in *A Guide to Musical Analysis*, meaningful analysis primarily involves acts of *relation* (or consolidation, or grouping) and acts of *omission* (or reduction). An example of relation: when you listen to two phrases and consider phrase form, you are examining how closely related they are (if they're identical, then it's a a; if they're very similar but not identical, then it's a a'; if they're different, then it's a b). When you "look through" a number of nonchord tones to find the underlying chord, you are performing an act of *omission*—you are determining which pitches are structural and you are implicitly omitting those pitches which function in an embellishing manner. It's possible to extend these ideas of "structural" and "embellishing" to *chords*, as we shall see shortly.

First, an English grammar lesson (idea taken from Kostka and Payne, *Tonal Harmony*, 2nd ed.). Consider the following sentence:

The Parisian chef carefully prepared a very memorable dinner.

The meaning of the sentence is derived from its most important parts—the subject and predicate. They would appear as follows:

chef prepared dinner

This sentence isn't particularly elegant, but it does get across the meaning, just as would a I - V - I progression. The other words in the sentence give it color and interest and help describe the subject and predicate. The entire sentence may be diagrammed hierarchically as follows:

The	Parisian	chef	carefully	prepared	a	very	memorable	dinner.
	Parisian	chef	carefully	prepared		very	memorable	dinner.
	Parisian	chef	carefully	prepared			memorable	dinner.
		chef		prepared				dinner.

The grammar of tonal harmony bears some similarity to spoken and written language, in that certain chords and progressions convey deep meaning and structure, while others create color and interest but are not so deeply tied into the meaning and structure. The chords which lie at the heart of musical structures are called (naturally enough) structural chords, while those which have less harmonic importance are called embellishing or linear chords.

A **structural chord** is a chord which forms part of a cycle of the harmonic paradigm (T S D T) at some level deeper than the chord-by-chord musical surface (the "foreground").

- A structural chord represents (organizes or groups) other harmonic events which elaborate or extend the progression on a more foreground (surface) level.
- In small contexts (a phrase, etc.), a structural chord often represents a pair or small group of chords which extend the structural chord or connect it with the following structural chord.
- The fancy term for extending the structural chord is **prolongation**. The structural chord is said to be **prolonged** in various ways, the most common of which is through embellishing or linear chords.

An **embellishing or linear chord** is a chord which helps to connect and **prolong** the structural chords. In linear chords, melodic linear function predominates; the horizontal voice-leading context is of primary importance, while the vertical arrangement of intervals (even if it's into a "chord") is of secondary importance.

We've been doing this all semester, actually. Consider just one example: the V_4^6 chord. As you know, the V_4^6 chord is a structurally unimportant chord, the function of which is to make a linear connection between I and I⁶. In other words, the V_4^6 plays a role in prolonging a chord of tonic function.

About reduction (and levels of harmonic importance)

Reduction (an act of omission) means gradually peeling away the embellishing (linear, foreground, surface) chords to reveal the underlying structural chords. The process of "gradually peeling away" involves recognizing the most embellishing chords at a given "level," then subsuming this level into a next, deeper level.

It's easiest if we move to a musical example and proceed step by step, then we'll tie ideas together afterward. Examine the rest of this page simultaneously with examining the "reduction examples" page.

First thing: play through levels 1 - 6 (and 6 - 1) to get their *sounds* into your ears.

About level 1: this level represents the absolute "foreground" or musical surface. Note that there are two phrases; the first moves I ----- V and the second moves I ----- V⁷ I. They form a contrasting period.

About level 2: there are a lot of changes here. First and most important: **meter and bar lines are removed** and the rhythms are altered. Rather than specific rhythm values, the half notes now represent structurally important chords, while the quarter note heads are chords of lesser structural significance. Often the initial tonic sonority, the phrase beginnings, and the cadences carry the greatest structural weight. **Notice the addition of slurs.** They generally connect chords of the same basic function (for example, I and I⁶ constitute an arpeggiation; IV and ii are both pre-dominant triads; vi substitutes for I). Slurs also connect important pre-dominant to dominant motions; they may also show important linear motions (such as V passing through V⁴/₂ on its way to I⁶). Finally, notice that the **nonchord tones** present at level 1 (see mm. 3, 5, and 7) have been "reduced out" since they are simply embellishing tones.

