# THE RHYTHM BOOK
## RHYTHMIC DEVELOPMENT AND PERFORMANCE IN 4/4

Rhythm is what breathes life into music. Yet, in music education materials, rhythm is surprisingly neglected in comparison to harmony and melody. *THE RHYTHM BOOK* series is the solution. This volume focuses on mastering rhythmic development and performance in 4/4, including phrasing, feeling time and form, rhythmic interaction and much more. Swing, Afro-Cuban, Brazilian, funk, calypso, reggae and ballads are among the styles discussed.

Author **Rory Stuart** is a critically acclaimed jazz guitarist and composer who created and taught the rhythm curriculum at New School University since 1992. The recipient of awards from the National Endowment for the Arts, Meet the Composer, and the Fulbright Commission, he has directed and taught workshops and clinics around the world; a list of his former students reads like a "Who's Who" of rising young music stars.

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*"In his Master Classes for students and teachers at Kazakh National University of Art, Rory Stuart carefully explained the basics of jazz rhythm and its development to an audience that was always engaged, tapping rhythms, singing parts, etc... The students were inspired, and this much- anticipated workshop was so well attended that it was standing room only!"*
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THE RHYTHM BOOK RHYTHMIC DEVELOPMENT AND PERFORMANCE IN 4/4

BY RORY STUART

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DIGITAL AUDIO INCLUDED

# THE RHYTHM BOOK

## RHYTHMIC DEVELOPMENT AND PERFORMANCE IN 4/4

BY RORY STUART

FOR ALL INSTRUMENTS

*"Before coming to NYC and meeting up with Rory Stuart I really had no idea how fascinating the world of rhythm was. Rory was like an open door to so many worlds of music, both in the sense of style and approaches of rhythm. Some things I take from his classes will always be a part of my music."*

- ARI BRAGI KARASON
(Trumpeter from Iceland)

*"During my four years at the New School, Rory Stuart was one of the kindest, most supportive and inspiring teachers I had the pleasure of studying with. His approach to rhythm influenced my music so deeply that I still find myself drawing from that inspiration when I write. Not to mention, of all the music I wrote those four years, my best tunes came out of Rory's classes!"*

- BECCA STEVENS
(Vocalist and Composer, USA)

*"Rory Stuart's versatility as a guitarist, composer and music researcher makes him one of the most original artists in contemporary music. His masterful ability to teach complicated rhythms in an understandable language has helped students and renowned jazz musicians from around the world to develop their unique voices. I feel honored that I had a chance to study with him. Rory showed me how rhythm goes beyond groove and feel, and this deeply changed my bass playing style."*

- AMANDA RUZZA
(Bassist from Brazil)

*"Rory Stuart has done an amazing job leaving no stone unturned in the rhythmic universe. He covers an incredible amount of ground in the text accompanied by first rate audio examples, a necessity when tackling the ambiguities of rhythm in music. . . . I am sure that [Stuart's books] will be required reading in the field, setting the standard for future research on rhythm."*

- DAVE LIEBMAN
(2011 NEA Jazz Master, Artistic Director of IASJ,
Saxophonist with Miles Davis and Elvin Jones)

*"Endlessly organized, enthusiastic, and imaginative, Rory Stuart is one of the most gifted teachers I have ever encountered. In designing and teaching the rhythm curriculum at The New School, he has had a quiet impact on a whole generation of players in the city, and I consider myself lucky to have had the chance to study with him."*

- JOHN ELLIS
(Saxophonist, USA)

*"The depth of Rory Stuart's rhythmic teaching is as inspiring as it is humbling. By far, one of the clearest, most refreshing masters of this knowledge..."*

- DANIEL DOR
(Drummer from Israel)

*"Rory's vast knowledge and long experience in teaching rhythm makes his material essential for any musician interested in developing their rhythmic ability!"*

- ANDERS VESTERGÅRD
(Swedish percussionist and rhythm professor at Fridhems Flkhögskola)

*"Rory Stuart, an internationally recognized guitarist, composer and educator, has worked with some of the foremost jazz musicians and taught many of the most important emerging young jazz stars of today, Rory has a lot of experience and information, especially in areas such as polyrhythmic compositional and improvisational techniques. He has worked long and hard to capture and convey this knowledge in this book series on rhythm, which expands the small number of works in this field. I've been waiting for these books for a long time - he knows about rhythm! It is a great contribution for all serious practitioners. Great job, Rory!"*

- DR. MARCELO COEHLO
(Saxophonist and professor at Souza Lima, Sao Paolo Brazil;
founder of International Rhythmic Studies Association)

*"Rory's rhythm lessons opened a lot of doors for me. As a veteran player, I had spent many years focused on harmony; the lessons got me to concentrate on rhythm. Rory showed me ideas I was able to add and immediately utilize in my playing to make the music feel fresher. The lessons really influenced, and continue to influence, my playing."*

- MICHAEL WOLFF
(Pianist, USA. Performed w/ Sonny Rollins, Nancy Wilson, Cal Tjader, Airto Moreira, Cannonball Adderley;
co-leader of Wolff & Clark Expedition)

*"As a fellow teacher who has studied rhythm with Rory, I can say he truly is a teacher's teacher. His precise and innovative instruction lifts my level of creativity and skill. His thorough coverage of rhythmic options allows for a massive expansion of concept, but he does it with an organizational structure in which it feels simple to learn and grow. Rory's method is genius and has taken so many young people to a new level that he has influenced a whole generation of jazz!"*

- RACHEL Z
(Pianist, USA)

*"I had the chance to meet Rory Stuart as a teacher at New School for Jazz and Contemporary Music and he opened my mind and pushed my research on guitar and composition with ideas, suggestions which were seeds i can still expand and dig!"*

