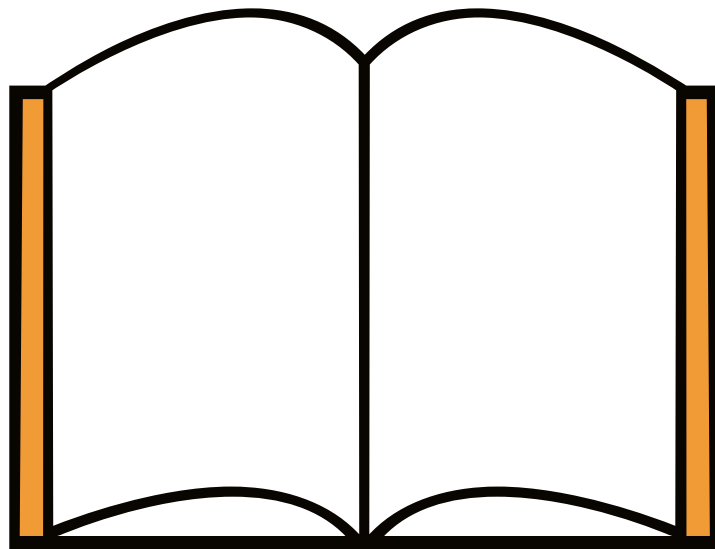




THE MITA GLOSSARY

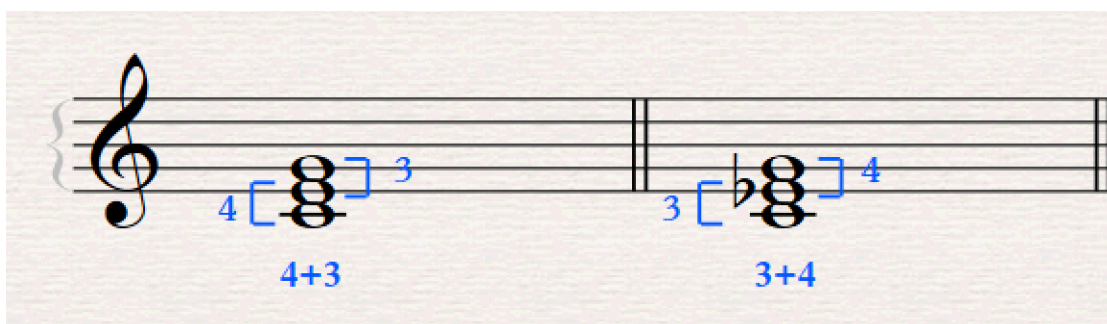


Music Interval Theory Terminology

powered by the **Music Interval Theory Academy**

4+3 and 3+4

Whenever you see any two (or more) numbers which are connected via a '+' symbol like 1+2, 5+3, or 2+2 then this always describes a vertical structure from bottom to top! Pick your starting note and move up chromatically until you reach the first number, that's your second note. From here, go up chromatically again until you hit on the second number.



4+3 stands for a major triad in the position of the 5th.

3+4 stands for a minor triad in the position of the 5th.



ANT

ANT = Anticipation

In the example below, we anticipate the note C from the second bar by letting our top voice move from scale tone -3 to 2.

The image shows a musical score for a piano in 4/4 time, consisting of two measures. The key signature has one flat (B-flat). The first measure contains a triad of notes: B-flat (scale tone -3), A (scale tone -2), and G (scale tone -1). The second measure contains a triad of notes: F (scale tone 2), E (scale tone 1), and D (scale tone 0). The top voice (treble clef) moves from B-flat in the first measure to F in the second measure, which is an anticipation of the note C (scale tone 2) that would be expected in the second measure. The bottom voice (bass clef) moves from G in the first measure to D in the second measure, which is a resolution of the fifth scale tone (RC 5) down. The notation includes a blue arrow pointing up from the first measure to the second measure, labeled '5', '-3', and '1'. The text '#11' is written below the first measure, and 'ANT: -3 to 2' is written below the second measure. The text 'RC 5 ↓' is written below the first measure.



Black-Box-Thinking

Black-Box-Thinking describes a way in which we can edit and manipulate a particular selection of notes only without touching any other part.

This technique is beneficial in keeping things simple (like working with basic triads and simple lines) while increasing the overall complexity. You'll find plenty of examples showing this technique in action inside the Academy and also in the materials of the Composition Course.



