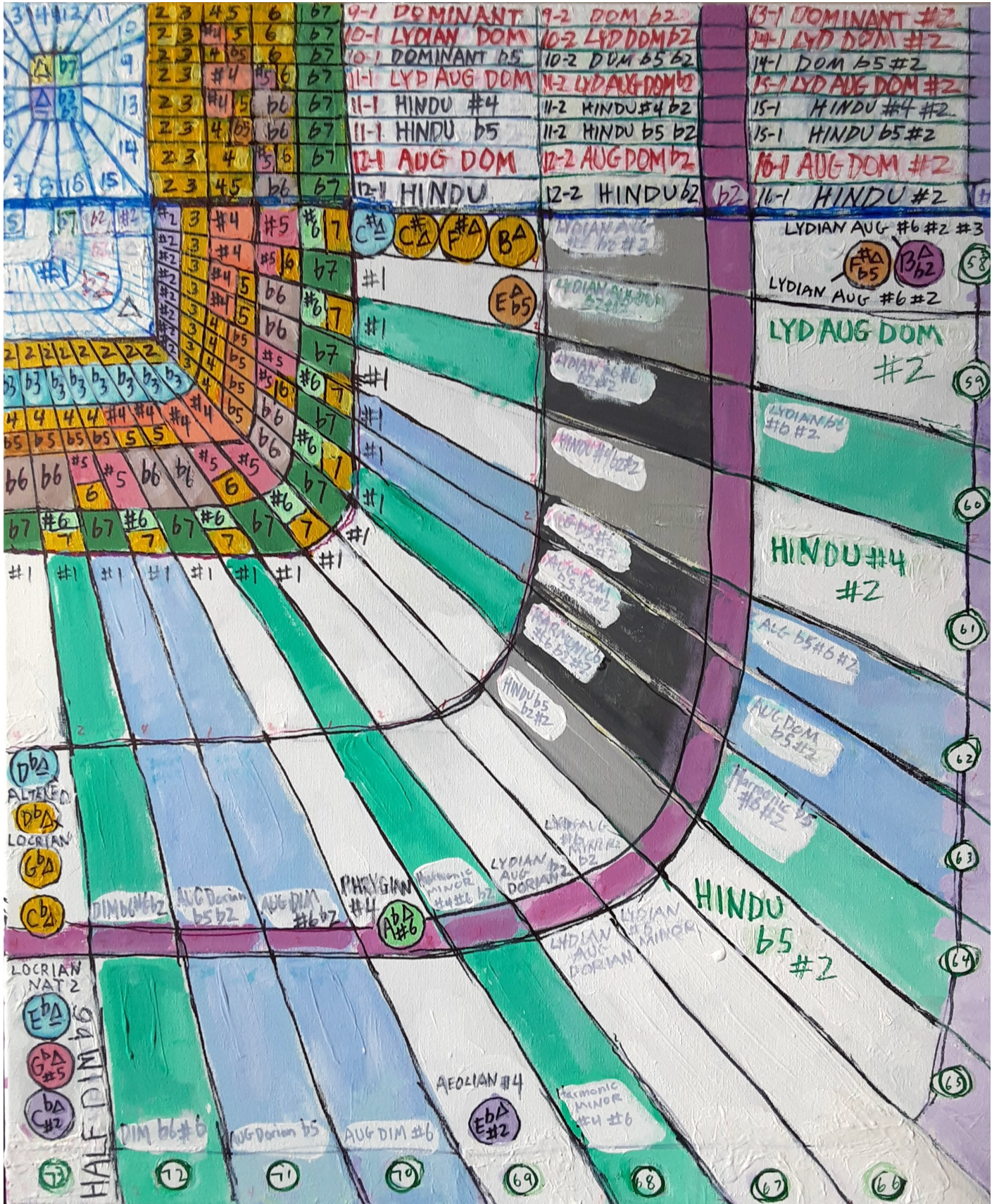


Group 15

Acrylic and Ink on Canvas, 24 x 20 inches, August 2026

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Introduction

This painting lists dominant modes at the top, with a close-up of group 15 (see *Modes, Scales and Keys IV*) below. Group 15 is in the dorian quadrant (b3 b7) with altered notes of #4, b5, #5, b6, #6. The additional b2 and #2 alterations are shown as well. In the upper left is an image showing the groups (1-16) layout, as well as showing the four quadrants: Major—Yellow, Melodic Minor—Orchid, Dominant—Green, Dorian—Blue.

