

Rhythmic Studies
for All Instruments
Volume 1

by
Tony Moreno



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Foreward

As music evolves, so do the techniques, mechanics and esthetics that musicians use change and develop to express their new approaches to melody, harmony and rhythm. Improvising musicians have been creating and performing music for thousands of years; as musicians who have studied jazz for a number of years can attest, this art form, by its very nature, will continue to evolve. And like all musicians, we draw much of our inspiration through studying the performances of all the great artists throughout the history of our music.

With the continued development of melody, form and harmony, so has rhythm grown to encompass the concepts of many musicians that are introducing challenging new ideas based on meter and form. Since the introduction of African, Afro-Cuban, Indian, South Pacific and Asian music into American culture, musicians have used these influences in both their compositions and improvising.

By applying some of these ideas over standard forms, such as the blues, we can gain an understanding of how these concepts can be applied to many different musical genres. But the idea for many of these exercises is to gain more control over the basic quarter note, of pulse and of form.

These exercises are also meant to be played with other musicians; they are not just solo studies. The best way to learn these concepts is to work in any musical setting you can organize, be it duo, trio or quartet. Often you may want to rehearse in a group setting with a metronome running to help guide the musicians. Once you and your bandmates develop these ideas, begin writing and performing your own compositions and formulating your own ideas.

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Counting and Clapping

One of the most efficient ways for developing a sense of rhythmic articulation is through the process of counting out loud and clapping. This is best done with a metronome when practicing alone, or in conjunction with another musician. By counting out loud and vocalizing one rhythm while clapping another component of the phrase, we become aware of pulse on an internal level. Rhythm can appear as a three dimensional grid, with different transparencies showing all the interlocking grids of one pattern over another. We can begin to feel rhythm as a dance, albeit a very precise and calibrated structure on which to build variations. Our wish is to create organic phrases that move fluidly, using space and creating drama. When practicing these exercises, always choose tempos that allow you to comfortably hear the patterns. When having difficulty with a particular exercise, it's best to stop and begin reducing the velocity (bpm) until you are able to hear and execute the exercise properly. It is important to keep this in mind when working on new musical ideas: continue slowing down the tempo on the metronome until you can play the beginning measure(s) correctly. Although the mechanics of your performance may seem rigid at these tempos, you must at least "hear" the basic principle before moving forward. And even at these slow tempos, you should continue to strive for musicality, phrasing and articulation.

We will begin by applying a counting system first, and later substitute melody and form as our internal clave. In the same way that drummers would start to work on these exercises within a simple, time-keeping context, rhythm section instrumentalists would begin by comping and counting out loud (with a metronome). We need to hear the original harmonic rhythm and form, as well as altered variations or superimpositions, simultaneously. We begin by understanding these principles as supportive players, dealing with these concepts as accompanists thereby fulfilling and deepening our roles as members of the rhythm section. Once this is accomplished, we have the template for developing our linear (soloing) ideas within this new vocabulary.

It's best to start by using the metronome while counting out loud and clapping the rhythms. When working on a specific rhythmic grouping (such as half note triplets), switch every 4 bars between your original or base meter (the metronome marking every quarter note in 4/4) which you are counting out loud: "1 and 2 and 3 and 4 and" while simultaneously clapping the grouping. It often helps to reinforce the base meter by tapping your foot on each downbeat. You get the 3:4 feeling running through your limbs and voice, similar to how drummers are able to mark time and tempo using a combination of all four limbs. After four bars, you would slightly reverse the process, and count the groupings out loud while clapping and tapping the base meter (4/4). In addition, I've always recommended using your laptop to create your own metronome, click track, sequence, whatever; we have to often think outside the box, so any sequencing software will help you to create your own study loops. But even using the standard metronome, we can assign that instead of representing our base rhythm (quarter notes in 4/4), the metronome is actually counting half note triplets. It then becomes a matter of perception of what we want the metronome to count for us. It can be much more than an eighth or quarter note.

If the base rhythm is 4/4, there are a variety of ways you should practice counting out loud: 1) Counting only the downbeats: 1 2 3 4; 2) Counting the downbeats with eighth note subdivisions: "1 and 2 and 3 and 4 and" 3) Counting the downbeats with eighth note subdivisions and bar numbers: "1 and 2 and 3 and 4 and 2 and 2 and 3 and 4 and 3 and 2 and 3 and 4 and 4 and 2 and 3 and 4 and". Later, you will have to alter the subdivisions based on your quarter note depending on what type of subdivision or grouping you are working on. If you are working on triplet based subdivisions, you have the following options: 1) Counting only the downbeats: 1 2 3 4; 2) Counting the downbeats with triplet subdivisions: 1-trip-let 2-trip-let 3-trip-let 4-trip-let 3) Counting the downbeats with triplet subdivisions and bar numbers: "1-trip-let 2-trip-let 3-trip-let 4-trip-let 2-trip-let 2-trip-let 3-trip-let 4-trip-let 3-trip-let 2-trip-let 3-trip-let 4-trip-let 4-trip-let 2-trip-let 3-trip-let 4-trip-let". This process would logically continue to 16th note subdivisions, then quintuplets (on the 16th note level), sextuplets (on the 16th note level), septuplets (on the 16th note level), 8 32nd notes, etc.

When counting out loud, we tend to use numbers as our principal means for keeping track of the meter, for hearing the subdivisions, for counting bars when playing a specific form or for trading with the drummer. Of course, there are many systems for counting throughout the world. And they should be explored and incorporated into your practicing regimen. The syllabic systems used throughout the Indian subcontinent, Africa, the Middle East and the South Pacific are highly developed and are easily adaptable to our numerical counting systems. There are a number of books available on this subject, and many are available through the internet. Todd Isler's "Ta Ka Di Mi This" is one of the clearest, thoughtfully written on the South Indian syllabic system. "Ancient Traditions-Future Possibilities" by Matthew Montfort is also beautifully written, and includes chapters on Indian, Balinese and West African rhythms. There are also a number of doctoral studies available through various universities or smaller, independent publishers. Of course, when studying these musical arts there is no substitute for private study with a master musician and teacher who can guide the student properly. Additionally, there are books written primarily with the drummer in mind, but which are very good for rhythmic sight reading and analysis. Although some are written as etudes for snare drum, and others with the drum set as the medium, you will find a great deal of musical information that is very useful and inspiring. Bob Moses: "Drum Wisdom"; Bruce Arnold: "Odd Meters", "The Big Metronome" and "Doin' Time with the Blues"; George Marsh: "Inner Drumming"; anything by Pete Magadini; Miles Okazaki: "Rhythm Matrix"; all the Gary Chaffee books (three volumes); Gary Rosensweig: "Advanced Rhythms" book #6; Anthony Cirone: "Portraits in Rhythm" and all books by Gavin Harrison.

In our first exercise, we have the melody of Charlie Parker's "Blues for Alice" written on the top ledger line. Below are eighth notes grouped in threes. You will notice that we have a three bar loop of these eighth note groupings; the downbeats of both our original meter and our new grouping lock together every three bars. This is also displayed on the bottom ledger line as dotted quarter notes (you can also think of them as the downbeat of every 3/8 grouping). Over these dotted quarter notes are the chords from the tune but if played as written would create a new harmonic rhythm stretched over the bar lines. The chords are still in their original place, but the value of our new quarter note creates the illusion that the tempo is slowing up very slightly. In addition, our three eighth note groupings begin to sound like triplets in this new feel. You might want to begin by working only with the metronome: set the metronome to 80 bpm in 4/4 and count all the eighth notes: "1 and 2 and 3 and 4 and" while clapping the dotted quarter notes over our 3 bar loop. Then clap quarter notes only (with the metronome at the same setting) while counting the eighth notes "123,123,123, 123". Next, set the metronome to 50 bpm, but now the click is our dotted quarter. Now count our original quarter notes in 4/4 (with eighth notes) over the dotted quarter of the metronome. You may want to count a three bar cycle before beginning to lock up both downbeats. After the properties of these two rhythmic lines have been internalized, we want to add the melody to our new subdivision. With the metronome set at 80 bpm, loop and sing the first three measures of the melody while clapping dotted quarter notes. You may need to straighten out the eighth notes (less of a swing feel) to do this. Later, you will be able to add more of a swing feel by accenting and slightly delaying the second eighth note (the upbeat). But since our three eighth note groupings sound like triplets, you can also add a "rest" on the middle eighth note triplet to strengthen the swing feel with the dotted quarter notes. Once you have the first three measures cycling easily with your singing and clapping, move on to the next three measures of the melody and loop those. Then you'll paste the first six measures together and loop them. Continue this process through the whole form. Once this process becomes clear through singing, counting and clapping, substitute your instrument in place of your voice and repeat the steps above.

