

A PERSONAL PERSPECTIVE ON AFRO-CUBAN RHYTHMIC INTEGRATION IN CURRENT JAZZ COMPOSITION

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ABSTRACT

The general purpose of this paper is to resolve issues related to the notions of rhythmic conceptualization within the compositional process and the personalization of the compositional process through the linking of two styles: the aesthetics and values of Afro-Cuban rhythms and the stylistic dimensions of Afro-American jazz. Since the end of the nineteenth century, Afro-Cuban and Afro-American composers have been using Afro-Cuban rhythms as a central tool for jazz orchestration and composition. While the process of hybridization is unique to each composer, Afro-Cuban-American pieces represent the foundation for jazz performance in the current Latin-jazz songbook repertory. Most recently, avant-garde jazz composers such as Gonzalo Rubalcaba and Steve Coleman have broken down the pre-existing barriers between Afro-Cuban rhythmic circularity and jazz harmonic textures. Their distinctive use of melodic rhythmic statements and rhythmic harmonic within jazz stylistics incline me to consider these rhythms as a source of inspiration for discovering new hybridizations between jazz and Afro-Cuban music. Specifically, my research explores the challenges I typically encounter in my compositional practice when developing a vocabulary where the music is driven, first and foremost, by Afro or afro-Cuban rhythms alone. I explore in particular how the circularity of these rhythms can serve as the bridge in hybrid compositions, an ideal of circularity that has not previously been pursued. This paper: 1.) recounts the history of hybridization in jazz, 2.) traces the influences of selected Afro-Cuban rhythms' and their specific musical figures, and 3.) documents the compositional process of six original compositions. Each work features a different Afro-Cuban rhythm and posed different rhythmic integration challenges stimulated by a different ensemble or stylistic context. The paper ends with a reflection about my own artistic individuality and the possibilities of composing with the Afro-Cuban rhythmic ideal.

Résumé

Le but général de cet article est de résoudre les problèmes liés aux notions de conceptualisation rythmique et personnalisation stylistique au sein du processus de composition en liant deux approches: l'esthétique et la valeur des rythmes afro-cubains et les dimensions stylistiques du jazz afro-américain. Depuis la fin du XIXe siècle, les compositeurs afro-cubains et afro-américains utilisent les rythmes afro-cubains comme outil central pour l'orchestration et la composition jazz. Bien que le processus d'hybridation est unique dans chaque compositeur, les pièces afro-cubaines-américaines représentent la base de la prestation jazz dans le répertoire actuel de jazz latin. Plus récemment, les compositeurs d'avant-garde tels que Gonzalo Rubalcaba et Steve Coleman ont brisé les barrières préexistantes entre la circularité rythmique afro-cubaine et les textures harmoniques du jazz. Leur façon de structurer la mélodiques et l'harmonie rythmique au sein de la stylistique jazz me inspire à considérer ces rythmes comme une source d'inspiration pour découvrir de nouvelles hybridations entre le jazz et la musique afro-cubaine. Plus précisément, ma recherche explore les défis que je rencontre habituellement dans ma pratique de la composition en développant un vocabulaire où la musique est d'abord et avant tout influencée par les rythmes afro-cubains. J'examine en particulier comment la circularité de ces rythmes peut me servir pour écrire mes compositions hybrides avec un idéal de circularité qui n'a pas été précédemment poursuivie. Cet article retrace 1.) l'histoire de l'hybridation dans le jazz, 2.) retrace les influences des rythmes afro-cubains sélectionnés et leurs figures musicales spécifiques, et 3.) documente le processus de composition de six compositions originales. Chaque œuvre présente un rythme afro-cubain différent et pose différents défis d'intégration rythmique stimulés par un ensemble ou un contexte stylistique différent. Le papier se termine par une réflexion sur ma propre individualité artistique inspirée par l'idéal rythmique afro-cubain.

Table of Contents

Acknowledgements:.....	iv
Chapter One: Introduction.....	5
Chapter Two: The Historical Context of Afro-Cuban Rhythms.....	13
Chapter Three: Composition Journal.....	23
Chapter Four: Conclusions.....	53
Appendix 1: Scores.....	57
“Overture”	58
“Distortions”	63
“Afro Cubano”	65
“Free Cuba”	70
“Obatala”	75
“Black Eyes”	81

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CHAPTER ONE: A Personal Perspective on Afro-Cuban Rhythmic Integration in Current Jazz Composition

Introduction

The general purpose of this paper is to resolve issues related to the notions of rhythmic conceptualization within the compositional process and the personalization of the compositional process through the linking of two styles. The goal of this research was to bridge the gap between the aesthetic and values of Afro-Cuban rhythms and the stylistic dimensions of Afro-American jazz and to categorize rhythmic functionality within different jazz forms and devices. This kind of bridging though the ideal of circularity is something that has not previously been done.

Through this investigation, I intend to demonstrate the general notion of rhythmic circularity and its value in my contemporary creations. While modern jazz compositional practices embrace a large number of styles and approaches, form is at the first level harmonically driven. Afro rhythms in contrast create a circularity at odds with this forward moment. The term circularity refers to repeated sequences of a cyclical pattern, which can be repeated in loop to created interaction.¹ I emphasize this potential in my original pieces; and at the same time, I revitalize the role of the piano in the rhythm section. I use the piano as a percussion instrument to superimpose harmonic and melodic rhythmic displacement, syncopation, and polyrhythm accentuations within the orchestration. Finally, by retaining the circularity, I enable the original Afro rhythms to convey something of their original spiritual roots through the physicality of the rhythm.

As an Afro-Cuban composer and pianist myself, I have always felt a strong passion for cultural linkages since the time I became involved with rhythms in my native country. Since then,

¹ Nelson, S. Thorana and David M. Rosenthal, "The Evolution of Circular Questions: Training Family Therapists." *Journal of Marital and Family Therapy*: 1986, Vol. 12, No. 2, pp. 113-127, accessed January 4, 2017. http://www.aamft.org/members/familytherapyresources/articles/86_JMFT_2_113_128.pdf.

I have also felt attracted by the critical circumstances in which Africans, Spanish, and Cubans developed together in the same territory and created a multicultural form of expression. In Cuba, I did not necessarily have a deep understanding about the philosophical meaning of Afro-Cuban rhythms in terms of their symbols in relation to performance practice. I only learned to perform the rhythms by accompanying traditional folk dances and songs in local ensembles. I learned by imitation, repetition and memorization, which according to John Blacking and Patricia Campbell, are the basic processes that define learning through oral tradition.² In addition, I always felt a deep passion for Afro-American popular music since the time I became involved with jazz in my native country. I have felt a special attraction to jazz stylistic in terms of instrumentation, form, and touch but I did not have a clear understanding about how the melodic and harmonic systems work together. I only learned a few jazz songs by Cubans jazz composers and transcribed a few jazz records to imitate the sound of Afro-American jazz composers. I also had the chance to seriously learn from Herbie Hancock and Kenny Barron in person. However, this context did not provide me with an understanding of Afro-Cuban consciousness in terms of identity. Fortunately, during my DMus program at McGill University I had the opportunity to understand deeply the rhythms and relearn them from a more analytical point of view.

² Campbell, Patricia Shehan, *Lessons from the World: A Cross-Cultural Guide to Music Teaching and Learning*. (New York: Schirmer Books, 1991), pp. 1-30.

Hybridization in Modern Jazz Composition

In our contemporary world, multiculturalism and globalization are at the center of our day-to-day life. The increase in new digital technologies and international exchanges are making our planet's various cultures more interconnected than ever before. According to Homi K. Bhabha and Peter Berker, the process of hybridization, the mix between different types of cultures, happens simultaneously in different regions of the world and can be analyzed in different areas, including the arts and more specifically modern music.³ Cultural integration has enabled classical and jazz composers from around the globe to establish a new and meaningful art, as in the case of the French composer Debussy, who was strongly influenced by Asian sounds. From this source, Debussy found a new way of expression, new resonances, and a new use of rests, which obviously shaped his perception on performing music through composing.⁴ In addition, the French composers Roussel and Delage took the spirituality and rhythmic circularity of Indian music to develop new musical forms which inspired other Western European composers. While Europeans coined new forms of expression through cultural exchange and musical integration, composers and performers in North and Central America also experimented with different musical linkages as a result of the European conquest and Africanization. Hybridization also played a role in the survival of popular music through the combination of elements from Europe, Africa's musical traditions and those of other countries such as Cuba and the United States. Two examples are the piano solo compositions *La Tedezco* by Manuel Saumell and *La Comparsa* by Ernesto Lecuona: while clearly expressing a national identity, both used the

³ Homi K Bhabha, *The Location of Culture* (New York: Routledge, 1994), pp.140-146.

tango congo syncopated pattern on the piano left hand from African cultures and melodic inflexions from the Spanish popular songs and to create a new artistic meaning.

By the late nineteenth century, the Afro-Cuban rhythmic tradition had become an important color in the musical landscape of the United States.⁵ According to prominent Cuban musicologist Leonardo Acosta, this cultural encounter created an early musical exchange between both Afro-Cuban and New Orleans identities.⁶ This process of cultural intercommunication resulted in a new stylistic development in jazz by the early 1900s.⁷ The symbiosis between the melodic structure of American black blues, the orchestral structure of ragtime, the harmonic motion of the stride piano, and Afro-Cuban rhythms affected the sound of jazz composition and improvisation. It provided performers' original work with a deep understanding of syncopation, accentuation, rhythmic displacement, and eventually lead to polyrhythms.⁸ In fact, this experimentation resulted, first, in a syncopated jazz approach known as the *Spanish Tingle* in the 1900s; this was followed by a second idiomatic approach called *Afro-Cuban jazz* by the 1940s.⁹ For example, the piece *The Crave* by Jelly Roll Morton combined the stride piano style and the *habanera* or *tango congo* rhythmic pattern.¹⁰

During the 1940s, popular Cuban music was also strongly influenced by Afro-American jazz sounds. The Afro-Americanization of the republic of Cuba occurred under the political and economic domination of the island by the government of the United States. This process led to an intense period of creativity and musical exchange between both countries. For example, the compositions *Manteca* (1947), *Guarachi Guaro* (1947), and *Cubana Be, Cubana Bop* (1947), co-

⁵ Ted Gioia, *The History of Jazz* (New York: Oxford University, 1997), 1-55, accessed May 18, 2015. <http://hdl.handle.net/proxy3.library.mcgill.ca/2027/heb.07118.0001.001>.

⁶ Leonardo Acosta, *Cubano Be, Cubano Bop: One Hundred Years of Jazz in Cuba* (Washington, DC: Smithsonian Books, 2003), p. 90.

⁷ Acosta, *Cubano Be, Cubano Bop*, p. 90.

⁸ Gioia, *The History of Jazz*, pp. 3-55.

⁹ Alyn Shipton, *A New History of Jazz* (New York: The Continuum Group, 2010), pp. 381-383.

¹⁰ Jelly Roll Morton, *Jelly Roll Morton 1939-1940*, Jelly Roll Morton Piano Solo, December 1940, 1 compact disc.

written by Dizzy Gillespie and Cuban percussionist Chano Pozo, used bebop devices and *Afro* rhythms.¹¹ Most recently, Steve Coleman's pieces like *Secretos Del Abacú* (1996), *Oyá Natureza* (1996), and *The Mystery of Seven (The Guagancó in Progression)* (1996) use modern jazz concepts such as symmetrical melodic motion over Muñequitos de Matanzas' Afro-Cuban polyrhythms.¹² The piece *Agua Larga Pa' Yemayá* (1999) by Cuban pianist Omar Sosa uses pentatonic jazz harmonies and Afro-Cuban *Yemayá* polyrhythm.¹³ In addition, the piece *Irakere* (1977) by Chucho Valdés uses modern jazz harmonic textures and *Obatala* polyrhythm, while Cuban composer Emiliano Salvador uses the Afro-Cuban *son* rhythmic pattern and modern jazz harmony extensions in his composition *Angélica* (1978).¹⁴ I consider these pieces to be current models for Afro-Cuban rhythms' integration into jazz composition because of their unique Afro-Cuban rhythmic conception within the jazz piano language. These models reflect the aesthetics and challenges of intercultural linkages during the compositional process for piano solo, jazz trio, and large ensembles.

If many artists have already created a variety of intercultural music by using original Afro-Cuban rhythms, such indications incline one to consider those rhythms as a useful source of inspiration to explore their potential in the twenty-first century.

My specific goal as a jazz musician is to develop a personal voice as a composer and improviser that will allow me to construct my contemporary vision from Afro-Cuban roots. Through analysis of my jazz creations, I intend to demonstrate the way I use Afro-Cuban rhythms

¹¹ Dizzy Gillespie, *Cubana Be, Cubana Bop*, Gillespie Large Ensemble, Dizzy Gillespie, Dreyfus Jazz FDM 36720-2, 2002, 1 compact disc.

