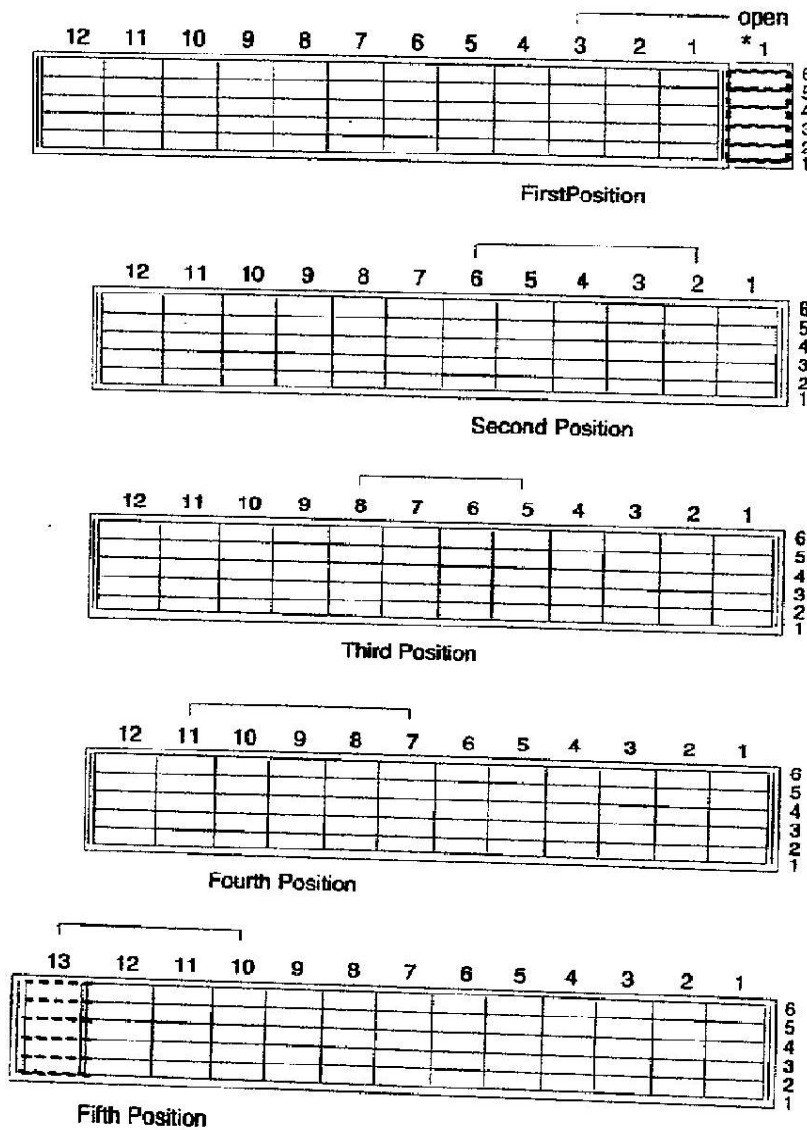


Line Forms

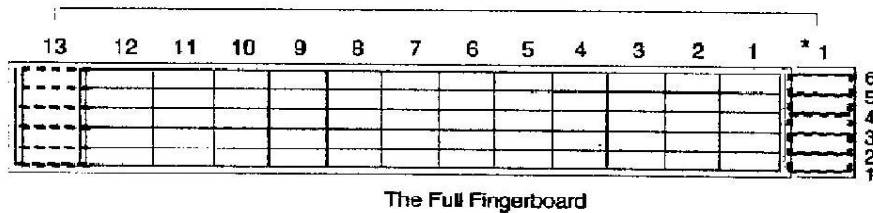
Linear Inversions

Ranges of chordal and linear activity organize in greater balance when they're viewed as self contained divisions of the fingerboard, (similar to separate floors in a larger house). These vertical areas comprise linear as well as chordal inversions encompassing all twelve keys in each of their five separate positions.

