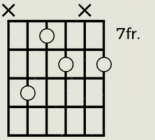
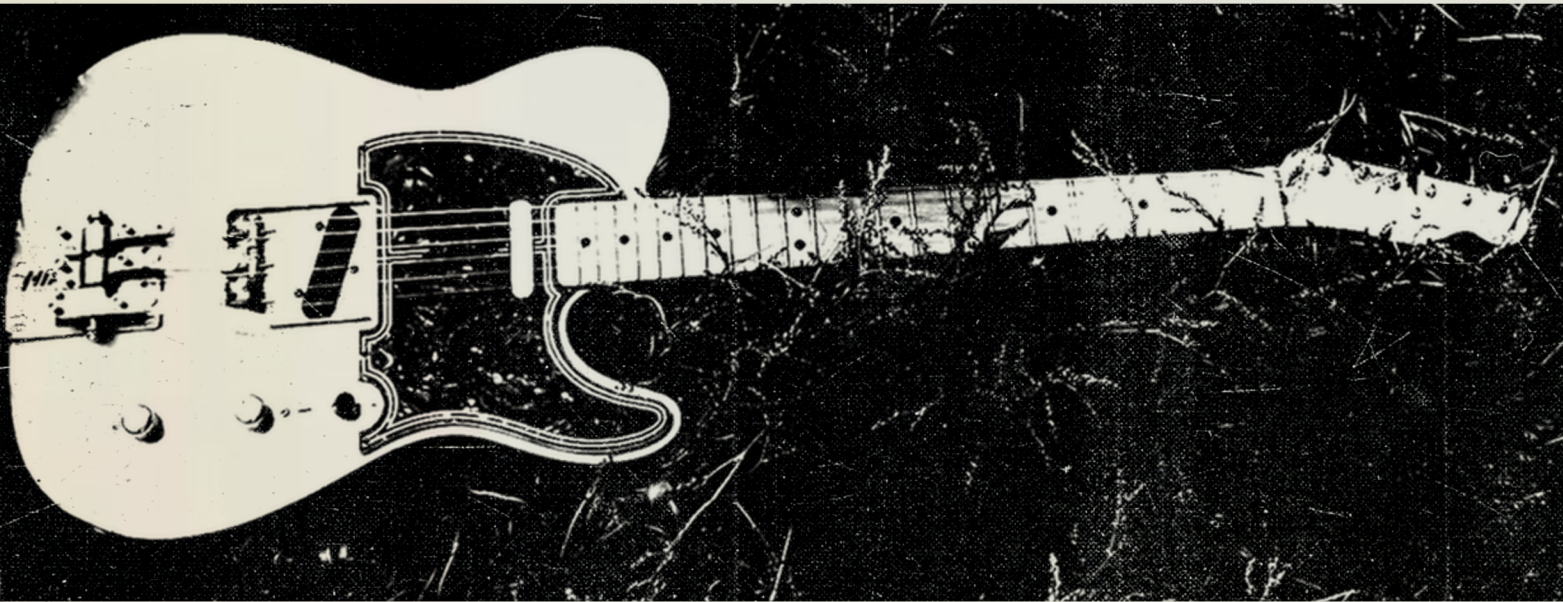
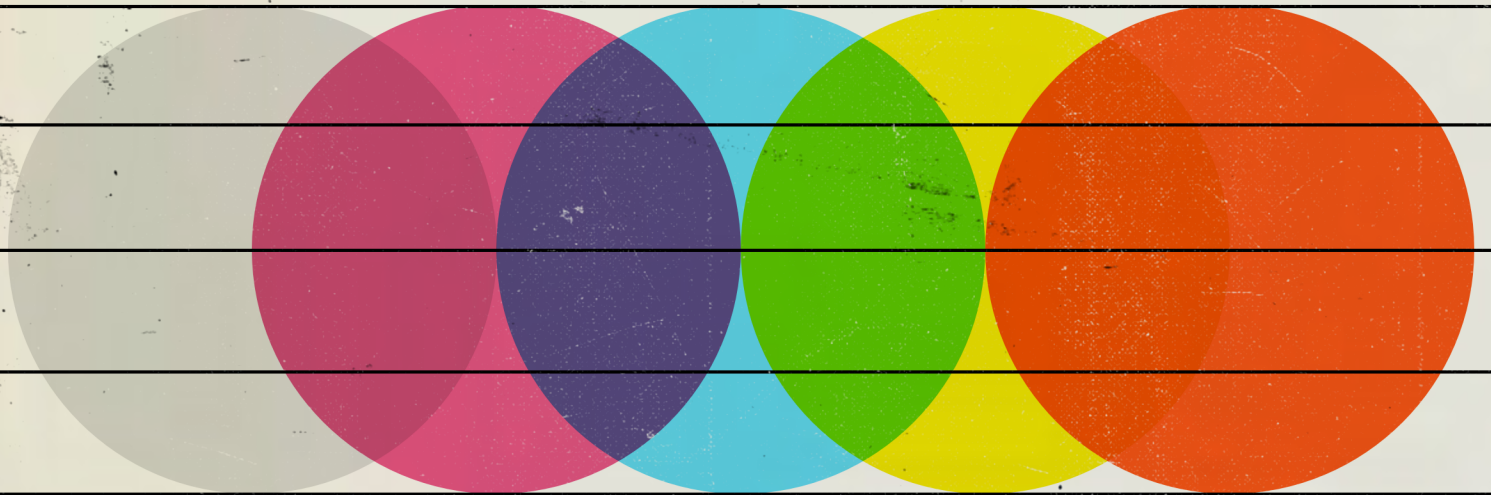


# CHORD YOGA



*CONCEPTS for SOLO GUITAR PERFORMANCE / 3rd Edition*  
**Studies for Electric Guitar** Tone / Technique / Theory



## **Part I**

**Studies for electric guitar**  
**Tone - Technique - Theory**

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# Pitch, texture and dynamics

## 1. Sound consistency

Ex. 1

The exercise is written in 4/4 time with a key signature of two sharps (F# and C#). The melodic line consists of several measures, each containing triplets of eighth notes. The chords indicated above the staff are A<sup>7</sup>, A<sup>b7b13</sup>, E<sup>7</sup>, and A<sup>7</sup>. A 'hold bend' instruction is present over the E<sup>7</sup> chord. The fretboard diagram below shows the fingerings for the notes: 5, 6, 8, 5, 7, 4, 5, 11, 13, 12, 13, 11, 9, 11, 9, 10, 11, 5, 6, 5.

The term // **tone** [tōn] // can be defined as your perception of the *interplay of pitch, texture and dynamics*.

The complexity behind a single sounding note - from the initial tone production to the resulting sound - is what makes 'tone' unique to every musician.

The *tone imprints* of guitarists like Jim Hall and John Scofield differ by a great margin - one sounds rather 'round', 'jazzy' and 'composed', the other one 'ragged', 'bluesy' and 'expressive'. Yet, both sound amazing!

In conjunction with their musical imagination and their gear of choice, both musicians developed tools to create their respective signature sounds. This inherent variety of tone(s) also shows that their approach towards musical expression and instruments still shares a crucial common denominator: **sound consistency**

a) **Sound texture (timbre)** - whether you play with a pick or fingerstyle, *the way you apply various techniques* determines the *quality* of the sound.

b) **Dynamics** are crucial to connect single events (pitches, rhythms) towards a coherent musical statement.

Using dynamics also goes a long way to be able to 'tell a story' with your performance.

### Ex. 1

- Learn the musical phrase by heart.
- Practice and record it with relatively 'flat' EQ settings and less or no reverb at all.
- Pause and start listening actively to evaluate your sound:

Does it sound 'musical', e.g. like a coherent sentence? [general rhythmic accuracy, musical interpretation]

Did you like the sound of all notes? [tonal quality, dynamics]

Since the lick comes with harmonies vs. single note-lines, fretted vs. open strings, position changes, bends and hammer-ons, it creates a varied sound texture. Depending on your perception, musical choices and your technical abilities it might be the case that the open strings sound less pronounced than the fretted ones - or the opposite. Does it still sound consistent - like one sound - or do some notes 'pop out' in an unintended way? Is the sound transparent or muddy? The overall goal isn't necessarily to develop a 'clinical' / absolutely even sound (unless that is what you're striving for) - the goal is to be able to perceive and evaluate accurately how you sound, why you sound that way and finding out how you're able to tweak your own sound.

The following exercises offer perspectives to further and adjust your available palette of 'sound production'-techniques to your own specifications.

## Synchronizing left and right hand

### 2. a) Synchronizing left and right hand

**Fretting hand:** keep your neck and shoulders as *relaxed* as possible and avoid moving them in order to be able to reach certain notes or chords on the fretboard: adjusting the positions of elbow and wrist are far more useful to adapt your hand's position and posture.

There is an abundance of seamlessly shifting postures happening while you access notes and chords across the fretboard. Consider that most of them already follow patterns you're very familiar with.

Since everybody does come with a slightly different build, there isn't a 'one size fits all' technique which you have to follow. Everybody learns best practices as how to move effectively and how to avoid unhealthy habits that can cause injuries.

For this exercise, rely on your established motion patterns and listen actively how your notes sound. Keep in mind that you only have to slightly adjust and tweak your motions to create the tones you strive for. Repeat the exercises while focussing on the listed aspects, one at a time.

### b) 'Up and down the neck'

- Keep your wrist straight [especially for repetitive ex.] That still entails that there's a lot of 'wobble room': you have to bend your wrist to access notes and chords in context. It's about allowing your hand to be in a **relaxed yet moving flow** as opposed to a rigid posture which doesn't help your sound nor your tendon's performance and longevity.

- Your fingers should be relaxed, resting in a natural 'bent' position, before you play a note. The fingers don't have to be perfectly lined up so you avoid unnecessary tension.

- When fretting notes, use **minimal pressure** to push the string towards the fretboard. To begin with slight string buzz is a nice tool to gauge how much pressure is actually needed to make a specific note on a specific string ring.

- Movement of the pick / 'plucking' finger: to get the most substantial tone out of your string you have to **push the string towards the guitar body**. By imposing slight pressure to the string, it is briefly displaced from its 'resting position', only to rebound when your pick or finger leaves the string. Unless you opt for a 'Chicken pickin' sound, you don't pick, rip or slide along the strings: these are all valid techniques, used for specific effects.

### c) '2 in 1' ex. Fretting hand permutations // tone production

The purpose of this exercise is to:

1. establish the needed *muscle memory* for possible permutations on the fretboard - play these patterns in variations up and down the fretboard on all strings.
2. establish a more coherent tone using alternate picking or fingerstyle playing: try different 'p - i - m - a' combinations and listen for sound consistency.

### d) Ascending / descending scale on one string

1. Focus on playing the position changes without interrupting the sound
2. Play the scale with very even dynamics (mp)
3. Apply dynamic changes, e.g. from *piano* to *forte*.

### 3. Rhythmic and dynamic balance

$\text{♩} = 50 - 120$

8

$\text{p}$   $\text{p}$  simile

simile

$\text{i}$   $\text{m}$  simile

- play in reverse

0 2 4 0 2 4 1 2 4 1 2 4 2 4 5 2

**Ex. 3 'Rhythmic accuracy':** use a metronome, play half a bar, let the last played note ring while you count the subdivisions.

For now, make sure that the 'gaps' between the notes are as short as possible and that the dynamics are consistent.

Listen closely and try to hear (not to see) if the fretting hand is the cause for rushed or delayed notes or if the (finger) picking hand isn't in sync with the metronome or your other hand.

Again, everybody has different tendencies - these aren't beneficial or 'bad' per se - they are what you work with.

It's your conscious perception of the sound and your knowledge about your tendencies that enable you to tweak your movements towards an expedient guitar technique.

**Fretting hand technique:** remember to keep your hand and fingers slightly relaxed and aim to 'prepare' notes.

E.g. when changing from one string to the next, the index finger can already be placed on the string and fret which is to be played next, while the pinky is still fretting the prior note. This applies to the labelled notes in the above sample.

This approach is also practical to create a legato sound or to let notes 'bleed' into each other.

Apply the same approach to the next exercise to practice sound consistency with hammer-ons / pull-offs.

#### b) Legato

8

H H simile (ascending)

simile (descending) P P

- play in reverse

0 2 4 0 2 4 1 2 4 1 2 4 2 4 5 2

#### c) Two-line scale

8

11 9 7 10 9 7 5 8

9 8 6 7 4 8 6 7 4 2 6 6 4 7 6 2 4 2

Focus on even dynamics while playing the double-stops throughout the register. Listen to:

a) how the low strings sound in comparison to the high register. Adjust your picking hand's attack accordingly.

b) the dynamic balance of the notes which are being played simultaneously. No matter if you opt for using a pick only, hybrid-picking or fingerstyle - all techniques have pros and cons in this context - go with the sound you like best and work slowly on improving it

8

6 5 4 2 0 1 2 2 4 4 6 6 7 6 7

d) 'Two-line' scale concept applied to the changes of 'Black Hole Sun'

The musical score is divided into two systems, each with a treble clef, a key signature of one sharp (F#), and a 4/4 time signature.

**System 1 (Measures 1-4):**

- Measure 1:** Chord  $G^6$ . Upper voice: quarter note G4, eighth note A4, eighth note B4. Lower voice: quarter note G2, quarter note B1.
- Measure 2:** Chord  $B^b_{\Delta\#11}$ . Upper voice: quarter note Bb4, eighth note C5, eighth note D5. Lower voice: quarter note B1, quarter note D2.
- Measure 3:** Chord  $F_{\Delta\#11}$ . Upper voice: quarter note F#4, eighth note G4, eighth note A4. Lower voice: quarter note F2, quarter note A2.
- Measure 4:** Chord  $E_-6$ . Upper voice: quarter note E4, eighth note F#4, eighth note G4. Lower voice: quarter note E2, quarter note G2.

**System 2 (Measures 5-8):**

- Measure 5:** Chord  $E^b_6$ . Upper voice: quarter note Eb4, eighth note F4, eighth note G4. Lower voice: quarter note Eb2, quarter note G2.
- Measure 6:** Chord  $D^7$ . Upper voice: quarter note D4, eighth note E4, eighth note F4. Lower voice: quarter note D2, quarter note F2.
- Measure 7:** Chord  $G$ . Upper voice: quarter note G4, eighth note A4, eighth note B4. Lower voice: quarter note G2, quarter note B2.
- Measure 8:** Chord  $\#5$ . Upper voice: quarter note F#4, eighth note G4, eighth note A4. Lower voice: quarter note F#2, quarter note A2.

The score includes various musical notations such as triplets, slurs, and fingerings (e.g., 8, 7, 9, 10) for the upper voice. The lower voice uses a 'two-line' concept, often with sustained notes and moving lines.

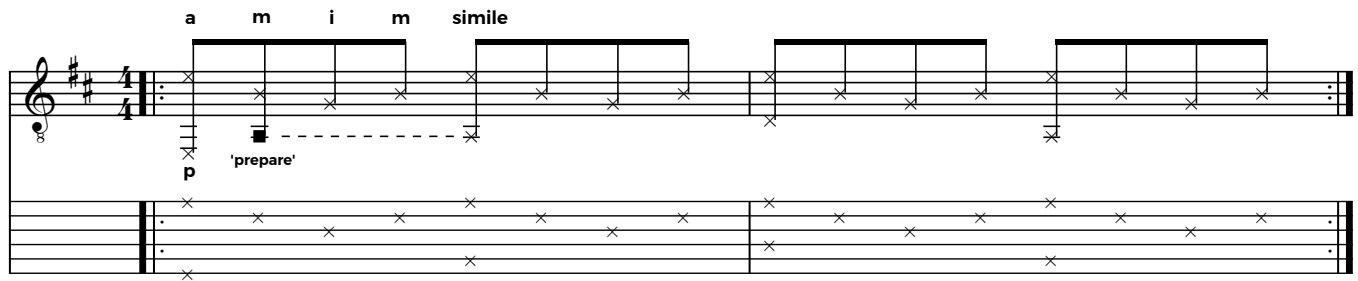
In the example prior to this one the upper voice was played at twice the pace of the lower one which diminishes intervals until the voices cross and the intervals become wider again. As seen above, you can also apply this approach more freely to outline harmonies and harmonic progressions with only two notes at a time.

It is also a practical exercise for the finger independence of the fretting hand: While there are 'pedal notes' that have to be sustained with one finger, the second melodic line still requires the other fingers to move.

# Synchronizing left and right hand

## - chordal playing -

### 1. Picking patterns: preparing notes, posture and dynamics



The purpose of this preliminary exercise is to establish efficient *muscle memory* and *finger independence* in the picking hand to facilitate chordal playing. Use fingerstyle technique or hybrid-picking.

Remember aforementioned aspects concerning tone production:

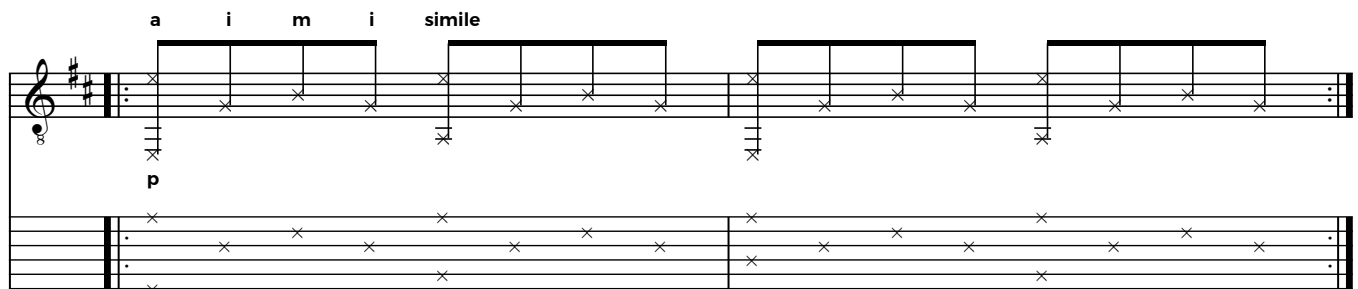
"to get the most substantial tone out of your string you have to **push the string towards the guitar body.**"

Play the muted notes **very slowly** since now all fingers including the thumb are involved.

Listen for sound consistency and adjust your hand position and angle accordingly.

1. After playing the first notes on low and high e-string with thumb (p) and ring-finger (a), move and place the thumb and middle finger (m) immediately on the strings where the following notes are going to be played. This is a 'snapping' motion rather than a gradual one. Your fingers are ready and in place to play the next notes, immediately after playing the first notes.
2. Index, middle and ring finger play a repeating pattern on the high string-set while the thumb moves independently from E to D string and back. Repeat this exercise while *shifting your focus* from sound consistency to preparing notes and back. Also, monitor if the position and posture of your 'shoulder-arm-wrist-hand-complex' is stable. Ideally, you find a position that allows for a relaxed and resting position of shoulder, arm and wrist while the fingers do the work.

### b) Permutations



Try more possible permutations like the one above when you're comfortable with the first one.

Practicing each pattern adds to your picking hand's dexterity. Apply this approach also to accompaniments and riffs you already know well and listen to how you improve your sound.