¹² Steve Coleman, *The Sign and the Seal*, Steve Coleman Large Ensemble, Steve Coleman, BMG France, 1997, 1 compact disc.

¹³ Omar Sosa, *Spirit of the Roots: Agua larga pa' Yemayá*, Omar Sosa Ensemble with Marquita Garcia (v), Oswaldo Valencia (mrb), Guillermo Triano (bat), Lazaro Rizo (bat), Pancho Quinto (bat), Rahsaan Fredericks (b), Elliot Kavee (d), Otá Records, PCP1005, 1999, 1 compact disc.

¹⁴ Chucho Valdés's website. "Discography," accessed on April 20, 2016: http://valdeschucho.com/prueba/disco_gral.html.

in jazz composition in order to answer the following questions: a) How do I use these original rhythms? b) How do I transform them and alter their cycles, meters, and accents? c) How do I combine them to create new polyrhythms? and d) How do I use these polyrhythms as a foundation to develop melodic lines and harmonic motion? Even if many artists have already created a variety of hybrid music by using original Cuban rhythms, I believe there is a gap to be filled as far as b), c), and d) are concerned. Specifically, my research will deal with the challenges I typically encounter in my compositional practice when developing a vocabulary where the music is driven by the rhythm alone. For example, I will try to answer the following questions: a) How can I balance melody, harmony, and rhythm even though my compositions are rooted in rhythmic components? b) How can I create thematic elaboration through rhythmic variations? c) Which meters can my melodies outline against the rhythm section's pulse to increase rhythmic activity? d) Which writing techniques put rhythm at the forefront and which ones make it more subtle instead? f) Can harmonic rhythm change the overall effect of a piece when displaced on different accents? This analytic work will resolve issues related to the notions of rhythmic conceptualization within the compositional process and the personalization of the compositional process through the linking of two styles. It will also bridge the gap between the aesthetic and values of Afro-Cuban rhythms and the stylistic dimensions of Afro-American jazz and to categorize rhythmic functionality within different jazz forms and devices.

Methodology

The first chapter of this paper will investigate the origins of Afro-Cuban rhythms. More specifically, this section will focus on and classify eight of the most revisited rhythms from the Cuban rhythmic repertory: 1) $2/3$ and 2) $3/2$ *clave*, 3) *afro*, 4) *cascara*, 5) $6/8$ *clave*, and 6) *countour-bell*. The chapter will present their influence and impact within Cuban society and describe their main musical characteristics in terms of pulse, cycles, polyrhythms, accents, and

syncopations. In order to understand the particular elements of these rhythms, I investigated a collection of published recordings from the traditional Afro-Cuban discography. I also analyzed an extended bibliography of works written by Cuban percussionists, for example, the method *El Arte de la Percussion Cubana* by Cuban percussionist and professor René J. Vergara, the *Método para la Enseñanza de latina percussion* by Cuban percussionist and composer Roberto Vizcaino, and the dissertation *Iyesa: Afro-Cuban Music and Culture in Contemporary Cuba* by Kelvin Delgado. I discuss the rhythms in two groups: those that remain true to the original source and those that I modify before integrating them into my compositions.

The second chapter explains the compositional process of six original compositions for piano solo, jazz trio, and quartet, which will show personalized hybridizations with the selected rhythms and contemporary jazz elements in terms of language, style, form, melody, and harmony. Written as a journal, this chapter includes personal thoughts and reflections about the compositional process.

In order to cover different types and levels of intercultural linkages, I document, in particular, the compositional process of six of my compositions which best represent my research results in terms of integrating different cultural musical resources. To do that, I followed a compositional and improvisation planning schedule that includes: 1) the selected rhythm, 2) the musical source of the selected rhythm, 3) the musical state of the rhythm, original or modified, in relationship to its original source, 4) an Afro-Cuban or an Afro-American musician model to support the rhythmic integration 5) a particular piece and its ensemble as references, 6) the preliminary process for rhythmic internalization, 7) the secondary process for rhythmic internalization within the composition, and 8) the compositional system for improvisation. This

schedule adapts the approach of *Mark Levine in The Jazz Theory Book*.¹⁵ I focus first on three works which allowed me to explore different types of rhythmic integration: *Overture*, a solo work for piano and 2/3 clave based solely on the *son* rhythmic pattern; *Distortions*, another solo work for piano that uses 2/3 and 3/2 clave patterns; and *Afro Cubano*, a piece for piano, acoustic bass, drums, and percussion that features the *afro* pattern. Then I analyze three more pieces for quartet which allowed me to explore different types of polyrhythmic integration: *Free Cuba*, a piece that uses the cascara pattern, the piece *Obatala* which features the 6/8 clave, and the piece *Black Eyes* which shows the *countour-bell* pattern.

¹⁵ Mark Levine, *The Jazz Theory Book* (USA: Sher Music, 1995), pp. 383-400.

Chapter Two: The Historical Context of Afro-Cuban Rhythms

Because of the extent of African history, I have chosen to trace the roots of Afro-Cuban rhythms in West Africa. By focusing on this particular area, I orient my discussion to the most significant influences found in the Yoruba group. I will discuss the characteristics of this particular ethnicity and its relationship with other groups such as the Ewé and the Mina since they were first encountered by Europeans in 1472. I will also discuss the situations that allowed the Yoruba to survive and remain a dominant influence in West Africa. Then, I trace the influence of Yoruba rhythms in Cuba and explain how they contributed to the development of Cuban nationalism around the beginning of the 1800s. As the Yoruba ethnic group played a major role in shaping Cuban cultural identity from the time of the massive arrival of the first West Africans on the island to the twentieth century, I have chosen to trace seven of the subjacent and most performed Cuban rhythms: 1) $2/3$ clave, 2) $3/2$ clave, 3) *afro* pattern, 4) *cascara* pattern, 5) $6/8$ clave, and 7) *countour-bell* pattern. I then illustrate through specific musical examples their relationship to metrics, accents, and syncopation to provide insight into the rhythmic foundations of my compositional process outlined in Chapter Three.

African Cultural and Religious Roots

The roots of Afro-Cuban rhythms can be found in the Yorubas' social organization, their capacity for assuming a commanding position over other ethnic groups, and the complexity of their religious system.¹⁶ According to Samuel Johnson and Johnson Obadiah, the name Yoruba derives from the word Yarba, a province in West Africa located between present-day Ghana and Nigeria where the Yoruba tribes settled permanently and experienced a deep cultural

¹⁶ Samuel Johnson and O Johnson, *The History of the Yorubas: From the Earliest Times to the Beginning of the British Protectorate* (London: Routledge & Kegan Paul, 1966), p. 6.

transformation.¹⁷ In fact, the Yoruba survivors became the most prominent ethnic group after the discovery of Africa by the Catholic Portuguese in 1472.¹⁸ As noted by Homi K. Bhabha and Peter Berker, the process of transculturation forced the Yoruba to adapt their cultural codes to Christianity, which provided them with a strong spiritual capability to dominate other groups such as the *Ewé* from Nigeria and the *Mina* from Ghana.¹⁹ According to Delgado: “A broad population moved by necessity always finds ways to adapt itself in society and reacts to central power forces.”²⁰ While the *Ewé* and the *Mina* groups did not assimilate Christianity and maintained a hermetic cultural heritage without expanding beyond their borders, the Yoruba people had beginning after the mid-fourteenth century expanded their territories and powerful practices through the seventeenth and eighteenth centuries.²¹ The minority of the tribes were based in the areas of Ghana and Togo, but the dominant groups of the *Yoruba* expanded widely between what are now the Republic of Benin and Nigeria.²² In the southern part of Benin, the population of the Yoruba tribes was close to one million, while in southwestern Nigeria it was about 40 million.²³ This identity expanded between their two capitals, a zone for political interests called Old Oyo and a territory for their religious needs known as Ilé Ifè.²⁴ The city of Ilé Ifè remains today a myth for the Yoruba people who believed that the creation of all human

¹⁷ Samuel Johnson and O Johnson, *The History of the Yorubas*, pp. 6-10.

¹⁸ Homi K Bhabha. *The Location of Culture* (New York: Routledge, 1994), pp. 140-146.

¹⁹ Johnson and Johnson, *The History of the Yoruba*, pp. 6-15.

²⁰ Kevin Miguel Delgado, *Iyesa: Afro-Cuban Music and Culture in Contemporary Cuba*, Dissertation, (Bell & Howell Information and Learning Company, 2001), pp. 1-200.

²¹ Bode Omojola, “Yorùbá Drumming: Performance Practice and the Politics of Identity,” in *Yorùbá Music in the Twentieth Century: Identity, Agency, and Performance Practice*, edited by Bode Omojola (Rochester, New York: University of Rochester Press, 2012), p. 17.

²² Bode Omojola, “Yorùbá Drumming: Performance Practice and the Politics of Identity,” in *Yorùbá Music in the Twentieth Century: Identity, Agency, and Performance Practice*, pp. 17-18.

²³ Ademide Adelusi-Adeluyia and Liora Bigonb, “City Planning: Yorùbá City Planning,” in *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, edited by Helaine Selin, (Boston: Kluwer Academic, 1997), pp. 1-7.

²⁴ Adelusi-Adeluyia, Ademide and Liora Bigonb: 1997, pp. 1-7.

beings began in this particular area.²⁵ According to Yoruba mythology, the Yorubas' first ancestor was the king Oduduwa, who was believed by the people to have been sent to earth by their supreme God, Olorun, the first king of Ilé Ifè.²⁶ The Yorubas' autonomy provided an advantage for their rivals, and they dominated the Ewé and Mina when it came to dealing with natural resources.²⁷ They built towns by following a specific organizational plan, starting from a central farm surrounded by huts.²⁸ These tribes were controlled through a centralized governance known as an agricultural feudal system.²⁹ Under the omnipresence of kingdoms, the Yoruba tribes established a predominant religious organization in West Africa.³⁰ However, the Ewé and Mina did not follow a specific structure in their social organization and religious hierarchy.³¹ These communities were nomads and were obedient to their supreme guide, who was the consulting person of the tribe for all kinds of unknown problems and causes whom they called "the wise old man." However, Yoruba religion was structured through a belief in their supreme God, Olorun. They believed that their patriarch Olorun created both the heaven and the earth. Olorun manifested himself on earth through emissary gods called Orisas. The Orisas were basically represented by their functions as follows: the creator of the human species Obatalá; the god of wars and iron instruments Ogun; the god and author of evil Esu or Elegbara; the god of thunder and lightning Shango; the beloved wife of Shango and queen of thunderstorms Oya; the protector god of fauna Osun; and the god of wisdom and knowledge Orisa Oko. Yorubas' rhythmic performance in Africa traditionally relates to their religious practices, and every Orisa is

²⁵ Johnson and Johnson, *The History of the Yoruba*, p. 15.

²⁶ Johnson and Johnson, *The History of the Yoruba*, pp. 6-15.

²⁷ Aribidesi A. Usman, "A View From the Periphery: Northern Yoruba Villages during the Old Oyo Empire, Nigeria," *Journal of Field Archeology* 27: pp. 43-61, accessed May 21, 2015. <http://www.maneyonline.com.proxy3.library.mcgill.ca/doi/pdfplus/10.1179/jfa.2000.27.1.43>.

²⁸ Johnson and Johnson, *The History of the Yoruba*, pp. 1-90.

²⁹ Johnson and Johnson, *The History of the Yoruba*, p. 40.

³⁰ Johnson and Johnson, *The History of the Yoruba*, p. 17.

³¹ Johnson and Johnson, *The History of the Yoruba*, pp. 1-90.

directly connected with a specific drum ensemble and rhythm. Some examples are the spiritual rituals to Obatala and the songs in tribute to the hunter Ogun rhythmically played on the *ogidàn*, which are the *batá* drums for the celebration of these deities. Yoruba rhythms were mostly performed on five *batá*, which were conceived strictly for sacred performance. Each *batá* had a specific musical role. The *iyaa* *batá* or *batá* mother commanded and accentuated the performance by following the musical accent from the chants, while the three *omele* drums (*omele abo*, *omele ako*, and *omele kudi*) supported the accompaniment, and the *éjin* drums provided a stable and intense beat over the pulse. In addition, the Afro-Cuban rhythms were mainly felt and learned through oral tradition in West Africa. Basically, students first learned the rhythms by observing their masters before he memorized them. However, the learning process was perceived by the students as a physical internalization, and the physicality of performance was required in order to learn the rhythms before the student could have the capacity to memorize or interiorize them. This section has explained how the roots of Afro-Cuban rhythms can be traced on the historical path of the Yoruba, the Ewé and the Mina, among other tribes from West Africa. It can be seen how rhythms resonated through the Yoruba mode of life and social organization in relationship with the religiosity of the performance. Rhythms were used by the Yoruba as a form of expression for maintaining cultural codes and a tradition for survival, which would later explain the richness and relevance of the rhythms for the enlightenment of Cuban culture.