- FRANCESCO DIODATI
(Guitarist from Italy)

*"Rhythm is a broad, complex and fascinating world to study and try to describe in a clear and compelling way. In his different volumes, Rory succeeds in giving the reader a great variety of examples and theories drawn from the most simple foundation to the most advanced concepts. I was lucky to collaborate with Rory, both as a student and performer, and was always inspired by his continuous search for higher rhythmic mastery. I can only encourage every musician, regardless of their level of understanding, to study using Rory's great writings.*

- ARTHUR HNATEK
(Drummer from Switzerland)

*"Rory Stuart has developed such a deep understanding of rhythm that he makes the most difficult material seem easy. As his student, I had the privilege to experience challenge, a clear method, new discoveries and fun."*

- CAMILA MEZA
(Vocalist/Guitarist from Chile)

*"I think these are the best rhythm books I've ever seen. These books will become a standard; they are so detailed and well thought out, I'm looking forward to working with them."*

- CHRISTIAN SALFELLNER
(Professor of Rhythm, University of Musik, Graz, Austria)

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# Contents

# This book is for you if:

• You have completed *THE RHYTHM BOOK—Beginning Notation and Sight-Reading* and *THE RHYTHM BOOK—Intermediate Notation and Sight-Reading*; or you have enough command of rhythmic notation that it is not an obstacle.

• You want to learn rhythmic concepts and practices and how to apply them in performance.

• You are any age, an adult or young learner.

• You are a vocalist, or play any instrument (including horns, piano, guitar, bass, strings — NOT just drums and percussion instruments!). This book, and the following ones in the series, are unusual in showing how rhythmic ideas connect to harmony and song form.

• You are taking music classes, studying with a private instructor, or are teaching yourself.

• You are a music teacher, who wants to teach rhythmic ideas to your students.

• You compose or would like to compose music, or write arrangements for others, and would like to incorporate rhythmic development, and greater awareness of rhythmic styles and interaction in 4/4.

• You play or want to play any style of music. This book has somewhat of an orientation towards jazz and contemporary music (funk, pop, rock, hip-hop, Afro-Cuban, Brazilian, modern classical) and includes the syncopation found in these styles of music and the swing feel of jazz. If you are an aspiring musician in a different style (e.g. folk, singer-songwriter, pre-20th century classical), you can learn what you need to know about rhythm, but the book includes some "extra" rhythmic things not usually found in your style of music.

Please note: once you have completed this book, you will be ready for the next book in *THE RHYTHM BOOK* series: *THE RHYTHM BOOK—Crossrhythms on 4/4*. From there, you can proceed to two other books in the series: *THE RHYTHM BOOK—Odd Meters and Changing Meters*; and *THE RHYTHM BOOK—Superimposition and Subdivision, Metric Modulation, Feel Modulation and Displacement*.

## Placement of Accented and Ghosted Notes

If you always accent "on-beats," practice accenting the "off-beats" and ghosting the on-beats. Then work on varying which beats are accented, so that there is a somewhat unpredictable but energetic "dance" to which beats you accent.

Many people new to swing either play all notes equally in volume, or accent on the beats. In combination with an exaggeratedly uneven placement of the eighth notes in time, they play lines in a way that sounds like this:

Example 3-012:

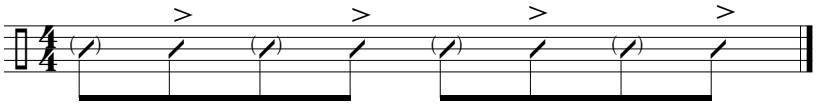
Even without the exaggerated uneven rhythm, their accenting on a line with pitches might sound like this (the notes in parentheses are ghosted):

Example 3-013:

In fact, people who accent on the beat all the time also would tend to not play a phrase like this starting on the "and" of the fourth beat. But, even if they did, they would accent it that way.

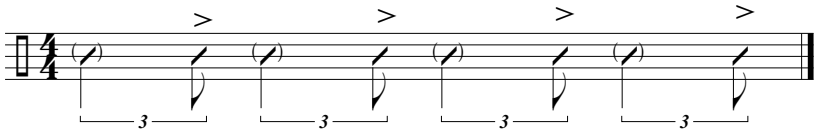
If this is what you are doing, a first thing I will advise is that you practice the following exercise, strongly accenting the off-beats and ghosting the on-beats (by "ghosting," I mean playing them so softly they are felt but barely audible). For some people, this is initially surprisingly difficult:

Exercise 3-002:



Practice this with rhythmically even eighth notes, and with eighths that are played as unevenly as this:

Exercise 3-003:



… and everywhere in between, with regard to rhythmic feel.

Applied to the pitches in the phrase in Example 3-013, switch to accenting the off-beats and ghosting the beats:

Exercise 3-004:

Our goal phrasing might be some mix of accents and ghost notes on and off the beat, such as:

Example 3-014:

… but you need to be comfortable accenting off-beats in order to make that happen.