## c) Block chords and dynamic control

'Emphasize single notes dynamically:  
e.g. accentuate the bass notes with your thumb.'

## d) Adding chord shapes

Now combine picking and fretting hand. Starting out with this root position triad shape allows for a relaxed hand posture in bars 1-2. Take your time to find a **very** comfortable shoulder-elbow-wrist-hand posture for this triad and keep the fingers curved so the open strings can ring throughout.

The following two bars come with a healthy :) fretting hand stretch (pinky on the 5th fret A string, index on the 1st fret G string) which is resolved in the last four bars.

Practice this exercise slowly and focus on keeping your fretting hand relaxed:

- apply the least amount of pressure necessary to fret the notes, take a break before your fretting hand starts to feel slightly uncomfortable. You can also start out with other chord shapes, e.g. open position E, A or D chords.
- tilt your hand position by adjusting your elbow and wrist angles to facilitate the 'stretchy' chord shape before moving back to your **very** comfortable starting position.



## e) 'Blurring the lines'

$G_{\Delta\sharp 11}$

let ring

Harm. Harm.

Harm.

This brief yet more complex idea combines some of the challenges of **single-note and chordal playing**.

Since the fretting hand is often in a '*transitioning position*' from single notes to dyads to full chord shapes, this exercise can be used as a tool to:

- become aware of different '*in-between*' positions and connective movements in between
- find and reduce unnecessary or exaggerated movements which slow you down and detract from sound quality.
- a better understanding how to move elbow, wrist, hand and fingers to connect positions in a practical way.
- establish a flexible technique which addresses more complex textures, e.g. the combination of open strings, harmonics and fretted notes in one line.

## Studies for electric guitar

## (1) Stella Watches the Stars

$B^b_{\Delta^9}/D$   $E^b_{-6}$   $D^b_{\Delta^9}/F$   $G^b_{-6}$

i p i m a (m) p p i m i p i m a m p p i m

I iV bIII bVi

6 5 H 8 7 sl. 8 H 11 10

$D^b_{\Delta^9}/F$   $G^b_{-6}$   $D^b_{\Delta^9}/F$   $B^b_{\Delta}/D$

i p i m a (m) p i m i m (i) p i m a m (i) p p i m

bIII bVi bIII I

9 8 H 11 10 9 8 11 sl. 8 11 10 8 8

$E^b_{\Delta^{11}}$   $C^7_{ALT}/E$   $B^7_{\Delta^{11}}$

i p p i m simile

IV II7 bII7#11

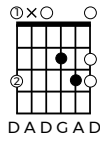
6 5 7 7 4 6 6 8 6 8

harm. harm.

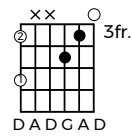
## (2) 'Nioma Stoops'

Blues riffs in DADGAD tuning

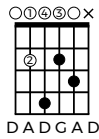
D<sub>7</sub>



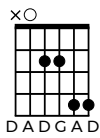
G<sub>SUS</sub>



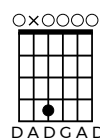
D<sub>SUS</sub>



A<sub>6</sub>



D<sub>SUS</sub>



### (3) Chet's Dream

**E<sub>-7</sub>** **A<sup>7</sup>/C<sup>♯</sup>** **C<sub>-6</sub>** **B<sub>ø</sub><sup>7</sup>** **E<sup>7</sup>ALT.**

harm.

**A<sub>-9</sub>** **F<sup>7</sup>#11** **B<sub>-9</sub>** **B<sub>♭</sub><sub>-9</sub>**

**A<sub>-6</sub>** **D<sup>7</sup>♭9/A** **B<sub>-7</sub>** **E<sup>7</sup>** **A<sub>-7</sub>** **D<sup>7</sup>ALT.** **G<sub>Δ</sub>**

Studies for electric guitar

## (4) Slow Dancing

a John Mayer-inspired guitar stroll

**C#<sub>7</sub>** **A<sup>6</sup>** **E**

The first system of notation is in 4/4 time, key of D major (F# C# G# D). The treble clef staff shows a melodic line starting on D5, moving through various intervals and triplets. The bass clef staff shows a bass line with fingerings 7, 9, 7, 9, 11, 9, 9, 9, 12, 11, 9, 5, 6, 4, 5, 6, 4, 4, 6, 4, 4, 9, 7, 9, 8, 7, 7, 9, 11. Above the bass staff, there are guitar-specific notations: 'S.H.' (sharpened harmonic) and 'S' (sustained) for the first two measures, and 'S' for the next two measures. There are also triplets and a 'p' (piano) dynamic marking.

**C#<sub>7</sub>** **A<sup>6</sup>ADD #11** **E**

The second system continues the piece. The treble clef staff shows a melodic line with a triplet of eighth notes. The bass clef staff shows a bass line with fingerings 11, 9, 9, 9, 14, 12, 11, 9, 9, 9, 7, 7, 8, 9, 9, 9, 9, 9, 11. Above the bass staff, there is a 'S' (sustained) marking for the first measure.

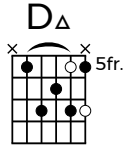
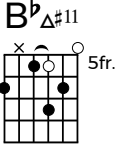
**C#<sub>7</sub>** **A<sub>Δ</sub><sup>#5</sup>** **E<sub>o</sub><sup>7</sup>** **E<sub>Δ</sub>**

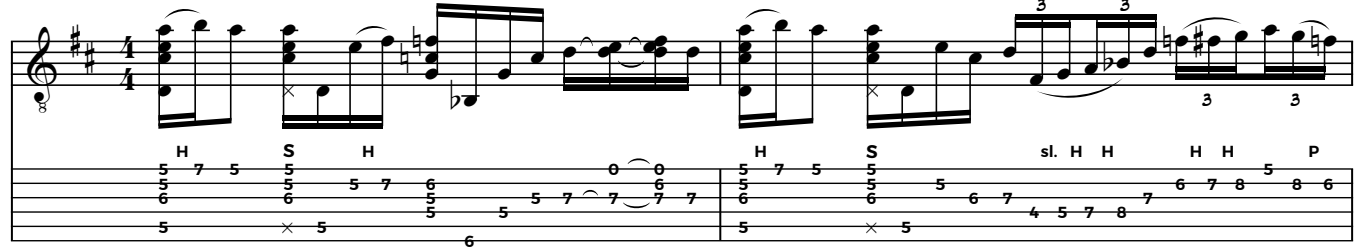
The third system continues the piece. The treble clef staff shows a melodic line with a triplet of eighth notes. The bass clef staff shows a bass line with fingerings 9, 9, 9, 9, 9, 11, 9, 12, 9, 9, 13, 11, 9, 9, 9, 11, 9, 7, 12, 9, 10, 9, 12, 14, (12), 9, 10, 9, 7, 8, 6, 6, 4, 4, 4, 4, 7. Above the bass staff, there are guitar-specific notations: 'S.H.' (sharpened harmonic) and 'S' (sustained) for the first two measures, 'Harm.' (harmonic) for the next two measures, and 'full' for the following measure. There are also triplets and a 'p' (piano) dynamic marking.

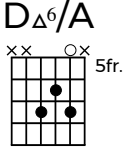
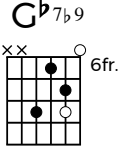
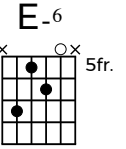
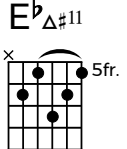
**A<sub>-6</sub>** **C#<sub>9</sub>**


The fourth system continues the piece. The treble clef staff shows a melodic line with a triplet of eighth notes. The bass clef staff shows a bass line with fingerings 7, 4, 4, 5, 4, 7, 9, 7, 4, 5, 4, 6, 5, 4, 4, 5, 9, 6, 7, 9, 10, 7, 7, 7, 8, 11, 11, 9, 9, 9, 9. Above the bass staff, there are guitar-specific notations: 'sl.' (slide) and 'H P' (harmonic) for the first two measures, and triplets for the next two measures.

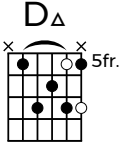
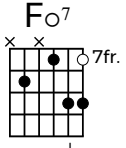
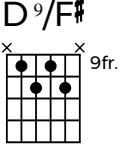
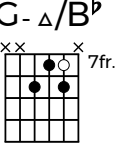
## (5) Akane

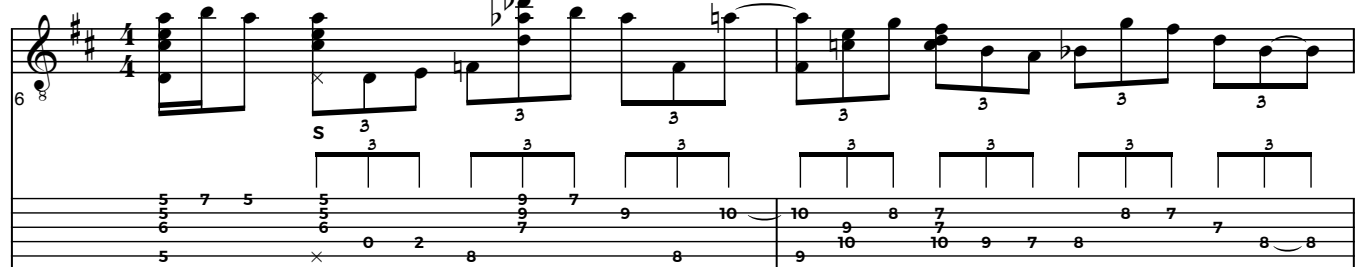







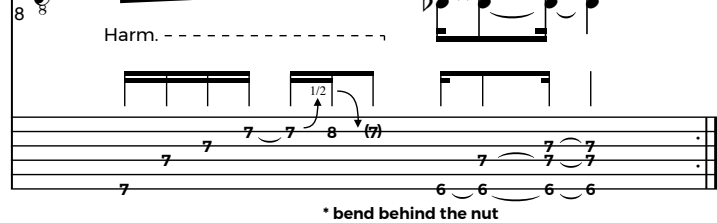











\* bend behind the nut



# How to 'Pass' a Blue Monk

**B<sup>b</sup><sub>9</sub>** **E<sup>b</sup><sub>13</sub>** **E<sup>b</sup><sub>7</sub>/D<sup>b</sup>** **F<sup>7</sup><sub>11</sub>/E<sup>b</sup>**

**B<sup>b</sup><sub>13</sub>** **B<sup>13</sup>/D<sup>#</sup>**

**B<sup>b</sup><sub>9</sub>/D** **F<sup>-</sup><sub>7</sub>** **B<sup>b</sup><sub>7</sub>**

**E<sup>b</sup><sub>7</sub>** **E<sup>o</sup><sub>7</sub>**

$E^b/B^b$     $B^b_\Delta$     $C^7$     $D^7_{ALT.}$     $G^7_{ALT.}$

$C_-^7$     $F^7_{ALT.}$

$D^7\sharp 9$     $G^7_{ALT.}$     $C_-^7$     $F^7$

$B^b_{13}$     $B_{13}$     $B^b_{13}$     $E^9$     $E^b_9$     $E^b_7/D^b$     $B^b_9/D$

B $\flat_9$  F-7/E $\flat$  B $\flat_7$  E $\flat_7$

19<sup>8</sup>

6 8 8 6 6 4 6 3 3 3

E $\flat_7$

21<sup>8</sup>

5 4 6 3 8 5 6 6 8 10 5 8 5 6

B $\flat_7$  A $\flat_7^{\#11}$  G $^7$

23<sup>8</sup>

7 6 6 4 3 3 10 10 10 9 10 10

C $^-9$  C $^7_{ALT}/E$  E $_{SUS}^9$  F $_{SUS}^{13}$

25<sup>8</sup>

13 10 11 11 9 7 7 9 10 8

B $\flat$ <sub>13</sub> E $\flat$ /G D/F $\sharp$  D $\flat$ /F

27 8

B $\flat$ <sub>13</sub> Fine

29 8

1/2

\* bend behind the nut

# How to 'Pass' a Blue Monk

## (Jazz Blues analysis)

**I<sub>7</sub>** **B<sup>b</sup><sub>13</sub>** motif: chord tones, tensions and approach notes **(bII<sub>7</sub>)** **B<sup>b</sup><sub>13</sub>/D<sup>#</sup>**

root b7 3rd 5th

\* Chromatic approach notes

**I<sub>7</sub>** **B<sup>b</sup><sub>9</sub>/D** **(II<sub>7</sub>/IV<sub>7</sub>)** **F<sup>-</sup><sub>7</sub>** **(V<sub>7</sub>/IV<sub>7</sub>)** **B<sup>b</sup><sub>7</sub>**

**IV<sub>7</sub>** **E<sup>b</sup><sub>7</sub>** **#IV<sup>o</sup><sub>7</sub>** **E<sup>o</sup><sub>7</sub>**

**Reharmonization:** **iV - IΔ for I<sub>7</sub>** **E<sup>b</sup>-/B<sup>b</sup>** **B<sup>b</sup><sub>Δ</sub>** **Secondary dominants:** **II<sub>7</sub> - III<sub>7</sub>** **C<sub>7</sub>** **D<sup>7</sup><sub>ALT.</sub>** **VI<sub>7</sub>** **G<sup>7</sup><sub>ALT.</sub>** **(b9 / #11)**

ii-7 V7 I7

C-7 F7 ALT. Bb13

Chord tones

\* double chromatic approach

Secondary dominant:  
(V7/VI7)

VI7

ii-7

V7

11 8

6 6  
10 7  
9 9

8 8  
8 8  
8

8 7  
9 8  
7

13<sup>8</sup>

**I7 (bII7)**

**IV7 ('quick change')**

B $\flat$ <sub>13</sub> B<sub>13</sub> B $\flat$ <sub>13</sub> E<sub>9</sub> E $\flat$ <sub>9</sub> E $\flat$ <sub>7</sub>/D $\flat$  B $\flat$ <sub>9</sub>/D

8 9 8 7 6 6 4 5 6  
7 7 6 7 5 3 5 4 5  
6

17

$B^b_9$

(II-7/IV7)

$F^-_7/E^b$

(V7/IV7)

$B^b_7$

IV7

$E^b_7$

158

Harmonic-melodic idea by Kurt Rosenwinkel

inc. voicing  
b7 - 3



#IV<sup>o</sup>7 scale: WTHTE<sup>o</sup>7

targeting b7 - 3rd of Bb7

I<sup>7</sup>B<sup>b</sup>7VI<sup>7</sup>G<sup>7</sup>A<sup>b</sup>7<sup>#11</sup>  
secondary dominant

ii-7

C<sup>-</sup>9(V<sup>7</sup>/V<sup>7</sup>)C<sup>7</sup>ALT/EE<sup>SUS</sup>9

superimposed harmony

V<sup>7</sup>F<sup>SUS</sup>13

Joe Pass inspired chord-melody lick

I<sup>7</sup>B<sup>b</sup>13'The Wind Cries Mary' chords in reverse ;)  
1st inversion triads w / hammer-onE<sup>b</sup>/G

D/F#

D<sup>b</sup>/F

# Tone & Technique (1): 'Tele moves'

## 2 licks and riffs inspired by Jim Campilongo

### 1. Lines

phrase 1: Asus7 cluster voicing w / harmonics

A

SUS<sup>7</sup>

Harm.

Harm.

phrase 2: descending composite scale: blues / mixo

1/4

sl.

P

sl.

### 2. Comping: triads and cluster voicings + chromatic approaches

D/F#

D/A

D<sup>6</sup>/F#

G<sup>7</sup>#9/F

b9 #11

S

S

S

S

\* chromatic approach

- transpose the 7/dim voicing up by a b3rd -

D<sub>Δ</sub><sup>9</sup>/F#

### 3. Close position triads on all string sets (C major)

2nd inversion      root      1st inversion      root      1st inversion      2nd inversion

2 5 10 0 5 9  
4 7 10 4 7 10  
8 12 10 4 7 10

### b) Triad inversions picking hand exercise

p i m simile

Musical score for 'p i m simile'. The score is written for a single melodic line in 4/4 time. The melody consists of eighth and sixteenth notes, often beamed in groups of three. The key signature has one flat (B-flat). The score includes a repeat sign at the beginning and end. The lyrics 'p i m simile' are written above the first measure.

Whether you play fingerstyle or with a pick, this exercise is intended to improve overall 'tone consistency'.

1. The triad shapes should become **second nature**: very slow but active repetition builds the **necessary muscle memory**.  
E.g. stick with the picking pattern, aim to be always aware which inversion you're playing, then gradually increase the speed until your muscle memory is 'up to speed': that would be the case if you simply think "C major 1st inversion" and your hand 'finds' the chord grip automatically while you don't have to think about where the notes are or which fingers to use.
2. For now, each note should sound **dynamically** similar: adjust your fingers attack until you achieve even dynamics from piano to forte. In the beginning, specific movements might create louder or more silent notes - listen and watch your fingers closely to adjust the way the strings are plucked.
3. Each sound has a **texture**: independent from what kind of guitar and amp you use your tone's initial imprint is determined by the velocity with which you pick the strings, the picking angle, the surface of your fingers/nails or picks, your picking hand position (e.g. near or far from the neck) and how you 'leave' the plucked string.

# Neo Soul flares

inspired by Chalmers 'Spanky' Alford

a) 'Gospel flares: outlining a V - I with a 'Spanky' Alford concept

G<sup>7</sup> C<sub>Δ</sub>

b) [00:58] Double stop fill, 'Forget Regret' - the RH Factor (2003)

C<sup>-7</sup>

c) [01:11] Smooth slides, 'Forget Regret' - the RH Factor (2003)

C<sup>-7</sup>

d) 'Neo soul' chord progression: IV - III<sup>7</sup> - VI - I<sup>7</sup>

E<sub>Δ</sub> D<sup>#7</sup><sub>ALT.</sub> G<sup>#9</sup> B<sub>SUS7</sub>

# Arranging grooves for guitar (1)

inspired by Rich Brian's track 'Kids'

(E = Db)      D<sup>b</sup><sub>Δ</sub>      C-7

S      S      3      A.H. sl.      S      3

4 2 x x 0      1 3 1 3 5 3      4 6 4 6 9 9      8 8 8 8 8 8      0 0      6 3 5 4 3 4

D<sup>b</sup><sub>Δ</sub>

3      3      3      S

3 3 6 3      4 3 5 6 3 5      4 6 8 8      8 8 8 8      4 6 5 4

D<sup>b</sup><sub>Δ</sub>      C-7      D<sup>b</sup><sub>Δ</sub>

5      8

# Arranging for Solo Guitar: Basics

"One of the first things that's really important is to actually know the song [...] What do I mean by knowing the song? I mean being able to play it anywhere (on the fretboard). Not to have to think about what the next chord is, because you just know it. [...] First figure out one very simple way to play the melody with chords." [1] Rosenwinkel 2013

**Kurt Rosenwinkel** about chord melody

## a) Learning melodic phrases and harmonic progressions on a structural level: 'Amazing Grace'

The diagram illustrates the melodic and harmonic structure of 'Amazing Grace' in A major (three sharps). The melody is written in treble clef, 3/4 time. The harmonic progression is shown below the melody, with fret numbers indicated on the strings.

