

A Brief Overview of the Theory of Intervallic Continuity

Intervallic Continuity is a theory for writing tonal music without any concern or necessity for a tonal key, thus providing us with more colors, more combinations, one more deep technique, with which to paint as we compose amazing music.

There are four key principles, key features, this theory is based on.

1. The Principle of Recalibration
2. Chord Cycles Generated from Basic Recalibration
3. The Principle of Invisible Modulation, also called Instant Modulation
4. The Principle of Extensive Recalibration

So, let's dive in.

At the core of the system of Intervallic Continuity is the Principle of Recalibration. Let us imagine a certain chord progression, a Cm Db Fm Gb. Now, if this progression were entirely in the key of Cm, then this progression would be defined as 1m b2 4m b5. But that would be an inaccurate description of what is happening. To see clearly, first we must attend to the symmetry. Here we have a minor chord, then, a half-step up, a major chord. Then, we have another minor chord, and here, just like the first, a half-step up is a major chord. So it can be argued that what is truly happening is a key-change on the Fm chord, and the correct way to define this chord progression is 1m b2 1m b2. And now we can begin wondering, is the Fm chord a 4m chord or a 1m chord? And, at this point, the Principle of Recalibration is here to clarify for us. The Fm chord is both. The correct way to define our original four chords is 1m b2 to 4m as 1m... In this conceptualization the Fm chord is a reflection of the C minor key, it is the 4m, but it is also the beginning of the F minor key, so it is simultaneously also the 1m. The Fm chord is being Recalibrated. When a chord is Recalibrated, it is both an expression of the key of the previous chords from which it emerges and an expression of the new key which it introduces.

And, as we can see, this progression, this chord cycle of 1m b2 to 4m as 1m... (as the original intervals of the chords cycle through all the new keys) is a pattern that could go on forever.

Let's see what a simple application of Recalibration can do.

Chord Cycles:

The Principle of Recalibration, when applied in basic ways, creates chord cycles. A chord cycle takes a defined series of intervals, either a short series or a long series, and cycles them through a process of key changes. Some of the chord cycles can continue forever, some cannot. Some chord cycles follow the framework of diminished or augmented chords, and so can occur in various versions. (A chord cycle that follows a diminished chord framework, for example, can occur along the contours of C to Eb to Gb to A, or D to F to Ab to B, or E to G to Bb to Db.)

Here are some examples of chord cycles:

Chord Cycle 1: Csus C Cm, Bbsus Bb Bm, Absus Ab Abm, F#sus F# F#m...forever.

1sus 1 1m to b7sus as 1sus...

Since this cycle fundamentally depends on whole steps, there are two versions of this cycle. (For example, one version “starting on” the ground chord of Csus, and the other version “starting on” the ground chord of Dbsus.)

Chord Cycle 2: Ebm D, F#m F, Am Ab, Cm B...and repeat...

1m b1 to 3m as 1m...

Because this cycle is based on the structure of a diminished chord, there are three fundamental versions of this cycle

Chord Cycle 3: Dm Esus E, C#m Ebsus Eb, Cm Dsus D, Bm Dbsus Db...and forever...

1m 2sus 2 to b1m as 1m...



Musical notation for Chord Cycle 3. The top staff is in treble clef and 4/4 time, showing a sequence of chords: Dm, Esus E, C#m, Ebsus Eb, Cm, Dsus D, Bm, Dbsus Db, followed by an ellipsis. The bottom staff is in bass clef and 4/4 time, showing a sequence of notes: D, E, F, G, A, B, C, D, followed by an ellipsis. The notes correspond to the chords above them.

Chord Cycle 4: An example of a long series of intervals, cycling an actual progression of four chords.

Dm C Fm Ab, Ebm Db F#m A, Em D Gm Bb... and forever...

1m 7 3m 5b to b2m as 1m...



Musical notation for Chord Cycle 4. The top staff is in treble clef and 4/4 time, showing a sequence of notes: D, E, F, G, A, B, C, D, followed by an ellipsis. The bottom staff is in bass clef and 4/4 time, showing a sequence of notes: D, E, F, G, A, B, C, D, followed by an ellipsis. The notes correspond to the chords in the cycle: Dm, C, Fm, Ab, Ebm, Db, F#m, A, Em, D, Gm, Bb, and so on.

And so we begin to see, chord cycles are a way to move through progressions of 4, 8, even 16 measures, maybe more, without any concern for a key.

Now, with a foundation in place, we can dive deeper.

Invisible Modulation:

As we move beyond chord cycles and basic applications of Recalibration, we move into the Principle of Invisible Modulation, also known as Instant Modulation.

To explain this concept, consider the common, popular, and well-worn chord progression of C G Am F—the ever praised and ever dreaded 1 5 6m 4.

On the Principle of Invisible Modulation, we can claim that, within the progression of these four simple chords, there are actually two key-changes.

