Rhythm Jati Grooves
By Jerry Leake

In the May 2010 issue of Percussive Notes I wrote about the South Indian Rhythm Jatis that explored changes in beat density. The system uses the concept of building denser structures by combining smaller cells. For example, 5 strokes occurring in one beat can be built with 2+3 cells, 6 strokes per beat combines 2+4 cells, 7 combines 3+4 cells, 8 uses 3+3+2 cells, and 9 with 2+3+4. Cells within a given series can be rearranged to create new structures and syncopation—8 can be 3 3 2 / 3 2 3 / 2 3 3.

In this article the Rhythm Jatis will be played at a constant 8th note tempo with cells overlapping beats and at times over the bar line. Examples are presented in a ternary pulse similar to African bell cycles. Of course, cells can be placed into binary pulses (2/4, 4/4) and shuffled into new arrangements.

Syllable Cells
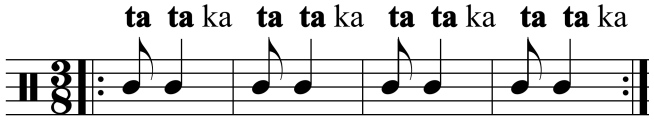
First we will break down the 5 individual cells that will comprise this study. Notice below that I deviate from the aforementioned 2+3 combination for the 5 (ta ka ta ki ta) and incorporate a unique syllable set: ta di ki na tom (tomb). Other spellings can include ta di ki ta tom and ta din gi na tom.

1 = ta
2 = ta ka
3 = ta ki ta (ta ki tuh)
4 = ta ka di mi
5 = ta di ki na tom

Combining Cells
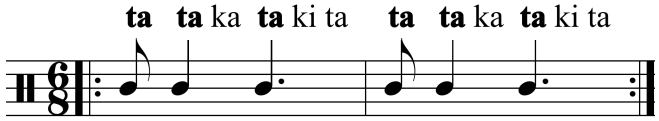
Example 1 presents a 1 + 2 series — **ta ta** ka — notated in 3/8 meter. Speak the syllables as you clap or stick the phrase.

Ex. 1



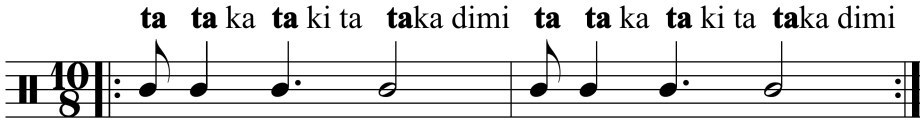
Example 2 adds in the 3 cell (ta ki ta). This expanded series—1 + 2 + 3—is placed in 6/8 meter. Continue speaking syllables as you play.

Ex. 2



By adding in the 4 cell—ta ka di mi—the phrase is notated in 10/8, as shown below in an expanded series 1 + 2 + 3 + 4.

Ex. 3

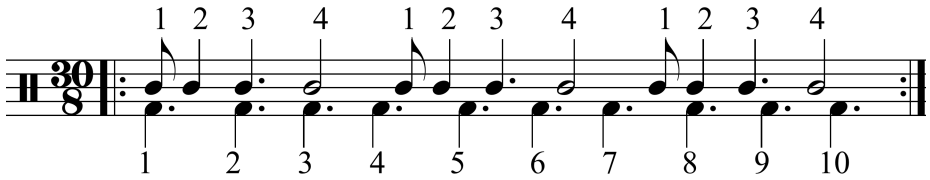


Example 4 takes the above phrase and places it into 30/8 meter. The goal is to establish a steady beat using dotted quarter notes (numbered 1–10 and beamed down). In this context three sets of the 1+2+3+4 series are required to complete one cycle. The series rotates to two other positions before reaching its origin on the downbeat.

Notice how the strikes of the first 1+2+3+4 series align with the first three dotted quarter notes, whereas the strikes of the second series are positioned to the off-beats of 4, 5 and 6. On- and off-beat awareness will help to unlock the syncopation in the third series that leads into beat 8.

As shown below the Jati syllables have been replaced with cell numbers to minimize clutter in the notation. Continue to speak **ta ta** ka **ta** ki ta **ta** ka di mi as you clap/stick the phrase. Practice paired combinations before applying all three layers of voice, clap, and beat.

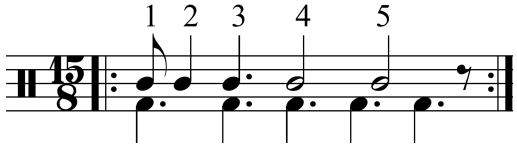
Ex. 4



Adding in 5—Ta Di Ki Na Tom

The example below in 15/8 adds a 5-cell at the end of the previous series to become 1+2+3+4+5. The dotted quarter note is retained, with the first three beats aligning with strikes. As you become comfortable, bring in the recitation.

