

Important Notes, Facts, Resources, and Devices *of EIS Murphy System*

Ted Greene 1977-10-07 & 08

Horizontal Composition Based on Equal Intervals (12)

- 1) A *simplified* and *highly accurate* method of counting, or spacing, all of the horizontal and vertical intervals used in modern music.
- 2) In the advanced theory section it becomes a complete Equal Interval System involving *all intervals*, vertical as well as horizontal, in *all* possible combinations.
- 3) There is *no key* as such, all Root tones being of equal importance, but we *can* have a tonal center (if required) which will serve the same general purpose.
- 4) For the most part, the structural design of this system consists of *Horizontal Patterns* written in equal intervals, using various Root lines as a bass.
- 5) We learn by playing and listening, comparing and analyzing, and checking and rechecking *against the previous lessons*. Play every note over and over again, carefully observing where each and every tone originates and the direction it takes (on a horizontal plane) in progressing to the following tones.
- 6) When several Root tones appear in sequence, they are called *Progressions*. p.26 → the term progression refers only to the horizontal movement of the Root tones (in the bass).
- 7) The *Perfect Fifth* (diatonic interval) is treated as an Octave Position of a fourth.
- 8) Although we use Equal Intervals in the *bass* with our Root tones, the scales employed in the *treble* are based on the Natural Major scale which has the diatonic intervals.
- 9) **Harmony** is a set of tones from any one scale sounded simultaneously. All chords are built on certain intervals belonging to the various scales.
- 10) We use a **Two-Octave Scale** when we wish to build chords.
- 11) Vertically, this system follows as closely as possible the spacing of the intervals found in the overtone series. To get the vertical sounds needed we use our scales as a basis.
- 12) The *first section of the course* is in Equal Intervals only in the horizontal relation of the tones (Root tones). *Vertically*, it is based on a greatly expanded 7-tone system.
- 13) If we divide the overtone series into 5 octaves, we see the following:
1st octave contains: the fundamental and its octave position
2nd octave contains: a Root and a 5th
3rd octave contains: 1, 3, 5, -7 ← called Chord Tones
4th octave contains: 1, 2, 3, 4+, 5, 6, -7 ← called Scale Tones
5th octave contains: 1, 2, 3, 4+, 5, 6, -7 ← called Scale Tones

- 14) *Book II: System of Progressions* – “We must start somewhere, so we select lines which give us all the vertical structures known to conventional students by “chord names.” starting with Open and Close Triads (major and minor triads).
- 15) *Equal Interval Theory*: “One line at a time written Horizontally in Equal Intervals.”
- 16) At the heart of this course is “the motion of the horizontal lines resulting from the voice-leading plus the non-chord tones. This creates little fragments of Melody which are tossed about among the various parts in a sort of contrapuntal fashion. As the course of study progresses, these horizontal lines become longer and more intricate, and the harmonies more complex and of increasing interest. Our Final Goal is to be able to weave horizontal lines from all the parts together (contrapuntal, or otherwise) into a complete and perfectly organized ensemble.
- 17) *Non-Chord Tones* (NCT’s) do not affect the Voice-Leading (VL) as they are placed between two chord tones. (p.26). (NCT substitute for or alter the chord tones as shown on p.23).
- 18) *Bass in Motion*: Descending → use diatonic motion on p.5 (E7), EIS on all other ascending: likewise, but last tone in bar is Root tone except for E2[^]. The range limit can be extended when the bass is in motion (bass solo). The movement of the bass through the ascending progressions is exactly the opposite of the descending progressions.
Everything in this course is reversable.
- 19) The method of study we employ causes us to use the bar line as an Integrating Force. That is, we do not have to worry about such technical problems as Voice-leading, Root progressions, etc., except when we cross the bar line. Everything contained in 1 bar, such as the scale, the chord, or the alterations (NCT’s) are based on a single Root Tone. When we cross the bar line, everything changes as it is then based on a new and different Root tone. This is our basic theory (but not true for actual composition).
- 20) In E5, E4, E3, and E6, the bass notes may be in any order of appearance you wish between Root tones.
- 21) *Elision*: We may leave out any intervals in the bass not necessary to our pattern or which do not conform to the metric considerations present in the treble.
- 22) *Change of Position (C.O.P.)* (the treble changing position): Use voice-leading when you cross the bar.
- 23) If no tone is held over (in the same voice) from one chord to another, we have a Substitute Position (S.P.) ← This is necessary sometimes when crossing the bas to keep a line going.
- 24) Mark everything (it will come in handy for reference later).

