

# African Rhythm as the Foundation of Contemporary Bass Performance

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## Abstract

Jazz and contemporary bass playing is a varied and deeply elaborate landscape. If jazz, American popular music, Caribbean, and Latin musical genres are taken into consideration, the breadth of bass styles is too broad to encompass in one lifetime. However, when the roots and traditions of these styles are examined, many common musical devices appear. With even more examination, these musical qualities can be seen and linked to West African ancestry. In this thesis, I outline several of these qualities and demonstrate these concepts from the perspective of modern bass performance. As well, I discuss the core rhythms in contemporary bass playing that have been retained from West African music. In conclusion, I present a handful of practical practice exercise to aid the bassist in internalizing some of the concepts discussed in the thesis.

With such a broad topic it is clear to me that, while I present a unique perspective on contemporary bass performance, the study of African retention in bass performance goes far beyond the scope of a master's thesis. It is my goal to open a gateway to a new awareness on the roots of contemporary bass playing and aid the bassist to build an authentic and profound connection to the ancestry of the art form.

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### **Definition of Terms**

Africa or African – context limited both geographically and culturally to the West African and Sub-Saharan region of the African continent.

European music – music from the Western world including classical music, differentiated from cultural musical styles from Africa, the Middle East, Asia, India, and popular or folk music from the Americas.

Classical music – liturgical and secular Western art music from the 11th century to the present including, but not limited to, the Classical period.

Contemporary bass playing – non-Classical forms of bass playing from American and international popular and folk music, jazz, and ethnic music styles since the twentieth century.

Contemporary groove music – an umbrella term for African American music genres including, but not limited to, rhythm 'n' blues, funk, hip-hop, rap, soul, neo-soul, and Motown.

Creole – Referring to a culture created in the Americas by the blending of European and African roots.

Jazz – broadly defined as an art music genre differentiated from popular music due to the absence of mainstream appeal as reflected in its lack of substantial radio airplay, album sales, or popularity in mainstream society, and enjoyed primarily by a niche audience of enthusiasts.

Popular music – mainstream popular music since the twentieth century, found in the United States, and as dispersed throughout the globe, including rock 'n' roll, pop-rock, country, rhythm 'n' blues, funk, hip-hop; excludes traditional or contemporary jazz.





## Introduction

My experiences as a continuing student of the bass and a practitioner of various musical styles have shown me that there are many fundamental similarities across the range of contemporary bass styles developed in the New World. This common ground seems to come from the retention of ancient musical principles, in particular certain musical concepts of West African descent brought to the New World through the introduction of African slaves by European colonisers. A number of jazz bassists have recognised the vital links to African music in jazz. For example, while director of the Banff Centre for the Arts International Workshop in Jazz & Creative Music, world-known bassist Dave Holland recruited the fifth-generation Ghanaian master drummer Abraham Adzenyah to teach a core component in the workshop. Each morning the workshop participants began their day with the study of West African rhythm and song. Holland was keenly aware of the African connection to jazz and deemed it a vital element of the workshop's curriculum. Many master bassists share Holland's viewpoint on the importance of African influences in jazz study but it seems that the average bassist and bass teacher overlooks the universalities descendant from West African music in Latin, jazz, and popular bass styles. Today, what should be a fundamental method in which bassists learn about styles, rhythms, and grooves widely ignored by them. The present study hopes to redress this lack of knowledge by exploring traits of West African music retained, through the enforced migration of Africans throughout the New World, in contemporary bass performance.

Although bassists consistently strive to create better bass lines, few consciously examine the roots and foundations of why a bass line functions well. Often the terms "feel," "groove," and "pocket" are used by contemporary popular music performers and discussion of these concepts is frequent, yet the notion of "groove" is frequently seen as an enigmatic concept

attributed to intuition and experience. By examining traditional and iconic examples from music that lies at the roots of American contemporary music and jazz, tangible musical devices can be identified. These insights are useful for improving a bassist's ability to construct and define compelling bass lines, bringing them out of the realm of intuition into an objectively observable sphere of musical study.

The development of music in the New World, including jazz, North American popular music, Latin, and Caribbean music has been extensively investigated in a cultural context. When the roots of jazz, rock, and R&B bass playing are studied, most roads lead to the development of North American music in nineteenth- and twentieth-century New Orleans. If the student continues to examine the unique circumstances that came into play in New Orleans, a direct link to the Caribbean through socio-economic and cultural forces appears. Investigating further, it becomes clear that the musical practices, sensibilities, and nuances introduced by West African slaves in the area played a significant role in the creolization of European music present at the time in the New World, leading to the development of different musical idioms and bass styles across the region. From a musical perspective, emphasis has been on percussion and drumset rhythm applications; from the bassist's point of view, however, this understanding is largely unmapped. This thesis intends to demonstrate how, when studied and juxtaposed alongside West African musical concepts, jazz and contemporary bass playing have borrowed many essential qualities from African musical models. It is striking how infrequently these rhythmic concepts and their African origins are discussed, taught, or reflected on by bassists when studying or performing, and this thesis hopes to begin to fill that gap.

Many resources exist that provide insight into the development of African-influenced musical styles of the New World but these sources are limited in academic scope or do not

specifically focus on the bass. For example, many bass books have been written offering insight into jazz, funk, R&B, or Latin bass playing, providing transcriptions of bass lines and examples of appropriate style choices but not offering background on the development and evolution of the styles. Academic articles focusing on the bass often analyze bass masters, discuss jazz improvisational and harmonic concepts, and examine the roots of jazz bass playing but stop at early jazz examples. Additionally, many non-bass focused, and primarily percussion-based, resources delve into the correlations between African rhythms and Latin and Caribbean music, and extensive discussion debating the impact of African slave migration and its social and cultural impact in the development of Latin, Caribbean and North American music exists. However, although there have been several academic articles and music books that bring to light the notion of core rhythms found within the West African diaspora, no resources present these ideas as related to the bass in a jazz or popular music context. My perusal of a wide variety of bass-specific material has shown that most resources are lacking in this regard and, generally speaking, the bass-focused materials are more dedicated to providing typical playing patterns in different stylistic contexts or transcriptions of bass recordings. Many instructional bass books are useful and well written but are limited in regards to the focus of the research and inadequate in terms of academic content. These resources include the books *Standing in the Shadows of Motown: The Life and Music of Legendary Bassist James Jamerson*, *The Funkmasters: The Great James Brown Rhythm Sections 1960-1973*, *The True Cuban Bass*, and *Afro-Caribbean & Brazilian Rhythms for the Bass*. Most of these books are simply descriptive or prescriptive, without offering reasons behind the choices made. Therefore, they do not stand up to musicological scrutiny and offer only a narrow view of jazz history and practice to the musician. In practical application, these resources serve as useful reference materials but do little to aid the

bassist in understanding the deeper causes and effects of rhythmic choices or provide information regarding the history and development of bass patterns from their early African roots.

While bass method books tend to lack nuance, several academic journal articles and dissertations have begun to promote scholarly discussion of these issues. Anthony Belfiglio's dissertation "Fundamental Rhythmic Characteristics of Improvised Straight-Ahead Jazz" provides excellent insight into the borrowed traits retained in jazz from African music. Stewart Alexander's "'Funky Drummer': New Orleans, James Brown and the rhythmic transformation of American popular music" and Christopher Washburne's "The Clave of Jazz: A Caribbean Contribution to the Rhythmic Foundation of an African-American Music," although not bass specific, supply useful information on the development of early North American music and its African and Caribbean influences. Another book of note is David Penalosa's *The Clave Matrix*. Penalosa's book dissects the foundational principles of core African rhythms and explains their usage in Latin music. This analysis opens the doors to further study of these concepts as related to jazz and North American popular music. Again, although these resources provide excellent insight, they do not focus on the concepts as related to the bass. This lack of focus on the bass in the related research only compounds the necessity for the more in-depth study of the subject. With the bass being so closely partnered with percussion sections and drummers of Latin, Caribbean, jazz, and North American contemporary music, it seems inevitable that many of the concepts historically examined by drummers should also be significant to bassists. Exploring the influence of West African musical concepts on contemporary bass playing provides the opportunity to enrich our understanding of bass performance practice from the perspective of the jazz bassist. By recognizing the value of the earliest foundations borrowed from Africa in place in contemporary bass playing today, a bassist can refine his or her bass lines. A greater

understanding of the nuances in rhythm and feel occur, and a bassist is then able to create more musical and supportive bass lines that do not rely on a complexity of notes but rather draw on fundamental musical elements retained from long-established ancestries like those from Africa. This heightened perception prevents the bassist from adding more notes to a bass line to seek creative solutions, and instead allows him or her to dig deeper into an existing bass line by fine-tuning more nuanced elements of time, feel, rhythm, and note choice. The “less is more” approach takes over, emphasizing a more profound version of the “less” rooted in the usage of bass line construction devices based on traditional fundamentals.

Today the jazz bassist is a highly diverse craftsman and artist, and the modern player does not only function in the world of swing and bebop. The contemporary player is expected to be proficient in the diversity of jazz eras and styles, as well as showcase stylistic knowledge when performing popular music styles like R&B, rock, funk, blues, and folk or roots music. Additionally, with the global nature of our society and musical landscape, the bassist must be fluent in many international musical styles including Latin and Caribbean genres. It is evident when listening to current jazz bassists such as Dave Holland, John Patitucci, Avashi Cohen, Marcus Miller, or Scott Colley that these players are fluent and well studied in a wide range of musical idioms.

To narrow down the scope of the examination of West African influences on contemporary bass performance, the important factors to consider are first, borrowed traits retained in contemporary bass playing of African origin and secondly, the core rhythmic patterns of African ancestry that appear in contemporary bass lines. Finally, basic exercises will be presented that aid bassists in internalizing and applying some of the concepts discussed. With

these musical elements isolated, it is possible to begin to understand the deep connection between West African musical concepts retained in contemporary bass playing.

## **Chapter One: Elements of African Origin Retained in Contemporary Bass Genres**

### **Africans in Early America**

With the forced migration of African slaves to the New World, the seeds of what would become not only the music of Latin America, the Caribbean, and North America but also eventually the jazz and popular music of the world were planted. In Africa, societies developed a wide variety of song types to fit the necessities of daily life (Southern 1973, 2). In many African cultures, music is a fundamental element of life. In Africa, for “almost every activity in the life of the individual or the community there was an appropriate music; it was an integral part of life from the hour of birth to beyond the grave” (Southern 1973, 5). With the development of early African American culture, African descendants in the New World developed similar, but unique, song styles that aided and eased the stresses of their new way of life. This new repertoire of African American music from the eighteenth and nineteenth century, including “religious songs, worksongs, dance songs, field holler and street cries, ballads, and sorrow songs or blues” (Southern 1973, 24), would be the basis for the development of early American music. Southern explains that these new songs were not European in style but distinctive with a strong foundation in African tradition reflecting some of the features of European music. It is believed that different African groups maintained their distinctive musical practices but, over time, created common musical traditions that fused elements from both Europe and Africa. Due to this “process of Africanization, the music was no longer African or European” (Djedje 1998, 121).

The development of music in the Americas, with mixed European and African (as well as indigenous) influences, realized unique circumstances that, over time, defined jazz and popular music around the world. The Caribbean and Latin American regions reveal their African

influence explicitly, but in North America the African elements are more implicit (Wilson 1974, 6). To clearly perceive African musical characteristics in North American music, the listener must survey the traditions, history, and underlying features of these North American musical styles. As bass playing evolved from European bass instruments like the bowed double bass and the tuba, and as it became a fundamental voice in the rhythm section, it adopted several African musical sensibilities over time. To varying degrees of realization, today all contemporary bassists, whether performing jazz, popular American, Latin, or Caribbean music, commonly utilize African musical concepts in their bass line creation.