I've mentioned how laptops can help us work on rhythmic concepts. In this exercise, you can record the melody with a click. Loop it and alternate choruses between comping in 4/4 and comping with the dotted quarter note subdivision. Next, you could record yourself comping the dotted quarter notes and alternate choruses as above. In both cases, you'll have a chorus where you're locked up, and a chorus where you are juxtaposing one rhythm over another. Again, it should be stressed that we're looking at this idea from the perspective of accompaniment, not as linear solo phrasing, but through comping as part of the rhythm section. We will look at linear applications later on in the book.

A very important rhythmic tool is designating a downbeat every fixed number of bars. In your sequence software, send a click every 2 bars, every 4 bars, every 8 bars, every 12 bars, every 16 bars, every 32 bars.....Please refer to Bruce Arnold's "Doing Time" series and "Big Metronome."

Dotted Quarter Note Transposition of Harmonic Rhythm in Blues For Alice

The first system of musical notation consists of three staves. The top staff is in treble clef with a key signature of one flat (Bb) and a common time signature (C). It contains a melody with eighth and sixteenth notes, including a triplet of eighth notes in the fourth measure. The middle staff is in bass clef and contains a continuous eighth-note accompaniment pattern. The bottom staff is in bass clef and contains a dotted quarter-note bass line. Chord symbols are written below the middle staff: FMA7, E-7b5 A7b9, D-7 G7, C-7, and F7.

The second system of musical notation consists of three staves. The top staff continues the melody from the first system. The middle staff continues the eighth-note accompaniment pattern. The bottom staff continues the dotted quarter-note bass line. Chord symbols are written below the middle staff: Bb7, Bb-7 Eb7, A-7, D7, Ab-7, and Db7.

The third system of musical notation consists of three staves. The top staff continues the melody, ending with a quarter rest in the fourth measure. The middle staff continues the eighth-note accompaniment pattern. The bottom staff continues the dotted quarter-note bass line. Chord symbols are written below the middle staff: G-7, C7, F, D-7, G-7, and C7.

3 Bar Cycles of Dotted Quarter Notes Grouped as 2 New Measures

This example shows our three bar cycle of dotted quarter notes grouped in 4 as two “new” measures of 4/4 over three of our original pulse. Therefore, we would have eight measures of our new 4/4 over twelve bars of the original form. I have also indicated with accents over beat 1 of measures #1, #4, #7 and #10 the clave or anchor points (thanks Bob!) for our three bar dotted quarter note cycle. It is a good idea of being aware of where different cycles line up depending on the form you’re working with. In this case, over a blues form, our locking up points occur in the same places, chorus after chorus. In the case of a 32 bar A-A-B-A form, our cycle would need 24 measures (2 x 12 measures) to lock in to our original beat 1 in the first measure. In other words, both rhythmic lines would converge on the downbeat of measure #25 (the last A section). For the student practicing the exercise at this level, it is recommended to develop both comping and linear phrasing within the dotted quarter note cycle, and round out the last 8 measures of the form by returning to the original 4/4 quarter note. Of course, the next step would be to continue the dotted quarter note phrasing grouped in 4 (our new 4/4) through multiple choruses, without returning to our original quarter until the beginning of the 4th chorus. The relationship of the number three also is apparent on a variety of levels: We are subdividing measures of 4/4 into 3/8 giving us a three bar loop. If we subdivided measures of 4/4 into 6/8 (remember that three is a multiple of six, so we’re just looking at a longer grouping), or if we thought of these six eighth notes (a dotted half-note) as our new quarter note, we would have 4 new beats over three measures of our original 4/4. The downbeats would fall on beats 1 and 4 of bar one; beat 3 of bar two; and beat 2 of bar three. We also know that it takes three complete choruses of our dotted quarter note grouped in 4 to return to “the big 1”. The relationship of our small subdivision to other, larger patterns remains the same. The number three becomes a constant depending on our point of view. You will see this relationship of a constant through many layers of time as revolving, interconnected gears, all moving at their own rate and each with its own distinctive feel.

•••

1 2 3 4 1 2 3 4 1 2 3

5 4 1 2 3 4 1 2 3 4 1 2

9 3 4 1 2 3 4 1 2 3 4

Alternate Harmonic Rhythm #1

This example presents the harmonic rhythm slightly anticipated; we are abridging the original harmonic rhythm to fit our template of dotted quarter notes.

First system of musical notation. The treble clef staff contains a continuous eighth-note pattern with accents. The bass clef staff contains dotted quarter notes. Chord symbols are placed below the staff: F#m7b9, E-7b5, A7b9, D-7, G7, C-7, F7, and Bb7.

Second system of musical notation. The treble clef staff contains a continuous eighth-note pattern with accents. The bass clef staff contains dotted quarter notes. Chord symbols are placed below the staff: Bb-7, Eb7, A-7, D7, Ab-7, Db7, and G-7.

Third system of musical notation. The treble clef staff contains a continuous eighth-note pattern with accents. The bass clef staff contains dotted quarter notes. Chord symbols are placed below the staff: C7, F, D-7, G-7, and C7.

Alternate Harmonic Rhythm #2

Another variant with some chords anticipated and others delayed. Since musicians will interpret these ideas in their own unique way, it's always beneficial to review this new harmonic rhythm in slightly altered forms; you could say we'll filter our exercise in a more musical, idiosyncratic way by anticipating how other musicians might hear and phrase these patterns.

The first system of musical notation consists of two staves in common time (C). The treble staff features a continuous eighth-note pattern with accents (>) on every eighth note. The bass staff provides a harmonic accompaniment with half notes and quarter notes. Chord symbols are placed below the bass staff: FMA57 in the first measure, E-7b5 A7b9 D-7 in the second measure, G7 in the third measure, and C-7 F7 in the fourth measure.

The second system of musical notation continues the exercise, starting with a measure rest of 5 measures in the treble staff. The eighth-note pattern and bass accompaniment continue. Chord symbols are: Bb7 Bb-7 in the first measure, Eb7 A-7 D7 in the second measure, and Ab-7 Db7 G-7 in the third measure.

The third system of musical notation continues the exercise, starting with a measure rest of 9 measures in the treble staff. The eighth-note pattern and bass accompaniment continue. Chord symbols are: C7 F in the first measure, D-7 G-7 in the second measure, and C7 in the third measure.

Blues For Alice in Compound Meters

The following exercise will present a system of running through various meters over a blues form. This exercise can also be applied over any standard, the only exceptions being compositions that already have mixed meters. Picking a melody and adapting it to fit all the meters will be the first step. Start by picking tunes that you're familiar with and that have simple melodies ("Autumn Leaves", "Stella by Starlight"). As you become more familiar with the process, choose more complex melodic and/or harmonic compositions such as "Confirmation" and "Moment's Notice". When working with complex melodies, you may want to write out the melody for all the different meters, but ideally this should be treated as a visual exercise. Since the melodies have to be altered to fit in each meter, there is no right or wrong way as to how you interpret each measure. Often by adding the appropriate number of rests (or by changing the values of certain notes to make the phrase shorter or longer, or even by drastically editing the melody), you can alter the melody to fit the meter you're in. Practice with a metronome set to constant quarter notes, again choosing a comfortable tempo. It's also a good idea to record yourself when practicing, giving you the opportunity of reviewing your accuracy and phrasing. Play the melody in 3/4, and solo over the form. After soloing, return to the theme and play it now in 4/4, then solo over the form. Repeat this process until you reach the ending meter (7/4) and then cycle backwards to 3/4. You must always play the melody first when moving from one meter to the next before soloing. Although adapting the melody to each meter may prove a little difficult, or some meters will be easier to hear than others, it's very important to begin each new meter not with a solo, but with a statement of the melody. Playing the melody helps to establish and internalize the new meter as well as the accompanying harmonic rhythm. This has to be clear in order to solo comfortably. Your last chorus of soloing in 7/4 would lead you back to the melody played in 6/4. Your last chorus of soloing in 6/4 would lead you back to the melody played in 5/4, and so on. The whole exercise ends up becoming a big loop. This cyclical approach allows for many repetitions of hearing the melody and meter and form move from one meter to the next without stopping. You can always play this exercise in any group setting, trading choruses with the other musicians. It's a good warm up exercise when playing in a session setting.