As an extension of the painting I have created this document which lists all possible dominant chords and modes created through the permutation ruleset. I use the term dominant instead of mixolydian throughout, and unless otherwise indicated, the name of any mode or scale is assumed to have a C as the root.

Dominant Chords

A dominant chord is a harmonic function consisting of four notes: 1 3 5 b7.

Inside every dominant chord is a tritone—the combination of a major third (3) and a minor seventh (b7).

This interval gives the chord its characteristic dissonant sound.

Functional Dominant Chords Dominant quality + root motion up a 4th (strong resolution expectation).

- | | |
|--------------------|---|
| 1. ii V7 I | The dominant leads back to the tonic, bass up a fourth. |
| 2. III7 VI7 II7 V7 | The dominant leads to another dominant, bass up a fourth. |
| 3. ii V7 i | The dominant leads to something unexpected (not tonic), bass up a fourth (deceptive). |
| 4. | |

Non-functional Dominant Chords Driven by voice-leading, sonority, blues flavor, chromatic parallelism, or local color rather than functional resolution. Unlimited possibilities.

- | | |
|-------------------|--|
| 1. I7 | The dominant as the tonic, as in blues. |
| 2. I IV7 I | The IV7 does not resolve to bVII; it returns to I. Common blues/gospel inflection. |
| 3. ii bII7 I | Tritone substitution. Resolves down a half-step. |
| 4. I ii bVI7 V7 I | Sounds good. |
| 5. | |

Dominant Modes

The dominant mode (1 2 3 4 5 6 b7) is the main scale associated with the dominant chord (1 3 5 b7).

The dominant modes contain the 3 and b7.

These are the seven altered notes b2, #2, #4, b5, #5, b6, and #6, which can be used, either singly or in combinations with the dominant mode, to create alternate dominant modes.

This document describes all of these possible combinations in tables, using the following format:

<u>Altered Notes</u>	<u>[#] (Name)</u>	<u>Notes</u>	<u>Group</u>	<u>Sub-Group</u>	<u>Source</u>
None	(Dominant)	C D E F G A Bb	9-1	29-1	mode of F Major

Altered Notes: In the first column we list the altered note(s) or name for that particular mode.

[#] (Name): Next within a bracket [#] is the number of notes in that mode. No bracket means a 7-note mode. 7-note modes that follow our ruleset are put in parenthesis in bold **(Mode Name)**.

If there are no brackets nor parenthesis, it is a 7-note mode that does not follow the ruleset.

Notes: The next column, in some instances, has the notes of the mode written out.

Cell: This is the location (group/sub-group—ring) of the mode. See *Modes, Scales & Keys IV*.

Source: Here we find information about that mode—primarily if it is a mode of a primary scale.

- Ruleset:
1. The mode must contain one and only one note of each letter name: C, D, E, F, G, A, and B.
 2. Each letter name may appear as natural (nat), flat (b), or sharp (#).
 3. No double flats (bb) or double sharps (##) are allowed.
 4. Enharmonic that create duplicate pitches are not permitted. Example: No B# if C is present.

Dominant Plus 1 Altered Note

This is the complete list of dominant modes which can be created with just one of our altered notes.

<u>Altered Notes</u>	<u>[#] (Name)</u>	<u>Scale</u>	<u>Group</u>	<u>Sub-Group</u>	<u>Source</u>
Dominant b2	(Dominant b2)		9-2	29-2	mode of F Harmonic Major
Dominant #2 '	(Dominant #2)		13-1	47-1	mode of F Major #6
Dominant #4	(Lydian Dominant)		10-1	31-1	mode of G Melodic Minor
Dominant b5	(Dominant b5)		10-1	33-1	mode of F Major b2
Dominant #5	(Augmented Dominant)		12-1	43-1	mode of F Major #2
Dominant b6	(Hindu)		12-1	45-1	mode of F Melodic Minor
Dominant #6	[6] Dominant	C D E F G (A#) Bb	9-1	29-1	within F Major

For the curious, here are the results with the remaining potentially altered notes, including diatonic alterations.