### Steady Beat

As Belfiglio illustrates, one of the core elements borrowed from African music in jazz and popular music is the presence of a steady beat (Belfiglio 2008, 18). To the outside listener the meter in African music may not seem overly consistent but it is important to understand that to Africans meter is understood “to be characterized by regular groupings of a steady pulse, even though that pulse is not always audible” (Dudley 1996, 273).

In all African-influenced music the principle of retaining a steady beat is paramount (Wilson 1974, 4): Not only is a constant pulse the basis for the characteristic African rhythmic concepts of syncopation, cross-rhythm, and polyrhythm, in African music a fixed tempo or beat is necessary because of the close relationship between music and dance. Music in West African societies fulfils specific functions in regards to ceremony, dance, work, and play (Belfiglio 2008, 16). Rhythm permeates many aspects of African life but, more specifically, music in Africa is entirely intertwined with dance. This relationship is so interwoven that the English words for “dance” and “music” have no direct translation in some West African languages. The words for



dance, music, play, and games correspond or concentrate into multiple meanings (Gore 2016, 29). African rhythm and the performing arts are integrated into the very fabric of African society (Locke 1998, 4) and Schuller goes as far as stating that, in African culture, art operates as one and is not divided into separate categories (Schuller 1968, 4); music does not exist without dance and vice-versa. It is true that Schuller and Locke are speaking from a Western Modernist perspective, and the debate whether the concept of art is even perceived the same way in African cultures is fair. Regardless, the connection between what we in the West call dance and music in African society reaches as far back as earliest recorded human civilization.

Like the occurrence of a steady beat in African music, across the New World this connection between dance, music, and a consistency of beat has been retained. Whereas not all music from the New World is created for dance, anyone exposed to Latin and Caribbean culture, or to African American popular cultural trends such as American bandstand televised programs like “Soul Train,” understands that idioms from these regions act as a strong societal conduit for dance. While the role of jazz in today’s society is that of an art music form, in its early development jazz was a popular music style directly linked to social dancing. The roots of swing dance were highly influenced by African movement as seen in its un-European qualities. Compared to African-based dances, European dance bases its movement on a tendency to have a solid torso and upright body orientation (Daniel 2005, 121) in a manner that “reaches for the heavens in a very erect posture” (Figuerola 2017). Ballet, for example, extends this concept with pointe work and high leaps. Contrastingly, and similar to swing dance, African-based dance is characterized by a “bending of the knee, limbs, and body, flexibility in the shoulders and hips, and reverence towards the earth making the movement grounded and less erect in the posture” (Figuerola 2017). The Charleston, the cakewalk, and swing dancing launched dance crazes in the

1920s and 1940s but since the end of the swing era, and swing's evolution to bebop, jazz has become music in which experimenting took priority over entertaining (Wall 2013, 257).

Although jazz has not served as a vehicle for dance accompaniment for over half a century, the occurrence of a steady tempo, however implicit or explicit, is still present in most of the jazz corpus.

As the role of a drum set player in American music has stemmed from the African percussionists' need to be in congruence with dance, the bass, as a key member of the rhythm sections, shares this role. The bass has become a principal figure through its musical contributions to the cultural and societal aesthetic intrinsic in popular dance. Additionally, within the musical ensemble the bass's role as a timekeeper facilitates the effectiveness of the idiosyncratic syncopations and polyrhythm of jazz and popular music. As jazz, Latin, and contemporary groove bass playing evolves, the bass utilizes more complex rhythms and syncopations but the necessity to maintain a steady beat, even if interwoven within more complex rhythmic devices, remains unyielding. Classical musicians will often stretch or contract a phrase as an ensemble, but in jazz, Latin, and popular music the opposite occurs. Most often the jazz and popular musician may layback or play ahead of the beat, but these effects work precisely because they create tension against an underlying pulse that is unchanging (Zimmerli 2016). This unchanging and underlying pulse is almost always provided by the bass.

In contrast to the jazz and popular music rhythm section, European classical music, at least since the early modern period, does not always interpret tempo and beat as steady. Instead, rhythm incorporates a freer, more flexible usage. As contemporary classical and cross-over composer Patrick Zimmerli explains, "There is no more marked area of difference between classically trained players and players trained in jazz than the domain of rhythm. Jazz musicians

prioritize above all else a kind of steadiness of pulse, a consistency of rhythmic placement .... Actual tempo fluctuation is strictly to be avoided” (Zimmerli 2016). Zimmerli contrasts this to how many classical musicians, at least from the eighteenth century on, see rhythm “as an *expressive* element. By stretching the pulse one way or the other, they can support the longer musical line, which to them is of highest importance” (Zimmerli 2016). Instances of *ritardando* and *rubato* are commonly utilized to great musical advantage. In these occasions, the performers or a conductor control the beat (Lawn 2013, 14). In jazz and other popular music, the tempo is dictated by the rhythm section (drums and bass) in a manner that demands, mainly due to its role as an accompaniment to dance, a rigid interpretation of a piece’s meter. The bass, as one of its primary functions in the rhythm section, is responsible for maintaining a piece’s tempo and rhythmic feel. As stated in Rufus Reid’s seminal jazz bass method, the bassist’s “primary role is to keep good time with good swinging bass lines.” (Reid 1974, 67). Monson’s notes on the role of the bass include an interview with acclaimed bassist Cecil McBee where he states, “It’s important that the player understands that his musical position is to ascertain the pulse, the harmony and rhythm all in one. He’s the heartbeat ... all are listening to him ... all are listening to that pulse” (Monson 1996, 29-30).

These statements regarding the role of the bass in a jazz ensemble align with the basic musical principle that lower frequency instruments tend to outline the pulse in a musical passage. In music “the main melody (spectral/pitch information) is most often carried by the highest-pitched voice, and the rhythm (temporal foundation) is most often laid down by the lowest-pitched voice” (Hove, et al. 2014, 10383). Technically speaking, even the articulation used by bassists in popular music idioms is markedly accented favouring punch and clarity of attack. In a classical setting, whether executed *arco* (bowed) or *pizzicato* (plucked), the bassist often works

in a bass section performing passage with a combined interpretation of the beat. Although articulation and rhythmic accuracy are paramount to the classical player, Arco and classical pizzicato playing allows for a very warm and expressive interpretation of notes whereas jazz and popular music bassists typically strives for a highly percussive, quick attack in their execution intended to define the tempo over anything else. This allows for the precise instant of the beat to be articulated and clearly heard by the rest of the rhythm section and ensemble. With this clarity, the rhythm section can more easily work together as a unit to express the beat unambiguously. The bass, when performing a steady rhythm like a walking bass line, has a relentless obligation to both define the exact point of the beat as well as maintain a consistent tempo. In fact, since the bebop era, the bass has taken an even more central role supplying a steady beat in the jazz ensemble. From the bebop era on, jazz drummers stopped utilizing a “flutter” pattern or four quarter notes to a measure on their bass drums, instead reserving this role for the bassist. In bebop drumming, time keeping is primarily done with the hi-hat and ride cymbal. As jazz drumming evolved, even the functions of the hi-hat and ride loosened allowing drummers more freedom to use these instruments more expressively and creatively. This evolution in drumming has reinforced the necessity of the jazz bassist to outline a piece’s beat.

One of the most revered examples of the modern jazz rhythm section is the trio of Herbie Hancock (piano), Ron Carter (bass), and Tony Williams (drums). On the live Miles Davis recording *Four & More*, the rhythm section is given considerable freedom while accompanying the horn soloists. Hancock and Williams, although not playing out of time, utilize great rhythmic variety and polyrhythmic experimentation whereas Carter generally maintains a supportive role. In this capacity, Carter provides the “glue” which the other musicians can rely on to remain unified within the compositional form. This similar distribution of roles can be heard in the John

Coltrane quartet consisting of McCoy Tyner (piano), Jimmy Garrison (bass), and Elvin Jones (drums). In this example, Garrison infrequently departs from a supportive role, and many of his characteristic bass lines involve ostinatos and drone-like devices. Contrastingly, in contemporary jazz, some players have adopted a freer, more creatively improvisational role. Although this is a useful approach in some scenarios, this style is far less utilized in the overall gamut of bass playing than the supportive timekeeper role of most bassists. Even when this freely improvised method of playing is used, bassists rarely play “out of time” and the piece’s tempo does not fluctuate.

The notion of a steady beat permeates all the African-influenced musical styles developed in the New World. As seen in the odd-time bass lines of Dave Holland, the syncopated R&B sixteenth-note lines of James Jamerson and Bootsy Collins, or the Latin grooves of Cachao, even when significant creativity is utilized their bass lines are still fundamentally providing a rhythmic role that supplies forward momentum within a steady metric matrix.

### Ostinato

A steady beat in music creates the conditions that allow for the effective use of the ostinato. An ostinato is a repetitive melodic or rhythmic phrase typically found in the lowest voice of a musical arrangement, often serving as a foundation for the other parts of an arrangement (Logan 1984, 193). The ostinato has been used as a compositional device in Western notated music since the baroque period, and the use of ostinato bass lines in improvised dance music dates back to at least the sixteenth century and likely long before. Although it has been used commonly in Western music, the ostinato is a defining and fundamental element in African music (Ember, Ember and Skoggard 2004, 364; Logan 1984, 193). Leonard Brown, in

his book *John Coltrane and Black America's Quest for Freedom: Spirituality and the Music* quotes Snead contrasting how “black culture highlights the observance of such repetition, often in homage to an original generative instance or act” versus “ever-developing European culture pointing toward progress” (L. Brown 2010, 133).

To some, musical repetition possesses a negative connotation. In fact, “many psychoanalytic readings simply assume repetition-structures in music are unequivocal markers of regression” (Fink 2005). German philosopher and musicologist Theodor W. Adorno based his critique of musical reiteration to the risk of enticing the listener into “mindless dances such as the jitterbug ... or into the herd mentality” (McClary 2012, 171). As McClary points out, there was a common attitude among university-trained musicians of the nineteenth and twentieth centuries chastising the “horror or repetition,” where repeating patterns in a composition was strictly frowned upon (McClary 2012, 171). Polish philosopher Roman Ingarden questions whether “so-called dance music” is even music in the strict sense of the word (McClary 2012, 170). Additionally, McClary notes that “aestheticians who concentrate exclusively upon music have frequently marginalized and even disparaged dance” (McClary 2012, 170).

As stated above, in African, Latin, Caribbean, swing-era Jazz, and popular music, dance and music are not mutually separate aspects of culture. Repetition is commonplace in these musical traditions, and the ostinato is viewed as an effective aesthetic device, in many instances intended to promote physical movement and dance. Wendell Logan in his article “The Ostinato Idea in Black Improvised Music” outlines the significance of ostinato in dance music of the African diaspora and highlights how the majority of Latin, Caribbean, and Afro-American music organized around the ostinato is dance music (Logan 1984, 193). He lists popular North American social dances such as the chicken, the funky popcorn, the twist, the smirf, the pac-man,



This interlinked approach to ensemble parts is not unlike the Cuban or Brazilian ensemble and, in fact, is equivalent to the style adopted by the rhythm sections of James Brown.