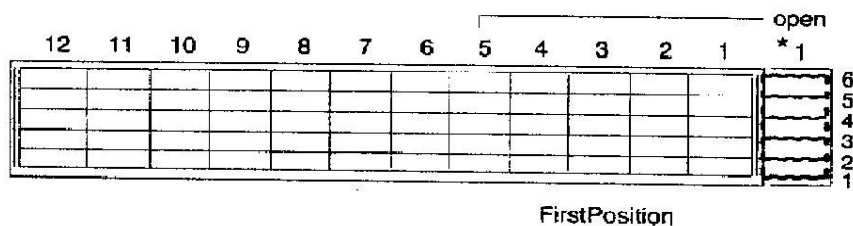
Eg. 25



When each of these areas are mastered, the sixth, (full fingerboard) becomes activated as a free canvas for any improvisational topic.



Eg. 26



Before beginning a discussion on line forms, and their inversions, it's important to define the proper use of fingerings for what's normally categorized as open strings.

Players often use a completely different arrangement of their fingers each time they use open strings in lower areas of the neck. By placing the first finger behind the "nut", just as if it were another fret, familiar fingerings used in other areas take place in comfort here as well. The following patterns utilize this approach. Take note, the asterisk * when in use should be viewed as a reminder regarding placement of the first finger behind the nut whenever it appears on fingerings in the upcoming patterns.

The first and fourth finger of the left hand determine not only the beginning of the pattern, but also the position in which it unfolds vertically as well as horizontally. From "Fingering Inversions" patterns I and II reveal a full vertical / horizontal inversion.

Eg. 27

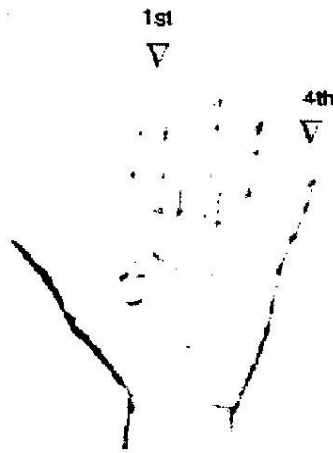
Inversion I / Position I I II

Staff I: Strings: ⑥ 5 6; Fingers: ④ 1 2 4 1 4

Staff II: Strings: ③ 2 3; Fingers: ① 3 4 2 3 1

Once again, when we give thought to a practical use of the opposites, (*yin & yang*) and view the outer fingers of the hand, (Eg. 30) the two patterns seen above, (Eg. 29) are perfectly in line with the fourth and first fingers. Vertically, pattern I begins at the lowest point with the fourth finger followed by its next inversion, (in close range) beginning with the first finger. These are the first two vertical inversions of this line form.

Eg. 28



The patterns displayed next are twelve positions of vertical and horizontal linear inversions of the same motive.