Dominant b3	Dorian	C D Eb F G A Bb	13-1	49-1	mode of Bb Major
Dominant #3	[6] no tritone	C D (E#) F G A Bb	9-1	29-1	within F Major
Dominant b4	[6] Dominant	C D E (Fb) G A Bb	9-1	29-1	within F Major
Dominant b7	(Dominant)	C D E F G A Bb (Bb)	9-1	29-1	mode of F Major
Dominant #7	(Dominant)	C D E F G A Bb (B#)	9-1	29-1	mode of F Major
Dominant b1	Lyd Aug #6 #2 #3	Cb D E F G A Bb	9-1	29-1	mode of F Major b5
		1 #2 #3 #4 #5 #6 7			
Dominant #1	#1 Altered bb7	C# D E F G A Bb	9-3	29-3	mode of F Major #5
		1 b2 b3 b4 b5 b6 bb7			

For Dominant #1, the #1 moves the ‘3 b7 tritone’ to the b3 bb7 position—no longer creating a dominant mode. There is still a ‘3’ due to the b4, but there is no longer a b7, thus it is not a dominant. This mode is also outside our ruleset since it has a bb7.

Enharmonic tritone variants (borderline cases).

There are other modes which have the tritone between the 3 and the b7 positions, yet these tritones aren't created with a 3 and a b7, but by enharmonic spelling combinations. We can create additional altered modes from these new tritone possibilities. Within their make up is a dominant sound—the tritone is in the right spot. But do we call these dominant modes? They have #6 or b4 — that isn't 'dominant', plus some even have a b3.

[illegible]

1. b4 and b7. The b4 is now the '3' so there must be a b3. No #2, because that would negate the b3, thus the b4.
2. b4 and #6. The b4 is now the '3' and the #6 is the 'b7' which means there must also be a 7.
3. 3 and #6. The #6 is now the 'b7' so we must include a 7.

Mode	Dorian b4	Melodic Minor #6 b4	Major #6
	1 2 b3 b4 5 6 b7	1 2 b3 b4 5 #6 7	1 2 3 4 5 #6 7
#4	[8] 1 2 b3 b4 #4 5 6 b7	[8] 1 2 b3 b4 #4 5 #6 7	1 2 3 #4 5 #6 7
b5	1 2 b3 b4 b5 6 b7	1 2 b3 b4 b5 #6 7	1 2 3 4 b5 #6 7
#4 #5	[8] 1 2 b3 b4 #4 #5 6 b7	[8] 1 2 b3 b4 #4 #5 #6 7	1 2 3 #4 #5 #6 7
#4 b6	[8] 1 2 b3 b4 #4 5 b6 b7	[9] 1 2 b3 b4 #4 5 b6 #6 7	[8] 1 2 3 #4 5 b6 #6 7
b5 #5	[8] 1 2 b3 b4 b5 #5 6 b7	[8] 1 2 b3 b4 b5 #5 #6 7	[8] 1 2 3 4 b5 #5 #6 7
b5 b6	[8] 1 2 b3 b4 b5 b6 b7	[8] 1 2 b3 b4 b5 b6 #6 7	[8] 1 2 3 4 b5 b6 #6 7
#5	1 2 b3 b4 #5 6 b7	1 2 b3 b4 #5 #6 7	1 2 3 4 #5 #6 7
b6	1 2 b3 b4 5 b6 b7	[8] 1 2 b3 b4 5 b6 #6 7	[8] 1 2 3 4 5 b6 #6 7

Each of these modes can be further altered by adding a b2, a #2, or a b2 and a #2, which would create three new tables of the above. Also we can alter the 1 (b1 if no 7) and 3 (#3 if no 4) in some instances, creating more modes.

Dominant Plus 2 Altered Notes

This dense list of modes contains all possible variations of the dominant mode that can be created by all combinations of two of the following notes: b2, #2, #4, b5, #5, b6, and #6. Each dominant mode that results from this action is listed twice, with the second one in italics. **(Bold)** = 7-note mode that follows the ruleset.