As stated above, repetition can conjure negative opinions. What needs to be understood is that there is an exceedingly subtle musicality occurring in instances of repetition. Relatively straightforward parts performed repetitively on top of each other create a more complex whole. Due to the nuanced interpretation of each part by individual musicians, micro-level variations in beat placement, timbre, and melodic/rhythmic distinctions occur. This approach brings an organic “time-lapse” effect (where musical ideas evolve slowly) to the auditory landscape that, if examined closely, offers compelling musical interest. The bass functions in this capacity more than most instruments. In general, if bassists embrace the repetitive nature of the instrument, while consistently being mindful of how their bass part relates to the greater whole of the group, he or she will surely be a more effective ensemble member than if he or she were to perform a more complex part. This mindfulness of interlinking parts is a pathway to achieving a higher level of musicality and artistry within the supportive nature of bass playing. Again, Locke’s words reiterate this concept from the Gahu perspective: “the basic part for each instrument is a short motive that is repeated without substantial variation [...] The percussion ensemble is interactive, a feedback network in which instruments ‘talk’ to each other” (Locke 1998, 7). A player does not place priority on their individual part but, instead, the musicians attend “to the complex weave among parts” (Locke 1998, 7). In fact, in the African drum ensemble, for the performers any one pattern has little meaning out of the context of the ensemble (Koetting 1970, 120). In groups like James Brown’s, the Tower of Power, or the Motown ensemble, the complex sixteenth note syncopations in the drums, bass, guitar(s), and keyboard parts are not carelessly



performed:

The musical score for "Get up (I Feel Like Being a) Sex Machine" (1970) by James Brown is presented for four instruments: Guitar 1, Guitar 2, Bass, and Drums. The key signature is B-flat major (two flats) and the time signature is 4/4. Guitar 1 and 2 play a constant, repetitive chordal pattern. The Bass line features a complex, syncopated rhythmic pattern with many accents. The Drums play a steady, syncopated pattern with many accents.

*Figure 2: James Brown, “Get up (I Feel Like Being a) Sex Machine” (1970)*

In Figure 2, the two guitar parts remain constant with subtle variation occurring in the bass and drum parts. The combination of repetitive motifs with an intermingled complexity of accents and syncopations creates a scenario not unlike an African drum ensemble. In this type of example each musician is aware of the others and how his or her part fits into the greater whole. Parts are astutely crafted and executed. Neglecting this attention to the interweaving of parts to create a greater whole is the primary error made by inexperienced musicians in the “groove-based” ensemble.

Although jazz is less repetitive in nature than popular music styles, the notion of the ostinato is not a foreign concept and is a fundamental task the modern jazz bassist is called upon to exploit. In the jazz ensemble, the bassist is generally the musician who utilizes ostinato the most. For example, Jimmy Garrison developed a unique sound and became a signature voice in the John Coltrane Quartet by utilizing ostinatos. His extensive use of ostinatos allowed Coltrane, Tyner, and Jones great harmonic and rhythmic freedom. As a bandleader, Coltrane utilized the ostinato supplied by Garrison to induce a semi-meditative state. As McClary has noted,

repetition is an addictive musical device “putting its listeners into the ecstatic trance state sought after by many rituals, from those of whirling dervishes to Cuban Santeria to raves” (McClary 2012, 173). Perhaps Coltrane uses the ostinato in his ensemble to supply a primal foundation to his music that balances the complex melodic and conceptual improvisations he supplies above. As Brown says, the performer “elicits a spiritual bond of a sort between himself or herself and the audience through the practice of rhythmic repetition making entrée into the thought processes of the musician more accessible” (L. Brown 2010, 133).

Coltrane is not the only jazz musician to incorporate the ostinato into his group’s sound. Many post-bop and modern jazz songs utilize the bass ostinato as a compositional device. Unlike highly harmonically vertical bebop music, the ostinato is particularly useful in modal jazz compositions like “Joshua,” as illustrated in Figure 3, where the harmony is more constant and unchanging as opposed to standard or bebop repertoire:



Figure 3: Ron Carter, Miles Davis, “Joshua” 1963

With the primary force of the ostinato typically residing in the lowest voice of an ensemble, the ostinato has become an important musical device for the bassist. The concept of repetitiveness can be perceived as boring to some players, but the mature bassist understands the usefulness of repetition as a grounding and vital voice within the larger canvas of an arrangement.

### Syncopation

The presence of a steady beat in music is fundamental for exploring more complex rhythmic concepts. With complex rhythm being the primary characteristic and an important aesthetic quality of African music (Munyaradzi and Zimidzi 2012, 194; Logan 1984, 2000), and

with a presence of a fixed foundation through a steady beat, endless rhythmic possibilities can occur. The most powerful and frequently utilized illustration of rhythmic sophistication is syncopation. Syncopation can be described as a variation of the rhythmically obvious or expected (Belfiglio 2008, 24). To Schuller, syncopation in jazz is “a flattened-out mutation of what was once the true polyrhythmic character of African music” (Schuller 1968, 15). Liebman quotes Schuller as stating that jazz rhythm is a combination of “the European classical sense of vertical accuracy and coinciding of downbeats that have resolution from cadence, with the African horizontal forward motion based on polyrhythms” (Liebman 1997). Through the examination of early jazz drummer Baby Dodds, Barbaro distinguishes marching influences and technical drum rudiments as distinctive European elements. Contrastingly, he acknowledges the occurrence of rhythmic patterns starting on offbeat phrases as being of African origin and compares this occurrence to the gahu from Ghana (Barbaro 1993, 150-153).

The occurrence of syncopation in African music is ubiquitous, but clear examples can be found in common bell patterns. In African musical styles these bell patterns, which can often be referred to as claves or keys to the rhythm, are fundamental central phrases within a piece (Martin 2006, 4). In the following figures, the syncopation inherent in these African-based bell patterns is apparent:



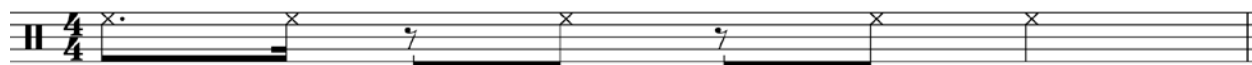
*Figure 4: Triple-pulse standard pattern*



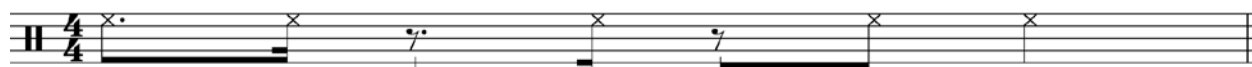
*Figure 5: Duple-pulse standard pattern*

What ethnomusicologists call the “standard pattern,” commonly known by musicians as the 6/8 or 12/8 bell pattern, is the fundamental “grid” for many rhythms originating from regions in

Africa that belong to the Niger-Congo language family (Kubik 2010, 57). From the standard pattern, other patterns, or claves, have emerged:



*Figure 6: Son clave*



*Figure 7: Rumba clave*

The Son and Rumba clave are common rhythms in Cuban music, but they initially developed as bell patterns with Yoruba, Ghanaian, and Nigerian roots (Martin 2006, 46). African rhythms like these bell patterns and their inherent syncopation have had a direct influence on the jazz and popular music created in the United States, and particularly in New Orleans, during the nineteenth century. Today, ubiquitous syncopation has become a defining characteristic of jazz and American popular music distinguishing it, at least in the popular imagination, from European classical music (Evan 2012; Schuller 1968, 19; Belfiglio 2008, 28; Barbaro 1993, 133; Wilson 1974, 6). As described by numerous sources, the rhythmic aspect of African music has influenced early jazz and American popular music much more than any rhythmic influence from European music (Evan 2012; Schuller 1968, 13). The syncopation inherent in these creolized rhythms has become a major defining factor in the way jazz and contemporary groove music is felt, performed, and understood. According to Schuller, syncopation was the means by which African American musicians transformed their historically-engrained cross-rhythms and cross-accentuation into a European musical structure (Schuller 1968, 15).

The bass lines of American popular music styles like R'n'B, Motown, and funk music draw heavily on syncopation as a defining attribute. The bass styles of popular groove masters like James Jamerson, Bootsy Collins, Rocco Prestia, Jaco Pastorius, and Larry Graham

demonstrate an ample usage of syncopation, and with the emergence of these African American musical genres, the usage of complex sixteenth note syncopations in bass line creation has become idiosyncratic. In Stewart's article "Funky Drummer," he quotes Fillyau (a seminally important drummer to the James Brown funk style) as telling a bassist, "your days of leanin' on the drummer are over with. You're gonna have to play. I'm not carryin' no straight time" (Stewart 2000, 303). This attitude led James Brown to hire a bass player with a much more syncopated performance style. As we can see in these Motown and Funk examples performed by Jamerson and Collins, the usage of syncopation has become stylistically expected in their bass lines:



Figure 8: James Jamerson, Stevie Wonder, "For Once in My Life" (1968)



Figure 9: Bootsy Collins, James Brown, "Give it up or Turnit a Loose" (1970)

As well as popular music examples, jazz bass playing has significantly evolved over the decades. Today, jazz bassists are called upon to play much more than the standard quarter note-based walking bass line. As shown in this bass line performed by bassist Scott Colley, highly syncopated bass lines and figures are commonplace in modern jazz bass playing:



Figure 10: Scott Colley, Chris Potter, “Highway One” (2002)

The use of syncopation in modern jazz bass playing is abundant, but although traditional bass playing is rooted in the two-feel and walking bass concepts, even traditional-focused performances can demonstrate ample use of syncopation. In a 2013 tuba performance by Julius McKee with the Some Treme Brass Band, McKee clearly illustrates a tendency towards offbeat rhythms and democratization of the beat in a New Orleans brass band performance:



Figure 11: Julius McKee, Treme Brass Band, “We Shall Walk Through the Streets of the City” (2013)

The roots of jazz bass playing have, in part, evolved out of the tuba’s role in the New Orleans brass band and figure 11 is a characteristic tuba example of the New Orleans jazz sound and a commonly imitated approach utilized by jazz bassists.

Syncopation can also be used more subtly, and the accenting of unexpected subdivisions within a measure of music is a style of syncopation in itself. In this case, the unstressed beats are not omitted but rather highlighted. With new emphasis placed on “underplayed” beats of a musical phrase, a democratization of rhythm occurs (Schuller 1968, 8).

### Democratization

As a differentiating characterization of European and African music, the placement of stress on unexpected metric beats becomes significant. Typically speaking, European music places emphasis on strong beats (Schuller 1968, 8), but African music tends to place stress on less common rhythmic pulses. From the onset and to the outsider, this rhythmic tendency becomes a defining trait of African music. In the New World, this African musical characteristic is clearly heard in the music of Latin and Caribbean America. In European-based Western music of standard quadruple meter, beat one, and to a lesser extent, beat three are considered the strong beats because more pulses occur on these beats (Belfiglio 2008, 22; Manuel 1985). For example, on beat one, there is a whole note, a half note, a quarter note, eighth note, and so on, on beat 2, we only find a quarter note, eighth note, and smaller. Karolyi labels rhythmic displacement as when “instead of accentuating the accepted strong beats, one accentuates the weak beats” (Karolyi 1998, 10), but Schuller, and many others, describe this idea as a democratization of rhythm. This African sensibility to stress the traditionally weaker beats is directly evident in jazz and popular music not only through syncopation but with accents as well. In his book, *The Untold Secret to Melodic Bass* Jon Burr explains how, “the foundation of rhythmic music of all kinds is accents, where they fall, and how much emphasis they get. Bassists need to know something about the traditions that exist here, which seem to have been largely overlooked in

written pedagogy but have been transmitted orally since the first strike of a drum” (Burr 2009, 7). Schuller explains that jazz inflection often leads to “the ostensibly weak notes [being] accentuated and further emphasized by elongation” (Schuller 9). A strong characterization of jazz and popular music is an emphasis on beats two and four instead of beats one and three (Schuller 1968, 9; Liebman 1997; Logan 1984, 200; Monson 1996, 28). Shifting weight to beats two and four “is a basic element underlying most African American musics. This emphasis on the offbeats has a noted ability to inspire people to rhythmic participation. An entire room of people clapping on 2 and 4 ... has the power to motivate all but the most resistant to clap along” (Monson 1996, 28). For the bassist, it is common to accent and elongate beats two and four of a walking bass line (Burr 2009, 22; Monson 1996, 30). Although the debate regarding the notion of a walking bass line with A) accents on beats two and four or B) a steady and consistent pulse on all four beats of the measure exists, it should be noted that both approaches are utilized and useful. Each creates a unique swing feel and should be used consciously to broaden a bassist’s “palette” of stylistic options.

