

Triadic Inversions with Lucas Michailidis (As featured on: www.digitalpill.tv)

The term triad corresponds to a three - note chord built from the root, third and fifth degree of a scale. Whilst there are, generally speaking, only four types of triad available: major, minor, diminished and augmented, triads constitute the foundation of the majority of music we are exposed to, from the simplest to most complex.

Each triad is in possession of a formula that provides it with a distinct and unique identity: major: (1 3 5), minor (1b3 5), diminished (1b3 b5), augmented (1 3 # 5). Referring to a major scale and altering notes accordingly will generate this formula.

Let's commence by considering the C major scale:

C(1) D(2) E(3) F(4) G(5) A(6) B(7) C(8)

The numbers in parenthesis represent s each note's accompanying scale degree.

Taking only the 1st, 3rd and 5th degree of this scale will generate the notes (C E G) and will correspond accordingly with our major triad formula. Flattening the 3rd degree of this triad i.e. E to E_b will result in a minor triad (C E_b G). Proceeding to take the minor triad and flattening the 5th degree i.e. G to G_b will generate the diminished triad (C E_b G_b). Finally, raising the 5th degree of the major triad i.e. G to G# will result in the augmented triad (C E G#).

Triads are found in three permutations that are otherwise known as inversions. The term inversion refer to which note of the triad occupies the lowest position of the chord. For example, root position consists of the root in the lowest position, first inversion consists of the 3rd, while second inversion consists of the 5th degree.

The following examples offer a comprehensive approach to the playing of all triads in C: major, minor, diminished and augmented. These are played in three positions starting from each inversion: root, 1st and 2nd. They should be memorised thoroughly, ensuring that the unique sound of each can be recognised and discerned clearly (singing along will do the trick).

Triads commencing from root position

C Major

The image shows musical notation for C Major triads in root position, first inversion, and second inversion. The notation is presented in a 4/4 time signature. The top staff shows the triads in root position, first inversion, and second inversion. The bottom staff shows the corresponding guitar fretboard diagrams for each triad in root position, first inversion, and second inversion. The fretboard diagrams are labeled T (Tuning), A (Action), and B (Bass).

Triad	Root Position	1st Inversion	2nd Inversion
Tuning	4	5	5
Action	5	5	5
Bass	7	7	7

C Minor

T 3 4 3
A 5 5 5
B 6 6 5

C Diminished

T 4 4 2
A 5 5 4
B 6 6 4

C Augmented

T 4 5 4
A 5 5 5
B 7 7 6

Triads commencing from the first inversion

C Major

T 8 8 8
A 9 9 9
B 10 10 10

C Minor

T 8 8 8 8
 A 10 10 10 8 8 8 10 10 10
 B 10 10 10 8 10 10 10 10 11

C Diminished

T 8 7 8 8
 A 10 10 10 8 8 8 10 10 10
 B 9 9 9 8 8 8 9 9 11

C Augmented

T 9 9 9 9
 A 10 10 10 9 9 9 10 10 10
 B 11 11 11 9 10 11 11 11 12

Triads commencing from the second inversion

C Major

T 12 12 12 12
 A 14 14 14 12 13 13 12 12 12
 B 15 15 15 12 13 13 14 14 15

C Minor

Musical notation for C Minor triad and bass line. The treble clef shows the triad notes: C3, Eb3, G3. The bass line shows the following fret numbers for strings T, A, B: (11, 12, 15), (11, 13, 15), (11, 12, 13), (11, 13, 12), (11, 13, 12), (11, 13, 15), (11, 13, 15).

C Diminished

Musical notation for C Diminished triad and bass line. The treble clef shows the triad notes: C3, Eb3, Gb3. The bass line shows the following fret numbers for strings T, A, B: (11, 13, 15), (11, 13, 15), (11, 13, 13), (11, 13, 13), (11, 13, 13), (11, 13, 13), (11, 13, 13), (11, 13, 14).

C Augmented

Musical notation for C Augmented triad and bass line. The treble clef shows the triad notes: C3, Eb3, G#3. The bass line shows the following fret numbers for strings T, A, B: (12, 13, 15), (12, 13, 15), (12, 13, 14), (12, 13, 13), (12, 13, 13), (12, 13, 14), (12, 13, 15), (12, 13, 16).

The world of triadic harmony opens up considerably when triads are superimposed over chords derived from alternative root notes. For example, if we were to take a simple I IV V chord progression in the key of D - D, G, A, the obvious triadic choices are major, from the root of each chord. Less obvious is the fact that there exists a range of possibilities that will generate extensions and alternative colors.

Our final example retains this I IV V progression yet manages to utilise a different triad type over each bar (here a bass player is handy). Commencing this progression with a bar of D major triad, we proceed to the second bar introducing the F# Diminished triad (F# A C). The C note in this triad turns the D chord of bar 2 into a D7th, thus creating a strong tendency to resolve to G (bar 3). Instead of

opting for a straight G major triad on bar 3, let's substitute an E minor triad (E G B). The addition of the E note creates the favourable sound of a G Maj 6th chord. Finally the role of the A chord in bar 4 is to act as the dominant of D. Playing an A Augmented triad over this final bar provides us with the sharpened 5th of the chord and thus creates a strong tension that inevitably resolves nicely back to D.

Triads: D Major F# Diminished (D7) E Minor (G6) A Augmented

Once we have acquired a mastery of the above, we can proceed to apply these substitutions to all starting positions (remember that triads exist in three inversions). Of course triads can be also played as chords, single notes and double - stops thus making them a valuable asset for in our bag of comping and improvisational tools.

Further articles are available from the website: www.lucasmichailidis.com

Hope you enjoy,

Lucas Michailidis