Afro-Cuban Rhythms and Their Popular Resonance in Cuba

As the Yoruba ethnic played a major role in shaping Cuban cultural identity from the massive arrival of the first West Africans on the island by the 1700s, a multitude of subjacent Afro-Cuban rhythms, such as $2/3$ clave, $3/2$ clave, *afro*, *cascara*, $6/8$ clave, and *countour-bell*,

also continued to develop through the 1800s and 1900s. According to Argeliers León, the resonance of these rhythms represented the cultural independence of a national identity that was already circulating on the island at the beginning of the 1800s.³²

From this context, the 2/3 and 3/2 claves emerged as a rhythmic figure to accompany a countryside folk dance called the *Changüi*. This musical genre was devised by the free black composer Chito Latamblé in a Cuban small town called *La Loma del Chivo* (The Mountain of the Goat) and later became a very famous genre in the province of Guantanamo. In fact, this dance spread throughout the urban areas of the country and became a mode for the new social middle classes. It was also a collective dance that generally involved one couple and a traditional combo including a guitarist, a bassist, a percussionist, and a singer.

Musically speaking, the *Changüi* consisted of two bars of syncopated group figures written in 2/2 following an accentuated musical idiom. Stylistically, the *Changüi* was written in two bar sections that loop. The looping followed major keys, diatonic melodies, and very simple harmonic structures. The practice appeared in Cuba during the eighteenth century and later became grounded Cuba's most popular dance music in the nineteenth century.³³ Since the nineteenth century, the 2/3 and 3/2 claves have stood at the heart of any Cuban performance practice. These claves present a two-bar binary motif. As illustrated in Figures 1 and 2, the 3/2 pattern is the reverse of the 2/3 pattern. This reversal affects the contour and feel of both claves in that the 3/2 clave shows a strong accentuation on beat one. This makes the syncopation release feel longer on bars two compared to the bar one of the 2/3 pattern, where the syncopated displacement happens on bar one and pushes the syncopated release toward the end of the pattern. This aspect increases the circular effect when the two claves are combined in sequence.

³² Argelier León, *Del Canto y el Tiempo* (La Habana: Editorial Pueblo y Educación, 1981), pp. 10-40.

³³ Peter Manuel, "From Contradanza to Son," *Latin American Music Review/Revista de Música Latinoamericana* 30, no. 2 (2009), p. 190.

In addition, the fact that the 3/2 clave accentuates beat one makes it easy to visualize on a chart. This helps to better understand its contour regarding accents and syncopated figures in comparison to the 2/3 pattern:

Figure 2.1: The 2/3 clave

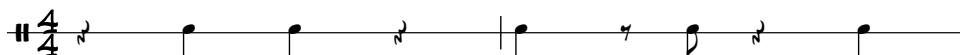
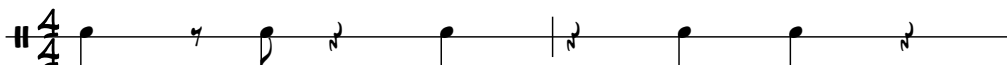


Figure 2.2: The 3/2 clave



The Afro Rhythm

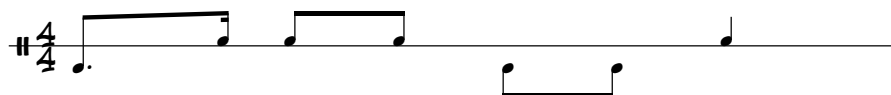
Derived from the English country-dance, the *afro* pattern was likewise influenced by the very accentuated and colorful Franco-Haitian *contradanzas* that came to the south of the Cuban island. The music performance that accompanied the Franco-Haitian *contradanzas* was brought to Cuba by Afro-Haitian and white French settlers who immigrated to Cuba from Haiti, Louisiana, and New Orleans after the early nineteenth-century Haitian Revolution. Even though Franco-Haitian *contradanza* themes such as *rigodones*, *lanceros*, and *cuadrillas* were popular, they affected the choreographic aspect more than the musical development itself.³⁴

The afro rhythm became a popular rhythm in the twentieth century through the performances of black percussionist and composer Chano Pozo in New York City in the 1940s. The *afro* rhythmic pattern was performed by its creator Pozo during the time he worked with Dizzy Gillespie's jazz band. Pozo played it with two different congas to support the typical big

³⁴ Peter Manuel, "From Contradanza to Son," p. 190.

band's rhythm section. This pattern was originally written in a 4/4 meter over a single bar. As seen in Figure 3, the first bar started with a dotted eighth note performed on the low conga and a dotted sixteenth note on the high conga on beat one, two eighth notes in the higher register on beat two, two eighth notes in the higher register on beat three, and a quarter note in the higher register on beat four. This figure strongly accentuated beats one and two, while accents recalled the slightly syncopated figure found on beat one of bar one:

Figure 2.3: The afro rhythm



The *Cascara* Rhythm

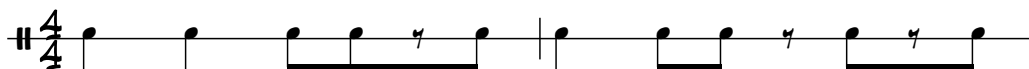
The *cascara*, *6/8 clave*, and *countour-bell* rhythms developed in social contexts in which there was a “Creolization” (or nationalization) of *contradanzas* that had already been defined by the blacks and free mulattoes who occupied professional positions in dance orchestras. Indeed, the “blackness” of Cuba’s ideology incorporated a combination of different Afro-Cuban rhythmic patterns into the European dances’ sounds and musical orchestrations.³⁵ The first *criollo* or national genre was therefore the result of an intercultural linkage between a European aesthetic in terms of form, melodic traits, harmonic motion, and chord choices and syncopated Cuban rhythmic formulas performed by colored percussionists. Due to the urgency for a national ideology, national rhythms such as the *cascara*, *6/8 clave*, and *countour-bell* quickly became the most celebrated rhythmic idioms to accompany Afro-Cuban musical genres such as the *guaracha*, *columbia*, and *timba* that were performed by colored and white local percussionists in

³⁵ Victoria Eli Rodrigues and Zolia Gomes Garcias, *Haciendo Musica Cubana* (Pueblo y educación, 1989), p. 69.

the 1950s.³⁶ According to pianist, arranger, composer, and ethnomusicologist Manuel Saumell, these types of proto-song genres already existed in Havana and progressively mutated into new genres before they finally disappeared.³⁷ These genres were consolidated in Havana in the 1900s and shared similar thematics and structures.³⁸

The *cascara* was developed as a complementary rhythm to accompany the *guaracha* and was performed by a percussionist on the timbales. This rhythmic pattern was usually conceived in a 4/4 meter over two measures. The first bar started with a quarter note on beat one, a quarter note on beat two, two eighth notes on beat three, an eighth note rest on the first half of the fourth beat, and an eighth note on the second half of the fourth beat, which make the accentuation feel strong at the beginning of the pattern and gradually syncopated by its end. In addition, the second bar started with a quarter note on beat one, two eighth notes on beat two, an eighth note rest on the first half of the third beat, an eighth note rest on the second half of the third beat. The latter combination makes the pulse feel obvious at the beginning of the second bar, followed by a syncopated feeling on bars three and four. The eighth note rest on the first half of the fourth beat, and an eighth note on the second half of the fourth beat make the syncopated effect feel strong and the pulse feel weak, as can be seen on the third and fourth beats of the first bar and is extended to the second and third beats of the second bar:

Figure 2.4: The cascara rhythm



³⁶ Peter Manuel, "From Contradanza," p. 190.

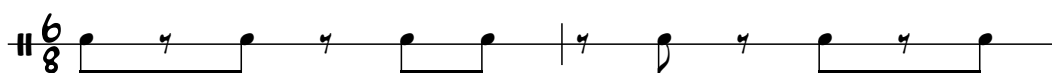
³⁷ Peter Manuel, "From Contradanza," p. 190.

³⁸ Victoria Eli Rodrigues and Zolia Gomes Garcias, *Haciendo Musica Cubana* (1989), p. 69.

The 6/8 Clave Rhythm

The *6/8 clave* was used as a rhythmic support for the musical genre called the *columbia*. The *columbia* was supported by four percussionists, each playing a different type of rhythm. However, the polyrhythmic sense of the performance was at the center of the choreography, which used three congas called female, male, and *quinto*. The low register of the female emphasized the strong beat, while the medium register of the male interacted with the improvised lines of the higher *quinto*. The 6/8 clave was written in two bars and implied a ternary subdivision within a binary pulse: this can be used to displace accents and syncopated figures. As can be seen in Figure 2.5, accents emphasized beats one, three, five and six, and the syncopation was felt in between bars one and two:

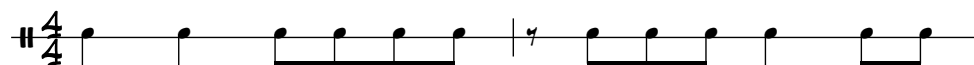
Figure 2.5: The 6/8 clave



The Countour-bell Rhythm

The *countour-bell* rhythm appeared within the context of the *timba* in the 1990s. During that time, the *timba* became an essential musical genre for Cuban composers and arrangers, who were conducting a new process of musical integration in the island more than 50 years after the revolution. Cuban combos adapted a chamber jazz format from American's popular music and performed *timba* with two trumpets, a tenor sax, an alto sax, a trombone, a piano, an electric bass, and four singers. However, the development of the genre relied on its sophisticated reinforcement of the rhythm section, which included a drum, three congas, and timbales. The *countour-bell* was performed on the timbales as a support Figure for the low bell. As seen in Figure 2.6, this pattern was written in 4/4 over two bars and emphasized accentuations by the repeated eighth notes:

Figure 2.6: The countour-bell rhythm



In addition, the *countour-bell* also served to support the melodic statements of the *timba* which followed an A-B-A' form and showed a syncopated melodic development in the horn section and some jazz harmony influences. These elements from American popular music strongly influenced the musical landscape of Cuba and the young generation of Afro-Cuban musicians, including myself, who saw during this period of political decadence a door opening to new musical developments and meaning through intercultural linkages.

Chapter Three: My Composition Journal

In this chapter, I will discuss issues related to how I personally integrate the *2/3* clave, the *3/2* clave, the *afro* pattern, the *cascara* pattern, the *6/8* clave, and the *countour-bell* pattern in my own compositions. I present the rhythms and compositions that best represent my explorations and results in terms of rhythmic integration. I start with the integration of a figure that remains true to the original source, and I progressively move towards more complexity, such as modified patterns that modulate in highly polyrhythmic patterns. In addition, I reflect the aesthetics and rhythmic challenges of each pieces by exploring different writing and improvisation techniques or approaches and observing their effectiveness in creating hybrid pieces. To do so, I organize my description of the compositional processes for each around sources of inspiration, rhythms, insights derived from mastering its complexities, and musician model, metric, forms, sections, melody and harmony in relationship to rhythmic integration. However, the specific pieces that I selected as points of departure for my compositions are current models for African rhythms' integration into Cuban popular and jazz repertory because of their highly syncopated Afro-Cuban rhythmic conception within the compositional language.

In section one, I illustrate the compositional challenge with a specific rhythm in relation to its sources of inspiration, the musical state in which I used the rhythm, and the musical source that I chose as a model for integration for each of the six pieces. In section two, I explain how I personally interiorized the rhythms and manipulated them prior their integration within the compositional system for each of the six creations in terms of type of orchestration, melody, and harmonic traits. I also explain the compositional system regarding the jazz stylistic, metric, instrumentation, form, sections, improvisation section, and improvisational concept. In addition, I show how I used and transformed these original rhythms by altering their cycles, meters, and

accents and how I combined them to create new polyrhythms to develop melodic lines and harmonic motion.

The Challenge of Composing *Overture*

The challenge in composing *Overture* was to integrate the 2/3 clave in such a way that this rhythm would remain true to its original accentuated pattern reflecting its circular effect its repetition creates. This piece written for piano and 2/3 clave follows a moderate tempo in 4/4 and shows the 2/3 clave used by the composers from the ensemble *Muñequitos de Matanzas* (The Matanzas Dolls) in their piece *Homenaje a Cha Cha* (Tribute to Cha Cha). I integrated the clave and the bass line in the left hand (LH) of the lowest register of the piano. I used the clave as a complement to the bass line. Later on, I developed the bass lines from the rhythmic contour of the clave to establish a metronomic pattern to support the harmonic base, which I used to develop the melodic statement in the right hand (RH). In addition, the clave pattern helped me to accentuate the syncopated character of the bass line and also reinforced the depth of the lowest register in terms of timber. The clave pattern also helped me to create a counterpoint effect from its juxtaposition with the bass line, which increased the level of rhythmic displacement. Nevertheless, the integration process required two preliminary steps before I started to work on the compositional process of *Overture*. This preliminary process helped me to learn the 2/3 clave from inside out and gave me a better understanding about its relationship with 4/4 meter. Personally, I also think that this preliminary practice was very revealing to me. It helped to assimilate accents from the 2/3 clave as much as its syncopated figures. It also provided me with the rhythmic base to support the thematic elaborations as well as the harmonic motions, which served me as preliminary ideas for orchestrating the piece.

