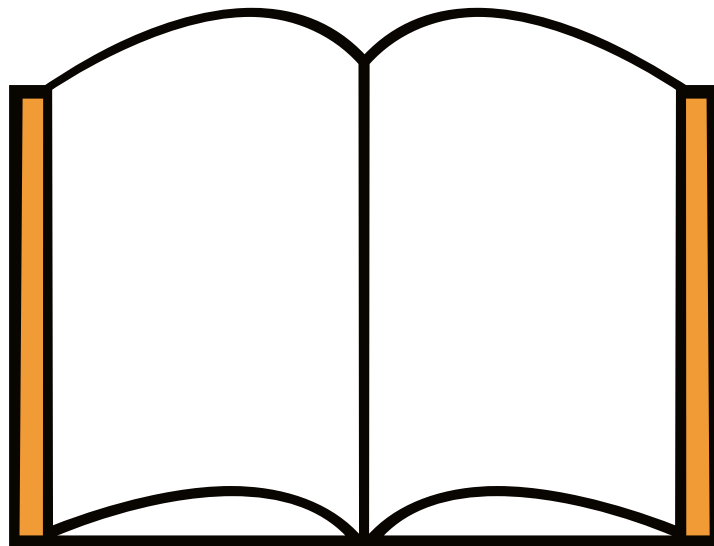




# THE MITA GLOSSARY



---

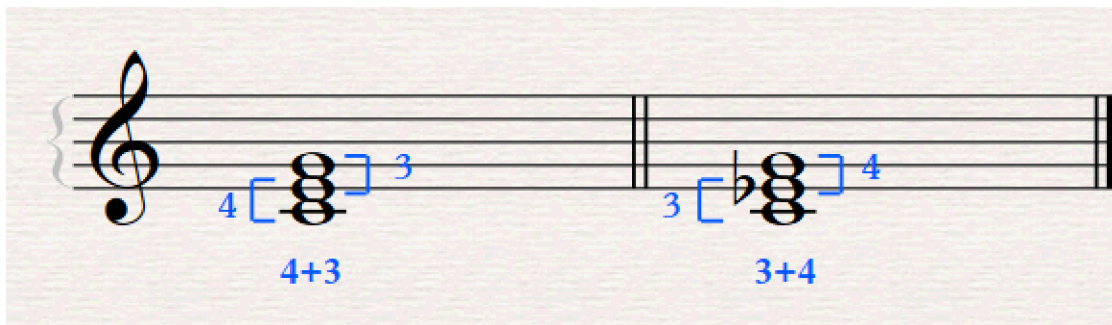
## Music Interval Theory Terminology

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 in 4/4 time, consisting of two measures. The key signature has one flat (B-flat). The first measure contains a piano accompaniment with a bass line on the bottom staff and a treble line on the top staff. The bass line starts with a whole note chord of B-flat and D, labeled "#11". The treble line starts with a whole note chord of B-flat and D, with a blue note C marked above it. An upward-pointing arrow to the left of the treble staff is labeled with "5", "-3", and "1". The second measure shows the continuation of the accompaniment. The bass line has a whole note chord of B-flat and D, labeled "RC 5" with a downward-pointing arrow. The treble line has a whole note chord of B-flat and D, with a blue note C marked above it. A blue label "ANT: -3 to 2" is placed between the two staves in the second 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 bass clef. The treble clef staff contains three notes: a whole note on the second line (F4), a whole note on the third space with a sharp sign (G#4), and a whole note on the third space (G4). The bass clef staff contains two notes: a whole note on the second space (B3) and a whole note on the first space (F3). The text 'PC: 2, 5' is written below the treble clef staff. The text 'CA' is written below the G#4 note. The text 'RC 5 ↓' is written below the bass clef staff.

PC: 2, 5

CA

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

---

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.

The image shows a musical score in 4/4 time, consisting of two staves: a treble clef staff and a bass clef staff. The treble staff contains a triad of notes: a whole note chord with notes G4, B4, and D5. A blue arrow points upwards from the G4 note to the B4 note, with the numbers 7, 5, and 3 written vertically to its left. The bass staff contains a whole note chord with notes G3, B2, and D3. A blue arrow points downwards from the G3 note to the B2 note, with the text "RC 5" written below it. In the second measure, the treble staff has a whole note chord with notes G4, B4, and D5, and the bass staff has a whole note chord with notes G3, B2, and D3. A blue arrow points from the G4 note in the treble staff to the B4 note in the treble staff, with the text "CT: 5 to 6" written in blue next to it.



# 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 equivalent (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.

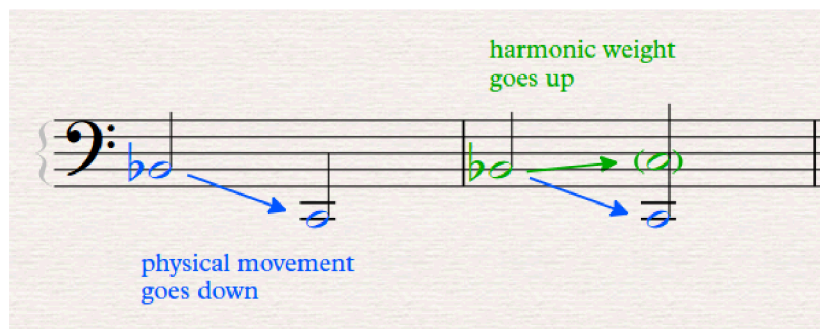


# Harmonic Weight

---

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

---

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

---

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

67

69

PC

1+1



# 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.

The image shows three musical staves illustrating the C major triad in different positions. Each staff has a treble clef and a bass clef. The bottom note is always C. The top note is G. The middle note is E. The intervals between the notes are shown with numbers in brackets, and the sum of these numbers is given as the Outside Interval (OI).

Position	Interval 1 (Bottom to Middle)	Interval 2 (Middle to Top)	Sum (OI)
Root Position	4	3	7
First Inversion	3	5	8
Second Inversion	5	4	9



# OTS

---

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.

The image shows a musical staff with two staves (treble and bass clefs) illustrating three variations of Position Change (PC). The notes are represented by circles. The first variation, labeled "Position of the 5th", shows a treble clef with notes 4 and 3, and a bass clef with note 5. The second variation, labeled "Position of the root", shows a treble clef with notes 3 and 5, and a bass clef with note 1. The third variation, labeled "Position of the 3rd", shows a treble clef with notes 5 and 4, and a bass clef with note 1. The labels "4+3", "3+5", and "5+4" are written in blue below the treble clef notes in the first, second, and third measures respectively.

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

---

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'!





# 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.

Scale #1

The image shows a musical staff with two systems. The first system has two notes: a quarter note on the second line (F4) and a quarter note on the third line (G4). The second system has two notes: a quarter note on the second line (F4) and a quarter note on the second line (F4). The notes in the second system are highlighted in blue. Labels include 'Scale tone PC: 2, 5' under the first note of the first system, 'RT: 2 to 3' under the first note of the second system, and 'RC 5 ↓' below the first system.

Scale tone  
PC: 2, 5

RT: 2 to 3

RC 5 ↓



# 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

---

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

---

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.





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

---

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.