Try taking a melodic line, playing it with even attack, then accenting on the beats:

Exercise 3-005:

...and then accenting off the beats:

Exercise 3-006:

What you will notice in hearing great melodic improvisers playing swing feel is that they neither accent all the beats nor accent all the off-beats; there is a kind of dance between what is accented and what is ghosted, in a way that is not entirely predictable by the listener. Therefore, the rhythmic execution of the melody is itself an exciting performance element, with a drum-like property. The phrase we've been using might be accented in one of several ways. For instance, try playing it like this:

Exercise 3-007:

***Capoeira***

As previously mentioned, capoeira is a martial art that originated among slaves in Brazil, and it is now a folkloric art, performed at dance concerts, as well as a martial art. Capoeira has its own style of music that is specifically created to accompany sparring. As we discussed, this music relies heavily on the berimbau, an instrument with a single steel string attached to a wooden bow on which a gourd is attached to resonate; a small stick, a shaker, and a coin or little stone are used in combination to produce the sound. The musical group playing for capoeira will always have at least one berimbau, but may have several (three is common, each with a different pitch). In addition to the berimbau(s), the group may include an agogo, atabaque (a conga-like hand drum), and one or more pandeiros. With multiple berimbaus, each has a different pitch, and there will be a lead instrument that the others follow.

Participants gather in a circle, called a roda, with the musicians playing, and everyone singing and clapping, while the martial artists enter the center of the circle to engage in combat (or, more commonly, simulated/practice combat, which looks very much like a dance). The music has a series of sections that correspond to the progression of actions by the capoeiristas. The berimbau leads the musical group, and plays a rhythm, called a "toque." There are many different toques, corresponding to the many moves and styles of capoeira "games" (the martial art sparring).

The lead berimbau may play:

Example 3-076:


… and the atabaque:

Example 3-077:

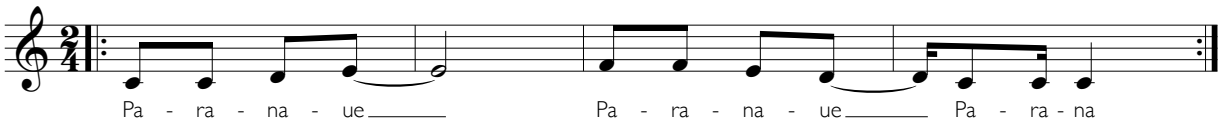
… and the pandeiro or reco-reco (a Brazilian scraper instrument, reminiscent of a Cuban guira):

Example 3-078:

These are just example parts. An excellent source of traditional capoeira recordings is *Capoeira Senzala de Santos* in the Musique Du Monde series (I've transcribed some of these parts from there).

An example of a vocal part from a traditional capoeira song:

Example 3-079:



## African Roots, Religion, and Dance

Many rhythms of Afro-Cuban music come directly from Africa, especially West Africa, for example Nigeria. Years ago, I heard drummer Joe Chambers describe a number of these rhythms with names that were not familiar to me; he was using the African names (Yoruban) for the source rhythms. Royal Hartigan and many others also draw the direct links between the African rhythms and the same rhythms used in Afro-Cuban and other New World music: kpanlogo's ngongo bell pattern and son clave; yeve sovu's gankogui bell pattern (from the Ewe people) and tresillo cubano (this same rhythm is also one of the parts played on the tamalin drum in sikyi dance music from the Ashanti people in Ghana).

Just as religious practices (Candomblé) are connected to Brazilian rhythms, the religious practice of Santería in Cuba and Latin America is an important influence on Cuban rhythms. And, just as dance is a vital element in Brazilian rhythmic styles, so it is in Cuban styles – for example, each style we speak of has an associated dance.

## Relationship Between 6/8 and 4/4

One key to understanding both Afro-Cuban music and how it has contributed to jazz feel is the relationship between 4/4 feel and 6/8 feel that is particular to this music. First, realize that, like Brazilian 16th notes, the eighth notes in Afro-Cuban music have their own kind of distinctly non-metronomic feel. Next, let's make a quick foray into triple meter, and look at a folkloric African clave called "bembe," which is thought to be a source of Afro-Cuban clave:

Example 3-089:

Adjust the tempo of the above 6/8 example so that the bembe figure sounds as much as possible like the 4/4 rumba clave we discussed before:

Example 3-090:

Practice going back and forth between these two claves, feeling their similarity. If you play this at a reasonably fast tempo, and phrase the claves (perhaps clapping it, hitting a cowbell, or even playing it with the instrument itself – the claves), in the way these are played by Afro-Cuban musicians, you may find that, to a listener, it is nearly indistinguishable whether you are playing the 6/8 bembe or the 3:2 rumba clave in 4/4.

This relationship between the claves, and hence between the feels, is the conduit used quite frequently in Afro-Cuban music to shift between and incorporate both feels together. For a clear example of this, I recommend you listen to Jerry Gonzalez and the Fort Apache Band on the recording *Rumba Para Monk* on the track "Little Rootie Tootie." On this recording, the band adapts compositions by Thelonious Monk and performs them in clave. On "Little Rootie Tootie," after horn and piano solos that explore 3:2 rumba, 6/8 bembe, and 4/4 swing, there is a group percussion improvisation (a sort of "group solo"). In this, you can hear transitions back and forth between 3:2 rumba and 6/8 bembe, and finally some points when they are happening simultaneously.

Several jazz musicians have expressed to me their opinion that this relationship in Afro-Cuban music is also responsible for the kind of 6/8 integration into 4/4 found, for example, so prominently in the playing of drummer Elvin Jones. Scholars, such as Rolando Perez Fernandez, have referred to this as the "binarization" of African triple meter music.