First, in order to learn to internalize the 2/3 clave part (Figure 3.1), I wrote the rhythmic pattern on a chart and read it several times in a loop. I played it with my hands and kept repeating it a few more times in order to feel the rhythm internally in my body. After becoming familiar with it, I noticed that I was creating some new rhythmic variations. However, needing to deeply understand this pattern in relationship to its 4/4 metric, I clapped the clave with my hands and accentuated the four beats of the 4/4 metric with my left foot.

Figure 3.1: The 2/3 clave with an accent on beats one, two, three, and four



Then, I kept clapping the clave with my hands and put an accent on the first beat of each bar:

Figure 3.2: The 2/3 clave with an accent on beat one of each bar



After I practiced the exercise shown in Figure 3.2, I then practiced the clave with an accent on beat two of each bar, then beats three and four (Figures 3 and 4):

Figure 3.3: The 2/3 clave with an accent on beat two



Figure 3.4: The 2/3 clave with an accent on beat three



Because I realized the accents on beats two and four were not easy to maintain, I practiced the exercise in Figure 3.5. I was now able to maintain the propulsion of the internal cyclical momentum.

Figure 3.5: The 2/3 clave with accents on beat two and four of each bar



The combination of exercises also developed a high level of concentration in terms of feeling.

Compositional Process and Form of *Overture*

After I had concluded the internalization process, I started the compositional process of *Overture*. This piece follows an AABA form, which is a very common form in the standard American jazz repertory. First, I established the key of E minor to develop the bass line, which followed the syncopated figures of the clave. In bar two, the second sixteenth note of beat three and the second eighth note of beat four both match in both lines. However, the really interesting harmonic aspect about this line is its harmonic motion. My harmonic choices from bars one to four allowed me to create an internal motion by moving the flat 6th of the Emin7(b6) chord to the natural 6th of the Emin6 chord followed by the flat 7th of the Emin7 chord. I think this is a very useful technique to enrich harmonic progression over a pedal point.

Figure 3.6: *Overture*. The 2/3 clave with the bass line (LH)

The musical score for the bass line (LH) of 'Overture' is presented in six systems. Each system consists of a treble clef staff and a bass clef staff. The treble staff contains a rhythmic pattern of eighth and sixteenth notes. The bass staff contains a bass line with various chords indicated by text labels: $E_{MIN}^{7(b6)}$, E_{MIN}^6 , E_{MIN}^7 , $E_{MIN}^{7(b6)}$, E_{MIN}^6 , and $E_{MIN}^{7(b6)}$. The key signature is one sharp (F#).

Then, I used the rhythmic figures and the harmonic movements suggested by the bass to develop the main melody in the RH. I placed the main melody on the top of the line and harmonized it in three, two, and five note chords. Thus, I created a contrast between the RH chords, which allowed me to enrich the harmonies' color over the E pedal note. In bar one, I used only an $E_{min}^{7(b6)}$, and then I used the colors of $E_{Maj}^{7(\#5)}$, E_{min}^7 and the poly-chord E_bMaj^7/E in bar two. Even though this section is a pedal point progression in the key of E minor, I also used an $E_{Maj}^{7(\#5)}$, which is called poly-modality. This technique enabled me to use chords from both modes of the E minor and E major keys to enrich the harmonic progression. As for bars five, six, seven, eight, and nine, I constructed the chords' voicing in a parallel motion following the E Lydian mode. I organized this parallel with closed intervals as well as minor and

major thirds and a perfect fourth, which left more room for the principal melody to sound clearly at the top of the chord:

Figure 3.7: *Overture*. The principal theme from section A, bars 1-9

Section B evolved from the same type of syncopation of the bass line. Harmonically, I developed this section from the chord Eb13(b9)/Emin(b6) with the omitted third. This poly-chord helped to produce a high level of harmonic density, which contrasts with the very light sense of section A. When I returned to section A, I balanced the omnipresence of the clave part and the E pedal by moving the chords' extensions in section A and combining chords and poly-chords from different modes in section B. In addition, the clave also serves as a metronomic line to support the highly interactive polyrhythm between the RH and LH melodies. It also helped me to create new thematic elaborations through rhythmic transformations.

Figure 3.8: *Overture*. Section B, bars 10-11

I chose to improvise my solos in section B. I used its short statement as a point of departure from which I could extend my lines. I also used the concept of thematic variations to improvise new ideas with the main theme. I tried to build several melodic lines based on rhythmic cells from the 2/3 pattern and then to develop them into block chords. In that way, I made sure that I was able to relate my improvisations to the main theme. In terms of harmony, I built my lines from a particular set of scales: E Lydian, E natural minor, E harmonic minor, E melodic minor, as well as E flat Lydian augmented. The E flat Lydian augmented scale also served as a point of tension that allowed me to move out of the E pedal point sound.

The Challenge of Composing *Distortions*

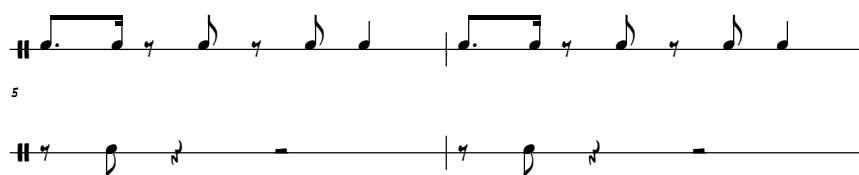
The primary challenge of the solo piano piece *Distortions* was to integrate the 3/2 and 2/3 claves together in such a way that these two patterns would remain true to their source while allowing more harmonic freedom than the first piece. This piece written for piano and two claves was inspired by the rhythmic syncopations of the work of Cuban composer and pianist Emiliano Salvador who integrated the 3/2 clave in his piece *Para Luego Es Tarde* (So it's already late). First, I practiced the 3/2 clave with my hands and added the four up-beats in 4/4 with my foot. This exercise helped me to keep the clave in a loop without losing my pulse and to be able to feel it from its up-beats instead of having the strong beats as a reference:

Figure 3.9: The 3/2 clave with the four up-beats



This first exercise was highly demanding and required a lot of concentration to feel the pulse in the up-beats. Then I retook the clave and combined it with up-beat one:

Figure 3.10: The 3/2 clave with up-beat one



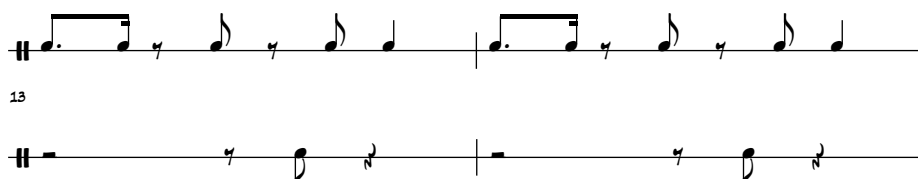
After having experimented with the clave and up-beat one, I next combined the clave with up-beat two:

Figure 3.11: The 3/2 clave with up-beat two



Then, I combined the pattern with up-beat three to increase the level of difficulty regarding the pulse:

Figure 3.12: The 3/2 clave with up-beat three



To complete the cycle with the up-beats, I practiced the 3/2 clave with up-beat four:

Figure 3.13: The 3/2 clave with up-beat four



Once I had completed the cycle with the four up-beats, I combined the 2/3 clave up-beats one and three:

Figure 3.14: The 3/2 clave with up-beats one and three



Then, I practiced the 3/2 clave with up-beats two and four, which demanded more concentration on my part to keep the pulse stable:

Figure 3.15: The 3/2 clave with up-beats two and four



Compositional Process and Form of *Distortions*

To compose the Introduction-AB form of *Distortions*, I first traced the rhythmic figure of the 3/2 clave in the introductory melody from bars one to four. This pattern allowed me to create a polyrhythmic structure that I used to orchestrate my thematic elaborations in both sections. The first melodic statements were harmonized with a repetitive cluster chord going from F# to B in the RH, which refers to the key of C# minor and the scale of C# melodic minor. Then, I designed the accompaniment in the LH with the 3/2 clave by using double cluster chords

combining a C# minor (+7) chord with an A minor in the LH, which I used to add depth to the lowest register of the piano. This active harmonic approach gave more harmonic freedom compared to *Overture*, which follows a more static harmonic motion. In addition, this sense of Afro-Cuban lowness and deepness in the piano register is a permanent aspect of all my compositions that I use to celebrate my African ancestors' old spiritual omnipresence, as in the piece *Overture*.

Figure 3.16: *Distortions*. The introductory section, bars 1-4



Section A is more active in terms of harmonic modulation. In bar five, the melody begins with a descending melodic movement in the key of C# minor that modulates to the key of A major. Then, in bars six and seven, the melody modulates from D major to A flat major, but in bar eight the interval motions heighten the loudness and tension of the diminished C scale. Then, the melody modulates to the major keys of F, B flat, A, E, and B. In bar nine, the melody builds on the key of B flat major and then modulates to the keys of F# and C minor melodic. I highlighted the expanded tension of the melody by using major seventh intervals, which give more tension to the melodic statement in bar nine. Then, the melody is resolved in the chords of C# maj9 and Emaj9 before I present an ascending melodic line that goes from the lowest register to a higher one and is resolved in the poly-chord Cmin6/F#maj7. Rhythmically, I used the 3/2 clave as a metronome reference to support the thematic development from bars one to nine.

However, in bar ten I combined the original 3/2 pattern with a second 3/2 clave that starts on the second beat instead of the first. This poly-rhythmic effect increased the interaction between the claves and the piano's voices.

Figure 3.17: *Distortions*. Section A bars 5-12

The musical score for Figure 3.17, Section A bars 5-12, is presented in two systems. The top system covers bars 5-8, and the bottom system covers bars 9-12. The piano part is written in a 4/4 time signature with a key signature of one flat (B-flat). It features complex polyrhythms, including triplets and sixteenth notes, often with slurs and accents. The percussion part consists of rhythmic patterns on a single line, with some rests. The score is labeled 'A' in a box at the beginning of the first system.

Then, I used the up-beats two and four to accentuate the polychord F#maj7/Cmaj7 in bars thirteen to sixteen of section B. This tritone's relational chords served as a harmonic reference to develop my improvisation, which modulates from both keys.

Figure 3.18: *Distortions*. Section B bars 13-16.

B [OPEN SECTION FOR PIANO SOLO]

In addition, the 3/2 clave helped me to emphasize the syncopation of my improvised lines. Basically, I developed the accentuations of my lines from the original 3/2 figure and then I modulated them into the displaced one, starting on the second beat of the measure. This effect of shaping improvisation by changing between the two claves enriched my approach in terms of metrics and accent displacement, which resulted in a vertical rhythmic perspective to compose. This aspect was gained in *Distortions* compared to the horizontal approach of *Overture*.

The Challenge of Composing *Afro Cubano*

The challenge in composing this hybrid piece for piano, bass, drums and percussions was to integrate the complexity of the afro rhythm across the quartet texture. This piece written in 4/4 for piano, acoustic bass, drums, and percussion follows a slow tempo and extends the work of Afro-American composer Dizzy Gillespie, the first to use the afro rhythm in his composition *Cubana Bop*. His melodic and harmonic approach helped me to structure my thematic elaborations and harmonic motions. I was particularly inspired by his particular way to organize dominants, altered and diminished chords in relationship with the extensions 9, b9, #9, 11, #11,

b5, 13 and b13. First, I modified the original afro rhythm figure and integrated it, which provided the piece with a metronomic guide to support both the melodic and harmonic statements and helped me to strengthen the rhythm section's sound. I started the internalization process by practicing the original afro rhythm with the 2/3 clave in 4/4. This exercise was a great challenge regarding the complexity of both rhythms' syncopations and accent displacements played simultaneously:

Figure 3.19: The afro rhythm and the 2/3 clave



Then, I modified the afro pattern. In fact, I changed the two eighth notes of beat two in bar one to a sixteenth note tied to an eighth note and a sixteenth note. This slight modification gave a more interactive effect to the afro rhythms in relation to the 2/3 clave's accentuations:

Figure 3.20: The afro figure with a slight modification on beat two



I then made a new modification in the afro pattern. This time, I changed the quarter note from beat four in bar one to a sixteenth note tied to an eighth note and a sixteenth note.