Eg. 29

Inversion I / Position I I

Inversion II / Position II III

Inversion III / Position III V

Inversion IV / Position IV VII

Inversion V / Position V IX

Inversion VI / Position VI XI

Inversion VII / Position VII II

Inversion VIII / Position VIII IV

Inversion IX / Position IX VI

Inversion X / Position X VIII

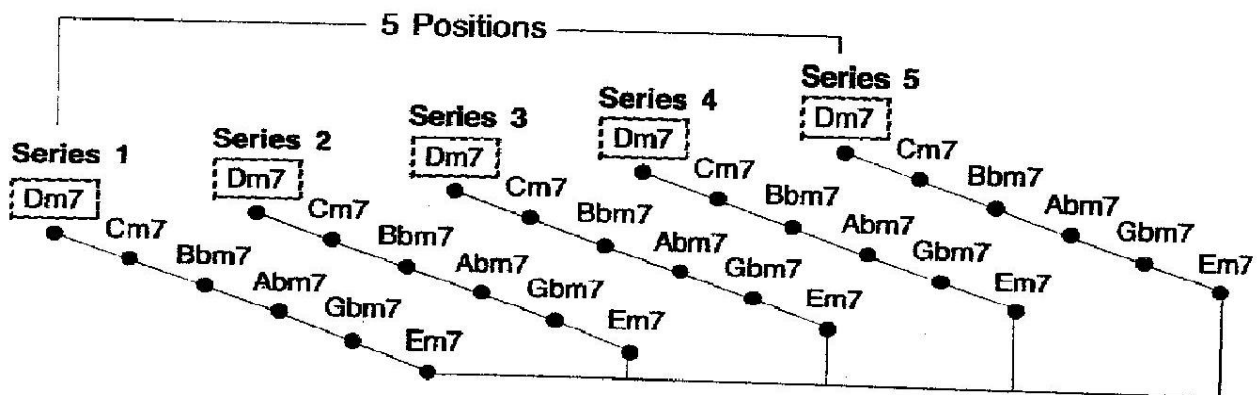
Inversion XI / Position XI X

Inversion XII / Position XII XII

In general, these linear forms, (seen as Eg. 29) are continuous variations of Eg. 27

The following series of this study uses descending transpositions, (in a wholetone scale) of the original form to define its change of position across the fingerboard. What initially was demonstrated as a pattern that's compatible with Gmi7 shall now be part of a descending framework that unfolds in six keys, beginning with D: Dmi7, Cmi7, Bbmi7, Abmi7, Gbmi7, Emi7, continued into the next of five ascending positions. The sixth, (invisible) position forms at the twelfth fret, (beginning with the first finger at D on the fourth string. The reason that it isn't included in the first string group, (4321) is that it's the departure point, (one octave lower) for the second string group, (5432) in this study. The dotted markings placed on Dmi7 in the example shown below represent the sequential inversions of the topic ascending horizontally across the entire fingerboard.

Eg. 32



The study is also arranged into three separate adjacent string groups, 4321, 5432 and 6543 before briefly moving thru combinations of these sets.

Whole Tone Inversions & Transpositions

String Group

4321

I

Dmi7 2 1 2 4 -1 2 4 -1 4
Cmi7 1 3 4 1 3 1
Ebmi7 3 2 3 1 2 4 1 3

Abmi7 3 1 3 4 2 3 1
F#mi7 4 3 4 1 2 4 1 4
Emi7 3 4 1 3 4 1 3 1

II

Dmi7 2 1 2 2 4 4 1 3 1
Cmi7 3 2 3 1 2 4 1 3
Bbmi7 2 3 1 3 4 2 3 1

Abmi7 4 3 4 1 4
F#mi7 3 4 1 3 4 1 3 1
Emi7 2 1 2 2 4 4 1 3 1

III

Dmi7 3 2 3 1 2 4 1 3
Cmi7 2 3 1 3 4 2 3 1
Bbmi7 4 3 4 1 2 4 1 4

Abmi7 4 3 4 1 3 1
F#mi7 2 1 2 2 4 4 1 3 1
Emi7 3 2 3 1 2 4 1 3

String Group

6543

I

Dmi7: 4 3 4 -1 3 -1
Cmi7: 5 4 5 4 -1 4
Bbmi7: 4 5 1 3 4 1 3 1

Abmi7: 6 5 6 4 1 2 4 1 4
F#mi7: 5 6 1 3 4 1 3 1
Emi7: 4 3 4 1 3 1

II

Dmi7: 5 4 5 4 1 2 4 1 4
Cmi7: 4 5 1 3 4 1 3 1
Bbmi7: 6 5 6 4 1 2 4 1 4

Abmi7: 6 5 6 4 1 3 4 1 3 1
F#mi7: 3 4 1 3 4 1 3 1
Emi7: 5 4 4 1 2 4 1 4

III

Dmi7: 5 4 5 4 1 3 4 1 3 1
Cmi7: 6 5 6 4 1 2 4 1 4
Bbmi7: 5 6 1 3 4 1 3 1

Abmi7: 4 3 4 1 3 1 4 1 2 4 1 4
F#mi7: 5 4 5 5 4 5 1 3 4 1 3 1
Emi7: 5 4 5 1 3 4 1 3 1