As an example of accents on beats two and four, the solo bass intro to the iconic recording of Charles Mingus’s “Haitian Fight Song” uses the concept expressly. A curious fact is revealed in the release’s original liner notes: Mingus is quoted stating “I selected these four [songs] over two others that were more intricate because some of those guys had been saying that I didn’t swing. So I made some that did” (Mingus 1957). This statement reveals that, for Mingus, the accents on beats two and four were useful to convey a swing feel more successfully:



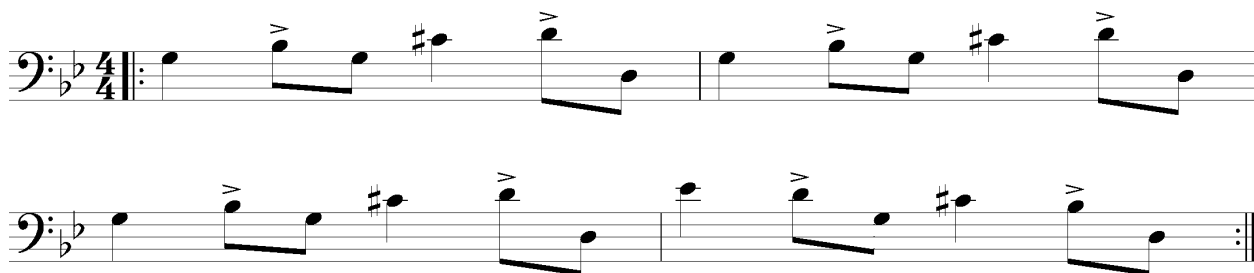


Figure 12: Charles Mingus, “Haitian Fight Song” (1957)

David Liebman extensively discusses the need for jazz’s tendency to stress beat two and four in his influential DVD on jazz rhythm, *Understanding Jazz Rhythm: the Concept of Swing*. Additionally, in his discussion regarding jazz articulation, he notes how jazz horn players articulate the upbeats in an eighth note based melodic figure and slur the downbeats. This phrasing style creates a natural accent on all upbeats of eighth note melodies (Liebman 1997). For bassists and jazz musicians in general, this articulation translates to the placement of a slight weight on the eighth note upbeats (Burr 2009, 22; Schuller 1968, 9). A clear example of this type of swing articulation can be heard on Paul Chambers’ solo on “Trane’s Blues”:

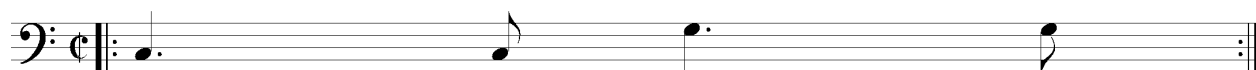


Figure 13: Paul Chambers, Miles Davis, “Trane’s Blues” (1956)

Burr describes the multilayered use of accents in jazz swing where a combination of stressing beats two and four layered with the accent of the swung upbeats occurs. Although this demonstrates very clearly the tendency for jazz musicians to emphasize traditionally weaker

beats, he does not explicitly name this occurrence as democratization. As an extension of Burr's concept, it is clear that the theory can be related to the belief, in agreement with Schuller, that early jazz musicians of African descent found this an effective tool to emphasize weak beats, accent against the beat, and express a tendency for rhythmic democratization (Evan 2012).

As with repetition and syncopation, democratization of rhythm can also be found in other African-derived musical styles. In Brazilian bass playing rhythmic democratization is commonly used, although contemporary bassists marginally discuss it. Even though in contemporary bass playing the samba bass line is interpreted as a march style “two-feel” played on the beats, closer inspection illustrates that the strongest beat is not beat one and the emphasis is placed on the back half of the measure. Misleadingly, the typical samba bass line is taught as:



*Figure 14: Commonly notated samba bass line*

If attention is paid to the Brazilian samba's surdo drum, which the bass emulates, beat one is shorter and quieter than the longer, accented beat two:



*Figure 15: Standard surdo drum pattern*

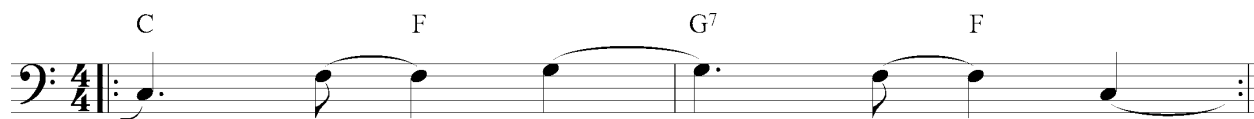
This example illustrates the tendency to accent beat three rather than the European-theorized “stronger” beat one. An authentic samba rhythm will stress the second half of the measure in a manner that propels the rhythm forward. Additionally, and distinctive from how the samba bass line is typically taught outside of Brazil, the fifth of the chord, played on beat three, should be pitched below the root. There are several reasons for this: Burr explains, “by default; the lower the note, the stronger the accent” (Burr 2009, 13). Burr describes this melodic

consideration as a pivot note. With the pivot, a bassist “communicates fundamental harmony at an unexpected time; however, it is most often not the root of the chord, and not at the beginning of the harmonic instance” (Burr 2009, 7). In addition, most strong bass lines produce a harmonic as well as a rhythmic system of tension and release. The fifth creates the harmonic tension to the root of the chord’s release and the accented, longer, and lower note adds a rhythmic dimension to the tension. Thirdly, when analyzing a surdo drum pattern played by one percussionist, beat one is muted whereas beat three is an open tone played at full length. By nature, the muted tone produces a higher pitch than the open tone. When more than one percussionist plays the surdo pattern, a higher pitched surdo strikes on beat one and a lower surdo on beat three. The samba is, in essence, a march rhythm, but these details highlighting democratization are some of the many factors in a samba that demonstrate its African influence. The need to create a sense of forward motion, utilize tension and release, and employ a democratization of rhythm in the surdo parts, as evolved to the bass, opens the window into the subtlety of the musical forces the African tradition has shared with New World musical cultures and genres. Even this relatively simple rhythmic pattern retains many acute elements that are clearly African in disposition. Considering these stylistic factors, a samba bass part is better notated as:



*Figure 16: More accurately notated samba bass line*

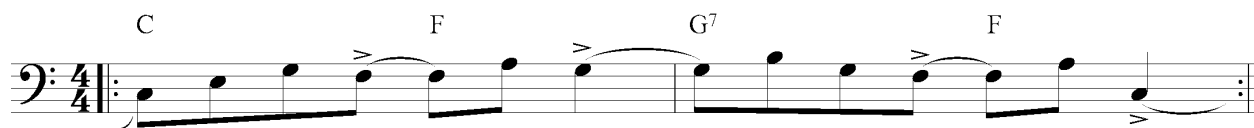
Another Latin example of the democratization of the beat found in bass playing today is the Cuban bass tumbao. In the tumbao, beat one is often avoided. Stress is placed on beat four of the measure anticipating the harmony by a beat. This anticipation creates a strong effect where the main beat is shifted to the weaker beat four as in Figure 17:



*Figure 17: Standard Cuban bass tumbao*

As explained by Manuel, “In the standard anticipated bass pattern, the iambic structure is intensified by treating the first note in the pattern as a weak anacrusis.” (Manuel 1985, 254; Munyaradzi and Zimidzi 2012). Penalosa describes this peculiarity as the stressing of the “bombo” or “and-of-two” and “ponche” or beat four or the tresillo rhythm (to be discussed later). As he explains, the Cuban bass tumbao emphasizes the “tresillo strokes which are offbeats. In other words, they do not coincide with a main beat” (Penalosa 2012, 45).

Even when the tumbao is embellished to incorporate other subdivisions, to maintain its original feel the new stressed beats should continue to be emphasized:



*Figure 18: Embellished Cuban bass tumbao*

In contemporary Cuban bass playing, the traditional tumbao is rarely played in its purest form. In the modern version of the tumbao, bassists utilize significant variation and embellishment while still maintaining the core rhythmic characteristics of this bass style. In “La Mujer Que Mas Te Duele” (figure 19) Cuban bassist Alain Perez utilizes stylistically appropriate variations within a typical tumbao groove. The arrows in the example indicate the original tumbao notes. Many of the other notes that are variations from the stock tumbao rhythm utilize

clave concepts that will be discussed later:



Figure 19: Alain Perez, Issac Delgado, “La Mujer Que Mas Te Duele” (2007)

Like the above Latin bass examples, many reggae bass lines utilize the democratization of the beat by avoiding beat one in their patterns altogether. As the title of the famous Bob Marley song indicates, this technique is known as a one-drop rhythm. In the figure below, the arrows indicate the stressed beats:

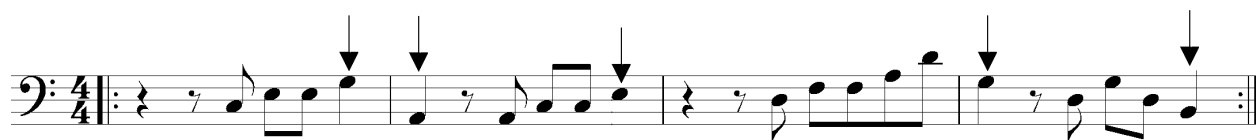


Figure 20: Aston Barrett, Bob Marley, “One Drop” (1979)

Although James Brown and Bootsy Collins have both stated the key essential to funk is beat one, funk bass playing, as an alternative approach, will utilize anticipation of the main beats to illustrate the concept of democratization. In these cases, beat one is often anticipated, as in this example by Rocco Prestia:



Figure 21: Rocco Prestia, Tower of Power, “Soul Vaccination” (1973)

The notion of democratization, as seen in jazz, Latin, and funk examples directly leads to the investigation of additive rhythms as a fundamental element of African-based musical styles.

By adding groupings of threes and twos, not only are rhythms perceived as additive, they also lend themselves to democratization and syncopation.

### Additive Rhythm

As discussed above, syncopation and accentuation of rhythms provided African American musicians a gateway to retain characteristics of their ancestral music within the structures of European music. Still another rhythmic feature that has facilitated this synthesis is the notion of additive rhythm. In Western classical music, rhythmic units are typically divisive, but in additive rhythms, the meter is divided unequally (Nketia 1974, 131; Barbaro 1993, 151). African music uses additive rhythm as a common reference point within the metric structure of a song (Ripani 2006, 50). In many African-derived musical styles, base rhythms are often divided into asymmetrical groupings (Schuller 1968, 11). The most common of these groups is the tresillo rhythm that is broken up into a grouping of 3-3-2:

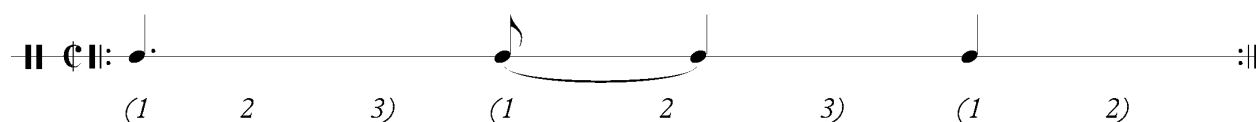


Figure 22: *The tresillo rhythm*

This 3-3-2 grouping and variations of it are the basis for a vast number of bass rhythms including figures found in Cuban, Brazilian, New Orleans, Caribbean, jazz, rock 'n' roll, and other popular musical styles. As Barbaro states, “in jazz, the rhythmic phrasing 3+3+2 remains from African rhythmical practice” (Trapchak2009; Barbaro 1993, 151). Reinforcing this claim, Schuller also outlines the African sensibility to create phrases built on the combination of two and three (Schuller 1968, 24). In examining common ragtime patterns found in Scott Joplin’s “Maple Leaf Rag,” Schuller explains how early musicians of African descent asserted an intense inclination to maintain two rhythms simultaneously within the European musical framework

found in the American music of the time (Schuller 1968, 24). As will be discussed in the next chapter, the notion of additive rhythm is directly apparent in the tresillo, habanera, clave, and cinquillo rhythms commonly found across the African diaspora.