Altered Notes	[#] (Name)	Scale	Group	Sub-G	Source
(Dominant b2)			9-2		
Dominant b2 #2	[8] Dominant Split Two			47-2	
Dominant b2 #4	(Lydian Dominant b2)		10-2	31-2	
Dominant b2 b5	(Dominant b5 b2)		10-2	33-2	
Dominant b2 #5	(Augmented Dominant b2)		12-2	43-2	
Dominant b2 b6	(Hindu b2)		12-2	45-2	mode of Ab Major #5
Dominant b2 #6	[6] Dominant b2 no6	C Db E F G Bb		29-2	within F Major b6
(Dominant #2)			13-1		
Dominant b2 #2	[8] Dominant Split Two			47-2	
Dominant #2 #4	(Lydian Dominant #2)		16-1	75-1	
Dominant #2 b5	(Dominant b5 #2)		16-1	77-1	
Dominant #2 #5	(Augmented Dominant #2)		14-1	51-1	
Dominant #2 b6	(Hindu #2)		14-1	53-1	
Dominant #2 #6	[6] Dominant #2	C D# E F G Bb		47-1	within F Major #6
(Lydian Dominant)			10-1		
Dominant b2 #4	(Lydian Dominant b2)		10-2	31-2	
Dominant #2 #4	(Lydian Dominant #2)		16-1	75-1	
Dominant #4 b5	[6] Lydian Dom	C D E F# A Bb		31-1	within Lydian Dom
Dominant #4 #5	(Lydian Augmented Dominant)		11-1	35-1	
Dominant #4 b6	(Hindu #4)		11-1	37-1	
Dominant #4 #6	[6] Lydian Dom	C D E F# G Bb		31-1	within Lydian Dom
(Dominant b5)			10-1		
Dominant b2 b5	(Dominant b5 b2)		10-2	33-2	
Dominant #2 b5	(Dominant b5 #2)		16-1	77-1	
Dominant #4 b5	[6] Lydian Dom	C D E F# A Bb		31-1	within Lydian Dom
Dominant b5 #5	[8] Dominant Split Five			39-1	
Dominant b5 b6	(Hindu b5)		15-1	41-1	
Dominant b5 #6	[6] Dominant b5	C D E F Gb Bb		33-1	
(Augmented Dominant)			11-1		
Dominant b2 #5	(Augmented Dominant b2)		12-2	43-2	
Dominant #2 #5	(Augmented Dominant #2)		14-1	51-1	
Dominant #4 #5	(Lydian Augmented Dominant)		11-1	35-1	
Dominant b5 #5	[8] Dominant Split Five			39-1	
Dominant #5 b6	[6] Aug Dominant	C D E F G# Bb		43-1	within F Major #2
Dominant #5 #6	[6] Aug Dominant	C D E F G# Bb		43-1	within F Major #2
(Hindu)			12-1		
Dominant b2 b6	(Hindu b2)		12-2	45-2	mode of Ab Major #5
Dominant #2 b6	(Hindu #2)		14-1	53-1	
Dominant #4 b6	(Hindu #4)		11-1	37-1	
Dominant b5 b6	(Hindu b5)		15-1	41-1	
Dominant #5 b6	[6] Aug Dominant	C D E F G# Bb		43-1	within F Major #2
Dominant b6 #6	(Hindu)		12-1	45-1	
Dominant #6					
Dominant b2 #6	[6] Dominant b2 no6	C Db E F G Bb		29-2	within F Major b6
Dominant #2 #6	[6] Dominant #2	C D# E F G Bb		47-1	within F Major #6
Dominant #4 #6	[6] Lydian Dom	C D E F# G Bb		31-1	within Lydian Dom
Dominant b5 #6	[6] Dominant b5	C D E F Gb Bb		33-1	within Dom b5
Dominant #5 #6	[6] Aug Dominant	C D E F G# Bb		43-1	within F Major #2
Dominant b6 #6	(Hindu)		12-1	45-1	