CA

CA = Chromatic Alteration

CAs only make sense when working with scale tones. Be aware that CA always brings you off a scale because it is an alteration of a scale tone so that it falls outside that scale. Below, we show the PC of scale tones 2 and 5, together with CA 5 to 5+.

Scale #1

The image shows a musical staff with a treble clef and a key signature of one flat (B-flat). The staff contains two measures. The first measure has a whole note on the second line (F) and a whole note on the fifth line (B-flat). The second measure has a whole note on the fifth line (B-flat) and a whole note on the second line (F). The notes are labeled 'PC: 2, 5' and 'RC 5 ↓'. A blue 'CA' label is placed above the second measure, indicating a chromatic alteration.

PC: 2, 5

RC 5 ↓



Cash Register

We talk about the Cash Register in the Orchestration Concepts course. The Cash Register is the register of an instrument where the musician has the most control over

- => articulation
- => intonation
- => vibrato
- => dynamics

We suggest you stick to those registers the most to get the best performance possible.



CH

CH = Close Harmony

Whenever we play all the tones of a vertical structure within one octave, we call this close harmony. The opposite of close harmony is open harmony.



CP = Creative Pool

The 'Creative Pool' is part of our Academy's **philosophy**. The CP is infinite and all around us. By connecting to the CP (via interval techniques), we become receivers of creativity. **Nobody owns creativity!** We simply learn how to plug into that pool so that we become more creative and free.

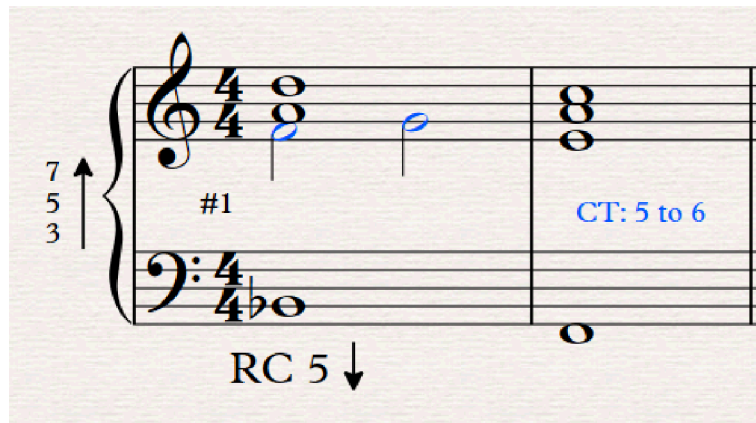


CT

CT = Changing Tone

A CT is part of Line Movement. It moves in one direction (either upwards or downwards), changes its direction and DOES NOT come back to the same note where it started from.

The ending note may be higher or lower in pitch than the starting note. In the example below, we show the movement of scale tone 5 going to scale tone 6. In the context of triads over an RC 5, this creates a changing tone.



DPT

DPT = Diatonic Passing Tone

A DPT is part of Line Movement and helps you to bridge over a gap in a line. DPTs always walk on scale tones only. The example below shows a DPT that goes from scale tone 5 to 6. See how it connects to the following Ab over the bar line?

Scale #3 (Dorian)

Scale tone
PC: -3, 5

DPT: 5 to 6

RC 5 ↓



Equivalents

Equivalents are structures that maintain the **same distance in chromatic steps between all notes** involved.

Equivalents very often appear as vertical structures and contain 3 or 4 parts (like 1+1, 2+2, 3+3+3, 4+4, and so on) but they also work horizontally.

All of our RCs (the 'Circle of Fifths' included) belong to the family of equivalents as well.



Extended Root Tones

Vertical structures, such as triads or equivalents (usually), have just one main root tone.

The main root leads to Extended Root Tones, which increase the complexity of the overall vertical interpretation. Those Extended Root Tones fit perfectly into our method of "Black-Box-Thinking", so that we can bring in those root tones at any time without touching the vertical structure above.

This is very handy and gives a lot of options when it comes to developing musical ideas and controlling the amount of complexity throughout the piece.



