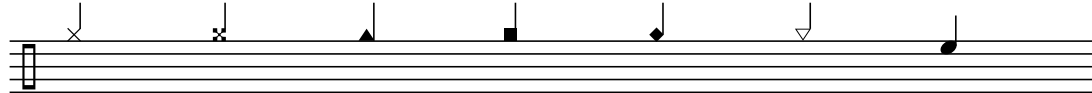



## DRUM SET KEY

Hi-hat      Cymbal      Clave block      Cowbell (mouth)      Cowbell (neck)      Floor tom (shell)      Hi tom



Mid tom      Snare      Floor tom      Snare cross stick or clave block      Bass drum      Hi-hat with foot



## THE SON CLAVE

The *son clave* is similar to the rumba clave, the difference being that the third stroke falls an eighth note earlier. This stroke is commonly called the *ponche*. It is used as a resolve point in the music or sometimes a starting point.

*Note: The final quarter note on either side of the clave can be referred to as ponche, however, the son clave only lines up with the ponche on the 3-side.*

This small change has a profound effect on the clave. It creates a more settled feeling and also increases the separation between the two sides. Son clave tends to be used for the popular dance styles generically called Salsa.

3-Side (Ponche) 2-Side

MAIN PULSE

## CLAVE DIRECTION

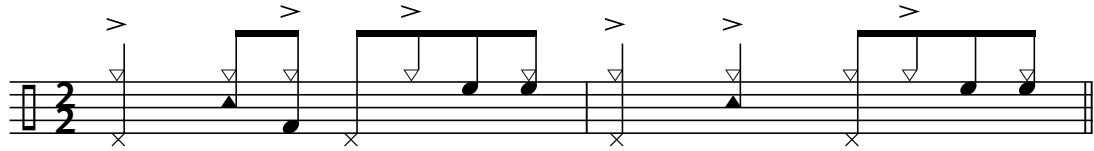
Clave has 2 sides each with distinct rhythmic features. It can start on either of these two sides. If it begins with the side that contains 3 strokes it is referred to as *3-2 clave* and if it starts with the side that contains 2 strokes it is called *2-3 clave*. This applies to both, rumba and son clave.

### 3-2 RUMBA CLAVE

### 2-3 RUMBA CLAVE

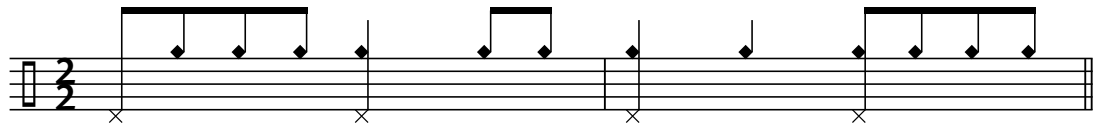
### CASCARA WITH CONGA TUMBAO

A conga pattern that is used with many styles is referred to as the *conga tumbao*. The main feature of this pattern is the slap on 2 and the open tones on 4 and 4+. These are replicated here by using the rim click for the slap and the tom tom for the open tones. The bass drum plays the bombo stroke.

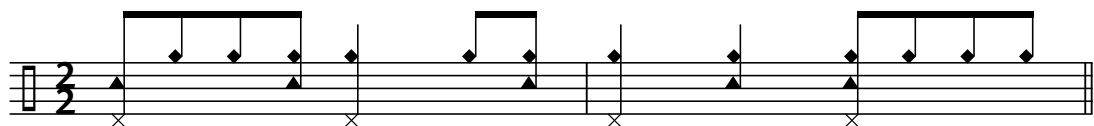


### MAMBO BELL

At certain sections of an arrangement the timbale player (*timbalero*) will move from playing the cascara pattern and play a rhythm on the cowbell known as the *mambo bell* pattern. Though this pattern is used in the rhythm of the *mambo* it is also used in many other styles. However, regardless of the style in which it is used, this pattern is referred to as the mambo bell pattern.

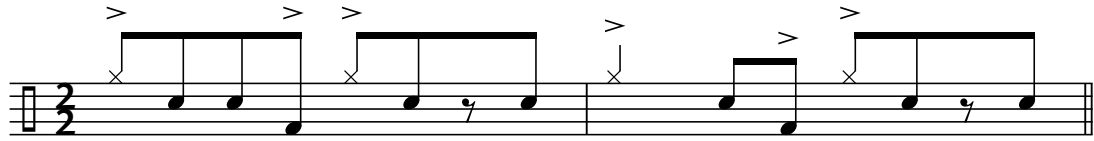


### MAMBO BELL AND CLAVE



## SONGO

The *songo* came to popularity in Cuba in the 70's and New York in the 80's. It is credited to the group Los Van Van and in particular to their drummer José Luis Quintana known as "Changuito". This is one of the patterns that originally included drum kit. The rhythm has a loose feel and lends well to improvisation. It has the ability to incorporate different Afro-Cuban folkloric styles and funk.



