

# Implied Metric Modulation

## A “multiverse” of groove

By Jason Lee Bruns

**T**he concept I like to call *Implied Metric Modulation* (maybe somebody else has coined this term already?) is basically a groove at a different pace within a groove. This is not a metric modulation in the traditional sense because there is no complete transition to the implied groove since a reference to the original groove is simultaneously maintained. It’s fun to think of this as a rhythmic metaphor for the sci-fi paradigm of a “multiverse” or “parallel universe.” The harmonic equivalent of this could be implying other keys via mode mixture and secondary dominant chords without actually modulating to the implied key, or playing “outside” for a melodic soloist.

Metric modulations are commonly (but not only) implemented using a hemiola-type rhythm that oftentimes, when continued, do not round out after one measure and go over the barline. A good example is a repeated dotted eighth-note morphing into the new quarter-note pulse (indicated as “dotted-eighth = quarter”). Many other examples are just as effective, but for the sake of efficiency and eventually getting to the larger point of the method, let’s move on.

My intrigue with Implied Metric Modulation is in the realm of triplet-based grooves such as shuffles, swings, and 12/8 Afro-Cuban feels. Because of this I have spent time thinking about ways to imply modulations in these feels using the half-note-triplet, which, as will hopefully be demonstrated, is a very useful and effective subdivision for creating this effect.

It is important to note that, when experimenting with these, do not do so at the expense of the music; especially if you are playing with a band and/or doing session work. However, for your own practice room indulgence, and maybe your advanced students, this can be an intriguing exploration. At the least, side benefits could include a stronger sense of rhythmic understanding, better time-keeping, and new creative tools.

Speaking of students, I’d like to first give a shout-out to my students who inspired me to develop a method for teaching this concept (you know who you are!), and to all of the teachers who put in extra care and preparations for making things more accessible for their students to grasp.

### PREREQUISITE

To begin, it is helpful (but not required) to understand the three-over-four (3:4) polyrhythm, as this will be the basis for the following type of Implied Metric Modulation. Below is this polyrhythm written in a triple-based feel (eighth triplets) in 4/4. The ride part is in “four” and the kick drum part is in “three.”

Now we will extract the kick drum part (the “three side”) from the above polyrhythm as the framework for the implied modulation by alternating these resulting half-note-triplets between kick/snare – effectively creating an implied backbeat groove. The counts above show where the beats line up in this implied modulation. As a reference point to the original feel, the ride will play quarter-notes (the “four side”). It will take four measures for the pattern to resolve (or three measures of the implied groove).

Note: To help visually account for every single triplet, I've purposefully written the patterns out using only eighth-note notation instead of grouping values together into larger subdivisions.

The image shows two staves of music. Each staff contains two measures of music. The notation uses eighth notes and triplet markings (a '3' over a bracketed group of notes). Below each staff is a sequence of vocalizations in parentheses: 1 (AH) (DA) (2) AH (DA) (3) (AH) DA (4) (AH) (DA). The first staff's sequence is: 1 (AH) (DA) (2) AH (DA) (3) (AH) DA (4) (AH) (DA) 1 (AH) (DA) (2) AH (DA) (3) (AH) DA (4) (AH) (DA). The second staff's sequence is: 1 (AH) (DA) (2) AH (DA) (3) (AH) DA (4) (AH) (DA) 1 (AH) (DA) (2) AH (DA) (3) (AH) DA (4) (AH) (DA).

The above modulation effectively creates the illusion of this simple “backbeat” pattern:

The image shows a single staff of music with four measures. The first measure has a single eighth note. The second measure has a triplet of eighth notes. The third measure has a single eighth note. The fourth measure has a triplet of eighth notes. Above the staff are the numbers 1, 2, 3, and 4, each positioned above its respective measure.

### PATTERN 1 (simple “rock” groove)

To make the backbeat groove more persuasive we can add a simple variation to one of the strong beats of the implied groove as follows. For now, the ride pattern will remain as before (on the downbeats of the un-modulated time feel).

The image shows two staves of music. Each staff contains two measures of music. The notation uses eighth notes and triplet markings. Below each staff is a sequence of vocalizations in parentheses: 1 (2) AH (3) DA (4) AH. The first staff's sequence is: 1 (2) AH (3) DA (4) AH 1 (2) AH (3) DA (4). The second staff's sequence is: 1 DA (2) AH (3) DA (4) 1 (2) AH 3 DA (4).