Faux Scales

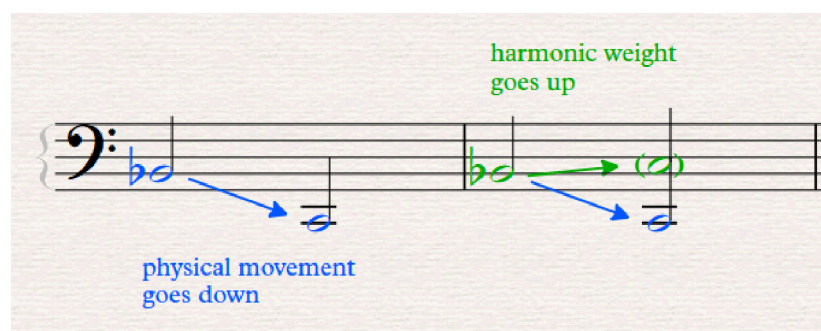
Faux scales don't exist in traditional theory. They describe a selection of notes which are located within the octave. Faux scales behave the same as regular scales but may vary in the number and positions of the scale tones included.



Harmonic Weight

The term 'Harmonic Weight' refers to the shortest distance between two neighboring root tones. You might want to put one of the notes in an octave position to see the closest distance more quickly. So, the physical movement in the bass can differ from the direction of the harmonic weight.

Here's an example: The physical movement goes down from B \flat to C. That's a movement of 10 chromatic steps downwards. However, that's not the shortest distance between those two notes. The shortest distance is not 10 down, but 2 up. So, the harmonic weight moves upwards, even if the physical movement goes downwards.



The chromatic distance of the harmonic weight cannot be larger than 6!



HF = Horizontal Formula

The HF describes a line in chromatic distances. This formula helps us recognize patterns and even expand on musical material. We introduce the HF very early on as it appears in simple chord progressions (over RCs) and also connects to String Theory.

It's a very powerful tool for composition.



IC = Interval Combination

We use pure numbers to describe intervals, such as 2, 3, 4, and so on. When we create vertical structures, **we stack intervals on top of each other.** Hence, ICs consist of at least two numbers that are connected via a '+' symbol.

Here are some examples of ICs.

3-part ICs: 1+3, 3+4, 4+2, 5+2, and so on ...

4-part ICs: 2+1+3, 1+3+4, 2+4+2, 2+5+2, and so on ...



Line Writing

Lines can be written on a scale using scale tones or completely free using all of the twelve tones available. As long as you know your point of reference, you may also switch between the two options.

You can also create your own set of tones for a line. This goes into defining 'faux scales'.



Line Movement

Line Movement embraces all kinds of techniques that we can apply to create a line between two given tones.

Here are some examples: DPT, LT, CA, CT, RT, ANT, SUS



LT = Leading Tone

Leading Tones move into the following note by either 1 or 2 from any direction. An LT always feels more connected to the next bar, and to achieve this, we need to leap over (at least) one scale tone before we bring in the LT.

Scale #3

PC: -3, 4

LT: 4 to 6

RC 5 ↓



Main ICs

Main ICs are unique interval combinations. By looking at the main ICs only, we remove all overlap of vertical structures when PC is applied.

The main ICs become incredibly useful in the advanced part of the Composition Course as they remove all duplicates if the same vertical structure in other positions. They also connect to String Theory when you transform their vertical appearance to a horizontal line.



Matrix of Ear Training

The Matrix of Ear Training is part of the Basic Course and shows all 4p-structures that are available to us.

In the advanced section of the Composition Course, we use that matrix for composition and orchestration. In that context, we refer to this 4p-matrix as the "Matrix of Intervals". The Matrix of Intervals is limited to the Main ICs while the Matrix of Ear Training shows all possible structures, including duplicates in other positions.



Matrix of Intervals

The Matrix of Intervals generally embraces the Main ICs of all 4p-structures. We use that matrix for composition and orchestration.

In addition to the Matrix of Intervals (4p), we also organize all 3p-structures into matrices and call them M1, M2, M3, M4, M5, and M6. Those 3p-matrices appear at the beginning of the second half of the Composition Course (the "TNO series"), which deals with pure interval theory.



Matrix of Modes

The Matrix of Modes is a visual organization of the 7 Church Modes and how they connect to other 7-tone scales emotionally. We introduce the Matrix of Modes in the early lessons of the Composition Course, which deal with line writing.

The Matrix of Modes helps us find functional scale changes, scale pairs, or even scale reflections. You can also use this matrix for form and structure in composition.



Matrix of Triads

The Matrix of Triads is part of the Composition Course and connects seamlessly to the Diatonic world. It organizes all major and minor triads efficiently so that the composer may focus on the emotional results while following the technique.

Furthermore, the Matrix of Triads opens up the door to subjects like Chord Complexity or Extended Root Tones which we also discuss in the Composition Course.



Motor

In composition and orchestration, we use the term 'motor' to describe a repeating pattern that pushes the energy forward. In its simplest form, it can be a pulse on just one note, but we can expand the motor to entire note sequences and across various instrument sections. The more energy a motor provides, the more it attracts the audience's attention.

