

SOLOING

There are six basic chord types. For each chord type there are applicable scales for soloing. There are 7 approaches that can be used with any scale. The idea is to mix these approaches up in various combinations. For example; a good soloist might play an ascending sequence then play a descending arpeggio and follow it with interval motion.

Not all chord progressions require a different scale selection for each chord. Simple chord progressions and static vamps can usually be tackled with one scale. Functioning chord progressions that involve changing keys do require utilization of these rules.

Chord Types and applicable scales

Minor-Minor7

- Dorian
- Aeolian (Natural Minor)
- Harmonic Minor
- Phygrian

Major-Major7

- Lydian
- Major

Unaltered Dominant

- Mixolydian
- Lydian b7 (Lydian Dominant)

Altered Dominant

- Superlocrian (altered scale)
- Diminished (1/2 step-Wholestep)
- Phygrian Dominant

Minor7b5

- Locrian
- Aeolian b5
- Locrian Natural 6

Diminished

- Diminished (wholestep-1/2 step)

Approaches

1. Choice of Scale

- approaches 2-7 are derived from the scale chosen

2. Pentatonic and Blues

- 5 & 6 note scales

3. Quadrad Arpeggios

- 4 note arpeggios

4. Triad Arpeggios

5. Interval Specific Motion

- (sequence based on one type of interval)

6. Sequences / Mixed Groupings

7. Random Nonspecific Motion

When you solo over a chord, in effect you are adding various intervals to the chords behind the lead. It all adds up to one big chord sound that varies with the notes you use in the solo. If we play a B note over an Am7 chord, we turn the big sound into an Am9, and so on. It all boils down to what intervals are being played in relation to the backing chord's root. Each interval will have its own sound and effect to it. Some work better and are safer than others. The safest intervals to play are always the intervals that the backing chord is composed of (chord tones). However, what is safe is not always interesting.

Technically speaking each chord of a progression can be thought of as a separate and individual soloing situation. Each having its own set of scale, arpeggio, etc. options. This is especially true in jazz progressions where keys change and lots of chords are used. There are several ways to approach soloing over chord changes. Not all guitarists think about constantly changing modes for each chord (Allan Holdsworth for one). Some are able to play exactly what they hear in their mind and don't need to think about scales. Others will just think one scale for the entire chord progression. I have found that for most rock progressions a single tone center can be used with variations in the modes used. For example: For the main scale used it might be E Pentatonic Minor, and over certain chords I would change to E Minor or E Pentatonic +9 etc.

Soloing Over Chord Changes

There are essentially two different soloing situations, static and functioning. Static refers to a chord vamp, riff or lick based around just one chord tone center. Static riffs don't really move through chord changes. They just repeat a one or two bar riff. An example would be the solo section of ZZTop's La Grange. In a static situation there is great freedom and responsibility for the soloist to create melodic interest. Since the chords aren't pulling the listener along the solo must. Functioning chord changes move through a progression of different chords. Blues progressions are an example. With functioning progressions there is a need to address each change with a selective choice of notes. The most basic principle behind soloing is that the notes should reflect and compliment the underlying chord changes.

The safest notes to play are always the notes of the backing chord at that moment (chord tones). It is desirable to have the first and last note of a chord change be a chord tone. The 3rd is referred to as the power tone. It's a more interesting note to start off on than the root. The 5th and 9th are good choices too. Playing chord tones for the first and last notes of a chord change add a logical intelligence to your phrasing. It helps explain the chord changes beneath.

The Principle of Similarity and the Principle of Variation play some part in what notes we play. Principle of similarity tells us that it is desirable to have consistency in our scale choices from chord to chord. Principle of Variation says that variation in scale selection is a contributing factor in creating interesting music. A balance between the two can be achieved. A scale change of no more than 1-2 notes is considered acceptable in most situations.

The other notes we would play come from whatever scale approach we choose to use. There's no hard rule that says - over a minor chord play Dorian scales etc. The scale chosen has a lot to do with the context and function of the chord: is it the V, I, or IV, what scale was used on the previous chord, does the song have a bright or dark mood etc.

Take Dm for example. In the progression Dm - C - Bb - C
Here I might prefer to play just D pentatonic minor (D F G A C) or D minor (D E F G A Bb C)
over the Dm chord.

In the progression Am - Dm - G - C
Here it may be preferable to play D Dorian (D E F# G A B C) over the Dm chord

The Single Tone Center Approach

In this approach one tone center is thought of for the whole solo. For example: if you were playing in the key of E minor you would switch between E Minor, E Dorian, E pentatonic, E blues etc. depending on what chord you were over. This may not be the purest form of musical thinking but it works pretty well.

