UNIVERSITY OF CALIFORNIA,
IRVINE

Afro-Cuban Batá Drumming: Composition, Abstraction, and the Grid

DISSERTATION

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

in Integrated Composition, Improvisation, & Technology

by

Atticus Joshua Brobst Reynolds

Dissertation Committee:
Professor Michael Dessen, Chair
Professor Amy Bauer
Professor Rajna Swaminathan
Professor Raul Fernandez
Professor David Font-Navarrete

2023

DEDICATION

To

my teachers

for their openness and trust

on the organization of time

"Curve on the Straight Line"[1]

(Milford Graves)

[1] Milford Graves & Melvin Gibbs, "Making Contact," *A Mind-Body Deal*, (Inventory Press, 2022).

TABLE OF CONTENTS

LIST OF FIGURES

ACKNOWLEDGMENTS

I would like to express my appreciation to my committee chair, Professor Michael Dessen, for his patience and openness in allowing me to move in many directions in this process while keeping a clear scope. Without his guidance and persistent help this dissertation would not have been possible. I would also like to thank my committee members, Professor Amy Bauer, Professor Raul Fernandez, Professor Rajna Swaminathan, and Professor David Font-Navarrete for their diverse perspectives and inspiring ideas in bridging my artistic practice and research.

I would like to thank my batá teachers David Font-Navarrete, Bobby Wilmore, Lázaro Galarraga, and Manley Lopez for their passion and love for the music and their openness in teaching. I would also like to thank my teachers Juan Alamo and Beto Torrens for their inspiration and commitment to my process over the years.

In addition, a thank you to my mother, Jennifer Brobst, for her tireless help as a sounding board and detailed editing throughout this process. She aptly stated that “reality is implied periodicity in a nutshell” while I was writing this dissertation and was my first influence on my musical journey.

Financial support was provided by the University of California, Irvine, Medici Scholarship for summer travel and study in Mexico City.

VITA

Atticus Joshua Brobst Reynolds

2017	Bachelor of Music, Minor in Entrepreneurship,
	University of North Carolina at Chapel Hill
2019-2023	Teaching Assistant & Associate, CTSA, University of California, Irvine
2023	Ph.D. in Integrated Composition, Improvisation, and Technology
	University of California, Irvine

FIELD OF STUDY

Afro-Latin Music and Religion, Rhythm Studies, Interdisciplinary Work in Visual Art and Music

PUBLICATIONS

2017 Ventana, Atticus Reynolds, Independently Released, July 29, 2017.

2021 Towers, Atticus Reynolds, Orenda Records, August 27, 2021.

ABSTRACT OF THE DISSERTATION

Afro-Cuban Batá Drumming: Composition, Abstraction, and the Grid

by

Atticus Joshua Brobst Reynolds

Doctor of Philosophy in Integrated Composition, Improvisation, and Technology

University of California, Irvine, 2023

Professor Michael Dessen, Chair

This dissertation is a study of contemporary and traditional Afro-Cuban batá drumming presented as a compositional and analytic heuristic. I begin by highlighting abstract concepts from the batá tradition for praxis-based analysis. The concepts include polymeter, in "fix" phrasing, clave (as meter), emergent form in a complex cueing system, rhythmic archetypes, rhythmic elasticity in regard to language, and sound. My research draws from past scholarship on Afro-Cuban religious music, more general comparative scholarship on African and Afro-diasporic music, and my own experiences studying batá.

I then analyze creative work by artists who have been influenced by or utilize Lukumí music in their secular compositions, blurring the boundary between sacred and secular. I include a brief history of Lukumí music in secular contexts as well as more pointed analyses of select artists who have addressed these traditions in their work. Among many others, I examine the work of pianists Chucho Valdes and David Virelles, as well as percussionists Pancho Quinto and Manley "Piri" Lopez.

As this dissertation is one of practice-based research, I analyze a concert of my capstone work, entitled *Gates*, using a similar lens of analysis in relation to the abstract concepts previously addressed. I am a drummer, composer, and producer indebted to histories of Afro-diasporic music, with a particular focus in jazz and creative music idioms. *Gates* included a solo set including drum-set, percussion, piano, electronics, and vocals as well as duo set of compositions for five different improvisers.

The dissertation ends with a broader chapter on the philosophical implications of the notion of a perfect isochronous grid in the digital age. In this chapter, I relate the previously discussed concepts about batá performance to a broader discussion of the grid as an acknowledgment of the absolute, and how these notions are amplified in new ways by today's digital tools. Within the context of past scholarship on the music of batá, this dissertation examines the tradition as a malleable framework for creative work, opening a dialogue between Lukumí music and outside secular traditions such as jazz, electronic music, and creative music.

INTRODUCTION

This dissertation is focused on musical analysis of contemporary and traditional Afro-Cuban batá drumming. A liturgical tradition, batá drumming was transplanted to Cuba in the transatlantic slave trade, with its origins in Yorubaland. Consecrated batá drums are utilized in ritual ceremonies, called Tambores, in the Lukumí religion, also known as Santería. In Yorubaland, the tradition had a speech-encoding aspect, yet this has been lost over time in the Cuban tradition.

The batá drumming tradition utilizes a three-part ensemble of double-headed drums playing interlocking rhythms that invoke and call the Orishas, or deities, of the Lukumí religion. The tradition involves memorization of specific "calls" cued by the largest drum, the iyá, signaling movement forward to different sections, or roads, of each Orisha rhythm. It also includes call and response and conversational streams between the iyá and the itótele, the second largest drum, as well as a highly nuanced blurring of westernized notions of meter, polyrhythm, and entrainment.

My PhD program in Integrated, Composition, Improvisation, and Technology at University of California-Irvine is a practice-based research program. I am a drummer, composer, and producer with a background in Afro-diasporic traditions, such as jazz and electronic music. This dissertation is unique in that it straddles different modalities of writing, positioning itself in worlds of ethnomusicology, music theory, and composition. It also includes personal analysis of my own related performance practice. For this reason, I draw equally from scholarship, my own studies in the batá tradition, recordings from diverse genres, and my artistic practice.

This research addresses the abstraction of formal and compositional concepts from Lukumí traditions and how they can be utilized in real-time improvisation, composing for improvisers, and contemporary electronic/popular music spaces. As a practice-based researcher, these derived concepts function equally as stand-alone analysis in ethnomusicological spaces, as well as compositional tools for composers to utilize in their own practice. I also hope that artists can use the same mechanisms for derivation in their own practices with other folkloric traditions outside of the Lukumí religion.

As an undergraduate student at the University of North Carolina at Chapel Hill, I studied different styles of Latin music and percussion with one of my mentors, Juan Alamo, as well as played percussion in Charanga Carolina directed by David Garcia. In 2016, I began to study batá with David Font-Navarrete in Durham, North Carolina, and quickly fell in love with the tradition. I was initially drawn to the bridging of fluid melodic expression on the drums with technical virtuosic strict adherence to specific memorized rhythms. A presupposed binary in many styles of improvised music, I felt that this bridging of openness and constraint lay at the heart of this music's transcendent nature.

To ground my research and orientation to the tradition, it is important to mention some of my teachers in Lukumí music. My first teacher, as well as dissertation committee member, David Font-Navarrete, is an initiated *añа* drummer, visual artist, and ethnomusicologist currently teaching as an Assistant Professor in the Department of Music, Multimedia, Theatre, and Dance at Lehman College. In Miami in the 1990s, Navarrete studied and performed with Lázaro "Tato" Alfonso, a member of the groundbreaking Cuban fusion group Irakere, as well as Ezequiel Torres, an influential Cuban batá drummer and drum-maker.

After moving to Los Angeles in 2019, I continued studies with legendary drummer/singer Lázaro Galarraga as well as Bobby Wilmore in Los Angeles.[2] Lázaro began singing in Lukumí ceremonies at age five in Havana, Cuba, and playing batá at age twelve. He studied and performed at a young age with some of the most influential Cuban batá drummers of the 20th century, including Girardo Rodriguez, Pablo Roche, Jesus Peréz, and Trinidad Torregrosa. In 1961, Lázaro was recruited as a founding member of the Conjunto Folklórico Nacional. After a year, he left to teach at Escuela Para Instructores de Arte and rejoined the Conjunto between 1977 and 1982, after which he left Cuba for New York City. After two years, he moved to Los Angeles, where he is still based. Outside of his teaching and ritual performances, he has been influential in secular "fusion" contexts as seen in his work with Bill Summers and Herbie Hancock. He has also performed with Chucho Valdez Jr., Celia Cruz, Jose Feliciano, Los Papines, Diego El Cigala, Omar Sosa, and Gloria Estefan.

Most recently, I have studied online and in person with Manley "Piri" Lopez.[3] I spent three months in Mexico City studying with Piri in the summer of 2022. Piri was born in 1981, in Havana, Cuba. He is a member of the widely influential "Los Chinitos" family from La Corea, a barrio of the San Miguel del Padrón municipio, in Havana. The family is known for creating the modern "Guarapachangueo" style of secular Rumba as well as for their style of batá performance. Piri began playing Lukumí rituals on batá at age ten in 1991. In 1997, Piri played

[2] For a more in-depth biography of Lázaro's life see Richard Thaler. Much of the above shorter biography was taken from Thaler's.
Richard Thaler, "BIOGRAPHY OF LÁZARO GALARRAGA," afrocubanpercussion, 2012, http://afrocubanpercussion.com/aboutlazaro/.

[3] See Antoine Miniconi's blog for more information on the "Los Chinitos" family and Piri.
Antoine Miniconi, "Curriculum Vitae: Manley "Piri" López Herrera," manleycvenglish, 2007, https://manleycvenglish.blogspot.com/.

itótele on the Abbilona recordings, under artistic direction from his uncle, Irián López. In 2014, he joined the folkloric group Raices Profundas, and toured internationally. He currently lives in Mexico City, teaches many students from around the world, and performs music in ritual contexts as well as with his own contemporary project "Guarabata."

Chapter Overview

Chapter One of the dissertation is focused on musical analysis of batá drumming and addresses compositional and improvisational concepts from the tradition. Polymeter as a concept is examined in relation to past scholarship related to comparative Afro-diasporic traditions. In dialogue with polymeter, I analyze Michael Spiro's concept of "Fix" phrasing,[4] as well kaleidoscopic frames on entrainment regarding a conditional stratum of entrainment to the grid. I then address ideas associated with emergent form in relation to how the batá cueing system functions in ritual practice. Conditional rhythmic archetypes for grounding oneself in the music, archetypes applied to each drum in the batá ensemble, and ensemble archetypes are addressed in questioning the possibility of a generative system of rhythms tangential to batá as well as for improvisation on other instruments. In parallel to polymeter and meter/entrainment, ideas associated with rhythmic elasticity and playing with space are addressed related to the idea of "rhythm as melody" and the history of batá as a direct speech-encoding instrument in Yorubaland. The chapter finishes with a short analysis of modern

[4] Justin Hill & Michael Spiro, *Roadmap for the Oru del Igbodu (Oru Seco)* (Michael Spiro and Justin Hill Independently published no. 1, 2015).

improvisation in batá that utilizes more open improvisational systems and an analysis of traditional and contemporary sound in technique/timbre and harmony (vertical stacks).

Chapter Two looks predominantly at musical examples outside of the Lukumí tradition that reference or take influence from specific rhythms and instruments of the tradition. I analyze select artists in line with many of the abstract concepts listed in Chapter One. Chano Pozo and Dizzy Gillespie's collaborations and the work of Mongo Santamaria from earlier intercultural collaborations from the mid-20th century are first analyzed. I then address the Cuban piano tradition in an analysis of a similar work performed by Chucho Valdés and Gonzalo Rubalcaba. In looking at innovative percussionist-composers, I analyze the work of Pancho Quinto and Manley "Piri" Lopez. To close this chapter, I analyze contemporary work from the Cuban American pianist David Virelles, in particular his 2014 recording *Mbókò*.

Chapter Three is an analysis of my own capstone concert, performed March 21, 2023, entitled *Gates*. This concert consisted of two sets, one of a long-form solo work in which I played drum-set, piano, brushes on an iyá drum, and a setup of metal objects, and sang. Each work took influence from or utilized concepts from Chapter One, to varying degrees of specificity. The second set consisted of five duos with drum-set: with guitar, mridangam, bass clarinet, trumpet, and piano. I analyze each work from both sets regarding my compositional process and briefly analyze how the concert went, a posteriori, in looking at the efficacy of ideas from Chapters One and Two as compositional tools.

Chapter Four explores the notion of the grid and how one positions oneself in relation to it, both in dialogue with batá improvisation. Batá drumming in relation to the religion functionally and metaphysically, is considered as a preface to more personal ideas related to a

21st century re-positioning of the grid. I consider a movement from the idea of the grid as an ontological question, one acknowledging the absolute, to a subconsciously internalized platonic ideal, a "perfect" quantized grid in the digital age. Rhythmic dialectics are considered in relation to evenness and oddness, polymeter and kaleidoscopic entrainment, tension and release, and clave as a noun and a verb. The chapter ends with a short poetic coda that looks at the idea of the grid in contemporary visual art worlds in dialogue with the grid in rhythm and batá. Rosalind Krauss' ideas in relation to the grid as "naked and determined materialism" as well as "anti-narrative and anti-discourse" are taken into consideration. [5]

[5] Rosalind Krauss, "Grids" *October*, Vol. 9 (1979) https://doi.org/10.2307/778321.

CHAPTER 1: CONCEPTS (AT/IN) PLAY

My research is focused on the abstraction of compositional and improvisational concepts from batá drumming. The first reason to abstract these concepts is to use them as tools in analyzing past compositional work and creating new work inspired by these traditions. The second reason is to contribute to the relatively small amount of scholarship in ethnomusicology and music theory about batá drumming itself. Due to these two unique pursuits, some of these concepts may be more readily used in composition and some may be more conducive to theoretical and analytical use. Considering the nature of distance created in abstraction, many of these concepts also surface in other styles of Afro-diasporic popular and folkloric music. The batá drumming tradition, although dense and quite distinct from other Afro-Cuban secular and sacred idioms, does not by any means exist in a vacuum.

As a composer and theorist, I feel that this somewhat heuristic process will be helpful for future composers and scholars in examining folkloric[6] music in contemporary improvisational and compositional spaces. I use the term folkloric broadly, as traditional or vernacular music outside the "popular" sphere. Abstracting these concepts from the batá drumming tradition, as well as considering these concepts in regard to music with little to no relationship to Lukumí traditions, could open lines of inquiry into interwoven folkloric and

[6] For more about the term "folklore" in relation to Afro-Cuban traditions in the twentieth century, see Katherine Hagedorn, *Divine Utterances*. Hagedorn makes a distinction between folkloric and sacred traditions in Lukumí music in Cuba, whereas I address sacred and secular traditions as both encompassed in "folkloric" music. Katherine J. Hagedorn, *Divine Utterances: The Performance of Afro-Cuban Santería* (Washington & London: Smithsonian Institution Press, 2001), 4,11,12.

sacred influence in modern music.

Most of the past scholarship in academic spaces that has addressed the music of batá drumming has been ethnographic and positions the music in its cultural, social, and ritual contexts without addressing the nature of how the drumming itself functions. However, Kenneth Schweitzer and Javier Diaz have made great strides in analyzing the drumming itself in depth.[7] In dialogue with Schweitzer and Diaz's research, I have divided my abstract concepts into six musical spaces: meter & entrainment, emergent form, rhythmic archetypes, elasticity and rhythmic phrasing, modern improvisation and virtuosity, and sound.

1. METER & ENTRAINMENT

In this section I will address different ways of experiencing and carving out musical time in batá drumming practice and how they may be felt concurrently. I am looking at meter existing as a tension or multiplicity of feels instead of a singular division of time.

1.1 POLYMETER & PHRASING IN "FIX"

At its most basic, we often think of meter as the way our brains group and compartmentalize musical rhythm. Studying conceptions of meter in contrasting cultural contexts might, theoretically, interrogate which components of meter are culturally learned versus which are innate. Meter is often considered in line with two parameters — duration and

[7] Kenneth Schweitzer, *The Artistry of Afro-Cuban Batá Drumming: Aesthetics, Transmission, Bonding, and Creativity*, (United States: University Press of Mississippi, 2013).
Javier Diaz, "Meaning Beyond Words: A Musical Analysis of Afro-Cuban Batá Drumming" (PhD Dissertation, City University of New York, 2019).

hierarchy. I use the term duration to mean the distance between key pulses and hierarchy as the manner in which each pulse functions in the holistic shape of the musical rhythm. In a 2019 SMT lecture, Richard Cohn listed the myriad of western music theory textbooks that define meter as a patterned series of strong and weak beats.[8] Yet, when dealing with grouping and meter in Afro-diasporic rhythm and batá drumming, traditional western conceptualizations of strength and weakness related to individual metric beats lose much of their value.

I will use two definitions of meter that consider duration but move away from hierarchy. The first is Richard Cohn's simple definition of meter: "an inclusion relation between two or more pulses."[9] I am interpreting inclusion relation to mean a consistent subdivision marking a compound (triple based), or simple (duple based) meter. Inclusion in this context would mean that subdivisions of two and three are grouped into larger units. Cohn defines a pulse as "a categorically isochronous set of (time points or time spans)."[10] This definition is key in that it makes no reference to notation and hierarchy. I will also utilize Fernando Benadon's definition of meter which is "an abstract temporal referent, a ground upon which rhythmic figures are set."[11] I am interpreting ground as a rhythmic periodic phrase of asynchronous or isochronous pulses that musicians and listeners "play" with. As shown in Sections 1.2 and 1.3 regarding entrainment and the concept of clave, Benadon's definition is key in considering clave and Topoi patterns as metric devices existing outside of an isochronous pulsed meter.

[8] Richard Cohn, "Damaged Cargo: Concerning the Unfortunate Voyage of Poetic Meter to the Land of the Modern Music-Theory Textbook," lecture delivered at the 2019 annual meeting of the Society for Music Theory, (November 2019).
[9] Cohn, ibid.
[10] Cohn, ibid.
[11] Fernando Benadon, "Meter isn't everything: The case of a timeline-oriented Cuban polyrhythm," *New Ideas in Psychology*, Vol. 56 (2020) 1.

This definition also frames meter as emergent and conceptual, as opposed to an essential characteristic of sound, an obvious yet often neglected notion in scholarship.[12]

Batá drumming includes embodiment and conceptualization of Cohn's notion of meter, one that is broken down into "categorically isochronous time points," but extends upon it in dealing concurrently with more than one inclusion relation (i.e., 12/8 and 4/4). The isochronous pulse is by far the most important, but control of other meters and abstract beat spans within and between the meters is a necessary component of playing the music idiomatically.

Master batá drummer Michael Spiro speaks on this feeling of being in 4/4 and 12/8 at the same time as in "fix."[13] The phrasing and swing of batá rhythms in 4/4 consistently pull towards 12/8, while 12/8 rhythms pull towards 4/4. How this pull or "swing" is utilized is an individual tool that defines master drummers' musical identities. In order to interpret these rhythms idiomatically, one must be able to feel many of these rhythms in different metric spaces.[14] "Fix" is used in creating small variations in rhythms by individual drummers in a batá ensemble, as well as collectively used to phrase an ensemble rhythm more closely to 12/8 or 4/4. For example, the rhythms for Yeggua and Ibedji in the Oru Seco are sometimes phrased

[12] Christopher Hasty's work in meter as projection applies to this emergent, conceptual understanding of meter as well. In Hasty's work, projection is "the process in which a mensurally determinate duration provides a definite durational potential for the beginning of an immediately successive event." Projection has little to do with hierarchy.
Christopher Hasty, *Meter as Rhythm* (Oxford University Press, 1997), 84.

[13] Hill & Spiro, *Roadmap for the Oru del Igbodu (Oru Seco)*, 5.

[14] Note that to some degree swing in the jazz tradition is also an abstraction of the distance between a triplet and eighth note space, yet much of that music sits in a specific spot between as opposed to sliding back and forth between the poles. An exception to this could be Philly Joe Jones' soloing which I find is much more "binary" than his time feel. Hip hop producers who embody non-quantized looser production styles such as J-Dilla are also in line with a personal concept of in "fix."

clearly in 4/4 or 12/8, or somewhere in between depending on the batá ensemble performing.

In dialogue with Spiro, Chris Stover conceptualizes the space between the attack onsets of 12/8 clave and 4/4 Rumba clave as a "beat span."[15] Though Stover predominantly focuses on secular Cuban Rumba improvisation with respect to this concept, it is directly aligned with playing in "fix." Both conceptualization of the clave and improvisational choices in batá music apply this cognitive process of orienting around and improvising within spans of time inside of longer cycles. As different musicians in an ensemble setting utilize the liberty of beat spans together, the resultant rhythmic friction/harmony creates momentum, energy, and the phrasing characteristic of the idiom.

Kofi Agawu, by contrast, defines and cites the cultural implications of theorizing polymeter as a concept in African rhythm.

> Polymeter is the simultaneous use of more than one meter in an ensemble composition. Each functional component of the texture, be it an instrument or a group, is said to expose a distinct rhythmic pattern within its own metrical frame, apparently without any obvious regard for a larger coordinating mechanism. Constituent meters do not collapse into each other or into a larger meter, but persist into the background, creating a kind of metric dissonance or metric polyphony. Philosophically, polymeter indexes coexistence, not (necessarily) cooperation.[16]

[15] Chris Stover, "A Theory for Flexible Rhythmic Spaces for Diasporic African Music" (PhD Dissertation, University of Washington, 2009).
[16] Kofi Agawu, *Representing African Music: Postcolonial notes, queries, positions (*New York and London: Routledge, 2003).