In our examples we go up through 7/4, although you can apply this to any fixed meter: 9/4, 11/8, etc. Or, you can combine meters in an arranged structure. The first 8 bars of Stella could be arranged as measures of mixed meters: (eighth note = eighth note) measure 1: 7/8; measure 2: 6/8; measure 3: 5/8; measure 4: 4/4; measure 5: 3/8; measure 6: 11/8; measure 7: 7/4; measure 8: 3/4. You could keep this form for the A sections, and create a recurring, alternative set of meters for the bridge.

In the first example, notice that when converting meters from 4/4 to 3/4 the harmonic rhythm remains balanced between both meters. A chord sustained for a full measure in 4/4 (a whole note) becomes a dotted half note in 3/4. If there are two chords sustained for two beats each (a half note) in a measure of 4/4, their new values would be two dotted quarter notes in 3/4.

In the second example, we move to 5/4 as a 3-2 subdivision. This means that each measure of 4/4 in our original piece becomes a measure, with the addition of one extra beat, of 5/4. Notice that the measures are subdivided into 3 beats and 2 beats. This helps us set the harmonic rhythm (as well as the melody) against a predetermined grid. Consequently, a chord sustained as a whole note in 4/4 becomes a dotted half note tied to a half note. Two chords in a measure of 4/4 become a dotted half note (chord one) and a half note (chord two).

Of course, you can invert the quarter note subdivision as a 2-3. This presents the melody and harmonic rhythm in a new light. An interesting exercise is the mirroring of subdivisions within a meter: the first measure of 5/4 could be a 3-2 subdivision and the second measure a 2-3 subdivision; or the first two measures could be a 2-3 subdivision and the following two measures a 3-2 subdivision. Also, remember that we are discussing these subdivisions on the quarter note level. We can also move to smaller subdivisions (micro): eighth notes, triplets, sixteenths, quintuplets, etc. Or larger subdivisions (macro): dotted quarter notes, half notes, etc. All of these can also be treated as 3 or 2 note subdivisions. The possibilities are limitless when improvising.

Blues For Alice in 3/4

First system of musical notation (measures 1-4) in 3/4 time, key of B-flat major. The treble clef staff contains the melody, and the bass clef staff contains a simple bass line. Chords are indicated below the staff.

Measures 1-4 Chords: FMA7, E-7b5 A7b9, D-7 G7, C-7 F7

Second system of musical notation (measures 5-8) in 3/4 time, key of B-flat major. The treble clef staff contains the melody, and the bass clef staff contains a simple bass line. Chords are indicated below the staff.

Measures 5-8 Chords: Bb7, Bb-7 Eb7, A-7 D7, Ab-7 Db7

Third system of musical notation (measures 9-12) in 3/4 time, key of B-flat major. The treble clef staff contains the melody, and the bass clef staff contains a simple bass line. Chords are indicated below the staff.

Measures 9-12 Chords: G-7 C7, F D-7, G-7 C7

Blues For Alice in 5/4 (3-2 subdivision)

First system of musical notation for "Blues For Alice" in 5/4 time. The treble staff contains four measures of music, and the bass staff contains four measures. Chords are indicated below the staff: FMA7, E-7 \flat 5, A7 \flat 9, D-7, G7, C-7, F7. The 3-2 subdivision is marked below the bass staff.

Second system of musical notation for "Blues For Alice" in 5/4 time. The treble staff contains four measures of music, and the bass staff contains four measures. Chords are indicated below the staff: B \flat 7, B \flat -7, E \flat 7, A-7, D7, A \flat -7, D \flat 7. The 3-2 subdivision is marked below the bass staff.

Third system of musical notation for "Blues For Alice" in 5/4 time. The treble staff contains four measures of music, and the bass staff contains four measures. Chords are indicated below the staff: G-7, C7, F, D-7, G-7, C7. The 3-2 subdivision is marked below the bass staff.

Blues For Alice in 6/4 (3-3 subdivision)

This example presents the piece in 6/4. Because this is evenly divided in a 3-3 subdivision, our 1 measure chords are a dotted whole note (or two, tied dotted half notes) in 6/4. Likewise, two chords in our measure of 4/4 become two dotted half notes.

First system of musical notation for "Blues For Alice" in 6/4 time. The treble staff shows a melody in eighth notes, with some measures containing triplets. The bass staff shows dotted whole notes corresponding to the chords: FMA57, E-7^b5 A7^b9, D-7 G7, and C-7 F7.

Second system of musical notation for "Blues For Alice" in 6/4 time. The treble staff continues the melody with eighth notes and some measures containing 4:3 and 4:5 ratios. The bass staff shows dotted whole notes corresponding to the chords: B^b7, B^b-7 E^b7, A-7 D7, and A^b-7 D^b7.

Third system of musical notation for "Blues For Alice" in 6/4 time. The treble staff continues the melody with eighth notes and some measures containing a 4:3 ratio. The bass staff shows dotted whole notes corresponding to the chords: G-7, C7, F D-7, and G-7 C7.

Blues For Alice in 7/4 (4-3 subdivision)

This example presents the piece in 7/4 as a 4-3 subdivision on the quarter note level. Our 1 measure chords in 4/4 (whole note) are now 7 beats in length. Two chords in 4/4 (two half notes) now become a whole note (4) and a dotted half note (3) in one measure of 7/4.

The musical score is organized into three systems, each with two staves (treble and bass). The time signature is 7/4, and the piece is in B-flat major (two flats). The notation illustrates a 4-3 subdivision on the quarter note level.

System 1 (Measures 1-4):

- Measure 1: Treble staff has a whole note chord $FMA\sharp 7$; Bass staff has a whole note F .
- Measure 2: Treble staff has a whole note chord $E-7\flat 5$ followed by a dotted half note chord $A7\flat 9$; Bass staff has a whole note E followed by a dotted half note A .
- Measure 3: Treble staff has a whole note chord $D-7$ followed by a dotted half note chord $G7$; Bass staff has a whole note D followed by a dotted half note G .
- Measure 4: Treble staff has a whole note chord $C-7$ followed by a dotted half note chord $F7$; Bass staff has a whole note C followed by a dotted half note F .

System 2 (Measures 5-8):

- Measure 5: Treble staff has a whole note chord $B\flat 7$; Bass staff has a whole note $B\flat$.
- Measure 6: Treble staff has a whole note chord $B\flat-7$ followed by a dotted half note chord $E\flat 7$; Bass staff has a whole note $B\flat$ followed by a dotted half note $E\flat$.
- Measure 7: Treble staff has a whole note chord $A-7$ followed by a dotted half note chord $D7$; Bass staff has a whole note A followed by a dotted half note D .
- Measure 8: Treble staff has a whole note chord $A\flat-7$ followed by a dotted half note chord $D\flat 7$; Bass staff has a whole note $A\flat$ followed by a dotted half note $D\flat$.

System 3 (Measures 9-12):

- Measure 9: Treble staff has a whole note chord $G-7$; Bass staff has a whole note G .
- Measure 10: Treble staff has a whole note chord $C7$; Bass staff has a whole note C .
- Measure 11: Treble staff has a whole note chord $FMA\sharp 7$ followed by a dotted half note chord $D-7$; Bass staff has a whole note F followed by a dotted half note D .
- Measure 12: Treble staff has a whole note chord $G-7$ followed by a dotted half note chord $C7$; Bass staff has a whole note G followed by a dotted half note C .