It kinda works like this:

In Minor Keys

over Im	<i>play</i> Pentatonic Minor	Em	E Pentatonic Minor
IIIm	Dorian	F#m	E Dorian
III	Pentatonic Minor	G	E Pentatonic Minor
IVm	Minor (aeolian)	Am	E Minor (aeolian)
Vm	Pentatonic add 9, Blues	Bm	E Pentatonic add 9, Blues
V	Harmonic Minor	B	E Harmonic minor
VI	Minor (aeolian)	C	E Minor (aeolian)
VII	Dorian, Pentatonic add 9	D	E Dorian, Pentatonic add 9

This sounds alot more interesting than just playing one scale the entire solo and it's an easy way to think. These scale choices reflect the chord tones being using. Sometimes I like to start off basic with pentatonic scales and then build up the solo with minor and pentatonic add 9 etc. This has the effect of modal style soloing, but in an easier way to think about it.

For example:

To solo over: ||: Em | D | Em | D | C | C | B | B :||

Over the E | D - you could play E Pentatonic Minor

Over The C | C - play E Minor

and for the B | B - play E Harmonic Minor

In Major Keys

over I	play Pentatonic Major	E	E Pentatonic Major
IIIm	Dorian	F#m	E Dorian
IIIIm	Major	G	E Major
IV	Dorian	A	E Dorian
V	Major	B	E Major
Vm	Pentatonic Major, Dorian	Bm	E Pentatonic Major, Dorian
VIIm	Major / Relative Minor	C	E Major
VII	Pentatonic Major	D	E Pentatonic Major

This can be simplified even further in lots of soloing situations.

Say you had to solo over: ||: E | A | E | A :||: E | F#m | A | Bm :|| E | A |

Over the E | A part you could play C# Pentatonic Minor (same as E Pentatonic Major)

Then over the E | F#m | A | Bm part switch to C# Minor (same as E major)

The following pages list formulas for modal type soloing over different types of chords. In these examples the scales tone center (root) always is the same as the chord's tone center. this modal approach works best when the chords change no less than ever two measures. The menu of soloing options is broken down by scale choice. The approaches of pentatonics, arpeggios, intervals, sequences and nonspecific random motion are derived directly from the scale type chosen for the chord. Examples of sequences and random motion were left out. The possibilities are too numerous to list.

A separate section on sequences is covered in another lesson.

When all else fails:

Faked improvization

Anytime you play licks without realizing the harmonic implications and relationship of the notes to the chord changes, you are essentially faking true improvization. Don't worry, most people do it in varying degrees.

Some guidelines to help you fake better:

1. Play a bunch of notes, when you find one that sounds good play it again.
Playing chromatic passages can help hide the fact that you are lost.
2. If you hit a sour note bend it to a good one or play it several times to make it sound like you ment to create tension.
3. Play so fast that no one can tell what the hell you are playing.
4. Smash your guitar and then stage-dive into the crowd.

Formulas for soloing over Major/Major7 type chords

Lydian Approach

1. **Scale** - Lydian - mode IV of Major 1 2 3 #4 5 6 7
2. **Pentatonics** - Minor up 3rd, Minor down 1/2 step, Minor down -3(minor 3rd)
3. **Quadrads Arpeggios** - All diatonic arpeggios especially m7 up 3rd, maj7 up 5th, m7 down 1/2
4. **Triad Arpeggios** - All diatonic arpeggios especially Maj up 5th, Maj up wholestep
5. **Interval Motion** - 3rds, 4ths, 5ths, 6ths
6. **Sequences** - All diatonic sequences (Too numerous to list)
7. **Random Motion** - All diatonic motion (Diatonic means that it is derived from the notes of the scale)

Good Choices

1. **Scale** - Lydian
2. **Pentatonics** - Down 1/2 Step for jazz, Down -3 for rock/southern rock
3. **Quadrads** -Min7 down 1/2 step
4. **Triads** - Maj up wholestep
5. **Interval Motion** - 6ths

With these choices, over an AMaj7 we would play:

1. **Scale** - A Lydian = A B C# D# E F# G#
2. **Pentatonics** - G# Pent. Min. = G# B C# D# F# Or F# Pent. Min. = F# A B C# E
3. **Quadrads** - G#Min7 = G# B D# F#
4. **Triads** - B = B D# F#
5. **Interval Motion** - A to F#, B to G#, C# to A Etc.

Major Approach

1. **Scale** - Major - 1 2 3 4 5 6 7
2. **Pentatonics** - Minor up 3rd, Minor down -3 (minor 3rd)
3. **Quadrads Arpeggios** - All diatonic arpeggios especially m7 up 3rd, Maj7 up 5th, m7b5 up 5
4. **Triad Arpeggios** - All diatonic arpeggios especially Maj up 5th, Maj up wholestep
5. **Interval Motion** - 3rds, 4ths, 5ths, 6ths
6. **Sequences** - All diatonic sequences (Too numerous to list)
7. **Random Motion** - All diatonic motion (Diatonic means that it is derived from the notes of the scale)

Good Choices

1. **Scale** - Major
2. **Pentatonics** - Minor up a 3 for jazz, Down -3 for rock/southern rock
3. **Quadrads** -Min7 up 3rd
4. **Triads** - Maj up 5th
5. **Interval Motion** - 6ths

With these choices, over an AMaj7 we would play:

1. **Scale** - A Major = A B C# D E F# G#
2. **Pentatonics** - C# Pent. Min. = C# E F# G# B Or F# Pent. Min. = F# A B C# E
3. **Quadrads** - C#Min7 = C# E G# B
4. **Triads** - E = E B G#
5. **Interval Motion** - A to F#, B to G#, C# to A Etc.