Agawu speaks here of polymeter as a theoretical tool "invented" to speak in an essentialist manner about African rhythm. Polymeter, alongside additive rhythm and the somewhat alienating concept of "African cyclical time," are components of the historical fetishization of African rhythm in ethnomusicological discourse. By creating new complex rhythmic concepts in scholarship to explain African and Afro-diasporic rhythmic processes, the human essence of this music is glossed over, and communities are in turn dehumanized. Spiritual "complexity," seemingly benign, is furtively paired with essentialization and in turn primitivism. Structural analysis with complex neologistic rhythmic concepts neglects the empirical cultural emic understanding of the music. Yet Agawu also notes that, by contrast, empirical writing with little to no structural analysis of African music is in many ways equally problematic.[17] Finding the balance between rational "structural" analysis and empirical "cultural" analysis is a venerable pursuit.

Agawu's arguments bring to light how theorists have used these ideas to find difference for the sake of difference and ultimately misrepresent the music. These ideologies and analytical approaches undoubtedly "other" the communities that are being studied. Yet while the sentiment of Agawu's critique is foundational, in *Representing African Music*, Agawu does not explicitly define meter itself and I would posit that hierarchy in relation to phenomenal strength or weakness of individual beats is assumedly implicit. In other words, with no clear definition of meter, one assumes the conventional definition.

[17] Both Representing African Music and Agawu's analysis of the "standard pattern" are pertinent to this discussion. Agawu, ibid.
Kofi Agawu, "Structural Analysis or Cultural Analysis? Competing Perspectives on the "Standard Pattern" of West African Rhythm," *Journal of the American Musicological Society*, Vol. 59. (2006).

In opposition to the idea of polymeter, Agawu feels that African musicians across the continent predominantly entrain to an isochronous pulse contained in an individual meter and then improvise polyrhythmically around that meter. Agawu then cites existing scholarship where theorists give examples of drummers internalizing different downbeats and/or different inclusion relations (e.g., 12/8 vs. 4/4 subdivisions) while playing their individual parts in a collective ensemble; although it is important to note that Agawu is not speaking about Afro-diasporic or Afro-Cuban notions of polymeter.[18]

In batá music, Agawu's approach becomes less applicable. Downbeats are almost always agreed-upon in batá, but under Cohn's definition of meter, in "fix" phrasing, or feeling more than one inclusion relation inside of an isochronous pulse, would be polymetric.[19] Yet this notion of polymeter also aligns with Agawu's idea of what polymeter is not: different meters collapsing into one another and in turn indexing cooperation. In "fix" phrasing in batá drumming, with its fluidity and multiplicity of feels, could be thought of as a sort of metric polyphony. Of note is also Agawu's definition of polymeter as only existing in an ensemble composition. This would imply that a drummer cannot internalize different meters "cooperatively" in an individual performance. In batá drumming practice, playing in "fix" exists clearly at the individual and ensemble level.

[18] Although beyond the scope of this dissertation, important research is needed in considering how the diaspora and the transatlantic movement of slaves to Cuba have influenced components of batá music in both Africa and Cuba. Did batá music historically feel equally "polymetric" in Africa and does it now, with transnational diasporic feedback loops, feel more polymetric in Africa?

[19] An exception is when different batá drummers hear clave in different spots in certain batá rhythms such as the rhythms for Ochun or Oyokota for Babalu Aye. This is at times attributed to different approaches of playing in Matanzas and Havana. Both rhythms are used in the Oro Seco and played without dance or song. In turn, the clarity of a downbeat is less crucial as there are no dance steps or lyrics.

As stated earlier, my understanding of polymeter in the context of batá music is that the isochronous pulse is by far the most important, but control of other meters and abstract beat spans within and between the meters is a necessary component of playing the music idiomatically. Javier Diaz discusses Efrain Toro's work regarding conceptualizing polyrhythms as harmonic intervals. [20] In a similar manner, one can entrain to and internalize polymetric relationships as emergent spheres of rhythmic potential, spaces that are not heard in opposition to one another but cannot exist without the possibility of the other, interwoven like DNA. David Locke's work on musical cubism and "simultaneous multidimensionality" is key here.[21] Locke's statement below is critical in looking at the dialectical nature of polymeter in batá playing; "A singular can be a plurality - and finds unity in apparent oppositions - for example, between the seen and the unseen, or the equivalence of two and three."[22]

While the meters existing in "fix," 12/8 and 4/4, still agree upon the same isochronous pulse, there are also some examples in batá drumming that utilize meters with different isochronous pulses overlaid. The isochronous 4/4 or 12/8 pulse is by far the most important but 6/4 and 3/2 to some extent can easily be accessed by master drummers. An example of batá drummers entraining to different meters that share the same downbeats and time spans is that of the Orisha rhythms that are played very quickly, such that entraining to the quarter note pulse is very difficult. The itótele parts for the Aro for Yemaya and Meta/Aluya for Chango

[20] Diaz, "Meaning Beyond Words," 75.
Efrain Toro, *Rhythm in Essence* (Independently Published, 2019).
[21] David Locke, "Simultaneous Multidimensionality in African Music: Musical Cubism," *African Music* Vol. 8, No. 3 (2009): 1.
[22] Locke, ibid., 1.

require the drummer to play sections of only the second partial[23] of the triplet at breakneck speeds.[24] Another example is the okónkolo part in a later section of the Aro as well as the first road of Osain in the Oro Seco. To some extent, one could feel 3/2 instead of 4/4 or 12/8 to keep their place.

When I asked batá drummers in Mexico City in 2022 about entraining to 3/2 in these cases, I was consistently told not to entrain to anything and let my muscle memory of the second partial and how it fits into the rhythmic pattern take over. I have also consistently been told not to use very quiet touch tones on the enu head on the downbeats to keep my place. This has more to do with a definitional binary between coordination and independence as discussed in Chapter Four.[25]

Adding nuance to the notion of polymeter in batá performance is the role of pitch in shaping a sense of hierarchy. Pitch orders often obscure an outsider's perception of meter while listening to batá music. For example, the itótele part for the seco rhythm for Chango switches back and forth between an open tone and closed muff on the enu head which on its own sounds like it is in 3/2, while the iyá and okónkolo parts outline the 12/8 isochronous pulse. Another rhythm for Chango, Wipami, includes an itótele part that highlights 3 phrases of 8 triplets that hyper-metrically align over 2 bars of 12/8. Considering pitch's relation to metric

[23] I use partial to describe the second and third "offbeat" of triplets and other odd subdivisions that are not binary.
[24] A parallel example is entraining to very quick tempos while remaining relaxed as a jazz drummer. A jazz drummer would keep 1 clearly pulsed in their body, rather than 1 and 3 in order to keep the hi-hat on 2 and 4 more in time.
[25] Another interesting Afro-Cuban example outside of batá drumming is the bell pattern used for Guiro ceremonies that is positioned predominantly off-beat from quarter note downbeats. This could be entrained to in 3/2 arguably more easily than 4/4.

accents is critical in looking at how different cultures entrain to meter. A “western” perspective would usually designate low sounds to downbeats and high sounds to upbeats (i.e., kick to snare).[26] Many batá rhythms and other folkloric Afro-diasporic traditions often place low sounds in the middle of the bar. A key example of this is the rhythm for ñongo, a rhythm analyzed in Chapter 3 in an etude from my capstone work.

1.2 ENTRAINMENT & THE “GRID”

In parallel with polymeter, this section examines the concept of entrainment in relation to batá drumming. Entrainment refers to synchronization of organisms to an externally perceived rhythm. It is the process of being drawn into and subsequently existing inside of a rhythmic current or flow. The degree to which this process is universal and influenced by musical enculturation is a point of ongoing scholarly inquiry. Batá music utilizes a few unique forms of entrainment that rely on a presupposed isochronous “grid” to different degrees. To preface this exploration of the nuances of entrainment in this particular study, Fernando Benadon's distinction between "orientation" and "interaction" in Cuban Rumba music is instructive:

> Rhythmic interaction occurs when a musician engages with specific features of a separate temporal entity. For example, using syncopation by placing musical accents on offbeats is a way of interacting with meter's hierarchical arrangement of beats, and

[26] One could consider the backbeat as a rhythmic pitch contour that acts in a similar manner to clave in many idioms of Latin music. I mean this in saying that the alternation of kick and snare, with kick always on the one, is the smallest rhythmic kernel that one could consistently find in drums in western popular music.

> replicating another instrument's rhythm in the ensemble—either in unison or with a temporal offset, as in call-and-response—is a way of interacting with that specific durational pattern (and with the musician who produced it, of course). Orientation, on the other hand, involves listening for temporal markers, be they silent or sounding, in order to regulate the timing of one's own actions.[27]

Following Benadon's terminology, I consider entrainment to be more an aspect of orientation than interaction, as entrainment is essentially a matter of perceptually orienting oneself in relation to some sort of periodicity, whether it be predictable and consistent or aleatoric.[28] In this section, I focus on how different forms of entrainment relate to an isochronous pulsed grid.[29] In a similar nature to the kaleidoscopic approaches to meter addressed in the first section, batá drummers utilize different forms of entrainment, at times concurrently in performance practice.

Below in Figure 1.1, I have outlined a conditional spectrum looking at entrainment in relation to an isochronous pulsed grid. Using this tool, I will address modes of perception in relation to batá drumming. The main parameter I am considering is the degree of consistency

---

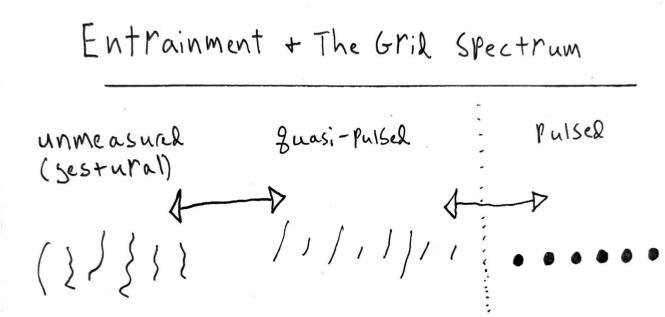
[27] Benadon. ibid.

[28] The relationship between orientation and interaction is somewhat a hermeneutic circle, as well as both cognitive and embodied. Musicians interact and improvise around oriented meters/rhythms and in turn start to orient themselves differently with more experience in relation to music that they are more comfortable with.

[29] I feel that a deeper understanding of perception and entrainment, one that takes into account diverse cultural musics, could be an interesting compositional tool to shape and abstract musical rhythm. Michael Tenzer's work on cross-cultural representations of musical time and continua related to hierarchy and duration in musical time aptly addresses this.
Michael Tenzer, "Generalized Representations of Musical Time and Periodic Structures," *University of Illinois Press, Ethnomusicology*, Vol. 55, No. 3 (Fall 2011).
Michael Tenzer, "A Cross-Cultural Topology of Musical Time, in Analytical and Cross Cultural Studies in World Music," *Oxford University Press* (2011).

in periodicity.

Figure 1.1 (Entrainment and the Grid Spectrum)



On the far left is unmeasured "free" time, or gestural time, where we entrain only to the motion of events. I use the term gestural as related to the idea of physical gestures outlining phrases between ensemble members without any consistent periodicity. In this space, repetition is inconsistent to the degree that a performer relies mostly on visual cues to synchronize attacks with other musicians. This mode of entrainment entails a complete departure from consistency of pulse and is how I envision what many performers sometimes call "out of time." Yet, we are never truly "out of time" so I neglect to use that term.

To the right of gestural time is quasi-pulsed time. Quasi-pulsed time is still quite inconsistent metronomically or in relation to a grid but touches on or implies consistent periodicities.[30] I question whether it is necessary for a musician to first have a strict isochronous pulse in their head to then abstract and "imply" pulsed time in this setting. I have

[30] In an improvised space, a great example of this approach is Paul Motian's drumming with Joe Lovano and Bill Frisell. The trio often takes this approach collectively. In contrast in batá music, the iyá drummer may play quasi-pulsed over more consistent itótele and okónkolo parts.

placed a dotted line to show the divide on the spectrum where pulses become perceptually salient.[31] On the right of gestural time is an isochronous pulsed grid. I am considering an isochronous pulsed grid as any consistent pulse with equal durations in between. This mode could encompass the smallest consistent subdivision, the tatum, or a larger pulse that rhythms float around.

The dynamic aesthetic weight of batà drumming is partially attributed to the fact that rhythmic ideas fall into all three of these categories at different points in the repertoire and combine some of these categories in certain toques.[32] Traditional Yoruba batá, in its use of direct language encoding, allows listeners and other drummers to entrain to "unmeasured" time.[33] The words often flow out of the drums like language, prioritizing communication as praise over dance and entrainment to isochrony. I will speak more on this in Section 4.3, "rhythm as melody."

In traditional Cuban batá drumming, short phrases such as "di-de" (to get up) are played before toques but this space of entrainment has been historically deprioritized in the diasporic musical tradition. This is even more true in contemporary Cuban batá as many drummers do not understand the language of Yoruba and in turn the direct encoding. Fragmented remnants of language encoding as a concept exist in Moyuba phrases in Cuban iyá playing. Moyubas

[31] Note that literally no musical periodicity, including digital periodicities, is perfectly consistent and the grid is in turn a platonic ideal. I will touch on this in Chapter Four.
[32] A toque is another term for a batá rhythm.
[33] Further research is needed in the field in considering unmeasured time in music related to poetry. For example, I am considering poetic meter in Iranian classical music as then echoed in the way musicians play "unmeasured" language in rhythm. Oriki praise poetry is a component of Yoruba batá that does not exist as commonly in Cuban batá practice.

outline some of this liturgical language over the top of isochronous pulsed grids on the other two drums. These phrases praise a specific Orisha and can be placed over the top of many different rhythms that are designated for specific Orishas.[34]

Examples of quasi-pulsed time exist in the way certain iyá drummers phrase over the bar-line in a manner which I will outline later in Section 4.3. Lázaro Galarraga is a great example of a musician who is known as a legendary singer but also a master of batá.[35] He shapes iyá rhythms by floating over the bar-line in a manner that I feel denotes an awareness of the pulse but does not seem to rely on referencing it. How do great singers approach drumming differently than those who specialize predominantly in drumming? A second example of quasi-pulsed time is the phased and metrically ambiguous transitions that exist between certain roads of toques in which ensembles dance between tempos and meters collectively, moving towards a new more rigid rhythmic space. Examples of this are a double to half time shift in the seco rhythm for Oya and the transition out of the first road of Titilaro for Chango.

In batá, most toques fit into the third category of isochronous pulsed grids. How that grid is phenomenologically entrained to in relation to clave, Topoi, and an isochronous pulse can be thought of in terms of additive or divisive rhythms as I will outline in the next section, clave (as meter).

---

[34] Here Manley Lopez and Nereo Gonzalez exhibit some Moyuba phrases for different Orishas over the top of Ñongo, a common dance rhythm used often in tambores.
Manley Lopez and Nereo Gonzalez, "Clase de Ñongo," YouTube, Oct 12, 2021, educational video, 1:14. https://www.youtube.com/watch?v=qjh14txkbBc.

[35] Polymaths, experts of dance, song, and drumming, are common culturally in this tradition. "Western" cultural epistemologies often impose pressure to focus on one craft (i.e., jack of all trades, master of none.)

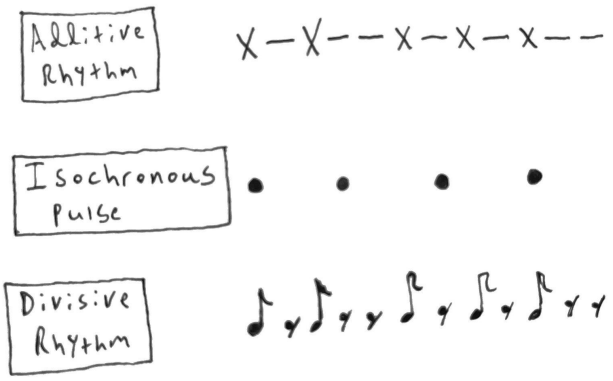
1.3 CLAVE (AS METER)

Clave is conceptualized and embodied in very different ways in global Afro-diasporic traditions. In Cuba, particularly in more modern popular music idioms in the last century, as well as in secular styles such as Rumba and Son, it is, in many ways, treated as "law." Often paired with an isochronous pulse, it offers a means to orient oneself to the music. In a more abstract sense, it is utilized in the creation of musical parts that dance in time both with and against onsets of clave. However, as Javier Diaz briefly touches on in his dissertation, clave in batá music is nuanced and complex and has quite a different relationship to rhythmic orientation and interaction than most other Cuban secular and sacred music.[36]

To preface my analysis of clave in batá drumming, I want to briefly take a more general look at clave phenomenologically. One could conceptualize clave as an asynchronous timeline in looking at it as an additive rhythm or as a divisive phrase that maps onto an isochronous pulse, subsequently creating two symmetrical sides of two beats each. I have outlined this distinction in Figure 1.2 below. Above isochronous pulses are divisive rhythms that "carve" against the grid but are often perceived concurrently much like 12/8 and 4/4 subdivisions in "fix" phrasing as well as the different spaces of entrainment previously outlined. Below the grid are additive rhythms that are conceptualized with much less regard for the durational constraints of the isochronous pulsed grid. These additive rhythms are thought of predominantly in relation to the consistent "cyclic" order of short and long attacks. For example, an additive division of clave is short, long, short, short, long.

[36] Diaz, "Meaning Beyond Words," 11, 135, 144.

Figure 1.2 (Additive/Divisive Rhythms)



Manley “Piri” Lopez is a specialist in a uniquely modern approach to improvisation in batá where he plays three batá, a cajon, a snare drum, and cymbals with his hands and a cowbell and hi-hat with each of his two feet. His approach is a tremendous example of an individual drummer who unites a polymetric approach with a multi-dimensional conception of entrainment.

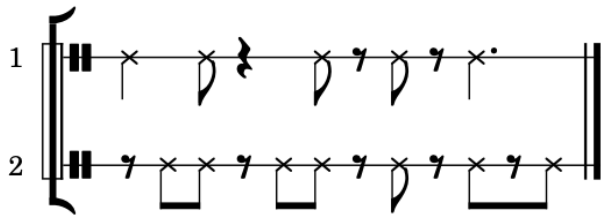
When I watched Lopez in Mexico City in 2022 improvise on three batá over clave with one foot, the clave moved and shifted with each flowing rhythm in a way that seemed to be “metrically” more crucial as a rhythmic base than the isochronous pulse. In scholarship, consideration of clave as a divisive rhythm that “carves” time is the more common and present conceptualization. However, I feel that phenomenologically interpreting a rhythm as additive allows a drummer to float and improvise around the phrase. There is a sort of dialectic weight to interpreting clave as both additive and divisive that aligns with Locke’s concept of

simultaneous multidimensionality, one that will be considered in more detail in Chapter Four.[37]

A parallel example of entrainment to clave as an additive rhythm is Fernando Benadons' analysis of clave entrainment in Rumba music.[38] Benadon analyzes a rhythmic quinto "ride" or stock pattern for improvisation played by Daniel Poyoux Vargas in a 2013 field recording in Santiago de Cuba in relation to different meters, clave, and the standard pattern. He shows that the off-beat ride pattern has more aligned onsets with the standard pattern and clave than the main pulses of 4/4, 6/4, or 3/2. This is an interesting thought experiment revealing alignment with clave in a manner functioning as meter. Clave is not an extra layer that is used in interaction with an isochronous pulse but becomes the base itself with which other layers interact. It is important to note that onset pairings are not always the best indicator of meter, as many key downbeats are not sounded in Afro-diasporic rhythmic spaces. A key example of this in Lukumí music is the Guiro bell pattern.

[37] Locke, ibid., 1.
[38] Benadon, ibid.

Figure 1.3 (Clave (1) & Guiro Bell Pattern (2))



Chris Stover has spoken about the hermeneutic complexities of timeline patterns as both determinant of meter and determined by meter, an observation that strongly aligns with clave in Afro-diasporic spaces.[39] Clave is so critical philosophically and generatively to most Afro-Cuban music that one could conceive the isochronous pulse of 4/4 and 12/8 as not possibly existing without clave carving through it. Stover's sentiment here gives further support for this dialectical relationship between an additive and divisive rhythmic conception of clave, allowing it to exist metrically as part of "a singular plurality" in David Locke's words.[40]

While master batá drummers have a deep understanding of clave as a generative and philosophical concept, clave is in some ways less crucial to orientation and interaction in batá performance practice. Unlike other Cuban styles such as Son and Rumba, clave is not always sounded in batá ensemble rhythms. Yet, clave is embodied and conceptualized in relation to songs, rhythms, and dance steps in both Guiro ceremonies and tambores. To understand this complex relationship of clave to batá performance practice, note that clave functions differently in each section of tambores.