**Harmonic Progression:**

- Phrase 1 'call': I<sub>7</sub> (A<sub>7</sub>) - IV<sub>Δ</sub> (D<sub>Δ</sub>) - I<sub>7</sub> (A<sub>7</sub>)
- Phrase 2 'response': I<sub>7</sub> (A<sub>7</sub>) - IV<sub>Δ</sub> (D<sub>Δ</sub>) - I<sub>7</sub> (A<sub>7</sub>)

**Interval Structures:**

- Tonal interval structure** (represented by squares): 4, 2, 2, 3, 2, 2, b3, 2
- Chromatic 'substantial' interval structure** (represented by circles): 5, 1, 3, 3, 2, 1, 6, 5

**Fret Numbers:**

- Phrase 1 'call': 9, 10, 9, 7, 10, 9, 7, 10, 7, 9, 9
- Phrase 2 'response': 10, 9, 7, 10, 9, 7, 12, 12

**Legend:**

- = **tonal interval structure** - in relation to the present heptatonic scale / tonality / mode
- = **chromatic 'substantial' interval structure**

Identify and analyze '**melodic tonal groups**\*' and '**harmonic tonal groups**\*' by measuring their intervallic structure:

- intervallic relationship of melody notes = chromatic interval structure
- intervallic relationship between melody, heptatonic scale and actual harmonization = tonal interval structure
- intervallic movement of the root or the lowest note of a chord to the subsequent harmony
- kind and characteristic of the harmonization (e.g. triads, seventh chords, quartal harmony, inversions, tensions etc.)

Learning musical motifs, chord progressions and entire songs on a **structural level** helps to memorize tunes and to understand which notes are important to outline melodic and harmonic development with one instrument.

Knowing intervallic structures also enables to hear the 'abstract musical concepts' behind the specific notes of a melody, lick or improvisation. This is extremely helpful to develop your own musical ideas and vocabulary based on your favorite musical performances / artists.

## b) Continuation of 'Amazing Grace': melody and basic harmonies

The diagram shows the continuation of the melody and basic harmonies for 'Amazing Grace'. The melody is written in treble clef, 3/4 time. The harmonic progression is shown below the melody, with fret numbers indicated on the strings.

**Harmonic Progression:**

- I<sub>7</sub> (A<sub>7</sub>) - IV<sub>Δ</sub> (D<sub>Δ</sub>) - I<sub>7</sub> (A<sub>7</sub>)

**Interval Structures:**

- Tonal interval structure** (represented by squares): 4, 2, 2, 3, 2, 2, b3, 2
- Chromatic 'substantial' interval structure** (represented by circles): 5, 1, 3, 3, 2, 1, 6, 5

**Fret Numbers:**

- Phrase 1 'call': 9, 10, 9, 7, 10, 9, 7, 10, 7, 9, 9
- Phrase 2 'response': 10, 9, 7, 10, 9, 7, 12, 12

\* Intervals can be measured based on any arbitrary group tonal group. Both the tonal interval structure and the chromatic interval structure can be identified as particular cases of tonal groups. This is of consequence for evaluating structural value and permutations. [...] (Kissenbeck 2007)



First staff: I<sup>7</sup> A<sup>7</sup>, IV<sup>Δ</sup> D<sup>Δ</sup>, V E<sup>7</sup>

Second staff: I<sup>7</sup> A<sup>7</sup>, V<sup>7</sup> E<sup>7</sup>, I A, G<sup>13</sup>/F

### c) Chord-Melody 'Gospel Chords': (re)harmonization ideas based on the original changes

Tonic functions: I - iV

'Secondary dominants': bVII<sup>7</sup>#11 - I<sup>7</sup> (V/IV)

Subdominant function: IV

'Secondary dominant' with detour: II<sup>7</sup> - (I) - V<sup>7</sup>

Chords: A<sup>7</sup>/G, F<sup>#</sup><sub>7</sub>, G<sup>7</sup> b<sup>9</sup> #<sup>11</sup>/F, A<sup>13</sup>/G, D<sup>add9</sup>/F<sup>#</sup>, B<sup>9</sup>/D<sup>#</sup>, A<sup>add9</sup>/C<sup>#</sup>, B<sup>b7</sup> #<sup>11</sup>

chromatic bassline

#11 melody note

Chords that are either related to tonic, subdominant or dominant degree are interchangeable because of common notes they share. Within a tonal context they serve the same function and can be used to harmonize melody notes, substituting the main functions I, IV, V. This knowledge is practical to find substitutions, voicing ideas or alternative bass movements.

Tonic functions: I - iii - iV  
 Subdominant functions: IV - ii  
 Dominant functions: V - Vii

E.g. both harmonies, A or F<sup>#</sup>-, are alternatives to harmonize a 'tonic' melody note.

Beyond this basic interchangeability of chords, secondary dominants provide for more tension and resolution tendencies. As in the sample above secondary dominants don't have to resolve directly to the following chord. They can also be followed by another inserted chord before finally resolving to the target harmony: e.g. B<sup>9</sup>/D (II<sup>7</sup>) - A<sup>add9</sup>/C<sup>#</sup> (I) - B<sup>b7</sup>#<sup>11</sup> (V<sup>7</sup>).

In the key of A the secondary dominant B<sup>7</sup> (V/V) leads to the V (E<sup>7</sup>). E<sup>7</sup> is present as tritone substitute - B<sup>b7</sup>#<sup>11</sup>.

Tonic function: I

'Secondary dominant': bVII7#11 'backdoor dominant'

'Secondary dominant': II7/13-b13 (V/V) - V7alt

A<sup>7</sup> B<sup>13</sup> B<sup>7</sup> b<sup>13</sup> E<sup>7</sup> ALT.

I<sub>7</sub>

'Secondary dominants'

IV<sub>Δ</sub> 'Secondary dominant': (V<sub>7</sub>) V

V<sub>7</sub>

A<sup>7</sup> B<sup>13</sup> A<sup>13</sup> D<sub>Δ</sub> B<sup>9</sup>/D<sup>#</sup> E<sup>7</sup> ALT./D

'backdoor dominant'

deceptive cadence

Vi-7 III7alt bVII7#11 V7b9 bVI<sub>Δ</sub> V - E7b9/G# I<sub>Δ</sub> #5 from F#-Melodic Minor (minor parallel)

F<sup>#</sup>-<sub>7</sub> C<sup>#</sup>7 ALT. G<sup>7</sup> b<sup>9</sup> #<sup>11</sup>/F E<sup>7</sup> b<sup>9</sup> F<sub>Δ</sub> G<sup>#</sup> O<sub>7</sub> A<sub>Δ</sub><sup>9</sup> A<sub>Δ</sub><sup>#5</sup>

# Amazing Grace

## Arranging Ideas

Chords: E<sup>7</sup> A F<sup>♯</sup><sub>Δ</sub>/A D<sub>Δ</sub> A<sub>Δ</sub>/C<sup>♯</sup>

8

Harm. - - - -

sl. sl. P

7 9 9 9 7 9 7 10 7 9 7 5 4 7

0 9 11 12 7 7 7 8 6 7 7 11 11 9 9 7 4 4 6 7

3 3

Chords: B<sup>b</sup><sub>7</sub><sup>♯</sup><sub>11</sub> A<sup>7</sup>/G B<sup>7</sup><sup>♯</sup><sub>11</sub>/A E<sup>7</sup><sub>ALT.</sub>

3

5 5 6 5 7 5 10 9 9 10 9 7 9 6 7 7 12 12 13 13 12

6 5 6 5 7 5 10 10 10 7 7 8 6 7 7 12 0 11 12 12 12 12

3 3

Chords: E<sup>b</sup> E A<sup>7</sup> D<sub>Δ</sub><sup>♯</sup><sub>11</sub>

3

11 11 12 11 9 11 8 9 14 12 9 7 5 2

11 12 11 11 8 9 11 12 12 7 8 5 5 5 4 6 4

3 3

Chords: E<sup>7</sup><sub>ALT.</sub> A<sup>7</sup>/G E<sup>9</sup> B<sup>b</sup><sub>Δ</sub><sup>6</sup>

3

5 6 5 7 5 10 9 9 10 9 7 9 6 7 7 5 8 5 6 5 7 5 5

6 5 7 5 10 10 9 5 4 5 5 8 5 6 5 7 5 5

3 3

Fine

## Shenandoah - Bill Frisell (solo)

Rubato D D/F#

3 8

Harm. - - - -

Harm.

00:21 B- D A D D/F#

6 8

Harm.

sl.

**B-7**

 $G_{\Delta}$ A<sup>7</sup>

Rit.

The musical score for 'D' is written in G major (one sharp) and 4/4 time. It consists of two staves. The treble staff begins with a treble clef and a key signature of one sharp (F#). The first measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The second measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The third measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The fourth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The fifth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The sixth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The seventh measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The eighth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The ninth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The tenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The eleventh measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The twelfth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The thirteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The fourteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The fifteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The sixteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The seventeenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The eighteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The nineteenth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The twentieth measure contains a whole note chord of G4, B4, and D5, followed by a quarter rest. The bass staff begins with a bass clef. The first measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The second measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The third measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The fourth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The fifth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The sixth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The seventh measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The eighth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The ninth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The tenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The eleventh measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The twelfth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The thirteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The fourteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The fifteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The sixteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The seventeenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The eighteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The nineteenth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest. The twentieth measure contains a whole note chord of G2, B2, and D3, followed by a quarter rest.

01:09

B-7

D

Measures 19-21 of the piece. Measure 19 starts with a treble clef, key signature of two sharps (F# and C#), and a 4/4 time signature. The melody begins with a quarter note G4, followed by a quarter rest, then a quarter note A4, and a quarter note B4. The bass line features a triplet of eighth notes (G2, A2, B2) followed by a quarter note C3. Measure 20 continues the melody with a quarter note C5, a quarter note B4, and a quarter note A4. The bass line has a quarter note D2, a quarter note C2, and a quarter note B1. Measure 21 shows the melody with a quarter note G4, a quarter note F#4, and a quarter note E4. The bass line has a quarter note A2, a quarter note G2, and a quarter note F#2. A 'Harm.' (harmonic) is indicated above the treble staff in measure 21.

D $\Delta$ 

Measures 22-24 of the piece. Measure 22 starts with a treble clef, key signature of two sharps (F# and C#), and a 4/4 time signature. The melody begins with a quarter note G4, followed by a quarter note A4, and a quarter note B4. The bass line features a triplet of eighth notes (G2, A2, B2) followed by a quarter note C3. Measure 23 continues the melody with a quarter note C5, a quarter note B4, and a quarter note A4. The bass line has a quarter note D2, a quarter note C2, and a quarter note B1. Measure 24 shows the melody with a quarter note G4, a quarter note F#4, and a quarter note E4. The bass line has a quarter note A2, a quarter note G2, and a quarter note F#2.

G

A

D/F#

Measures 25-27 of the piece. Measure 25 starts with a treble clef, key signature of two sharps (F# and C#), and a 4/4 time signature. The melody begins with a quarter note G4, followed by a quarter note A4, and a quarter note B4. The bass line features a triplet of eighth notes (G2, A2, B2) followed by a quarter note C3. Measure 26 continues the melody with a quarter note C5, a quarter note B4, and a quarter note A4. The bass line has a quarter note D2, a quarter note C2, and a quarter note B1. Measure 27 shows the melody with a quarter note G4, a quarter note F#4, and a quarter note E4. The bass line has a quarter note A2, a quarter note G2, and a quarter note F#2.

B-/A G/A

Measures 28-30 of the piece. Measure 28 starts with a treble clef, key signature of two sharps (F# and C#), and a 4/4 time signature. The melody begins with a quarter note G4, followed by a quarter note A4, and a quarter note B4. The bass line features a triplet of eighth notes (G2, A2, B2) followed by a quarter note C3. Measure 29 continues the melody with a quarter note C5, a quarter note B4, and a quarter note A4. The bass line has a quarter note D2, a quarter note C2, and a quarter note B1. Measure 30 shows the melody with a quarter note G4, a quarter note F#4, and a quarter note E4. The bass line has a quarter note A2, a quarter note G2, and a quarter note F#2. A 'Harm.' (harmonic) is indicated above the treble staff in measure 29.

1

The musical score for 'The Rose Tree' is presented in two systems. The first system features a treble clef, a key signature of two sharps (F# and C#), and a 4/4 time signature. The melody is written on a single staff, starting with a quarter note G4, followed by a quarter note A4, a quarter note B4, and a quarter note C5. The lyrics 'The Rose Tree' are written below the staff. The second system continues the melody with a quarter note D5, a quarter note E5, a quarter note F#5, and a quarter note G5. The lyrics 'The Rose Tree' are repeated. The score concludes with a double bar line and the word 'Fine'.

The transcription at hand is Bill Frisell's improvised rendition of the traditional American folk song "Shenandoah", filmed for the *Fretboard Journal's* subscriber exclusives in 2013.

He played this performance on a 1930 Gibson L-00 flat-top acoustic guitar which was handed to him shortly before. This very intimate, acoustic performance, stripped of his usual electric-guitar sound enables us to focus on inherent musical qualities and ideas in Bill Frisell's playing style that truly are the cornerstones of his famed signature sound and musical vocabulary.

Regardless of the final purpose of working with a transcription, it is immensely beneficial for every player's progress not only to learn the music note-for-note but to identify and analyze musical ideas within their context to be able to deduct musical principles. Musical methods then can be applied to improvise new choruses or to harmonize any other given melody 'in the style of'.

### Musical Devices

Most notably throughout the performance is the use of varying but logical rhythms and that the melody always comes first. As opposed to a plain chord-melody style, accompanying notes that outline harmonic progressions aren't necessarily played simultaneously with the melody but rather fill in the gaps between melodic phrases (bar 1-3, 11-13). Applied rhythms to both melody and harmonies add variety and momentum to the performance by constantly contrasting shorter note values with longer ones. The treatment and relationship of melody and accompaniment in the first three bars is exemplary for this organization principle. A sustained melody note (half-note) is followed by a melodic-rhythmic fill with shorter note values. The next melodic phrase, comprised of eight-notes, is followed by a sustained accompanying note.

Bill Frisell's general rhythmic approach and its musical effect found in this transcription correspond with Travis Lewis' analysis of Bill Frisell's improvisations:

"The use of syncopation and note pairs is something that frequently occurs throughout Frisell's improvised solos. He rarely resorts to complicated rhythmic patterns, but instead utilizes syncopation by playing strictly on upbeats. [...] The end result of each of these devices is a **looser time feel** that sits behind the beat and gives the impression of floating. This floating syncopated effect, when combined **with his tendency to sustain notes, thickens the overall texture of his performances** and allows him to avoid the thin sound that is sometimes associated with guitars playing in a group without a pianist." [1]

Melody notes are frequently anticipated and followed by accompanying notes on offbeats (bar 10-11, 16-17). Melodic-harmonic fills often start and end on upbeats (bar 14-15). You can find note pairs like 2nds, 3rds and 4ths intervals throughout the performance.



### **Sustained Notes: Open Strings, Harmonics & Pedal Point**

"I like to work out fingerings for scales or melodies that get things running like a piano. For example, I'll take a G major scale and re-finger it using open strings. I let everything ring as long as it possibly can by holding every note until the last moment. Curve your fingers so they don't dampen the open strings." - Bill Frisell [2]

Bill Frisell's use of open strings and harmonics instead of fretted notes create a variety of intervallic textures and also allows for longer sustained notes. It creates a similar effect as a sustain pedal does on a piano: e.g. smaller intervals like major and minor seconds resonating together (bar 4, 6, 16). The use of open strings for adjacent notes creates sustained 2nd intervals as well. These techniques are combined to great effect in bar 14 - 15: The melody is played in a low register, taking advantage of open strings while the accompaniment simultaneously adds a dyad on G and B-string, a pedal point with a fretted note on the E-string and a short melodic fill before the next melodic phrase begins. A similar principle is applied in bar 9: the sustained high pedal note F# is complemented with a descending melodic line.

In conclusion these musical devices show Bill Frisell's economical playing style. Instead of block chords, sustained melody notes combined with inserted chord tones are sufficient to outline the harmonic progression of a tune and create a distinct mood at the same time.

A great exercise to apply the found principles to the guitar fretboard is to first outline the tonic chord D-Major by playing a lower open string (A or D) and a sustained pedal note like A on the E-String while playing fills with notes of the D-Major scale (compare bar 14). This most likely results in unconventional fingerings which shows you if the sound of the scale is internalized and accessible on the fretboard. Another benefit is that with added sustained notes the tonal relationships of the scale notes are audible. You can advance this exercise by applying it to different scales and harmonies to connect tonic, subdominant and dominant functions.

#### Sources:

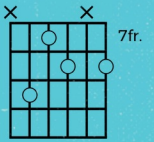
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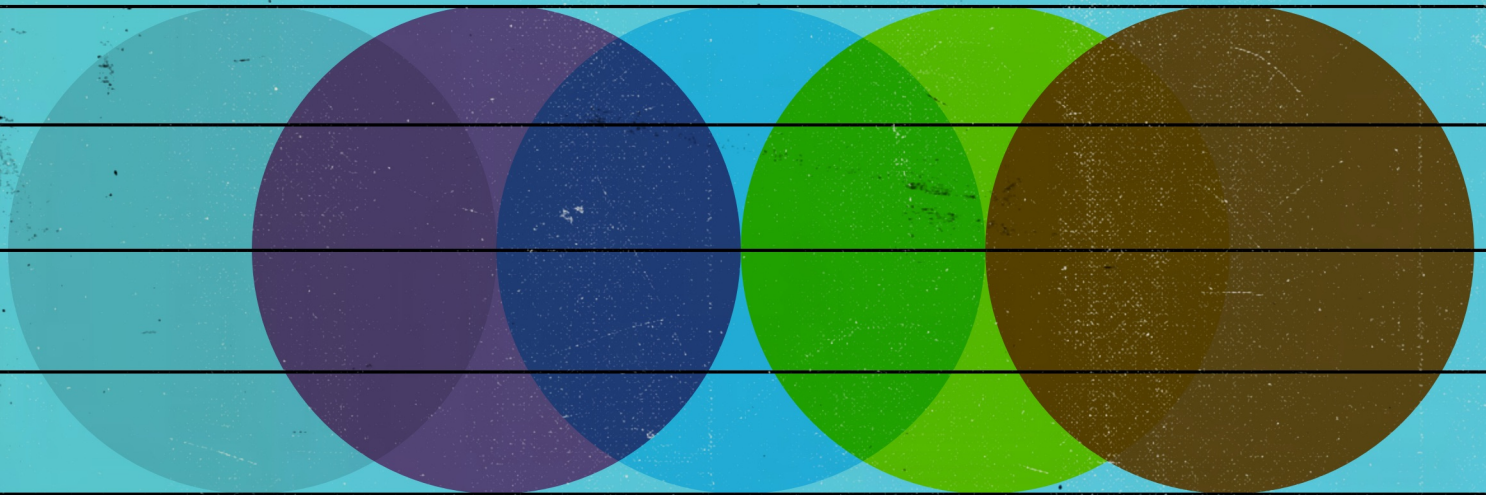
[2] See Bill Frisell, "An Approach to Guitar Fingering," in Arcana: Musicians on Music , edited by John Zorn, 140-144 (New York: Granary Books, 2000)

# CHORD YOGA

Part 2



*CONCEPTS for SOLO GUITAR PERFORMANCE / 3rd Edition*  
**Studies for Electric Guitar** Tone / Technique / Theory





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# 1. Analyzing Melodic and Harmonic Tonal Groups

"One of the first things that's really important is to actually know the song [...] What do I mean by knowing the song? I mean being able to play it anywhere (on the fretboard). Not have to think about what the next chord is, because you just know it." [...] First figure out one very simple way to play the melody with chords." [1] Rosenwinkel 2013

- Kurt Rosenwinkel about Chord Melody

## How do you go about that?

**1.1** Find the most common and defining recordings of the song. Decide *which versions* fit both the common playing practices and the given purpose of learning the **basic structure** (plain melody + basic harmonies). For instance, a standard like *Embraceable You* is commonly played with different harmonies and varying keys - Charlie Parker's version is in F, Billie Holiday's in C. In this case, for a guitar solo performance, choosing the key of G is practical because of a number of reasons:

- it's a common and good sounding key for the instrument, e.g. you can take advantage of all open strings
- initially, tonal relationships and harmonic progressions are easier to process in a key with less accidentals
- there are interesting recordings of guitar performances and sheet music available

## 1.2 Melodic Tonal Groups \*:

- identify and analyze melodic phrases by [measuring their intervallic structure](#)

### Harmonic Tonal Groups \*:

- identify the harmonic progression: e.g. is it a static harmony (modal) or an often used harmonic 'template' [ I - Vi - ii - V ] / [ ii - V - I ] ?
- what are the characteristics of the harmonies (triads, seventh chords, specific inversions & tensions, constant structure ...)
- the intervallic movement of the root or the lowest note of a chord

**Sample 1.2a:** *Embraceable You* - the melody is based on one of Billie Holiday's recordings of this tune.

- the harmonies are based on Bill Frisell's performance and available sheet music.

