Chapter 12: Advanced Rhythmic Concepts (draft)
Steve Treseler stevetres.com

The studies in this chapter will help you develop flexible and varied rhythmic phrasing, give you tools for approaching difficult time signatures, and provide material for original compositions.

Triplets

First, let's lock in with each eighth note triplet subdivision. Play along with the slow swing, medium swing, and shuffle drums grooves (download).

Play each of the following rhythms on a single pitch. Once you are comfortable with each rhythm, improvise with other pitches.

The first triplet subdivision is on the beat:

The third triplet subdivision is the swing off-beat.

The second triplet subdivision doesn't line up with the grid of swing eighth notes, so it's the most difficult one to lock in with. Spend lots of time with this one until it feels comfortable. Having a command of the second triplet will deepen your relationship with the rhythm section.
Next, play on the second and third triplet subdivisions.

The Afro-Cuban *Abakwa* rhythm displaces three consecutive eight note triplets.

The Afro-Cuban 6/8 drum groove track is based on a *bembe* feel. Below is the *bembe* bell pattern along with hi-hat on the downbeats:

Tap the bell pattern with your hand while tapping the downbeats with your foot

**Groups of Four Eighth Note Triplets**

Listen to how Herbie Hancock phrase triplets in three groups of four on Hancock’s “Dolphin Dance”: 
This phrasing implies a new tempo—but it is locked in with the triplet groove.

Begin by setting a metronome to 60 bpm (with triplet subdivisions if possible), tap triplets with your hands, and alternate accenting groups of three and four:

Eventually work up to 120+ bpm

Next play melodic phrases that accent these groupings, for example:

Now try phrasing scale sequences you know in triplets. For example:

becomes:
Next play familiar eighth note phrases as triplets, for example:

Quarter Note Triplets

Combining together groups of two eighth note triplets creates quarter note triplets.

Tap eighth note triplets and accent your right hand to draw out quarter note triplets.

A famous example of this rhythm is Vernon Duke’s “April in Paris”:

Steve Treseler      stevetres.com
Measures 15-16 of Lennie Tristano’s “317 East 32nd” feature quarter note triplets phrased in groups of two.

Displaced Quarter note triplets

Quarter note triplets can also begin on beats two and four.

Tap eighth note triplets and accent your left hand to draw out the displaced quarter note triplets.

Measures 22-24 of “317 East 32nd” contain displaced quarter note triplets.

A favorite pattern of bebop drummers is to play this rhythm with cross-sticks on the snare.
Notice how the cross-stick pattern lines up with the standard swing ride and hi-hat pattern.

**Half note triplets**

Combining together groups of two quarter note triplets produces half note triplets.

Half note triplets can be difficult to execute—particularly at slower tempos. Try subdividing quarter note triplets, and group them in fours.

The half note triplets land on beat one, the second triplet of beat two, and the third triplet of beat three.

- Experiment improvising with quarter note triplets, and displaced quarter note triplets, and half note triplets.
- Try displacing half note triplets to begin on beats two, three, and four.

**Switching gears**

Experiment with improvising over a tune with whole notes, half notes, half-triplets, quarter notes, quarter note triplets, eighth notes, eighth note triplets, and sixteenth notes.

Steve Treseler      stevetres.com
Here is an example over “Mack the Knife”:

Over the ballad drum groove, improvise with the rhythms above, and add even eighth notes, swing eighth notes, even sixteenth notes, swing sixteenth notes, and thirty-second notes. Once you are comfortable with switching fluidly between these subdivisions, try it over a tune.

**Cross-Rhythms**

*Cross-rhythms* are contrasting rhythmic patterns sounding together. The most common cross-rhythm is two against three, also known as a *hemiola*.
Set a metronome to 60 bpm for each measure, and tap quarter notes in your right hand and the dotted quarter notes in your left hand. The composite rhythm is:

\[
\begin{array}{c}
\text{R} \\
\text{R} \\
\text{L} \\
\text{R} \\
\end{array}
\]

Now while tapping the same rhythm at the same tempo, shift the emphasis to the dotted quarters creating a 6/8 feel:

\[
\begin{array}{c}
\text{R} \\
\text{R} \\
\text{L} \\
\text{R} \\
\end{array}
\]

The composite rhythm is:

\[
\begin{array}{c}
\text{R} \\
\text{R} \\
\text{L} \\
\text{R} \\
\end{array}
\]

Continue tapping the rhythm while shifting the perception of the meter back and forth between 3/4 and 6/8. See if you can hear both grooves at once. You can use the mnemonic phrases below to feel the switch in meter.
The John Coltrane Quartet plays a two against three feel on Mongo Santamaria “Afro Blue” from the album *Afro Blue Impressions*. The piece is in 3/4 and the melody itself implies a two-feel. Listen to McCoy Tyner’s solo interlude after the first statement of the melody—his left hand comps dotted quarter notes implying a two feel throughout.