In the Oro Seco, played with only drums in front of the altar for the Orishas at the

[39] Chris Stover, "Eight Axioms for a Theory of Timeline Spaces," (Invited talk, University of Oslo, October 16, 2017).
[40] Locke, ibid.

beginning of the ceremony, some rhythms have phrases composed of an odd number of beats and do not necessarily line up with clave. Examples of this include a section for Oya called the "wind shift" by Michael Spiro,[41] a call for Orichaoko, and the Rezo for Obatala. Some rhythms such as Inle in 7/4, and Osun in 6/4, are hypermetric to clave yet align after an even number of cycles. There is also a rhythm in 9/8 in the Cierre at the end of the ceremony, another section played with only drums (dry or seco). Clave does not line up clearly with these rhythms and many drummers historically may have disregarded it at times.[42] Considering the history of the directly encoded Yoruba language, the melody of these phrases could be considered more critical to transmission and communication with the Orishas than the formal organization (i.e., clave). The modern notion of clave, one found ubiquitously in Afro-Cuban music, may be at odds with the notion of how Lukumí praise was practiced historically in dry sections of the ceremony.

In other sections of the ceremony, clave is historically more present in the music. In the Oro Cantado and Wemilere sections, clave is crucial for many drummers as they are following the Akpon, the lead singer, and participants dance with each rhythm. Singers often clap clave as the songs grow in intensity while singing, and many musicians start to learn this music by singing and clapping clave before they are sworn in to play the drums. Manley "Piri" Lopez spoke to me about how different drummers prioritize clave to different degrees in batá music. For example, the Los Chinitos family, with a background initially in Rumba music, is interesting to look at in relation to their conceptual approach to batá in prioritizing clave. Other master

[41] Hill & Spiro, *Roadmap for the Oru del Igbodu (Oru Seco)*, 51.

[42] It is important to note that this is a contentious topic to some extent and control and knowledge of clave is undoubtedly a trait of a master drummer.

drummers historically had less of a relationship with Rumba and conceptualized the music differently with less regard to clave. Piri and Irian Lopez, his uncle, both had a deep relationship and interest in determining how clave fit with each toque. I feel that clave has been profoundly important in the creation of inventos[43] and abstracting the essence of calls and rhythms in adding improvisation and floreos[44] in drummers' individual concepts.

2. EMERGENT FORM

With respect to emergent form, batá drummers create larger modular structures of form in sculpting ceremonial performances. This is shown in a complex cueing system.

CUEING SYSTEM

The batá drumming tradition involves collective memorization of specific "calls" cued by the largest drum, the iyá, signaling movement forward to different sections, or roads, of each Orisha rhythm.[45] For some practitioners, these roads align with different characterizations of each Orisha in the religion, such as with Elegua, a young boy or old man with a cane. Within each road, there sometimes exist call and response conversational streams between the iyá and the itótele. In these streams, the iyá plays something slightly different than its "base"[46] and the

[43] Inventos are more modern rhythms that were created in Cuba by certain drummers and have become a part of the repertoire.
[44] Floreos are short flourishes that are at times played on okónkolo or itótele without a call from the iyá triggering them.
[45] In a few very specific cases, the itótele or okónkolo could call a transition into a new section. This is possible going into the dance rhythm of chachalokpfun from itótele.
[46] A "base" is the basic pattern for an Orisha rhythm. To some extent different schools of drumming have slightly different bases but master drummers have a feel for the different options that could be utilized.

itótele answers with a variation. At times these variations are predetermined and circumscribed, while at other times there are several options that one could choose from. In more modern contexts, there is more flexibility in choosing answers or improvising in "playing what one hears." I will analyze this progression more in Section 5 regarding modern improvisation and virtuosity.

Kenneth Schweitzer and Javier Diaz's analysis of the cueing system is significant.[47] Diaz lists four different spaces wherein iyá calls can exist.

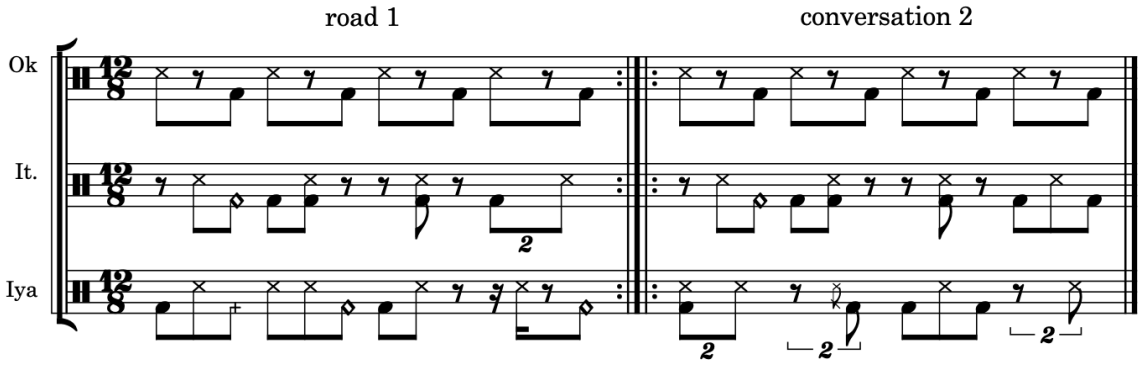
1. Conversation (**within a section of a toque**) Call (Llame), played by the iyá, Response, played by the itótele
2. Section—Call (Llame), played by the iyá; **it signals a switch to another section**
3. Call (Llame)—Section (**Initial Call before a toque**)
4. "Conversation" or Moyuba (**within the basic pattern of a section**), played by iyá only

Calls by the iyá can trigger conversations within roads, new sections, or a whole new Orisha rhythm. Diaz notes that Moyubas, speech-like iyá improvisations that do not ask for itótele responses, are sometimes called conversations due to their historical connections with Yoruba and Lukumí speech encoding. These Moyubas do not trigger movement to a new section. The difference between conversations and roads remains ambiguous in scholarship and western-notated teaching tools. I am defining conversations as when the iyá part changes

[47] Schweitzer, ibid.
Diaz, ibid., 103.

slightly to trigger a specific itótele response within a road.[48] An example of this, seen in Figure 1.4 below, could be conceptualized in La Topa, the first rhythm in the Oro Seco for Elegua. The second section on itótele, called conversation two in Michael Spiro and Justin Hill's transcriptions, is very similar to the first road except for an extra tone on the last partial of beat four. The iyá part is significantly different.

Figure 1.4 (La Topa for Elegua)



What would make this a conversation within a road and not a road in itself? One could posit that it is a conversation as the itótele part is very similar to the first road and the okónkolo part does not change between the two sections. One could alternatively call it a road as the iyá part is significantly different. This is a somewhat semantic discussion as formally defining sections as conversations or roads is not necessarily "law" among different batá drummers. Yet I feel that these definitions have some role in improvisation and the creation of inventos in drawing the lines of which sections can be improvised on for longer or skipped in modern ritual settings.

[48] Conversations should not be confused with "floreos," parts that are slight variations usually on okónkolo or itótele that are not specifically triggered by an iyá call.

The cueing system functions very differently in each section of a tambor. In the Oro Seco, the iyá has complete liberty in deciding when to transition between each part but does follow a unique order of Orishas depending on which Orisha the specific tambor is for. There is also a specific order in the Cierre section that features only drums at the end of the ceremony.

In the Oro Cantado, the iyá drummer has the unique responsibility to make calls between different Orisha rhythms in following the akpón, the lead singer officiating the ceremony. The drummer knows which songs fit well with certain rhythms and must choose which rhythm to play in real time after hearing a section of the song sung a capella. Schweitzer's book is particularly helpful in his system of classifying rhythms as applicable to one Orisha or song, a few, or many.[49] The rhythms played and transitions cued are also in dialogue with the general energy of the room, the chorus singing, and the dancer for each individual Orisha. Drummers get used to specific patterns and trends regarding which rhythms are cued in which order and ensembles develop unique styles over time. Master drummers can function effortlessly within different "crews'' by understanding many options of how one could maneuver modularly in ritual settings.

In teaching settings, and sometimes in ritual settings in lower energy sections, drummers use playfulness in teaching to test younger drummers. In my studies with Piri and Lázaro, each drummer would play half of a call or even just leave out a few notes to test whether I would move onto the next section out of step. This also can happen in transitions in the Oro Seco between Orisha rhythms. Sometimes drummers stop completely between rhythms and make the call for the next rhythm, but often the time warps and the ensemble

[49] Schweitzer, ibid., 77.

moves directly into a new rhythm at a slightly different tempo. Master drummers will sometimes playfully touch on hints of the new Orisha rhythm in improvising around the iyá part without actually calling the new rhythm, confusing younger drummers. Masterful use of Moyuba phrases for other Orishas further obfuscates this concept and is another reason that drummers sitting at all three drums must know and embody the calls at a precise high level.

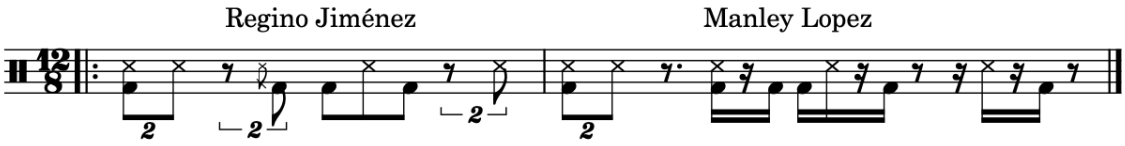
Kenneth Schweitzer tells an applicable story of the use of play and "trickery" in teaching in relation to master batálero Pancho Quinto, who I will touch more on in Chapter 2, Section 2.4.[50] In a class, Pancho started every rhythm on itótele and okónkolo and asked Schweitzer to play the correct pattern on iyá out of order. This exercise, in which he had to be a "follower" on iyá, was used to train him in hearing other sides of the music and break away from muscle memory and cognitive dependence to extra-musical cues like body movement.

This concept of "play" becomes elusive in looking at the modernization of calls in batá music. As drummers have started to improvise more around the "base," particularly on the iyá drum, the calls have developed in prioritization of very specific beats that signify the call as happening. This is demonstrated in conversation two in La Topa for Elegua. The clear tone played on the and of two and the two eighth notes on beat one on the cha head are the most important markers in triggering this conversation. It is also clear that both markers do not exist in the first road, exhibited above in Figure 1.4. In looking at Spiro and Hill's transcriptions of Regino Jiménez on iyá in the Ilu Aña recordings and Lopez's playing in his instructional YouTube video, one can see how this call and pattern could be played differently.[51]

[50] Schweitzer, ibid., 134.

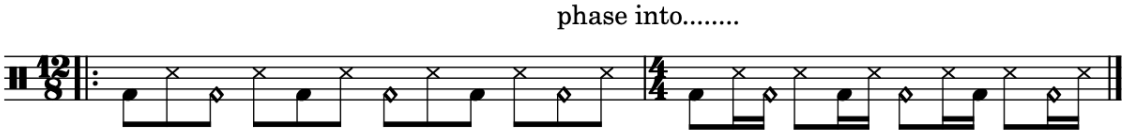
[51] Manley Piri Lopez, "oru seco la topa," YouTube, June 5, 2009, educational video, 5:36, https://www.youtube.com/watch?v=s7cuuu6ZjMk.

Figure 1.5 (Elegua La Topa Road 2 Iyá Comparison)



Another interesting component of the cueing system is the use of phasing rhythms from one metric space to another. This is an example of abstraction of the three entrainment spaces in a formal manner and is shown in the transitions of the beginning of Titilaro for Chango and the Aro for Yemaya. Double-time and half-time shifts are also utilized in rhythms for Oya and a rhythm called Sokutanibo that is used for many Orishas in the Cantado and Wemilere sections.

Figure 1.6 (Titilaro for Chango Itótele Phase)



The cueing system is a uniquely beautiful facet of batá performance practice that does not exist in many other Afro-diasporic forms of music. Master iyá drummers' use of playfulness in obscuring calls and the modernization of calls in contemporary batá practice go hand in hand in keeping drummers on their toes and bringing life to this practice of painting “emergent forms.”

3. RHYTHMIC ARCHETYPES

Similar to James Burns' work in defining rhythmic African and Afro-diasporic archetypes, I have created a list that applies to batá music specifically.[52] The list includes grounding rhythmic cells that align with my thoughts on polymeter and entrainment, specific archetypes for each batá drum, and collective ensemble archetypes. As the batá rhythmic canon is vast, I will be listing many Orisha rhythms that do not have complementary scores for reference. For reference texts that have western-notated transcriptions of batá rhythms, see texts by Michael Spiro & Justin Hill, Don Skoog, and John Amira & Steven Cornelius.[53] Each text is slightly different, as is true of the idiom itself, with slightly different versions of each "base" rhythm. Master batá drummers are aware of all these nuanced possibilities.

3.1 BASE RHYTHMIC MATRICES

Base rhythmic matrices are rhythmic cells that could help musicians internalize the sounding collective whole of certain batá rhythms.[54] The most prominent rhythmic ratio in most batá rhythms, as well as arguably most Afro-diasporic music, is three over two. When

---

[52] James Burns, "Rhythmic Archetypes in Instrumental Music from Africa and the Diaspora," *Music Theory Online*, Volume 16, Number 4, (2010).

[53] Hill & Spiro, ibid.
Don Skoog & Alejandro Carvajal Guerra, *Batá Drumming, The Oru Seco, The Instruments, the Rhythms, and the People Who Play Them*, (The Contemporary Music Project, 2010).
John Amira & Steven Cornelius, *The Music of Santeria: Traditional Rhythms of the Bata Drums (Performance in World Music Series)* (Mel Bay, 1999).

[54] I use the term matrix partially in reference to the "Los Chinitos" family and their perception of rhythmic base contrapuntal lines in Rumba Guarapachangueo as a matrix. Pedro López references this in an interview with Antoine Miniconi.
Antoine Miniconi, "Pedro Lopez Interview," manleycvenglish, 2007, https://manleycvenglish.blogspot.com/2007/03/pedro-lpez-in-this-interview-conducted.html.

binarized, the three beats become a tresillo rhythm as each attack is pushed over just slightly. Both the tresillo pattern and three over two polyrhythm can be found in different modulations and starting points throughout the repertoire. Many Orisha rhythms have more than one cycle of three over two overlaid. The rhythms for Orichaoko, Osun, and Obba all deal with a three over two cycle at the eighth note, quarter note, and half note level. Hypermetric layering of the same phrase can also be seen in the ways drummers improvise around chachalopkfun. In this rhythm, the tresillo overlaid with two isochronous beats is felt at the half note and whole note level as well as in relation to the Clave. The hypermetric layering of three over two and the tresillo rhythm in relation to isochronous beats are seen below in Figures 1.7 and 1.8 as my first two base matrices.

Figure 1.7 (Base Matrix 1)

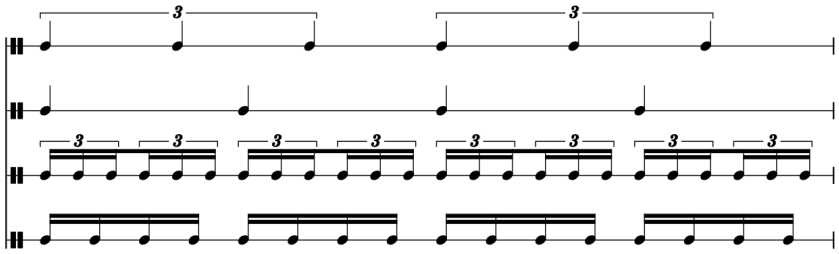
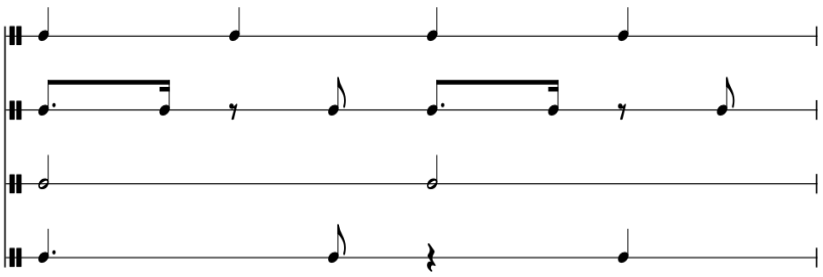
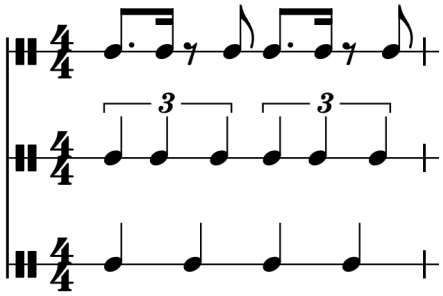


Figure 1.8 (Base Matrix 2)



The third base matrix, taken from David Peñalosa's clave matrix, includes a 3/2 polyrhythm in relation to the tresillo pattern.[55] It is a combination of the first two base matrices. The internalization of the distance between the 2nd and 3rd beats of the even 3 beats and the tresillo, in line with Chris Stover's beat span concept,[56] is key in looking at batá music. This idea is analyzed in more detail in Chapter Four.

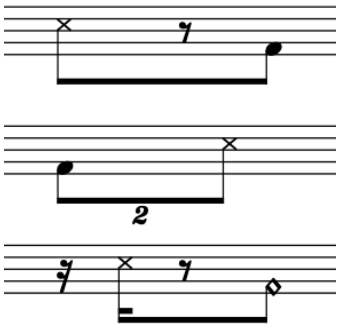
Figure 1.9 (Base Matrix 3)



The fourth matrix is taken from James Burns' paper on African and Afro-diasporic archetypes.[57] RA1, or the small interweave, is an abstraction of 4 over 3 that could be binarized and tightened in myriad ways. In the first road of La Topa for Elegua the collective sound on beat 4 between the three drums creates this interweave.

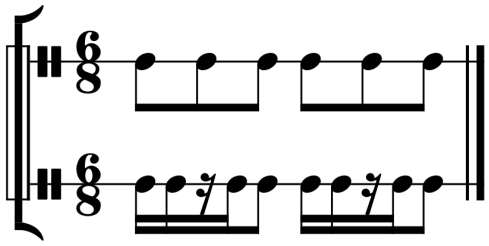
[55] David Peñalosa, *The Clave Matrix, Afro-Cuban Rhythm: Its Principles and African Origins*, (Bembe Books, no. 1, 2009), 109.
[56] Chris Stover, ibid.
[57] Burns, ibid., 8.

Figure 1.10 (La Topa Beat 4, RA1)



In its fully binarized form we see it in the call for Ochosi into the third road as well as Ifa/Orula. Yet, it is important to note in these examples that it only takes up three beats and applies a "rhythmic comma" to fill out the four bars. Richard Cohn uses the term "rhythmic comma" in a similar nature to how a syntonic comma functions.[58] Titilaro for Chango is an interesting binarization of 4 over 3 as well.

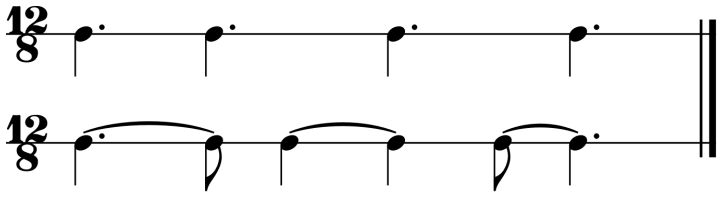
Figure 1.11 (Base Matrix 4, RA1)



[58] Richard Cohn, "A Platonic Model for Funky Rhythms," *Music Theory Online*, vol. 22, issue 2 (2016)

The fifth matrix I will consider is James Burn's RA 6[59], or shifting three archetype. This archetype highlights a longer cycle of 4 over 3 and is seen in rhythms such as Titilaro for Chango, Wipami for Chango, and improvisation in ñongo. Note in the itótele part for Titilaro that the enu rhythm itself is the tresillo, but as the part alternates between muff and open tone we hear the 4 over 3 relationship. This section also phases from 4 over 3 in 6/8 to 4 over 3 in 4/4. A clearer 4 over 3 ratio is heard at the end of Meta for Chango as the itótele plays fast groups of four over the bigger three pulse. Yeggua is another example as some ensembles' okónkolo part dances around an in "fix" phrase leaning towards triplets with the rest of the ensemble in duple with 16th note phrases.

Figure 1.12 (Base Matrix 5, RA6)

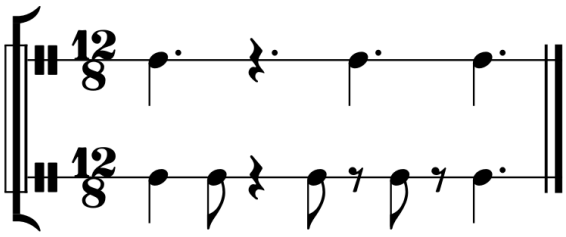


The sixth matrix I will consider is James Burn's RA 5 or 341 archetype.[60] This is seen in the itótele part for Obatala as the enu head plays 1, 3, and 4 or 1 and 4 depending on the iyá call. It is also seen in the itótele part of ñongo. This archetype, in relation to clave, accents the push-pull binary of tension and resolution that Chris Stover and other theorists have

[59] Burns, ibid., 16.
[60] Burns, ibid., 15.

addressed.[61] The omission of 2 gives space to the openness of the 3 side of the clave.

Figure 1.13 (Base Matrix 6, RA5)



Importantly, clave itself is also in line with Burn's concept of archetypes. Burns sees certain rhythmic phrases as learned and embodied over long periods of time and muscle memory and internalization as more key than abstract conceptions of rhythms such as polymeter and entrainment. This simplifies the concept and I feel is most like how emic performers may conceptualize this music. I analyze clave as a rhythmic dialectic in a deeper sense in Chapter 4.