Dominant Plus 3 Altered Notes

Altered Notes	Name	Scale	Group	Source
b2 #2 #4	[8] Lydian Dom Split Two	C Db D# E F# G A Bb		
b2 #2 b5	[8] Dominant b5 Split Two	C Db D# E F Gb A Bb		
b2 #2 #5	[8] Aug Dominant Split Two	C Db D# E F G# A Bb		
b2 #2 b6	[8] Hindu Split Two	C Db D# E F G Ab Bb		
b2 #2 #6	(Dominant Split Two no6)	C Db D# E F G Bb		
b2 #4 b5	[6] Lydian Dom b2 no5	C Db E F# A Bb		
b2 #4 #5	(Lydian Aug Dom b2)	C Db E F# G# A Bb	11-2	
b2 #4 b6	(Hindu #4 b2)	C Db E F# G Ab Bb	11-2	
b2 #4 #6	[6] Lydian Dom #b2 no6	C Db E F# G Bb		
b2 b5 #5	[8] Dominant b2 Split 5	C Db E F Gb G# A Bb		
b2 b5 b6	(Hindu b5 b2)	C Db E F Gb Ab Bb	16-2	<i>mode of Db Major #2</i>
b2 b5 #6	[6] Dominant b5 b2 no6	C Db E F G# Bb		
b2 #5 b6	[6] Hindu b2 no5	C Db E F Ab Bb		
b2 #5 #6	[6] Aug Dom b2 no6	C Db E F G# Bb		
b2 b6 #6	(Hindu b2)	C Db E F G Ab Bb	12-2	
#2 #4 b5	[6] Lydian Dominant no5	C D# E F# A Bb		
#2 #4 #5	(Lydian Aug Dom #2)	C D# E F# G# A Bb	15-1	
#2 #4 b6	(Hindu #4 #2)	C D# E F# G Ab Bb	15-1	
#2 #4 #6	[6] Lydian Dom #2 no6	C D# E F# G Bb		
#2 b5 #5	[8] Dominant #2 Split 5	C D# E F Gb G# A Bb		
#2 b5 b6	(Hindu b5 #2)	C D# E F Gb Ab Bb	15-1	
#2 b5 #6	[6] Dominant b5 #2 no6	C D# E F Gb Bb		
#2 #5 b6	[6] Hindu #2 no5	C D# E F Ab Bb		
#2 #5 #6	[6] Augmented Dom #2 no6	C D# E F G# Bb		
#2 b6 #6	(Hindu #2)	C D# E F G Ab Bb	14-1	
#4 b5 #5	(Lydian Aug Dom)	C D E F# G# A Bb	11-1	
#4 b5 b6	[6] Hindu #4 no5	C D E F# Ab Bb		
#4 b5 #6	[5] Lydian Dom no5 no6	C D E F# Bb		
#4 #5 b6	[6] Hindu #4 no5	C D E F# Ab Bb		
#4 #5 #6	[6] Lydian Aug Dom no6	C D E F# G# Bb		
#4 b6 #6	(Hindu #4)	C D E F# G Ab Bb	11-1	
b5 #5 b6	(Hindu b5)	C D E F Gb Ab Bb	11-1	
b5 #5 #6	(Dominant Split Five no6)	C D E F Gb G# Bb		
#5 b6 #6	[6] Augmented Dominant no6	C D E F G# Bb		