Figure 3.21: The afro pattern with a slight modification on beats two and four



Next, I changed the quarter note from beat four in bar two to a sixteenth note tied to an eighth note and a sixteenth note:

Figure 3.22: The afro figure with a slight modification on beat four of bar two



This experiment resulted in a complex polyrhythmic pattern whose accents later created an overlapping effect between the bass line and the piano during the compositional process.

Compositional Process and Form of *Afro Cubano*

To create this AB form, I used the result shown in Figure 3.22 as a rhythmic complement to support the pulse of the entire piece. It enabled me to stabilize the pulse and also helped to establish the base rhythmic groove before developing the harmonic motion and the melodic line in the left hand (LH). The melody follows the jazz colors and chord motions of the Gmin7(b6) chord, starting with the tonic, the fifth, the sixth, and flat third in bars one to four, while in bars five to eight the line modulates to the Fmaj7chord over G. From bar nine to bar 12, the LH again follows the Gmin7(b6) chord; and in bars thirteen to sixteen, the melody modulates to the Fmaj7 chord over G and then to F#Maj7(#5) and F#Maj7 in bars 17 to 20.

Figure 3.23: *Afro Cubano*. A section, bars 1-4

I next set up a point pedal based on the Fmin7(b6) chord from bars 21 and 22 and the Fmaj7(#11) chord in bars 23 and 24, and I used the LH line to create a melodic motion between both chords.

Figure 3.24: *Afro Cubano*. Section B, bars 21-24

Section B is less static and longer than section A. In writing section B from bar 21 to 40, I used the same harmonic movement as in bars 21 to 24. However, in bar 33, I decided to develop

the theme and create short variations. I was prompted to create these variations in order to overcome the static feeling for this section. I was also pushed to develop the harmonic progression, which follows the Fsus4/D chord in bars 33 and 34; Dmaj7 in bar 35; Cmin7(b6), Fsus4/D and EbMaj7(#5) in bar 36; Absus4/F, Bbsus4/G and AbMaj7(#5) in bar 38; and Amin7(b6) in bar 40. The harmonic motion from section B also enriches the thematic development with a colorful statement combined with the metronomic accompaniment from the rhythm section. The less static feeling is created through the feeling of a rhythm which embraces a broad harmonic motion that modulates more through different keys centers instead of the pedal point feel from section A.

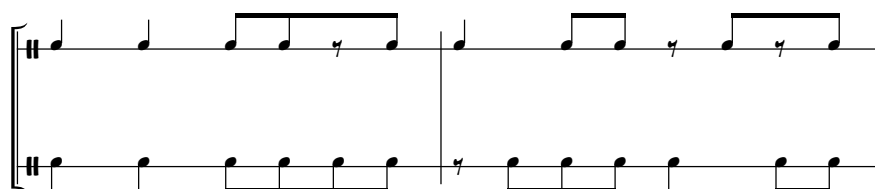
Figure 3.25: *Afro Cubano*. Section B, bars 29-35

The musical score for Figure 3.25, *Afro Cubano*, Section B, bars 29-35, is presented in two systems. The first system (bars 29-32) features a piano part with chords $Fmin7(b6)$ and $Fmaj7(\sharp 11)$, a bass line, a percussion line with a steady eighth-note pattern, and a guitar line. The second system (bars 33-35) features a piano part with chords $Fsus4/D$ and $Dmaj7$, a bass line, the same percussion line, and a guitar line. Bar numbers 29, 33, and 5 are indicated at the start of their respective staves.

The Challenge of Composing *Free Cuba*

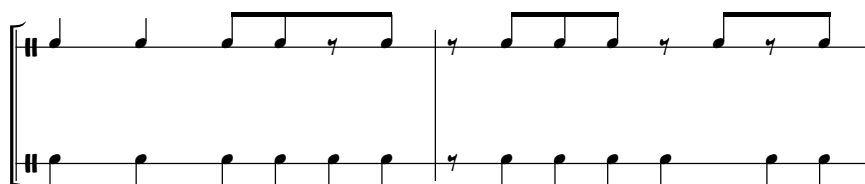
The challenge in composing *Free Cuba* was to integrate both the *cascara* and the *countour-bell* patterns in the drums parts which would typically be orchestrated. This piece written for piano, acoustic bass, drums and percussion extends the work of Cuban composer Frank Emilio Flynn who used the *cascara* in his piece *Mondongo, Gandinga y Sandunga* (Tripe, Leather, and Flavor). I was inspired by this piece because its syncopated rhythmic interaction and overlap between the melody and the bass line. Only, I integrated the pattern in such a way that this figure would remain true to its source. I created a series of new exercises with both figures in order to learn how to better internalize the *cascara*. These new modifications helped me to enrich the accompaniment from the rhythm section. It also established the main syncopated figures that I used as a guide to develop the main theme of this piece. In this preliminary step, I began by practicing the *cascara* with the *countour-bell* simultaneously. From my first try, I quickly felt that this polyrhythm was the most difficult of all the preliminary exercises I had created. I found the difficult juxtapositions of both figures very demanding to feel physically and to internalize. It also made me refresh my notions about the technique of drumsticks. I got two drumsticks and started practicing both rhythms on a table and then I practiced them on the piano. I believe that this exercise helped me to familiarize myself with the complexity of both figures. It also helped me to enjoy them by grooving with a stable pulse in 4/4.

Figure 3.26: The *cascara* and the *countour-bell*



Then, I created new exercises in order to combine the modified cascara with the *countour-bell*. In fact, I changed the quarter-note from beat one in bar two to an eighth-note rest and an eighth note:

Figure 3.27: The cascara with a slight modification on beat one from bar two



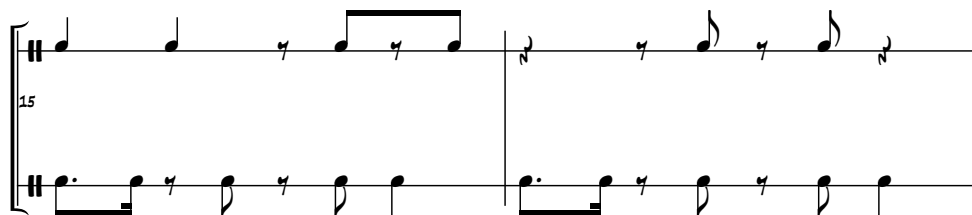
I gradually reduced the number of figures from the cascara while trying to keep its original rhythmic contour. To do so, I replaced the first eighth note of beat three with an eighth-note rest:

Figure 3.28: The cascara with a slight modification on beat three from bar one



I proceeded with a final modification that allowed me to create a new syncopated figure from the basic contour of the cascara, thus putting the up-beats in front.

Figure: 3.29: The cascara with a slight modification on beat three from bar one



This approach helped me to internalize different rhythmic cells which I later used during the compositional process to increase the syncopated effect of the rhythm section. The cascara also served as a metronomic reference to support the bass line. These exercises not only allowed me to integrate two rhythmic figures in the same drum part, but also allowed me to create a rhythmic supplement to accompany the congas (See, Appendix I, p. 1, bars 1-4)

Compositional Process and Form of *Free Cuba*

During the compositional process of this AABA form, the cascara served me as a rhythmic guide to structure the bass line in section A. This is why the bass line follows exactly the same rhythmic figure of the cascara with a slight difference in beat four of bar two. In fact, while the cascara shows a quarter note on beat four of bar two, the bass line presents an eighth-note rest and an eighth note. This slight difference is enough to create an overlapping effect between the cascara and the bass line, which strongly emphasizes the accents on the up-beats.

Figure 3.30: *Free Cuba*. Section A, bars 1-4

The musical score for Figure 3.30, Section A, bars 1-4, is presented in four staves. The key signature is B-flat major (two flats) and the time signature is 4/4. The Piano part features chords Bbmin7, Eb11, Bbmin7, Ab11, and BbMaj7. The Acoustic Bass part follows a rhythmic pattern of eighth notes and rests. The Drum Set part features a pattern of eighth notes and rests. The Percussion part features a pattern of eighth notes and rests.

The pattern also created an interesting change from 4/4 to 6/4 time that occurs in the transition between bars nine and ten, which posed a challenge to me and my ensemble in keeping

the pulse at the transition point. This change gives consistence to the very beginning melodic statement at this point, which inspired me to repeat it in circles with a ternary feel.

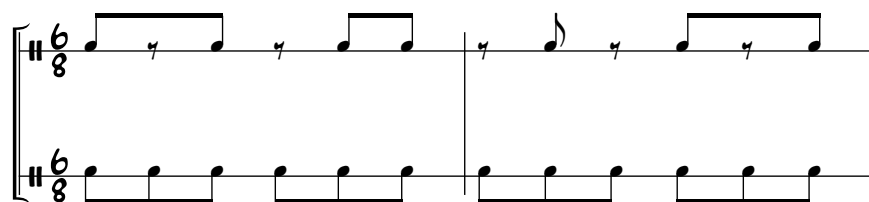
Figure 3.31: *Free Cuba*. Head in, bars 9-10

As for the harmony, the bass line follows the main root notes of the chords Bbmin7 and Ebm7, which support the melodic development from bars one to eight. From bar nine to bar 11, the harmony follows the progression of the Bbmin7, Eb11, and Ab11 chords. From bar 12 to bar 13, I created an ascending cycle of C#13(#11), D13(#5), Eb13(#11), E13(#11), A13(#11), and D7(b5) dominant chords. This cycle helped me to create a slight tension within the main melody of section A. I then developed section B, which follows a lyrical melody and has more syncopated figures. In this section I used the melody as the key element to drive the harmonic movements as Ebmin7 in bar 16, Abmin7 and Db7(b9) in bar 17, F #min7/C# in bar 18, Bmin7 and E7(b5) in bar 19, Emin7(b5) in bar 20, Cmin7(b6) and Db11 in bar 21, and Fmin7(b5) and Bb7(b9) in the bar 22.

The Challenge of Composing *Obatala*

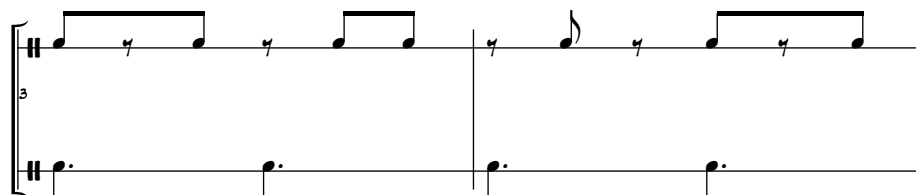
The challenge in composing *Obatala* was to integrate the 6/8 ternary clave in such a way that this pattern remains true to its source. This single pattern shows both a binary and a ternary pulse on its own, which can really challenge its overlapping effect within the rhythm section. This piece written for piano, acoustic bass, drums, and percussions extends the work of Cuban composer Chucho Valdez who used this clave on his piece *Irakere*. *Obatala* extends Valdez's approach in the way the 6/8 clave's accentuations are used to overlaps with the piano (RH) melody and syncopated chord progression. Due to the complexity of this pattern, I started by practicing it with claps. I noticed that this pattern of two measures was quite complex and rich in terms of syncopated variations. Then, I practiced it one more time with claps and accentuating every eighth note in 6/8.

Figure 3.32: The 6/8 clave and its six beats



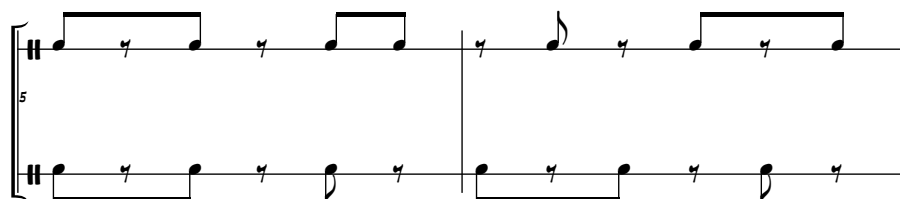
Then, I played the 6/8 clave combined with two dotted quarter notes per bar.

Figure 3.33: The 6/8 clave with two dotted quarter notes per bar



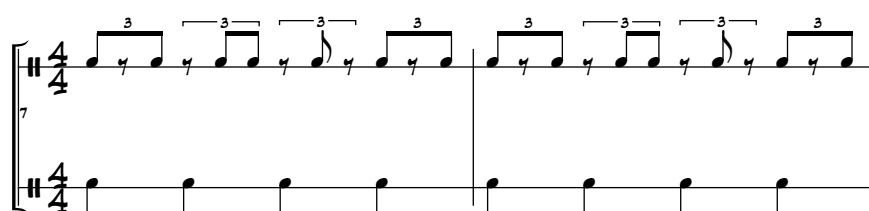
I practiced the 6/8 clave with an eighth note on beats one, three, and five.