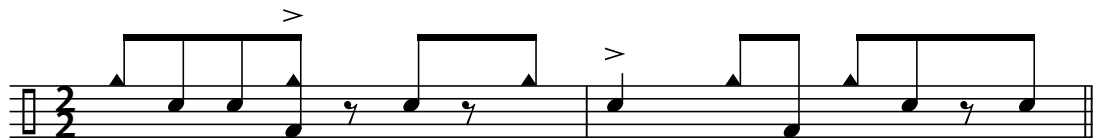
## SONGO BASS DRUM VARIATIONS

Here is the songo with extra bass drum strokes added. They are optional and are played or not, depending on the musical context.



## SONGO WITH CLAVE

This pattern has the clave played with the right hand.



## THE CLAVE IN 9

We'll begin by writing the *rumba clave* as a one bar pattern. It will now be a single bar of 4/2 instead of the more commonly used two bars of 4/4. The reason for doing this is, to show that the underlying pulse in clave is the half note. It is also the model used to create the new clave.

### THE RUMBA CLAVE AS A TWO BAR PATTERN

Musical notation for the Rumba Clave as a two-bar pattern in 4/4 time. The top staff shows the melody with notes and rests: a dotted quarter note, an eighth note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The bottom staff shows the bass line with four half notes.

### THE RUMBA CLAVE AS A ONE BAR PATTERN

Musical notation for the Rumba Clave as a one-bar pattern in 4/2 time. The top staff shows the melody with notes and rests: a dotted half note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The bottom staff shows the bass line with four half notes.

### THE 9 CLAVE AS A TWO BAR PATTERN

We now extend the clave by adding an extra stroke to the two-side. This is shown initially by writing the new clave as a two bar pattern, the second being a bar of 5/4.

Musical notation for the 9 Clave as a two-bar pattern. The first bar is in 4/4 time and contains a dotted quarter note, an eighth note, a quarter note, a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note. The second bar is in 5/4 time and contains a quarter note, a quarter note, a quarter note, a quarter note, and a quarter note.

### THE 9 CLAVE AS A ONE BAR PATTERN

Here we write the clave as one bar of 9/4 rather than a bar of 4/4 and a bar of 5/4.



### THE 4 1/2 PULSE

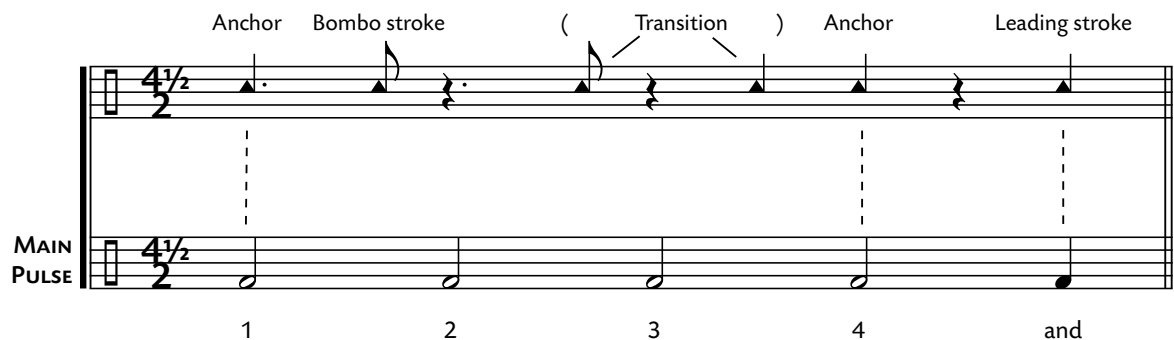
As explained in "The Clave" chapter the main pulse of clave is the half note. The same applies to the 9 clave. However, because of the uneven amount of quarter notes it cannot be divided equally into half notes. Hence the main pulse is four half notes and the last pulse is a quarter note. To emphasize the main pulses (half notes), the time signature will be written as 4 1/2 over 2, instead of 9/4.

To feel the main 4 1/2 pulse we count on every second quarter saying "and" on the final quarter note to bring us back to "one".