While there is no need to look further at the purely notational relationship between 6/8 bembe and 3:2 rumba (we remind ourselves that notation of rhythm in jazz is just our attempt to approximate what is actually played), and I do not generally look at this with my students, for those readers who are interested, I will show here how the two claves in notation form differ. First, we can convert the 6/8 bembe to 4/4 by treating each dotted quarter as a half note, and writing it in triplets. So, we see that, if we choose the right tempo relationship:

Sing the rhythm of the melody to Sonny Rollins "Everywhere Calypso" as performed by Roy Haynes Quartet (on *True or False*):

Example 3-176:

Even short melodic phrases from calypso tunes convey a lot about the rhythmic feel. Sonny Rollins plays this short two bar call and two bar response pattern in his piece "Don't Stop the Carnival" from *What's New*:

Example 3-177:

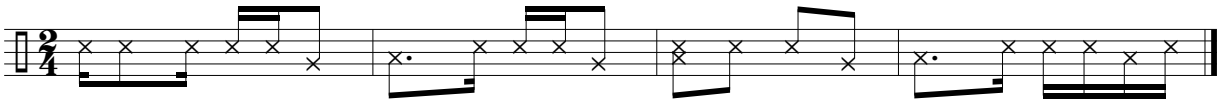
… and then trades phrases with guitarist Jim Hall, on this great recording to study for calypso feeling.

Similarly, check out the rhythm in this melody phrase in Mark Soskin's "Caribbean Party Stomp" from *Rhythm Vision*:

Example 3-178:

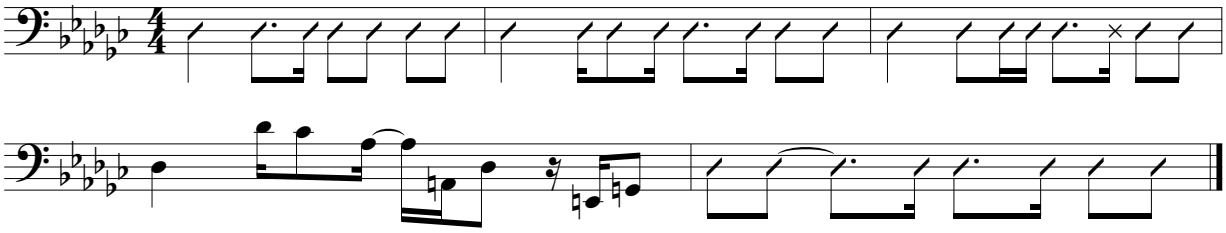

… as well as the drum part played by Harvey Mason and the percussion part by Sammy Figureroa (for example at the beginning of the piece):

Example 3-179:



… and the start of his third chorus (the fourth and fifth bars have examples of his surprising use of open strings as a "feel" element, even though the A natural and E naturals are harmonically distant from the chords at that point in the tune)

Example 3-214:



There was rapid evolution of the music in the late '60s and into the first part of the '70s. Not long after James Brown was having hits with tunes such as "Cold Sweat" and "I Feel Good," Sly and the Family Stone were shaping their own style of funk. "Love City" from their record *Life* is a good example, and was written and performed not long after the tunes by James Brown.

The bass line to "Love City," even more sparse than the bass lines in James Brown tunes, and in striking contrast to the kind of parts Jamerson was playing, is all at the eighth note level. But neither of the two repeating notes falls on a beat! What made this especially of interest and a glimpse into the future was the technical innovation of Sly's bassist, Larry Graham, usually called "slap technique" or "slapping and popping," though called by Graham himself "thumpin' and pluckin'." This percussive way of playing electric bass involves slapping the lower strings with the side of the thumb, while plucking the higher strings so hard that they produce a snapping or popping sound. Later bassists (examples: Stanley Clarke, Marcus Miller, Victor Wooten) would use this technique, but usually in much more notey displays of technical virtuosity than in this early Larry Graham line. Here is what Larry Graham played on "Love City":

Example 3-215:

But, on top of this bass line on the eighth note level are occasional syncopated 16th note lines from the horn section:

Example 3-216:

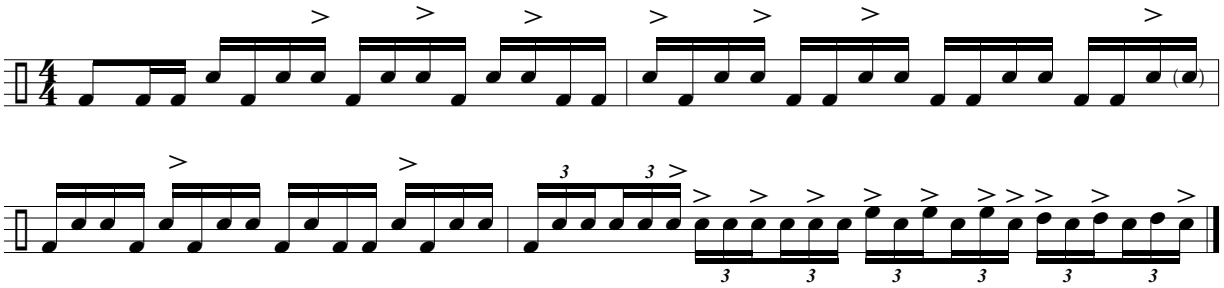
… and a steady drum groove by Greg Errico that feels more 16th note based than are the James Brown grooves by Clyde Stubblefield and Jabo Starks:

Example 3-217:

We see this progression from eighth note feel to 16th note feel in funk, and there was another giant leap in that direction with the developments in the East Bay area of California, especially exemplified by Tower of Power. In Tower of Power, the funk had moved all the way to the 16th note level, with 16th note bass lines, filled with ghost notes and syncopations; 16th note comping by guitar and organ; syncopated horn parts played by the amazingly tight and cohesive horn section; all over the intricately syncopated drum grooves created by David Garibaldi.