Figure 3.34: The 6/8 clave on beats one, three and five



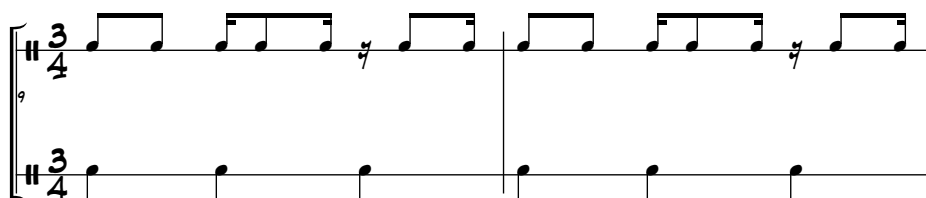
To move on, I wrote the 6/8 clave in 4/4, accentuating the four beats of the measure.

Figure 3.35: The 6/8 clave in 4/4



Finally, I rewrote the 6/8 clave in 3/4 and practiced it by tapping the three beats of the measure simultaneously with my feet.

Figure 3.36: The 6/8 clave in 3/4



Compositional Process and Form of *Obatala*

To compose the AAB form of *Obatala* in the form AAB, I decided to use the original figure to enrich the rhythm section in section A, which I developed from bar one to bar 29. Then, I changed the 6/8 meter to 4/4 to develop the 6/8 rhythmic contour in a different way in section B from bar 30 to bar 57. This change resulted in a new syncopated figure (See Appendix 1, p 77,

bars 29-30). This section is also more active and has fewer rests compared to section A. Then I changed the 4/4 meter to 3/4, which gave me a new perspective regarding the transition between meters in the solo section. However, the creation of *Obatala* required a preliminary step to reflect on these three possibilities for adapting the same rhythm in three different meters. The juxtaposition of the 6/8 clave and the percussion rhythmic pattern served me as a guide for structuring the rhythmic contour of the bass line. I simplified the rhythmic Figure of the 6/8 clave and reproduced it on the bass line. Then, I used the bass line to develop harmonic base notes as the tonic and the fifth to elaborate the main melody in the right hand (RH) of the piano.

Figure 3.37: *Obatala*. Section A, bars 1-9

The musical score for Figure 3.37: *Obatala*. Section A, bars 1-9, is presented in two systems. The first system (bars 1-4) is in G Major (GMaj11) and the second system (bars 5-9) is in C minor (Cmin7(b6)). The instruments are Piano, Electric Bass, Drum Set, and Percussion. The Piano part features a melodic line in the right hand and a harmonic base in the left hand. The Electric Bass part provides a rhythmic foundation. The Drum Set and Percussion parts provide a steady 3/4 meter rhythm.

I developed the main modal melody and harmony of the RH in the key of G Major. In bars one to four, I presented the GMaj7(add11) and G7 chords as a harmonic motion and in bars six to nine the Cmin7(b6) chords from the C natural minor scale. Next, I developed the main

melody in bars 10 to 13, which follow the AbMaj7, Ebdim7, AbMaj7, F#dim7, and G#dim7 chords. These last diminished chords helped me to create tensions before resolving the modulation to the key of F#Maj7 in bar 16. From bar 18, the melody modulates from the key of E Major to Ab Major. This same modulation is repeated from bar 22 to bar 25 before the conclusion of the melodic development with the AbMaj7 and Absus4(add9) chords in bars 26 to 29. In addition, I used the 6/8 clave in 4/4 to develop section B. This helped me to contrast sections A and B in terms of meters. I used the strong beats in 4/4 to give a metronomic character to the RH line, while the LH develops the main melody in unison with the bass. The harmony follows the Fmin9 chords in bars 30 and 31, the Ebmin7 and Ab11 chords in bars 32 and 33, the Ab13(b9) chord in bars 34, 35, and 36, the F13(b9) in bar 37, the EMaj11 in bars 38 and 39, the C#Maj7 in bar 40, the Ab11 in bar 41, and the Amin7(b6), G13 in bar 57.

Figure 3.38: *Obatala*. Section B, bars 30-33

The musical score for Figure 3.38 shows Section B, bars 30-33. It is written for piano and percussion. The piano part consists of two staves: the right hand (RH) and the left hand (LH). The RH part features a series of chords: Fmin9 in bar 30, Ebmin7 in bar 31, Ab11 in bar 32, and Ab13(b9) in bar 33. The LH part features a series of chords: Fmin9 in bar 30, Ebmin7 in bar 31, Ab11 in bar 32, and Ab13(b9) in bar 33. The percussion part consists of two staves: the right hand (RH) and the left hand (LH). The RH part features a 6/8 clave pattern in 4/4 time, with triplets indicated by '3' and 'x' marks. The LH part features a series of chords: Fmin9 in bar 30, Ebmin7 in bar 31, Ab11 in bar 32, and Ab13(b9) in bar 33.

Then, I concluded the harmonic progression in section B with a Dmin7(b6) chord from bar 58 to bar 65. This section also served as a reference for improvising with the LH.

Rhythmically, I integrated the 6/8 clave in 3/4, which gives more angularity and displacement to my improvised lines.

Figure 3.39: *Obatala*. Solo section, bars 58-61

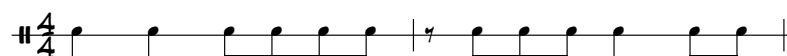
The musical score for Figure 3.39, titled "Obatala. Solo section, bars 58-61", is written for piano and percussion. The score is in 3/4 time. The piano part is written in a grand staff (treble and bass clefs) and is marked with "D MIN 7(b6)" and "OPEN SOLO SECTION:". The piano part features a series of chords and single notes, with some notes tied across measures. The percussion part consists of two staves, each with a 6/8 clave pattern in 3/4 time. The score is divided into two systems, with the first system covering bars 58-61 and the second system covering bars 62-65. The piano part is marked with "58" and "62" at the beginning of each system. The percussion part is marked with "58" and "62" at the beginning of each system.

The Challenge of Composing *Black Eyes*

The challenge in composing *Black Eyes* was to integrate the *countour-bell* pattern. The challenge is about putting the original pattern in a meter seemingly at “odd” which forces changes in its circular accentuation pattern. This particular challenge somehow extends the

changing meters approach showed in the piece *Obatala* and differs from the rest of the other four pieces *Overture*, *Distortions*, *Afro Cubano*, and *Free Cuba* which show a unique meter through their entire forms. This piece written for piano, acoustic bass, and drums features the modified countour-bell used by composer Cesar Pedroso on his piece *Para Que?* (For What?). First, I practiced the original figure in 4/4:

Figure 3.40: The *countour-bell* pattern in 4/4



Then, I inserted the original accents and syncopation of the *countour-bell* in a single bar of 11/4 and added a quarter note on beat nine, two eighth notes on beat 10, and a quarter note on beat 11:

Figure 3.41: The *countour-bell* in 11/4



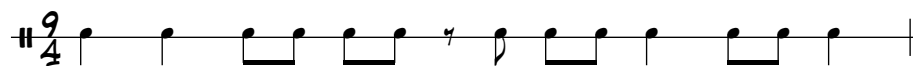
Next, I wrote the pattern in 10/4 and added a quarter note on beat nine and two eighth notes on beat 10:

Figure 3.42: The *countour-bell* in 10/4



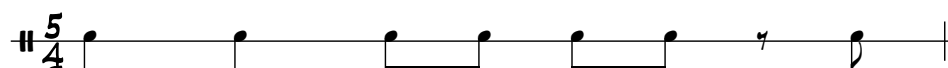
Then, I wrote the Figure in 9/4 and added a quarter note on beat nine to complete the first bar's phrase:

Figure 3.43: The *countour-bell* in 9/4



Finally, I wrote the Figure in 5/4, this time inserting the original Figure 3.40 from beats one to five only:

Figure 3.44: The countour bell's original, Figure 3.40 inserted in 5/4



Once I had a first set of exercises, I experimented with different combinations of the exercises shown in Figures 3.41 and 3.42.

Figure 3.45: The *countour-bell*, Figures 3.41 and 3.42.

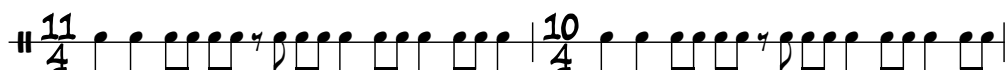
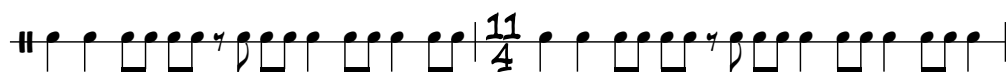


Figure 3.46: The *countour-bell*, Figures 3.42 and 3.41



Then, I practiced the combination between Figures 3.41 and 3.43:

Figure 3.47: The modified *countour-bell*, Figures 3.41 and 3.43



Figure 3.48: The *countour-bell*, Figures 3.43 and 3.41

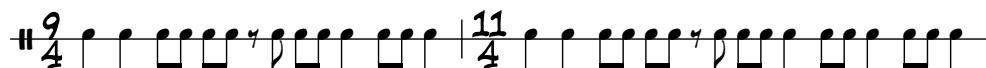


Figure 3.49: The *countour-bell*, Figures 3.42 and 3.43



Figure 3.50: The *countour-bell*, Figures 3.43 and 3.42

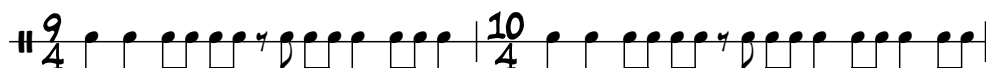


Figure 3.51: The *countour-bell*, Figures 3.43 and 3.44Figure 3.52: The *countour-bell*, figures 3.44 and 3.43

This rhythm served as a reference point for playing in various irregular metrics within the different sections of the piece. This was achieved by inserting the syncopated accents and figures of this pattern into the irregular meters 11/4, 10/4, 9/4 and 5/4. This gave me new cell figures with which I developed the rhythmic contour and accentuations of the main melody in the right hand (RH) in relation to the counter-melody of the left hand (LH).

Compositional Process and Form of *Black Eyes*

To create the AA'BA form of *Black Eyes*, I used this *countour-bell* pattern as shown in Figure 45 to support the thematic elaborations of section A. In addition, I developed the main melody of the E minor pentatonic jazz scale in the (LH), which is also doubled on the bass line.

Figure 3.53: *Black Eyes*. Section A, bars 1-4

The accentuations from the main melody interact against the *countour-bell* accents and create tension and dynamics for the harmonic development of the (RH). In bars one to three, the main melody follows the Bsus4 (add3)/F # chord succeeded by the F#Maj7(#11) chord and then the Amin7(b6) chord in bar five, the Gmin7(add11) and EMaj11 chords in bar six, and the Bbsus4(add3)/F# in bars seven and eight. Bars seven and eight also reveal the *countour-bell* figure, as illustrated in Figure 43:

Figure 3.54: *Black Eyes*. Section A, bars 7-8

Section B follows the Fsus4(add3)/A and FMaj9 chords in bar nine, the Dbsus49(add3) chord in bar 10, the DbMaj7(#5) and DbMaj7 chords in bar 11, the Ebsus4(add3)/Bb and Csus4(add3)/G chords in bar 12, and then the GMaj7/D chord in bars 13 and 14, the F#13(b9) chord in bar 15, the AbMaj7(#5) chord in bar 16, the Fmaj7/C and Cdim7 chords in bar 17, and the C#min7, Bsus4(add3)/A#, Dsus4(add3)/G and Bsus4(add3)/D# chords in bar 18. Bars 19 and 20 follow the same harmonic movement as bars 17 and 18. In addition, bars 15 and 16 reveal the *countour-bell* pattern, as illustrated in Figure 3.55:

Figure 3.55: *Black Eyes*. Section B, bars 15-16

Finally, I used section A to complete the form of the piece. In this section I also used the *countour-bell* as illustrated in Figure 3.56:

Figure 3.56: *Black Eyes*. Section A', bars 27-28

Chapter Four: Conclusions

The six original works that I created for this paper share a number of points in common: I developed them all from a rhythmic conception at the beginning before I presented the melodic statement and the harmonic motion. The pieces use very short forms, such as AB, ABA, and AABA, and they all include chord motions within the melodic development. They all resulted from an experiment in hybridization that encapsulated both approaches: Afro-Cuban rhythmic harmony and rhythmic circularity. However, their particular writing techniques also reveal several challenges with respect to rhythmic integration in relation to melodic trait. The new rhythmic cells derived from the original patterns served to create melodic elaboration and give a sense of angularity to the melody. Rhythmic cells also gave motion and circularity to the harmonic chords' progression in terms of resolutions and chord superposition.