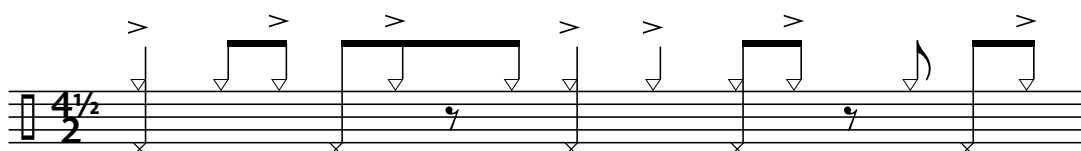
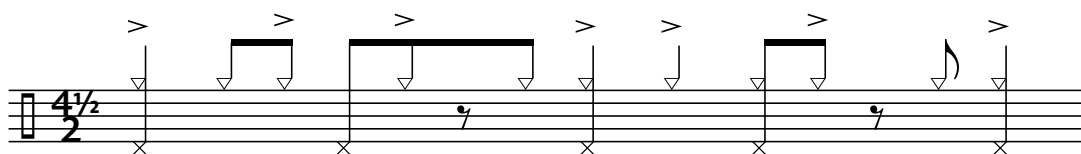
### THE CLAVE AND THE PULSE

The clave strokes retain the qualities explained in "The Clave" chapter. However, now the last pulse lines up with the final stroke of the clave. This gives both the final pulse and the final stroke of the clave the quality of a pick-up, or a leading stroke, bringing you back to the first stroke of the clave. This pick-up has a feeling that is similar to the accent known as *ponche* (see "Son Clave").



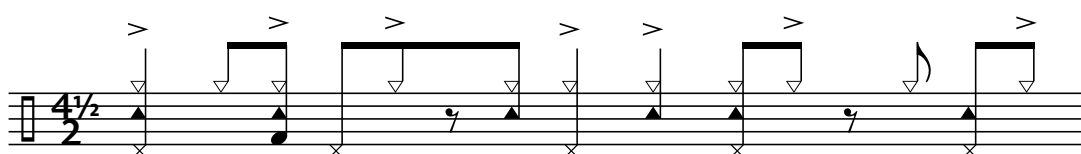
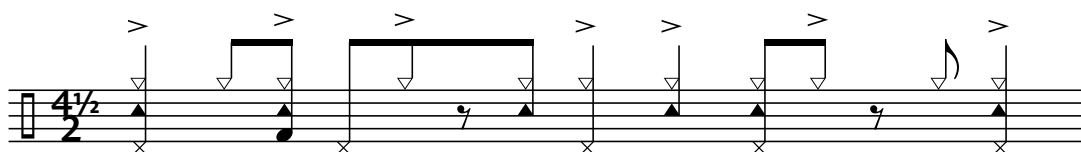
## CASCARA IN 9

The following *cascara* patterns are built from the 9 clave. Each pattern includes the main pulse played on the hi-hat. Pay close attention to the accents.



## CASCARA WITH CLAVE

Here they are again, but now with the clave and *bombo* added.



### CASCARA AND CONGA TUMBAO

We continue with the cascara, adding an adaptation of the *conga tumbao*.



### THE TWO HANDED CASCARA PATTERN

Another common device is to play the cascara pattern with the right hand and fill in the remaining eighth notes with the left hand. The rhythm has an even eighth note feel, but with the original cascara accents in the right hand.



### CASCARA FUNK

Here are 2 funk applications of the two handed cascara pattern. The left hand has been moved to the snare drum. The unaccented snare strokes are played *pp*.





## THE MAMBO BELL

Now we move on to the *mambo bell* pattern. Begin by playing the pattern with just the pulse on the hi-hat with your foot. The cowbell stroke on pulse one is only played the first time, to make it easier to begin the pattern.

(1st x only)

## MAMBO BELL WITH CLAVE

Add the clave and bass drum to the rhythm.



## MAMBO BELL WITH CONGA TUMBAO

Here is the mambo bell pattern with an adaptation of the conga tumbao.

(1st x only)



### BASIC GUAGUANCO IN 9

Musical notation for 'BASIC GUAGUANCO IN 9'. The piece is in 9/2 time. The notation consists of a single staff with a treble clef. It features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings.



### GUAGUANCO VARIATIONS

Musical notation for the first variation of 'GUAGUANCO VARIATIONS'. It is in 9/2 time. The notation features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings.

Musical notation for the second variation of 'GUAGUANCO VARIATIONS'. It is in 9/2 time. The notation features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings. The word '(muted)' is written below the first measure.