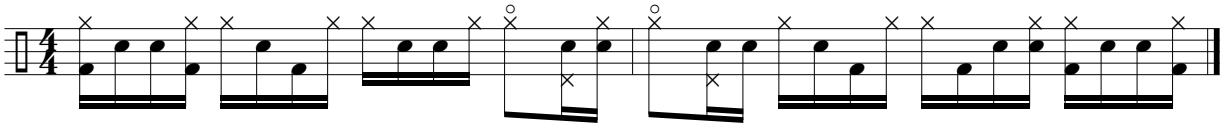
For a start, listen to Dave Garibaldi's 16th note-based playing on the closed hi-hat throughout "The Skunk, the Goose, and the Fly" on their debut recording from 1970, *East Bay Grease*. (Similarly, listen to "Knock Yourself Out.") And, it is not just his hi-hat playing; check out his highly syncopated four bar drum break 3:18 into the tune (I've shown only snare, bass drum, and tom-toms here):

Example 3-218:



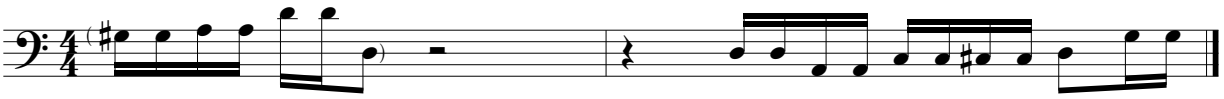
Listen to how syncopated these 16th note grooves were in "Oakland Stroke," with this part played by David Garibaldi:

Example 3-219:



… and the very 16th note based part Francis Rocco Prestia plays on bass to "Oakland Stroke":

Example 3-220:

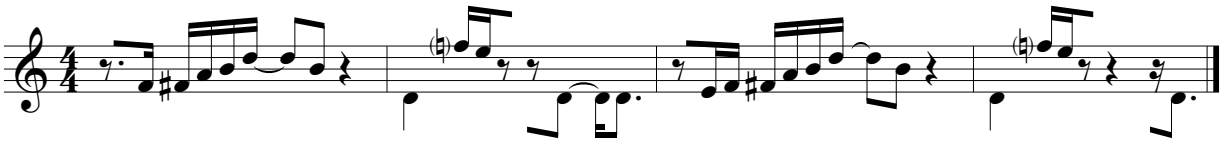



The key hits to Bruce Conte's rhythm guitar part on "Oakland Stroke" (couched in some strumming of deadened strings for groove effect) are:

Example 3-221:


Even the horn parts are highly syncopated at the 16th note level. Here, the baritone sax-only parts are shown stem down (they are actually played at the bottom of the bari range), and the rest of the horn ensemble parts are stem up:

Example 3-222:



# Very Fast and Slow Tempos

Extremes of tempo can be a particular challenge. The ability to play well at fast tempos is required only for some styles of music. For example, we rarely find lightening fast Calypso, hip-hop, singer-songwriter music. Fast tempos are an issue in jazz (swing feel), sometimes in fusion and funk, and in other styles such as bluegrass. Many of the examples I use in this discussion will be jazz, but most of the principles apply to all genres. First, we briefly discuss very slow tempos.

## Slow Tempos

Many of the challenges of playing very slow tempos are addressed in the discussion of Ballads on page 78. The ability to choose from the rich palette of possible note rates and phrasing, and to avoid simply double-timing everything on solos are key. Playing at very slow tempos also requires a somewhat heightened sense of time, feeling a pulse over a larger expanse of silence, for example. Irish bassist Ronan Guilfoyle describes the challenge he felt at first in simply walking quarter notes at a very slow tempo called by bandleader and drummer Keith Copeland; there was so much time between each quarter note, and it had to be played at just the right place in order to feel good. One strategy many use is to subdivide in their internal feeling of the pulse at very slow tempos, such as feeling triplet sixteenth notes in playing a slow shuffle. You can also practice relaxing and feeling the slow pulse without subdividing.

## Fast Tempos

After distinguishing between notes played quickly and fast tempos, we discuss some of the challenges in playing fast tempos, and some ways to address them.

### Distinction Between Playing Notes Quickly vs. Playing at Fast Tempo

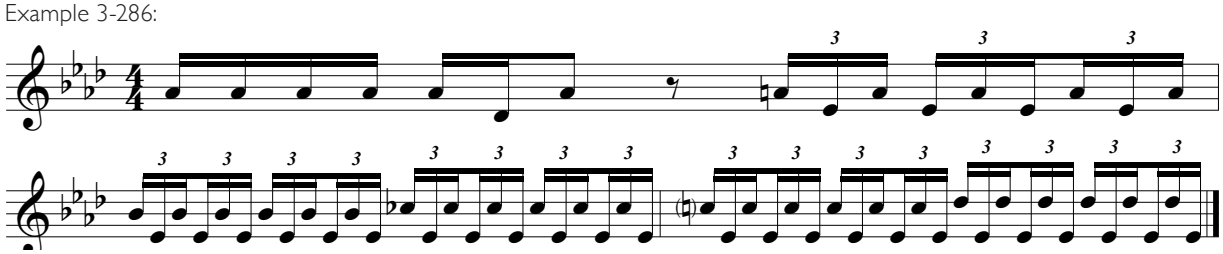
Oscar Peterson, who was quite impressive at playing music at very fast tempos, made the point that there were many pianists around who could play notes as rapidly as he could, but a very small percentage of these who could play at a fast tempo the way he did. This distinction is important; many people, in trying to play at fast tempos, focus on the velocity of notes they can string together in lines. Velocity does play a role, but it is less important than feeling the tempo and keeping track of the form and where the beat is, listening well and locking in with the other musicians with whom you are playing, and playing what notes you do play in just the right places. I sometimes use a boxing analogy to express this last point: a boxer who simply flails, throwing as many punches as quickly as possible tends to be much less effective than one who throws fewer punches, but makes those perfectly timed stinging blows. It's true some musicians who play well at fast tempos do play a lot of notes (and Oscar Peterson is a good example of this), but they also place these notes very well; and you can effectively play at a faster tempo without such density of notes (listen to Miles Davis and Jim Hall, for example). Incidentally, this distinction is true in most styles of music, but less so in bluegrass, where the musicians tend to play parts that include most notes on the "grid" of the tempo performed in regular patterns.