The image displays two staves of musical notation for the song "Embraceable You" in G major. The first staff shows the first two measures, with a melodic phrase starting on G4. Above the staff, intervallic structures are marked: (b3) up, (b2) down, and (5) down. Chords are indicated as I6, bIII°, II-7, and V7. The second staff shows the next two measures, with a melodic phrase starting on A4. Above the staff, intervallic structures are marked: (6), (7), (1), (#11), (b13), (13), and (11). Chords are indicated as II-7, Iv7, I6, and V7. The notation includes various intervallic structures (circles and squares) and chord symbols (I6, bIII°, II-7, V7, Iv7, I6, V7, Vii-7b5, III7). The first staff is labeled "Phrase 1" and "Phrase 2 (= continuation Phrase 1)". The second staff is labeled "Sequence of Phrase 1" and "Sequence of Phrase 2".

○ = **tonal interval structure**, in relation to the present heptatonic scale / tonality / mode

□ = **chromatic 'substantial' interval structure**

Learning musical motives, chord progressions and entire songs on a **structural level** helps to [memorize tunes](#) and to understand which notes are important to [outline melodic and harmonic development with one instrument](#).

Knowing **intervallic structures** enables playing musical ideas in different areas of the fretboard. By having access to all available registers you can take advantage of all guitar specific techniques, e.g. legato playing with added sustained notes.

The Excerpt from Bill Frisell's solo rendition of *Embraceable You* in the following sample illustrates the use of sustained notes, reoccurring musical motives and added bass notes.

\* Intervals can be measured based on any arbitrary tonal group. Both the tonal interval structure and the chromatic interval structure can be identified as particular cases of tonal groups.

This is of consequence for evaluating structural value and permutations. [2] (Kissenbeck 2007)

**Sample 1.2b:** Bill Frisell - *Embraceable You* [3]

Use of motives and sustained notes

The G-triad and the first melodic motive in the intro are played by using natural harmonics only. The sustained triad establishes a tonal center while providing a harmonic background for the motive that anticipates the melody of the tune.

The first system of musical notation shows the beginning of the piece. The top staff is in treble clef, key of D major (one sharp), and 4/4 time. It features a melodic line starting with a half note G4, followed by a quarter note A4, and then a half note B4. A dashed line labeled 'Phrase 1' spans the first two measures. The bottom staff is in bass clef and shows a sustained G-triad (G2, B1, D2) with natural harmonics indicated by 'Harm.' and '12'. The notation includes various accidentals and fingerings to indicate the specific harmonics and melodic phrasing.

After more arpeggiated harmonics in bar 3, the harmony is outlined with a variety of techniques: sustained bass notes (bars 4-8), chromatic approach (bar 10), voice-leading b7-3 (e.g. bar 5) and chords (bar 6, 9-10).

The second and third systems of musical notation continue the piece. The top staff shows a melodic line with various chords indicated above it: G<sup>6</sup>/B, B<sup>b</sup>, A-11, D<sup>9</sup>, E<sup>7</sup>, A-7, C-7, F<sup>7</sup>, Gadd<sup>9</sup>, F#<sup>7</sup>/C, and B<sub>sus</sub><sup>7</sup>. The bottom staff shows a bass line with sustained notes and arpeggiated harmonics. The notation includes various accidentals, fingerings, and dynamic markings. The third system ends with a double bar line.

Most notably are the varying rhythms and that **the melody 'comes first'**.

The accompanying notes aren't played simultaneously with the melody, they rather fill gaps between melodic phrases.

**Sample 1.2c :** Concepts found in Bill Frisell's playing style, applied to *Stella By Starlight* [4]

8<sup>b6</sup>

Phrase from the original melody

Harm.

12 12 13 12 12 11 7 8

E<sup>87</sup> A<sup>7ALT</sup> C<sup>-11</sup> F<sup>7ALT</sup>

Harm. ----- Harm. -----

10 0 8 8 10 10 6 6 6 6 7 7 7 7 3

F<sup>-11</sup> B<sup>b13</sup> E<sup>b6</sup> A<sup>b7</sup>

3 4 4 3 6 3 3 3 3 6 4 4 3

**Sources:**

[1] Rosenwinkel, Kurt (2013): *Clinic Gdansk*, Akademia Muzyczna w Gdańsku

[2] Kissenbeck, Andreas (2007): *Jazz Theorie II*, Kassel : p. 16

[3] Frisell, Bill (2013) *Embraceable You (Solo)*, Seattle

for the Fretboard Journal published on YouTube: <https://www.youtube.com/watch?v=uEHdvZD5jFc>

[4] Jakut, Jan (2017): *Interstella*, Seattle - Juju Music Edition



## 2. Analyzing Musical Forms

The majority of playing practices found in American Popular Music favor cyclic forms like AABA in Jazz or Verse - Bridge - Chorus in more Rock / Pop-related repertoire. It's a practical organization principle to establish musical ideas while complementing them with contrasting elements.

The transcription of Julian Lage's improvised solo performance shows how to organize musical ideas around this principle to create compelling solo performances.

**A**

establishes a tonal center      contrasting tonal center

A 'melodic-harmonic phrase': it introduces a harmonic center with contrasting musical devices - Chord-Melody w / triads and cluster voicings

Cluster voicing + bVII degree = tension

concluding the 'melodic-harmonic' phrase

**'Call and Response' principle**

T

**A'**

'Call'

T

New tonal center

Chord symbols:  $B^b$ ,  $C^-$ ,  $B^b/D$ ,  $E^b$ ,  $E^b^b$ ,  $D^7$ ,  $G$

'Response'

T

**A"**

Chord symbols:  $B^b$ ,  $D^-$ ,  $G7_{ALT}$ ,  $B^b7$ ,  $C^b$ ,  $C^-6$

The musical phrases which are here labeled as three different 'A' parts have less melodic and harmonic conformity as compared to the ones found in the segmentation of a Jazz standard but their development paired with the use of musical devices create a consistency that leads to a contrasting B-part with a new tonal center:

**B**

Chord symbols:  $B^7$ ,  $B^7^*$

Dominant Function w / single-note lines + a steady flow of 8's notes

\* Chord symbol reflects implied tonality

8 10 11 7 8 10 8 7 10 9 10 9 7 6 8 7 6

9 7 6 9 9 8 7 5 4 6 7 4 5 9 8 7 8 9 7 8 7 11 14

A'''

[I-]/VI- in G-Major

Resolution

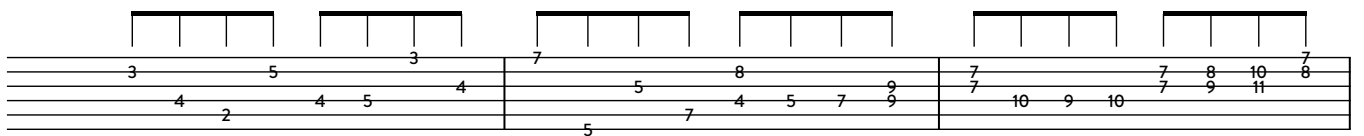
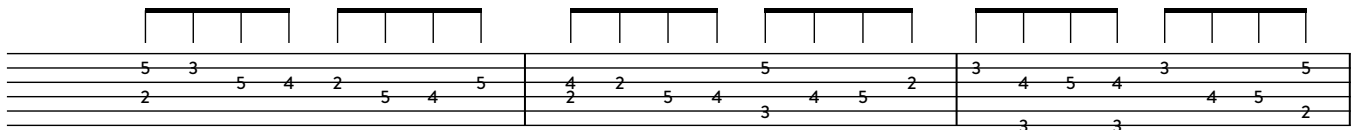
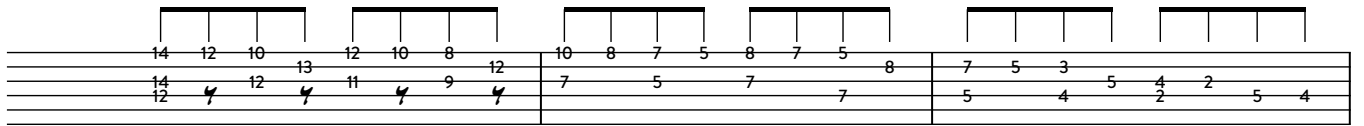
Chord-Melody w / triads and cluster voicings

15 14 12 12 12 14 15 14 12 15 15 12 12 8 8 10 7

V7

D<sup>7</sup>

'Two-Line' - descending scale



G      G<sup>b</sup>

8 10 7 10 12 10 12 12 11 11

G      F<sup>Δ</sup>

'pedal point'

11 14 14 18 19 14 17 15 16 14 12 14 17 15 16 14 13 15 10 13 15

E<sup>-</sup>      E<sup>b</sup><sub>Δ</sub>

17 15 16 14 12 17 15 16 14 12 14 17 15 12 14 11 13 13 11

$D^7$   $A\flat 7_{ALT}$

Fingerings: 17 15 14 16 14 12 7 8 10 13 10 14 19 10 13 16 10 12 16

**Ending**  $E^-$   $G^6$   $C^{\Delta}$   $A^{-11}$   $D^7/F^{\#}$

Fingerings: 15 10 12 9 10 7 3 5 9 10 8 5 3 2 0 2 0 1 3 0 2 5 4 3 2 0 2 2 2

$G\Delta 9(\#5)$

Fingerings: 3 0 3 4 0 0 12 15 0 0 4 3

A.H. -----

### 3. Means of Harmonic Organization

**Sample 3.1a:** 'Improvisation' - Julian Lage (1997 Gibson Super 4000 Demo for Carter Vintage Guitars)

Chord symbols above staff:  $E^b$ ,  $G^b$ ,  $E^b$ ,  $A^b-11$ ,  $D^b_{13}$

Labels below staff:

- Degree: I
- Voicing: triad
- (bIII) triad
- I triad
- (IV-) cluster/inc
- (bVII) 7th Chord

Chord symbols above staff:  $D^b_9$ ,  $G^b$ ,  $A^b$ ,  $E^b$ ,  $T$

Labels below staff:

- (bVII) cluster/inc
- (bIII) triad
- V triad
- I triad
- $T$

# I. Musical Phrases

**Phrase 1:** A plain triad establishes the tonal center as well as the **listener's expectation** while the following rhythmic phrase **'surprises'** with a brief detour to another key and **contrasting** cluster-like voicings.

**Phrase 1**

The musical notation for Phrase 1 consists of two staves. The top staff is in treble clef with a key signature of two flats (Bb, Eb) and a 4/4 time signature. It shows a triad of Eb, Gb, and Ab. The bottom staff is in bass clef and shows a series of notes and rests, including a cluster of notes (6, 8, 8) and a sequence of notes (9, 8, 6, 3, 6, 6, 2, 2, 4, 6).

**Phrases 2 & 3** reference harmonic elements of the first phrase in reverse (cluster-voicing to triads). The contrasting rhythm concludes the musical idea logically and leads back to the original tonic.

**Phrase 2** **Phrase 3**

The musical notation for Phrases 2 and 3 consists of two staves. The top staff is in treble clef with a key signature of two flats (Bb, Eb) and a 4/4 time signature. It shows a sequence of notes and rests, including a cluster of notes (Gb, Ab, Bb) and a sequence of notes (Gb, Ab, Bb). The bottom staff is in bass clef and shows a series of notes and rests, including a cluster of notes (6, 2, 4, 3) and a sequence of notes (11, 7, 9, 9, 7, 6, 10, 6, 6, 11, 8, 8, 8, 8, 6).



## II. Harmonic Structure

contradict tonal expectation

established tonal expectation 'Eb' 'home'

back 'home'

Degree: I  
Voicing: triad

(bIII)  
triad

I  
triad

(IV-)  
cluster / inc

(bVII)  
7th chord

**Secondary Dominant** to new tonal center bVII7 ( V )

new tonal center 'Gb' leaving via III7 ( V ) ... back 'home'

(bVII)  
cluster / inc

(bIII)  
triad

V  
triad

I  
triad

T

## III. Application

**Sample 2.1b:** 'Improvisation' based on analyzed organization principles - a 'musical syntax'

**abstract structure:**

tonal center, harmonic  
progression, melodic and  
harmonic phrases

**concrete structure:**

chord, voicing  
melody, rhythm

Chord symbols:  $G^b$ ,  $G^b$ ,  $G^b$ ,  $E^b_{-11}$ ,  $A^b_{13}$

Degree: I, (bIII), I, (IV-), (bVII)

Voicing: triad, triad, triad, cluster / inc, 7th Chord

Chord symbols:  $A^b_{13}$ ,  $G^b$ , F,  $G^b$

Degree: (bVII), (bIII), V, I

Voicing: cluster / inc, triad, triad, triad

## Means of Tonal Harmonic Organization

I - IV - V

Sample 3.2a: I - IV - V - Principle

**I**

Intervallic structure relative to bass note

3 - 5 - r

r - b3 - (5) b6

5 - b7 - b3

**IV**

r - 3 - 5

b3 - 5 - b7

**V**

b7 - r - 3

b5 - b6 - r

Chords that are either related to **tonic**, **subdominant** or **dominant** degree are **interchangeable** because of common notes they share. Within a tonal context **they serve the same function** and can be used to harmonize a melody, substituting the main functions I, IV, V.

This is also useful to interpret chord progressions and to come up with substitutions, voicing ideas or different bass movements.

E.g. in the key of E, the changes [ F#-7 - B7 - EΔ ( II-V-I ) ] can be translated to [ AΔ - D#ø7/A - C#-9/G# ( IV-VII-VI ) ] as shown in sample 3.2b.

**Sample 3.2b :** Chord Substitutions and voicing ideas [II-V-I] - based on the interchangeability of chords

Chord substitutions and voicing ideas for the [II-V-I] progression:

- System 1: F#-7 (II-7), B7 (V7), EΔ (IΔ)
- System 2: F#-7 (II-7), B7 (V7), EΔ (IΔ)
- System 3: AΔ (IV), D#7/A (VII), C#-9/G# (VI)

Fret numbers for the chords:

- F#-7: 5, 4, 4
- B7: 5, 4, 4
- EΔ: 5, 4, 4
- AΔ: 5, 4, 4
- D#7/A: 6, 6, 4
- C#-9/G#: 6, 4, 2

tensions for  
F#-7: 6 - 9

Chord substitutions and voicing ideas for the [II-V-I] progression:

- System 1: AΔ, D#7/A, G#-

III-7 w/ b6 for I

Tension: 9

Fret numbers for the chords:

- AΔ: 0, 9, 11, 12
- D#7/A: 14, 11, 13
- G#-: 12, 11, 14, 11

**Sample 3.2c :** Chord changes for a simple melody (I - ii - V)

Chord changes for a simple melody (I - ii - V):

- System 1: EΔ

Fret numbers for the chords:

- EΔ: 0, 9, 11, 12

Sample 3.2d: Chord Substitutions

### Sample 3.2d : Chord Substitutions

Sample 3.2d: Chord Substitutions

Sample 3.2d: Chord Substitutions

## 4. Melodic Devices

### Guitar Techniques of Jim Hall & Bill Frisell

#### 4.1 Sustained Notes: Open Strings, Harmonics, Pedal Point & Barre

"I like to work out fingerings for scales or melodies that get things running like a piano. For example, I'll take a G major scale and re-finger it using open strings. I let everything ring as long as it possibly can by holding every note until the last moment. Curve your fingers so they don't dampen the open strings." [1]

- Bill Frisell

Using open strings and harmonics instead of a fretted note creates a variety of intervallic textures and allows for longer sustained notes. It creates a similar effect as a sustain pedal does on a piano: e.g. smaller intervals like major and minor seconds resonating together. "I find this way of thinking interesting because it opens possibilities for dissonant or closely voiced chords not so commonly used on the guitar."

- Bill Frisell [2]

#### Sample 4.1a : Unconventional scale fingerings for C-Dorian [ see Lewis, p. 15-16\* ]

Intervals: [2] [b2] [2] [2] [b5] [2]

Harm. -----

[1] Jude Gold. "The Big Bang: Bill Frisell Helps You Unleash an Ever-Expanding Universe of Melodic, Harmonic, and Textural Possibilities," *Guitar Player* 36, no. 12 (Dec., 2002): pg 61.

[2] See Bill Frisell, "An Approach to Guitar Fingering," in *Arcana: Musicians on Music*, edited by John Zorn, 140-144 (New York: Granary Books, 2000).

\* Lewis, Travis. *A STUDY OF BILL FRISSELL THROUGH PAUL MOTIAN'S ON BROADWAY RECORDINGS*. Urbana, IL : University of Illinois at Urbana-Champaign, 2016. 15-16.



**Sample 4.2a :** Transcription excerpt 'Poor Butterfly' as played by Jim Hall (solo) \* // use of Pedal Point

The first system of the transcription shows a melodic phrase in the treble clef, starting with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The bass clef shows a pedal point exercise with a half note G2, followed by a quarter note A2, a quarter note B2, and a half note C3. The melodic phrase is labeled 'Melodic Phrase\*' and is enclosed in a dashed box. The bass clef shows a sequence of notes: 13, 10, 11, 14, 13, 13, 14, 13, 13, 13, 16, 16, 16, 16, 16, 16.