3.2 OKÓNKOLO

In looking at archetypes for each batá drum, a salient consideration is the possible "function" of each drum in the ensemble. Due to the lack of improvisation and the consistent use of ostinatos over many different changing roads, the okónkolo can be considered as a timekeeper. It helps to scaffold a texture for melodies to bloom around. Manley Lopez's okónkolo sound and technique, addressed in Section 6.1, aims to replicate the sound of a bell tone. When considering the function of bells in much Afro-diasporic music, it makes sense that

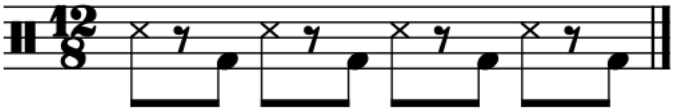
[61] Stover, ibid.

one would consider the okónkolo a timekeeper. However, many drummers, such as Roman Diaz, have spoken about the collective batá ensemble as one drum in that the okónkolo also undoubtedly contributes to the melodic contours.

Even though in "fix" phrasing is present and accessible in most rhythms, certain batá rhythms lean more towards binary divisions or ternary divisions of the beat. Below is a list of five archetypes, some of which lean towards ternary divisions and some towards binary divisions. There are more rhythms that are distinctly ternary than are binary.

The first archetype is colloquially and phonetically named ki-la among batá drummers. Roman Diaz has spoken on ki-la as an omnipresent particle of the idiom, as it is found in so much of the repertoire. Ki-la is a low to high motion from the enu head to the cha head.[62] The slap marks each quarter note. The movement of high to low creates oscillation that initiates motion in the music. A few of the rhythms that utilize ki-la are seco rhythms for Elegua, the first road for Obaloke, Babalu Aye, Osun, the middle section of Obatala, Dada, Oggue, Orichaoko, Yemaya, Obba, a later road of Oya, and ñongo. Ki-la is also in Ibedji and Yeggua as binarized into sixteenth notes.

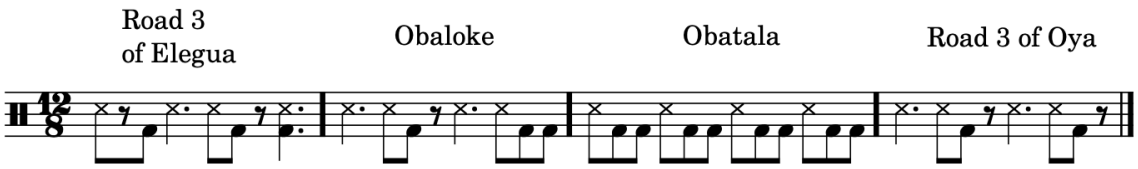
Figure 1.14 (Okónkolo Archetype 1, Ki-la)



[62] The motion is usually right to left but some drummers play Surdo and flip the drum on their lap so this motion would then be left to right.

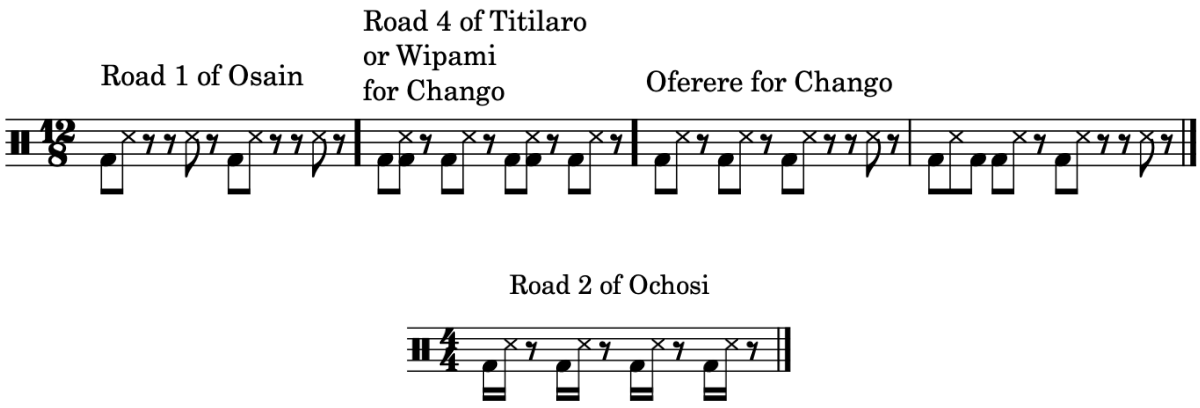
The second archetype is an abstraction of the ki-la contour where the slap still exists on the downbeat but the enu head is sometimes varied from the consistent third partial. The dance and motion are still similar to the first archetype and seems to circle around the ghost of ki-la. Some examples of this archetype in practice are the third road of Elegua; the second road for Obaloke; Obatala; the road of Oya before the half time modulation; Meta for Chango; a more traditional variation on Yeggua; Tui-Tui for Oya; the change in the Aro for Yemaya; the second road of Obba; and Bayuba for Chango.

Figure 1.15 (Okónkolo Archetype 2)



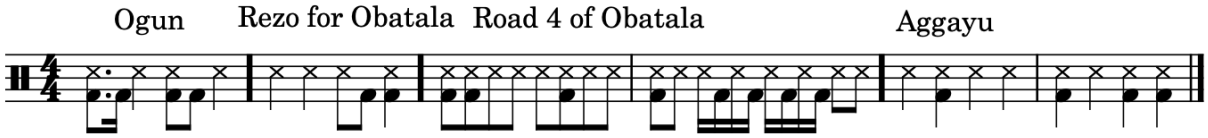
The third archetype is a further abstraction of ki-la where the enu tone is on the downbeat, but the high low contour still exists as the slap is on the long side of short-long. This also mirrors the most common archetype for itótele that is usually paired with ki-la on okónkolo. Some examples of this are the second road of Ochosi, the first and third road of Osain, the second road of Titilaro for Chango, Oferere for Chango, and Wipami for Chango.

Figure 1.16 (Okónkolo Archetype 3)



There are two key archetypes that exist in rhythms that lean more towards binary divisions of the beat. The fourth okónkolo archetype includes all of the binary okónkolo rhythms that include the slap on the downbeat. Some of these include an enu melody that outlines the sides of the clave. Some of these rhythms are Ogun, the Rezo for Obatala, the last two roads of Obatala, Aggayu, Ifa, Ibedji, and Oya. Inle is interesting in that many players play this phrase differently and there is one approach that obscures the clave and one that solidifies it.

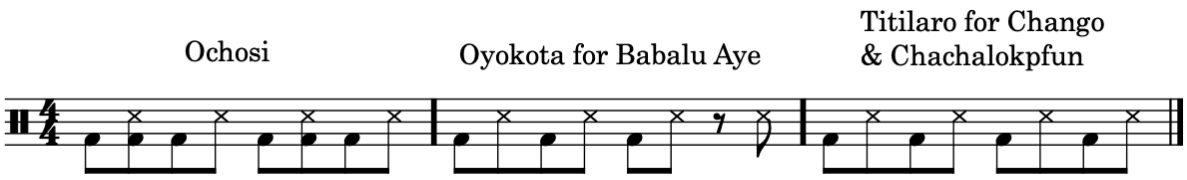
Figure 1.17 (Okónkolo Archetype 4)



The fifth okónkolo archetype includes the slap on the offbeat. This archetype breaks against my conception around ki-la as a space of motion as the okónkolo cha tone solidifies the downbeats. It is interesting to note that when rhythms are fully binary one does not often hear

ki-la with the offbeat on the enu. Rhythms for Ochosi, Oyokota for Babalu Aye, Titilaro for Chango, chachalokpfun, and Oshun exemplify this archetype.

Figure 1.18 (Okónkolo Archetype 5)



3.3 ITÓTELE

The itótele keeps time, as well as interacts with and answers the iyá in conversation. The slap on the cha head is usually a consistent "ride" while the enu head changes in floreos and conversations. Javier Diaz speaks of itótele as requiring a "mechanical/rhythmic coordination that allows the drummer to perceive the compound sonic image of two independent rhythmic lines" as parallel coordination.[63] I feel that itótele also utilizes another type of parallel coordination, one that requires the cognitive ability to keep time in hearing the compound sonic whole while also interacting and responding in time. This is similar in some ways to the cognitive approach of keeping time and comping in jazz drumming performance practice.

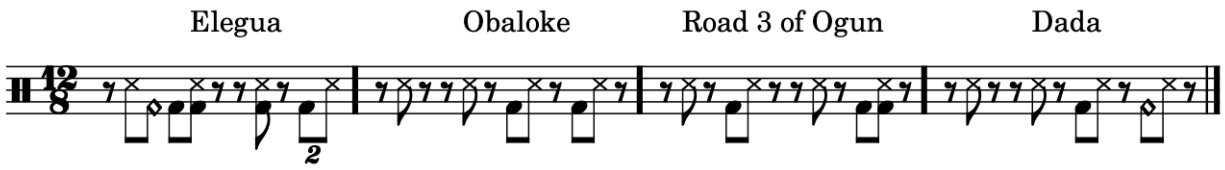
Itótele is particularly interesting as it often plays binary phrases in rhythms in which the iyá and okónkolo play ternary rhythms and ternary phrases in rhythms where the iyá and okónkolo play binary rhythms. For this reason, the following four archetypes are not organized

[63] Diaz, ibid., 58.

by whether the sonic whole is felt more closely to binary or ternary, as is the case with the okónkolo archetypes.

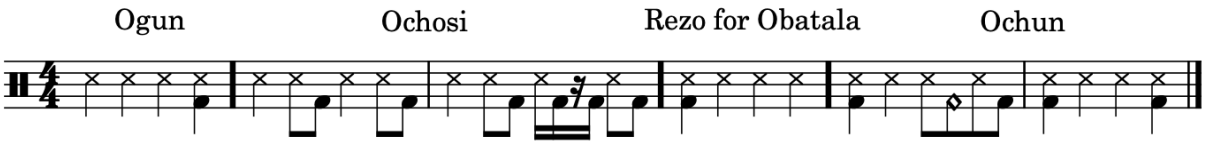
The first archetype, and arguably the most common, has the cha head positioned on the second partial of the triplet. This can be seen in the seco rhythms for Elegua, Obaloke, Babalu Aye, the third road of Osun, the third road of Obatala, Dada, Oggue, Meta for Chango, Yeggua (in "fix"), the fifth road of Oya, the Aro and Omolode for Yemaya, the second road of Obba, Odudua, and Tui-tui for Oya.

Figure 1.19 (Itótele Archetype 1)



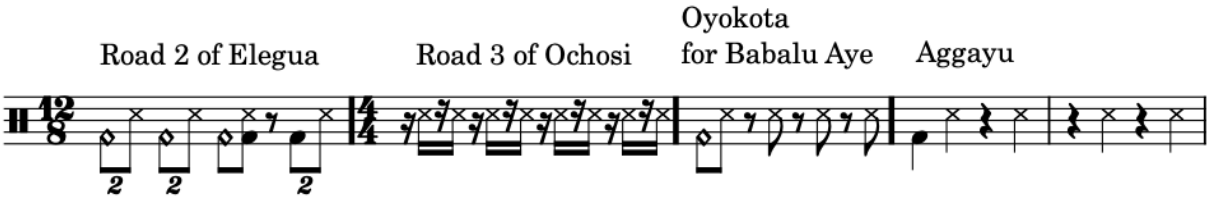
The second itótele archetype includes the cha head on quarter notes on the downbeats marking the time. This archetype is more common in binary rhythms. Some examples of this archetype are the seco rhythms for Ogun, Ochosi, Osain, the Rezo for Obatala, the second road of Obatala, the second and third road of Ifa (Orula), Ochun, the second road of Oya, and Iyesa.

Figure 1.20 (Itótele Archetype 2)



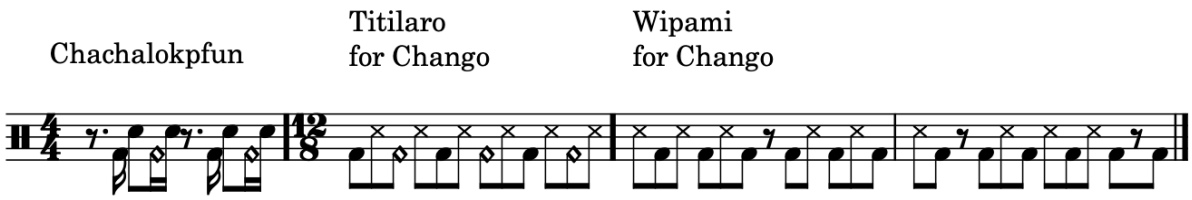
The third itótele archetype occurs when the cha head is on offbeats (or the “ands”) in a binary space. This often exists in cases in which the iyá and okónkolo are playing ternary-phrased rhythms. Some examples of this are the second and third road of Elegua, the third road of Ochosi, Inle, Oyokota for Babalu Aye, the fourth road of Osain, Osun, the fourth and fifth roads of Obatala, Aggayu, the first road of Ifa, Orichaoko, Ibedji, the third and fourth roads of Oya, the first road of the Aro for Yemaya, Yakota, and Obba.

Figure 1.21 (Itótele Archetype 3)



The fourth itótele archetype is the least common and includes rhythms where the cha head alternates between offbeats and onbeats. Some examples of these rhythms are chachalokpfun, Titilaro for Chango, and Wipami for Chango.

Figure 1.22 (Itótele Archetype 4)



3.4 IYÁ

Because iyá has the most space for improvisation in choosing what to play, deriving archetypes is more challenging. It could also be argued that what the iyá adds to the sonic whole is what makes an Orisha rhythm specific to an Orisha. In this logic, the iyá floats on top of archetypal combinations of itótele and okónkolo. This is not to say that there are not certain patterns that exist and connect certain iyá rhythms. For example, Osun, Orichaoko, and Obba have a similar pattern. Obaloke, Obba, and Ñongo are also similar. The seco rhythms for Ogun and Ifa have a section that uses the exact same rhythm as an ensemble. These connections are significant to religious practitioners in the relationships between respective Orishas in the faith.

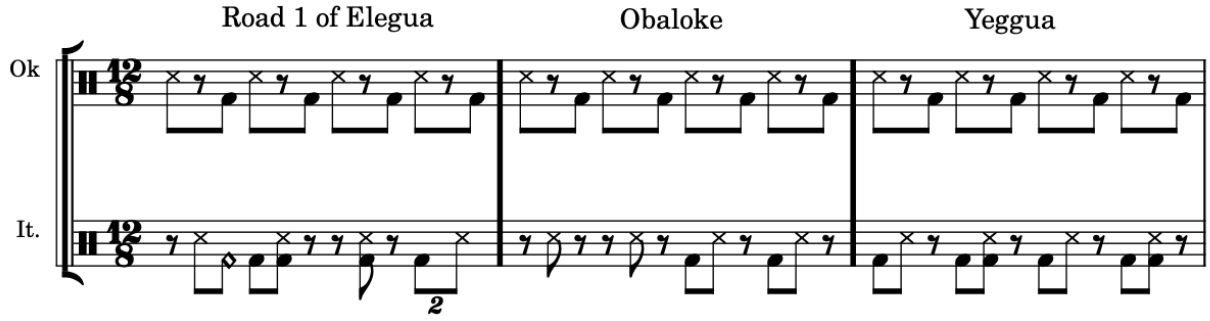
3.5 ENSEMBLE ARCHETYPES

In looking at ensemble archetypes, I examine common pairings of itótele and okónkolo that create textural sonic "spaces." Diaz speaks of these spaces as "harmonic zones."[64] The first three ensemble archetypes most commonly occur in ternary spaces and the last four most commonly occur in binary spaces.

The first ensemble archetype is the most common in the repertoire and includes a pairing of ki-la, the first okónkolo archetype, with the first itótele archetype. It can be found in the first and fourth roads of La Topa for Elegua, Obaloke, Babalu Aye, the third road of Obatala, Dada, Oggue, the third road of Osun, Yeggua, the final roads of Oya, and the Aro for Yemaya.

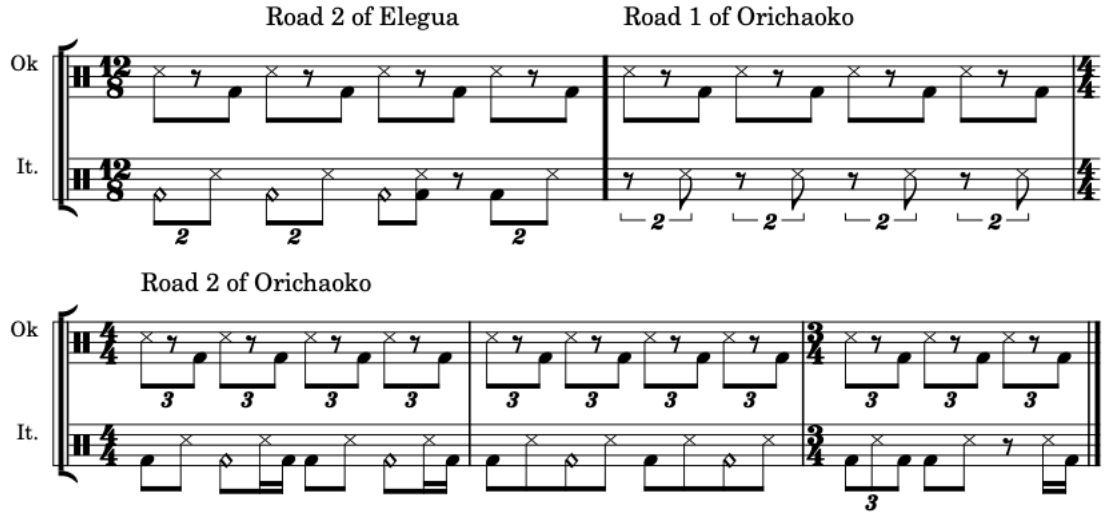
[64] Diaz, ibid., 83.

Figure 1.23 (Ensemble Archetype 1)



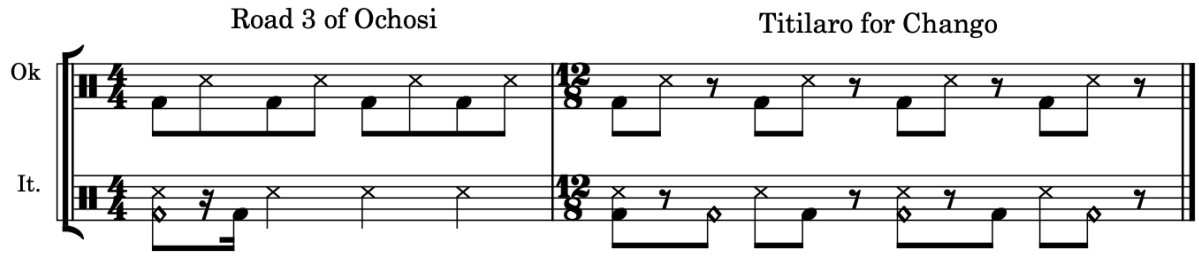
The second ensemble archetype I identify includes okónkolo with the cha on the downbeat and the itótele cha on the binary offbeat. This is a combination of the first or second okónkolo archetype and the third itótele archetype. It can be found in the second and third roads of Elegua, Osun, the first and second roads of Obatala, Orichaoko, the first road of Yemaya, and Obba.

Figure 1.24 (Ensemble Archetype 2)



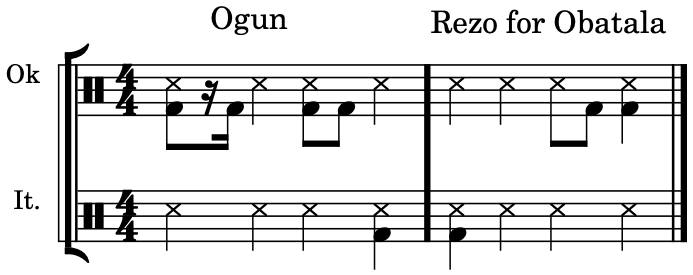
The third ensemble archetype includes flipped roles between the okónkolo and the itótele. The okónkolo cha is on the second partial of the triplet or eighth note offbeat and the itótele's cha marks the downbeat. This is a combination of the third okónkolo archetype and second itótele archetype. Some examples of this include roads five and six of Ochosi, the fourth and fifth roads of Titilaro for Chango, Oferere for Chango, and Wipami for Chango.

Figure 1.25 (Ensemble Archetype 3)



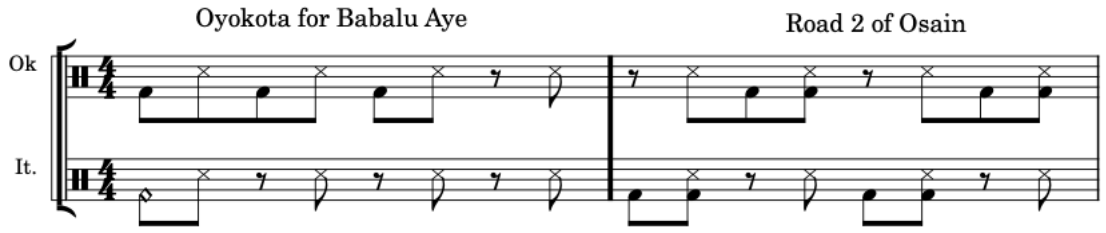
The fourth ensemble archetype utilizes highlighted downbeats on both itótele and okónkolo with the cha heads. This archetype is less common as there is usually a rhythmic counterpoint between these two cha heads. Some examples of this archetype are the seco rhythm for Ogun, the Rezo for Obatala, and the second and third roads of Ifa.