Next, let’s play a three against four polyrhythm One way to feel this cross-rhythm is half note triplets, which we covered earlier in the chapter.

If you tap four in your right hand and three in your left hand, the composite rhythm is:

---

Steve Treseler   stevetres.com
We can also feel this cross-rhythm is to layer four beats over three. The result is four dotted eighth notes over three quarter notes.

Here is the composite rhythm:

Pat Metheny’s “Question and Answer” features this cross-rhythm:

Continue tapping the rhythm while shifting the perception of the meter back and forth between 4/4 and 3/4. See if you can hear both grooves at once. You can use the mnemonic phrases below to feel the switch in meter.

“Hey, Jimmy, park the car”          “Eat the goddamn spinach”
Implied Meters

Another way jazz musicians use cross-rhythms is to imply a new time signature. Listen to Louis Armstrong’s sing an extended hemiola in his legendary 1927 scat solo on “Hotter than That”:

The bridge of Steve Kuhn’s “The Saga Harrison Crabfeathers” is a phrase of consecutive half notes layered onto a waltz.

• Choose a 3/4 rhythm and try layering it over a tune in 4/4. It may help to write it out—the cycle repeats after three measures of 4/4:
Metric Modulation

Metric Modulation is a change in tempo and/or time signature that is related to the original tempo. Below are examples of compositions that incorporate metric modulation.

- “Brilliant Corners” by Thelonious Monk – every other chorus is in double-time (twice as fast)
- "Lithia" by Chick Corea Litha – dotted quarter in 6/8 Afro-Cuban feel becomes half note in a fast 4/4 swing
- "Kathy's Waltz" – quarter note triplet in 4/4 becomes new quarter note in 3/4
- “Sparticus” by Branford Marsalis – dotted quarter note becomes new quarter note

Experiment with metric modulation in your compositions and arrangements.

Odd Meters

Below is the rhythm section vamp for Paul Desmond’s “Take Five”:

![Rhythm Section Vamp for Take Five](image)

Most odd time signatures can be reduced to smaller pieces and/or an underlying clave. The feel and harmonic rhythm of “Take Five” is three beats plus two beats. The basic clave is two dotted quarter notes, and two quarter notes.

![Clave Notation](image)
Brubeck’s “Unsquare Dance” from *Time Further Out* is a blues in 7/4. The time signature is divided into four beats plus three beats, which is clearly outlined by the bass line and clapping.

"Unsquare Dance" is six measures long. It is actually a twelve-bar blues if you divide each measure of 7/4 into one measure of 4/4 plus one measure of 3/4.

Below is the vamp from Dave Liebman’s 5/4 arrangement of Dizzy Gillespie’s “A Night in Tunisia” from *Besame Mucho*. Dave arranged the song by adding an extra beat to each measure.

Jerry Bergonzi arranged Jule Styne’s “Just in Time” in 7/4 on his album *Wiggy*.

Like “Unsquare Dance,” the meter is actually alternating 4/4 plus 3/4. Each four-bar phrase in 4/4 becomes two measures of 7/4. The underlying clave is two half notes and two dotted quarter notes.

- Arrange a standard in 5/4 by adding an extra beat to each measure
- Arrange a standard in 7/4 by alternating measures of 4/4 and 3/4
Implied Odd Meters

Listen to how Wynton Marsalis implies a 7/4 time signature, interspersed with two measures of 5/4, on top of “Cherokee” from *Standard Time Vol. 1*.

In measure nine, Marcus Miller starts comping with a 7/8 rhythm on piano:
Below are riff rhythms in 5/4 and 7/4. You can use them to begin improvising in these time signatures, and as implied meters in 4/4. Use a metronome app that can outline odd meters.

5/4 Rhythms

7/4 Rhythms
Odd Meter Claves

Dave Brubeck’s “Blue Rondo a la Turk” is based on a 9/8 *Karsilama* rhythm that Brubeck heard Turkish street musicians playing.