Ex. 5



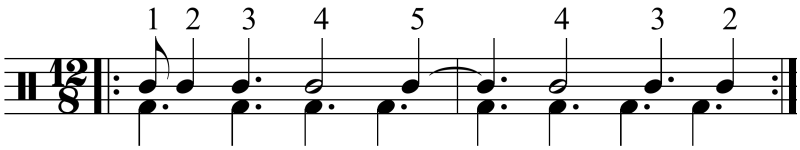
Phrase Expansion and Contraction

Having explored expanding phrases using 1, 2, 3, 4, 5 cells, we can reverse direction and reduce the number series back down to create new rhythm geometry. The expansion and contraction shown below is built with the cell series: 1 2 3 4 5 4 3 2. When it is repeated, the "1" on the downbeat completes the full phrase before launching into the next. Expansion and contraction is represented in a pyramid-like stack of numbers that also includes its "reflection" (contraction) back down to 1.

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

Example 6 puts the above numbers into notation. What results is a 2-bar phrase in 12/8 that shares some of the on- and off-beat qualities of ternary African bell patterns. Play this to the dotted quarter note beat to discover the expansion and contraction.

Ex. 6
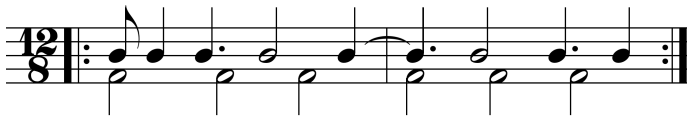


Once you are comfortable with the limbs add in the recitation. The Indian syllables are shown below in expanding and contracting shapes. The entire series is repeated to reveal how the end of one phrase flows into the beginning of the next, and so on. The first syllable of each line (bold print) highlights the “strikes” from example 6 shown above.

ta
ta ka
ta ki ta
ta ka di mi
ta di ki na tom
ta ka di mi
ta ki ta
ta ka
ta
ta ka
ta ki ta
ta ka di mi
ta di ki na tom
ta ka di mi
ta ki ta
ta ka
ta

Changing the Beat from 4 to 3

In example 7 the dotted quarter note beat has been changed to a half note, thereby switching from a more grounded “4” feel to a “3” feel. Notice that only the first beat of the first bar aligns with a strike. This more abstract approach, that appears to lack continuity and cohesion in notation, unfolds in a unique sonic partnership of tension and resolution. Refer to the video link to hear this and all previous examples.

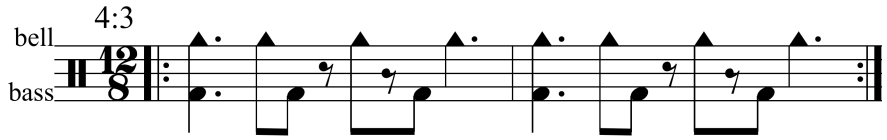
Ex. 7



Bringing in 4:3
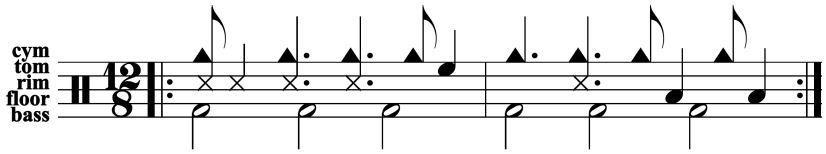
We can expand the possibilities by building a drum set groove that further develops example 7. This is accomplished by adding in a steady cymbal pattern that recalls the 4-feel. Example 8 shows the 4:3 relationship of the bell of the cymbal (or cowbell) and the bass drum.

Ex. 8



Example 9 finishes the groove by bringing in the 2-bar phrase from example 7. The phrase has been arranged to the snare drum using rim clicks and mounted tom and floor tom for a more melodic contour. Improvise other approaches to expand the orchestration possibilities.

Ex. 9



Conclusion

This article was conceived from the fundamental question: “What if?”

What if the Rhythm Jatis of South Indian music were assembled into consecutive strands of cells, placed into Western notation with an underlying beat, and orchestrated into a unique drum set groove? These examples start to answer only a portion of that question.

Stepping outside the box of familiar territory allows new ideas to be discovered and discussed. Pioneers inspired by this concept will dig deeper beyond what I have found on the surface and unearth new rhythm treasures.