Measure numbers 4, 5, and 9 are indicated at the beginning of the first, second, and third systems, respectively. Brackets under the bass staff in each system indicate the 4-beat and 3-beat subdivisions.

Blues For Alice in 5/4 (short form 3-2 subdivision)

The following example presents a condensed form of 5/4. In this system, you take the first original measure of your composition (4/4) and convert it to 3/4 (dotted quarter note = 3 beats). The second original measure (4/4) is converted to 2/4 (half note = 2 beats). Combine both measures to give you one large measure of 5/4. Notice the following: that we are using the 3-2 subdivision; and that because of our rhythmic compression, the harmonic rhythm moves at a faster rate; if there is one chord in your measure of 3/4, then you play a dotted half note; if there are two chords in your measure of 3/4, divide the bar evenly into two dotted quarter notes; if your measure of 2/4 has one chord, it is played for the duration of a half note; if your measure of 2/4 has two chords, divide the bar evenly: each chord will be a quarter note in duration. In addition, the same study of subdivisions would apply here as in our previous example in 5/4: reversing the subdivision to 2-3; alternating 4 measures of the 3-2 subdivision with 4 measures of the 2-3 subdivision; mirroring each grouping: 2-3-3-2 or 3-2-2-3.

Blues For Alice in 7/4 (short form 4-3 subdivision)

The following example presents a condensed form of 7/4 (as a 4-3 subdivision). In this system, you take the first original measure of your composition (4/4) and leave it in its original meter (whole note = 4 beats). The second original measure (4/4) is converted to 3/4 (dotted half note = 3 beats). Combine both measures to give you one large measure of 7/4. Notice the following: that we are again using the 4-3 subdivision; and that because of our rhythmic elasticity, the harmonic rhythm moves at a faster rate only in the second measure; if there is one chord in your measure of 4/4, then you play a whole note; if there are two chords in your measure of 4/4, divide the bar evenly into two half notes; if your measure of 3/4 has one chord, it is played for the duration of a dotted half note; if your measure of 3/4 has two chords, divide the bar evenly: each chord will be a dotted quarter note in duration. In addition, the same study of subdivisions would apply here as in our previous example in 7/4: reversing the subdivision to 3-4; alternating 4 measures of the 4-3 subdivision with 4 measures of the 3-4 subdivision; mirroring each grouping: 3-4-4-3 or 4-3-3-4.

Blues for Alice Trading 3 Bar Phrases

The ability of controlling form is essential to all improvising musicians. Form gives us the parameters in which we work. And yet form can take many different shapes. Within a form there might be sections that are open and continue until cued. Form may not even be rhythmic in nature, but based more on melodic form and/or harmonic color. Exercises for developing this control can take many forms, but these exercises will deal with a blues form. They can be easily adapted for any standard tune. Trade 2 choruses of 4 bar phrases with another musician and then at the top of the form on the third chorus trade 2 choruses of three bar solos (the following example) and loop the entire form.

First 6 bars of the blues form:

- Bar 1: Empty (Improvisation)
- Bar 2: Empty (Improvisation)
- Bar 3: Empty (Improvisation)
- Bar 4: C7, F7
- Bar 5: B \flat 7
- Bar 6: B \flat 7, E \flat 7

Bass line for first 3 bars:

- Bar 1: FMAc7
- Bar 2: E7 \flat 9, A7 \flat 9
- Bar 3: D7, G7

Second 6 bars of the blues form:

- Bar 1: Empty (Improvisation)
- Bar 2: Empty (Improvisation)
- Bar 3: Empty (Improvisation)
- Bar 4: C7
- Bar 5: F, D7
- Bar 6: G7, C7

Bass line for first 3 bars:

- Bar 1: A7, D7
- Bar 2: A \flat 7, D \flat 7
- Bar 3: G7

Blues for Alice Trading 5 Bar Phrases

Now we'll trade 5 bar phrases over a blues form. Notice that it takes five complete choruses to cycle back. Although in the beginning the trading of 3 and 5 bar phrases may seem mechanical and forced because of the focus needed in maintaining your place in the form, over time you will see the shape that these phrases have both within the overall form and as separate units. Of course, you can apply larger units for trading: 6, 7, 8 or 9 bars. And this exercise applies to standards as well. Another approach to form exercises is where you reduce the total number of bars from your original composition by a fixed number of bars (or beats). For example, "Stella" could be played as a 7 bar tune; just cut out the last measure of every eight bar phrase (28 bar form instead of 32). You would do this both for the melody and soloing. Or "Donna Lee" as 5 measures per section instead of 8; both the melody and soloing. Or a blues where the form is 11 bars in length? Or the last measure of your blues is in 3/8? How fluid and organic is your phrasing within these new rhythmic forms and harmonic rhythms?

Musical notation for a 5-bar blues phrase starting at measure 13. The notation is in treble and bass clefs. The first staff (treble) contains the following chords: F#m7, E-7b5 A7b9, D-7 G7, C-7 F7, and Bb7. The second staff (bass) contains the following chords: Bb-7 and Eb7.

Musical notation for a 5-bar blues phrase starting at measure 19. The notation is in treble and bass clefs. The first staff (treble) contains the following chords: F, D-7, G-7, and C7. The second staff (bass) contains the following chords: A-7, D7, Ab-7, Db7, G-7, and C7.

Handwritten musical notation for measures 25-30. Treble clef, bass clef. Chords are written above the staff.

25	26	27	28	29	30
FMA ^b G7	E-7 ^b 5 A7 ^b 9	D-7 G7			
			C-7 F7	B ^b 7	B ^b -7 E ^b 7

Handwritten musical notation for measures 31-36. Treble clef, bass clef. Chords are written above the staff.

31	32	33	34	35	36
		G-7	C7	F D-7	G-7 C7
A-7 D7	A ^b -7 D ^b 7				

Handwritten musical notation for measures 37-42. Treble clef, bass clef. Chords are written above the staff.

37	38	39	40	41	42
FMA ^b G7					
	E-7 ^b 5 A7 ^b 9	D-7 G7	C-7 F7	B ^b 7	B ^b -7 E ^b 7

Handwritten musical notation for measures 43-48. Treble clef, bass clef. Chords are written above the staff.

43	44	45	46	47	48
A-7 D7	A ^b -7 D ^b 7	G-7	C7	F D-7	
					G-7 C7

Handwritten musical notation for measures 49-54. Treble clef, bass clef. Chords are written above the staff.

49	50	51	52	53	54
				B ^b 7	B ^b -7 E ^b 7
FMA ^b G7	E-7 ^b 5 A7 ^b 9	D-7 G7	C-7 F7		

Handwritten musical notation for measures 55-60:

Measure	Treble Clef	Bass Clef
55	A-7 D7	
56	A ^b -7 D ^b 7	
57	G-7	
58		C7
59		F D-7
60		G-7 C7

Handwritten musical notation for measures 61-66:

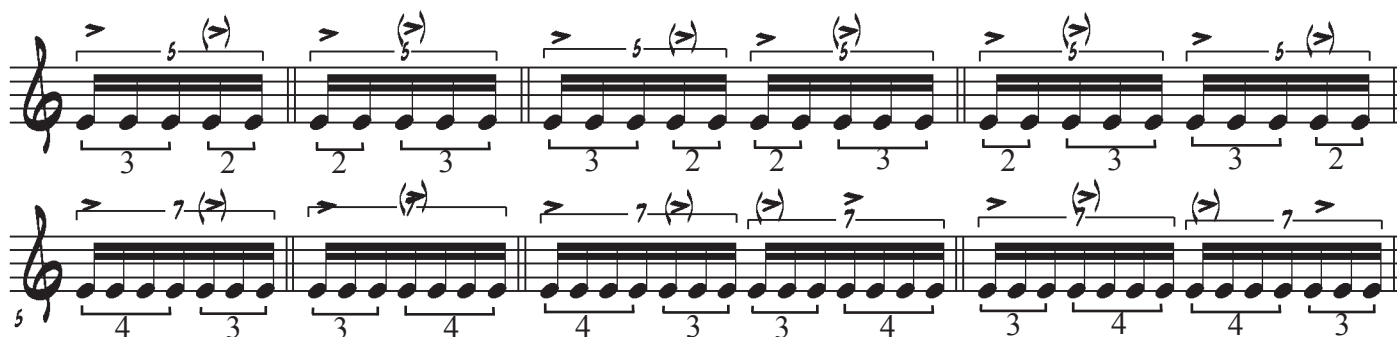
Measure	Treble Clef	Bass Clef
61		FMA ^b G7
62		E-7 ^b 5 A7 ^b 9
63	D-7 G7	
64	C-7 F7	
65	B ^b 7	
66	B ^b -7 E ^b 7	

Handwritten musical notation for measures 67-72:

Measure	Treble Clef	Bass Clef
67	A-7 D7	
68		A ^b -7 D ^b 7
69		G-7
70		C7
71		F D-7
72		G-7 C7

In this exercise, set the metronome at a comfortable tempo. Since we want to hear all the subdivisions of the quarter note clearly, you will want to make sure that your 32nd note phrases can be executed clearly. Articulation is very important, especially when we begin adding accents.