Figure 1.26 (Ensemble Archetype 4)



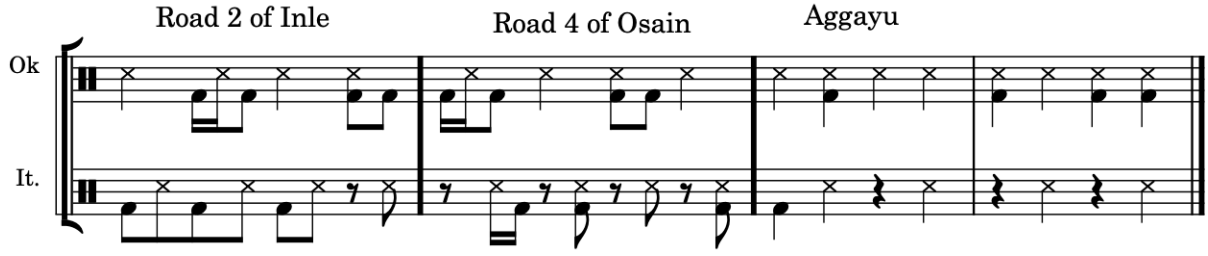
The fifth ensemble archetype utilizes highlighted offbeats on both itótele and okónkolo with the cha heads. Some examples of this archetype are Oyokota for Babalu Aye and the second road of Osain.

Figure 1.27 (Ensemble Archetype 5)



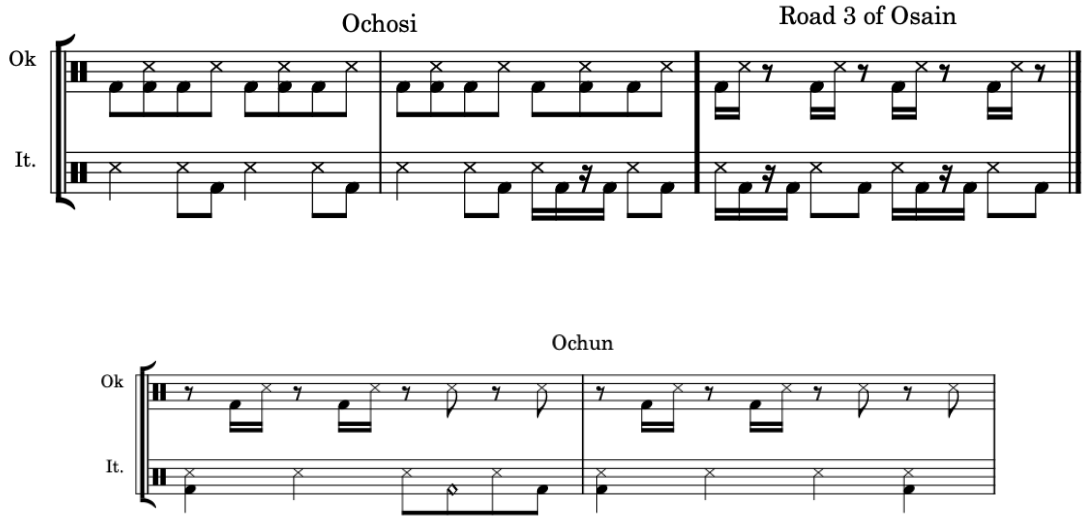
The sixth ensemble archetype utilizes okónkolo and itótele chas switching off with the okónkolo on the downbeat and the itótele on the offbeat. Some examples of this are Inle, the fourth road of Osain, the fourth and fifth roads of Obatala, Aggayu, Ifa, Ibedji, and Oya.

Figure 1.28 (Ensemble Archetype 6)



The seventh ensemble archetype utilizes okónkolo and itótele chas switching off with the itótele on the downbeat and the okónkolo on the offbeat. Some examples of this are Ochosi, the third road of Osain, and Ochun.

Figure 1.29 (Ensemble Archetype 7)



The most common groupings contain the okónkolo cha on the downbeat with the itótele cha on the offbeat in both binary and ternary spaces. Respectively, if the itótele takes over the downbeat, the okónkolo often takes over the offbeat. Balance and symmetry are key.

Future research could seek collective whole archetypes and matrices utilizing all three drums. The slight nuances between the similar patterns of Obba, Orichaoko, and Osun would be a useful place to start. Another possible approach that I learned from Antoine Miniconi was that of singing and analyzing the two enu heads of itótele and iyá and adding in the open spaces the iyá cha. The player can then clap clave over singing the three-part matrix to find all of the voices that fill up the melodic zone. The ensemble archetypes I have listed above are more commonly interpreted as harmonic zones in Javier Diaz's terms.

3.6 MODULARITY

For composers, the listed archetypes above could be utilized in compositional practice or in the creation of algorithmic systems that are batá-like and pseudo-generative. A common link through many of these archetypes is the fact that many of these rhythms are modulations of commonly used rhythmic shapes that start on different spots in the phrase. The emergent texture of the batá ensemble often feels cyclical, as if in perpetual motion. In analyzing Afro-diasporic music, theorists have connected this feeling partially to the fact that many cyclical-feeling rhythms are made up of these different modulations. Master drummers hear and internalize many modulations of similar shapes in a way that generates a multi-dimensional interpretative rhythmic approach. Kofi Agawu, in consideration of a similar feeling with regards to different starting points of the same African timelines, has referred to them "as if endowed with a permanent anacrusic feeling."[65]

However, modularity becomes more complex conceptually in relation to clave. When one improvises in reference to clave as "meter," one cannot assume that any phrase can be shifted conceptually to different spaces of the beat and keep its exact phrasing. Micro-timing and phrasing allow for different beats in the clave to be approached differently. At different tempos, improvisers also treat the 2 and 3 sides of the clave differently. Theorist Joao Martin's work has addressed a similar issue in regard to rhythmic phrasing of uneven sixteenth notes in Brazilian Maracatu music.[66] The internalization and omnipresence of clave in Afro-Cuban music

[65] Kofi Agawu, "The Metrical Underpinnings of African Time-Line Patterns," YouTube, June 20, 2017, educational video, 20:45, https://www.youtube.com/watch?v=8ypTYNGLr5A.
[66] Joao Martins, "Gismontisms: composition and improvisation techniques of composer-performer Egberto Gismonti," (AMS-SEM-SMT, 2022).

is a diasporic concept that breaks away from "true" modularity to some degree. I cover this in more detail in Chapter Four.

This complicated diasporic perspective on modularity does not imply that these shapes and their embodied internalizations are not still key to idiomatic batá practice. Some examples of modularity in practice in batá music are the okónkolo rhythms for Ogun, Ifa, and Elegua Nitan. This rhythm also surfaces in the itótele answer to the fifth road of Ochosi. In Ogun and Ifa, the rhythm starts on the downbeat and in Elegua Nitan it slides over to starting on 2. Other examples of modularity in practice are the okónkolo parts for the 1st road of Inle, the 4th road of Osain, and the last road of Obatala. The rhythms of Inle and Osain start on the downbeat while the rhythm for Obatala starts on 2. Finally, the okónkolo rhythms for Oya and Aggayu reveal modularity in practice. If one note is subtracted from the Aggayu rhythm, it is 3 beats off from the Oya rhythm.

When more modern batáleros create inventos, modularity is an important tool. In my studies of Piri's technique and concept, I found he would often move base phrases over one sixteenth note or triplet to vary the rhythms on iyá. Kenneth Schweitzer also mentions Pancho Quinto's use of modularity in teaching to allow a "performer to think harder about his part and, presumably, develop a deeper understanding of it."[67] This technique keeps components of the tradition alive in a more modern improvisational space as opposed to improvising with no tether to the tradition.

[67] Schweitzer, ibid., 137.

3.7 SYMMETRY

Considered conceptually in parallel to modularity, many batá rhythms find balance in latent or manifest symmetry in individual patterns or between two parts. As previously mentioned, there is very little overlap of the enu heads between itótele and iyá as the itótele usually answers and fills in the space of the iyá part. If it does happen, it is likely an enu muff on one drum overlapped with an enu tone on the other drum, giving the collective sound a thicker, more nuanced timbre. This tendency creates symmetrical interweaved shapes that flow over the top of the archetypal foundations discussed in Section 2.2. There are certain symmetrical shapes in individual parts that are palindromic in nature such as the okónkolo phrases for seco rhythms for Oya and Aggayu. In these rhythms, the first and second half of the phrase fit into each other like a glove.

Symmetry also exists in improvisation in more modern "dance" rhythms such as ñongo.[68] A possible way of approaching itótele answers to iyá variations could be conceptualized as using the reverse of clave. The iyá always calls on the first half of the phrase, the 3 side, so that the itótele answer fits on the 2 side. However, the base phrase and variations often align more with attack onsets of the 3 side, creating an illusion of two repetitions of the 3 side.[69] This concept is also utilized in the rhythm for Obaloke in the Oro Seco.

[68] I am considering "dance" rhythms as rhythms that are very often used throughout ceremonies such as ñongo, chachalokpfun, and Iyesa. "Dance rhythms" are aligned with Kenneth Schweitzer's classification of rhythms used for many Orishas.

[69] For a much deeper analysis of ñongo, see Kenneth Schweitzer's last two chapters of The Artistry of Afro-Cuban Batá Drumming.

Schweitzer, ibid.

Javier Diaz aptly highlights balance and symmetry within ensemble melodic structures. Many batá rhythms also create melodic palindromes (Aggayu, Oya, Obatala) in how each drum part fits together.[70] In this nature there are also poles of complexity in that when an itótele part is busier the okónkolo part may be barer. This concept is true in many different forms as all three drums trade off levels of complexity to some degree.

4. ELASTICITY & RHYTHMIC PHRASING

This section considers batá drummers' rhythmic phrasing in conscious and subconscious relationship to the aforementioned ideas about meter, entrainment, and form in Sections 1 and 2. The focus here is on the use of micro-timing and rhythmic elasticity in batá performance practice, specifically the interaction side of Fernando Benadon's orientation/interaction paradigm.

4.1 ELASTIC TIME SPACES & MICRO-TIMING

Due to the fact that traditionally much of the batá repertoire is circumscribed and memorized, improvisation is an elusive and intriguing facet of the music. The okónkolo drum mostly plays "ostinati" with a few spaces for embellishments or floreos. Gracenote or flam placement when playing both heads at almost the same time is often used musically in an individual okónkolo style. In my studies with Lázaro Galarraga and Bobby Wilmore in Los Angeles, they often spoke of specificity as to which head played the grace note in different

[70] Diaz, ibid., 71.

Orisha rhythms. Most of the time, the cha head plays a grace note before the enu but for a few rhythms such as Osain the enu plays a grace note before the cha.

The itótele rarely uses grace notes and players are encouraged to find near perfect double stop attacks when playing both heads together. As previously noted in Section 3.3, the itótele mostly follows the iyá and answers calls in conversations but occasionally has the ability to vary between a few options of answers. The iyá has the most flexibility with improvising around stock phrases, often called "the base."

With little choice over what notes are played, improvisation in traditional batá contexts predominantly deals with phrasing, dynamics,[71] tempo,[72] and real-time creation of form, as Orisha rhythms are to a degree modular. "Fix" phrasing, polymeter, kaleidoscopic entrainment, and embodiment of clave all contribute to how master batá drummers make these decisions. Comparably, western classical musicians may learn excerpts and make nuanced individual decisions about phrasing. Constraint opens the door to nuance. Traditionally, batá drummers found their individual sound and voice out of the discipline of playing circumscribed parts.

4.2 PLAYING WITH SPACE

Another common facet of African and Afro-diasporic music is the creation of density out of "playing with space." Here, I am speaking of rhythmic choices in ensemble settings in which

[71] Dynamics are an interesting component of batá music as I've had different drummers tell me antithetical ideas about them. Some feel that everything is played loud for the sake of transmission to the Orishas and some feel that the Orishas require different dynamic levels and dynamic contours to create form. More modern drummers play much louder as I will address in Section 5.

[72] Note Javier Diaz's research on tempo maps in different sections of ceremonies in his dissertation.
Diaz, ibid., 125.

small rhythmic phrases are slid into open spaces to create thick dense textures. A parallel example of this type of improvisation would be quinto playing in Rumba music. Drummers speak of floreos as small phrasing variations that at times can slightly abstract base parts. An example of a possible floreo would be sliding one note over to thicken up the texture.

An example in the batá repertoire of playing with space is the dance rhythm chachalopkfun. When looking exclusively at the iyá part the rhythm feels stagnant and simple but the dense whole and improvisation in the 3-part ensemble is massive and thick. Below are figures exhibiting the base rhythm, two common variations on okónkolo, a matrix including the sonic whole of the itótele and okónkolo part, and a few possible iyá variations. Note how the iyá cha slaps in the variations fit inside the texture. Also note that the low open tone on the iyá is always on the 3 side and the bare slap sets up the 2 side of clave. This use of a backbeat is in line with modern Cuban timba music and is part of why chachalokpfun has been so easily adopted into other genres that include batá. I will speak more about this in Chapter Two in relation to Pancho Quinto and Manley "Piri" Lopez.

Figure 1.30 (Chachalokpfun Base)

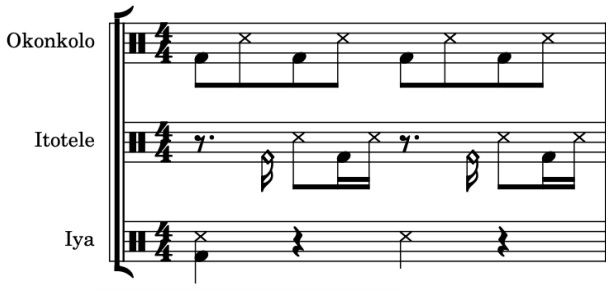


Figure 1.31 (Chachalokpfun Okónkolo Variations)

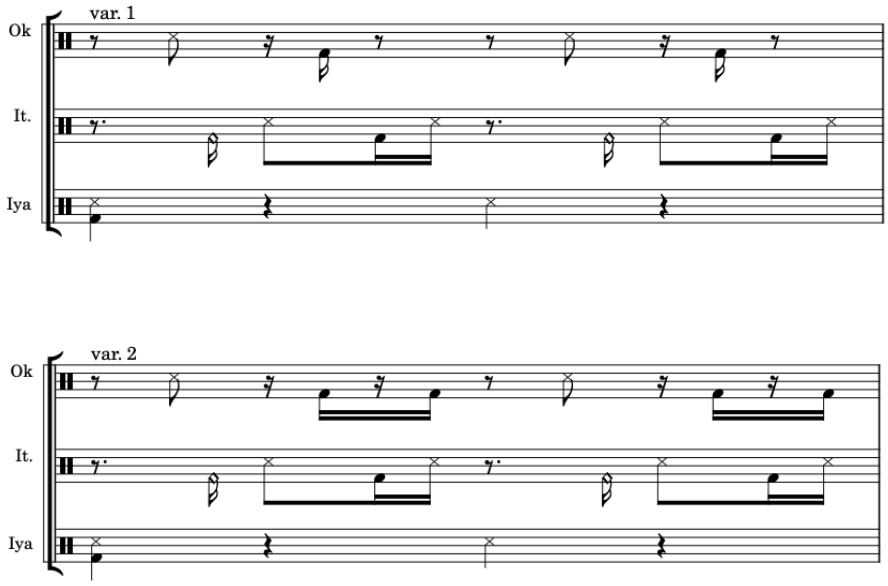


Figure 1.32 (Chachalokpfun Okónkolo/Itótele Matrices)

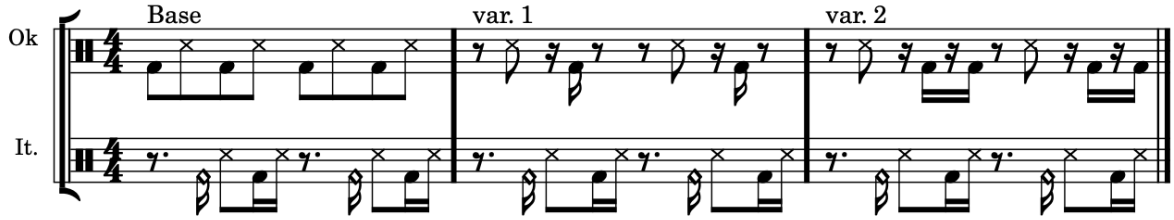


Figure 1.33 (Chachalokpfun Okónkolo/Itótele Matrix in relation to Clave)

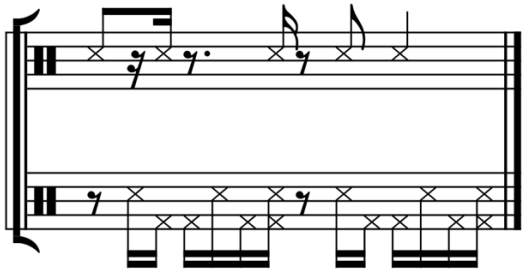
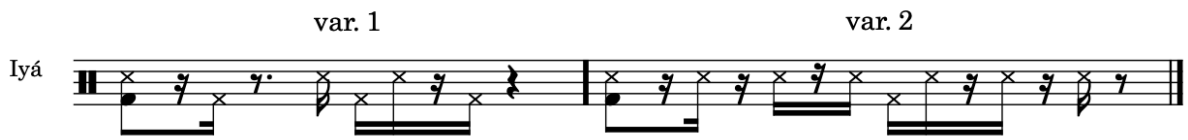


Figure 1.34 (Chachalokpfun Iyá Variations, Manley Lopez)



4.3 RHYTHM AS MELODY

The term melody is traditionally used with respect to how pitch contours and pitch groupings are organized in time. While Javier Diaz speaks on melody in batá music to describe the "drum pitches arranged in horizontal schemes that resemble pitch melodies," I am more interested in how batá phrasing could be conceived as "melodic."[73] In addressing "rhythm" as melody, I consider both the Ená encoded language in Yoruba batá and how modern Cuban batá drummers use melodic phrasing.

In Yorubaland, language on the drums was both literal and metaphorical. Amanda Villepastour's book, *Ancient Text Messages of the Yorùbá Bàtá Drum*, is a key text in its analysis of the way that the Yoruba language is encoded and utilized in Yoruban batá practice.[74] As batá drums have less capability in glissandi than the Dundun family of Yoruba talking drums, the Ená language utilizes an encoding system to map vowels and consonants in the tonal Yoruba language onto the drums. Different options of slap, muff, and open tone on each drum are taken into account as well as combinations of the left and right hand together or in grace note

[73] Diaz, ibid.
[74] Amanda Villepastour, *Ancient Text Messages of the Yoruba Batá Drum: Cracking the Code*, (Routledge, 2010).

stuttered form.[75] Enná is significant as well in that it is a spoken language among drummers to teach the rhythms and communicate secretly. Alubatá, the brotherhood of initiated drummers, has traditionally used this language to communicate among themselves.

Villepastour breaks down broader concepts of how the drums speak by encoding Yoruba. While the most obvious approach is to follow the temporal contour and dynamic enunciations of spoken language, done by mapping the three tones of Yoruba using strokes or stroke combinations, the language also utilizes many other techniques. These techniques include mapped enunciation, punctuation, and grammar with not only strokes and stroke combinations but also elisions of certain traditionally expected notes and use of glissandi. Direct encoding in this manner in some ways sounds less like the original speech than solely mimicry. This leads one to question to what degree temporal pacing plays as opposed to pitch contour and timbre of individual events in intelligibility of a spoken language. Detailed encoding, in making language more specific on the drums, at times sounds less like the language.

In Cuba, language on the drums is now predominantly metaphorical. Historically, improvisation on the iyá was directly encoded to phrases in Yoruba. In the beginnings of Lukumí music practice in Cuba, many master drummers were still communicating with this language, but as time has gone by younger drummers have lost much of this in their playing. This is partially why many older generations are highly critical of overplaying, or "too much talking," in

[75] One can note the historical significance of micro-timing in grace notes and double stops by considering the different meanings attributed to different options of very similar stroke combinations.

modern batá settings. As the Oro Seco is without song or dance, there is often a different conceptualization of rhythmic flexibility in a manner that I feel is more "melodic" in relation to the drumming.[76] In addition, as mentioned in Section 1.3 on clave as meter, clave becomes more present conceptually in sections with song and dance. The melodic flexibility in the Oro Seco and Cierre feels at times at odds with clave as a foundational principle.

Although understanding of the translations of these direct encodings has been largely lost, Cuban batá drummers still utilize Moyuba prayer phrases on the iyá that align with Oriki praise poetry in the West African tradition. These phrases are loose, gestural, and mimic speech. One question is how one's approach to musical melody changes when thinking of language literally or metaphorically. Batá drummers may deprioritize rhythmic hierarchy and beat placement when replicating speech on a drum as they prioritize the contour of the phrases. Loose melodic phrasing is interesting in relation to rhythmic entrainment for when we speak, as well as listen to each other speak, we do not necessarily attempt to align these phrases with some sort of grid or temporal structure. Yet, rhythmic pacing and strong/weak placement in linguistic contour is still an important component of fluency and "sounding native."