IV

Dmi7: 6 5 6 4 1 2 4 1 4
Cmi7: 5 6 1 3 4 1 3 1
Bbmi7: 3 4 1 3 4 1 3 1

Abmi7 F#mi7 Emi7

4 3 4 3 4 5 4 5

4 1 2 4 1 4 1 3 4 1 3 1 4 1 2 4 1 4

III

Dmi7 Cmi7 Bbmi7

5 4 5 3 2 3 4 3 4

1 3 4 1 3 1 1 3 4 2 3 1 4 1 2 4 1 4

Abmi7 F#mi7 Emi7

4 3 4 5 4 5 5 4 5

1 3 4 1 3 1 4 1 2 4 1 4 1 3 4 1 3 1

IV

Dmi7 Cmi7 Bbmi7

3 2 3 4 3 4 3 4

1 3 4 2 3 1 4 1 2 4 1 4 1 3 4 1 3 1

Abmi7 F#mi7 Emi7

5 4 5 4 5 3 2 3

4 1 2 4 1 4 1 3 4 1 3 1 1 3 4 2 3 1

V

Dmi7 Cmi7 Bbmi7

4 3 4 3 4 5 4 5

4 1 2 4 1 4 1 3 4 1 3 1 4 1 2 4 1 4

Abmi7 F#mi7 Emi7

5 4 5 3 2 3 4 3 4

1 3 4 1 3 1 1 3 4 2 3 1 4 1 2 4 1 4

IV

Dmi7 Cmi7 Bbmi7

Abmi7 F#mi7 Emi7

V

Dmi7 Cmi7 Bbmi7

Abmi7 F#mi7 Emi7

String Group

5432

I

Dmi7 Cmi7 Bbmi7

Abmi7 F#mi7 Emi7

II

Dmi7 Cmi7 Bbmi7

Chords & Substitutions

("Welcome To A Prayer")

Ballad

Pat Martino

Chords: * C7 (b9)
Substitutions: Dbm7

J = 49

F#m9
F#m7

Ab / Bb
F#m7

Ebm9
Ebmi7

Ab7 (#5)
Ami7

Cma7 / A
Ami7

Cma7 / G
Ami7

F#mi7 (b5)
Ami7

1.

B7 (b9)
Cmi7

A7 (b5)
Bbm7

Dmi9
Dmi7

G13 (b5)
Abmi7

B7 (#5)
Cmi7

Ebm9
Ebm7

A7 (b5)
Bbm7

Dbmi7 (b5)
Ebm7

Gb7 (#5)
Gmi7

Bmi9
Bmi7

Dbmi / D
Bmi7

A13 (b9)
Bbm7

A7 (#5)
Bbm7

Dmi9
Dmi7

G13 (b5)
Abmi7

Cmi9
Cmi7

* Gb13 (b5)
Dbmi7

2.
B7 (b9)
Cmi7

Bmi11 (b5) / E
Dmi7

Cma7 (b5) / E
Ami7

Dbmi7 (b5) / E
Ebm7

Cma7 (b5) / E
Ami7

Ebm7 (9/11)
Ebm7

Four Vertical Frameworks in F Major, and its relative D Minor

SKELETAL AREAS OF ACTIVITY (F Major) (Vertical & Horizontal)



SKELETAL AREAS OF ACTIVITY (D Minor) (Vertical & Horizontal)