Below, we show a double motor with a 2-part pulse in the treble and a faster line underneath it. This example is taken from Lesson 37 and deals with the use of "1+1".

Ex.5c

The musical notation for Example 5c consists of two systems of staves. The first system starts at measure 67 and the second at measure 69. Both systems are in 2/4 time. The treble clef staff in each system contains a 2-part pulse, with notes marked with a 'PC' (Pulse Change) and a '1+1' bracket indicating a 1+1 rhythm. The bass clef staff in each system contains a faster line, likely a motor pattern, with notes marked with a 'PC' and a '1+1' bracket indicating a 1+1 rhythm.



OH

OH = Open Harmony

Whenever the tones we play spread over a wider distance than one octave, we call this open harmony. The opposite of open harmony is close harmony.






OI

OI = Outside Interval

Every vertical structure has a bottom note and a top note, independent from the number of voices in the middle. These outside notes define the Outside Interval.

Here's an example. Let's look at a C major triad in all of its different positions. We can determine all the intervals involved, like a "4+3". The sum of these numbers gives you the OI: $4+3 = 7$.

Please don't forget that the numbers represent chromatic distances (or half steps) from one note to the next, starting from bottom to top.

 <p>$4+3 = 7$ (The OI is 7.)</p>	 <p>$3+5 = 8$ (The OI is 8.)</p>	 <p>$5+4 = 9$ (The OI is 9.)</p>
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OTS = Overtone Series

The Overtone Series is a simple observation from nature and therefore, a fundamental part of how we structure music and sound. Our ears got so used to its sound that it is an essential part of our musical culture.

The OTS shows you things like the strength of intervals, how to create strong or weak vertical structures, or how to organize dissonance in different registers.

At our Academy, we go into in-depth explanations about how to use the OTS in composition and orchestration most effectively.



OTS Modes

The OTS Modes are derived from the most prominent scale that we can find in the Overtone Series. That is the Lydian Dominant scale. The Lydian Dominant is our first OTS Mode, just like the Ionian often is referred to as the mother scale of the Church Modes. Here are the seven OTS Modes:

Lydian Dominant, Melodic Minor, Melodic Dominant, Gypsie Minor, Aeolian/-5, Lydian Augmented, Altered Scale

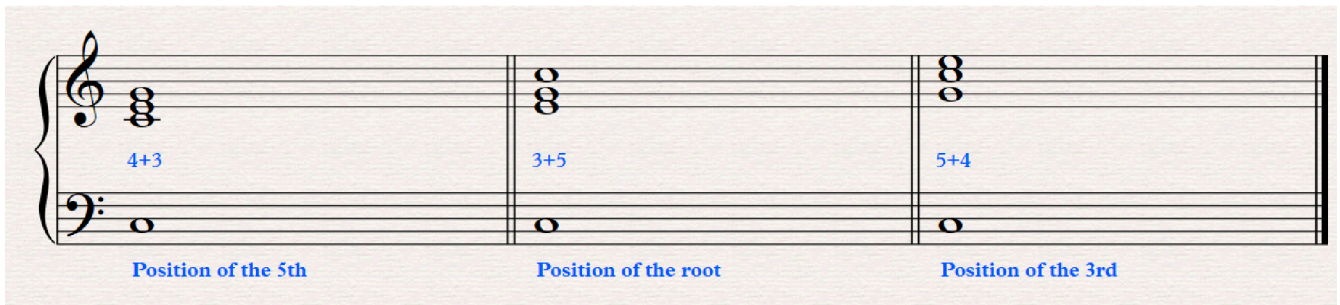
Inside the membership, we have lots of in-depth material about how to use the OTS Modes most practically. We also go into how to connect them back to the Church Modes so that all materials become available to us.



PC (including variations)

PC = Position Change

PC refers to 'what is on top' in a vertical structure. In its purest form, it describes the different positions of a vertical structure, but it also appears in the context of voice-leading.



We also use variations of PC, like "OH-PC" (open harmony-PC) or "Component-PC". These are compositional tools that help us open particular registers for other lines to move through. That's the basis of transparency in the process of orchestration.



RC

RC = Root Cycle

Root Cycles are a sequence of bass notes which appear in equal distances. The most popular RC is the 'Circle of Fifths'. In total, five RCs are ascending and five descending.