This is a soloing exercise based over a blues form. Every 4 bars will introduce a new subdivision. For the 16th note quintuplet and septuplet, you may want to write out your solo, or at least your subdivision. Of these groupings:



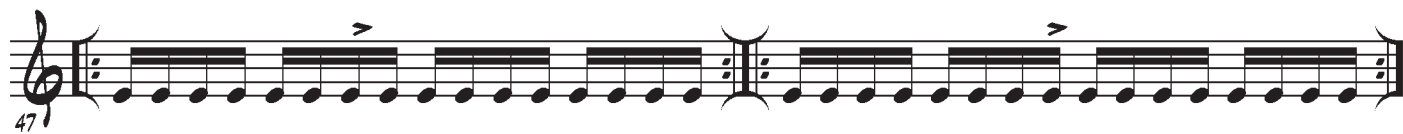
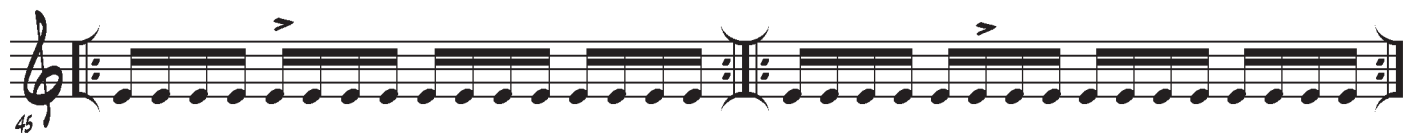
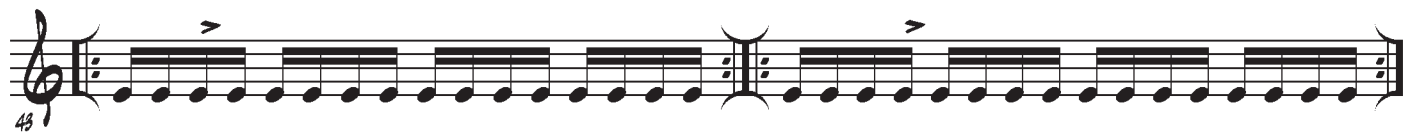
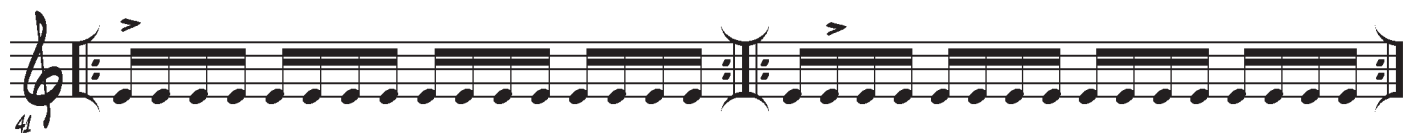
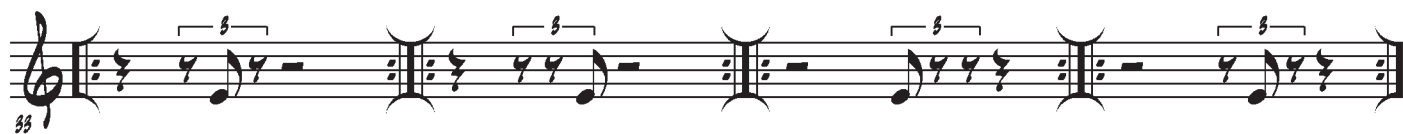
Running through all 4 choruses of the blues form will return to the eighth note level. One musician comps while the other solos; after completing an entire form, players switch roles. Begin at very slow metronome levels = 30-40 bpm.

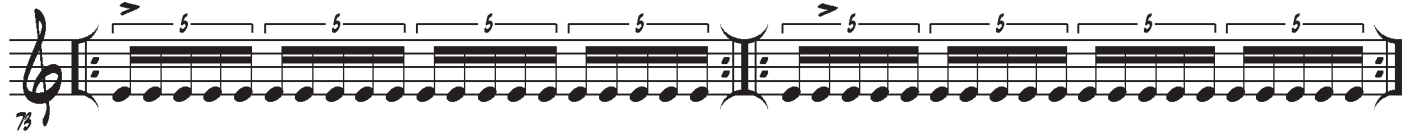
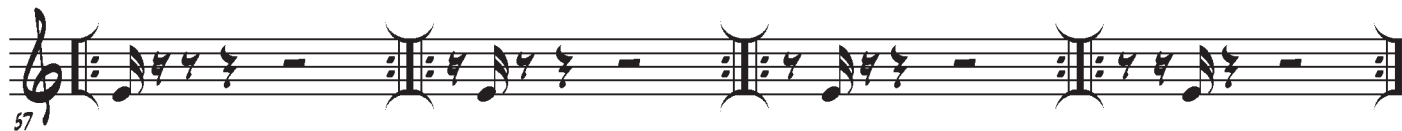
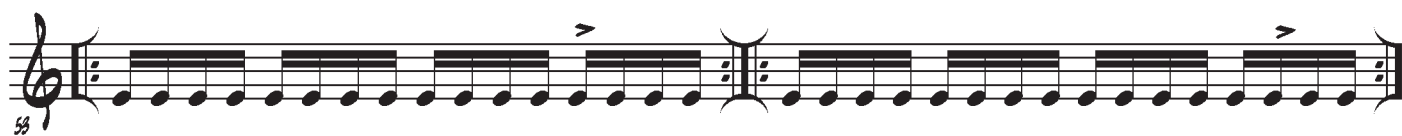


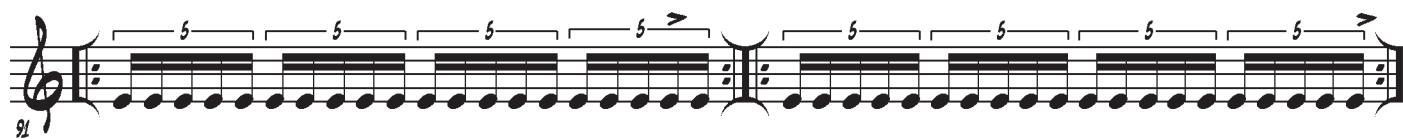
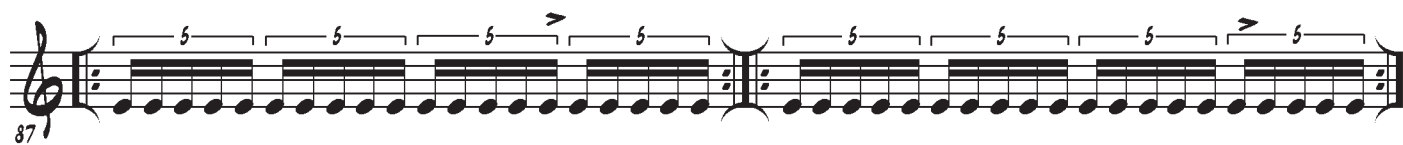
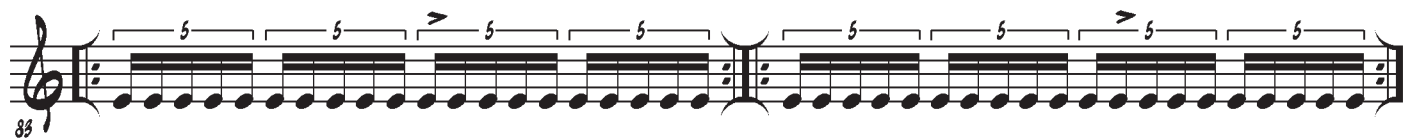
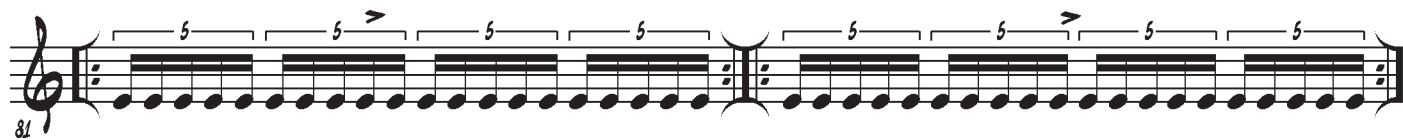
This study will help in hearing all the subdivisions over one quarter note.
Repeat each line 12 times (12 bar blues).