Moving beyond examples of additive rhythms in common time, the notion of odd meter playing in a contemporary jazz setting is highly based on additive rhythms. Bass lines commonly found in this style of jazz directly reflect this influence. Perhaps the best-known odd-time example in jazz repertoire is the quintuple meter, additive rhythm in Dave Brubeck's "Take Five":



Figure 23: Eugene Wright, Dave Brubeck, "Take Five" (1959)

Even in more complex odd meter examples, groups of 2's and 3's are common. In this 11/4 figure the phrasing can be interpreted as 4-4-3 or 4-3-4:



Figure 24: Dave Holland, "Nemesis" (1990) interpreted as 4-4-3

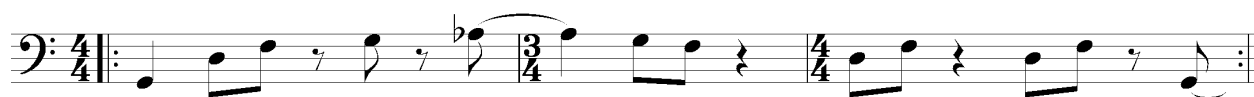


Figure 25: Dave Holland, "Nemesis" (1990) interpreted as 4-3-4

As illustrated in these examples, all the various rhythms can be broken down into groupings of two/four or three. In one of the most comprehensive articles regarding odd-meter bass playing, Trapchak reveals that bassists Scott Colley, Larry Grenadier, and Johannes Weidenmueller "use a clave pattern to divide an uneven meter bar into two uneven parts; they are then able to feel a half-time pulse, enabling them to think in larger phrases" (Trapchak 2009,

4). Although this notion demands further study and can only be discussed here in a limited fashion, it highlights how the concept of grouping rhythms together in an additive manner is apparent and useful in even the most recent examples of jazz bass playing.

The intertwined concepts of a steady beat, syncopation, democratization, and additive rhythms are elements that begin to define African rhythm. These fundamental musical components are not essential mechanisms in European music to the extent that they are in African music, yet they are all compulsory principals in contemporary bass playing. The bassist today, whether performing jazz, popular American music, Latin, or Caribbean musical styles, utilizes these four rhythmic tools extensively. Often, the use of these concepts is subconscious or unrefined but by studying, understanding, and commanding these devices, the bassist can control the rhythmic aspects of his or her bass playing with greater authority, authenticity, and legitimacy.

Chapter two of this thesis will demonstrate the concepts at play in core rhythmic patterns found in contemporary bass playing. When everyday rhythms within North American, Latin, and Caribbean bass playing are isolated, combined with an understanding of the discussed borrowed traits, it is easier to comprehend the musical forces at play in common bass styles and incorporate them into one's own playing.



## Chapter Two: Core Rhythms

### The Tresillo, Habanera, Cinquillo, and Clave

When examining rhythms commonly found in bass styles originating in the New World, several primary motifs emerge. These core rhythms demonstrate the ample usage of syncopation, democratization, and additive rhythms. Together, these devices form patterns that have become universal in contemporary bass rhythms. These seminal rhythmic bass figures found across the New World, including Latin America, the Caribbean, and North America, are also commonly found in traditional West African music. The tresillo, habanera, cinquillo, and clave are all rhythms with Spanish names that are most commonly associated with Cuban and other Latin music. However, cross-cultural and cross-geographical studies in Jazz and North American popular music show that these rhythmic motifs trace their origins back to Africa (Penalosa 2009; Dudley 1996; Steward 2000; Washburne 1997; Acquista 2009; Schuller 1968, Manuel 2007). By studying the roots, usage, and application, of the tresillo, habanera, cinquillo, and clave rhythms the modern bassist can gain valuable insight into how contemporary bass rhythms can function better within the rhythmic framework of an ensemble. With this gained knowledge the bassist can make more informed bass line decisions rooted in tradition and based on authentic and in-depth knowledge.

Besides the common two-feel bass line, the tresillo, originally a Spanish word for ‘triplet,’ is a three-note rhythm found in numerous bass styles played today. The tresillo is the basic foundation to countless bass lines from genres across the New World and “has been shown to be the most common rhythm found cross-culturally” (Acquista 2009, 1). It is common in the tango, many Brazilian rhythms, Afro-Cuban grooves, Caribbean beats, and early and modern jazz, rock-

and-roll, R'n'B, and several other North American musical styles. According to Martin, the tresillo is “widespread in African cultures, especially more recent dance styles like Soca, Soukous, Highlife, New Orleans beats, Hip-Hop and Reggaeton” (Martin 2006, 86). In a common-time measure, the tresillo is a three-note, 3-3-2 additive rhythm that places a strong syncopation on the and-of-two:



Figure 26: Tresillo rhythm

In his book, *The Clave Matrix*, Penalosa extensively details the African roots of the tresillo rhythm as the duple-pulse version of the African 3-2 cross-rhythm. To appreciate this correlation an understanding of the 3-2 cross-rhythm is necessary:



Figure 27: 3-2cross-rhythm in a triple-pulse feel



Figure 28: 3-2cross-rhythm in a duple-pulse feel

The notion of 3-2 cross-rhythm, or as commonly referred to by Western musicians, the three-over-two rhythm, is abundant throughout Africa as seen in Ewe drumming (Locke 1998, 25), melodies played on the Gyil marimba from Ghana (Penalosa 2012, 22), and the Cameroonian Bikutsi and Mangambe rhythms (Traversa 2007, 31). In many African music examples there lie two distinct beat pulses, lines, or cycles. As the figure 27 outlines, the four beat stave is the primary beat cycle and the six beat stave illustrates the secondary beat cycle. Acquista, in his

article “Tresillo: A Rhythmic Framework Connecting Differing Rhythmic Style,” states that “the 3-2 cross-rhythm is the cornerstone of African music” (Acquista 2009, 14). Additionally, Penalosa showcases the secondary beat cycle as “the basis of many folkloric drum rhythms and 6/8 bass lines in Latin jazz” (Penalosa 2012, 26). He cites the bass line performed by Al McKibbon on Mongo Santamaria’s song “Afro Blue.” In this example, the bass plays the secondary beat cycle while the main beat of the song provides the primary cycle:

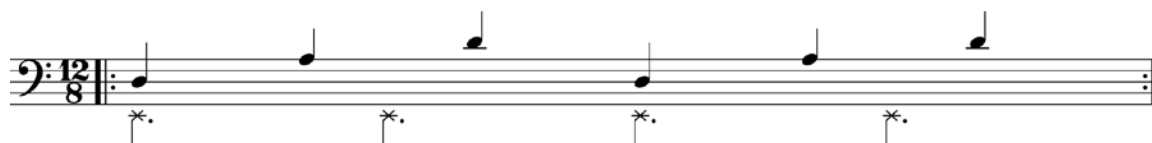


Figure 29: Al McKibbon, Mongo Santamaria, “Afro Blue” (1959)

With the 3-2 cross-rhythm in mind, it is possible to realize the tresillo in its duple-pulse form. Penalosa states that “every triple-pulse pattern has a duple-pulse correlative.” (Penalosa 2012, 38). In other words, every triplet rhythm has a straight-eighth note version, and the tresillo is the duple-pulse correlative of the secondary beat cycle (Penalosa 2012, 36; Acquista 2009, 10) of the three-over-two cross-rhythm:

Triple-pulse secondary beat cycle in quartet note triplets

Triple-pulse secondary beat cycle in eighth note triplets

Duple-pulse secondary beat cycle

Primary beat cycle

*Figure 30: Triple and duple-pulse comparison*

According to Acquista, the majority of the core rhythms used in the Guinean Kuku are tresillo-based patterns (Acquista 2009, 28). In addition, Acquista reveals how the tresillo figure can be rhythmically extracted from several more complex African and Caribbean rhythms (Acquista 2009, 13):



*Figure 31: Common djembe accompaniment from Guinea, Mali, and the Ivory Coast*



*Figure 32: Makuta middle drum part*

As he theorizes, the tresillo is a common denominator in the examples. Additionally, this suggests the above examples are all derivatives stemming from the tresillo as a common rhythmic ancestor. Just like the tresillo is the common denominator in these African percussive examples, the tresillo can be observed in many common contemporary bass rhythms:



*Figure 33: Bernard Odum, James Brown, "Funky Women" (1970)*



*Figure 34: Sam Thomas, James Brown, "Out of Sight" (1964)*

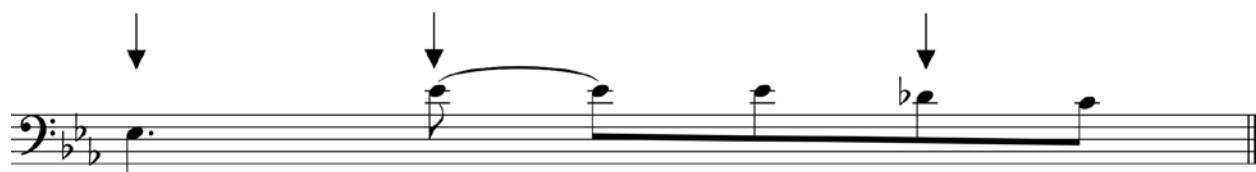


Figure 35: Bernard Odum, James Brown, “Think” (1960)



Figure 36: James Jamerson, the Temptations, “Since I lost my Baby” (1965)

In addition to these examples, the other core rhythms discussed, the habanera, cinquillo, and clave, can be shown to be derivatives of the tresillo as well. The habanera is the closest example:

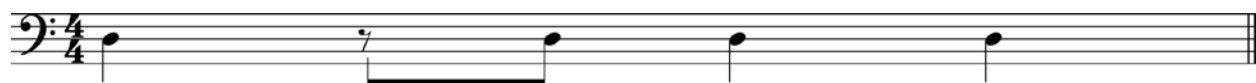


Figure 37: Habanera

The habanera rhythm is well documented in African music in examples like the *mbilu a makinu* from Kongo (Lhamon Jr., et al. 2017, 85). As stated in the book *Listen Again*, “The power of the habanera is that upbeat in the middle of the bar, on the and-of-2. If it’s in the bass, you’re already rocking” (Lhamon Jr., et al. 2017, 75). It is theorized that the strength of the habanera as a rhythm is the superimposition of both the primary and secondary beat cycles. This underlying nod back to the African 3-2 cross-rhythm provides an innate impact as a bass rhythm:

Duple-pulse secondary beat cycle

Duple-pulse primary beat cycle

Habanera rhythm

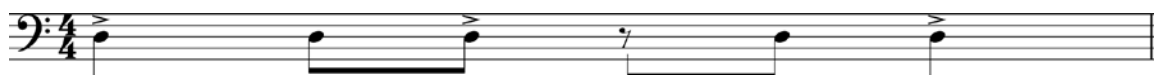
*Figure 38: Habanera as a combination of primary and secondary beat cycles*

As Penalosa explains, “from the perspective of North American music, the habanera rhythm can be conceived as the tresillo combined with the backbeat” (Penalosa 2012):



*Figure 39: Habanera as tresillo with a backbeat*

The cinquillo (cinco being five in Spanish) is the tresillo with two added notes. It is a five-note pattern and the characteristic rhythmic feature of the Cuban danzón:



*Figure 40: Cinquillo*

The cinquillo is used in the music of Haiti, Cuba, the Dominican Republic, and Trinidad and can also be heard in the African regions of Congo, Central African Republic, and Zaire (Martin 2006, 87).