In different cultural spaces, what do we assume when we think about melody? One might assume that it floats above some stable grounding in ensemble settings and the musicality of the melodic phrase takes precedence over how well it locks into a grid. Language

[76] Further research is needed in looking at different sections of the ceremony in Yorubaland and Cuba as to the use of speech encoding.

and words force us into deprioritization of the grid in focusing on the literal meanings of the phrases. Drums in western contexts are not often afforded this same looseness that prioritizes the phrase above all else and are instead conceptualized as utilizing a different set of constraints than "melodic" instruments. Much Afro-diasporic Latin music, with batá as a key example, restructures some of these preconceived constraints.

In learning Orisha rhythms, particularly when playing the itótele, I've often found myself allowing the melodic dialogue to take priority over all other musical aspects. In this nature it is difficult for me to know where clave is, where some conceptual downbeat may be, and a clear notion of phrase lengths. As drummers spend more time with this music and it becomes embodied and internalized, notions of clave, and in turn a conceptual downbeat, are more clearly understood. My personal lack of experience is definitely in play here. However, experientially the learning process is easier when focusing on dialogue instead of rhythmic hierarchy.

This is connected to looking at the music teleologically, in Chris Stover's terms,[77] for batá drummers often focus more on what happens in relation to each other and may not agree on a hierarchical grid or metric structure. I'm utilizing the term teleology here to explain musical motion that prioritizes melodic interaction in a way that emphasizes motion and cyclicality. I am not thinking of teleology as a prioritization of a musical object's purpose and function over its cause but as a prioritization of the present in moving towards a musical space of finality. I am considering a space of hyper-presence in line with conceptual ideas surrounding

[77] Chris Stover, "A Theory of Flexible Rhythmic Spaces," 166 & 233.

musical transcendence in batá music. The drums' melodic approach to phrasing subverts westernized notions of hierarchical meter and in turn deprioritizes hierarchical metric grid-like groupings. The ensembles' presence in embodying the dialogue of individual phrases creates musical meaning.

Kofi Agawu in speaking on African and Afro-diasporic timeline patterns "responds to two imperatives, logical and cultural relevance. [The] logical imperative [is] necessary to ensure a pattern's structural integrity at each stage, the cultural imperative acknowledges origins and habits and thoughts in action. Analytical and generative processes should reflect known attitudes and not just logic."[78] Crucial to this research, melodic phrasing and varying degrees of use of encoded language in the historical transformation of batá drumming in its movement from West Africa to Cuba is directly in line with this cultural imperative.[79]

5. MODERN IMPROVISATION AND VIRTUOSITY

In traditional settings, each batá drum idiomatically requires differing levels of constraint in the nature of their "improvisation." As mentioned previously, the okónkolo predominantly plays "time" and finds an individual sound and flavor by way of floreos and phrasing. The itótele plays time as well as answers the iyá with some predetermined options. With the most flexibility, the iyá paints the musical canvas and directs the emergent form,

[78] Agawu, "The Metrical Underpinnings of African Time-Line Patterns".

[79] This theoretical binary between cultural and logical imperatives deserves further consideration as logic and systems of knowledge creation are inherently cultural. Moreover, the triptych of rhythm, harmony, and melody explicated in this analysis is a western theoretical conceptualization in itself.

marking transitions and choosing the order of rhythms. There is also some improvisation in "playing what you hear" around base rhythms on iyá.

This music traditionally deals with these three cognitive tiers of improvisation, or tiered hierarchies of respective constraint. As drummers traditionally move one-by-one from okónkolo to itótele to iyá in learning the music, drummers are able to embody and internalize these respective limitations/liberties of improvisation in their practice. In ceremonies, drummers often switch drum seats in different sections, such as the Oru Seco and the Oru Cantado, and control of these different improvisational modalities is crucial to the practice.

In my studies of modern batá performance practice, these tiers are continuously becoming blurred together. Okónkolo and itótele players fill up the space with floreos and small additions to base rhythms every few bars to the degree that an outsider may perceive these variations as the base. These added floreos are often unprompted by a specific iyá call but could be considered in response to a feeling in the music that could be dynamic or phrasing based. Phenomenal accents and phrase contour, much like in jazz and creative music improvisation, are crucial in modern batá improvisation.

Another crucial improvisational concept in modern batá practice is the process of "opening and closing" sections. Cerrado (closing), is the process by which an iyá drummer calls a break from the base rhythm with a variated call. This call usually ends on a muff tone as a departure from consistent open tones. When this call is cued, the iyá and itótele enu heads pause until the iyá starts to play improvised phrases that the itótele answers in response. This approach uses idiomatic language but gives the performers liberty to play what they hear. An angular improvised call and response section between the iyá and itótele occurs in which both

drummers concurrently internalize their individual parts, the melodic contour of iyá and itótele, and the ensemble's sonic whole in relation to the clave. When the iyá starts to play the traditional base again, the rhythm is then abierto (open), and the itótele goes back to its original part.

One of the most common rhythms in the repertoire is ñongo, a dance rhythm used for many different Orishas in the Oru Cantado and Wemilere sections of the ceremony. This concept of opening and closing rhythms was most traditionally used in ñongo and was heard around the world on the seminal 1995 Abbilona recordings. Ken Schweitzer has written a thorough analysis of the trajectory of ñongo from its traditional form to the early 2000s and the Abbilona recordings.[80] While Schweitzer does not specifically mention the terms "open and closed," his analysis addresses more modern ñongo improvisation in looking at longer calls in relation to clave and the Los Chinitos family's work in creating Rumba de Guarapachangueo. His terms "rapid calls and responses and free simultaneous improvisations" in relation to a field recording by master drummer and singer Lorenzo "Cusito" Peñalver explain a similar concept to "open and closed."[81]

In contemporary 21st century batá performance, drummers are taking this concept of opening and closing and applying it to many other rhythms other than ñongo. This happens predominantly in the Oru Cantado and Wemilere sections of the ceremony and is much less likely to happen in the Oru Seco. Again, improvisation and distance from "the tradition" is more comfortably placed in settings that have audience participation with dance and song.

[80] Schweitzer, ibid., 143.
[81] Schweitzer, ibid., 184.

Another change in modern batá, one that is often critiqued by older generations, is that of higher volume, speed, and less dynamic contrast between Orisha rhythms. Some younger generations feel that to play at the peak of your technical ability is to give more praise to the Orishas, yet older generations feel that this way of playing lacks clarity and muddies the transmission. Some also feel that dynamic contrast and differing volume levels are crucial for speaking specifically to the characters of each Orisha. This living and dynamic religious tradition allows the musical structures to adapt to individual and community perspectives of faith over time.

6. SOUND (A VERTICAL LENS)

While most of my analysis so far has utilized a horizontal lens, one of linear patterns that exist (or cycle) in flowing time, I wish to end with a vertical perspective. This perspective opens a door to analysis of sounds that we perceive as individual events as opposed to the relationships between them. Technique is inextricably bound to sound in batá drumming. Batá timbre can be considered in relation not only to the individual sounds that can be brought out of each head on each of the three drums, but in relation to the vertical stacks of individual tones. This section will address both technique from a modern and traditional lens and the vertical groupings that occur most commonly in Orisha rhythms.

6.1 TECHNIQUE (TIMBRE)

Batá drumming technique has gone through many pivotal shifts in its existence. In Yorubaland, traditionally the omele ako, a set of two small drums tied together and struck with leather straps, took the place of the okónkolo. The other two drums in the ensemble are called the ìyáàlù and the omele abo. The ìyáàlù functions similarly to the iyá while the omele abo functions similarly to the itótele. Both of these drums have two heads but are more conical than the traditional Cuban shells. In more contemporary settings in Nigeria, the omele meta, a set of three small drums tied together and struck with leather straps, has been added to the ensemble. The most drastic timbral change between Cuba and Africa is the fact that the small cha-cha head (called sásá in Yoruba) was played with leather straps on the ìyáàlù and the omele abo. This is a technique that historically is also associated with Matanzas style batá drumming in Cuba.[82]

As the vernacular encoded language of Enά has been lost and many Cuban drummers are no longer able to understand the way different strokes on each drum encode language, technique has undoubtedly shifted in line with new musical aesthetics. In addition, many drummers do not understand the language of Yoruba as a means of communication. Subsequently, as Javier Diaz aptly states, “when words cannot be understood, it is musical gesture, character and collective imaginings (physical and metaphysical) that provide semantic

[82] For more information on the technical, musical, and language encoding aspects of Nigerian Batá drumming, Amanda Villepastour’s work is key.
Amanda Villepastour, *Ancient Text Messages of the Yoruba Batá Drum: Cracking the Code*,” (Routledge, 2010).

and meta-narrative meanings to the batá repertoire."[83] Further research would benefit an understanding of the differences between Yoruba and Cuban batá technique in relation to the efficacy of encoded language in musical contexts.

I have had the blessing of studying with Lázaro Galarraga & Manley "Piri" Lopez, two master batá drummers of different generations that have guided me on very different technical paths. Lázaro Galarraga and Bobby Wilmore have been my resources in learning traditional batá technique. Lázaro, as a founding member of the Conjunto Folklorico and an emigree to the United States in 1982, has experienced distance from the modern shifts in style in batá drumming and the parallel shifts in the religion. Manley "Piri" Lopez, having recorded as a teenager on the seminal Abbilona batá recordings, is at the forefront of innovation in batá technique. His innovation however is in no way indicative of a lack of knowledge of the history and tradition of the instrument.

On the okónkolo, traditionally one holds their fingers open and strikes the enu head of the drum with the front two digits of the hand. The sound should be warm and full and requires a perfect combination of power and looseness in letting the weight of the hand hit the drum. Wrist tension is a key facet of technique for many hand drums and the lack of gravity in playing batá horizontally makes tension more complex. A more modern okónkolo technique, as taught to me by Piri, is much louder and piercing in sounding like a "bell." The idea of a bell-tone makes one consider the okónkolo as functioning as a timekeeper and separates it conceptually from the other two drums. This is a perfect example of how technique and timbre follow suit with aesthetic goals in this musical practice. Piri's modern okónkolo technique requires an

[83] Diaz, ibid., 10.

angled hand that strikes the drum as a rim shot, with the lower part of the palm and first digit of the middle finger hitting the drum in a whip-like motion. This technique goes hand-in-hand with the necessity of power and volume in modern batá practice. Ceremonies are arguably much louder, faster, and less dynamic in terms of volume between rhythms. Some feel that power, in tandem with density and maximalism, is necessary to transmit to the Orishas.

The itótele open tone is traditionally played with fingers closed on the enu head and almost all, if not all, of the three digits of the hand. The more modern approach to the open tone uses open fingers as the hand falls as loosely and intuitively as possible against the head. The muted stroke on the enu head is traditionally tighter and utilizes a good amount of pressure on the drum. In contrast, the modern muted stroke is much looser and utilizes less pressure to get a clear "hip" sound that in context sounds much more similar to the open tone than in a traditional batá ensemble. Outside of technique, tuning and drum design can impact the contrast between muted and open strokes.

Note that I did not address clearly the differences between the slap cha-cha head on each of the three drums as I have not noticed a massive difference between traditional and modern styles. It is important, as is true of most hand drums, to let the slap sound fall with the right amount of tension in the wrist against the drum for a thick full sound that is not tight and thin. The only drastic difference I have found is that the slap, as is true in many respects of the modern approach to the music, is significantly louder in modern contexts. An exception to this is the itótele slap that often feels less prominent in phenomenal weight and in volume than the iyá and okónkolo slaps. This makes sense as its common placement on the second partial of the triplet almost "stitches" the rhythms together. Piri, since his early days of playing ceremonies

with the Los Chinitos family, is known for having powerful control of volume and nuance in his slap on the iyá drum.

For an alternative perspective here on the beauty of use of muffs and open tones, I want to reference master percussionist Milford Graves. Graves explains below his concept of Bäbi music.

> Bäbi. Which, from a traditional point of drumming, the ba- is a drum syllable on mnemonic that has the kind of power to stimulate the respiratory system. The bi- is a sound that stimulates the circulatory system, which many people have said in the medical field, or you can check it out yourself, that the two very important systems in our body is the respiratory and circulatory system. And I've been playing this all the time that I've went back and listened to tapes and tapes and tapes, and as long as I can remember that has been the two primary tones that I have used and I've built off of that.[84]

In dialogue with Graves, I feel that ba can be interpreted as an open tone and bi as a muff tone. In other words, the open tone pushes forth breath in a collective ensemble while the muff tone punctuates our heartbeats. Both are always in motion. The collective whole of three drummers painting with both tones as well as the slap sound creates a dialogue between heart and mind/body. The idea that batá music timbrally addresses resonance in relation to biological

[84] Milford Graves, "1977 Lecture at Bennington College," (Exhibition Guide, Milford Graves: Fundamental Frequency, Institute of Contemporary Art, Los Angeles, 2023).

processes aligns clearly with the linguistic history of the music. When spoken or played on the drums, language is both embodied and conceptualized.

While this sonic analysis is very specific to batá practice and is difficult to abstract into other musical spaces, I feel that it is important to consider the nature of a musical practice that utilizes the combination of very similar tones with short resonances (open, muff, slap, semi-abierto). The artful layering of these subtle options is one of many ways that batá drummers find flexibility in constraint.

6.2 HARMONY (VERTICAL STACKS)

There are certain vertical stacks that surface predominantly in Orisha rhythms in the Oro Seco as well as the Oro Cantado, Wemilere, and Cierre sections of each ceremony. Some of these stacks are heard concurrently and some utilize slight offsets between drumheads barely before or after the beat. This is due to the stylistic choices of drummers using grace notes on okónkolo and iyá in particular.

A fascinating component of batá rhythms is the fact that there are very few moments where one drum is tacet. The only moments where individual drummers may be tacet are those where they are listening to introductory calls to new Orisha rhythms and finding their place in the rhythm. Yet, there are also very few moments where all six heads are collectively sounded in unison. The careful balance of motion and space is key to understanding the musical object as a whole.

In most Orisha rhythms, there are usually two or three heads sounded at once. At times, four heads are collectively struck, creating a dynamic accent. In the Rezo for Obatala, the last

road for the most common Oro Seco rhythm for Obatala, and the last road of the Oro Seco rhythm for Inle, five heads are struck together. More often than not, the vertical stacks of each onset fluctuate between groupings of two and four. In relation to my ideas about playing with space in Section 4.2, iyá drummers embody and manipulate the sonic density of the textures, sliding in and out of the tightest musical spaces. While this granular formalist analysis is not commonly spoken about in the tradition, I believe master batáleros internalize these changing densities.

Another interesting analytical angle is to look at double stops on each drum, their placement within their respective musical phrases and in relation to clave, and in turn how they function as phenomenal accents. I am defining a double stop as when the left and right hand hit directly together. On okónkolo, double stops consistently coincide with beat four, a key resolution point of clave. Examples of this include the 3rd road of La Topa for Elegua, Inle, the Rezo for Obatala, and the last road of Yemaya. Double stops on itótele can also coincide with beat four and clave, as seen in the rhythms for Ogun and Ifa. This is another interesting example of archetypes moving back and forth between okónkolo and itótele. These vertical stacks do not often include both itótele and iyá enu heads as they tend to answer each other contrapuntally. When they do occur together, they do not often include one muff and one open tone. [85]

[85] Further research is needed in looking at how tuning has developed in batá practice and how different styles of tuning impact notions of metric ambiguity, entrainment, melo-rhythmic phrasing, and other facets of the music.

CHAPTER 2: CONCEPTS IN PRACTICE

(IN COMPOSITION & IMPROVISATION)

"Camino al futuro sin perder la esencia"

(I walk to the future without losing the essence)

-Manley "Piri" Lopez[86]

In this chapter, I am looking at musical examples outside of Lukumí religious practice that reference the specific rhythms and instruments of the tradition or are deeply connected to the abstract concepts I have listed in Chapter One. This chapter, much like the first, acts as both a theoretical study and heuristic experiment. I feel that this experimental approach to analysis will contribute to scholarship on Afro-Cuban religious practices, etic[87] composition in working with folkloric traditions, and my own compositional practice. I aim for my analysis to both speak to some suppositional logic of the works and, in a more poetic vein, add to the meaning of the works.

As Manley "Piri" Lopez aptly states at the end of an instructional video on playing three batá at once, abstraction and innovative approaches do not necessarily have to be at odds with the essence of a musical tradition. His use of essence as a singular connotes some irreducible,

[86] Manley López, "Funcionalidad del Trío Batá," YouTube, June 9th, 2020, educational video, 1:55. https://www.youtube.com/watch?v=X-N_31GYxN8.

[87] I am using etic here as a broad term that connotes a sense of being "outside" a folkloric tradition. I am cautious to define these terms clearly as the line between an emic and etic positionality to a tradition is often permeable and fluid in regard to ethnic, racial, and national backgrounds as well as the amount of time spent in studying a tradition.

ephemeral quality of authenticity derived from a deep respect and understanding of a tradition. I question to what extent these concepts (at/in) practice, breathe and live dynamically in music that concretely considers Lukumí traditions as well as music completely outside of the tradition. My own work with Lukumí music, as well as with many other global folkloric traditions, has been to constantly inquire after what these essences are and how they connect global traditions that move listeners in similar ways.

Yet transitioning from Piri's singular essence to "essences" in the plural connotes fragmentation and not an irreducible whole. While I considered parallel terms such as fragment, referent, and core principle, I felt that "essences" emphasized the dialectic tension that makes my process and that of the artists in Chapter Two honest. It points to the irreducible whole, yet looms above itself, questioning that irreducibility by nature of its multiplicity. To find an essence in a folkloric tradition is a parallel meta-musical path that accepts a concept as foundational to an art form, embracing a dialectical understanding that that essence is, in many ways, personal, and not necessarily universally understood in that tradition. Finding essences, as opposed to essentialization, makes the sonic whole more complex and aims to combat a colonial primitivism of the music and the communities that birthed it. Hence, "finding essences" should be a practice that distances oneself from essentialization.

Taking a semiotic approach is fruitful in understanding the complex relationship between abstracted "essences" and their rhizomes.[88] I see the concepts identified in Chapter

[88] I use the Deleuzian term rhizome here to comment on the fact that these "essences" in batá music function in non-linear and atemporal fashion. They may be abstracted to create inventos in contemporary settings or conceptually addressed centuries ago to create batá rhythms in Africa. Rhizome speaks well to this "chicken and egg" paradigm.
Gilles Deleuze and Felix Guattari, *A Thousand Plateaus*, (University of Minnesota Press., 1980).

One as some combination of Peircean symbols and indices of their signified objects as opposed to icons. An iconic representation would be a full replica out of context, exactly repeating a musical phrase on a traditional instrument over the top of another completely detached musical tradition. The majority of these concepts, in my own compositional practice as well as in the practice of the composers addressed below, are pulled out of the music and reapplied referentially as symbols or indices. Often in inter-cultural musical spaces, approaches that could be conceived as iconic tend to feel stiff and dull. It is important to remember that my use of "essences" is as components or fragments of what they reference, while essentialization forces an audience to see the essence as a pure omnipresent object, one that everything in a tradition accrues around. The irreducibility of an "essence" often connotes a whole, but irreducibility is not married to universality in this sense.

Another reading of this idea would be to see "finding essences" as metonymy & metaphor in Jacques Lacan's terms.[89] My process aims to lean towards metonymy in creating authentic chains of signifiers that take a multiplicitous approach to adapting a concept. While some ideas end up being reflected metaphorically, condensing the idea into a more simplistic musical space to be expanded upon, a combination of the two approaches is fruitful.

I have found that many of these concepts, particularly my ideas in relation to polymeter and entrainment to the "grid," exist in many contemporary jazz drumming traditions and electronic/hip-hop production spaces. While these extant manifestations are fascinating and inspiring to me as a composer, they are outside the scope of this dissertation. In this chapter, I

[89] In Chapter Three, I will explore my own personal compositional work dealing with batá aesthetics and the liminal space between writing music metonymically and metaphorically.
Lacan, Jacques, *Écrits*, (Paris: Seuil, 1966).

will predominantly focus on a few examples that either utilize batá drums and rhythms or are closely adjacent to the tradition with practitioners.

My process in selecting these specific examples consisted of listening to music that I suspected would connect with my ideas and then writing detailed notes about each work in an attempt to be open and not force concepts onto works. I felt that this "rhizomatic" and processual practice would lead to more honest and fruitful work, as opposed to one with preconceived objectives. I would then subsequently go back and highlight what aligned with my specific concepts in Chapter One. I found that certain concepts, such as polymeter, kaleidoscopic entrainment to the grid, and rhythmic elasticity were quite easy to find in many spaces of intercultural music in and outside of the tradition. However, finding specific rhythmic archetypes, use of the cueing system, and specific adoption of timbre and sound from the batá tradition were more granular and difficult to find.

This analysis is divided into six sections. First, I will analyze earlier recordings from the late 1940s to the late 1950s of Chano Pozo and Dizzy Gillespie, as well as Mongo Santamaria. I will then analyze two different versions of a very similar work by Chucho Valdés in 1972 in looking at the Cuban piano tradition in line with batá drumming: specifically, "Son no. 2" by Valdés and "Son XXI" by Gonzalo Rubalcaba. The next section will present an analysis of Pancho Quinto and Manley "Piri" Lopez, two innovative Cuban percussionists from different generations. The final section focuses on the work of contemporary jazz pianist David Virelles in relation to broader concepts associated with Afro-Cuban folkloric and religious traditions from Lukumí music and Abakuá. For more information on Lukumí music in secular "fusion" contexts, see Appendix A where I have outlined a brief history as well as attached a list of key recordings.