The above modulation effectively creates the illusion of this simple “rock” pattern:

The image shows a single staff of music with four measures. The first measure has a single eighth note. The second measure has a triplet of eighth notes. The third measure has a single eighth note. The fourth measure has a triplet of eighth notes. Above the staff are the numbers 1, 2, 3, and 4, each positioned above its respective measure. A plus sign (+) is placed above the third measure.

In triplet-based grooves, the following are transcriptions of the composite rhythm that this particular implied “rock” pattern reveals within the shuffle, swing, and Afro-Cuban ride (bell) feels.

Application 1: “Shuffle” ride pattern

Application 2: “Swing” ride pattern

Application 3: 12/8 Afro-Cuban (or “Bembe”) ride (bell) pattern. (I purposely did not write this application in 12/8 to keep consistent with any learning connections that are hopefully being made from the prior applications.)

Variations to the kick drum pattern (or snare, for that matter) can be as simple as thinking of each eighth-note triplet from the implied groove as sixteenth notes from what would be the modulated groove. To make this clearer, I have written the counts from what would be sixteenth notes in each variation underneath the implied eighth-note triplet groove . (If this doesn't makes sense right away don't worry.

Two staves of musical notation in 4/4 time. The first staff contains two measures of a triplet-based groove. The first measure has a triplet of eighth notes (1, 2, 3) followed by a quarter note (4). The second measure has a quarter note (1), a triplet of eighth notes (2, 3, 4), and a quarter note (A). The second staff contains two measures of a more funky 'rock' pattern. The first measure has a quarter note (3), a triplet of eighth notes (E, A, 4), and a quarter note (A). The second measure has a quarter note (1), a triplet of eighth notes (E, A, 2), a quarter note (3), and a quarter note (4). Above the notes are triplet markings (three lines with a '3' above them). Below the notes are the corresponding rhythmic values: (1 E + A 2 E + A 3 E + A 4 E + A) (1 E + A 2 E + A 3 E + A 4 E + A).

The above modulation effectively creates the illusion of this more funky “rock” pattern:

A single staff of musical notation in 4/4 time. It shows a sequence of four notes: a quarter note (1), a quarter note (2), a quarter note (A), and a quarter note (3). Above the notes are triplet markings (three lines with a '3' above them). Below the notes are the corresponding rhythmic values: 1 2 A 3 + 4. The notes are connected by a horizontal line, indicating a continuous pattern.

Instead of writing out the composite rhythms for these variations (as I have done with applications 1, 2, and 3 previously shown) I instead suggest it is *much* easier to play the ride/hi-hat foot patterns of the triplet-based groove applications (e.g., shuffle, swing, Afro-Cuban ride patterns) while reading the notated variations on the kick/snare. This would be similar to how playing various grooves while reading lines from Ted Reed’s book *Syncopation* is accomplished. (If you have not done this yet, I suggest pausing this article and getting that book.) And similarly to how Gary Chester’s innovative book, *The New Breed*, does with his “melody/system” method. (Get this book too while you’re at it.)

#### Variation 2

Two staves of musical notation in 4/4 time. The first staff contains two measures of a triplet-based groove. The first measure has a triplet of eighth notes (1, 2, 3) followed by a quarter note (4). The second measure has a quarter note (1), a triplet of eighth notes (2, 3, 4), and a quarter note (A). The second staff contains two measures of a more funky 'rock' pattern. The first measure has a quarter note (3), a triplet of eighth notes (E, A, 4), and a quarter note (A). The second measure has a quarter note (1), a triplet of eighth notes (E, A, 2), a quarter note (3), and a quarter note (4). Above the notes are triplet markings (three lines with a '3' above them). Below the notes are the corresponding rhythmic values: (1 E + A 2 E + A 3 E + A 4 E + A) (1 E + A 2 E + A 3 E + A 4 E + A).

### Variation 3

The image displays three staves of musical notation for Variation 3. The notation is written on a single-line staff with a treble clef and a key signature of one flat (B-flat). The rhythm is based on eighth and sixteenth notes, with various triplet and syncopated patterns. Fingerings are indicated by numbers 1-4 and accents. The notation is as follows:

Staff 1: (1 E + A 2 E + A 3 E + A 4 E + A) (1 E + A 2 E + A

Staff 2: 3 E + A 4 E + A) (1 E + A 2 E + A 3 E + A 4 E + A)

Staff 3: 1 A (2) + 3 4 A

### CONCLUSION

I hope you found this method of Implied Metric Modulation and its application examples useful and inspiring – and perhaps with a challenging dose of frustration and musical growth as well. I know it was a fun challenge for me to explain. Happy rhythmic exploring!

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