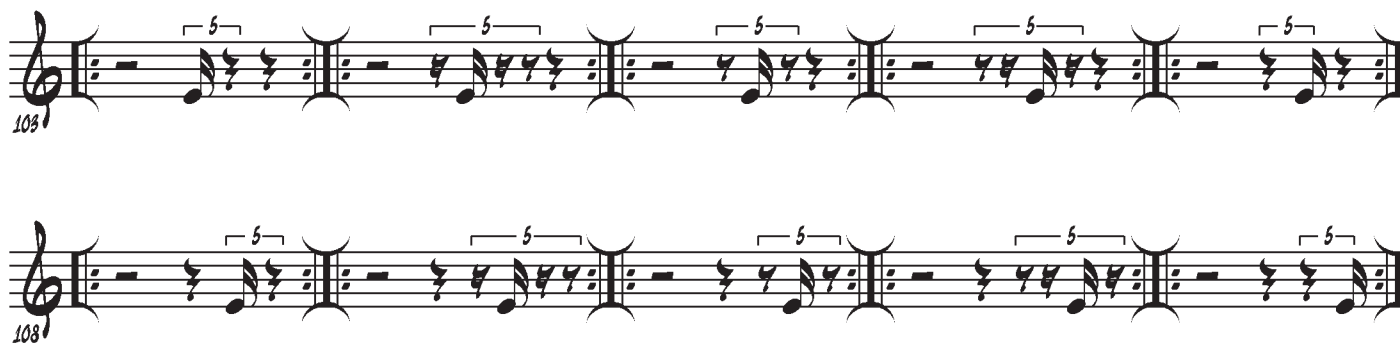
Play linear phrases for the entire cycle: all eighth note lines with the corresponding accent. When returning to the top of the form, comp only an accented note hearing the rest of the measure filled out with rest(s). Then move on to the next level (triplets) and follow the same process. The same system can be applied to sextuplets, septuplets, etc.

The musical score is written in 4/4 time and consists of 10 staves. The first four staves (measures 1-12) show a cycle of eighth notes with accents on the first, fourth, and seventh notes of each measure. The last six staves (measures 13-26) show a cycle of eighth notes with accents on the first, fourth, and seventh notes of each measure, with the first note of each measure being a triplet. The score is divided into two systems of five staves each, with measure numbers 4, 7, 10, 13, 17, 20, 23, and 26 marked at the beginning of their respective staves.









The accent points that have only the accent notes and rests may be approached in a different way. If we treat the solitary accent as the “point of departure” for our phrase, or to put it another way, “our starting point,” begin your phrase on that accent, ending before its return. Conversely, if we treat the accent as our “point of return,” you can begin your musical phrase anywhere in the measure, and conclude it on the accent point. In Bob Moses’ “Drum Wisdom,” the whole idea of accent points and how Bob assigns an extra measure for development between each point is a very important work on the subject and presents these ideas in a more musical light. Another aspect of dealing with subdivision is to reduce them to their most common denominator. If we have a measure of sixteenth notes in 4/4 we can subdivide them as follows:



The subdivision could be considered in different ways:



But our lowest common denominator would include just the longest and shortest subdivisions:



This principle is also referred to as the long/short beat subdivision. The short beat would be any 2 beat subdivision, and the long beat any 3 beat subdivision

In 7/8 we can subdivide:



In 11/8 we can subdivide:

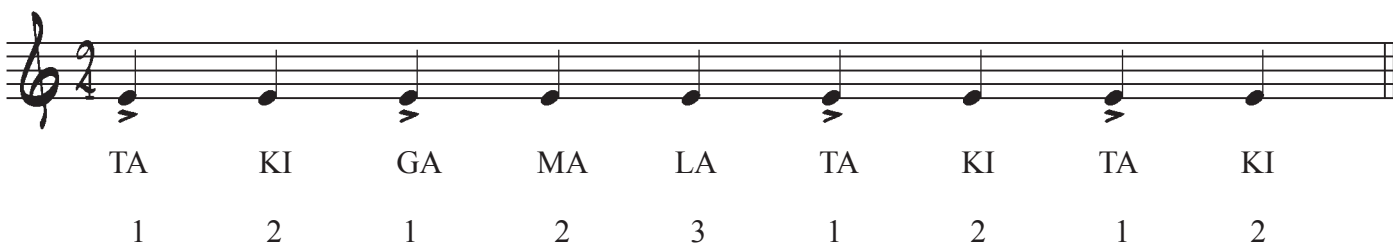


In both cases, we have subdivided everything into long and short beats,

Karl Berger, at the Creative Music Studio in Woodstock, presented a syllabic system based on the long beat: “GA-MA-LA” and the short beat:”TA-KI”. In 9/4, you can count the 3 beat groupings as 3 long beats:

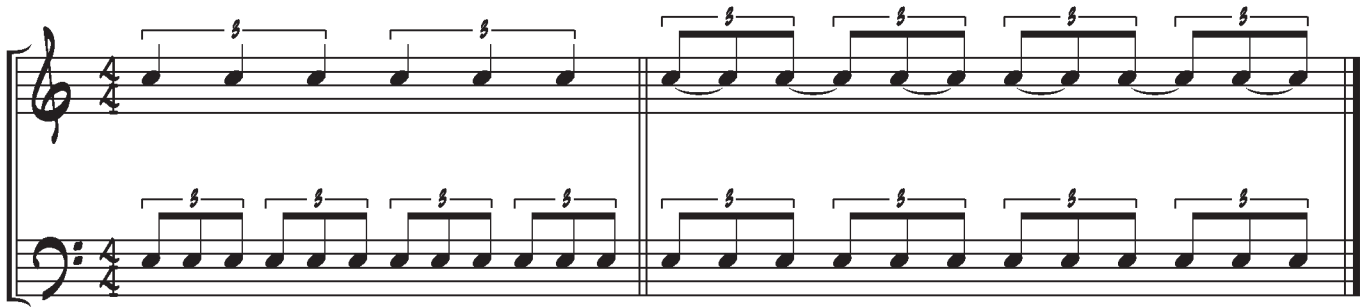


Or as a different subdivision:

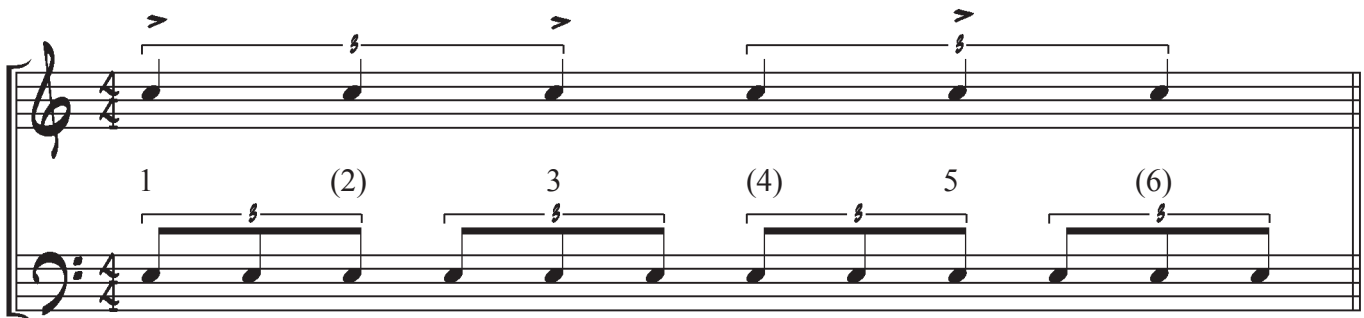


For further study, “Rhythm Matrix” by Miles Okazaki is strongly recommended.