Musical notation for the third variation of 'GUAGUANCO VARIATIONS'. It is in 9/2 time. The notation features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings.

Musical notation for the fourth variation of 'GUAGUANCO VARIATIONS'. It is in 9/2 time. The notation features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings. There are also a circled 'o' and a '+' sign above the first measure.

Musical notation for the fifth variation of 'GUAGUANCO VARIATIONS'. It is in 9/2 time. The notation features a series of rhythmic patterns: a half note followed by a quarter note, a half note followed by a quarter note, and a half note followed by a quarter note. There are also rests and accents (>) over certain notes. The bottom line of the staff has 'x' marks under the first, third, fifth, seventh, and ninth measures, indicating where to strike the strings. There are also a circled 'o' and a '+' sign above the first measure.

### GUAGUANCO WITH CASCARA

Here we replace the clave with the cascara played on the side of the floor tom. Any of the above tom variations can be used with this pattern.



Musical notation for Guaguanco with Cascara. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a series of eighth notes with accents and down-bow marks, and 'x' marks on the staff indicating specific rhythmic points.

### SONGO

We begin with the basic songo. This is the framework from which the following patterns are built. The hand pattern is virtually the same throughout the first set, with the variations played on the bass drum.



Musical notation for Songo. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a series of eighth notes with accents and down-bow marks, and 'x' marks on the staff indicating specific rhythmic points.

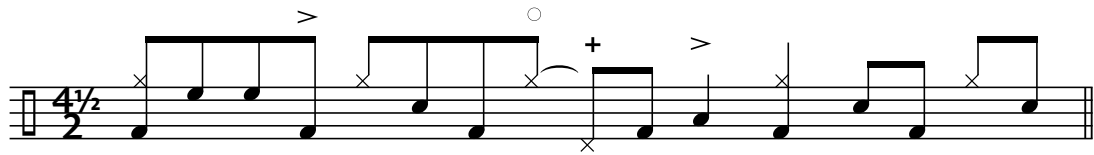
### SONGO BASS DRUM VARIATIONS

Musical notation for Songo Bass Drum Variations. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a series of eighth notes with accents and down-bow marks, and 'x' marks on the staff indicating specific rhythmic points.



Musical notation for Songo Bass Drum Variations. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a series of eighth notes with accents and down-bow marks, and 'x' marks on the staff indicating specific rhythmic points.

The bass drum also plays in groups of 3 here.

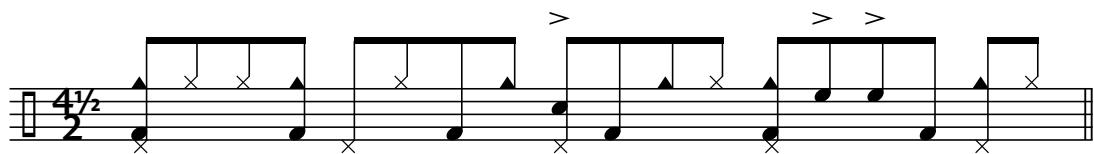


### SONGO WITH CLAVE



### LEFT HAND VARIATIONS WITH CLAVE

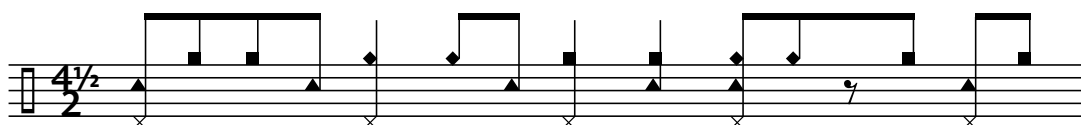
Again our right hand plays the clave while left hand plays around drums. In the second variation the bass drum plays in groups of 3.



### MOZAMBIQUE

We begin this section with an application of the standard cowbell pattern of the *mozambique*. This can be applied to both the *Cuban and NY styles*. In this case the pattern is played on 2 cowbells, but it can also be played on one cowbell, using the high and low tones, of the bell. Traditionally the mozambique is played in a 2-3 clave direction, but in keeping with the rest of rhythms of the book it is presented here in 3-2.

### MOZAMBIQUE BELL PATTERN WITH CLAVE



### MOZAMBIQUE NEW YORK STYLE

The following pattern is derived from the style of mozambique developed in the 60's by New York musicians such as Eddie Palmieri and Manny Oquendo. It uses an application of the standard bell pattern, played with the right hand, while the bass drum and left hand outline the clave. The accents should be played *forte*!



