

## Melodic content using permutations.

In this column I am going to look at how to improvise using permutations of arpeggio notes on the fretboard. A few issues back I did a column on scale tone arpeggios, I will use some of the patterns featured in that article to demonstrate how you can develop your improvising skills. A common question asked about improvising on the guitar is 'how do I solo not using licks?'. A lick is a grouping of notes in a specific rhythm that has been composed to work over a chord or chord progression. Every guitarist who improvises has a certain amount of licks in their bag. The other ability a good improviser has is to hear and react to what they are playing as they are creating it. Composing on the fly, what note you play now will effect your next note choice.

A simple way to develop this skill is in practice, to restrict yourself with the amount of notes you have to begin with. The examples I will look at in this column will be over a F major chord with the note choices for improvising coming from the F major scale. If we have a four note arpeggio outlining the basic chord, we have twenty-four possible permutations of those four notes. Below are the twenty-four permutations of a major 7th arpeggio in numerical analysis.

### F major 7th F/1 - A/3 - C/5 - E/7

1 3 5 7	3 1 5 7	5 1 3 7	7 1 3 5
1 3 7 5	3 1 7 5	5 1 7 3	7 1 5 3
1 5 3 7	3 5 1 7	5 3 1 7	7 3 1 5
1 5 7 3	3 5 7 1	5 3 7 1	7 3 5 1
1 7 3 5	3 7 1 5	5 7 1 3	7 5 1 3
1 7 5 3	3 7 5 1	5 7 3 1	7 b 3 1

Within one fretboard position and one shape, practice playing through different permutations of a F major 7th chord without repeating a previous permutation. Play one permutation four times before moving to the next to get the sound of it into your head. This is the first step in training your ear to all the possibilities of melodic content that can be found within a certain chord. The more you drill the different sounds that can be found within these arpeggios the more likely these sounds will start to come out when you solo. Take the above permutations through scale tone arpeggios adjusting the degrees appropriately i.e. b3 and b7 for minor chords, b7 on dominant chords and so on. I have added a line that incorporates this.

Try adding the extensions to a four note arpeggio and trying all the permutations. The four note arpeggio followed by the permutations of the three note extensions. Below are all the permutations of the extensions from a C major 7th C/1 - E/3 - G/5 - B/7.

### Extensions D/9 - F#/#11 - A13.

9 #11 13	9 13 #11
#11 9 13	#11 13 9
13 9 #11	13 #11 9

Combining the extensions with the arpeggios and exploring all the possible combinations of permutations will give you massive amount of melodic content to start incorporating in your playing.

1 2 3  
 4/4 4/4 4/4  
 F Maj7 Amin7 Emin7b5 Gmin7 FMaj7 Amin7  
 TAB 4/4 4/4 4/4  
 3 2 1 0 1 2 0 3 3 0 3 2 3 0 3 3 2 1 0 3 2 1 0 3