The process of producing hybrid pieces illuminated my philosophical thinking about Afro-Cuban rhythms and their importance in shaping my own cultural identity and jazz artistic ideals as a composer and improviser. For example, in the pieces *Overture* and *Distortions*, I first tried to use the whole patterns of the 2/3 and 3/2 claves as the rhythmic body for the accompaniment of my left hand. This experiment produced an overwhelmed feeling in my left hand. This exercise surcharged the repetitive sound of my left hand, which brought the chords' darkness to the fore instead of producing a rhythmic support. In my opinion, these challenges and experimentations provided a guide for me to reflect on issues about rhythmic integration in hybrid jazz compositions that may be faced by today's composers.

The compositional part helped me to reflect on my own individuality and personality as a jazz composer and improviser. It also provided me with a set of exercises to internalize and integrate rhythmic patterns that remain true to the original source but progressively move towards more complexity, such as modified patterns that modulate and highly polyrhythmic patterns.

However, the most valuable experience was the creative process itself, which helped me to reflect on the rhythms and their impacts within each of the six compositions. This creative process provided me with a personal path for rhythmic integration that embraces my background as a composer, pianist, and percussionist. The compositional plan allowed me to shape the melodic timbers of my pieces through rhythmic contours and taste the differences between a very rare form of orchestration as piano and claves gradually modulate into a jazz trio with a percussion instrument.

The piece *Distortions* is the best example of balanced melody and harmony, even though this composition is entirely rooted in rhythmic components. In fact, I shaped its melodic development with the figure of the 3/2 clave and the harmonic motion simultaneously. In that way, I ensured that the rhythmic contour of the melodic statement followed a close relationship with the original 3/2 clave. Then, I used harmony as a source to construct my thematic elaboration. However, the 3/2 clave is less present within the harmonic textures of *Distortions* compared to *Overture*. In *Overture*, the 2/3 clave is more present and defined in the score. It also blends better for piano solo. However, the thematic development is more static and does not develop far beyond the central E minor pedal point, which allowed me to put the harmonic movement in the foreground and the rhythmic figure in the background as a metronomic line.

In *Free Cuba*, I used the *countour-bell* in the same way I used the 3/2 clave in *Overture* but I had the opportunity to combine it with the cascara pattern, which gives a more stable and syncopated accompaniment in the rhythm section. Melodically and harmonically speaking, the harmonic progression drove the melodic elaborations but not the rhythms, as in the case of *Distortion*, in which I used the rhythmic cell of the 3/2 clave and transformed it into new cells to create the thematic elaboration of the right hand (RH). I would also point out that in bar nine of *Free Cuba* the melody outlines the ternary 6/4 meter against the rhythm section's pulse, which

increases rhythmic activity and interaction. This same effect also occurs in the piece *Obatala*, in which the melodic statements outline the ternary 3/4 meter against the 6/8 clave and the binary rhythm's pulse. However, in the piece *Afro Cubano*, the main melody outlines the harmonic motion more than the meters do. The melody chiefly outlines the inner minor chords' colors and motions, the diminished 7 V chord over I and the left hand (LH) harmonic counterpoint against the RH melodic development. In *Black Eyes*, the melody outlines the 10/4, 11/4, and 5/4 meters against the rhythm section's pulse to increase rhythmic overlapping between the piano's melodic-harmonic elaboration, the bass line, and the drum claves. These three meters provided me with three different claves, which I combined to create a counterpoint between the RH and the LH and to shape the melodic-harmonic statements.

I believe that the writing techniques of *Overture*, *Distortions*, and *Afro Cubano*, in which I used the original rhythm to create a metronomic polyrhythm to support the rhythm sections, put the rhythm at the forefront. The writing techniques of *Free Cuba*, *Obatala*, and especially *Black Eyes*, in which I modified the original rhythm and then modulated it in highly polyrhythmic patterns, made the rhythms more subtle in the process of arranging. In addition, the juxtaposition of a binary pulse over a ternary meter in *Obatala* highlights the overlapping effect between the 6/8 clave and the RH melody. However, the use of irregular meters in the *Black Eyes* gives a sense of rhythmic circularity to the arrangement.

In conclusion, the compositional process resulted in a set of multifunctional images, such as the holistic pieces *Overture* and *Distortions*, in which the spatial character of sacred Afro-Cuban songs build from the harmonic loudness and melodic lowness of the LH; the popular *Afro-Cubano*, *Free Cuba*, and *Obatala*, which represent the melodic shape of Afro-Cuban vocal sound inflexions build from melodic angularity; and the energetic and very compacted *Black Eyes*

emphasizes the quantitative dimensions of rhythms from an analytical treatment within up-beat meters.

Finally, this cultural reconciliation has enriched my compositional process and also helped me to move to a higher level in terms of melodic-harmonic jazz conception. However, I also believe that this research can open a new door to explore rhythmic integration in jazz composition on an even higher level that focuses on superimposed circularity between irregular metrics. This exploration in terms of harmonic rhythm challenged the performance practice during my rehearsals. The particular displacement and syncopated pulse of the rhythms was difficult to feel and incorporate within the harmonic chord progression. Another challenge was to keep a balance between the melody and rhythmic circularity when using large intervallic motions, which provided my pieces with a strong sense of angularity.

Through the observation of my rehearsals and practice, I noticed that syncopation enriched the physicality of rhythms. The syncopated approach impacted my thematic elaborations and provided the pieces with multiple discourses and a sense of rhythmic harmonized melody. In addition, motion allowed me to feel naturally the rhythms in my body and express myself through an omnipresent rhythmic ideal. With the hope that this research will bring me new issues regarding a more advanced level of rhythmic overlapping, I wish this research also to be useful material for the generation of Afro-Cuban Jazz composers to come.

Appendix 1

Scores

“Overture”

“Distortions”

“Afro Cubano”

“Free Cuba”

“Obatala”

“Black Eyes”

Figure 1. "Overture."

OVERTURE

On original composition by Rafael Zaldivar

A $E_{MIN}^{7(b6)}$ $E_{MAJ7}(\#5)$ E_{MIN}^7 $E_{bMAJ7/E}$

$E_{13(b9)}$ E_{MIN}^6 E_{11} $E_{MIN}^{7(b6)}$ $E_{MAJ7}(\#11)$

3

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Figure 1, continued.

[OPEN SOLO SECTION]:

The image displays two systems of musical notation for an "OPEN SOLO SECTION". Each system consists of three staves: a grand staff (treble and bass clefs) and a separate staff with a double bar line and a sharp key signature. The first system is labeled with a measure number "5" at the beginning. The second system is labeled with a measure number "7" at the beginning. Both systems feature a key signature of one sharp (F#) and a time signature of 7/8. The grand staff notation includes complex chords and triplets, with a label "E MAJ7(#11)" above the first measure of each system. The separate staff at the bottom of each system contains a series of notes and rests, including a measure with a double bar line and a sharp key signature.

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Figure 1, continued.

Musical score for measures 14 and 15. The score is written for piano (p) and includes a bass line. The key signature is one sharp (F#). The tempo/mood is marked 'p'. The score is divided into two systems. The first system (measures 14-15) features a complex harmonic structure with a bass line that includes a triplet of eighth notes. The second system (measures 16-17) features a complex harmonic structure with a bass line that includes a triplet of eighth notes. The score is labeled with the following chord symbols: E 13(b9), E MIN⁶, E 11, E MIN^{7(b6)}, and E MAJ7(#11).

14

Musical score for measures 16 and 17. The score is written for piano (p) and includes a bass line. The key signature is one sharp (F#). The tempo/mood is marked 'p'. The score is divided into two systems. The first system (measures 16-17) features a complex harmonic structure with a bass line that includes a triplet of eighth notes. The second system (measures 18-19) features a complex harmonic structure with a bass line that includes a triplet of eighth notes. The score is labeled with the following chord symbols: E MAJ7(#11).

16

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Figure 1, continued.

E MAJ7(#11)

18

18

20

20

Figure 2. "Distortions."

DISTORTIONS

An original composition by Rafael Zaldivar

The musical score for "Distortions" is written for Piano, Claves 1, and Claves 2. The key signature is one sharp (F#) and the time signature is 4/4. The score is divided into two systems.

System 1:

- PIANO:** The treble staff contains a complex melodic line with many beamed sixteenth notes. The bass staff begins with a $C^{\#}MIN^7$ chord and then continues with a rhythmic accompaniment of eighth and sixteenth notes.
- CLAVES 1:** Plays a rhythmic pattern of eighth and sixteenth notes.
- CLAVES 2:** Remains silent in this system.

System 2 (Marked A):

- PNO.:** The treble staff features triplets of eighth notes. The bass staff continues the rhythmic accompaniment, ending with a sustained chord.
- Clav. 1:** Continues the rhythmic pattern from System 1.
- Clav. 2:** Remains silent in this system.

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Figure 2, continued.

2

DISTORTIONS

PNo.
 Clv. 1
 Clv. 2

The Piano part begins with a triplet of eighth notes in the right hand and a single eighth note in the left hand. This is followed by a measure with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The Clavichord 1 and Clavichord 2 parts enter with a single eighth note in the right hand and a single eighth note in the left hand. The score includes various musical notations such as triplets, accidentals, and dynamic markings.

B [OPEN SECTION FOR PIANO SOLO]
 PNo.
 Clv. 1
 Clv. 2

The Piano part begins with a triplet of eighth notes in the right hand and a single eighth note in the left hand. This is followed by a measure with a triplet of eighth notes in the right hand and a single eighth note in the left hand. The Clavichord 1 and Clavichord 2 parts enter with a single eighth note in the right hand and a single eighth note in the left hand. The score includes various musical notations such as triplets, accidentals, and dynamic markings.

Figure 3. “Afro-Cubano”

Afro-Cubano

An original composition by Rafael Zaldivar

The musical score for "Afro-Cubano" is written in 4/4 time and consists of four staves. The Piano part is in G minor, indicated by the $G^{MIN} 7(b6)$ chord markings above the first and third measures. The Acoustic Bass part is in G minor, indicated by the $G^{MIN} 7(b6)$ chord markings above the first and third measures. The Drum Set part features a complex rhythmic pattern with eighth and sixteenth notes. The Percussion part features a complex rhythmic pattern with eighth and sixteenth notes.

PIANO

ACOUSTIC BASS

DRUM SET

PERCUSSION

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Figure 3, continued.

2 Afro-Cubano

FMaj7/G **FMaj7/G**

PNO.

A.B.

D. S.

PERC.

G MIN^{7(b6)} **G MIN^{7(b6)}**

PNO.

A.B.

D. S.

PERC.

Figure 3, continued.

4 **F_{MIN}7(b6)** **F_{MAJ}7(#11)**

PNO. 21

A.B. 21

D. S. 21

PERC. 21

PNO. 25 **F_{MIN}7(b6)** **F_{MAJ}7(#11)**

A.B. 25

D. S. 25

PERC. 25

Figure 3, continued.

Figure 3, continued, showing musical notation for measures 29-33 across five staves: PNO., A.B., D. S., PERC., and PNO. (repeated).

Measures 29-32:

- PNO. (first system):** Chords $F_{MIN}^{7(b6)}$ and $F_{MAJ7}(\#11)$. Measure 30 is marked with a '5'.
- A.B.:** Continuation of the bass line.
- D. S.:** Continuation of the drum line.
- PERC.:** Continuation of the percussion line.

Measures 33-36:

- PNO. (second system):** Chords $F_{sus4/D}$, $F_{sus4/D}$, and D_{MAJ7} .
- A.B.:** Continuation of the bass line.
- D. S.:** Continuation of the drum line.
- PERC.:** Continuation of the percussion line.

Figure 3, continued.

6 $C^{MIN}7(b6)$ F^{sus4}/D $E^{bMAJ}7(\#5)$ $A^{b}sus4/F$ $B^{b}sus4/G$ $A^{bMAJ}7(\#5)$

PNO. 36

A.B. 36

D. S. 36

PERC. 36

36 $A^{MIN}7(b6)$

PNO. 40 FINE

A.B. 40

D. S. 40

PERC. 40

Figure 4. "Free Cuba."

Free Cuba

An original composition by Rafael Zaldivar

A

PIANO

ACOUSTIC BASS

DRUM SET

PERCUSSION

PNO.

A.B.

D. S.

PERC.

Chord progressions for Piano and PNO.:

- Piano: $B^b_{MIN}7$, E^b_{11} , $B^b_{MIN}7$, A^b_{11} , $B^b_{MAJ}7$
- PNO.: $B^b_{MIN}7$, D^b_{11} , E^b_{11} , $B^b_{MIN}7$, A^b_{11} , $B^b_{MAJ}7$

The score is written for five staves: Piano, Acoustic Bass, Drum Set, Percussion, and Piano (PNO.). The Acoustic Bass, Drum Set, and Percussion staves are also labeled as A.B., D. S., and PERC. respectively. The key signature is B-flat major (two flats). The time signature is 4/4. The score is divided into two systems. The first system contains measures 1 through 4. The second system contains measures 5 through 8. The key signature changes to D-flat major (three flats) at the end of measure 8.