Moreover, the clave (to be discussed later) is a two-bar pattern where the “three” side of the figure is the tresillo:



*Figure 41: 3-2 son clave*

### Tension and Release in Contemporary Bass Performance

The basic tresillo rhythm, unlike the triple-pulse version, is not a divisive rhythm, but instead, an additive rhythm in the 3-3-2 configuration. Through the rhythmic cadence within the duple-pulse tresillo exists a fundamental system of tension and release:



Figure 42: Tension and release within the tresillo

The notion of tension and release is one of the core components of effective bass lines (Burr 2009, 7). In short, syncopation creates tension that is consequently released with a downbeat: the tresillo is the archetypal example of this. The back and forward balance between tension and release in rhythm creates forward motion, ultimately becoming a key driving force of any strong bass line. This concept is the rhythmic equivalent of the forward motion caused by harmonic cadences or melodic passing and chromatic tones resolving to chord and scale tones.

Today many contemporary bass lines that incorporate syncopation borrow this notion of tension and release. To further understand this concept, a basic understanding of clave is necessary. The clave can be theorized in many ways, but in essence, clave is a perfect example of rhythmic tension and release. As opposed to the tresillo, habanera, and cinquillo, the clave is typically thought of a two bar figure where one of the two bars is a tresillo-based rhythm. The measure containing three notes (the tresillo side) creates tension whereas the measure containing two notes releases it. To Martin the clave is a cyclical framework in the music that guides the musicians and dancers. He explains that the clave contains two parts of equal length acting together to create a call and response phrase initiating an up-and-down motion to the rhythm. In other words, one “part is syncopated, creating an *up-beat*, then, the other part will answer with *down beats*” (Martin 2006, 4). As Penalosa puts it, “a central tenet of the clave concept is its binary structure of two opposing cells. This is one of the great Cuban contributions to music theory – a concept that transcends Cuban music and offers a superb model with which we can understand the African cross-rhythm in general” (Penalosa 2012, 91). Roberts adds an additional explanation of the clave’s usage:

“Clave, which has a strong first part and an answering second part, like the call-and-response structure common in African and Afro-American music, appears to be a way of incorporating into European measure-patterns the basic western African rhythmic pattern of eighth notes and rests, usually built up of combinations of two and three beats” (Roberts 2014, 5).

Although to extensive a concept to explore in depth in thesis essay, the notion of a two-sided motif with contrasting sides, like the clave, becomes markedly apparent when looking at contemporary bass lines. The clave’s use of syncopation released by non-syncopation is a concept many bassists, perhaps subconsciously, utilise:



Figure 43: “Hambone” Afro-American regional song (Logan 1984, 194)

In jazz playing the bass has significantly evolved from the era of straight four beats to the bar. Today a bassist utilizes “regular various interrelated features of rhythm, harmonic colour, and contour according to basic principles of tension and release, their alternation contributing to the music’s swing and momentum” (Berliner 1994, 316). It is safe to say that with the clave-like concept and the other bass line techniques discussed above, the bassist puts a strong focus on momentum and a strong forward drive.

#### Tresillo and Habanera in Brazilian, Caribbean, and Latin Bass

The tresillo and habanera rhythms in bass lines are found across the New World, but in Brazilian, Latin, and Caribbean bass styles the tresillo, along with its derivatives, is an



unavoidable core rhythm extensively employed. Low percussion instruments like the zabumba in Northeastern Brazilian genres like the baião, forró, coco, lambada, cabaçal, and xaxado commonly perform rhythms based on the tresillo and habanera. Since the twentieth century these parts have been adapted to the bass. Also in South America, the primary rhythmic basis of the Argentinean tango is the habanera. Musical styles from many Caribbean islands also base their drum and bass grooves on the tresillo and habanera. Some of these musical styles include reggaeton, dancehall, bachata, ragga, soca, mento, dembow, and bomba. The popular Cuban guaracha, danzón, bolero cha, and cha-cha-chá use a habanera, tresillo, or derivative rhythms as the primary motif for bass line construction. Furthermore, the slave trade brought a strong African element to rural and peasant music leading to the emergence of Afro-Cuban folkloric music. Many folkloric bata and rumba music styles feature the tresillo and habanera extensively.

Cuba plays a special role in the development of Latin and Afro-Latin styles as a historically-significant influence on North American music. Cuba “presents a more equal balance of African and Spanish ingredients than any other Latin country except Brazil” (Roberts 2014, 4) and in Cuba, the eighteenth-century European-based contradanza began to incorporate “many African rhythmic concepts into the popular dance form, creating a truly ‘Creole’ style” (Mauleon-Santana 1999, 19). The Cuban contradanza was the Spanish-American version of the French contradanse and English country dance. The contradanza was prevalent in Cuba by the nineteenth century where it was developed by musicians of both European and African descent, but it is commonly acknowledged that it was the “black musicians that began to syncopate the contradanza’s rhythm” (Roberts 2014, 6). The contradanza is considered the first formally composed and notated music to be based on an African rhythm, namely the habanera. The first known Cuban contradanza is “San Pascual Bailón,” 1803 (Manuel 2007, 67; Witmer 2011, 123).

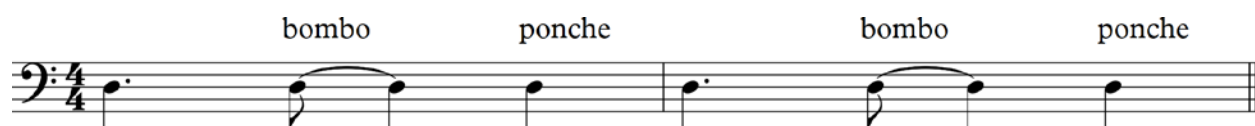
Manuel Saumell Robredo is regarded as the first composer whose contradanzas “transcended mediocrity and the first to achieve an artful synthesis of Cuban musical creolisms and European sophistication” (Manuel, *Creolizing Contradance in the Caribbean* 2007, 80). By the late nineteenth century, the contradanza had spread extensively to regions outside of Cuba. Roberts discloses that “in the 19<sup>th</sup> century the most effective way in which any new [musical] form could spread was by way of sheet-music” (Roberts 2014, 6). The distribution of printed music advanced the popularity of the contradanza and, consequently, the sound of the habanera bass across Latin American and the United States. The notion of melding European and African music into a Creole form may have started with the contradanza, and it is important to note that this synthesis, which has over time become exceptionally intricate, initially began with a comparatively rudimentary concept:

“Although rhythmically tame by contemporary Afro-Cuban standards, the contradanza was scandalously syncopated for its time because it represented one of the earliest obvious entrances of African rhythm into Cuban music salons which had until then been a venue for strictly European forms like waltzes, quadrilles and schottisches” (PBS n.d.). Characteristically, contradanza piano arrangements feature the habanera rhythm in the left hand. Due to this, the contradanza has contributed to the presence of the tresillo-based motif in modern bass lines:



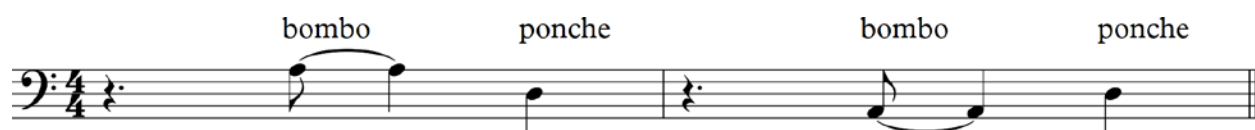
*Figure 44: Excerpt of the contradanza, “San Pascual Bailón” (1803)*

In Cuba, various motifs found in low register instruments featured tresillo-derived rhythms. Many of the rhythms now played on the bass originated in formal setting like the contradanza, folkloric percussion examples, and instruments like the marimbula, a large lamellaphone of Congolese origin (Penalosa 2012, 99), and the botella (O’Farrill 2007, 15) a large jug that was blown. The parts played by these instruments often emphasised the bombo and ponche notes of the tresillo pattern. In Spanish, bombo is the word for bass drum or in this case bass note. Ponche means the punch note. In the tresillo, the bombo is the note on the and-of-two, and the ponche is beat four:



*Figure 45: Bombo and ponche notes of the tresillo*

This focus on the bombo and ponche notes of the tresillo rhythm has led to the bass tumbao commonly found in son and salsa bass lines:



*Figure 46: Bombo and ponche as applied to the Cuban bass tumbao*

The Cuban tumbao has become the model for Latin bass playing today. When exploring its roots, it demonstrates the influence of the African tresillo, evolution from a 3-2 cross-rhythmic tendency, and democratisation of the beat.

With its broad diversity in popular and folkloric music and dance genres, Cuba has had a profound musical influence on not only other Caribbean and Latin countries, but North America as well. In the nineteenth century, due to its significant social-economic relationship with the

United States, and most importantly New Orleans, Cuban music, dating back to the time of the slave trade, made a lasting impact on the development of North American jazz and popular music.

### Tresillo in Jazz

Like Schuller's example of the "flattened-out mutation" (Schuller 1968, 15) of poly-rhythm as syncopation in jazz, Washburne contends that there is an African polymetric element in early jazz containing a "biometric approach of the African native forced into the simple 2/4 pattern of European marches" (Washburne 1997, 7). He quotes Borneman as explaining how the 3-3-2 motif is "unmistakably African in origin and approach" (Washburne 1997, 11). Washburne discusses Jones's theory that this connects with the notion that "African phrases are built up of the numbers 2 or 3 or of a combination of 2 and 3" (Washburne 1997, 24) similar to how "the tresillo rhythm; and the son clave, cinquillo, and tresillo rhythms all embody this combination of threes and twos" (Washburne 1997, 8). In early jazz and the music of New Orleans brass bands, ragtime, and the Charleston, the tresillo and the idea of combinations of 2 and 3 are also a clearly observable rhythmic motif.

A direct link between the Caribbean and New Orleans can be seen as the primary conduit for the tresillo into North American music. The article "The Clave of Jazz" sheds some light on the complex mixing of cultural influences that occurred in New Orleans in the nineteenth century. As Washburne explains, when Thomas Jefferson acquired Louisiana for the United States in 1803, New Orleans had just completed two generations of Spanish and French rule. In the eighteenth century, many individuals from Saint-Domingue (now Haiti) migrated to Cuba to escape the Haitian slave uprisings. Ten years later, war erupted between France and Spain and

“many were forced once again to seek refuge in a foreign land. New Orleans was an attractive locale because of its proximity, similarity in climate, and Caribbean flavor” (Washburne 1997, 4). At this time, New Orleans’ population doubled due to the influx of Caribbean immigrants, making approximately sixty-three percent of its population African in descent (The New York Public Library 2005). With this appearance of Caribbean people in New Orleans a “pronounced impact on custom and habit” is said to have occurred. This impact is so strong that “scholars now consider New Orleans, like Miami, to be part of the Gulf of Mexico that are acultural extension of the Caribbean” (Berry, Foose and Jones 1986, 4).