### CUBAN STYLE MOZAMBIQUE

In this section the patterns are applications of the bombo drum patterns common to the Cuban style mozambique. The clave can be played with either right or left hand.



(CUBAN STYLE MOZAMBIQUE)



Musical notation for Track 58, (Cuban Style Mozambique). The notation is on a single staff with a 4 1/2 / 2 time signature. It features a sequence of notes with various articulations: a first note with a circle above it, a second note with a plus sign above it, and a third note with an accent (>) above it. These three notes are grouped with a bracket above them. This is followed by a series of notes, including a triplet of three notes indicated by a bracket with the number '3' above it. The notes are placed on a staff with 'x' marks below the lines, indicating specific rhythmic positions.

TIMBA

The clave in the following timba patterns can be played with either the right or left hand.



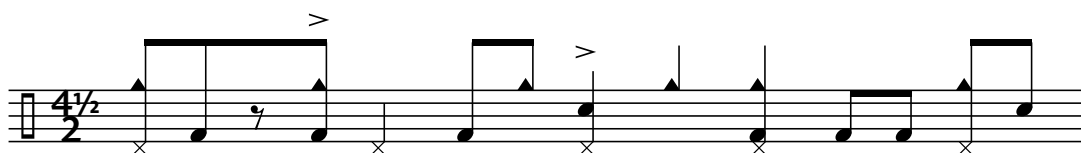
Musical notation for Track 59, Pattern 1. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a sequence of notes with various articulations: a first note with an accent (>) above it, a second note with a slash (/) below it, and a third note with an accent (>) above it. This is followed by a series of notes, including a triplet of three notes indicated by a bracket with the number '3' above it. The notes are placed on a staff with 'x' marks below the lines, indicating specific rhythmic positions.

Musical notation for Track 59, Pattern 2. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a sequence of notes with various articulations: a first note with an accent (>) above it, a second note with a slash (/) below it, and a third note with an accent (>) above it. This is followed by a series of notes, including a triplet of three notes indicated by a bracket with the number '3' above it. The notes are placed on a staff with 'x' marks below the lines, indicating specific rhythmic positions.

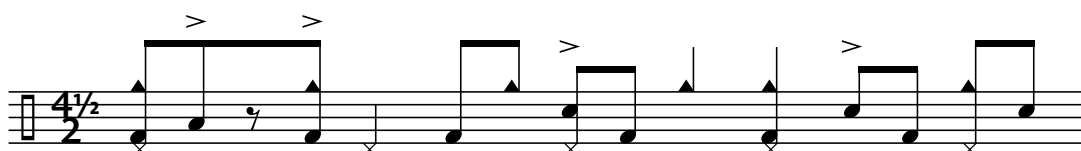


Musical notation for Track 60, Pattern 1. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a sequence of notes with various articulations: a first note with an accent (>) above it, a second note with a slash (/) below it, and a third note with an accent (>) above it. This is followed by a series of notes, including a triplet of three notes indicated by a bracket with the number '3' above it. The notes are placed on a staff with 'x' marks below the lines, indicating specific rhythmic positions.

Musical notation for Track 60, Pattern 2. The notation is on a single staff with a 4 1/2 / 2 time signature. It features a sequence of notes with various articulations: a first note with an accent (>) above it, a second note with a slash (/) below it, and a third note with an accent (>) above it. This is followed by a series of notes, including a triplet of three notes indicated by a bracket with the number '3' above it. The notes are placed on a staff with 'x' marks below the lines, indicating specific rhythmic positions.



Note the bass drum is in groups of 3.



### GROUPINGS OF 3

Up to this point we have divided the pulse for our 9 clave into four groups of two (half notes) and a one (quarter note). This is the 4 1/2 pulse.



However, the 9 can also be divided evenly into three groups represented by dotted half notes. This will be referred to as the "3 pulse".



By playing both pulses at the same time we create an interesting polyrhythm, which can be applied to our patterns. Play the 4 1/2 pulse on a cowbell while the 3 pulse is played on the bass drum.

### 9/4 POLYRHYTHM



(1) (2) (3) (4) (and)

COWBELL

1 2 3 4 5 6 7 8 9

(1) (2) (3)

### THE PULSE IN 3'S

Now we look at the clave and how it relates to this polyrhythm. The first and last pulses of the 3 pulse fall with anchor strokes of the clave, while the second falls evenly between the second and third pulse of the 4 1/2 pulse. To hear this on the drum set, we will play the clave while playing the polyrhythm with our feet. The bass drum plays the 3 pulse, while the hi-hat plays the 4 1/2 pulse.