This transcription excerpt shows the features of Jim Hall's economic playing style :  
sustained melody notes combined with inserted chord tones are enough to outline a harmonic progression  
and to create a distinct mood.

The second system of the transcription shows a melodic phrase in the treble clef, starting with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The bass clef shows a pedal point exercise with a half note G2, followed by a quarter note A2, a quarter note B2, and a half note C3. The melodic phrase is labeled 'Melodic Phrase\*' and is enclosed in a dashed box. The bass clef shows a sequence of notes: 14, 14, 15, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14.

The third system of the transcription shows a melodic phrase in the treble clef, starting with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The bass clef shows a pedal point exercise with a half note G2, followed by a quarter note A2, a quarter note B2, and a half note C3. The melodic phrase is labeled 'Melodic Phrase\*' and is enclosed in a dashed box. The bass clef shows a sequence of notes: 5, 6, 5, 6, 8, 6, 6, 6, 6.

Without using open strings and harmonics to sustain notes, one or more fretted notes act as pedal points.  
E.g. F and Eb in bar 11. Since every finger of the fretting hand can provide for a pedal point this technique is a  
great exercise finger independence as well.

**Ex. :** Play the C-major scale (from C) 5th fret on the G-string, while simultaneously sustaining the root on the E-String (8th fret).  
This is a good add-on to the standard way of learning and practicing scales:

- now, with the root being sustained ( or any other category ), the tonal relationships of the scale notes are audible
- by depriving yourself from muscle memory it shows you if the structure of the scale is internalized
- finger independence

\* Hall, Jim. *Jim Hall's Three*. Concord Records, 1986, Compact Disc.



**Sample 4.2b:** Pedal point & Jim Hall's melodic ideas applied to the changes of 'All The Things You Are'

The notation for Sample 4.2b is divided into two systems. The first system features a treble clef staff with a key signature of three flats (B-flat, E-flat, A-flat) and a 7/8 time signature. It shows a melodic line with a circled root note (F) labeled 'pedal point (root)' and a circled third note (A-flat) labeled 'pedal point (3rd)'. Chord changes are indicated above the staff: F-7, B-flat-7, and E-flat7. The second system consists of two staves. The top staff continues the melodic line with triplets and slurs. The bottom staff shows the corresponding fret numbers for the pedal point exercise, with numbers like 8, 11, 9, 10, 11, 8, 11, 9, 10, 11, 8, 12, 8, 11, 10, 9, 8, 12, 8.

Jim Hall's concept of playing concise melodic ideas is great to use as a springboard for improvisational ideas.

**Sample 4.3a:** Melodic and harmonic outline of "Shenandoah"

The notation for Sample 4.3a is divided into two systems. The first system features a treble clef staff with a key signature of two sharps (F-sharp, C-sharp) and a 4/4 time signature. It shows a melodic line with a dashed line indicating 'Phrase 1' and another dashed line indicating 'Phrase 2'. Chord changes are indicated above the staff: D, G, and D. The second system consists of two staves. The top staff continues the melodic line. The bottom staff shows the corresponding fret numbers for the harmonic outline, with numbers like 7, 7, 7, 7, 5, 7, 8, 7, 5, 10, 9, 7, 7, 10, 7, 10, 7, 10, 10, 10.

8-                      0                      G                      0                      G                      0

Phrase 3

**Sample 4.3b:** Transcription excerpt *Shenandoah* - Bill Frisell (solo) \*  
Application of pedal point, open strings and harmonics

Phrase 1

Harmonic Fill

0/F#

cont. Phrase 1

Phrase 2

Harm.

Harm.

Harm.

\*Frisell, Bill. *Shenandoah*. For the Fretboard Journal, 2013, Youtube.

High 'pedal note' w / underlying melody fill

$D^{\Delta}$   $B-7$   $G^{\Delta}$   $A^7$  Rit.

Phrase 1 harmonic fill cont. Phrase 1

Use of open strings for adjacent notes (= sustained 2nd intervals)

$D^6$   $G$   $D$  Harm.

**Sample 4.3c:** Improvisation excerpt 'When You Wish Upon A Star' - Bill Frisell (solo)

This performance uses the discussed devices and accompanies the melodies with harmonic fills.

Note the chromatic approach in bar 55 as well as the frequent use of syncopation of the melody ( e.g. bars 54 - 55, 58 - 59 ).

The musical score is presented in three systems, each with a melody line (treble clef) and a harmonic line (bass clef).

**System 1:**

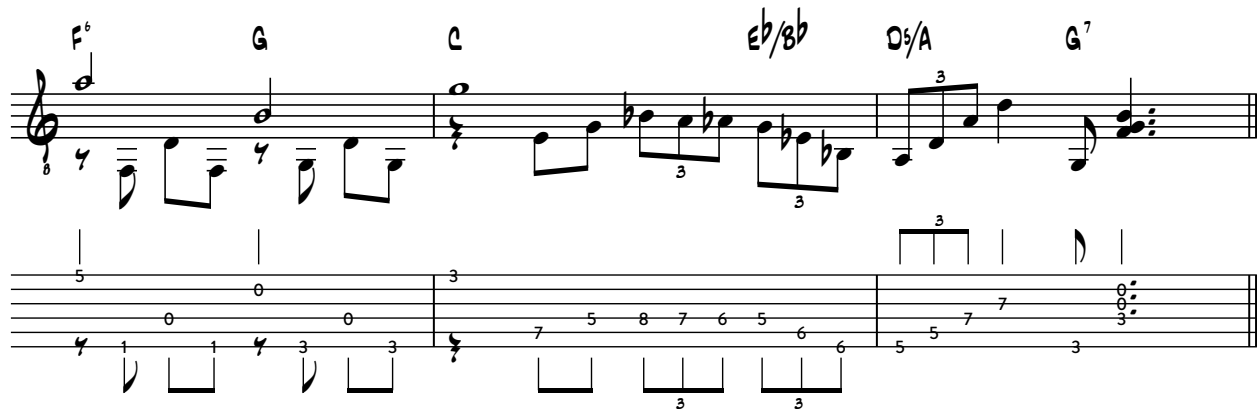
- Melody:** Starts with a half note G4, followed by a quarter note A4, a quarter note B4, and a quarter note C5. A syncopation is marked in bar 54. Bar 55 features a chromatic approach (B4 to A4) and a syncopation. Bar 58 features a syncopation. Bar 59 features a syncopation.
- Harmonic:** Labeled "Harm." with a dashed line. It consists of a series of chords: C, A7/C#, D-Δ, D-7, and G.

**System 2:**

- Melody:** Continues the melody with a syncopation in bar 54 and a chromatic approach in bar 55. Bar 58 features a syncopation. Bar 59 features a syncopation.
- Harmonic:** Labeled "Harm." with a dashed line. It consists of a series of chords: C, A7/C#, D-Δ, D-7, and G.

**System 3:**

- Melody:** Continues the melody with a syncopation in bar 54 and a chromatic approach in bar 55. Bar 58 features a syncopation. Bar 59 features a syncopation.
- Harmonic:** Labeled "Harm." with a dashed line. It consists of a series of chords: C, C/E, E♭7, D-, and D/C#.



The playing practices and their musical effects found in this transcription excerpt correspond with Travis Lewis' analysis of Bill Frisell's improvisations :

"The use of syncopation and note pairs is something that frequently occurs throughout Frisell's improvised solos. He rarely resorts to complicated rhythmic patterns, but instead utilizes syncopation by playing strictly on upbeats. [...] The end result of each of these devices is a **looser time feel** that sits behind the beat and gives the impression of floating. This floating syncopated effect, when **combined with his tendency to sustain notes, thickens the overall texture of his performances** and allows him to avoid the thin sound that is sometimes associated with guitars playing in a group without a pianist." [5]

[5] Lewis, Travis. A STUDY OF BILL FRISSELL THROUGH PAUL MOTIAN'S ON BROADWAY RECORDINGS. Urbana, IL: University of Illinois at Urbana-Champaign, 2016. 102.

**Sample 4.3d** : a pentatonic melody in a 'Mingus mood'

1. Arrangement ideas using open strings, harmonics and pedal point

2. Pedal point concept applied to the changes of *Autumn Leaves* - J. Kosma

### 3. Original rhythm guitar part for 'In Bloom' by Nirvana w / syncopation and chromatic approach.

The image shows a musical exercise for piano. The top staff is a treble clef with a key signature of two flats (Bb and Eb). The melody consists of eighth and quarter notes. Above the staff, the chords Bb5, G5, F5, Ab5, and A5 are indicated. The bottom staff is a bass clef. It features a bass line with syncopation (indicated by a 'x' over a note) and chromatic approach (indicated by a 'x' over a note). The exercise is divided into two measures by a double bar line.

Intro for 'In Bloom', using reharmonizations, open strings, harmonics and pedal point

Chord symbols:  $Bb9(\#5)$ ,  $G^7$ ,  $F9(b5)$ ,  $B^7$

The score consists of a treble clef staff with a key signature of two flats (Bb and Eb) and a bass clef staff. The treble staff contains a melodic line with various intervals and accidentals. The bass staff contains a complex harmonic line with many accidentals and a pedal point. Fingering numbers (0-4) are written below the bass staff notes.

**Sample 4.4 :** Barre technique as used in 'Embraceable You' - Bill Frisell (solo)

Chord symbols:  $C\Delta$ ,  $F9(\#11)$

The score is in treble clef with a key signature of one sharp (F#). It features a melodic line with a barre technique indicated by a horizontal line across the staff. The bass staff shows a harmonic line with many accidentals and a pedal point. Fingering numbers (8, 9, 10, 11, 12) are written below the bass staff notes.

'Christmas Time Is Here' : the barre technique is applied to play the melody while simultaneously creating an  $Eb7\#11$  harmony

Chord symbols:  $F\Delta$ ,  $Eb9(\#11)$ ,  $F\Delta$

The score is in treble clef with a key signature of two flats (Bb and Eb) and a 3/4 time signature. It features a melodic line with a barre technique indicated by a horizontal line across the staff. The bass staff shows a harmonic line with many accidentals and a pedal point. Fingering numbers (5, 6, 7, 8, 9, 10, 11, 12) are written below the bass staff notes.

The "barre" technique is used as a temporary and flexible capo (index finger) to let ring notes as if they were played with open strings. All other fingers are freed up to play melodic fills or create sustained notes and emphasize tensions like  $\#11$  and chord tones resonating simultaneously.



The image shows a musical score for the song "The Rose Tree". It consists of two systems of music. The first system is in G major (one sharp) and 3/4 time. The melody is written in a treble clef, and the guitar accompaniment is written in a standard six-string format with a capo on the 4th fret. The second system is in F major (one flat) and 3/4 time, indicated by a key signature change and a capo on the 3rd fret. The melody continues in the treble clef, and the guitar accompaniment is written in a standard six-string format with a capo on the 3rd fret. The score includes various musical notations such as notes, rests, and bar lines.

Playing single-note lines without an underlying harmony requires a more dense and directed harmonic and rhythmic consistency on a small and large scale level. Coherent structures (e.g. arpeggios, scales) including repetitions and references create a musical statement that is easier to follow for the listener.

## 5. (Re)harmonization Techniques

### Outlining Sounds, Harmonic Tonal Groups, Chords and Voicings

" The two notes C & E, although a valid sound, are not named as a chord when standing alone [...]. Even though the sound is not as definite as with three notes , the listener still hears the OUTLINE of a chord. If no other notes are present, he hears the sound as a C chord sound. His ear relates to the bottom note C . Because of this ambiguity in a two-note sound, it is very flexible and open to interesting and surprising additions which can really intrigue a listener. [ 1 ]

- Jimmy Wyble

An effective approach to spell out harmonies ( basic triads ) including their extensions ( 9, 11, #11, 13 ) and suspensions ( sus2, sus4 ) is to use dyads. To play two notes at a time is sufficient to define the harmonic context and allows for melodic movement.

Sample 5.1a : "Two-Line" Descending Scale with Crossing Voices

This sample of a descending scale with two voices starts with a b7 dyad. In the key of G-Major its harmonic function can be interpreted as a suspension of D7:

A - G = 5th - sus4

resolving to

A & F# = 5th - 3rd

The upper voice is played at twice the pace of the lower one which diminishes intervals until the voices cross and the intervals become wider again. You can find the same principle used in Julian Lage's improvisation in sample 5.1b

**Sample 5.1b** : "Two-Line" Descending Scaleas played by Julian Lage - *Improvisation for Carter Vintage Guitars* ( from 01:11 ) \*

\* Chord symbol reflects implied tonality

**Ex. :** Play scales with this approach, starting with different dyads / intervals in order to get familiar with tension and resolution tendencies.

Find short melodic phrases and combine them with chords and lines to play a harmonic progression.

It's not so much about spelling out a harmony with all of its standard chord tones, e.g. [ G Δ = G - B - D - F# ], it is about establishing a harmonic tonal center and outlining harmonic changes with a more minimalist approach. Allow for tensions and even 'avoid notes' ( see C in G Δ , bar 11 ) - they bring color an movement ( 'passing notes' ). Meanwhile, shifting tonal centers as in a song like *Black Hole Sun* can be connected with common tones.

**Sample 5.1c** : "Two-Line" scale applied to the changes of *Black Hole Sun*[Sound sample](#)

\* Lage, Julian - *Improvisation - Demo for Carter Vintage Guitars*

from Jimmy Wyble's general theory for **OUTLINING SOUND** :

- start with two notes of any interval
- add one or two notes which either make the original sound definitive and expected or which make it unusual and surprising
- the added notes can be above, below or between the original two notes as long as they come after them. [2]

The 'G  $\Delta$  #11 b9 sound' is a good example how to combine dyads effectively.  
It's based on the approach described in **Jimmy Wyble's Classical / Country** book:

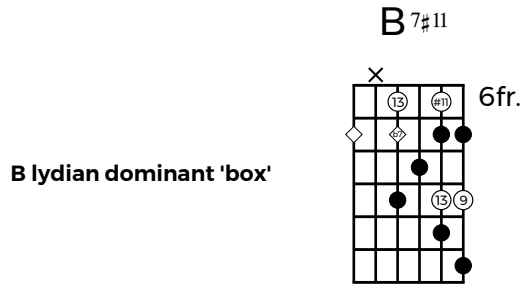
This example starts with a 'flexible' two-note G-sound [ G, B ] . With an added G in the bass the listener is likely to perceive a more definitive G-chord. The next note [ C# ] introduced on beat two suggests another sound to the listener:  
it's an 'A7 sound' with resolving tendency to D-Major. However, with the next added note D, it sounds more like a 'G add b5 sound, including a natural 5th.

"The point is - we've made the listener interested enough to try and find out.  
He wonders what comes next." [3]

The final harmonics confirm [ F# = G  $\Delta$  #11 ] and develop [ Ab - G  $\Delta$  #11 b9 ] the perceived harmony.

# Outlining Lydian Sounds (1) Lush Life

inspired by Bill Frisell's solo performances



**Sample 5.2 :** Outlining a lydian dominant sound, from the intro vamp of 'Lush Life' [ bII to I ( verse ) / B 7 #11 to Bb ]

**B<sup>7#11</sup>**

**b) Scale formula for B lydian dominant', derivative of F# melodic minor**

**F# melodic minor**

6 Δ7

Scale formula: R 2/9 3 #11 5 6/13 b7 R

**B lydian dominant (MM4)**

### Improvisation concepts: alternative scale fingerings

**B<sup>7#11</sup>**

The notation shows a melodic line in treble clef with a key signature of three sharps (F#, C#, G#) and a 7/8 time signature. The melody includes a descending scale with a trill on the final note. The bass line consists of a single note (F#) with various harmonic markings. The fingerings for the bass line are: 7, 10, 7, 9, 7, 12, 9, 11, 11, 11, 6, 6, 6, 6, 6, 6, 7, 7.

Harm. -----

### Building blocs of improvisation: use of alternating rhythm, motivic cells, motifs and sequences

motivic 'cell' descending 2nd

'sequence'

'sequence'

'motif' 2nd - 3rd

'sequence'

The notation shows a melodic line in treble clef with a key signature of three sharps (F#, C#, G#) and a 7/8 time signature. The melody is composed of several short phrases labeled as 'motivic cell', 'sequence', and 'motif'. The bass line consists of a single note (F#) with various harmonic markings. The fingerings for the bass line are: 7, 10, 6, 8, 7, 6, 8, 10, 8, 9, 9, 8, 6, 7.

7

### Repeating motifs

motif a 'call'

b 'answer' / 'accompaniment'

motif a'

b 'answer' / 'accompaniment'

The notation shows two systems of musical notation. The first system has a melodic line in treble clef with a key signature of three sharps (F#, C#, G#) and a 7/8 time signature. The melody consists of a 'call' motif (motif a) and an 'answer' motif (b). The bass line consists of a single note (F#) with various harmonic markings. The fingerings for the bass line are: 6, 9, 7, 7, 6, 7, 6, 11, 11, 6, 9, 7. The second system has a melodic line in treble clef with a key signature of three sharps (F#, C#, G#) and a 7/8 time signature. The melody consists of a 'call' motif (motif a) and an 'answer' motif (b). The bass line consists of a single note (F#) with various harmonic markings. The fingerings for the bass line are: 7, 6, 7, 6, 8, 7, 7.

Harm. -----

# Outlining Lydian Sounds (2)

## 'The Lick'

### 1. 'The Lick' : intervallic structure

### a) Diatonic transposition (+1) / sequence

$A_{\Delta\#11}$

### b) Variation of the sequence

$A_{\Delta\#11}$

### 2. Constant structure voicings

$\times \bullet \times$

$\times \bullet \times$

# Outlining Sounds (3)

## Movement within a Harmony

### 1. Taking advantage of open strings :

Combining shell voicings with open strings already creates a rich sound texture.

In this example the open strings remain static ( pedal point ) yet they change their respective function within harmonies while the shell voicing is being moved down the neck:



The Ab7alt voicing can be used as a colorful chromatic approach to A9, e.g. while improvising in a modal context to create tension or simply as a voicing in a minor ii - V - I progression.

### 2. Creating movement *within* a harmony:

Adam uses a similar progression in his composition. Although it's moving down (II-V-I), the voicings are moving up. This is always a fresh sound since most progressions move downwards.

This movement is achieved by moving from a root position voicing to an inversion (D-7 to D-7/ F) and connecting these with a double-chromatic approach.

Think: - 1 step below the target chord, then move up chromatically. You can also think of it as using an inversion of the harmony one step below from D-7 (C-7) which is being moved up chromatically.

Do you recognize the same principle applied to the G7 harmony in the following bar?

D-7    C-/Eb    C#-/E    D-7/F    G7/F    F7    F#7    G7    C-7/Bb

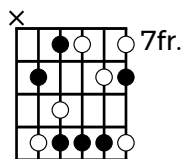
The image shows a musical score for a single bar of music. The top staff is a treble clef with a key signature of one flat. The bottom staff is a bass line with fingerings. The chords are: D-7, C-/Eb, C#-/E, D-7/F, G7/F, F7, F#7, G7, and C-7/Bb. The score includes a treble clef, a key signature of one flat, and a bass line with fingerings.