If you are more concerned with playing notes quickly rather than playing at a fast tempo, you can check out, for example, Michael Brecker's solo on "Young and Fine" from *Smokin' in the Pit* by Steps Ahead, where, at a medium tempo (quarter note equals ~100), Brecker plays triplet 16th notes at 3:33:

Example 3-285:

… and at 4:05:

Example 3-286:



… and even 32nd notes (at 2:24):

Example 3-287:

… and at 3:37:

Example 3-288:

The rest of this section, however, will focus on playing at fast tempos, rather than playing notes quickly.

## Hearing and Staying in the Right Place in the Time and Form

In locking in with the other musicians and being clear in the form, a key factor is listening to others while you play, a topic we've discussed already. Failure to do this, especially if it leads to the soloist becoming displaced or confused about the place in the form, can completely undermine credibility at a fast tempo, even if the soloist is physically capable of playing lightening-fast strings of notes. Effectively using space can both help the soloist listen, and help the rhythm section members listen and coalesce. Study where people who are great at playing fast tempos leave the space and where they play their phrases (I've listed some examples at the end of this section). It is important that the soloist and rhythm section hear and agree on the "landmarks" in the tune, especially the exact place in the time where a section of the tune begins; experienced players convey these very clearly, especially if there are any momentary uncertainties between the band members.

## Rhythm Section Players and Unaccompanied Performers

For the rhythm section player, or the person doing a solo performance (listen to Art Tatum for great examples of playing unaccompanied at fast tempos, e.g. "Tiger Rag," written as though quarter note equals 176, but felt twice as fast as quarter equals 352), the main issue is establishing and maintaining the fast tempo.

Rhythm section players generally do not need to play as high a velocity of notes (e.g. a bassist walks quarter notes or a drummer plays quarter notes on the ride cymbal, while a soloist might be playing short stabbing eighth note-based lines), but the bassist and drummer must play continuously, so they must be able to stay physically relaxed and avoid fatigue, maintain and express strongly the pulse they feel internally, and listen to each other as they play. A chordal comping instrument, such as piano, guitar, or vibes, is in a position more like that of the soloist, in which they can play less and leave space, but what they play must be in just the right places.

# Rhythm Section Interaction

Within the rhythm section itself, there is (or should be!) a great deal of interaction on several levels: placement of the beat and relationship to the beat between members; definition of the song form; and reaction to what others in the rhythm section play, including where this results in change in feel. The roles within the rhythm section, and the way individual members function (including if, for example, the group has both a pianist and guitarist) also are important to consider.

## Roles Within the Rhythm Section

There are certain traditional roles within a rhythm section, dependent on musical style, of which you should be aware. But, there is no need to be overly tied to traditions if you understand them; different rhythm sections function together somewhat differently, so it is informative to listen to rhythm sections you especially enjoy and study how they do what they do. Is there someone who functions mostly in a foundational/anchor role? Someone who plays more adventurously on top of that?

For example, in a swing context, the bassist traditionally plays a role involving walking, defining root movements of the chord progression and anchoring the time. Listen to the Miles Davis Quintet with Ron Carter and Tony Williams, and Carter is almost always the anchor. But, if you listen to Scott LaFaro's playing with the Bill Evans Trio, you hear a bassist effectively functioning in a different way, playing melodic phrases and broken rhythmic figures, and this worked well musically in that group. Paul Motian's role as a drummer would have been different with a Ray Brown type bassist than it was with Scott LaFaro (and Ron Carter's playing with Miles Davis allowed Tony Williams the freedom to do what he did). Afro-Cuban groups often have the bassist play a very repetitive part to anchor the groove, but listen to how variably (and sometimes "conversationally") Andy Gonzalez plays in the Fort Apache Band and how well it works. In some cases, a group may be looking for the traditional role; in other cases, a more non-traditional is what the group seeks. It is said that, amazing as he was, Miroslav Vitous did not fill the traditional role as much as Joe Zawinul wanted in Weather Report (though, personally, I must admit I loved what Vitous played in that early edition of the group!).

### *Rhythmic Landmarks*

I mentioned above the way Elvin Jones would play a thundering cadence; he would often put these in critically important places to keep the form of a piece clear (as he did with John Coltrane on "Impressions"). There is a wide spectrum of possible approaches to playing in terms of how obvious vs. how disguised the group makes the time and form of a piece of music. If these elements are being played in a very obvious way, the rhythmic landmarks will almost certainly be made explicit. Still, I want to mention this specifically with regard to drummers. I notice that I often hear less experienced drummers (students) who play the pulse alright, and might have a good time feel in their playing; but they don't do those things (some of them subtle) that really convey the form of the music. In contrast, more experienced drummers often grasp the form so quickly and convey it so clearly that it feels very comfortable to play even a new piece of music that one is sight-reading for the first time (I think of Keith Copeland and John Riley as examples of drummers I've played with who are masters of this). When you get to the bridge or some other new section of the piece, they play some little thing that affirms to everyone "yes, we are here!" (Bassists can similarly choose to play things that either make clear or obscure the rhythmic landmarks in a piece that convey the form but, because they have to deal with harmonic motion, they are usually quite aware of form issues; less experienced drummers are often not.) So, my message to drummers is to play the form as clearly as would someone on any instrument who had to deal with melodic or harmonic elements.