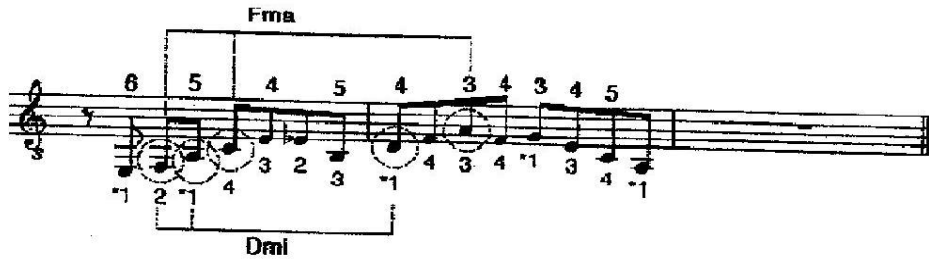
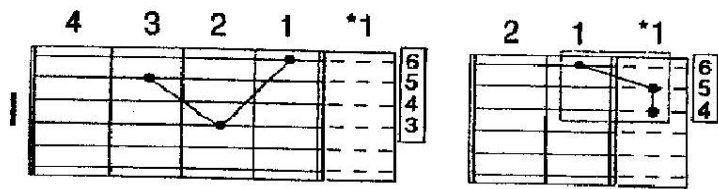


Both forms, Fma, and Dmi are displayed in a series of Vertical and Horizontal Constellations, (voicings). The following analysis is based upon the first constellation with melodic improvisations within that field of activity, (between the 1st, and 3rd frets). It begins first with two graphic diagrams on the placement of the Ma & Mi inversions, the second follows with the same inverted forms on the staff, and the third displays a brief improvisation, (on the staff) containing the same described elements. The following studies are referred to as Vertical Segments 1, 2, 3, and 4 in their first horizontal position.

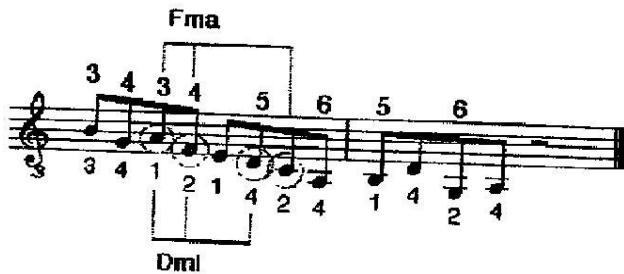
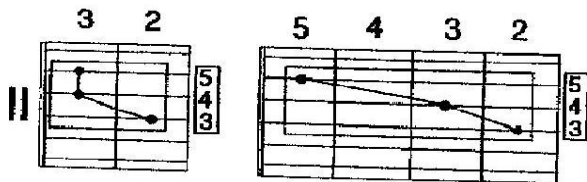
Although the following improvisational examples are in context with a Dmi7 motif, they can also be applied to alterations of other compatible forms, (eg. Bmi7 (b5), Db7 (#9), G13, etc.

These four examples are covering the first series of "skeletal areas", covering the *1st, (behind the nut) to the 5th fret. The following two series cover the 5th, to the 10th, and 10th to the 13th frets.

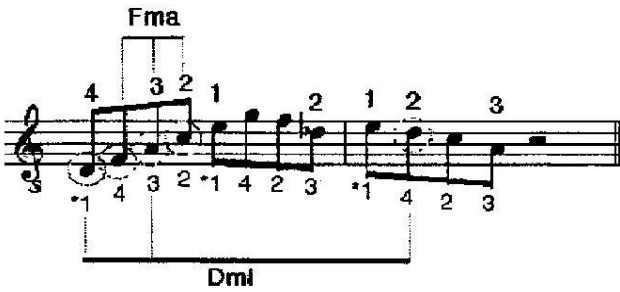
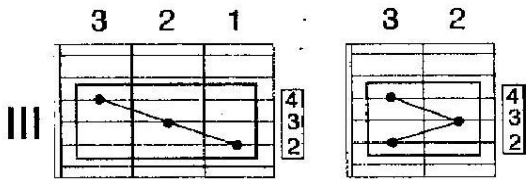
VERTICAL SEGMENT 1



VERTICAL SEGMENT 2



VERTICAL SEGMENT 3



VERTICAL SEGMENT 4