Dominant Plus 4 Altered Notes

<u>Altered Notes</u>	<u>Name</u>	<u>Scale</u>	<u>Group</u>
b2 #2 #4 b5	Lydian Dom Split Two no5	C Db D# E F# A Bb	
b2 #2 #4 #5	[8] Lydian Aug Dom Split Two	C Db D# E F# G# A Bb	
b2 #2 #4 b6	[8] Hindu #4 Split Two	C Db D# E F# G Ab Bb	
b2 #2 #4 #6	Lyd Dom Split Two no6	C Db D# E F# G Bb	
b2 #2 b5 #5	[9] Dom Split Five Split Two	C Db D# E F Gb G# A Bb	
b2 #2 b5 b6	[8] Hindu b5 Split Two	C Db D# E F Gb Ab Bb	
b2 #2 b5 #6	Dom b5 Split Two no6	C Db D# E F Gb Bb	
b2 #2 #5 b6	Hindu Split Two no5		
C Db D# E F Ab Bb	G# Bb Aug Dom Split Two no 6		
b2 #2 #5 #6	Aug Dom #6 Split Two no6	C Db D# E F G# Bb	
b2 #2 b6 #6	[8] Hindu Split 2	C Db D# E F G Ab Bb	
b2 #4 b5 #5	(Lydian Aug Dom b2)	C Db E F# G# A Bb	11-2
b2 #4 b5 b6	[6] Hindu #4 b2 no5	C Db E F# Ab Bb	
b2 #4 b5 #6	[5] Lydian Dom b2 no5 no6	C Db E F# Bb	
b2 #4 #5 b6	[6] Hindu #4 b2 no5	C Db E F# Ab Bb	
b2 #4 #5 #6	[6] Lydian Aug Dom b2 no6	C Db E F# G# Bb	
b2 #4 b6 #6	(Hindu #4 b2)	C Db E F# G Ab Bb	11-2
b2 b5 #5 b6	(Hindu b5 b2)	C Db E F Gb Ab Bb	11-2
b2 b5 #5 #6	Dominant b2 Split Five	C Db E F Gb G# Bb	
b2 b5 b6 #6	(Hindu b5 b2)	C Db E F Gb Ab Bb	11-2
b2 #5 b6 #6	[6] Aug Dom b2 no6	C Db E F G# Bb	
#2 #4 b5 #5	(Lyd Aug Dom #2)	C D# E F# G# A Bb	15-1
#2 #4 b5 b6	[6] Hindu #4 b5 #2 no5	C D# E F# Ab Bb	
#2 #4 b5 #6	[5] Lydian Dom #2 no5 no6	C D# E F# Bb	
#2 #4 #5 b6	[6] Hindu #4 #2 no5	C D# E F# Ab Bb	
#2 #4 #5 #6	[6] Lyd Aug Dom #2 no6	C D# E F# G# Bb	
#2 #4 b6 #6	(Hindu #4 #2)	C D# E F# G Ab Bb	15-1
#2 b5 #5 b6	(Hindu b5 #2)	C D# E F Gb Ab Bb	15-1
#2 b5 #5 #6	Augmented Dom b5 #2 no6	C D# E F Gb G# Bb	
#2 b5 b6 #6	(Hindu b5 #2)	C D# E F Gb Ab Bb	15-1
#2 #5 b6 #6	[6] Aug Dominant #2 no6	C D# E F G# Bb	
#4 b5 #5 b6	[6] Hindu #4 no5	C D E F# Ab Bb	
#4 b5 #5 #6	[6] Lyd Aug Dom no6	C D E F# G# Bb	
#4 b5 b6 #6	[6] Lydian Dominant no5	C D E F# Ab Bb	
#4 #5 b6 #6	[6] Hindu #4 no5	C D E F# Ab Bb	
b5 #5 b6 #6	(Hindu b5)	C D E F Gb Ab Bb	11-1

Dominant Plus 5 Altered Notes

<u>Altered Notes</u>	<u>Name</u>	<u>Scale</u>	<u>Group</u>
b2 #2 #4 b5 #5	[8] Lydian Aug Dom Split Two	C Db D# E F# G# A Bb	
b2 #2 #4 b5 b6	Hindu #4 Split Two	C Db D# E F# Ab Bb	
b2 #2 #4 b5 #6	[6] Lyd Dom Split Two no5 no6	C Db D# E F# Bb	
b2 #2 #4 #5 b6	(Hindu #4 Split Two)	C Db D# E F# Ab Bb	
b2 #2 #4 #5 #6	Lyd Aug Dom Split Two no6	C Db D# E F# G# Bb	
b2 #2 #5 b6 #6	Hindu Split Two no5	C Db D# E F Ab Bb	
b2 #2 b5 #5 b6	[8] Hindu Split Five Split Two	C Db D# E F Gb Ab Bb	
b2 #2 b5 #5 #6	[8] Dominant Split Five Split Two no6	C Db D# E F Gb G# Bb	
b2 #2 b5 b6 #6	[8] Hindu b5 Split Two	C Db D# E F Gb Ab Bb	
b2 b5 #5 b6 #6	(Hindu b5 b2)	C Db E F Gb Ab Bb	11-2
#2 #4 b5 #5 b6	[6] Hindu #4 #2	C D# E F# Ab Bb	
#2 #4 b5 #5 #6	[6] Lyd Aug Dom #2 no6	C D# E F# G# Bb	
#2 b5 #5 b6 #6	(Hindu b5 #2)	C D# E F Gb Ab Bb	15-1
#4 b5 #5 b6 #6	[6] Lyd Aug Dom no6	C D E F# G# Bb	