1. ARTISTS AND ABSTRACTION

In this section I will cover in more detail specific artists that have been influential in secular "fusion" spaces with Lukumí music. I will move roughly chronologically, apart from Gonzalo Rubalcaba's example that follows Pancho Quinto's album and Piri's example that is more recent than David Virelles' examples.

1.1 CHANO POZO & DIZZY GILLESPIE

In 1947, Dizzy Gillespie assembled a big band which included the enigmatic percussionist, Chano Pozo. Although their performing relationship was short-lived as Pozo passed away in December of 1948, their musical collaborations were widely influential to future syntheses of Latin music, jazz, and creative music idioms. While their collaborations did not use batá drums or specific batá rhythms, Pozo was a Santero as well as Abakuá and these musical communities were foundational to his approach to improvisation. Many other percussionists who birthed Latin-jazz in the United States such as Francisco Aguabella and Julito Collazo, came from similar religious communities.

I will focus here on a 1948 live recording of the Dizzy Gillespie big band featuring Chano Pozo at the Salle Pleyel in Paris.[90] This recording also notably featured John Lewis on piano, of Modern Jazz Quartet fame, and Kenny Clarke on drum-set. This album included beautiful collaborations of ballads using rhythmic frames of danzones and boleros, such as Thelonious

[90] Dizzy Gillespie, *At Salle Pleyel (Paris, France - 1948)*, Prestige Historical Series, 1970.

Monk's "'Round Midnight" and "I Can't Get Started." It also included versions of Gillespie's "Woody'n You" with a traditional marcha conga pattern that can be found in Salsa music and Mambos around the same time period. There are also pieces such as "Ool-Ya-Koo," "Things to Come," and "Oop-Pap-Ada," that utilize a swing rhythm and subsequently involve Pozo finding a pattern on congas that complements the motion of the music outside of any "Latin" conception of time.

So much of Afro-Cuban folkloric music finds its heart in small ensemble improvisation which allows for temporal elasticity, as described in Chapter One. In addition to the difference in ensemble size as compared to many Cuban folkloric groups, many of these musicians in the big band were American jazz musicians that were unaffiliated with Latin music communities. While these musicians had to find common ground with Pozo in their musical aesthetic approaches, they widely outnumbered him. Jairo Moreno examines these complex relationships and power dynamics with respect to Mario Bauzá, Gillespie, and Pozo in "Bauzá–Gillespie–Latin/Jazz: Difference, Modernity, and the Black Caribbean."[91]

> I consider the emergence of Latin jazz not so much as a celebrated contribution balanced between related expressive cultures (Gillespie), and certainly not as a

[91] Jairo Moreno, "Bauzá–Gillespie–Latin/Jazz: Difference, Modernity, and the Black Caribbean," *South Atlantic Quarterly* (2004).
See also Jason Stanyek.
Jason Stanyek, "Transmissions of an Interculture: Pan-African Jazz and Intercultural Improvisation," in *The Other Side of Nowhere: Jazz, Improvisation and Communities in Dialogue*, (Wesleyan University Press, 2004).

''marriage'' of musical styles (Bauzá), but as a tense and dynamic syncopation of sonic and social histories and temporalities.[92]

Although a detailed discussion of the social dynamics of this collaboration is beyond my scope here, Moreno's statement above is integral to my research and analysis in looking at these abstracted "essences" and interpretation by an audience as products of not only the familiarity of a musician to a tradition but their national and ethnic positionality to that tradition. Moreno's analysis of Gillespie and Pozo's collaboration makes clear the position of power that Gillespie occupied. As a bandleader, he in some ways orchestrated Pozo's capabilities as an object to be placed inside of the dominant musical culture of the African American jazz idiom. Early collaborations in Latin-jazz, such as that of Pozo and Gillespie, used the Cuban music in semiotic terms "iconically," by simply restating the musical objects without allowing aesthetic dialogue and equal input in composition and improvisation.

While this music may not have held each collaborator in similar positions of power and musical autonomy, I am hesitant to disregard the weight of these collaborations in grounding future inter-cultural projects involving Afro-Cuban religious music. The "Afro-Cuban Drum Suite" from the Pleyel concert includes utilization of the congas as a prominent "melodic" voice in the band, as well as ensemble phrasing and improvisation that is in nuanced dialogue with Pozo.

It is interesting to ruminate over the form of this work and in turn consider the process of how it developed. The Afro-Cuban Jazz Suite starts with a fast conga pattern that could be

[92] Moreno, ibid., 83.

situated in 4/4, almost march-like and flat.[93] Kenny Clarke interjects a forceful tom call on the drum-set over the top of Pozo's base and the energy settles down to allow the initial trumpet call to drift in, as if from some distance. The conga pattern sounds very similar to the rhythmic contour of the standard rhythm for Ogun in the Oru Seco as well the contour of the secular Conga Comparsa rhythm played in Cuban Carnival. It makes sense that if Pozo and Gillespie were improvising together over a flat 4/4 march-like bounce, a rhythm such as the toque for Ogun would float into Pozo's mind as complementary to the rhythmic motion of the work. The holistic rhythm gets locked into a flat, more "monorhythmic" space, as the full band comes in with aggressive ensemble figures and then settles into a calmer brass refrain.

At around 2 minutes and 30 seconds, an improvised break begins between Gillespie and Pozo and both musicians begin to stretch, pushing towards the apogean points of the rhythmic frame. Pozo's approach changes to dancing around the contour of Ogun/Comparsa rhythms as well as one of more clarity in outlining and carving around the clave. There are clear sections where he stretches his phrasing into an elastic 6/8 space, as well as quinto-like phrases with open and closed slaps that nod to his background as a rumbero. Pozo starts to speak inside of the spaces between Gillespie's phrases while continuing to dance around the phrase and keep time. This parallel coordination approach, previously discussed in Chapter One, Section 3.3, is in line with the relationship between Rumba drummers as well as the cognitive approach to playing itótele in dancing around the time while answering the iyá.

Gillespie continues to improvise predominantly in a flow of eighth notes with highly nuanced accents. The bebop conception of time, as Gillespie notes in *To Be or Not to Bop*, is

[93] Dizzy Gillespie, "Afro-Cuban Jazz Suite", *At Salle Pleyel (Paris, France - 1948)*, Prestige Historical Series, 1970.

often "monorhythmic."[94] Moreno considers this sentiment as Gillespie's expression of an African American approach to rhythm following the outlawing of drums in many enslaved communities.[95] Bebop and many other outgrowths of Black music in the new millennium find rhythmic dance and motion in the flow of accents and not in the idea of "polyrhythmic counterpoint." The duo section of improvisation in this recording is a beautiful sonic realization of this friction, or "dynamic syncopation" in Moreno's terms, of Afro-Cuban and African American rhythmic sensibilities.

At 3:30, a clear melodic call ends their improvisation, and a sharp cut then opens up the space for an Abakuá vocal call and a soloistic open-time space for Pozo.[96] The loose "out of time" solo rises and falls and then dies off. Pozo then brings in a 6/8 Bembe-esque rhythmic space that becomes a base for a call and response vocal section between the ensemble and the lead singer. To some extent this interjection of much more traditional (not abstracted) music could seem forced, but Gillespie may have felt that this was the best representation of Pozo's musical abilities. Even though the musical object is used out of context as an "icon," it creates a space for Pozo to speak most honestly.

[94] John Birks Gillespie (Dizzy) with Al Fraser, *To Be, or Not to Bop*, (Da Capo Press, 1979), 318.

[95] Moreno, ibid., 93.

[96] For more information on Abakuá music in popular music historically, see Ivor Miller's article below. While secrecy and protection of this tradition, much like Lukumí music, was also of concern in use of Abakuá influence in popular music, many members believed the lack of outsider understanding of the language itself protected the tradition.
Ivor Miller, "A Secret Society Goes Public: The Relationship between Abakuá and Cuban Popular Culture," *African Studies Review*, Vol. 43, (2000).

1.2 MONGO SANTAMARÍA

In 1949, *Toques de Santo* was recorded by singers Celia Cruz, Merceditas Valdés, and batá drummers Jesus Perez, Virgilio Ramirez, and Trinidad Torregrosa. This recording primed accessibility of Lukumí music in the United States. Mongo Santamaría, though only a few years younger than Chano Pozo, moved to New York in 1950, a year after this recording and Pozo's passing. Santamaría's career as a percussionist included time with diverse artists such as Tito Puente, Cal Tjader, and Fania All Stars, making him equally influential in mambo, Latin-jazz, and salsa music. Santamaría recorded *Afro-Cuban Drums* in 1952, an album replete with Orisha songs, a chorus of singers, and batá.

Both *Afro-Cuban Drums* and *Toques de Santo* are predominantly folkloric recordings as they were performed quite closely to the way the music would be played in ceremonial settings. Although this folkloric approach was taken, it seems almost certain that Santamaria would have made formal adaptations to meet the time limitations of short vinyl tracks.[97]Another departure from traditional ritual performance is exhibited in relation to the vocal performances. Vocal harmonies and phrasing decisions may have been changed slightly to fill out the sonic whole in a way that was likely more rehearsed in a conventional "western" sense than in ceremonial settings.

In his long career, Santamaría continued to make folkloric recordings of or take influence from Rumba, Abakuá, and Bembe music. I will focus specifically on two recordings

[97] Note that the seminal 1999 Abbilona recordings in Cuba were significantly longer than "radio-ready" tracks in an effort to more closely replicate ritual performance.

from Santamaria's album *Mongo* released on Fantasy recordings in 1959. The album featured Cal Tjader on mallet percussion, Al McKibbon on bass, who was also on the live 1948 Gillespie and Pozo recordings previously mentioned, Willie Bobo on timbales, and Vince Guaraldi on Piano. Francisco Aguabella[98] and Armando Peraza are also prominently featured on congas alongside Santamaría.

The first work to be considered is "Rezo." A Rezo in the Lukumí repertoire is a praise song that is loosely out of time and flows over the top of a batá rhythm that is situated more "in time." This short recording (2 minutes and 11 seconds) features Paul Horn on flute crafting a simple melody over the top of a conga part that loosely outlines the rhythmic contour of the beginning of the Aro rhythm for Yemaya. One can hear the first ensemble archetype I have outlined in Chapter One at around 1:17. This archetype dances around a slower 3 over 2 polyrhythm where one could situate themselves in three/four or six/eight. I am struck by the amount of space left for the drums to breathe. Minimalist composition with long resonances in dialogue with denser drum language was not particularly common in this era of jazz and is closer to a post-bop aesthetic. Tjader's loose marimba part creates a bed for the flute to float and a low bass hum combines with a rolling conga part to create a lower texture. The conga part drifts from a rubato open phrasing that is speech-like (like a Moyuba) into an in-time laid back 6/8 pattern. It then shifts into an accelerando, as one expects, from the Aro rhythm for

[98]Francisco Aguabella is a key figure who, aside from playing percussion and batá, sang, arranged, and composed many works on the recordings of Santamaría. He was a tremendous source of knowledge of batá, Rumba, and Abakuá music and was a mentor to many theorists and performers in the music such as Michael Spiro and Katherine Hagedorn.

Yemaya. The tuning of the drums is low in a manner that sounds much closer to batá than usually expected with congas.

The second work that is key on this record is “Bata.” This percussion ensemble piece loosely outlines the toque for Osain starting on the second road. The work goes from the second to the third road and then ends with a fast 6/8 matrix that is similar to many toques such as Yemaya. The transition to 6/8 and the way the performers phase into the meter is a perfect example of an abstract concept out of context. It includes three percussionists. Here, the tuning of the drums is high and resonant in a manner more closely related to Yoruba batá than Cuban batá. Though it is difficult to discern whether it is congas or batá, the manner of improvisation on the second road is interesting. The itótele part (or part functioning as itótele) has significant flexibility in how time is carved elastically. There is a nod to chachalokpfun as well in the phrasing at 1:22 in how the drummers outline the okónkolo pattern inside the rhythmic matrix.

1.3 CHUCHO VALDÉS AND GONZALO RUBALCABA

Moving on from the earlier jazz collaborations of Dizzy Gillespie, Chano Pozo, and Mongo Santamaría, the piano becomes a key emblem of Afro-Cuban musical identity. The instrument’s use in Cuban music could be thought of as one of the purest confirmations of the instrument’s classification in the percussion category. The history of the instrument involves use of guajeos, sometimes also called montunos, that are rhythmic archetypes or contours that dance and lock in with the percussion and bass parts. As the piano has consistently adapted

ensemble roles from other instruments, such as tres, marimbula, and percussion, Cuban pianists have often used an historical approach to "comping" that at times is more rigid and fixed for other parts to improvise over, similar to a common western conception of a jazz drummer. Eighty-eight hammers, or drums, may speak all at once and all alone.[99]

Cuban pianists in the past 100 years have been equally positioned in western classical traditions, Latin music traditions, and western popular/jazz idioms. There is a rhythmic prowess, manifested as minimalist and maximalist, that is idiomatic to the tradition. Pianists play technically dense virtuosic sheets of sound or hyper-minimal vamps with deep control of rhythmic elasticity. This is not to discount the massive harmonic and melodic impact that Cuban pianists have had on jazz traditions historically and in contemporary music. I will address here two of the most well-known Cuban pianists from the past 60 years, Chucho Valdés and Gonzalo Rubalcaba.

Chucho Valdés released *Jazz Bata* on Areito records in 1973.[100] The album was a trio recording with Valdés' future Irakere band members Carlos Del Puerto on bass and Oscar Valdés on batá and congas. All three of these musicians had already participated together in the Orquesta Cubana de Música Moderna for a few years. The small ensemble on this recording created much space to stretch away from more conventional improvisational guidelines that were adhered to in Latin-jazz around this era.

[99] For a deeper look at the history of montunos in Cuban piano, see Rebecca Mauleon's *101 Montunos*. Rebecca Mauleón-Santana, *101 Montunos* (Sher Music Co., 1999).
[100] Chucho Valdés, *Jazz Bata*, Areito, 1973.

Oscar Valdés' approach to playing solo iyá on the first track is unique. On the first track entitled Irakere, he improvises around a contour that is similar to the iyá parts for Osun, Orichaoko, and Obba. The 3 over 2 phrase that loosely outlines the standard bell pattern fits in well with the McCoy Tyner-esque chord stabs that Chucho Valdés is playing.

I want to focus specifically on Valdés' composition, "Son no. 2." The harmonic material exists in a very minimal vamp that follows aesthetically in the long history of descarga compositions (long form jam sessions). The ensemble improvises together for almost eleven minutes to create folkloric contours of dynamic flow. Valdés starts by making a call that reminds me of minimalist Orisha rhythms such as those for Aggayu and Oya. The call outlines the Son bass line that is positioned on beats 3 and 4. Valdés then moves over to playing congas and a more traditional "marcha" pattern. He then switches to claves, conga again, and then Chekere.

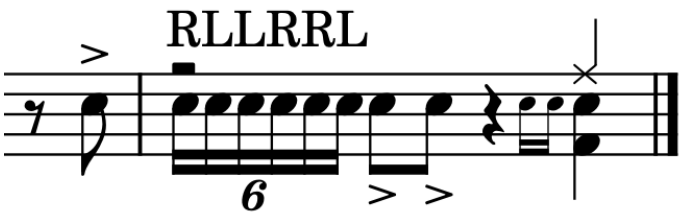
This shifting back and forth between different percussion instruments places the drums in a different functional space than what is traditional. Valdés and Del Puerto keep the time while the drums add textural information by outlining folkloric contours. I see the material as textural, as it dances around the phrase in a manner often less in-time than the piano and bass parts. The collective goes in and out of time with short, passing, improvisational spaces. Valdés' approach here is an extension of the emergent modular form that exists in the batá repertoire. There is an openness to move in different directions while also dealing with very minimal information to create an almost ritualistic contour that takes time to develop. Valdés is also a master of rhythmic nuance in repetition. I am more interested in how the musicians shift in and out of the vamp than necessarily the groove and interaction as aligned with folkloric religious

drumming. These shifts and angularities create worlds inside of the work that give the vamp itself new meaning.

More recently in 2011, Gonzalo Rubalcaba released an album entitled *Son XXI*.[101] The title track is a modern rendition of "Son no. 2" by Valdés. This track features Marcus Gilmore on drums, Matt Brewer on bass, and Pedrito Martinez on congas. Much like Valdés, Rubalcaba creates a dynamic engaging form out of minimal material. While this version never fully leaves an isochronous pulse behind as is true of "Son no. 2," the musicians embody polymeter and "fix" phrasing wholeheartedly.

This version starts with a loose swinging drum-set call that cues beat 4 of the Son bass line. The six-stroke roll, reminiscent of bop drummers such as Philly Joe Jones and Max Roach, starts on the 3rd partial of the triplet. While this concept of starting in the middle of the bar is less common in jazz idioms, it happens often in Rumba improvisation and batá calls. The first sounded notes do not necessarily imply the downbeat.

Figure 2.1 (Marcus Gilmore Intro Fill Contour)



Like Valdés' performance, the pacing is effortless and patient. Each instrument seems to have rhythmic liberty in dealing with elasticity and density of information. Bass and Piano function like other drummers in a folkloric ensemble. When Gonzalo locks into a montuno at

[101] Gonzalo Rubalcaba, "Son XXI," *XXI Century*, 5Passion, 2011.

around 2:08, Pedrito fills in the holes of the phrase and the ensemble opens up the time briefly with sustained piano clusters. This is an expression of my idea of "playing with space." Brewer then begins an angular bass solo that functions like an iyá in a batá ensemble. He effortlessly moves in between phrases of triplets and sixteenth notes while the two drummers lock the 6/8-time in. Rubalcaba then creates a washy, low piano blur and Gilmore floats around the time before Martinez starts a conga solo.

Gilmore's drumming functions very similarly to a second conga player. At the beginning of the piece, both hands are positioned on the snare drum with one hand playing a cross-stick, and the other "riding" on the head with the snares off in the tradition of Timbales players in Latin dance musics. The hi-hat and kick drum support the sound, but the interlocking matrix of ensemble time exists as a whole and is not hammered away on the ride cymbal. Martinez instead has overdubbed a Guiro track that hammers away the time, allowing Gilmore to float around the time. As he begins to play cymbal and dance around the time, the sustain of the cymbal shifts the ensemble tone. Yet, the cymbal continues to function as a complement to the collective sound and not as the crux of it. Gilmore also uses muted strokes on the drums, a mounted bell, and mounted batá on the side of the kit to situate his sound in alignment with Martinez.

There is an ebb and flow to density and resonance that gives life to the minimalist harmony of the form. Like Valdés' recording, this improvisational patience aesthetically aligns itself with ritual motion and pacing. In essence each musician is aesthetically playing drums. A drum "aesthetic" here involves a prioritization of timekeeping and consideration of how one's rhythmic flow fits into the sonic whole. However, this concept and prioritization of only

"timekeeping" could also be aligned with a reductive idea of the western function of drums in modern music. I feel that this ensemble is also taking into account rhythmic elasticity and the melodic dance of rhythm aligned with language as well as density in leaving space for a collective groove.

The drum set and piano have the most control over the length of sustain. At around 6:20 the group abstracts the time and dances around the grid with only Martinez holding down the "Base" Pattern. Rubalcaba and Gilmore create orbital waves of energy that move in the same directions but begin and end phrase-lengths out of sync in a beautifully raw manner. This way of approaching improvisation reminds me of the relationship between Tony Williams and Herbie Hancock in the Miles Davis Second Quintet.[102] It is a relationship of "talking over one another" while listening to each other at a highly detailed level. This dialectic of independence, in a perceptual sense mentioned in more detail in Chapter Four, is in line with many of the kaleidoscopic metric and entrainment concepts brought up in Chapter One.

Miles Davis' Second Quintet was deeply influential for many Cuban jazz musicians and was likely absorbed by both Valdés and Rubalcaba. In comparison to earlier artists such as Pozo, Santamaria, and Gillespie, Valdés and Rubalcaba seem able to connect more abstractly with concepts surrounding ritual music because of their relationships with more modern innovative changes in improvised music, such as Davis' Second Quintet.

[102] A key example of this ensemble approach is Live at Harmon Gymnasium, an album featuring the usual quintet members Wayne Shorter, Tony Williams, Herbie Hancock, and Miles Davis as well as Albert Stinson substituting in on bass for Ron Carter.
Miles Davis Quintet, *Harmon Gymnasium, University of California, Berkeley, CA, April 7, 1967*, KALX-FM, 1967.

1.4 PANCHO QUINTO

In this section, I will focus on historic batá masters that have made a tremendous impact on the notion of creativity and innovation in Lukumí music. I will first look at Francisco Hernández Mora (also known as Pancho Quinto). Both Pancho, as well as Manley "Piri" Lopez, one of my own mentors, have been influential in how they approach individuality in both ritual and secular fusion contexts.