- 25) Bass and Treble Motion Combined: The bass may move and the treble change position at the same time.
- 26) *Substitute Tones* (ST's): Can replace chord tones. Example: 6 for 5; 4 for 3; 2 for 1. When Substitute Tones appear first and resolve back to the chord tones, we refer to them as *Leading Tones*. If the chord tones appear first and the ST's follow, then we refer to them as *Passing Tones* (PT).
- 27) A) *Passing Thirds*, and B) *Passing 5ths in the Bass*: are inserted between any *two* tonics. For Passing 3rds, the Root Tone must appear 1st at all times, but not so for Passing 5ths.
C) *Passing 3rds & 5ths* may be combined but if the 3rd is ever sounded at the *same time* (metrically) as the Treble Structure, then the Root or 5th must be doubled in the Treble (and the 3rd omitted). The Passing 3rds & 5ths will be referred to as the “Chord Tones.”
D) *Passing 3rds & 5ths* may be combined with Equal Intervals used in the bass (on pp 32 & 33).
E) Both the “Chord Tones” and the “Equal Intervals” referred to above may be combined with Leading Tones and Passing Tones (2 to 1, 4 to 3
1 to 2, 3 to 4)
F) All Bass Tones may be repeated an Octave Higher or Lower.
(Example: T 8-3 5)
G) Watch out for Parallel Octaves between bass and any note in Treble.
- 28) The *Six-Four* chord is a separate chord with Root in the bass in this system. The resolution of the “unstable” sound is 6 → 5
4 → 3 or reverse (and either 5 or 6 in minor). 6 and 4 are Substitute Tones here.

HORIZONTAL COMPOSITION
Based on EQUAL INTERVALS (12)

Important Notes & Facts about EIS
(also: Murphy System Resources & Devices)

10-7-77

- ① A simplified and highly accurate method of counting, or spacing, all of the horizontal & vertical intervals used in modern music.
- ② In the advanced theory section it becomes a complete Equal Interval System involving All intervals, vertical as well as horizontal, in All possible combinations.
- ③ There is no key as such, all root tones being of equal importance, but we can have a tonal center (if required) which will serve the same general purpose.
- ④ For the most part, the structural design of this system consists of HORIZONTAL PATTERNS written in equal intervals, using various Root Lines as a basis.
- ⑤ We learn by playing & listening, comparing & analyzing, and checking & rechecking against the previous lessons. Play every note over & over again, carefully observing where each & every tone originates & the direction it takes (on a horizontal plane) in progressing to the following tones.
- ⑥ When several root tones appear in sequence they are called **PROGRESSIONS**.
P. 26 → The term progression refers only to the horing. movement of the root tones (in the Bass).
- ⑦ THE Perfect Fifth (DIAT. INTV.) is treated as an OCTAVE POSITION of a fourth.
- ⑧ Although we use EQUAL INTERVALS in the Bass with our Root Tones, the **SCALES** employed in the Treble are based on the Natural Major Scale which has the Diatonic intervals.
- ⑨ **HARMONY** is a set of tones from any one scale sounded simultaneously. All chords are built on certain intervals belonging to the various scales.
- ⑩ We use a **TWO-OCTAVE SCALE** when we wish to build chords.
 - ⑪ Vertically, this system follows as closely as possible the spacing of the intervals found in the overtone series.
To get the vertical sounds needed we use our scales as a basis.
 - ⑫ The 1st section of the course is in Equal Intervals only in the horizontal relation of the tones. Vertically, it is based on a greatly expanded 7 tone system.
ROOT TONES
 - ⑬ If we divide the overtone series into 5 octaves we see the following:

1st octave contains =	THE FUNDAMENTAL and its octave position
2ND " "	a root and a 5th
3RD " "	1, 3, 5, -7 ← called CHORD TONES
4th " "	1, 2, 3, 4+, 5, 6, -7 ← called SCALE TONES
5th " "	
- ⑭ **BOOK II = SYSTEM OF PROGRESSIONS** - "We must start somewhere, so we select lines which give us all the vertical structures known to conventional students by 'chord names'. Starting with **OPEN & CLOSE TRIADS** (MAJOR AND MINOR TRIADS)
- ⑮ **EQUAL INTERVAL THEORY**: "One line at a time written HORIZONTALLY in EQUAL INTERVALS."
- ⑯ At the heart of this course is the motion of the horizontal lines resulting from the Vk plus the Non Chord Tones. This creates little fragments of **MELODY** which are tossed about among the various parts in a sort of contrapuntal fashion. As the course of study progresses, these horizontal lines become longer and more intricate and the harmonies more complex and of increasing interest.
Our **FINAL GOAL** is to be able to weave horizontal lines from all the parts together (contrapuntal, or otherwise) into a complete and perfectly organized ensemble.
- ⑰ **NON-CHORD TONES (NCT's)** do not affect the **VOICE LEADING (VL)** as they are placed between two chord tones. (Nct substitute for or alter the chord tones as shown on P. 23.

(18) **BASS IN MOTION**: Descending \rightarrow use DIATONIC motion on P. 5 (E7), EFS on all others
Ascending: likewise but last tone in bar is Root Tone except for E21.
The range limit can be extended when the Bass is in motion (Bass Solo).
The movement of the Bass through the Asc. Prog's is exactly the OPPOSITE
of the desc. prog's. **EVERYTHING IN THIS COURSE IS REVERSIBLE.**

(19) The method of study we employ causes us to use the bar line as an **INTEGRATING FORCE**. That is, we do not have to worry about such technical problems as Voice leading, Root Prog's etc except when we cross the bar line. Everything contained in 1 bar such as the scale, the chord, or the alterations (NCT's) are based on a single Root Tone. When we cross the bar line everything changes as it is then based on a new & different Root Tone. This is our **Basic Theory** (but not true for actual composition).

(20) In E5, E4, E3, and E6, the Bass Notes may be in any order of appearance ^{in the bass} between root tones.

(21) **ELISION**: We may leave out any intervals ^{in the bass} not necessary to our pattern or which do not conform to the metric considerations present in the treble.

(22) **CHANGE OF POSITION (C.O.P.)**: Use V.L. when you cross the bar
(The treble changing position)

(23) If no tone is held over (in the same voice) from one chord to another we have a **SUBSTITUTE POSITION (S.P.)** \leftarrow This is necessary sometimes when crossing the bar to keep a line going.

(24) **MARK EVERYTHING** (it will come in handy for reference later).

(25) **BASS + TREBLE MOTION COMBINED**: The Bass may move and the Treble change position at the same time.

(26) **SUBSTITUTE TONES (ST'S)**: Can replace chord tones EX: 6 for 5, 4 for 3, 2 for 1, 2 for 3.
When Substitute tones appear first and resolve back to the chord tones, we refer to them as **LEADING TONES**. If the chord tones appear first & the ST's follow, then we refer to them as **Passing Tones (PT)**.

(27) **PASSING 3rds & 5ths in the BASS**: are inserted between any 2 TONICS.
For passing 3rds, the Root Tone must appear 1st at all times, but not so for passing 5ths. **PASSING 3RDS & 5THS** may be combined but if the 3rd is ever sounded at the same time (symmetrically) as the Treble structure then the Root or 5th must be doubled in the Treble (and the 3rd omitted).
The passing 3rds & 5ths will be referred to as the "Chord Tones".

Passing 3rds & 5ths may be combined with Equal Intervals used in the Bass. on pp 32 + 33.

Both the "Chord Tones" and the "Equal Intervals" referred to above may be combined with leading tones and passing tones (2 to 1, 4 to 3, 1 to 2, 3 to 4)

All Bass Tones may be repeated an Octave Higher or Lower. (EX: T 8-35)

Watch out for parallel octaves between bass + any note in Treble.

(28) The **SIX-FOUR** chord is a separate chord with R in the bass in this system.
The resolution of this "unstable" sound is $\frac{6}{7} \frac{4}{3}$ or reverse (and either 6 or 6 in mirror).
6 + 4 are **SUBST. TONES** here.