## Concepts in Context

### (1) Bi triadic hexatonic scales

**a) Hexatonic scale for B7alt: F major + G major**


$$\mathbf{B}^7_{\text{ALT.}}$$

F

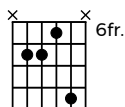
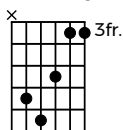
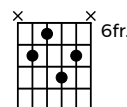
G

8      7      10      10      9      7

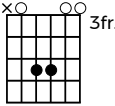
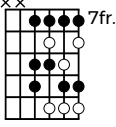
Triads offer - similar to the benefits of the pentatonic scale - a strong sound with structural integrity that is easy to identify even when embedded in more complex structures. By combining two triads that have no common tones into a hexatonic scale you can a) create lines that have a defined, recognizable outline and b) create new 'colors' since using the scale emphasizes different combinations of notes than the standard scales. In this case the resulting hexatonic scale is basically B-altered omitting the major third. It is also helpful to be able to think and find 'F-triad' and 'G-triad' on the fretboard while playing over altered harmonies, here B7alt.

**b) Sample line: ii - V7alt - I**

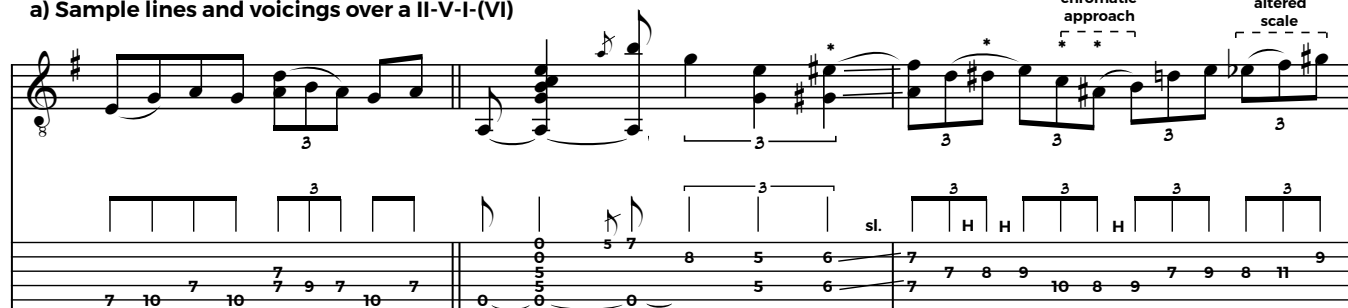
F#\_9

B <sup>7</sup><sub>ALT.</sub>/D# $E_{\Delta^9}$ 

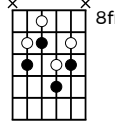
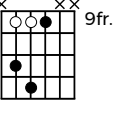
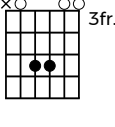
## (2) II-V-I: altered colors and chromaticism

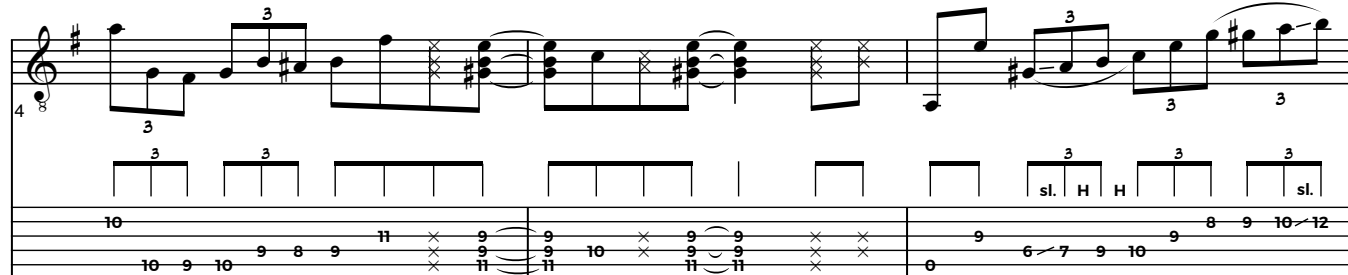
**A<sup>-9</sup>**  **D<sup>7</sup>** 

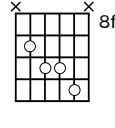
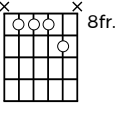
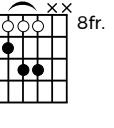
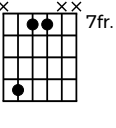
**a) Sample lines and voicings over a II-V-I-(VI)**

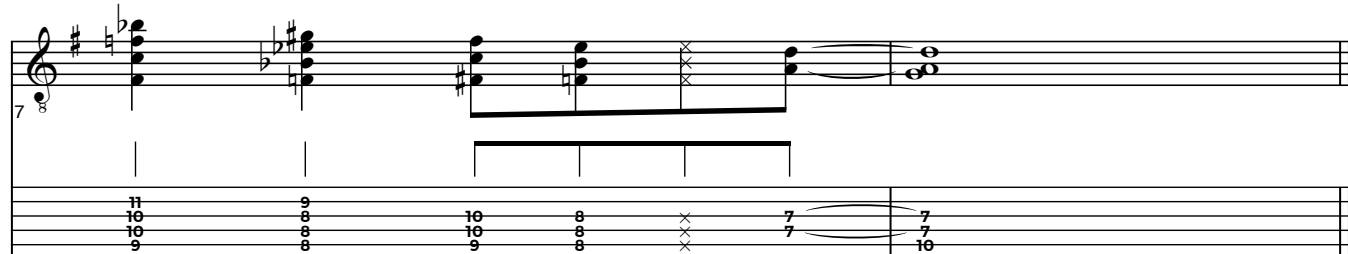


\* chromatic approach

**G<sup>Δ9</sup>**  **E<sup>7</sup>/G<sup>♯</sup>**  **A<sup>-9</sup>** 



**D<sup>7</sup>ALT.**    **G<sup>ADD9</sup>** 



## b) Chromaticism

**D7**

The non-diatonic notes from the sample line (a) add extra 'colors' by contrasting the current tonality and by creating stronger resolution tendencies. Where and how does one find these on the fretboard? There are two concepts at display how to find 'dedicated color notes' for a chord function.

The first one is rather intuitive. **Chromatic approach:** a target note (e.g. B in bar 3) on a heavy beat (e.g. 1-2-3-4) can always be approached from a half or whole-step below and above itself.

Here it is encircled by c' and a#' which happen to be both diatonic (c) and non-diatonic (a#). This concept is dubbed 'double chromatic approach' - a common technique often found in bebop improvisation.

You can always go for a less chromatic sound by opting for an a' instead of a#. Still, more important than the note choice is the rhythmic placing: rather think 'one fret below - one fret above' when approaching target notes.

Here's another sample using chromatic and double chromatic approach:

**D7**

Here's another way how the space between target notes can be filled up. The first half of the measure is almost diatonic, creating an augmented sound with the inserted g# approach note. The last three notes encircle the f# target note of GΔ. Build your own!

**D7** **GΔ**

c) D-mixolydian scale with superimposed notes from D-altered

**D<sup>7</sup>**

xx 7fr.

b9 3rd #11 b13 b7 b9

The second concept is **superimposing** notes from the respective altered scale. How to go about that in a musical way?

A good start is to establish the diatonic outline of the chord in the first half of a bar, similar to the prior exercise.

Then add notes from D-altered, they create tension and a resolving tendency towards a following harmony.

The above chord diagram 'box' shows the diatonic notes (black dots). It is a D-Mixolydian scale minus the 4.

First, play the notes in this position only. Ideally with a drone of the root (sing or loop: D) so you can both establish

1. a 'sonic imprint' of the sound and
2. muscle memory regarding to where this sound is located in this area of the fretboard.

The second step is to slowly add altered notes (white dots). Listen to how the sound differs and if you can hear the resolving tendencies towards the following chord (e.g. GΔ or G-). Looking at the diagram / fretboard you'll notice as well that the altered notes come in 'triadic shapes':

Ab triad & Eb-minor triad. When you're looking for altered sounds you can always think

1. major triad from the b5 of the chord (D - Ab: Ab c eb) -
2. minor triad from the b9 of the chord (D - Eb: Eb gb bb).

# Melodic Minor: (Re)harmonization ideas

## a) IV - I: bars 8-11 of 'Silent Night'

IV I

G IV D I

## b) IV - I reharmonized

IV

secondary dominant II7

dominant V7

1.  $G \Delta \#5$  7fr.

The IV chord already comes with a #11 (G-lydian), the added #5 is borrowed from E melodic minor, its minor parallel with a raised 6th and 7th. It is a common practice in jazz and related styles to harmonize or embellish the third of a I or IV chord with a  $\Delta \#5$  voicing.

2.  $G \frac{6}{9}$  9fr.

3.  $E \frac{13}{b9}$  9fr.

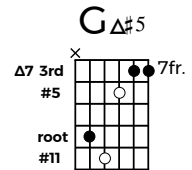
4.  $A \frac{7}{b13/9}$  5fr.

5.  $I7$   $D \text{ sus } 9$  5fr.

6.  $iV-\Delta/V$   $A \frac{7}{\text{sus } b9}$  4fr.

## Applied reharmonization concepts:

1. The 'lydian augmented' scale: using  $\Delta\#5$  voicings to harmonize the 3rd (melody note) of a I or IV harmony:



E-Dorian                      E-Melodic Minor

Where is this non-diatonic note coming from? Here's one possible approach:

The minor parallel for the IV chord (G) in the key of D major is E-minor. Since E is the second degree in D major it already comes with a raised 6th (C#) which is the #11 in the IV chord - practical! The raised 5 can be borrowed from the E-Melodic Minor scale by changing the D to a D#. The resulting voicing offers a lydian augmented color derived from the third mode of melodic minor, here: G lydian augmented.

2. & 3. Superimposed secondary dominants

secondary dominant                      dominant

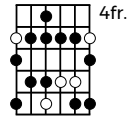
IV                      II7                      V7                      I7

$G_{6/9}$                        $E_{13\flat 9}$                        $A_{7\flat 13/9}$                        $D_{SUS^9}$

1.                      2.                      3.

#### 4. Susb9 - not your common dominant chord

A<sup>7</sup><sub>SUS</sub> b9



G melodic minor

A Dorian b9 (2nd mode of G melodic minor)

1/2

1/2

b9

6/13

3 5 6 8 5 7 4 5 7 8 5 7 5 7 8 5 6 8

# Harmonic Tonal Groups, Chords and Voicings

Before harmonizing melodies with more complex sounds, keep in mind that every sound that is part of a harmony, exists within a context. Every 'chord-tone' is part of a **melodic pathway** that at a point **converges into a harmony**. Thinking of an individually moving voice rather than a static event helps to make more conscious decisions about which chord and voicing structures to pick to harmonize a melodic line.

## Harmonic Tonal Group

Analyze the tonal interval structure of the melody. Which possible harmonic centers / keys does it imply? The tonal center determines the function / the effect each note has at a given moment. The majority of melody notes in sample 5.2a points towards the key of A.

## Chord

The term chord is the abstract definition to categorize different organization principles for sounds consisting of more than two different notes within a harmonic tonal group: triads, 7th-chords ( with/without tensions ), quartal harmony.

Triads define perceived harmonies clearly, whereas 7th-chords and quartal harmonies can offer a more open sound.

Apart from stylistic choices this should be a simple guideline when choosing and combining different chord structures.

## Voicing

The term voicing describes the categories and intervallic arrangement of chord tones added to a melody note.

E.g. a 'complete' 7th-chord sound consists of: root / 9th - 3rd - 5th - 6th / 7th.

Every chosen sound to harmonize a melody can either enforce, color or disguise a melody note, depending on the tonal relationship and intervallic distance.

**Sample 5.2a** : Tonal interval structure, in relation to chosen harmonies

Sample 5.2a shows a melody in G major (one sharp) with harmonic analysis. The melody is written on a treble clef staff. Above the staff, harmonic centers are indicated: B- (B minor), E7 (E7), and A (A major). Asterisks (\*) mark specific points in the melody. Below the staff, a series of boxes contain interval numbers: 11, 9, b7, b6, 9, 6, b9, b6, 5. A dashed line connects these boxes to the melody. Below the staff, a series of numbers (12, 9, 10, 10, 8, 7, 7, 6, 6, 6, 5, 5, 5) are written, likely representing scale degrees or intervals. The bottom staff shows a series of notes, likely representing the harmonic structure.

**Sample 5.2b** : Harmonization with 7th-chords and quartal harmonies, application of chromatic approach

Sample 5.2b shows a melody in G major with harmonic analysis. The melody is written on a treble clef staff. Above the staff, harmonic centers are indicated: B- (B minor), E7 (E7), and A (A major). Text annotations include: "Inversion of DΔ (IV sub. for II) includes 9 and chord tones of B-minor", "new tonal center Harmony: Bb add9 (I) 3 - r - 9 - 5", "new tonal center Harmony: F7 (V) 'home' key A b7 - 3 - 6 - 9". Below the staff, a series of numbers (12, 9, 10, 10, 8, 7, 7, 6, 6, 6, 5, 5, 5) are written, likely representing scale degrees or intervals. The bottom staff shows a series of notes, likely representing the harmonic structure. A dashed line connects the bottom staff to the text "Voicing category: constant structure F7 - E7" and "Voicing category: constant structure Bb add9/D - A add9/C#". The text "chromatic approach" is written below the bottom staff.



A melody note that doesn't match any available chord tones or tensions within the key, indicates a shift of the tonal center. An exception are 'avoid-notes' which resolve to a chord tone, functioning as suspended notes. E.g. a 4th during a I chord, like in 'Stella By Starlight'. It can also be harmonized with a minor iv-derived triad (Eb- / Bb) which would indicate a tonal shift. However, looking at its function and brevity, it still would rather be considered to be a reharmonization than a change of key.

**Sample 5.2c** : Stella By Starlight - 4th melody-note / I Δ harmony / harmonization ideas for 'avoid notes'

The image displays musical notation for Sample 5.2c, illustrating harmonization ideas for 'avoid notes' in 'Stella By Starlight'. The top staff shows five chord voicings with their corresponding chord symbols: Eb-/Bb, BbΔ, Eb7/Bb, BbΔ sus4, and F sus add9. Below these, two additional staves show voicings including the 4th and Δ, and voicings including the 4th and 3rd, with fingerings indicated by numbers 1-10.

**Sample 5.3a** : Harmonization with triads 'Karma Police' - Radiohead

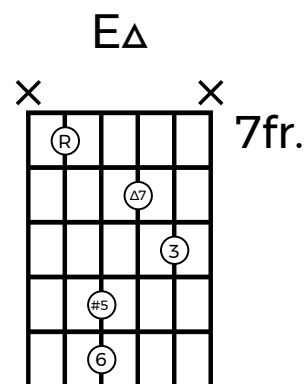
The image displays musical notation for Sample 5.3a, illustrating harmonization with triads in 'Karma Police' by Radiohead. The top staff shows a melody line with four chords: C, D, G, and F#. Below this, two additional staves show the corresponding chord voicings and fingerings, with numbers 1-10 indicating the fretboard positions.

Use inversions to create economic voice leading and harmonize a melody in one area of the fretboard. Inversions differ slightly in their intensity: the intervallic structure of the second inversion of each major, minor or diminished triad creates the most distinct sonority, independent from which register it's played in.



## 2. Inner movement: (#)5 - 6

E      Δ7      #5      6



## b) Application: IV - I

A<sub>Δ</sub>      G<sub>#-7</sub>      F<sub>#-7</sub>      E<sub>Δ</sub>

## 3. 'Gospel chords': guitar moves inspired by Spanky Alford, Isaiah Sharkey and Melanie Faye

E<sub>ADD 9</sub>      F<sub>#-9</sub>      G<sub>#ALT. 7</sub>      A<sub>Δ9</sub>

A<sub>-6</sub> A G<sup>#</sup><sub>-7</sub>

iv IV (#4) 5 iii 5 (b6)

F<sup>#</sup><sub>9</sub> B<sup>7</sup><sub>ALT.</sub>

ii V F triad / B  
b7 - b9 - #11

E A<sup>-7</sup>

I iv

E<sub>Δ</sub> D<sup>#</sup><sub>Ø7</sub> A<sub>ADD9/C#</sub> F<sup>#</sup><sub>7/A#</sub>

I vii iv (v/v)

[illegible]

## I - IV progressions w / passing chords

I A $\Delta$  IV D $\Delta$

### 1. I $\Delta$ - I $7$ - IV $\Delta$ - iV $6$

A $\Delta$  A $7$ /C $\sharp$  D $\Delta$  D $^-6$  A $\Delta$

I I $7$ /(V/IV) IV iV I

### 2. I $\Delta$ - ii $7$ - I $7$ - IV $\Delta$ - iV $6$

A $\Delta$  B $^-7$  C $\sharp$ O $7$  D $\Delta$  D $^-6$  A $\Delta^9$

ii-7 A $7$ b $9$ /C $\sharp$

### 3. I $\Delta$ - $\sharp 5$ - ii $7$ - I $7$ - IV $\Delta$ - iV $6$

A $\Delta$  B $^-7$  A $7$ /C $\sharp$  D $\Delta$  D $^-6$  A/C $\sharp$

A<sub>Δ</sub>      B<sub>-11</sub>/F<sup>♯</sup>    A<sup>13</sup>/G    D<sub>Δ</sub><sup>6/9</sup>      D<sub>-</sub><sup>6</sup>

9 10 10 12 9 12 9 10 12 10 9 11 10 9 11 9 10 9 10 10 10

A<sub>Δ</sub>/C<sup>♯</sup>

9 9 7 9

# Quartal Harmony - 'The 4th Way'

## "All Apologies"

Quartal Four Part Harmony voicings create full sounds and tensions, especially for comping or harmonizing a melody in a modal playing context.

Standard quartal four-part voicings

Standard quartal four-part voicings in B-flat major:

Chord	D-flat 7	E-flat 7	F-7	G-flat 9
Functional Harmony	V.*			I
Degrees	6, 4, 4, 4	7, 6, 6, 6	2, 8, 8, 8	11, 10, 9, 9

\* Degrees in functional harmony

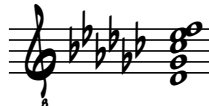
Quartal four-part voicings in B-flat major:


Chord	A-flat 7	B-flat 7	C-flat 9 (#11)	D-flat 7
Functional Harmony			IV.	
Degrees	12, 11, 11, 11	9, 9, 9, 9	11, 10, 9, 9	13, 12, 11, 11



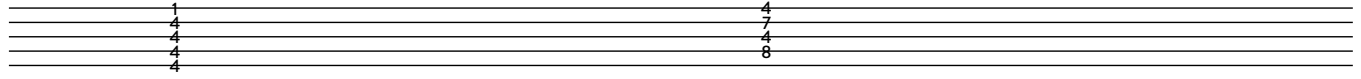


## Structure of stacked-4th voicings and derived constant structure voicings

**V**  

 4th 'block chord' + 3  
 4 categories in one  
 voicing


**II**  

 In modal playing, voicings are interchangeable .  
 This voicing is based on Ab-minor, the intervallic  
 structure features 2nds.


r - 4 - b7 - 9 - 3      13 - b7 - 4 - 5



**I**

**Constant Structure**  
 Intervallic formula\*: -----  
 "r" - (b)2 - (#)4th - (b)2


 r - 4 - b7 - 3      9th - 3 - b7 - r      r - 9 - 5 - 13



\* Intervallic formula in relation to a given  
 note from Db-Mixolydian "r"

**Ex.:** Use an intervallic formula like the one above and play the resulting constant structure voicings within a tonality.