Historically, New Orleans has played a significant role in the development of North American music, and the roots of many major North American music styles can be traced back there. Early jazz, funk, and rock-and-roll have all been heavily influenced by the music emerging from New Orleans at the beginning of the twentieth century. The origins of jazz and other African-American musical styles can be overly simplified by stating they were birthed in New Orleans as the offspring of European harmony and African rhythm, and although this is truly an overgeneralization, these musical styles would not be what they are today if not for the combined cultural influences of New Orleans, Europe, and Africa. The cultural impact of the introduction of Africans into the New World was and is profound. Their effect on the diverse colonial societies established in the region and the cross-pollination of influence, due to social-economic trade between the United States and the Caribbean in the nineteenth century, has aided in dispersing and planting many of the musical sensibilities African slaves brought with them to the New World.

In *Experiencing Jazz*, Lawn states that jazz was created by black Americans as a direct result of West African, Caribbean, and Afro-Latin elements on popular American and European-

derived music styles (Lawn 2013, 6-9). “The clave of jazz: a Caribbean contribution to the rhythmic foundation of an African-American music” explores this theory throughout and openly declares that “New Orleans is the best place to use to illustrate the Caribbean connection to jazz” (Washburne 1997, 61). While “Funky Drummer”: New Orleans, James Brown and the Rhythmic Transformation of American Popular Music “discusses New Orleans’ role in transforming American popular music, the article mentions Cuban and Caribbean influences throughout and dedicates a major segment to Caribbean influence. In the section entitled “Mardi Gras Mambo,” Stewart quotes numerous resources reiterating the notion that Afro-Cuban rhythms have been evident in New Orleans since the nineteenth century (Stewart 2000, 216). Because many Caribbean and Latin rhythmic tendencies are originally derived from Africa, it is safe to state, as Barbaro does, “In jazz, the rhythmic phrasing 3+3+2 remains from African rhythmical practice” (Barbaro 1993, 153). Still, Washburne dedicates significant effort to demonstrating the Caribbean influence of the tresillo on early New Orleans musicians and cites how “early jazz and swing (1917-1945) provided countless examples” of the clave, cinquillo and tresillo rhythms. For example, Washburne illustrates “Jelly Roll Morton’s reliance on the tresillo rhythm in the left hand on ‘New Orleans Blues’” (Washburne 1997, 10):



Figure 47: Jelly Roll Morton, “New Orleans Blues” 1925

These observations begin to illustrate how many African and Caribbean influences were retained in ragtime. Perhaps many of the musicians may not have been aware of direct correlations (Barbaro 1993, 38) but others plainly state a clear understanding of the borrowing.

Jelly Roll Morton himself referred to the inclusion of tresillo-like rhythms as a “Latin Tinge” (Morton 1938). The tresillo and habanera became a reoccurring rhythm in ragtime compositions where its “influence may have been part of what freed [American] black music from ragtime’s European base” (Roberts 2014, 16). According to Acosta, the ragtime songs which utilised “more monotonous rhythm” were labelled as having a “European rhythm” (Acosta 2003, 6). Presumably, this refers to a standard two-feel bass pattern.

Perhaps the most predominant “comping,” or accompaniment figure found in early jazz is the Charleston rhythm:



*Figure 48: the Charleston rhythm: 2-note version*

When discussing the Charleston rhythm, it is important to note that, alternatively, numerous sources refer to the Charleston rhythm as the typical 3-note tresillo rhythm. Originally associated with the dance with the same name from Charleston, South Carolina, it is impossible to ascertain if the usage of the Charleston rhythm is more directly influenced by Caribbean patterns, a tendency for African 3-2 cross-rhythm as previously explained, or, most likely, a combination of both, but it is clear to see that the motif is a derivative of a 3-3-2 additive pattern. Barbaro, Schuller, and Washburne all compare the Charleston to the West African Gankogui drum pattern (Barbaro 1993, 150; Schuller 1968, 19-20; Washburne 1997, 7). In Barbaro’s examples, he is comparing the phrasing of early jazz drum pioneer Baby Dodds to common West African techniques (Barbaro 1993, 150). He discusses the occurrence of the 3-3-2 pattern in the kidi and kaganu parts of the African gahu. He continues by asking, “Did Dodds learn this from family influence, or from the teachers with whom he studied? However it developed, this is a typical African rhythmic characteristic, which in European music does not bear the same force”





approach to bass line construction, but today jazz bass playing incorporates many of the early New Orleans and Caribbean influences and ventures away from these traditional methods. Although the walking bass line is still the common approach in which traditional jazz bass playing is performed, the modern jazz diaspora explores much greater rhythmic variety. Modern jazz composers, ensembles, and contemporary bassists rely on a complex system of rhythms and rhythmic concepts drawing upon many external influences.

With the movement away from swing and bebop, post-bop composers began to write specific bass parts that became synonymous with their compositions. Analysis of these bass lines points towards New Orleans and Caribbean influences and, consequently, African roots. Post-bop jazz composers like Chick Corea, Joe Henderson, Herbie Hancock, Wayne Shorter, Horace Silver, and John Coltrane often wrote songs with distinctive bass lines. Interestingly, many of these composed bass lines feature rhythms similar to the tresillo or demonstrate clave-like concepts. Figure 51 demonstrates John Coltrane's post-bop adaptation of the classic "Summertime." In this example, the tresillo, three over two polyrhythms, clave-based motifs, and traditional walking bass can be found:

Figure 50: Steve Davis, “Summertime” (1960)

Many other examples of clave and tresillo-based influences exist:

Figure 51: Art Davis, “Dahomey Dance” (1961)

Not taking compositions written by Latin composers into consideration, figure 53 lists jazz pieces with composed bass lines based on the tresillo, habanera, cinquillo, or clave-based rhythms including the Charleston rhythm:

Song Title	Composer, arranger, or primary performer	Device utilized	Year
“DahomeyDance ”	John Coltrane	Clave	1961
“Eighty-One”	Ron Carter	Tresillo	1965
“Equinox”	John Coltrane	Tresillo / Clave	1960
“Fire”	Joe Henderson	Clave	1973
“First Light”	Freddie Hubbard	Clave	1971
“Gaucho”	Wayne Shorter	Rumba clave	1966
“Grand Central”	John Coltrane	Charleston	1959
“In a Silent Way”	Miles Davis	Clave	1969
“Love Supreme”	John Coltrane	Tresillo	1965
“Maiden Voyage”	Herbie Hancock	Clave	1966
“Mamacita”	Joe Henderson	Charleston	1968
“Metamorphosis”	Horace Silver	Charleston	1957
“Nica’s Dream”	Horace Silver	Tresillo	1960
“Nutville”	Horace Silver	Tresillo	1975
“Peep”	Michael Brecker	Cinquillo	1990
“Punjab”	Joe Henderson	Tresillo	1964
“Red Clay”	Freddie Hubbard	Clave	1970
“Sak ‘O Woe”	Julian “Cannonball” Adderley	Tresillo	1960
“Sea Journey”	Chick Corea	Clave	1985
“34 Skidoo”	Bill Evans	Three over two cross- rhythm	1990
“Star Eyes”	Gene de Paul and Don Raye	Rumba clave	1955

“The Night Has a Thousand Eyes”	McCoy Tyner	Habanera	1973
“Togetherness”	Jimmy Heath	Clave	1986
“Tunji”	John Coltrane	Clave	1962
“You Stepped Out of a Dream”	McCoy Tyner	Tresillo	1976

*Figure 52: List of jazz standards with composed tresillo/clave-based bass lines*

### Tresillo in Popular music

#### *New Orleans Funk and the Legba Beat*

The musical traditions cultivated in New Orleans played a vital role in the creation of many North American musical styles. Also, the unique rhythms and musical styles found in New Orleans aided in the “development of a funkier style of R&B” (Stewart 2000, 293). As Stewart explains, “because these musical traits have been prominent in the dense, churning grooves of New Orleans R&B from the beginning, it is understandable why funk is so often linked to New Orleans” (Stewart 2000, 299). Many of New Orleans’ most revered musicians are considered major contributors to the funk genre. Fats Domino and Professor Longhair are described as combining “the sounds of early Rock n’ Roll and Blues with Afro-Cuban influenced New Orleans Second Line” (Berry, Bufe and Boomer 2014, 14). Steve Marks explains that “in the 1950s boogie-woogie piano, mixed with blues, parade beats, and Caribbean rhythms became a distinctive part of the emerging national R&B/Rock and Roll scene ... Longhair played a rumba-derived boogie-woogie piano, whose syncopated rhythms were precursors of 1960s funk” (Marks 2007, 58).

Although New Orleans bass lines often feature a two-feel, the incorporation of the tresillo and clave instantly give a bass part a characteristic flair. Figure 54 demonstrates this difference. The top line features a straight traditional jazz two-feel whereas the bottom line incorporates the tresillo in a 2-3 clave-influenced motif:



Figure 53: Comparison of two-feel with clave-influenced New Orleans beat

Figures 48 and 50 also demonstrate this trait with the occurrence of the tresillo, habanera, cinquillo, and clave in early New Orleans music. According to Washburne, “the abundance of these rhythms dispels any notion that their presence ... is coincidental” (Washburne 1997, 10).

Tim Boomer in his book *The Bassist's Bible* describes the tresillo in New Orleans' funk settings as the “legba beat.” Sharing the name of the Haitian/Creole spirit guardian of the crossroads, the legba beat is “the most common rhythm found in New Orleans Funk bass lines (Berry, Bufe and Boomer 2014, 15). In Haitian culture, Legba belongs to the Radar family of spirits which is “said to have the deepest African ancestry” (Berry, Bufe and Boomer 2014, 19). As Berry, Bufe, and Boomer illustrate, the legba beat is the main bass motif in popular New Orleans songs such as “Brother John,” “Fire on the Bayou,” “Hey Pocky A-Way,” “Big Chief,” and “Meet the Boys on the Battlefront” (Berry, Bufe and Boomer 2014, 15). The most iconic New Orleans funk group is the Meters. Meters' bassist George Porter Jr., has recorded many iconic bass lines, many of which feature tresillo and clave-inspired motifs:



Figure 54: George Porter Jr., the Meters, “Cissy Strut” (1969)

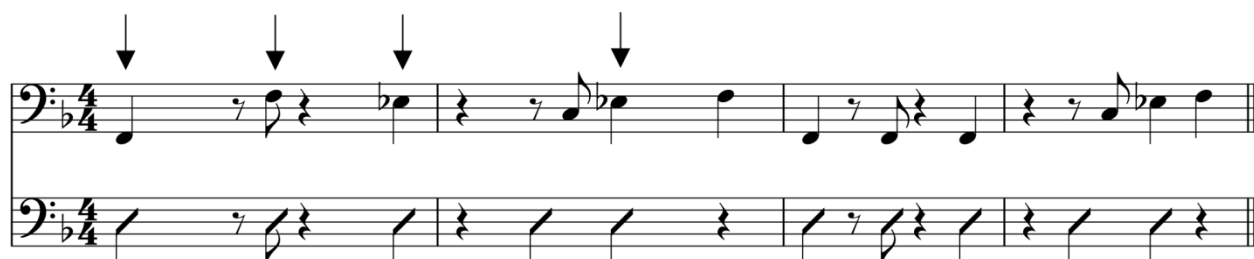


Figure 55: George Porter Jr., the Meters, “Hey Pocky A-Way” (1974)

The notion of clave in the bass is a common theme in New Orleans funk bass playing. In describing the influence of the Cuban clave in New Orleans bass playing, Steve Marks states that “In Afro-Cuban music a percussionist states the clave while the bassist plays a syncopated accent around it, but in this groove the bassist plays the clave while the drummer plays a second-line feel” (Marks 2007, 62):



Figure 56: Steve Marks’ second-line street beat bass line utilising the clave (Marks 2007, 62)

As in a traditional Cuban musical setting, if all the instruments are playing “in clave,” then no one instrument is required to play the clave rhythm verbatim. The clave is understood and felt through the combination of parts and lack of contradicting references. The instruments may

navigate away from explicitly or implicitly outlining the clave so long as no one part is played “across” the clave or opposed to the clave’s sense of beat versus syncopation pattern.