But what if the band is playing in a style where the time and form are more obscured? Perhaps abstract ideas are being conveyed, or there are crossrhythms, superimpositions, and/or feel modulations played that make the underlying time and form less obvious. Perhaps this hiding of the time or form is being done to create a certain intrigue in the listener, who is listening to hear where these hidden things are. In this case, it might hurt the effect to play a bunch of obvious things that spell everything out; but it is even more essential to selectively play certain landmarks at key places that keep everyone in the group together.

### *Holding it Down*

Often, someone in a group takes the role of anchoring (providing solid foundation to) the rhythm section, freeing up others in the group to stretch out more. For example, in the Miles Davis Quintet of the '60s, Ron Carter played time and forms clearly and authoritatively, freeing up Herbie Hancock and Tony Williams to do inventive things on top of his bass line. Less obviously, Elvin Jones was so solid in anchoring the time and forms in the John Coltrane Quartet, that Jimmy Garrison and McCoy Tyner had a lot of flexibility, and it is striking how often Jimmy Garrison provides propulsive swinging feel in his bass parts while playing all kinds of figures (and not playing quarter notes). Incidentally, I sometimes hear drummers who borrow some of the language of Elvin Jones, without understanding and incorporating his powerful statement of critically placed cadences that keep the form of the piece clear.

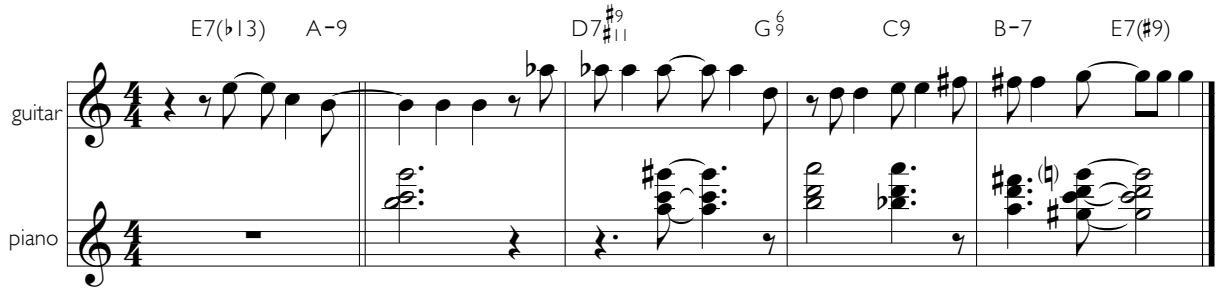
***What To Do in a Group with Both Pianist and Guitarist***

When it comes to the roles in a rhythm section, a particular relationship about which I am often asked by students is that of the pianist and guitarist in a group that has both. An especially problematic situation, common in inexperienced groups, is where both the pianist and guitarist simultaneously accompany a soloist, yet don't listen and react to each other. One issue with this is that it can feel too rhythmically cluttered and muddy in timbre; another is that there can be harmonic clashes; and yet another is that it can handcuff each so that no interesting harmonic substitutions can be played for fear of clashing (if they are even aware this is a risk!). Recognizing these problems (or perhaps being told not to play at the same time by an instructor or bandmate), the pianist and guitarist can resolve this by one of them laying out while the other accompanies a soloist. This can definitely work and, at times is the best solution (sometimes it is also great for all chording instruments to lay out!). Alternating who comps also allows for a change in color/timbre/texture behind different soloists as the guitarist accompanies one while the pianist accompanies the other.

However, there are other ways that pianists and guitarists can work together. Here are a few examples.

In a bossa nova style, over chord changes used on tunes such as "Tangerine" (the guitar plays finger style bossa; I've shown only the top notes of the guitarist's chord voicings and the rhythm in which they are played; the pianist plays ringing sustained high chords):

Example 3-328:

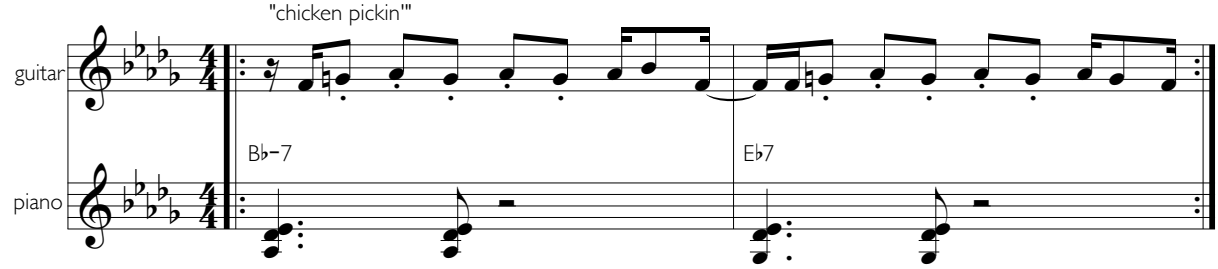



… on a swing blues in F, with guitarist playing Freddie Greene-style chording:

Example 3-329:


… on a funk vamp, in which the guitarist plays a "chicken pickin'" style line:

Example 3-330:

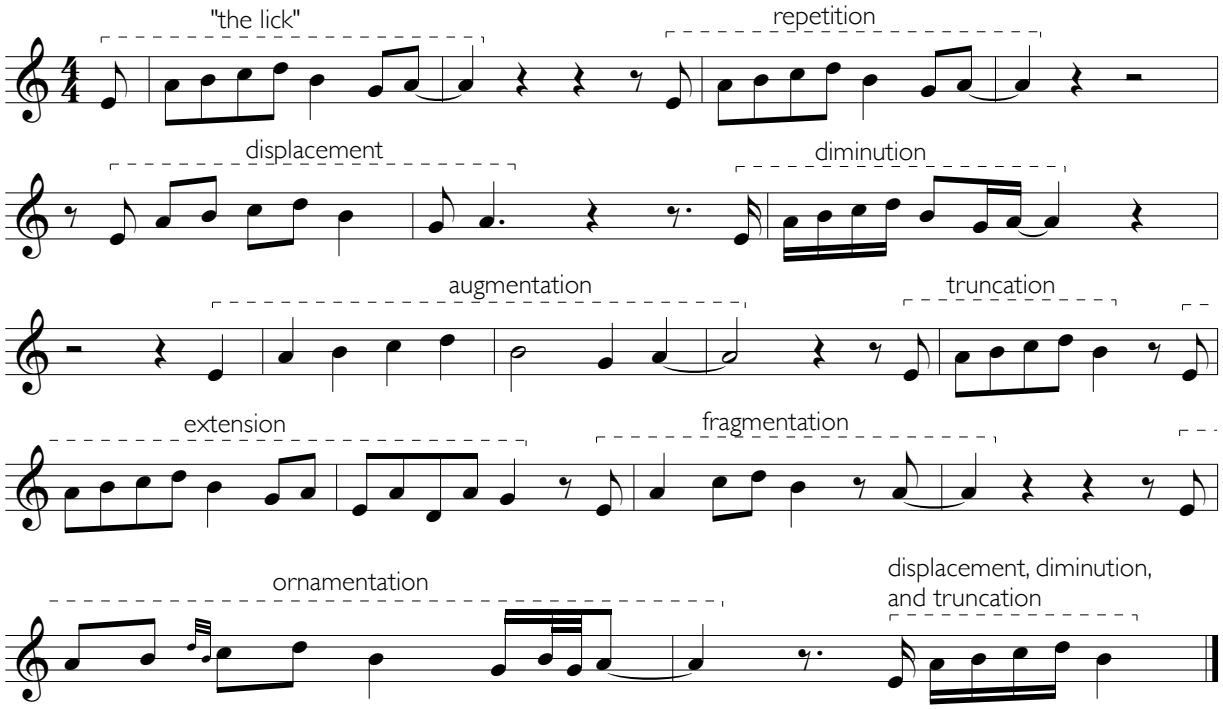


...and here, motif #1 is played one fourth as fast (i.e. each note proportional increased four times in duration) compared to the original:

Example 3-378:

You can apply all of these techniques (and even combine them, as we discuss below) to any material, even to "the lick":

Example 3-379:



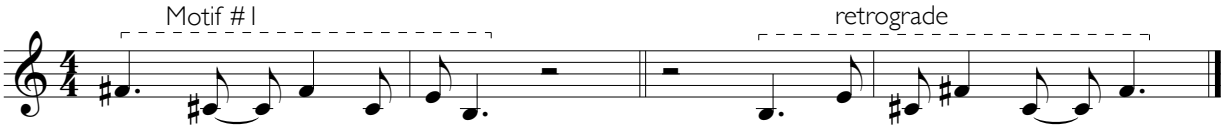

## Other Techniques

The techniques we've just discussed are the ones that are central to developing a rhythmic idea in an improvisatory situation. They are also all we need to analyze most rhythmic development. There are a few other techniques of which you should be aware, although they are less central.

***Retrograde***

Playing phrases in retrograde means to play them "backwards." This technique is used in 20th Century twelve-tone music. Here is motif #1 played in retrograde:

Example 3-380:



***On Two***

The opposite of the feeling of anticipation from ending strongly on the fourth beat is the feeling of delay created by ending strongly on the second beat of the next bar. Like the endings on the fourth beat, this is emphasized if the note on the second beat is accented, the rhythm section also hits it strongly, and there is some space immediately after it:

Example 3-453:


For another example of this:

Example 3-454:

Of course, phrases can end on the second beat without this accent, without the space, and without the rhythm section hit, for a different effect.

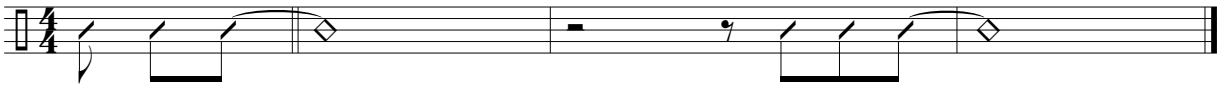
***The Propulsive "And" of Four***

Ending a phrase on the "and" of beat four can create a propulsive effect, whether the last note is played short:

Example 3-455:

… or, like the melody in the Sam Jones tune "Unit 7," played long:

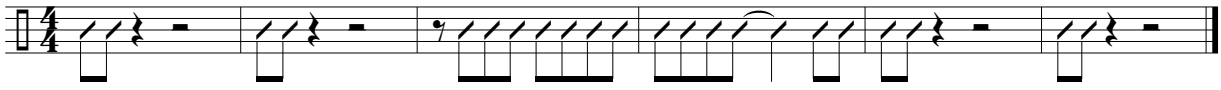
Example 3-456:



***"Bebop" Ending on the "And" of One or Three***

A particular phrase ending heard often in music with swing feel is what I think of as the "Bebop" ending (because it sounds like the word "bebop"). This can be heard at the beginning of the tune "Groovin' High" by Dizzy Gillespie on the first beat of each of the first two bars:

Example 3-457:



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- introduces rhythmic notation, from the very first steps (does not assume you have any notation background);
- teaches how to read and write rhythms in 4/4 at the quarter, eighth, and triplet eighth levels;
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