The progression starts in the key of C, and goes to the 5 chord, the G. At this point, the key changes to G, and goes to the 2m, the Am. (And this makes complete sense, the Am chord is completely diatonic within the key of G.) At this point, the key changes to Am and goes to the 6, the F. (And this also makes sense, the F chord is completely diatonic within the key of Am.)

So, on the Principle of Invisible Modulation, it is entirely accurate to say there are two key changes in the C G Am F progression. To make this statement, all we have to realize is that the G chord is the 5 of the key of C, and can also be Recalibrated to the 1 of the key of G, which puts us in the key of G. And then we have to realize Am is the 2m of the key of G, and can also be Recalibrated to the 1m of the key of Am, which puts us in the key of Am.

And, in making these realizations, we arrive at the Principle of Extensive Recalibration: As a song is being composed, every major or minor chord can be Recalibrated as its 1 or 1m chord respectively, and this Recalibration changes the key we are operating within—as we compose the song—to reference the immediately present Recalibrated 1 or 1m chord.

By applying the Principle of Extensive Recalibration, as we compose a song, advancing a chord progression from each chord to the next, we no longer have to ask “What key am I in?” Now we have the freedom to ask, “How many chords can my 1 chord, or my 1m chord, move to?” And we are free to compose an entire song without any concern or limitation for being in or operating within an overarching key.

Let's take a look at Extensive Recalibration in action.

Extensive Recalibration:

Here is an example of the method, the process, used to compose a song using Extensive Recalibration. Here is how to compose a song without any concern for an overarching key.

We will start the song we are writing with a C chord, as the 1 chord. So that is our ground chord.

And let's say we start with the progression C to Am.

1 to 6m = C to Am.

(Now Recalibrate Am to 1m. Where can my 1m chord go? Let's choose 2sus 2.)

1m to 2sus 2 = Am to Bsus B

(Now Recalibrate B to 1. Where can my 1 chord go? Let's choose 3m.)

1 to 3m = B to D#m

(Now Recalibrate D#m to 1m. Where can my 1m chord go? Let's choose b1.)

1m to b1 = D#m to D

(Now Recalibrate D to 1. Where can my 1 chord go? Let's choose b3.)

1 to b3 = D to F

(Now Recalibrate F to 1. Where can my 1 chord go? Let's choose 1m.)

1 to 1m = F to Fm

(Now Recalibrate Fm to 1m. Where can my 1m chord go? Let's choose 2sus 2 again.)

1 to 2sus 2 = Fm to Gsus G

And that G chord, using very traditional tonality on a 5 to 1, will take us right back to C.

Now, we remove the scaffolding of the process, and see the progression that we've made:

C Am Bsus B D#m D F Fm Gsus G C

Sometimes, editing the initial, drafted chord progression will be required. Maybe some chords will have to be moved, removed, or added. But this initial progression looks good. Let's see if we can compose it into a short song.

And there it is. A perfectly viable, if not beautiful, chord progression, generated without any concern for an overarching key.

And now, for an added twist, let's say we were to slightly edit this chord progression. Focusing on the last few chords, instead of moving to a Gsus G C, let's move to a Gb Absus Ab Bb.

And now we see, the final Bb chord could resolve the progression, or it could continue the song. And, if it continues the song, we have the option of cycling the entire chord progression of the previous nine measures onto the new ground chord of Bb. (Instead of beginning C Am, as with the original cycle, the second cycle would start Bb Gm.)

And that is some of the power of the theory of Intervallic Continuity.

And that is the Theory of Intervallic Continuity in a nutshell. There are some important details to consider, so let's take a look at those.

Moving from the 1 and 1m to Many Other Possible Chords:

There is some knowledge fundamental to the process of composing music with the Principle of Extensive Recalibration. An artist needs to know all the chords that a 1 chord, and a 1m chord, can move to in a viable way that sounds good.

To figure this out, we need to look at both a major scale and a minor scale. I'll start with the major scale.

Every time we are working with a 1 chord (either as the first chord of the song or Recalibrated), we are working with a major scale. Looking at all 12 diatonic and chromatic notes that can be involved in a major scale, we see this numeric definition: 1 b2 2 b3 3 4 b5 5 b6 6 b7 7.

Besides the 1 chord itself, there are 11 other notes. Each of these notes can be either a major chord, or a minor chord. So that is 22 possible chords to which the 1 chord can move. Include the fact that a 1 chord moving to its own 1m (like C to Cm) also sounds good, and there are 23 options.

The following chart assumes most of the chords in it are in second inversion (and that is a theme you'll see throughout Intervallic Continuity, chords show up in second inversion all the time, it might be a limitation of the system. But see the last section to work around this, and beyond this.) This chart shows the most direct path from a 1 chord to all the other possible 23 chords.