About level 3: you'll note that **six chords have been "reduced out."** This means that they are somehow *foreground* or *surface* chords whose role is to connect and/or *prolong* the chords which still remain. The V⁶/₅ chord (from m. 1) is simply a linear chord which serves to prolong the underlying I chords, largely through neighboring motion in the individual voices. The V⁴/₃ chord (from m. 2) is another linear chord; it connects I and I⁶ (an arpeggiation) through passing and neighboring motions. The ii chord (from m. 3) is a functional substitute (a different pre-dominant) for the IV chord which came before it. The V⁶ chord (from m. 5) connects the I chord to its functional substitute vi, mostly through passing motion. The V⁴/₂ chord (from m. 6) simply supports passing motion in the bass (F3 through E^b3 down to D3) and is less important than the V before it and the I⁶ after it. The I⁶/₄ (from m. 7) is a cadential ⁶/₄ chord and is far less important than the V⁷ which follows it. We may by now have moved into the "middleground," though we're still fairly near the surface.

About level 4: here, just **three chords have been reduced out.** The I chord (from m. 2) became a repetition when we reduced out the V⁶/₅ chord earlier. The vi chord (from m. 5) is a functional substitute for the I chord which came before it. The reduction of the V chord requires more careful consideration: have we really "left tonic function behind" and moved into an area of "V-ness," or is tonic function somehow still being prolonged? One might argue for the latter: first, the bassline has a smooth descent from do (m. 5 downbeat) down to mi (end of m. 6), and this descent is an arpeggiation from I to I⁶. Second, there's still a strong pre-dominant to come. We are now well into the "middleground"; the surface has been left behind.

About level 5: the prolongation of I through **arpeggiation** to I⁶ has been **reduced out**, leaving a "deep middleground" T - S - D cycle in the first phrase and complete T - S - D - T in the second.

About level 6: here, the pre-dominant (IV) chords have been reduced out, leaving the primordial, underlying I - V and I - V⁷ - I as a very deep middleground or even background level.

So: moving from level 1 to level 6 is moving from foreground (surface) toward background (deep structure); it's an act of reduction. Moving the opposite way (from level 6 to level 1) is a gradual "composing-out" toward the musical surface.

Reduction examples

1



Bb: I V₅⁶ I V₃⁴ I⁶ IV ii V I V⁶ vi V V₂⁴ I⁶ IV I₄⁶ V⁷ I

2



3



4



5



6



More on levels of harmonic importance

Here are the Roman numeral analyses of "levels 1 - 6" from the reduction example page:

level 1:	I	V_5^6	I	V_3^4	I^6	IV	ii	V	I	V^6	vi	V	V_2^4	I^6	IV	I_4^6	V^7	I
level 2:	I	V_5^6	I	V_3^4	I^6	IV	ii	V	I	V^6	vi	V	V_2^4	I^6	IV	I_4^6	V^7	I
level 3:	I		I		I^6	IV		V	I		vi	V		I^6	IV		V^7	I
level 4:	I				I^6	IV		V	I					I^6	IV		V^7	I
level 5:	I					IV		V	I						IV		V^7	I
level 6:	I							V	I								V^7	I

The point is that the lower levels (1, 2) show the musical *foreground*—they show quite literally all of the chords. As we move to higher levels (3, 4, 5, then 6), we move from the *foreground* to the *middleground* and finally to the *background*—the most important structural chords.

What are the characteristics of structural *versus* embellishing chords?

Structural chords are important chords which shape the essential structure of a phrase or passage.

- the most important ones are the beginning and final tonic chords
- phrase beginnings and endings are also structurally important.
- put differently, a structural chord is a chord which forms part of a cycle of the harmonic paradigm (T S D T) at some level above the surface or *foreground* level of musical events.
- a structural chord thus represents (organizes or groups) other events which elaborate or extend the progression on a more foreground (surface) level.
- in small contexts (a phrase, etc.), a structural chord often represents a *pair* or *group* of chords which extend the structural chord or connect it with the following structural chord.