Formulas for soloing over Unaltered Dominant7 type chords

Mixolydian Approach for chords like: A7, A7sus4, A9sus4, A11, G/A, A13sus4

1. **Scale** - Mixolydian - mode V of Major 1 2 3 4 5 6 b7
2. **Pentatonics** - Minor up wholestep, up 5th, up 6th
3. **Quadrads Arpeggios** - All diatonic arpeg. esp. m7 up 5th, maj7 down wholestep, maj7 up 4th
4. **Triad Arpeggios** - All diatonic arpeggios especially Maj up 4th, Maj down wholestep
5. **Interval Motion** - 3rds, 4ths, 5ths, 6ths
6. **Sequences** - All diatonic sequences (Too numerous to list)
7. **Random Motion** - All diatonic motion

Good Choices

1. **Scale** - Mixolydian
2. **Pentatonics** - Minor up wholestep
3. **Quadrads** -Maj7 up 4th
4. **Triads** - Maj up 4th
5. **Interval Motion** - 6ths

With these choices, over an A7sus4 we would play:

1. **Scale** - A Mixolydian = A B C# D E F# G
2. **Pentatonics** - B Pent. Min. = B D E F# A
3. **Quadrads** - Dmaj7 = D F# A C#
4. **Triads** - D Maj = D F# A
5. **Interval Motion** - A - F#, B - G, C# - A etc.

Lydian Dominant Approach

1. **Scale** - Lydian Dominant - 1 2 3 #4 5 6 b7
2. **Pentatonics** - Minor down a minor 3rd
3. **Quadrads Arpeggios** - All diatonic arpeg. esp. m7b5 up 3rd, m/maj7 up 5th, maj7#5 up wholestep
4. **Triad Arpeggios** - All diatonic arpeggios especially Maj from root, Maj up wholestep
5. **Interval Motion** - 3rds, 6ths
6. **Sequences** - All diatonic sequences (Too numerous to list)
7. **Random Motion** - All diatonic motion

Good Choices

1. **Scale** - Lydian Dominant
2. **Pentatonics** - Minor down minor 3rd
3. **Quadrads** - Maj7#5 down wholestep
4. **Triads** - Major up wholestep
5. **Interval Motion** - 3rds

With these choices, over an A13 we would play:

1. **Scale** - A Lydian Dominant = A B C# D# E F# G
2. **Pentatonics** - F# Pent. Min = F# A B C# E
3. **Quadrads** - G Maj7#5 = G B D# F#
4. **Triads** - B Major = B D# F#
5. **Interval Motion** - A - C#, B - D#, C# - E, etc.

Formulas for Soloing over Altered Dominants

(7b9,7#9,7b5#9,7#5b9,7#5#9,7#11,13b5)

Superlocrian Approach

1. **Scale** - Superlocrian - 1 b9 #9 3 b5 #5 b7 - mode VII of Melodic Minor
2. **Pentatonics** - Minor up minor 3rd
3. **Quadrad Arpeggios** - All diatonic arpeg. esp. m7b5 down wholestep
4. **Triad Arpeggios** - All diatonic arpeggios especially Maj up b5, Maj up #5
5. **Interval Motion** - 3rds, 6ths
6. **Sequences** - All diatonic sequences (Too numerous to list)
7. **Random Motion** - All diatonic motion

Good Choices

1. **Scale** - superlocrian
2. **Pentatonics** - Minor up minor 3rd
3. **Quadrads** - m7b5 down wholestep
4. **Triads** - Maj up #5
5. **Interval Motion** - 3rds

With these choices, over an A7#9 we would play:

1. **Scale** - A Superlocrian - ABb B# C# Eb E# G
2. **Pentatonics** - C Pentatonic Minor - C Eb F G Bb
3. **Quadrads** - Gm7b5 - G Bb Db F
4. **Triads** - F Maj triad - F A C
5. **Interval Motion** - A-C, Bb-Db, C- Eb, etc.

Other improvisational Considerations

Playing on the melody

This is a technique common among all types of players because it is basic and very accessible. A guitarist who plays off the melody recreates the verse or chorus melody and inserts fills in the gaps. Some players will just play the melody, maybe harmonized or stylized somehow. Another way to play off the melody is to play the melody for a few measures then totally improvise over an area the melody actually occupies.

Double Stop Riffs

This is a technique of self-harmonization. Instead of playing phrases with single notes you will use combinations of 2 notes. 4ths and 3rds are most commonly used. 5ths and 6ths can also be used. Jimi Hendrix is considered a master of this technique.

Repeating the Phrase in Octaves

This technique can make a phrase stand out in a solo. Instead of repeating the same lick, it is repeated up or down an octave.