### THE CASCARA WITH BASS DRUM IN 3

Here we take our cascara pattern and add it to the "group of 3" bass drum pattern, while the hi-hat keeps the 4 1/2 pulse. These patterns take time and effort to master. Remember to start slowly, ensuring each individual part is relaxed and accurate.

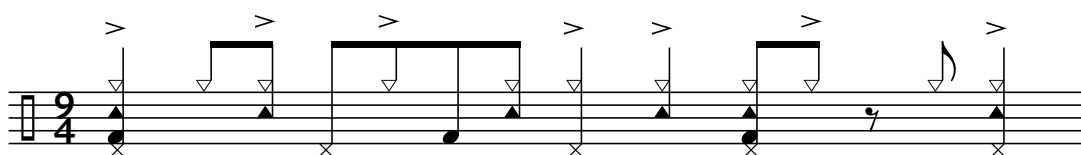


### THE CASCARA, CLAVE AND BASS DRUM

Now add the clave to the cascara. Again let me stress the need to start slowly, only increasing the tempo when you are certain that the rhythm is accurate. Eventually you should be able to play the rhythm while hearing all the individual patterns within it.



(THE CASCARA, CLAVE AND BASS DRUM)



GROUPS OF 3 EIGHTH NOTES

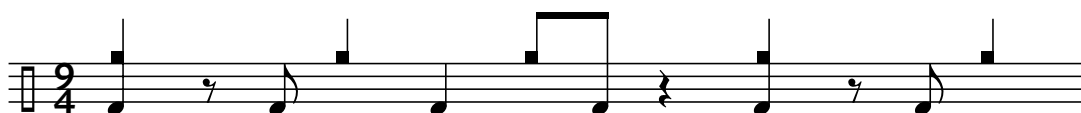
We can also divide our clave evenly into 6. Here is the math: There are 18 eighth notes in the 9 clave, which are divided into 6 groups of 3 eighth notes. These groups are represented here as dotted quarter notes. We call this our “6 pulse”.

THE 6 PULSE



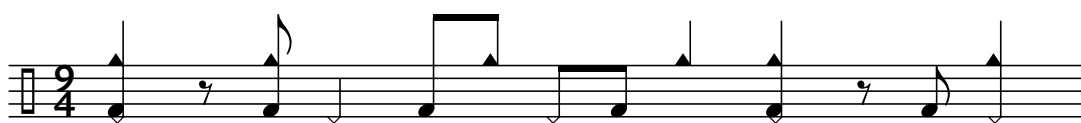
4 1/2 AND 6 POLYRHYTHM

In the following exercise the 4 1/2 pulse is played on the cowbell, while the bass drum plays the 6 pulse.



THE BASS DRUM WITH CLAVE

Now we add the 9 clave to this polyrhythm. The 4 1/2 pulse is played with the hi-hat, while the bass drum plays the 6 pulse. Make sure you can hear all 3 voices individually while playing the pattern.



## CREATING YOUR OWN CLAVE

The claves in this book are based on the 3–2 rumba model. Adjustments were made to either the 3-side or the 2-side to create new claves. In the case of the 5 clave the 3-side was extended, while with the 9 clave the 2-side was extended, and for the 7 clave the 2-side was reduced.

Staying with these models there are other devices we can use to create new claves.

### DIRECTION

As explained in the “clave” chapter, clave is a two-sided pattern and depending on the context can begin on either side. This concept can also be applied to the odd meter model. By starting on the opposite side the odd meter clave has a very different feeling. This means the associated patterns would also start on that side, giving the effect of a complete new set of rhythms.

### THE 7 CLAVE IN 2–3

Note how the second pulse is shortened, similar to the final pulse in the 3–2 model.

The image shows musical notation for the 7 Clave in 2-3. It consists of two staves. The top staff is divided into two sections: "2-Side" and "3-Side". The "2-Side" section contains two pulses, each represented by a quarter note. The "3-Side" section contains three pulses: a quarter note, a dotted quarter note, and a quarter note. The bottom staff is labeled "MAIN PULSE" and has a time signature of  $\frac{3\frac{1}{2}}{2}$ . It shows three pulses: a quarter note, a dotted quarter note, and a quarter note. A vertical dashed line is drawn at the end of the second pulse. Below the staves, the numbers 1, and, 2, and 3 are placed under the first, second, third, and fourth pulses respectively.