Starting from G the same formula would yield the voicing [ G - A - D# - E ] in the key of E-Melodic-Minor.

The voicing can be used for all degrees of the melodic-minor scale.

The intervallic structure in relation to Eb7alt (VII) would be 3 - b5 - r - b9.

With the missing b7 category it is an incomplete voicing ( inc ) including two tensions.

# Voicing formulas

- 6s -

I

IV

Voicing formula, adapted for [ bII 7#11 - 1Δ ]

E9(#11)

E♭Δ

## 6. Creating Arrangements & Improvisations

A rewarding path to learn and arrange a musical idea or an entire song is to first internalize its basic structure.

This way you end up with a couple of arrangement sketches which may either lead up to a "definitive" performance or to the flexibility to play and improvise with the musical material readily available at your hands.

First learn to play a melodic musical phrase in one area of the fretboard, then find the spaces the phrase leaves to insert accompanying notes 'easily'. Easily means that the note is not too difficult to reach - consider range / fingering.

The accompaniment should complement the rhythmic structure of the melody - you don't always have to accent the first beat of a bar, at times the melody takes care of this job quite beautifully and you can insert notes where they lead directly to the next harmony. The chosen accompanying notes should help to establish the tonal center so both the defining bass note (root) and the 3rd and 7th ( guide-tone lines ) of the given harmony are good candidates. You don't always have to play these specific notes and while voice-leading is important, try to create a rhythmic-harmonic flow first.

After you've learned the basic harmonic and melodic structure of the song and you found where all the practical note options are on the fretboard you can start to adjust the voice-leading and the rhythmic structure to your liking.

This approach opens up the flexibility to play and alter the melody freely, change harmonies on the fly and to add the middle voices ad libitum. The middle voices are more likely subject to change, depending on how you intend to color the melody.

**Sample 6.1a :** The following sample illustrates this concept, applied to an improvised melody, which is harmonized with switching tonal centers and a minor iiø - V - I progression:

Establishing Tonal Center (B): Tonic - Dominant - Tonic

I V7 (Vi) bVIΔ#11

"Tonic" sound "Subdominant" Sound

Contrasting Tonal Center w / a Lydian Sound derived from the IV chord in the tonality of D-Major. This choice harmonizes non-diatonic melody notes and offers a contrasting sound which still leads to the next V harmony.

The musical notation consists of a treble clef staff and a bass clef staff. The treble staff shows a melodic line with notes circled and labeled as 'Accompanying note - root -' and 'Accompanying note - 3rd -'. The bass staff shows a bass line with notes circled and labeled as 'Accompanying note - root -'. Above the treble staff, there are labels for chords: I, V7, (Vi), and bVIΔ#11. Above the bass staff, there are labels for chords: I, V7, (Vi), and bVIΔ#11. The notation includes various musical symbols such as notes, rests, and accidentals.

Notice that in the first two bars melody and accompaniment, consisting of only two notes at a time, are sufficient to establish harmonies and to create harmonic and rhythmic movement. As opposed to playing full chords, this minimalistic approach - literally - frees up your hands and mind.

It is easier to phrase the melody differently ( e.g. more legato ) or to alter it even further.

This musical model can be used as basic outline to improvise freely with any given musical material.

For a listener's perception and interpretation of a sound, context provides most of the necessary information. Playing a root and a 9th simultaneously might have the same musical effect as playing a complete four-part voicing.

Depending on the tonal context the listener will still 'hear' a major chord which you can either enforce by later adding the defining note or contradict by playing a minor third.

**V7**  
F#7/C#

**I**  
B $\Delta^9$ /D#

Accompanying Chord  
- above melody note -

**G $\Delta^9$ (#11)**

**B $\Delta^7$**

Incomplete voicing

Chromatic approach

Chromatic approach

The musical score is written for piano and consists of three systems of music. The first system shows a V7 chord (F#7/C#) and a I chord (BΔ9/D#). The second system shows a GΔ9(#11) chord and a BΔ7 chord. The third system shows a C#7 chord and a Bb6/9 chord. The score includes various musical notations such as notes, rests, and fingerings. The GΔ9(#11) chord is marked with 'Incomplete voicing' and the BΔ7 chord is marked with 'Chromatic approach'. The C#7 chord is also marked with 'Chromatic approach'.

Bars 5-8 show the same approach with more added notes to outline the harmonic movement with different textures. The G  $\Delta^9$ (#11) harmony comes as an incomplete voicing with #4 and 5 next to each other, creating an interval of a second.

The minor ii $\Delta$ -V-I-progression is connected with a guide-tone line (7th-3rd), chromatic approach bass notes and chords.

**Ex :** Improvisation

The exercise is written in G major (one sharp). The top staff shows a melodic line with notes for BΔ (Ionian) and GΔ (Lydian) chords. Notes are labeled as root, 3rd, 5th, 7th, 3rd, root, 7th, 5th. Tensions 9 and #11 are indicated. The bottom staff shows bass lines for 'Tonic' Sound (BΔ) and 'Subdominant' Sound (bVI Δ#11) with fingerings.

Find the notes which resolve from BΔ (Ionian) to GΔ (Lydian) and back and create melodic phrases. It is advisable to start with chord tones only to really hear and establish a tonal center before adding tensions like 9 and #11. Play simple rhythmic phrases with a start and ending, so you have a musical statement that creates a clear structure which can be repeated, altered and developed.

Play the respective bass notes either simultaneously with the current melody note or insert them in between your melodic phrases. To accommodate that, alter common fingerings in a way that frees up a' finger or two'.

After you've found musical melodic lines and you're comfortable to play and alter them with added bass notes, try to add a third note to create more complete harmonies, e.g. A# in B Δ resolving to B in G Δ ( 7th-3rd ).

Melody notes with a longer rhythmic value can be accompanied by more than two notes. Try to build voicings based on the scale rather than common chord shapes ( see bar 5 ). Meanwhile, the melody note can act as a pedal point.

# Outlining Chord Progressions

Licks and riffs inspired by Bill Frisell

## 1. Minor (iiø7-V7b9) V - I idea w / open strings, harmonics and double-stops

( ii ø 7                      V 7b9 )                      V                      A

Bø7                      E7b9                      Asus                      A

Harm.                      Harm.

A7b9                      I

D

## 2. 'New York' syncopations

D                      A-7

**D<sup>7b9</sup>** **G<sup>Δ#11</sup>** **G-Δ**

8 3 3 3 5 7 8 8 7 10 11 7 7 9 7 11 11 9 10 8 11 0

**D<sup>ADD9/F#</sup>** **B<sup>9/A</sup>**

10 9 12 11 9 12 12 7 7 8 9 10 11 9 8 0 9 9 7 10

**B<sup>7ALT.</sup>** **E-11** **A<sup>13</sup>**

8 8 8 7 7 10 8 7 7 10 8 8 11 11 0



# Outlining Chord Progressions

## (2) 'Flexible Voicing Formulas'

The diagram illustrates three guitar fretboards and their corresponding musical notation and voicing formulas:

- Chord 1 (II):** A sus7/G. Fretboard shows a 2-fret voicing. Musical notation shows a standard drop 2 voicing for a dominant 7th chord in 3rd inversion. Formula: b5 - b2 - 5.
- Chord 2 (V):** D sus4 add2/A. Fretboard shows a 5-fret voicing. Musical notation shows a drop 2 voicing for a suspended 7th chord in root position. Formula: 6 - b2 - 5 - (2).
- Chord 3 (IV):** G Δ#11. Fretboard shows a 3-fret voicing. Musical notation shows a formula for a major 7th chord with a raised 4th (or b5). Formula: 6 - b2 - 4 - (b3).

This chord kit shows how standard drop-2 grips can be used as a template to come up with more colorful voicings. One way to apply (or hear) these voicings is as a (II - V) in the key of D moving to the IV chord - actually without adding any non-diatonic notes.

The only tweak to the inversion of A7 is lowering the 5th (E) one whole step. This adds the sus4 (D) to the harmony which creates a rich texture ('b2 rub') in conjunction with the still present 3rd (C#).

The Dsus4add2/A also features a dissonant b2 interval between the 3rd (F#) and 4th (G) of the harmony. The 5th (A) in the bass is a nice touch - instead of always moving from root to root in the lower register. Notice that the voicing qualifies as 'incomplete' since the b7 (C) is missing which would make this harmony a 'full-fledged' dom7 function. That works in this specific context and for musical situations where you look for colorful chords rather than for strict resolution tendencies only. It creates a more 'open', floating sound.

The IV chord is created by simply taking the voicing formula of the prior chord and reusing it from the 5th (D) of the G chord. Again, this choice was made to create a b2-tension within the voicing. Since the G is a subdominant function it comes with a raised 4th (or b5) - making it possible to have a 'sus'-type major 7 chord.

Check out if you can use these concepts and similar voicing formulas as a springboard to tweak your known chord grips!

## 6.2 Improvisation Practices: Strawberry Fields Forever

**A**  $\frac{4}{4}$  **A<sup>7</sup>**

Motive reflects the original melody: 4th/3rd

descending two-line scale

Harm. Harm. - - -

**E<sup>-9</sup>** **B<sup>b</sup><sub>Δ</sub>** \*

\*chromaticism and b6 in Δ7 harmony : a common Bebop practice

intervallic structure derived from original guitar fill, transposed. **F#<sub>Δ</sub>7** **D<sub>Δ</sub>9** **F#<sub>Δ</sub>7**

'Original melody' quote

rhythmically contrasting triplets w / sustained pedal notes

**D<sup>9</sup>(#11)** **B<sup>b7</sup>**

original guitar fill, see bar 5 -----

**A<sup>sus7</sup>** **F#<sup>sus7</sup>** **E** **E<sup>Δ</sup>**

**E<sup>7</sup>** **C#<sup>7</sup>** **F#<sup>-7</sup>** **E<sup>7</sup>**

$D_{\Delta}^9(\sharp 11)$  E

3 3 3

3 3 3

5 4 7 6 5 6 7 5 9 7 7 12 9 10 9 5 7 0

A melodic idea from original recording  $A^7/G$

Harm.

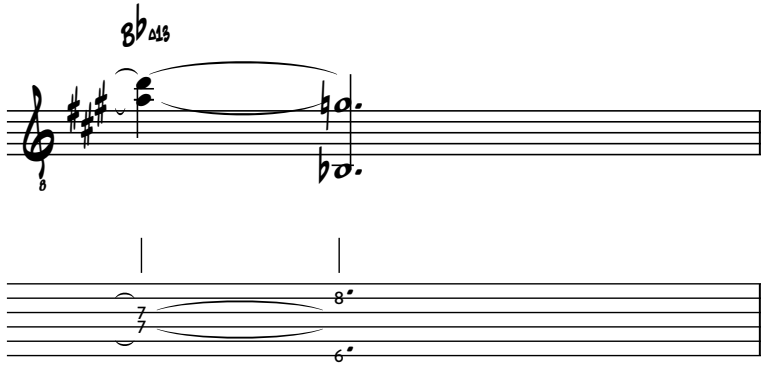
7 5 5 5 6 7 0 6 5 4 5 3 4 0 0 0

$D_{\Delta}^9$   $B_{-9}$

3

Harm. Harm. Harm.

5 4 7 6 5 7 4 5 7 9 7 9 7



### 6.3 Arrangement Ideas - Soundslice

"Self-Portrait In Three Colors" - Charles Mingus (Jazz)

"Toxic" - Britney Spears (Pop)

"Guitar Jingle" - Jan Jakut (Neosoul)

"Wouldn't It Be Nice" - The Beach Boys (Reharmonization)

# Supplement: Sonic Imprints

An ear-training exercise

□ = chromatic interval structure  
in relation to sustained note

**Chromatic Scale**, ascending semitones

**Whole Tone Scale**, descending whole tones

1 b2 ... 3 ... #5 ... 8 9 b5

— play retrograde

5 6 7 8 9 5 6 7 8 4 5 6 7 8 5 7 5 8 6 9 7 5

Here's an economic way to speed up your ears and to map the fretboard without shapes or patterns \*. It combines different ways of learning sounds (auditive, visual and tactile) to create a stable sonic imprint in your mind, whose structure you can compare and match with actual sounds you encounter. The idea is to establish your perception of both semitones / whole tones and intervals (b2 - 9) in relation to another pitch. Focus on one aspect at a time.

1. Sustain a pitch with your voice or a loop and play an ascending chromatic scale followed by a descending whole tone scale.
2. Try to anticipate the sound of each following note in your mind before playing it.
3. Follow your ears to find other possible fingerings and stringsets to play these notes on the fretboard.
4. Play only the sustained pitch and sing / imagine the sounds of the scales without your instrument.

\*Shapes and patterns are very useful when trying to play an instrument consistently :) This exercise complements your helpful knowledge of shapes and patterns.

Julian Lage - Live at National Sawdust in Brooklyn

## Study for Electric Guitar

Rubato ♩ = 110

by Julian Lage

Transcription: Jan Jakut

First system of musical notation for electric guitar, featuring a treble clef and a key signature of three sharps (F#, C#, G#). The music is in 4/4 time. The first staff shows a melodic line with triplets and a sustained note. The second staff shows a bass line with triplets and a sustained note. The system is labeled with 'E' and 'A' above the first and second measures respectively.

Second system of musical notation for electric guitar, featuring a treble clef and a key signature of three sharps (F#, C#, G#). The music is in 4/4 time. The first staff shows a melodic line with triplets and a sustained note. The second staff shows a bass line with triplets and a sustained note. The system is labeled with 'C#', 'C#', and 'D7/A' above the first, second, and third measures respectively.

Third system of musical notation for electric guitar, featuring a treble clef and a key signature of three sharps (F#, C#, G#). The music is in 4/4 time. The first staff shows a melodic line with triplets and a sustained note. The second staff shows a bass line with triplets and a sustained note. The system is labeled with 'A', 'B7', and 'E' above the first, second, and third measures respectively.

## Study for Electric Guitar

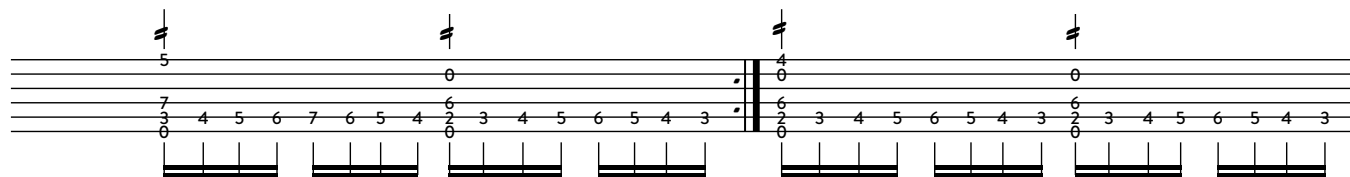
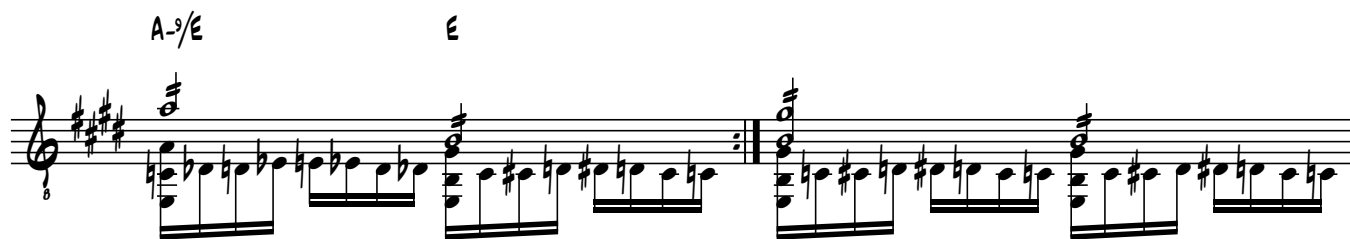
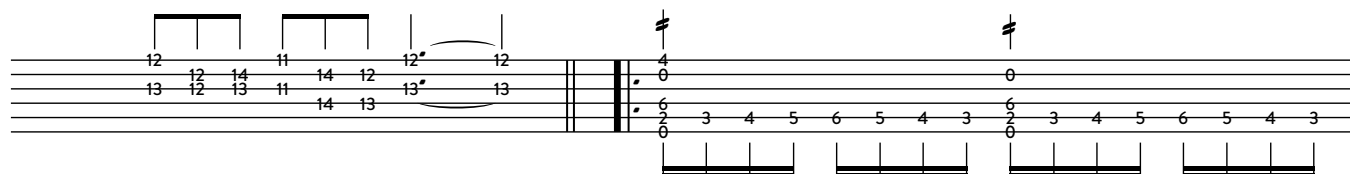
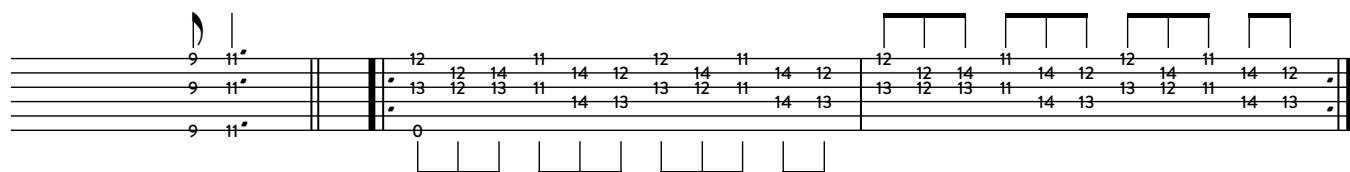


Study For Electric Guitar

E E7/G# Gb7/bb Bsus9

C#m D7 A

# Study For Electric Guitar



# Study For Electric Guitar

A<sup>9</sup>/C E A<sup>7</sup>

5 12 17 16 13 13 10 11 8 10 7 4 6 8 7

E/G# E A<sup>9</sup>/E

5 4 2 2 6 4 5 4 7 0 0 9 10 14 11 13 13 13 11 13 10 8 11

E A<sup>9</sup>/E

10 8 12 13 9 12 10 11 18 16 12 0 0 0 6 9 6 2 3 4 5 6 7 6 5 4 7 4 0 0

# Study For Electric Guitar

The first system of musical notation consists of a treble clef staff and a six-string guitar staff. The treble staff is in the key of D major (two sharps) and 4/4 time. It features a melodic line with eighth and sixteenth notes, ending with a wavy line and the word "train" written above it. The guitar staff shows a sequence of fret numbers: 13 12 10 9 9 12 10 9 11 9 10 9 10 9 7 9 7 9 7 9 5 5 5 5 4 4 4 4 4 2 6 4 2 4 6 4 6 4 4. The notation includes various fretting techniques like bends and vibrato.