#1) Eighth note triplets subdivided into the corresponding quarter note triplets; it can also be written with the eighth notes tied together. Practice counting the triplets from one level to the next with the metronome marking quarter notes. Try converting the metronome to mark quarter note triplets while you count (and play) in 4/4.



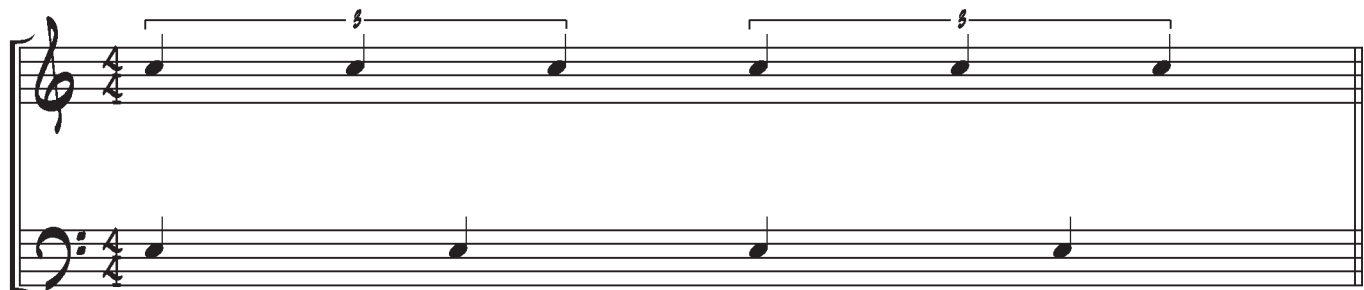
#2) If counting the triplets in groups of six, accent the quarter note triplets by marking the first, third and fifth beats.



#3) Both systems of notation represent the same rhythmic phrase.



#4) Set the metronome to mark quarter note triplets. Count the down beats out loud for 4 measures, then the downbeats and upbeats. Try running through both a straighter eighth note feel (more duple based) and a swung (triplet based) feel when phrasing the eighth notes. Clap the quarter note triplets.



Count: 1 2 3 4
 1 and 2 and 3 and 4 (eighth note level)

#5) With the metronome marking quarter notes, count out loud all the quarter note triplets at each level for 2, 4 or 8 bars. At a later date, we will look at these relationships over compound meters; i.e. quarter note triplets grouped in threes within 3/4; 4/4; 5/4; 6/4; 7/4, etc. Or, quarter note triplets grouped in 4,5,6,7 note groupings over 3/4; 4/4, etc.

Count:1

1

1

1

1

1

2

and

2

and

2

and

3

and

3

and

3

and

1

1

4

4

1

2

and

2

and

2

and

3

and

3

and

3

and

5

5

6

6

3

5 (eighth note level)

#6

3/4

Count:1

1

6/4 → 1

2

2

2

3

3

3

1

2

4

2

and

2

and

2

and

3

and

3

and

3

and

6

6

6

These examples will break the quarter note triplets (as our new quarter note) into eighth notes.

Example 1) Count the upper line with the metronome marking quarter notes. Accent the “1” as you count. The accents alone also represent quarter note triplets beginning on a downbeat.

Example 1 musical notation: Three staves. The top staff contains eighth notes with accents (>) on the first, third, fifth, and seventh notes of each measure. The middle staff contains quarter note triplets, each marked with a bracket and a '3'. The bottom staff contains quarter notes.

Example 2) Now repeat the step for example 1 but accenting the “2”, or upbeat, of the quarter note triplet. The example below is the upbeat accent alone or quarter note triplets starting on an upbeat.

Example 2 musical notation: Three staves. The top staff contains eighth notes with accents (>) on the second, fourth, sixth, and eighth notes of each measure. The middle staff contains quarter note triplets, each marked with a bracket and a '3'. The bottom staff contains quarter notes.

Example 3 musical notation: Three staves. The top staff contains eighth notes with brackets above groups of three notes, indicating quarter note triplets. The middle and bottom staves are empty.

Example 3) Now the quarter note triplets begin on the third eighth note triplet of beat one, and how it would be written with the accent alone.

The first system of musical notation consists of three staves. The top staff is in treble clef and contains six eighth notes, each with an accent (>) below it. The middle staff is in treble clef and contains four groups of eighth note triplets, each marked with a bracket and a '3' above it. The bottom staff is in treble clef and contains four quarter notes, each marked with a bracket and a '3' above it.

The second system of musical notation consists of three staves. The top staff is in treble clef and contains five groups of eighth note triplets, each marked with a bracket and a '3' above it. The middle staff is in treble clef and contains five groups of eighth note triplets, each marked with a bracket and a '3' above it. The bottom staff is in treble clef and contains five groups of eighth note triplets, each marked with a bracket and a '3' above it. The system is divided into three measures by vertical bar lines.

When subdividing the eighth note triplets into quarter note triplets (where the quarter note = one quarter note triplet), we can superimpose a three (or six) feel over the original form. The upper level shows the eighth note triplet subdivision into quarter note triplets, or 6 over 4. These are then subdivided symmetrically as represented by the broken line. If there is one chord per measure in the original form, then there is one chord for all six quarter note triplets. Two chords in the original form translate into three quarter note triplets each. The harmonic rhythm can also be altered over the quarter note triplet feel in other groupings: 4-2; 2-4; 5-1; 1-5, etc. The lower level shows the harmonic rhythm rewritten as the new three feel. Note that in the new 3 feel our form is now 24 measures long. With a 6 feel, our new form is 12 bars long.

24 Bars of New 3/4 or 12 Bars of new 6/4

4/4
trans-
posed
6/4

4/4 staff: Eighth note triplets. Chords: FMA7, E-7 \flat 5 A7 \flat 9, D-7 G7, C-7 F7.

6/4 staff: Half notes. Chords: FMA7, E-7 \flat 5 A7 \flat 9, D-7 G7, C-7 F7.

4/4
5
6/4

4/4 staff: Eighth note triplets. Chords: B \flat 7, B \flat -7 E \flat 7, A-7 D7, A \flat -7 D \flat 7.

6/4 staff: Half notes. Chords: B \flat 7, B \flat -7 E \flat 7, A-7 D7, A \flat -7 D \flat 7.

4/4
9
6/4

4/4 staff: Eighth note triplets. Chords: G-7, C7, F D-7, G-7 C7.

6/4 staff: Half notes. Chords: G-7, C7, F D-7, G-7 C7.

Here is the quarter note triplet subdivision in 4 note groupings. Remember that our original quarter note is equivalent to a quarter note triplet. Note that if we retain the harmonic rhythm in its original form we will have some interesting groupings. The lower level shows the harmonic rhythm rewritten to fit the new template: 1 new measure of 4/4 over FM7; 2 beats of the second new measure continues with the first beat on E-7^b5; and the third measure continues with the first beat on E-7^b5, and the remaining three beats over A7^b9. Of course, all the chords that are 3 new beats in length (A7^b5, F7, E^b7, D^b7 and C7) can be anticipated by one beat to give a more balanced 4/4 feel. Note that in this 4 beat grouping we have 18 measures of new 4/4 over our original 12.

4/4

trans-
posed

6/4

FM7 E-7^b5 A7^b9 D-7 G7 C-7 F7

4/4

6/4

B^b7 B^b-7 E^b7 A-7 D7 A^b-7 D^b7

4/4

6/4

G-7 C7 F D-7 G-7 C7

Harmonic Rhythm in the Superimposed 3/4

Three staves of musical notation, each in 3/4 time, showing harmonic rhythm. The notation consists of a single note per measure, with various chords written above. The first staff starts with a 3/4 time signature, the second with a 9, and the third with a 17.