Starting with a major chord as 1, thus the scale 1 b2 2 b3 3 4 b5 5 b6 6 b7 7

1 to major chords	1 to minor chords
1 to b2	1 to 1m
1 to 2, 1 to 2sus 2	1 to b2m
1 to 2sus 2 to 3sus 3	1 to 2m
1 to b3	1 to 7sus 7 to b7sus b7 to b3m
1 to 4	1 to 3m
1 to 5	1 to 4m
1 to 5m to b5	1 to 4 to b5m
1 to b6	1 to 5m
1 to 6	1 to 1m to b3 to b6m
1 to b7	1 to 6m
1 to 7sus 7	1 to 4 to b7m 1 to 7m

Now, the 1 minor chord, or 1m. Every time we are working with a 1m chord (again, either as the first chord of a song or Recalibrated) we are working with this numeric definition of the scale of all 12 diatonic and chromatic notes: 1 b2 2 3 b4 4 b5 5 6 b7 7 b1

Almost exactly all of the same conditions from the major scale apply to this minor scale—except that it doesn't sound good when a 1m chord moves to its own 1 chord, like Cm to C—so the 1m chord has 22 other possible chords it could move to.

Again, the chart below assumes second inversions for most of the chords.

Starting with a minor chord as 1m, thus the scale 1 b2 2 3 b4 4 b5 5 6 b7 7 b1

1m to major chords	1m to minor chords
1m to b2	1m to 6 to b2m
1m to 2sus 2	1m to 2sus 2 to 2m
1m to 3	1m to 6 to 3m
1m to 6 to 3m to b4	1m to 5 to b4m
1m to 4	1m to 4m
1m to 4m to b5	1m to 4m to b5 to b5m
1m to 5	1m to 5m
1m to 6	1m to 6 to 6m
1m to 4sus 4 to b4sus b4 to b7	1m to 4sus 4 to b4sus b4 to b7m
1m to 7	1m to 7 to 7m
1m to b1	1m to 2sus 2 to b1m

So, that is all the chord options that a 1 chord, and a 1m chord, can move to.

Two Systems of Numeric Definition for Chord Progressions:

And, fair warning, if someone goes rather deep into the theory of Intervallic Continuity, they will begin to realize there are now two different ways to write the numeric definition of chord progressions, and it might start to get confusing. Here's how I keep things clear.

First, there is the Standard (traditional) Definition, where the numeric value of each chord is determined in its reference and relationship to the root chord, the 1 chord, at the beginning of the chord progression. In the Standard Definition, there are no key changes in a C G Am F progression, and that progression is numerically defined as 1 5 6m 4.

And, next, there is the Recalibrated Definition, where the numeric value of each chord is determined in its reference and relationship to the Recalibrated 1 or 1m chord just before it. In the Recalibrated Definition, there are two key changes in a C G Am F progression, and that progression is defined as follows: 1 5 (recalibrated as 1) 2m (recalibrated as 1m) 6.

Here, in common notation, Recalibrating every chord to its 1 or 1m chord is just passively acknowledged, so we remove the scaffolding of the process, and writing the Recalibrated Definition of C G Am F is just written as 1 5 2m 6.

So:

The Chord Progression: C G Am F

Standard Numeric Definition, where each chord references the root 1 chord: 1 5 6m 4

Recalibrated Numeric Definition, where each chord references the Recalibrated 1 or 1m chord just previous to it: 1 5 2m 6.

A person simply has to keep it straight in their mind if they are using the Standard approach to numeric definition, or the Recalibrated approach.

(For example, in the charts on pages 6 and 7, in the progressions that involve three or four chords, those progressions are written using the Standard approach. And the same is true for my method for writing the numeric definition of chord cycles.)

What the Prominence of Chords in Second Inversion Actually Means:

Let's return to the original chord cycle I introduced:
Cm Db Fm Gb Bbm B Ebm E...and so on...forever...



A musical score in 4/4 time. The treble clef is on the top line, and the bass clef is on the bottom line. The score consists of two staves. The top staff shows a sequence of chords in second inversion: Cm, Db, Fm, Gb, Bbm, B, Ebm, and E. The bottom staff shows the bass line notes corresponding to these chords. A dotted line indicates the progression continues.

The structure of this progression is heavily dependent on chords arranged in second inversion.

What this structure actually reveals is that it is built on a basic chord structure. Now that this basic chord structure establishes the melody, it becomes apparent how to add in more advanced chords in more interesting ways. So, we want to start looking at how the notes in the melody can be voiced in things like 7th's, major 7's, 9's, and quartal harmony.

With those considerations, we can develop more advanced progressions, like the one below:



A musical score in 4/4 time. The treble clef is on the top line, and the bass clef is on the bottom line. The score consists of two staves. The top staff shows a sequence of chords: Cm, Db, Fm, Gb, Bbm, B, Ebm, and E. The bottom staff shows the bass line notes corresponding to these chords. The progression continues with a new section starting at measure 8, indicated by a '8' above the staff. The new section begins with a chord of Gb, followed by Bbm, B, and Ebm.

And this more advanced progression is:

Cm Db Csus/Bb Csus/Ab C, Fm Gb Ebm Ebm/Db F, Bbm B Bbsus/Ab Bbsus/Gb F, Ebm E C#m C#m/B Eb, resolving on Ab.