The RC6 is unique in that it has no direction. If you went up six chromatic steps from your starting note, then you get to the same which is located six steps below your starting note. So, the direction doesn't matter.

Please note that we don't have any bigger RC than six as it would only change the direction: RC 7 ascending = RC 5 descending.



RP = Root Progression

A root progression consists of unequal distances between the bass notes. A combination of fragments from RCs can create an RP. When it comes to neighboring bass notes, always make sure you determine the smallest distance between the two adjacent bass notes as this gives you the direction of the 'harmonic weight'!



Root Tone

Contrary to the Diatonic system, we often isolate each tone in the bass and consider them entries into tonal centers - that's a Root tone. The root, on its own, doesn't give any information about the scale or harmony. It's like your wild card for whatever you want to do on top of it.

Often, the Overtone Series (OTS) is your most powerful guide to finding the proper vertical balance within a given musical context.

You can even apply this perspective to any composition you've written in the Diatonic world. Here's an example that follows the Ionian mode on C:

1st scale degree: Ionian (C)

2nd scale degree: Dorian (D)

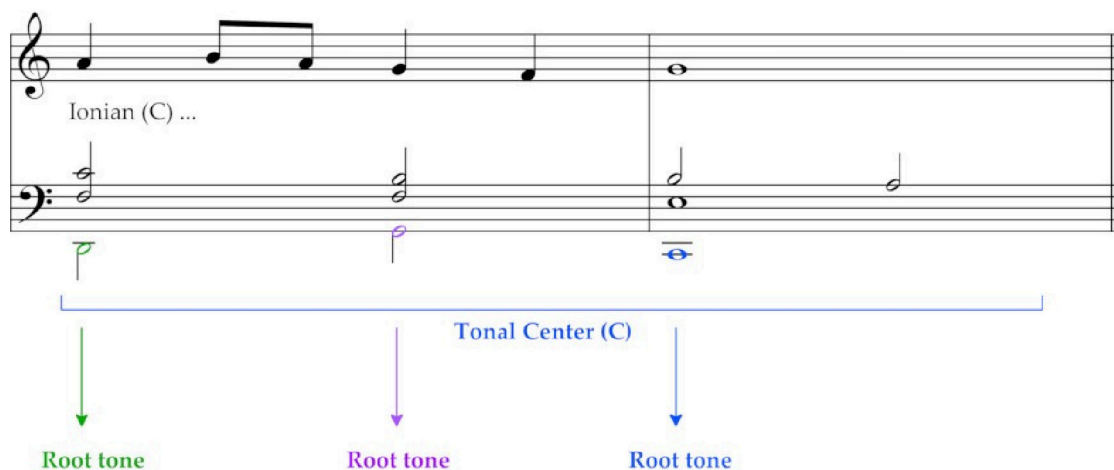
3rd scale degree: Phrygian (E)

4th scale degree: Lydian (F)

and so on ...

Each of those scale degrees can be viewed as root tones, and you may change the scale on top to change the overall color and emotion.

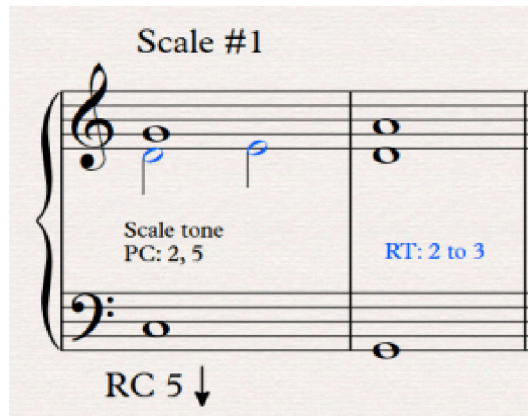
This option perfectly balances Diatonic and pure Intervallic thinking, leaving all possible doors open at all times—maximum freedom.



RT

RT = Returning Tone

An RT is part of line movement. It starts from one note into any direction, changes its direction, and comes back to the starting note! Essentially, RTs create little loops.



Scaling

Scaling refers to multiplying numbers that describe the distances (horizontally or vertically) between two notes.

You might choose the factor of this operation, but in most cases, a factor $\times 2$ or $\times 3$ makes the most sense musically. Here are some quick examples of scaling with the factor $\times 2$.

$$1+2 \Rightarrow 2+4$$

$$4+3 \Rightarrow 8+6$$

$$4+4 \Rightarrow 8+8$$



Shift

A 'shift' equals a transposition. We introduce this term in the Basic Course when we talk about Position Change. As intervals have their own nature to them, a shift of that exact interval doesn't change its characteristics.