Staff	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6	Measure 7
1	FMA7	E-7b5	A7b9	D-7	G7	C-7	F7
2	Bb7	Bb-7	Eb7	A-7	D7	Ab-7	Db7
3	G-7	C7	FMA7	F	D-7	G-7	C7

These examples are to be played with the metronome marking all quarter notes while counting out loud and clapping the accents. Since the 4 note grouping of quarter note triplets in the previous example may prove difficult, before progressing to the half note triplet feel practice counting the triplets as groups of 4; the syllabic equivalent in Indian counting is written out as well. The following examples displace the accent to all four points.

The next example shows the eighth note triplet level as it relates to quarter note triplets and half note triplets. Practice counting 4 bars each from one level to the next.

The following examples illustrate some methods of counting and clapping.

ta ka di mi ta ka di mi ta ka di mi

1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

Example 1) Counting quarter note triplets as our new quarters and eighths; and with the downbeats accented (our new quarter note).

Counting

Counting with accents on downbeats

1 and 2 and 3 and

1 2 3 4

Metronome and Clapping

Example 2) Counting quarter note triplets as quarters and eighths with accents on the upbeats; and counting only the half note triplets with the metronome marking quarters. This example is very important if we consider the upbeats swung, or slightly delayed, within the context of jazz phrasing in 4/4 with eighth note upbeats.

Counting with accents on downbeats Counting

1 and 2 and 3 and 1 2 3

Metronome
and
Clapping

Example 3) and 4) how the superimposed feel of half note triplets is simply translated to our new 3/4 feel; and how dotted quarter notes can be interpreted in our new 3/4 feel.

Superimposed 3/4 Feel-Half Note Triplet=Quarter Note

1 and 2 and 3 and 1 2 3

An important point to remember, and develop, is your complete understanding of how our half note triplet, which has become our new quarter note, can be subdivided as easily, as a quarter note in 4/4. In other words, if one half note triplet equals a quarter note, then we have to understand the subdivision on every level of the quarter note: eighth notes, triplets, sixteens, quintuplets, sextuplets, etc. If our new quarter note is our dotted quarter note, then we have to develop all the subdivisions, of *that* new quarter note. This is how a more fluid, organic phrasing is achieved when working within these new modulations. Each one will require focused study to hear all the different rhythmic levels. Later, dynamics, accents and articulation will help complete the picture.

The following example presents the triplets in our original tempo subdivided into the half note triplet level. The bottom staff presents the harmonic rhythm in our new 3/4 time feel.

4/4

4/4

trans-posed 3/4

↑
Transposed harmonic rhythm.

F#m7 E-7b5 A7b9 D-7 G7 C-7 F7

4/4

4/4

trans-posed 3/4

Bb7 Bb-7 Eb7 A-7 D7 Ab-7 Db7

4/4

4/4

trans-posed 3/4

G-7 C7 F D-7 G-7 C7

This next example again presents the eighth note triplets in our original tempo subdivided to represent the rhythmic shape of the melody (“Blues for Alice”) as it would be written in our superimposed 3/4 feel. The bottom staff represents the melody notes connected to our subdivisions. Measure #8 is slightly adjusted in the eighth to have note level to reflect it’s transposed phrasing in 3/4.

4/4

4/4

trans-
posed
3/4

Melody

4/4

4/4

trans-
posed
3/4

4/4

4/4

trans-
posed
3/4

These exercises are to be practiced moving from one level to the next; each level should be repeated a fixed number of times. The metronome should be set to quarter notes. Introducing quintuplets and septuplets will add to both the phrasing and understanding of the basic quarter note simultaneously. Compound rhythmic forms are very prevalent in all forms of music, and it is important to focus on rhythmic accuracy and articulation when studying these subdivisions. Each example presents the subdivisions on the sixteenth note level: 5 or 7 beats for each quarter note; the eighth note level: 5 over 2 (quarter notes) or 7 over 2 (quarter notes); the quarter note level: 5 over 4 (quarter notes) and 7 over 4 (quarter notes); and the half note level: 5 over 8 (quarter notes); and 7 over 8 (quarter notes).

This musical exercise is for quintuplets, where each quarter note contains five sixteenth notes. It is written in 4/4 time and consists of two systems, each with two measures. The first system shows the exercise in four staves: Treble, Treble, Treble, and Bass. The second system shows the exercise in three staves: Treble, Treble, and Bass. The Treble staves use a 5-measure bracket to indicate the quintuplet. The Bass staff uses a 5-measure bracket to indicate the quintuplet. The exercise is repeated twice in each system.

This musical exercise is for septuplets, where each quarter note contains seven sixteenth notes. It is written in 4/4 time and consists of two systems, each with two measures. The first system shows the exercise in four staves: Treble, Treble, Treble, and Bass. The second system shows the exercise in three staves: Treble, Treble, and Bass. The Treble staves use a 7-measure bracket to indicate the septuplet. The Bass staff uses a 7-measure bracket to indicate the septuplet. The exercise is repeated twice in each system.

This example presents the sixteenth note quintuplets on the upper ledger line connected (approximately) to the melody notes from the first 4 measures from “Blues for Alice”. The melody is written within the 5/4 meter modulation, and the bottom staff shows the harmonic rhythm in the 5/4 meter modulation in the 3-2 subdivision. The subdivision can also be written as a 2-3 subdivision, as well as all the combinations in the previous chapter on compound rhythms.

The first system of musical notation consists of three staves. The top staff features sixteenth note quintuplets on the upper ledger line, with five groups of five notes each, bracketed and labeled with a '5'. The middle staff shows the melody in 5/4 time, with notes corresponding to the harmonic rhythm. The bottom staff shows the harmonic rhythm in 5/4 time, with notes corresponding to the melody. The key signature is one flat (B-flat).

Chord labels below the middle staff: **FMA^b7**, **E-7^b5**, **A7^b9**

The second system of musical notation consists of three staves. The top staff features sixteenth note quintuplets on the upper ledger line, with five groups of five notes each, bracketed and labeled with a '5'. The middle staff shows the melody in 5/4 time, with notes corresponding to the harmonic rhythm. The bottom staff shows the harmonic rhythm in 5/4 time, with notes corresponding to the melody. The key signature is one flat (B-flat).

Chord labels below the middle staff: **D-7**, **G7**, **C-7**, **F7**

The third system of musical notation consists of three staves. The top staff features sixteenth note quintuplets on the upper ledger line, with five groups of five notes each, bracketed and labeled with a '5'. The middle staff shows the melody in 5/4 time, with notes corresponding to the harmonic rhythm. The bottom staff shows the harmonic rhythm in 5/4 time, with notes corresponding to the melody. The key signature is one flat (B-flat).

Chord labels below the middle staff: **B^b7**, **B^b-7**, **E^b7**

5 5 5 5 5 5 5 5

7 7

A-7 D7 Ab-7 Db7

5 5 5 5 5 5 5 5

9 9

G-7 C7

5 5 5 5 5 5 5 5

11 11

F D-7 G-7 C7

[illegible]

System 1: Treble clef contains sixteenth-note triplet runs. Middle staff contains eighth-note melody with chords A-7, D7, Ab-7, and Db7. Bass staff contains whole notes.

System 2: Treble clef contains sixteenth-note triplet runs. Middle staff contains eighth-note melody with chords G-7 and C7. Bass staff contains half notes.

System 3: Treble clef contains sixteenth-note triplet runs. Middle staff contains eighth-note melody with chords F#m7b9, D-7, G-7, and C7. Bass staff contains half notes.

Remember, that whether we impose the six (quarter note triplet phrasing) over 4/4, the three (half note triplet phrasing) over 4/4, the metric modulation of 5/4 (16th note quintuplet denominator) over 4/4, or the metric modulation of 7/4 (16th note septuplet denominator) over 4/4, the downbeat of each measure will remain in the same position. So, if the metronome is set at 60bpm in 4/4 the downbeats will be at the same point for each modulation. The effect, of course, will be an increase or decrease of velocity depending on your modulation.