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Figure 4, continued.

Free Cuba

PN0. $A^b \text{MIN}^7$ $D^b 7(b9)$ $F^\# \text{MIN}^7 / C^\#$ $B \text{MIN}^7$ $E^7(b5)$ $E \text{MIN}^7(b5)$ 3

17

A.B.

17

D. S.

17

PERC.

17

PN0. $C \text{MIN}^7(b6)$ $D^b 11$ $F \text{MIN}^7(b5)$ $B^b 7(b9)$ $F 13(b9)$ [C]

21

A.B.

21

D. S.

21

PERC.

21

Figure 4, continued.

Free Cuba

4

PNO.

25

A.B.

25

D. S.

25

PERC.

25

PNO.

29

A.B.

29

D. S.

29

PERC.

29

6/4

6/4

6/4

6/4

Figure 4, continued.

Free Cuba

5

PNO.
 32

A.B.
 32

D. S.
 32

PERC.
 32

PNO.
 36

A.B.
 36

D. S.
 36

PERC.
 36

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Figure 5. "Obatala."

OBATALA

An original composition by Rafael Zaldivar

PIANO

ELECTRIC BASS

DRUM SET

PERCUSSION

PNO.

E.B.

D. S.

PERC.

A **GMAJ11**

C MIN^{7(b6)}

6

6

6

6

The musical score is divided into two systems. The first system includes staves for Piano, Electric Bass, Drum Set, and Percussion. The Piano part begins with a treble clef and a key signature of one flat (Bb), with a 6/8 time signature. The Electric Bass part is in the bass clef. The Drum Set and Percussion parts are represented by a single line with a drumhead icon. The second system includes staves for Piano Solo (PNO.), Electric Bass (E.B.), Drum Set (D. S.), and Percussion (PERC.). The Piano Solo part begins with a treble clef and a key signature of one flat (Bb), with a 6/8 time signature. The Electric Bass part is in the bass clef. The Drum Set and Percussion parts are represented by a single line with a drumhead icon. The score includes a first ending bracket labeled 'A' with the chord 'GMAJ11' and a second ending bracket labeled 'C MIN^{7(b6)}'. The score is marked with '6' at the beginning of the Electric Bass, Drum Set, and Percussion staves in the second system.

Figure 5, continued.

2

A^bMAJ6 **E^bDIM⁷** **OBATALA** **A^bMAJ⁷** **F[#]DIM⁷** **G[#]DIM⁷**

PNO. 10

E.B. 10

D. S. 10

PERC. 10

E^{MIN}7(b5) **F[#]MAJ⁷**

PNO. 14

E.B. 14

D. S. 14

PERC. 14

Figure 5, continued.

Figure 5, continued, showing musical notation for two systems of music.

System 1 (Measures 18-21):

- PNO.** (Piano): Treble and Bass staves. Chords: E^{MAJ7}, A^{bMAJ7}, OBATALA, E^{MIN7(b5)}. Measure 21 ends with a repeat sign and a 3-measure rest.
- E.B.** (Electric Bass): Bass staff.
- D. S.** (Drum Set): Snare and Kick drum notation.
- PERC.** (Percussion): Percussion notation.

System 2 (Measures 22-25):

- PNO.** (Piano): Treble and Bass staves. Chords: E^{MAJ7}, A^{bMAJ7}, E^{MIN7(b5)}.
- E.B.** (Electric Bass): Bass staff.
- D. S.** (Drum Set): Snare and Kick drum notation.
- PERC.** (Percussion): Percussion notation.

Figure 5, continued.

4 **AMAJ7** **A^bSUS(ADD9)** OBATALA

PNO. 26

E.B. 26

D. S. 26

PERC. 26

26 **B** **FMIN⁹** **E^bMIN¹¹** **A^b11**

PNO. 30

E.B. 30

D. S. 30

PERC. 30

Figure 5, continued.

OBATALA

5

A^{b13(b9)} **F^{13(b9)}**

PNO. 34

E.B. 34

D. S. 34

PERC. 34

E^{MAJ11} **C^{#MAJ7}** **A^{b11}**

PNO. 38

E.B. 38

D. S. 38

PERC. 38

Figure 5, continued.

8 **D_{MIN}^{7(b6)}** OBATALA **D_{MIN}^{7(b6)}**

PNO. 58

E.B. 58

D. S. 58

PERC. 58

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Figure 6. “Black Eyes.”

Black Eyes

by Rafael Zaldivar

The image displays a musical score for the song "The Sound of Silence" by Simon & Garfunkel. The score is written for three instruments: guitar, piano, and acoustic bass. The tempo is marked as 130 beats per minute, and the time signature is 4/4. The key signature is one flat (B-flat).

The score is divided into two systems. The first system includes a guitar part (top staff) and a piano/acoustic bass part (bottom two staves). The guitar part features a complex, rhythmic melody with many accidentals. The piano part consists of a steady, rhythmic accompaniment. The acoustic bass part provides a simple, steady bass line.

The second system continues the music, with the guitar part featuring a change in harmony to F# major 7th (#11). The piano and acoustic bass parts continue their respective parts.

The score is written in a standard musical notation style, with notes, rests, and accidentals clearly visible. The guitar part is written in treble clef, while the piano and acoustic bass parts are written in bass clef.

Figure 6, continued.

2

Black Eyes

5

A MIN^{7(ADD 11)} **G MIN^{7(ADD 11)}** **E MAJ¹¹**

PNO.

A.B.

5

7

B SUS^{4(ADD 3)}/F[#]

PNO.

A.B.

7

Black Eyes

3

Figure 6 is a musical score for guitar, piano (PNO.), and a.B. (alto saxophone). The score is in 10/4 time and consists of two measures. The guitar part (top staff) features a melodic line with a key signature of one flat (Bb) and a key signature change to two flats (Bb, Eb) in the second measure. The piano part (middle staves) features a complex rhythmic pattern with many beamed sixteenth notes. The a.B. part (bottom staff) features a melodic line with a key signature of one flat (Bb) and a key signature change to two flats (Bb, Eb) in the second measure. The score is labeled "Figure 6," and "continued." below the piano part.

11

D^bMAJ7(#5) **D^bMAJ7** **E^bSUS4(ADD3)/B^b** **C^{SUS4(ADD3)/G}**

PNO. 11

A.B.

11

Figure 6, continued.

4

Black Eyes

The image displays a musical score for the song "The Sound of Silence" by Simon & Garfunkel. The score is written for piano (PNO.) and voice (A.B.).

System 1 (Measures 13-15):

- Staff 1 (Piano Right Hand):** Treble clef, 2/4 time signature. Measure 13 contains a whole rest. Measure 14 contains a whole rest. Measure 15 contains a whole note chord of G major with a 7th (G-B-D-F).
- Staff 2 (Piano Left Hand):** Treble and Bass clefs, 2/4 time signature. Measure 13 contains a whole rest. Measure 14 contains a whole rest. Measure 15 contains a whole note chord of G major with a 7th (G-B-D-F).
- Staff 3 (Voice):** Bass clef, 2/4 time signature. Measure 13 contains a whole rest. Measure 14 contains a whole rest. Measure 15 contains a whole note chord of G major with a 7th (G-B-D-F).

System 2 (Measures 16-18):

- Staff 1 (Piano Right Hand):** Treble clef, 5/4 time signature. Measure 16 contains a whole rest. Measure 17 contains a whole rest. Measure 18 contains a whole note chord of F# major with a 13th and 9th (F#-A-B-C-E-G).
- Staff 2 (Piano Left Hand):** Treble and Bass clefs, 5/4 time signature. Measure 16 contains a whole rest. Measure 17 contains a whole rest. Measure 18 contains a whole note chord of F# major with a 13th and 9th (F#-A-B-C-E-G).
- Staff 3 (Voice):** Bass clef, 5/4 time signature. Measure 16 contains a whole rest. Measure 17 contains a whole rest. Measure 18 contains a whole note chord of F# major with a 13th and 9th (F#-A-B-C-E-G).

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Figure 6, continued.

Black Eyes

5

Figure 6, continued, showing musical notation for "Black Eyes" (Page 5).

The notation is presented in two systems, each featuring three staves: a single staff at the top, a grand staff (Piano and Bass) in the middle, and a single staff (A.B.) at the bottom. The key signature is one flat (B-flat), and the time signature is 4/4.

System 1 (Measures 17-24):

- Staff 1 (Top):** Contains rhythmic notation with rests and eighth notes. Measure numbers 17, 10, and 9 are indicated.
- Staff 2 (Piano):** Contains complex piano accompaniment with many beamed eighth and sixteenth notes. Measure numbers 17, 10, and 9 are indicated.
- Staff 3 (A.B.):** Contains a bass line with eighth and quarter notes. Measure numbers 17, 10, and 9 are indicated.
- Chord Progression (Measures 17-24):** FMAJ7/C, C^{dim}7, C[#]min7, B^{sus}4(ADD3)/B^b, D^{sus}4(ADD3)/G, B^{sus}4(ADD3)/D[#].

System 2 (Measures 19-26):

- Staff 1 (Top):** Contains rhythmic notation with rests and eighth notes. Measure numbers 19, 10, and 9 are indicated.
- Staff 2 (Piano):** Contains complex piano accompaniment with many beamed eighth and sixteenth notes. Measure numbers 19, 10, and 9 are indicated.
- Staff 3 (A.B.):** Contains a bass line with eighth and quarter notes. Measure numbers 19, 10, and 9 are indicated.
- Chord Progression (Measures 19-26):** FMAJ7/C, C^{dim}7, C[#]min7, B^{sus}4(ADD3)/B^b, D^{sus}4(ADD3)/G, B^{sus}4(ADD3)/D[#].

Figure 6, continued.

6

Black Eyes

Figure 6, continued, showing musical notation for measures 21-23. The notation is organized into three systems, each corresponding to a measure number (21, 23, 23) and a measure count (10, 9, 10).

The notation includes three staves for each system:

- PNO.** (Piano): Treble and Bass clefs, showing complex rhythmic patterns and chords.
- A.B.** (Acoustic Bass): Bass clef, showing a simple bass line.
- Unlabeled Staff:** Treble clef, showing a simple melody line.

The tempo is marked as $\text{♩} = 130$.

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Figure 6, continued.

Black Eyes

7

The musical score is for the piece "Black Eyes" and is a continuation of Figure 6. It is written for Piano (PNo.) and Alto Saxophone (A.B.). The score is divided into two systems. The first system begins at measure 25 and ends at measure 31. The second system begins at measure 27 and ends at measure 33. The key signature is one flat (Bb). The time signature is 4/4. The score includes various musical notations such as notes, rests, and dynamic markings.

System 1 (Measures 25-31):

- Measure 25:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 26:** Treble clef, 9/4 time signature. Bass clef, 9/4 time signature. Piano part: Treble clef, 9/4 time signature. Bass clef, 9/4 time signature. Alto Saxophone part: Bass clef, 9/4 time signature.
- Measure 27:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.
- Measure 28:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 29:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.
- Measure 30:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 31:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.

System 2 (Measures 27-33):

- Measure 27:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.
- Measure 28:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 29:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.
- Measure 30:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 31:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.
- Measure 32:** Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Piano part: Treble clef, 10/4 time signature. Bass clef, 10/4 time signature. Alto Saxophone part: Bass clef, 10/4 time signature.
- Measure 33:** Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Piano part: Treble clef, 11/4 time signature. Bass clef, 11/4 time signature. Alto Saxophone part: Bass clef, 11/4 time signature.

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Figure 6, continued.

8

Black Eyes

29

PNO.

29

A.B.

29

31

1.

PNO.

31

A.B.

31

8/4

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Figure 6, continued.

Black Eyes

9

33

2.

8/4

10/4

PNO.

33

8/4

10/4

A.B.

33

8/4

10/4

34

10/4

34

10/4

PNO.

34

10/4

A.B.

34

10/4

E MAJ7/B

Figure 6, continued.

10

Black Eyes

36

CMAJ7

PNo.

36

A.B.

36

38

B^bMIN⁹

PNo.

38

A.B.

38

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Figure 6, continued.

Black Eyes

11

The musical score for 'Black Eyes' is presented in three staves. The top staff is for the vocal part (A.B.), the middle staff is for the piano (PNO.), and the bottom staff is for the guitar (G). The score is in 4/4 time and features a key signature of one flat (B-flat). The piano part includes a chord progression of A^b sus4 / G^b in the right hand and a bass line in the left hand. The guitar part is a single bass line. The vocal part consists of a melody line. The score is marked with measure numbers 40 and 41.

40

PNO.

A.B.

40

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