The eighth notes in the first three measures are grouped as “two-two-two-three,” which is the Turkish rhythm. The eighth notes in the fourth measure are grouped as “three-three-three,” which is the most common grouping of 9/8 in Western music. For jazz musicians accustomed to playing in 4/4 and 3/4, the task of counting this time signature can seem daunting.

The key to counting and feeling odd meters is to feel the underlying clave. Remember, many rhythms that Western musicians consider difficult are in fact common folk and dance rhythms in other cultures.

Gamala Taki

North and South Indian music have intricate rhythmic cycles known as *tala* or *taal*. Each stroke on the *tabla* drum has a corresponding spoken syllable.

In the 1970s, Karl Berger and Don Cherry developed a simplified practice system of syllables for Western musicians called “Gamala Taki.” Legendary bassist Dave Holland teaches with this system. The Gamala Taki system breaks rhythms down into groups of twos and threes. Groups of three are spoken “Ga-ma-la,” and groups of three are spoken “Ta-ki.” The first syllable of each group is accented.

The Gamala Taki method is particularly useful for simplifying odd meters. Speak the Gamala Taki syllables and clap on the strong beats while listening to the recording of “Blue Rondo a la Turk”:

---

Steve Treseler  stevetres.com
Feeling this song in terms of long beats and short beats will help you engage with this traditional Turkish dance rhythm.

The Pat Metheny Group’s “The First Circle” alternates measures of 12/8 and 10/8 with irregular groupings. The “Gamala Taki” method will help you feel the flow of the meter. Try tapping your foot on the strong beats, clap on the weak beats while speaking the syllables. The Pat Metheny recording begins with only the clapping figure, which disguises the meter.

Below are the Gamala Taki combinations for 5/8, 7/8, and 9/8:

- Clap each rhythm above while speaking the Gamala Taki pattern with a metronome
- Improvise in each meter with eighth notes while accenting the clave
- Compose and/or arrange tunes based on one or more of the claves above
- Use these rhythms as implied meters over tunes 4/4 and 3/4

Odd Subdivisions

Listen to Wynton Marsalis’s recording of “Autumn Leaves” from Standard Time: Vol I. While Wynton is playing the first half of the melody, the rhythm section featuring Marcus Miller, Robert Hurst, and Jeff “Tain” Watts, plays a wild rhythmic accompaniment that seems to speed up. In fact, Wynton is playing the melody as at a fast swing tempo the entire time. The rhythm section divides each two-measure phrase into different subdivisions. The first two measures are in one,
then the next phrase is in two, then three, four, five, six, seven and finally to eight, which is the actual tempo. The bar lines are consistent throughout.

Next we will look at ways to approach quintuplets and septuplets, which only scratches the surface of the endless combinations of odd subdivisions.

Begin by setting a metronome to 50-60 bpm. Speak a five-syllable word like “BMW” or “Hippopotamus” evenly with each click. Keep speaking until you feel the groove of the subdivision. By now you are comfortable switching between eighth notes, triplets, and sixteenth notes—quintuplets are a new feel for you to lock in with.

Next play up and down a pentatonic scale with the metronome. The tonic will land on every beat, which will help you stay locked in with quintuplet subdivisions. Keep your notes even.

Since you have five fingers on each hand, quintuplet groupings lay well on the piano. Practice playing scale patterns on the piano such as:

Steve Treseler      stevetres.com
Next, set the metronome at 90-100 bpm and play a quintuplet over two beats. This subdivision is quicker than eighth notes and slower than eighth note triplets. Beats two and four land exactly between the third and fourth note of each quintuplet group.

Create own five-note scale patterns to practice in quintuplets. For example:

Practice these five-note groups as eighth notes in 4/4, which implies a 5/8 meter:

To begin working on septuplets, set a metronome to 50-60 bpm and speak a seven-syllable phrase like “City University” or “incompatibility” evenly with each click. Keep speaking until you feel the groove of the septuplet subdivision.

Practice seven note modes up and down in septuplets with the metronome. The tonic will always land on the beat.
Next, set the metronome at 90-100 bpm and play septuplets over two beats. This subdivision is quicker than eighth note triplets and slower than sixteenth notes. Beats two and four land exactly between the fourth and fifth note of each septuplet group.

Create own seven-note scale patterns to practice in septuplets. For example:

Practice these seven-note groups as eighth notes in 4/4, which implies a 7/8 meter:

Switching Gears

Now let’s combine conventional and odd subdivisions. Improvise with the following rhythms, which divide each half note into up to eight even subdivisions:
Playing the rhythms in this order creates a type of measured accelerando, and in reverse, a decelerando.