Besides specific rhythmic motifs, the intrinsic rhythmic feel used by early New Orleans R&B and funk musicians became a signature sound that eventually spread across the groove music landscape:

“Only in New Orleans ... did the mixture of shuffle and straight eighths become a trademark of sorts. Sometimes it is found between members of the group, for example with the bass player in 8/8 and the pianist in 12/8, or the drummer in 12/8 and the pianist in 8/8; and at times it is found within one member such as the drummer (a straight feel on the hi-hat and a swing feel on the snare) or the pianist (between the two hands)” (Stewart 2000, 297).

Although the examination of this concept is beyond the scope of this thesis, the mixture of feels described in the statement above can be said to resemble the multi-layered approach to rhythm found in African percussion ensembles where the nuance of each part mixing with the other is what brings the whole of the ensemble to life. In New Orleans this approach became common. For example, Professor Longhair had a distinctive style known as rumba-boogie. He would commonly play triplets with the right hand over a bass “left-hand habanera-like figure in even eighths and an underlying current of sixteenth notes played on the snare” (Stewart 2000, 296). This complex interpretation of rhythm implanted a very distinctive feel to R&B and funk music from New Orleans. New Orleans R&B and funk recordings are known to have a “peculiar ‘in-between-ness’” in their rhythm (Stewart 2000, 299). This hybrid feel, sometimes called an open shuffle or mixed groove, features a blend of straight and swung subdivisions that is often explained as straight notes slightly swung or swung notes played more evenly. Regardless, the

feel is neither straight nor fully swung. This approach has been adapted and utilised by many contemporary R&B rhythm sections today. Also, many hip-hop and neo-soul producers exploit this feel to great effect and drummers like the Roots' Questlove have developed this concept using extreme rhythmic nuance. Master groove bassists like Pino Palladino and Meshell Ndegeocello have taken the degree of this concept to new heights making the intricacy in their feel so subtle that they have opened the gates to what is possible within a groove. For example, in an interview by Chris Jisi bassist Pino Palladino explains the rhythmic approach utilised by singer D'Angelo in producing his seminal neo-soul recording "Voodoo":

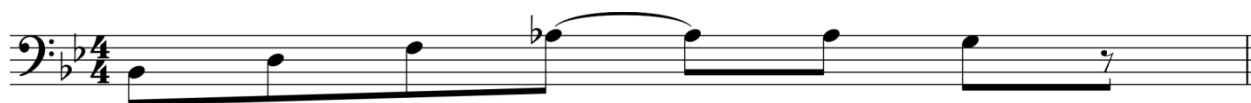
His concept has the drums right on the beat--almost pushing--with the keyboards and bass hanging back in their own places. At points it can even sound polyrhythmic; some of it reminds me of music I've heard in Africa. When we first recorded he'd explain how far back he wanted me, and it felt pretty natural. I'd just try to lay back with the keyboards and listen to the overall feel. Still, there were times when I'd wonder if it was *too* far back--if people would get it. But when he'd finish putting his vocals and sound collages on top, the whole track would work splendidly. (Jisi 2000)

As explained by Palladino in the quote above, the nuance in this approach is the "push and pull" of the beat among different instruments of the ensemble. Notating this concept would not produce accurate results, and to understand the notion, in-depth listening is recommended. In short, the layering of intermixed parts and push and pull of rhythmic feel in contemporary neo-soul, R&B, and funk music and bass playing harks back to its roots in New Orleans. In the crescent city, elements of the African drum ensemble's musical sensibility for rhythmic subtlety and sophistication remains ingrained.



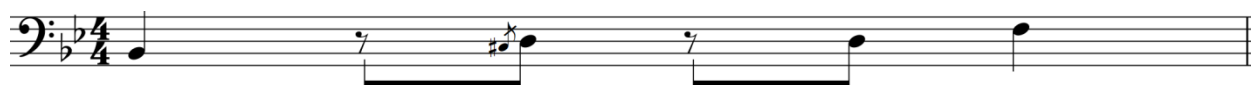
## *Rock & Roll*

Rock & roll and pop music (rock) developed in the United States during the 1940's and 50's from early jazz, jump blues, boogie woogie, and traditional rhythm and blues. Due to these early influences, it is easy to say that rock was highly influenced by music in the southern United States including New Orleans. If we look at early examples of rock bass lines, these examples mirror the bass lines from boogie woogie and standard jump blues or jump swing walking bass lines. Besides these traditions, early rock was, like early jazz and R&B, affected by Caribbean and Latin influence in large part because of New Orleans. Chuck Berry, any early innovator of rock music, explicitly utilised Latin influences in his music. In a later version of the famous song "Johnny B. Goode", a "Latin rhythm which Berry was experimenting with around this time" was introduced (Taylor 1992, 37). In this version a distinctive tresillo influenced bass part appears:



*Figure 57: "Johnny B. Goode," Mercury version, bass part (Taylor 1992, 37)*

In early rock, countless bass lines incorporate this tresillo-like rhythmic technique:



*Figure 58: Example of tresillo usage in common early rock bass line*

In addition, it is common for rock bass lines to utilize the principles inherent in clave. Although not conceived as clave-like in a Cuban setting, the basic principle of tension and release and forward push are still intact and apparent:



its reign as the “most influential sound system in the world” in the early twenty-first century by blending reggae vocals with hip hop and dancehall beats (R. Brown n.d.).

Throughout the New World these core rhythms have embedded themselves across distinct cultures and musical styles. However, in the bass, these motifs appear consistently regardless of idiom. These bass figures all feature syncopation, democratisation of the beat, and additive rhythms in settings where a dance-inspired steady beat and the use of ostinato is characteristic. These New World bass lines may evolve into highly complex models, but when broken down, their foundational elements are clearly exposed.

### **Conclusion**

Today, bassists who work in the jazz or contemporary music genres will find it necessary to perform in a diverse array of styles. As has been shown above, many of these musical styles trace their roots back through New Orleans, the Caribbean, Latin America, and, ultimately, West Africa. Consider how the working bassist needs to comfortably play jazz standards, R&B, pop, Cuban, Brazilian, reggae, calypso, boogaloo, second line, and more, and it is surprising that the discourse regarding the shared roots of these styles is not frequently presented to developing bassists. When comparing these genres to more European-based examples, like country-and-western, polkas, and, of course, classical music, the prevalence of common rhythmic devices demonstrates a shared vocabulary in contemporary bass rhythms. Additionally, understanding the borrowed traits retained in contemporary bass playing that have been passed down from West African musical sensibilities give the bassist an authentic and profound platform in which he or she can confidently make informed bass line choices. This finely tuned awareness permits the

bassist to delve further into an existing bass line by finetuning the feel and rhythm within it.

Basically, the goal is to refine the existing part to fit into the ensemble more effectively rather than adding notes to it to compensate for shortcomings. Although the genres contemporary bassists must perform have become distinct from each other over time, the well-rounded bassist must transcend these cultural frontiers and can, while respecting the unique qualities of each genre, benefit by understanding the consistencies, lineage, and underlying principles that aided in the advancement of all these various bass figures and bass line construction techniques.

This research provides basic concepts worth contemplating, but further studies could demonstrate a broader examination of cultural considerations, migration patterns, effects of Northern African influences, or greater comparison with European or Middle Eastern music.

With that stated, the information in this thesis provides the bassist with an outline exposing core principles in bass line construction, and to fully internalise these ideas through application of the principles discussed is essential. In addition, analytical listening and study of African, Latin, and Caribbean examples can only result in greater depth of the examined musical ideas facilitating a well-formed integration of these broad concepts into everyday contemporary bass playing.

## **Appendices**

The following four appendices are examples of how the tresillo and clave can be introduced into bass pedagogy. The exercises are developed to help the student understand the basic foundations of the tresillo and clave rhythms. Furthermore, the hope is that these exercises expand the student's perspective, bringing to mind possibilities for further investigation and study of these and other related concepts.

## Appendix 1: Internalizing the Tresillo

Practice the following exercises using a metronome in order to better understand and internalise the tresillo rhythm.

Ex. 1: Feeling Tresillo in duple and triple meter

Metronome

Ex. 2: Feeling subdivisions within tresillo

Ex. 3: Tresillo displaced forward by one 8th-note

Ex. 4: Tresillo displaced back by one 8th-note

Ex. 5: Moving the tresillo around the beat

## Appendix 2: Tresillo Variations

Students are often told that Example 1 is the basis for many Latin and Caribbean bass lines. He or she may stop there and apply the motif as shown with little inventiveness. With a little encouragement, the student can open up the concept to include many possibilities.



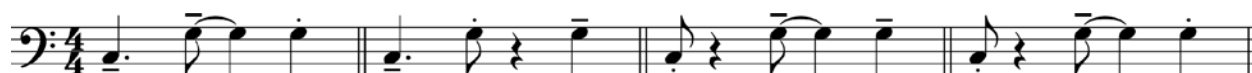
*Example 1: Standard tresillo-based bass line*

By examining the twelve variations in Example 2, it becomes easy to see how other alterations in note choice, octave, and rhythm can be applied:



*Example 2: Simple tresillo bass line variations*

Now imagine adding variations in articulation to all the above examples:



*Example 3: Added variations in articulation to the tresillo-based bass line*

Finally, consider the possibilities if two-bar patterns are constructed:



*Example 4: Examples of two bar tresillo-based bass lines*



### Appendix 3: Clave in Latin Bass

The concept of clave is well documented in Cuban bass playing. Below are the different types of claves or clave-like rhythms and examples of them used in bass lines:

Ex 1: 2-3 Son Clave



Ex 2: 3-2 Rumba Clave



Ex 3: 6/8 Clave



Ex 4: Bossa Nova / Brazilian rhythm incorporated into a bass line



### Appendix 4: Pop/R&B Bass Clave Exercise

Here is a simple exercise that demonstrates how different clave rhythms can be found in pop/R&B style bass lines:

Tresillo-based

The Tresillo-based exercise is written in 4/4 time. The top staff shows a rhythmic pattern with 'x' marks: a quarter note, a dotted quarter note, and an eighth note, repeated twice. The bottom staff shows a corresponding bass line with eighth notes and quarter notes, including accidentals (flats and naturals) and slurs.

Son Clave-based

The Son Clave-based exercise is written in 4/4 time. The top staff shows a rhythmic pattern with 'x' marks: a quarter note, a dotted quarter note, and an eighth note, repeated twice. The bottom staff shows a corresponding bass line with eighth notes and quarter notes, including accidentals (flats and naturals) and slurs.

Rumba Clave-based

The Rumba Clave-based exercise is written in 4/4 time. The top staff shows a rhythmic pattern with 'x' marks: a quarter note, a dotted quarter note, and an eighth note, repeated twice. The bottom staff shows a corresponding bass line with eighth notes and quarter notes, including accidentals (flats and naturals) and slurs.

Bossa Nova-based

The Bossa Nova-based exercise is written in 4/4 time. The top staff shows a rhythmic pattern with 'x' marks: a quarter note, a dotted quarter note, and an eighth note, repeated twice. The bottom staff shows a corresponding bass line with eighth notes and quarter notes, including accidentals (flats and naturals) and slurs.

Three-note Groupings

The Three-note Groupings exercise is written in 4/4 time. The top staff shows a rhythmic pattern with 'x' marks: a quarter note, a dotted quarter note, and an eighth note, repeated twice. The bottom staff shows a corresponding bass line with eighth notes and quarter notes, including accidentals (flats and naturals) and slurs.

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