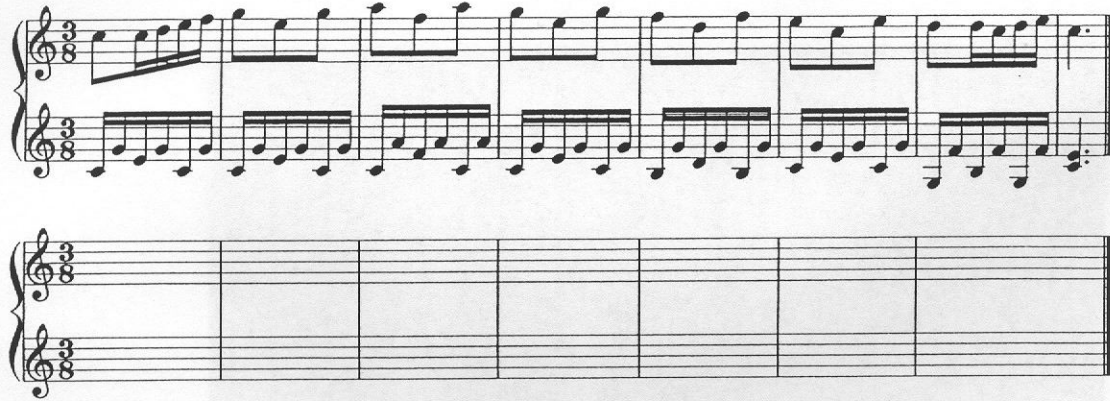
An **embellishing or linear chord**'s essential role is to embellish, decorate, or *prolong* the underlying structural chords. It's a chord in which the melodic linear function predominates; the horizontal context is most important, while the vertical arrangement of intervals is of secondary significance. Here are some categories of embellishing chords:

1. The $\frac{6}{4}$ chord is virtually *always* an embellishing chord.
 - a. The cadential $\frac{6}{4}$ chord [I_4^6 - $V^{(7)}$ - I] simply embellishes or delays the cadential dominant chord.
 - b. The passing $\frac{6}{4}$ chord [I - V_4^6 - I^6 , for example] harmonizes passing motion in the bass.
 - c. The neighboring $\frac{6}{4}$ chord [I - IV_4^6 - I] is really just neighboring motion in two upper voices.
2. Other passing chords: V_3^4 or vii^{o6} (passing chords between I and I^6 or I^6 and I).
3. Other neighbor chords: for example, the dominant chords in the progressions I - V^6 - I or I - V_5^6 - I.
4. Chords which result from arpeggiation may be embellishing chords. Example: a I^6 chord after a I.
5. Chains of first inversion triads often are embellishing chords which "fill a gap," harmonically.
6. Embellishing chords may arise from one or more nonchord tones (PT, NT, APP, etc.).

The clearest example from the top of this page is probably the step from level 2 to level 3. Level 3 reduces out chords which serve as embellishing chords at level 2. The V_5^6 is a neighbor chord between the I chords. The V_3^4 is a passing chord between I and I^6 . The ii chord is a simple functional substitute for the IV chord. The V^6 is a passing chord between I and vi. The V_2^4 is a passing chord between V and I^6 . The I_4^6 near the end embellishes the structural V^7 which follows it.

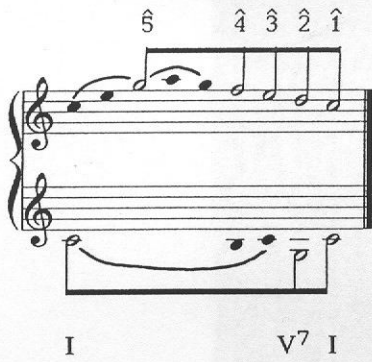
Levels of harmonic importance—examples for class discussion

Example no. 1: an excerpt from a Clementi piano sonatina:



- level 1:
- level 2:
- level 3:

Here's how the Viennese theorist Heinrich Schenker might graph this piece:



Example no. 2: an excerpt from Haydn's *Piano Sonata in C Major*, no. 35, mvt. III:



- level 1:
- level 2:
- level 3:
- level 4:
- level 5:

A fairly clear-cut additional example of reduction

Here's an analysis of eight bars from a Beethoven piano sonata. Analysis by Allen Winold, based on one by David Beach.

a. foreground

Adagio molto

p *cresc.* *fp*

b. foreground reduced

Ab: I V₆ I V₇ I V I I₆ IV IV₆ V₆₅ I I₆₄ V

c. middleground

I V I IV I V

d. middleground

I V I V

e. background (deep middleground)

I V