ST

ST = Substitute Tone

A Substitute Tone can be used to bring in variation to patterns. They work as your wildcard whenever you are not happy with the result. STs also include compensation of notes to avoid 13s in line writing.



String Theory

String Theory is a subject from the later part of the Composition Course. It explains the intervallic approach of line writing and therefore, connects the world of interval theory back to the Diatonic system.



SUS

SUS = Suspension

Using suspension to delay the resolution to a chord structure is a common thing in music. We can apply this technique to all of the chord tones involved.



SVL = Substitute Voice-Leading

Sometimes it simply sounds better if you don't stick to the traditional voice-leading guidelines. In composition, there are many opportunities where you want to use SVL over VL. Here are some examples:

=> Parallel movement works great when the distance from one note to the next in your parts is small, like a 1 or 2 (minor or major second).

=> Sometimes, you want to double harmony in a second instrument section, but you want to create contrary motion between those two sections. In this case, let your stronger section follow proper voice-leading and use SVL for the other one.

=> Imagine you want to transition to a different register, but voice-leading won't let you get there. Switch to SVL in this case.

All of this is part of developing the tools and techniques that will enable you to compose with freedom!



TNO = The Nature Of ...

When we talk about the TNO series, this refers to the second half of the Composition Course in which we go through all the intervals and ICs and explore their emotional and functional nature.



Tonal Center

Defining tonal centers is a first step out of the constraints of Diatonic thinking. A tonal center does not have to give all the information about the scale but usually contains harmony.

Usually, **cadences and mediants set up the tonal center for the listener.**

In Interval Theory, we create many temporary tonal centers and switch through them fluently. The tonic and its connected scale might change in your composition.

To keep things easy to follow, you might want to think of your tonal centers as being part of one of the following categories: major, minor, diminished, dominant, or minor dominant.

You can even change the character of your temporary tonal centers later and after the fact. You can think of tonal centers as little Diatonic snippets you piece together in sequence.

The image displays two musical staves, each with a treble and bass clef. The first staff is labeled 'Ionian (C) ...' and the second is labeled 'Dorian (C) ...'. Below each staff, a blue bracket indicates the 'Tonal Center'. The first bracket is labeled 'Tonal Center (C major)' and the second is labeled 'Tonal Center (C minor dominant)'. The notation includes various notes and rests, with some notes highlighted in blue.



Tonic

The tonic is the first scale degree (scale degree 1) of the diatonic scale (the first note of a scale). So, it defines the scale and all harmony since everything will fall on scale tones only.

Once you've defined the tonic, you've also created a tonal center.

This is pure Diatonic writing.

The image displays two musical staves. The top staff, labeled "Ionian (C)", shows the C major scale in treble clef with a key signature of one flat (Bb). The first note, C4, is marked with a red "Tonic" label. The bottom staff, labeled "Ionian (C) ...", shows a harmonic progression in 4/4 time. The bass line consists of whole notes: C2, C2, F2, and C2. The treble line consists of quarter notes: C4, D4, E4, and F4. A blue bracket labeled "Tonal Center" spans the first three measures, which all contain the C2 note in the bass. The fourth measure contains the C2 note in the bass and the F4 note in the treble, with a red "Tonic" label pointing to the C2 note in the bass.



VL = Voice-Leading

It describes the smoothest way to transition from one chord structure into the following. According to the Diatonic system, there are three main guidelines that you can follow:

- 1) If there are any common tones between your neighboring chords, hold those.
- 2) Let the remaining tones from your first chord move into the missing chord tones from the second structure via the shortest way.
- 3) If there are no common notes between two chords, let your tones move contrary to the bass movement and via the shortest way into the chord tones from the second structure.

We can get to the same results but using Interval Theory instead. You need to know the direction of the Harmonic Weight in your bass and apply Position Change in the treble. It's like cycling through your chord tones in the opposite direction to your Harmonic Weight.

We explain this process in detail inside the Composition Course and the Membership.





X = Crossing (of Parts)

The crossing of parts (or voices) happens in two ways.

- 1) One part physically moves over another one. Imagine the soprano voice move down and below the alto voice. This would have created an X.
- 2) When a part moves over the octave position of another part, we also create an X. We basically move from close harmony into open harmony (and vice versa).

The technique of crossing voices is a rapid method and time-saver when it comes to creating a second part out of your first one. We get very in-depth on this technique in the line writing section of the Composition Course.