Dominant Plus 6 Altered Notes

<u>Altered Notes</u>	<u>Name</u>	<u>Scale</u>
b2 #2 #4 b5 #5 b6	Hindu #4 Split Two no5	C Db D# E F# Ab Bb
b2 #2 #4 b5 #5 #6	Lyd Aug Dom Split Two no6	C Db D# E F# G# Bb
b2 #2 #4 b5 b6 #6	Hindu #4 Split Two no5	C Db D# E F# Ab Bb
b2 #2 #4 #5 b6 #6	Hindu #4 Split Two no5	C Db D# E F# Ab Bb
b2 #2 b5 #5 b6 #6	[8] Hindu b5 Split Two	C Db D# E F Gb Ab Bb
b2 #4 b5 #5 b6 #6	[6] Hindu #4 b2 no5	C Db E F# Ab Bb
#2 #4 b5 #5 b6 #6	[6] Hindu #4 #2 no5	C D# E F# Ab Bb

Dominant Plus 7 Altered Notes

<u>Altered Notes</u>	<u>Name</u>	<u>Scale</u>
b2 #2 #4 b5 #5 b6 #6	Hindu #4 Split Two no5	C Db D# E F# (Gb) Ab Bb

Dominant Modes

This is the complete list of dominant modes that follow the 7-note ruleset. The four main groups are Dominant, Lydian Dominant, Lydian Aug Dominant, and Augmented Dominant. Some of these basic groups have more than one dominant mode in them. There are eight total basic modes. Each of these modes can be modified with a b2, a #2, or both a b2 and a #2. These are shown on the painting with the exception of the split two dorian quadrant.

Dominant Quadrant (Name)

Group 9-1 Dominant

(Dominant) b7

Group 10-1 Lydian Dominant

(Lydian Dominant) #4 b7
(Dominant b5) b5 b7

Group 11-1 Lydian Augmented Dominant

(Lydian Augmented Dominant) #4 #5 b7
(Hindu #4) #4 b6 b7
[8] Dom Split Five [Aug Dom b5] b5 #5 b7
(Hindu b5) b5 b6 b7

Group 12-1 Augmented Dominant

(Augmented Dominant) #5 b7
(Hindu) b6 b7

Dorian Quadrant (Name with #2)

Group 13-1 Dorian

(Dominant #2) b7 #2

Group 14-1 Aeolian

(Augmented Dominant #2) #5 b7 #2
(Hindu #2) b6 b7 #2

Group 15-1 Half Diminished b6

(Lydian Aug Dominant #2) #4 #5 b7 #2
(Hindu #4 #2) #4 b6 b7 #2
[8] Dominant Split Five #2 b5 #5 b7 #2
(Hindu b5 #2) b5 b6 b7 #2

Group 16-1 Half Diminished

(Lydian Dominant #2) #4 b7 #2
(Dominant b5 #2) b5 b7 #2

Dominant Quadrant with b2

Group 9-2

(Dominant b2)

Group 10-2

(Lydian Dominant b2)
(Dominant b5 b2)

Group 11-2

(Lydian Augmented Dominant b2)
(Hindu #4 b2)
[9] Dominant Split Five b2 [Aug Dom b5 b2]
(Hindu b5 b2)

Group 12-2

(Augmented Dominant b2)
(Hindu b2)

Dorian Quadrant with Split Two (b2 #2)

Group 13-2

[8] Dominant Split Two

Group 14-2 Phrygian

[8] Augmented Dominant Split Two
[8] Hindu Split Two

Group 15-2 Locrian

[8] Lyd Aug Dominant Split Two
[8] Hindu #4 Split Two
[9] Dominant Split Five Split Two
[8] Hindu b5 Split Two

Group 16-2 Locrian Nat 6

[8] Lydian Dominant Split Two
[8] Dominant b5 Split Two