The second system of musical notation continues the piece. The treble staff shows a melodic line with a wavy line and the word "train" written above it. The guitar staff shows a sequence of fret numbers: 0 0 6 3 4 5 6 5 4 3 7 4 5 6 7 6 5 4 6 10 8 8 12 10 9 12 12 11 15 21 21. The notation includes various fretting techniques like bends and vibrato.

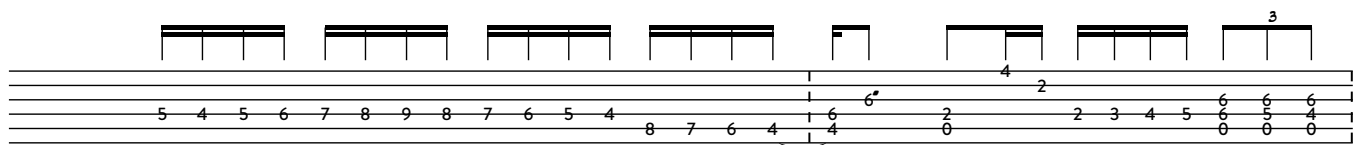
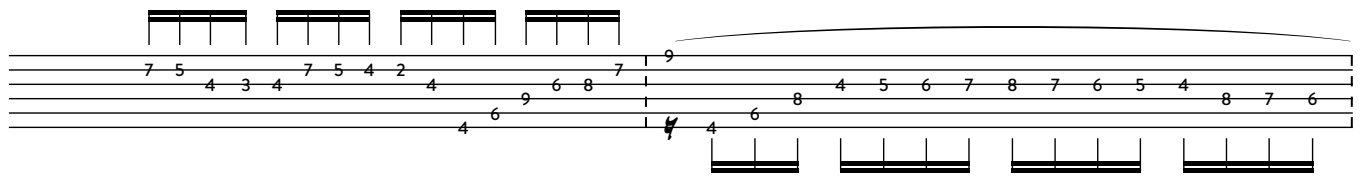
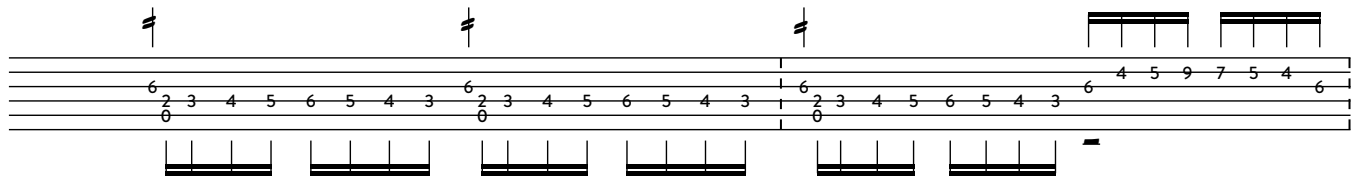
The third system of musical notation continues the piece. The treble staff shows a melodic line with a wavy line and the word "train" written above it. The guitar staff shows a sequence of fret numbers: 16 17 16 18 12 13 14 10 9 11 4 4 5 4 4 0 3 4 5 6 5 4 3 0 4 5 6 7 6 5 4. The notation includes various fretting techniques like bends and vibrato.

## Study For Electric Guitar

[illegible]

# Study For Electric Guitar

A



# Study For Electric Guitar

The Sound of Silence  
 Simon & Garfunkel  
 Guitars  
 C#

C#  
 E  
 E7/G#  
 A  
 C#  
 D7/A

# Study For Electric Guitar

Sheet music for electric guitar, featuring a key signature of three sharps (F#, C#, G#) and a 6/4 time signature. The music is divided into two systems, each with a treble and bass staff.

**System 1:**

- Measure 1:** Treble staff has a whole note chord **A** (F#, C#, G#). Bass staff has a whole note chord **A** (F#, C#, G#).
- Measure 2:** Treble staff has a whole note chord **B<sup>7</sup>** (D#, F#, A, C#). Bass staff has a whole note chord **B<sup>7</sup>** (D#, F#, A, C#).
- Measure 3:** Treble staff has a whole note chord **E** (G#, B, D#). Bass staff has a whole note chord **E** (G#, B, D#).

**System 2:**

- Measure 4:** Treble staff has a whole note chord **E<sup>7</sup>/G#** (G#, B, D#, F#). Bass staff has a whole note chord **E<sup>7</sup>/G#** (G#, B, D#, F#).
- Measure 5:** Treble staff has a whole note chord **G<sup>b7</sup>/B<sup>b</sup>** (Bb, D, F, Ab). Bass staff has a whole note chord **G<sup>b7</sup>/B<sup>b</sup>** (Bb, D, F, Ab).
- Measure 6:** Treble staff has a whole note chord **B<sup>sus9</sup>** (D#, F#, A, C#, G#). Bass staff has a whole note chord **B<sup>sus9</sup>** (D#, F#, A, C#, G#).

**System 3:**

- Measure 7:** Treble staff has a whole note chord **G#<sup>Δ</sup>** (F#, C#, G#, B). Bass staff has a whole note chord **G#<sup>Δ</sup>** (F#, C#, G#, B).
- Measure 8:** Treble staff has a whole note chord **D<sup>7</sup>/A** (F#, C#, G#, B). Bass staff has a whole note chord **D<sup>7</sup>/A** (F#, C#, G#, B).
- Measure 9:** Treble staff has a whole note chord **A** (F#, C#, G#). Bass staff has a whole note chord **A** (F#, C#, G#).

The music includes various guitar techniques such as triplets, bends, and harmonics, indicated by the notation and the "Harm." label in the second system.



# Study For Electric Guitar

A musical score for the song "The Rose Tree". The score is written for a single melodic line on a treble clef staff. The key signature is three sharps (F#, C#, G#), and the time signature is 6/4. The melody begins with a half note G4, followed by a half note A4, and then a half note B4. This is followed by a half note C5, a half note B4, and a half note A4. The melody then descends through G4, F#4, E4, D4, and C4, ending with a half note B3. The score includes a repeat sign after the first measure and a double bar line at the end. The tempo is marked "Allegretto" and the meter is "6/4".

A musical score for three voices (Soprano, Alto, Bass) and piano accompaniment. The key signature has one flat (B-flat), and the time signature is common time (C). The Soprano part consists of a single melodic line with lyrics underneath. The Alto and Bass parts provide harmonic support with chords and some moving lines. The piano accompaniment features a steady bass line and chords in the right hand. The piece concludes with a double bar line.

The first system of the musical score is written on a single staff in treble clef. The key signature has three sharps (F#, C#, G#), and the time signature is 4/4. The music begins with a repeat sign, followed by a series of eighth and sixteenth notes, and ends with a double bar line and a repeat sign.

The musical score for 'The Rose Tree' is presented on a three-staff system. The top staff is a vocal line with a treble clef and a key signature of one flat (B-flat). The melody consists of a series of eighth and sixteenth notes, with lyrics written below it. The middle staff is a piano accompaniment line with a treble clef, featuring a steady eighth-note accompaniment. The bottom staff is a piano accompaniment line with a bass clef, featuring a steady eighth-note accompaniment. The score is divided into two measures by a double bar line. The first measure contains the main melody and accompaniment, while the second measure contains a repeat of the melody and accompaniment, ending with a double bar line.

The first system of the musical score for 'The Rose Tree' is shown. It consists of two staves, labeled 12 and 13. The melody is written on staff 12, and the accompaniment is on staff 13. The key signature has one flat (B-flat), and the time signature is 4/4. The first measure of the melody is a half note G4, followed by a half note A4. The first measure of the accompaniment is a half note G3, followed by a half note A3. The system ends with a double bar line.

# Arianna Powell - 'May Irwin'

[Soundslice Link](#)

Transcription: Jan Jakut

Chords:  $E^{\Delta}$   $C\sharp-7$

Fade in

T

Chords:  $E^{\Delta}$   $C\sharp-7$

First system of musical notation. The treble clef staff is in E major (three sharps). The key signature is E major. The first measure is a whole note chord labeled  $E\sharp-7$ . The second measure is a half note chord labeled  $A^\Delta$ . The third measure is a half note chord labeled  $B$ . The fourth measure is a half note chord. The fifth measure is a half note chord. The sixth measure is a half note chord. The seventh measure is a half note chord. The eighth measure is a half note chord. The bass clef staff shows the following fret numbers: 10, 10, 9, 7, 7, 7, 9, 9, 9.

Second system of musical notation. The treble clef staff is in E major (three sharps). The key signature is E major. The first measure is a whole note chord labeled  $E^\Delta$ . The second measure is a half note chord. The third measure is a half note chord. The fourth measure is a half note chord. The fifth measure is a half note chord. The sixth measure is a half note chord. The seventh measure is a half note chord. The eighth measure is a half note chord. The bass clef staff shows the following fret numbers: 0, 4, 0, 0, 7, 4, 4, 5, 4, 7, 4, 4.

Third system of musical notation. The treble clef staff is in E major (three sharps). The key signature is E major. The first measure is a whole note chord labeled  $E^\Delta$ . The second measure is a half note chord. The third measure is a half note chord. The fourth measure is a half note chord. The fifth measure is a half note chord. The sixth measure is a half note chord. The seventh measure is a half note chord. The eighth measure is a half note chord. The bass clef staff shows the following fret numbers: 0, 2, 4, x, 0, x, x, 2, 4, 9, 9, 11, 9, 11, 9, 9.

**C<sup>6</sup>**

7 7 9 8 9 2 2 4 3 4

8 8 3

**F<sup>Δ</sup>**

0 2 5 8 10 10 12 8 8 15 14 15

1 8 15

# Melodic Ideas for Autumn Leaves

**C-7** **F7**

\* Chromatic Approach

basic chord tones:  
3rd / b7th

extensions: #9 b9 \* Chromatic Approach

**BbΔ** **EbΔ** **A87**

Passing Tone Passing Tone / #5

Incomplete voicing:  
root - 3rd - #11

basic chord tones:  
3rd / b7th

**D7** **G-9** **G7ALT**

**C-7** **F7**

**BbΔ** **EbΔ** **AΔ7**

**D7ALT** **G-6**

**A<sup>b</sup>7** **D<sup>7</sup>ALT**

17 8

13 12 11 10 13 10

11 9 10 10 8 9

**G<sup>-6</sup>** **C<sup>-7</sup>**

19 8

10 7 8 7 9 10

10 7 8 7 9 10

**F<sup>7</sup>** **G<sup>b</sup>Δ** **E<sup>b</sup>Δ**

22 8

5 7 5 6 6 8 7

7 5 8 7

7 7 8 7 6 7 8 6 8

25 8

A<sub>7</sub> D<sub>7</sub><sup>ALT</sup>

27 8

G<sub>-6</sub> F<sub>-9</sub> B<sub>7</sub><sup>ALT</sup> E<sub>b</sub><sup>9</sup> D<sub>7</sub>

30 8

C<sub>7</sub> D<sub>7</sub> G<sub>-6</sub> D<sub>7</sub><sup>ALT</sup> G<sub>-6</sub>



## Comping Concepts - Gershwin's Chords

Chord progression:  $E_{-6}$   $B^{\flat}/F^{\sharp}$   $E_{-6}$   $B^{\flat}/F^{\sharp}$

Bass line: 6, 7, 6, 8, 8, 10, 10, 8, 8, 10, 10, 7, 7, 9, 9, 9

Chord progression:  $E_{-6}$   $B^{\flat}/F^{\sharp}$   $E_{-6}$   $E^7$   $A-$   $E^{\flat 9}$   $D^9$   $A^{\flat 7}$

Bass line: 8, 6, 8, 6, 8, 6, 10, 8, 10, 8, 10, 8, 5, 6, 7, 6, 7, 5, 6, 5, 3, 5, 4, 4, 4

Harm.

Chord progression:  $G^{\Delta}$   $D^{\flat 9}$   $C^9$   $F^{\sharp 7}$   $B^7$

Bass line: 5, 4, 4, 4, 3, 0, 2, 4, 5, 6, 7, 7, 8, 8, 6

Harm. - - -

E<sup>-6</sup> E<sup>7</sup>/B E<sup>-6</sup> D<sup>-7</sup> E<sup>-11</sup>/A

9 8

E<sup>-11</sup> A<sup>-11</sup> A<sup>b7</sup> G<sup>Δ</sup> C<sup>7</sup> F<sup>#7</sup> B<sup>7</sup><sub>ALT</sub>/D<sup>#</sup>

12 8

Harm.

E<sup>-9</sup> D<sup>-6</sup> E<sup>-6</sup> B<sup>7</sup><sub>ALT</sub>/D<sup>#</sup>

15 8

$E_{-6}$   $B^{\flat}/F^{\sharp}$   $E_{-6}$   $B^{\flat}/F^{\sharp}$   $E_{-6}$   $B^{\flat}/F^{\sharp}$

17 8

8 8 10 10 8 8 10 10 8 8 10 10 8 8 10 10

9 9 11 11 9 9 11 11 9 9 11 11 9 9 11 11

7 7 9 9 7 7 9 9 7 7 9 9 7 7 9 9

$E_{-6}$   $B^{\flat}/F^{\sharp}$   $E_{-6}$   $A_{-7}$   $G$   $C^{\flat}$   $C^{\sharp}7$

20 8

8 6 8 6 8 6 10 8 8 5 3 4 5 6 7 8 8 12 11

9 9 9 9 11 9 9 5 3 4 5 6 7 7 9 10 11

7 7 7 7 9 7 7 5 3 4 5 6 7 7 9 10 11

$B^{\flat}/D^{\sharp}$   $F^{\sharp}_{ALT}/E$   $B^7$   $F^{\sharp}_{-6}$   $F^7$

23 8

7 6 7 11 10 7 9 8 7 7 11 10 9 8

6 9 7 7 7 7 7 7 7 7 7 7 7 7

6 9 7 7 7 7 7 7 7 7 7 7 7 7



# Gee Baby, Ain't I Good To You

Guitar Solo - Amos Garrett

**E = D**

from 01:11

The guitar solo is written in E major (one sharp) and 4/4 time. It consists of three systems, each with a treble clef staff and a bass staff with fret numbers.

**System 1:** The first staff begins with a key signature change from one sharp to no sharps or flats. The melody starts with a quarter note G4, followed by a quarter note F#4, and then a quarter note E4. The bass staff shows fret numbers: 1-3, 0, 0, 3, 0, 2, 3, 5, 3, 5, 7, 5, 1, 6, 7, 2, 3, 4, 7-9, 9, 9, 9, 8, 10, 7.

**System 2:** The second staff continues the melody with a quarter note D5, followed by a quarter note C#5, and then a quarter note B4. The bass staff shows fret numbers: 8, 9, 13, 15, 15, 12, 12, 10, 12, 10, 9, 10, 9, 10, 12, 9, 9, 10, 8, 11, 10, 10, 10, 8.

**System 3:** The third staff continues the melody with a quarter note A4, followed by a quarter note G4, and then a quarter note F#4. The bass staff shows fret numbers: 0, 1, 2, 3, 5, 3, 5, 7, 5, 7, 10, 3, 5, (3), 2, 1, 2, 2, 5, 4, 6, 9, 9, 10, 9, 8.

7 8

9 8

11 8

13 0

8 6 5 4 3 2 1 0 0 9 7 2 1 0 1 3 4

15 0

Hold bend

3 3 13 15 12 13 10 12 10 12 13 10 13 13 12 11 10 11 13 11 10 11 11 12

# Red River Valley - Bill Frisell (solo)

KUTX Radio - Studio 1A Sessions

Rubato

F\*

Transcription: Jan Jakut

The first system of musical notation is in 4/4 time. The treble clef staff contains a melody starting with a half note G4, followed by a quarter note A4, a quarter note B4, and a half note C5. The bass clef staff contains a bass line starting with a half note G2, followed by a quarter note F2, a quarter note E2, and a half note D2. The notation includes various fingerings and slurs.

\* Chord symbols reflect implied tonality

Harm.

The second system of musical notation continues the melody and bass line. The treble clef staff features a series of eighth notes and quarter notes. The bass clef staff includes a sequence of eighth notes and quarter notes. Chord symbols C<sup>SUS</sup>, C, C<sup>7</sup>, F, and B<sup>7</sup><sub>ALT.</sub> are placed above the staff. The notation includes various fingerings and slurs.

The third system of musical notation continues the melody and bass line. The treble clef staff features a series of eighth notes and quarter notes. The bass clef staff includes a sequence of eighth notes and quarter notes. Chord symbols B<sup>b</sup><sub>ADD9</sub>, B<sup>o</sup><sub>7</sub>, F/A, A<sup>7</sup>, G, C, and F are placed above the staff. The notation includes various fingerings and slurs.

The fourth system of musical notation continues the melody and bass line. The treble clef staff features a series of eighth notes and quarter notes. The bass clef staff includes a sequence of eighth notes and quarter notes. Chord symbols C, F, D<sup>7</sup><sub>b13</sub>, G<sup>-</sup>, and C are placed above the staff. The notation includes various fingerings and slurs.



F F<sup>+</sup>7 B<sup>b</sup><sub>Δ</sub> D<sup>7</sup> A<sup>7</sup> D<sup>7</sup>

13 8

G<sub>-</sub>7 C<sup>7</sup><sub>b9</sub> F<sup>ADD</sup>9

15 8

B<sup>b</sup> C F

18 8

G<sup>7</sup>/B B<sup>b</sup><sub>ADD</sub>9 B<sub>O</sub><sup>7</sup> A- D- G<sub>-</sub>7 F

20 8

F B<sup>b</sup> C

24<sup>8</sup>

13 9 10 12 10 12 10 10 12 10 8 10 6 5 8 6 7 10 5 5 5 8 7 5 3 1 2 3 4 5 3 5 7 8 9 1 3 4 5 3 5 6 7 8 9 10 12

F E<sup>7</sup> A<sup>5</sup> G-

26<sup>8</sup>

13 17 15 13 10 15 13 12 10 13 9 8 7 6 5 7 8 6 7 5 3 0 0 2 1 2 3

C F B<sup>b</sup> F B<sup>b</sup><sub>6</sub> F B<sup>b</sup><sub>ADD9</sub> A<sup>7</sup> D-<sup>7</sup> B<sup>b</sup>

28<sup>8</sup>

1 1 1 3 5 6 6 6 5 8 6 5 6 5 6 8 6 3 6 3 6 3 5 5 5

F D<sup>7</sup>/A G- C F B<sup>7</sup> ALT. B<sup>b</sup>

31<sup>8</sup>

5 5 5 5 8 6 5 3 3 8 6 5 5 5 8 6 6 6 8 5 8 6 7 5 4 5 5 3 5 3 8 7 7 6 6 8

E<sup>7</sup>      A<sup>-7</sup>      A<sup>7</sup>      F      C      F

34 8

Fine