Pancho Quinto, born in 1933 in Havana, was a batálero and rumbero who studied and performed with Jesús Pérez and Pablo Roche in his youth. His profound legacy can be attributed to his teaching of many Cuban and foreign students and his creative approach to expanding improvisation on the instrument. He is also credited with being one of the creators of Guarapachangueo, a contemporary style of Rumba, along with the Los Chinitos family. Kenneth Schweitzer, Pancho's godson and long-time student, has written a comprehensive chapter on Pancho's life and influence.[103] Other important drummers influenced or mentored by Pancho include Roman Diaz, Pedrito Martinez, and Manley "Piri" Lopez.

In the early 1980s, Pancho founded the influential folkloric ensemble Yoruba Andabo. The group went on to have widespread success in Cuba and globally when they began to collaborate with jazz artists such as flutist Jane Bunnett. Pancho recorded on Bunnett's 1991 recording *Spirits of Havana*, 1997 recording *Chamalongo*, 2000 recording *Ritmo + Soul*, and 2002 recording *Cuban Odyssey*. He also has two foundational recordings as a bandleader: *En El Solar La Cueva Del Humo* in 1998, and *Rumba Sin Fronteras* in 2003. Schweitzer relates his own

[103] Schweitzer, ibid.

experience studying with Pancho, including stories of certain drummers criticizing the influence of this aesthetic of innovation on the music as a whole.

> Pancho Quinto stands out, in my mind, both for his pedagogical approach and for what I understood to be his ultimate aim when teaching. That is, he aspired to open drummers' minds to the creative spirit of the batá. He first made sure his students understood the fundamentals and essence of the toques, but then he pushed them to find their own voice.[104]

Schweitzer also mentions master drummers such as Roman Diaz and Ángel Bolaños' thoughts on Pancho as an innovator who could only make these contemporary abstractions to the practice because of his degree of respect for and knowledge of the tradition. Roman Diaz mentions that "Pancho was using a concept that was oriented toward the rhythmic line of the singer and the dancer, and that was his personal way of expressing himself, very particular to him."[105] I see this to mean that Pancho's flexibility of time and perspective to changing rhythmic phrases that was deemed "contemporary" may be more aesthetically "traditional" in its regard to rhythm as melody and drumming as language.[106]

This is supported by another story Schweitzer tells of Pancho encouraging him to approach a toque on iyá in his own personal way without emulating Pancho. Schweitzer

[104] Schweitzer, ibid., 128.
[105] Schweitzer, ibid.
[106] Similarly, many highly innovative jazz musicians often cite influences that are older than what is thought of as traditional, for example Cecil Taylor and Duke Ellington, Anthony Braxton and Charlie Parker, and Jason Moran and Fats Waller.

explains how Pancho sang and improvised almost completely out of time in the Aro for Yemaya with a "wide range of dynamics and colors as he struck the drum several different ways."[107] This reminds me of my own experience playing with Lázaro Galarraga in 2022 in how he approached phrasing in a loose, gestural, and "out of time" manner.

Schweitzer notes a few different and specific ways that Pancho approached the music creatively. Pancho was able to see patterns or "essences" in this music much like what was abstracted in Chapter One. One of these patterns was the consistent rhythmic counterpoint that occurred between certain heads, such as the iyá enu and itótele cha. In a rhythm for Aggayu, Pancho moved over some of the attacks of both the iyá enu and cha heads to change the melodic contour of the phrase. Another observation that Pancho used in his practice was finding connections between certain Orisha rhythms that are not often played consecutively in ritual settings but share certain archetypal characteristics. Schweitzer shows this by recounting Pancho's grouping of the seco rhythms for Oya and Aggayu. They both utilize ensemble archetype six from Chapter One. Pancho also conceptualized and abstracted patterns by shifting in between seco rhythms for Orichaoko, Osun, and Obba which all use ensemble archetype two.

Pancho Quinto, Lázaro Galarraga, and Manley "Piri" Lopez are all children of Elegua and follow in his spiritual path aesthetically in their approach to performance and in their approach to life. Elegua guards the crossroads between spaces and acts as a messenger between the Orishas, humans, and the Egun (ancestors). Schweitzer makes an observation that Pancho's dialectic understanding of the equal importance of innovation and tradition is aesthetically in

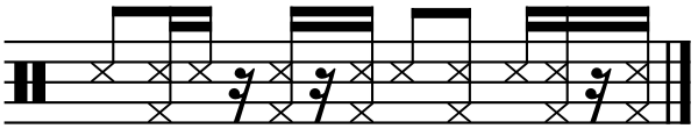
[107] Schweitzer, ibid., 141.

line with being a child of Elegua. I feel that this is also quite true of my teachers Lázaro Galarraga and Manley "Piri" Lopez. The crossroads can be observed in binaries of innovation/tradition, liminal spaces between sacred/secular, embodied knowledge and cognitive intellectual approaches to improvisation, and the interstitial threads between genres in "fusion" contexts. Elegua also is in dialogue with their approach to teaching as seen in their patience, empathy, and playful "trickery." All three of these drummers' faith and alignment with Elegua is intertwined with their influence in bringing Lukumí concepts and essences into popular genres.

Pancho also innovated the instrument's orchestration in creating a hybrid multi-percussion system including batá, a cajon, a cowbell, and a spoon. Pancho would sit on the cajon and play it with a spoon in his left hand as well as the cowbell that was held down by his right foot. His right hand would play the three batá stacked on the ground with the enu heads facing him. This was his primary setup for improvising in a Guarapachangueo Rumba setting.[108] His approach allowed him to improvise with an ensemble and hint at different roles from a traditional Rumba setting. Pancho was able to add to the music as opposed to replicate these roles. His left hand with the spoon played a pattern on the cajon that differed from the traditional gua-gua pattern played with two sticks on wood. His new pattern contains exactly the same rhythmic contour from the okónkolo part for chachalokpfun shown in Chapter One. His right hand would move back and forth between the side of the cajon and the batá to hint at segundo and quinto roles in Rumba improvisation.

[108] Here is footage from a class with percussionist Steve Bloom in Washington D.C. of this setup.
Pancho Quinto, "Cuban Jam, Pancho Quinto en casa de Steve Bloom," YouTube, January 5, 2009, educational video, 8:10, https://www.youtube.com/watch?v=l8uRR7uF85c

Figure 2.2 (Rumba Havana Cata Pattern and Pancho Quinto Spoon Pattern)



In a class setting with percussionist Steve Bloom in Washington D.C., Pancho also abstracts the cueing system of batá in contemporary Rumba practice.[109] At 3:36 he begins to play calls/rhythms for different batá rhythms on his multi-setup and then quickly phases into the rhythm for guarapachangueo. He plays the okónkolo seco rhythm for a later section of Yemaya and Elegua, Oferere for Chango, and hints at Titilaro for Chango. His left hand improvises around the contours of all three cha heads while his right hand outlines the melodic contour using each enu head.

Pancho Quinto's recording career included jazz fusion collaborations with Jane Bunnett, Omar Sosa, and Los Hombres Calientes. He spent years finding ways to synthesize folkloric secular and sacred styles into his own aesthetic as well as into genres outside of the Cuban tradition. Some interesting examples include tracks such as Song for Argentina from Jane Bunnett's *Spirits of Havana* in which Pancho plays the last road of the seco rhythm for Osain. This rhythm has a shape that fits well with the contour of boleros and danzones as well modern styles of music such as reggaeton and dembow. On G.M.S. from the same recording, the batá ensemble plays chachalokpfun in the introduction under Bunnett's flute improvisation. Many of these recordings set a precedent for how to approach playing batá in secular fusion contexts.

[109] Pancho Quinto, ibid.

I want to focus specifically on Pancho's own recording *Rumba Sin Fronteras*. While many of his collaborations with other artists are strong examples of how he approached fitting the rhythms into new music, they often lack the space to deal with larger aesthetic concepts that I have outlined in Chapter One. Yet both *Rumba Sin Fronteras* and his first album *En El Solar La Cueva Del Humo* embody these concepts on many levels.

Rumba sin Fronteras includes a variety of tracks that include some combination of four singers, saxophone, guitar, piano and rhodes, as well as many percussionists. Some tracks include a trio of batá drums, and some include a modern Rumba setup of two congueros, a cata player, and a clave player. Pancho plays his multi-setup on many of the tracks such as "A Esos Senores," "Sosa En El País De Las Maravillas," "Aspirina," "Caridad," and "Water Please." Some of the tracks start as Guarapachangueo and morph into chachalokpfun, such as "Water Please" and "Sosa En El País De Las Maravillas."

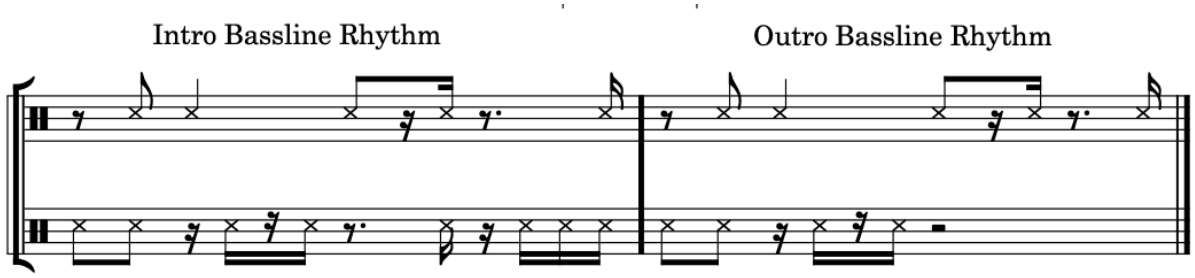
Caridad is notable in that Pancho calls the okónkolo rhythm for Oferere for Chango on the multi-setup and then changes into the okónkolo pattern for Meta (sometimes known as Aluya) for Chango. He employed a similar transition during the class with Steve Bloom previously mentioned. This rhythm then transforms directly into Guarapachangueo. As a result, he is abstracting the parts from their functional roles in the batá ensemble. Okónkolo parts on their own would hardly ever call an ensemble to go into a new section.

Certain tracks such as "Solo Mi Arte," "La Gorra," and "Sosa En El País De Las Maravillas" include production magic in fading transitions and multi-tracking. The breakdown at 2:09 in "Solo Mi Arte" is a strong example of space in the call and response between guitar and rhodes. This repeated phrase sets up the chachalokpfun rhythm. Pancho consistently uses heavy chorus

and reverb to affect his voice and certain instrumental textures. However, this wash never overtakes the rhythmic dance of the whole.

"La Gorra" begins with the call for chachalokpfun and proceeds to fall into a Tony Williams Lifetime-esque fusion dance. The bass line locks directly into the itótele pattern for chachalokpfun. Space is left for the drums as many of the harmonic attacks are whole notes on beat one. There is also a drum machine track slid into the texture including open and closed hi-hats that fit into the itótele pattern for chachalokpfun with the bass line. The outro ends with a bass, piano, and percussion breakdown including a montuno over the top of chachalopkfun with a timbale solo over the top by Jesus Diaz. Pancho finds infinite ways to bring together the sacred and secular while keeping the tradition alive.

Figure 2.3 (La Gorra Bassline with Clave)



1.5 MANLEY "PIRI" LÓPEZ

Manley López Herrera was born in 1981 in the San Miguel del Padrón borough in Havana, Cuba. Colloquially known as "Piri," he is a percussionist from the legendary family of rumberos and tamboreros known as "Los Chinitos de la Corea."[110] The percussionists in the family include four brothers; Irián, Bertico, Reynaldo, and Pedro, who is Piri's father. The family was close to Pablo Roche Cañal, also known as"Akilakuá," one of the elders of the Cuban batá tradition. Bertico was a member of Yoruba Andabo with Pancho Quinto and Irián a member of the Conjunto Folklórico Nacional de Cuba. In 1991, at the age of ten, Piri began to play batá in ritual settings. At age 15, he played itótele on the deeply influential Abbilona recordings of batá drumming and song. These albums, released in 1999, aimed to approach the music more authentically to ritual settings with long form recordings, many of which lasted 10 to 30 minutes. The project ultimately contained 45 albums recorded over four periods.

Piri, like his uncles and father, is a master rumbero in traditional styles of Yambu, Columbia, and Guaguanco, as well as the modern style Guarapachangueo that was created by his family and Pancho Quinto. In 1995, he joined the Rumba collective "Aspirina Guaguancó" that includes members of the influential Aspirina family. The Aspirina family has roots reaching back to the 1940s in Rumba idioms. In 2004, Piri joined the folkloric ensemble "Raices Profundas" and toured internationally. Following in the footsteps of Pancho Quinto, Piri is

[110] Much of this information has been consolidated by percussionist Antoine Miniconi who lived with Piri and the Los Chinitos family for many years in Cuba and documented much of their life and accomplishments. Antoine Miniconi. "Curriculum Vitae: Manley "Piri" López Herrera," manleycvenglish, 2007, https://manleycvenglish.blogspot.com/.

prodigious both as an educator and performer. Piri currently lives in Mexico City and teaches many students from around the world online and in person.

In a similar vein to Pancho Quinto, Piri has taken liberties with the music itself as well as his setup. He has created a new style of music that he calls Guarabatá. The setup for Guarabatá includes all three batá stacked on a stand, a cajon mounted on his right, a snare drum mounted on his left, a hi-hat played by his right foot, and a cowbell played by his left foot. His right foot often keeps the quarter note going while his left foot often plays clave.

The most significant change in the batá that makes his style different from past drummers that have played three batá at once is the fact that the okónkolo is flipped so that on his right he has the enu heads of the itótele and iyá and okónkolo cha head.[111] On his left he then has the cha heads of the itótele and iyá and the okónkolo enu head. This is significant as he is able to play rhythmic ensemble archetypes with his left hand. His left hand is dealing with "harmonic zones" in Javier Diaz's words.[112] His right-hand deals with the melodic contours of itótele and iyá and at times adds in the okónkolo cha in spaces where his hand is free. He treats the okónkolo cha as a "pseudo" iyá cha, a voice that is important in the melodic dialogue of the music. At times, Piri then uses the iyá cha head as a "pseudo" okónkolo cha.

Piri's concept of adapting batá rhythms to the multi-setup channels batá improvisation by making clear not what needs to be added but what could logically be left out. The okónkolo cha head, as shown in the rhythmic archetype section in Chapter One, often highlights the

[111]Piri explains his process of inverting the okónkolo in his multi-setup in this video. Manley López, "Funcionalidad del Trío Batá," June 9, 2020, educational video, 1:55, https://www.youtube.com/watch?v=X-N_31GYxN8.
[112] Diaz, ibid.

downbeats and marks time. When only one drummer is playing, the motion of ki-la continues to be felt between the itótele or iyá enu heads and at times the okónkolo cha is not necessary. In November of 2018, Piri uploaded a video of a full Oru Seco on his three batá setup.[113] As one would expect, the notes that are left out are usually in vertical stacks that include 3 to 4 notes. A drummer with two hands can only play two notes at once. As the melodic contour of his right hand (itótele and iyá enu heads) is usually quite busy, it is difficult for him to fill in the spaces with iyá slaps, thus, that voice is less present in the texture than in 3-part ensemble settings. On the left side of the setup, slaps on either itótele or okónkolo cha heads that support an enu head already on the downbeat are often omitted. An example of this is the rhythm for Ochosi as the itótele cha is omitted. This is heard at 1:12 in the video below.[114]

In ritual settings, analyzing Piri's approach to the instrument is complex as he is such a dynamic player in how he relates his aesthetic to what is needed in the sonic whole. His influence on ritual drummers in the past 20 years has been broad, partially because of the reach of social media and the internet.[115] Like other modern batá drummers, Piri will at times fill up more space and "improvise" patterns around "Base" phrases on all three drums. Nonetheless, as noted in Chapter One, the definitional difference between "floreos" (small

[113] Here Lopez plays a full Oru Seco on 3 batá.
Manley Lopez, "Orun Seco 🌎🌎🌎 COMPLETO. 13 MINUTOS. BatáBatería. Estudiando en casa, 12 Noviembre 2018. Nereo Gonzalez, Ayan Sayeró, Rangel" Facebook, November 12, 2018, educational video, 13:05, https://www.facebook.com/manleylopez/videos/210521679720111.
[114] Manley Lopez, "Orun Seco," https://www.facebook.com/manleylopez/videos/210521679720111.
[115] Johnny Frias addresses in his dissertation how Afro-Cuban folkloric music has changed in relation to modern technology and distribution.
Johnny Frias, "Afro-Cuba Transnational: Recordings and the Mediation of Afro-Cuban Traditional Music," (PhD Dissertation, CUNY Graduate Center, 2019).

variations), “conversations” that are idiomatic, and “inventos” (new patterns) can be subtle and subjective.

To some older batáleros, any inventive changes in ritual settings are concerning, even those that come from deep understanding and internalization/embodiment of those traditions. The difference between a drummer like Piri and other younger drummers that fill up space in a less effective way is Piri’s deep understanding and malleability in working with the “essences” I have described. A great example of this is how Piri maneuvers the beautiful ambiguities of definitional binaries between conversations, floreos, and inventos particularly in his playing of itótele in ritual settings.[116] Drummers like Piri remind us that density and quantity of notes need not be at odds with feel, consistency, and groove.

An anti-chops trope in batá[117], one that Piri challenges, can be valid but reminds me also of a parallel problematic notion that intensity needs to be married to high volume and speed. I have witnessed Piri play ceremonies very slowly and quietly and very quickly with piercing volume at equal intensities. I remember distinctly one Oru Seco that Piri played in the summer of 2022 in Mexico City that lasted almost an hour where he played every rhythm almost at half the traditional tempo in which some toques were almost unrecognizable. Kenneth Schweitzer explains a similar story in regard to Pancho Quinto testing him in class settings with toques at

[116] This rift between generations is also present in jazz drumming communities as older drummers warn of the loss of feel and groove in modern improvised music.

[117] Another way of explaining this idea is in terms of differing definitions of virtuosity. More modern batáleros that play maximally in regard to tempo, density, and volume are more in line with a traditional “western” perspective on virtuosity. Historically, drummers' virtuosity was reflected in their constraint, control of sound, memorization of encoded language in the drumming and precision in catching iyá calls.

very fast and very slow tempos that were outside of the acceptable range for each Orisha rhythm.[118]

As a teacher, Piri is highly disciplined in his regard to sound. I spent almost a month trying to get a specific sound together on the okónkolo enu head. He reminded me that anyone can learn the rhythms and that his contribution to students was to help them understand feel and sound. Piri takes such detailed consideration to the exact position his hands and body are in and how this changes the sounds coming out of the drums. For him, the body and its posture are equally important to the motion of the arms in striking the drums. One can tell in recordings how consistent his ensembles usually sound as he makes sure many of the drummers he plays with have the same consideration to sonic detail. While this consistency and precision in technique is at times aligned with a more conservative traditional notion of batá, it allows Piri to utilize innovative phrasing and inventos while keeping his sound in alignment with the tradition.

This precision in control of traditional sound on the batá also works as a point of departure for Piri in use of contemporary extended techniques. On his three batá setup, he has developed new sounds on many of the drums. He utilizes bell-tone like rings on the okónkolo cha head by striking the edge of the drum. This is a technique that is sometimes used in Matanzas style batá as a complement to the traditional cha technique of hitting closer to the center of the head. Piri also has taken influence from Zakir Hussain in creating new iyá sounds using the palm of his hand instead of the whole hand.[119] This technique has been criticized

[118] Schweitzer, ibid., 134.
[119] Manley "Piri" López, Personal Communication with the author, Mexico City, Summer, 2022.

historically as it can lower the pitch of rope-tuned drums, but Piri has mastered the intricacies of this technique so that the drum keeps its pitch. He also uses a rolling technique on some of the drums similar to "la mano secreto," a technique made famous on congas by Giovanni Hidalgo and Jose Luis Quintana ("Changuito"), where he rolls back and forth between his palm and fingers.[120]

In February 2023, Piri released a video for his composition entitled "Entre Abbure."[121] The piece includes Eduardo Veitia ("Rumberito") on congas and cajon and Nereo González on cata as well as Piri on his multi-setup. The piece is a series of abstractions on Rumba and modern Guarapachangueo. It begins with a medium tempo where Piri "rides" like a conguero on mostly the okónkolo with the cajon, iyá, and itótele adding conversational lines in relation to Rumberito. At 1:02, Rumberito calls a quick transition to a new tempo that Piri answers and González brings in the quicker cata pattern. This transition is in line with the way batá ensembles catch calls in an instant. Rumberito then takes a lyrical solo on cajon over the new texture. Piri's use of the multi-setup makes the batá sound timbrally quite different from their traditional form. His consistent use of rolls and two notes in quick succession on his left hand are a component of this sound.

Piri then takes a solo at 1:56 using mostly the snare drum and cajon. Timbrally these sounds call forth resonances of a kick and snare drum. Piri is abstracting modern drum-set contours outside of folkloric music with his own phrasing and language that is deeply situated

[120] One can see this technique at 9:55 in his presentation of the Oru Seco on three batá. https://www.facebook.com/watch/?v=210521679720111

[121] Manley López, "Entre Abbure," YouTube, February 9, 2023, 3:20, https://www.youtube.com/watch?v=t-TwCZHzJLo.

inside of folklore. This abstraction includes long flows of notes, maximalist almost rudimental phrases (in a drum-set sense), and more simple melodic phrases accentuating the back and forth between the cajon and the snare (see 2:34). If anything is "clave-like" in modern western music, it would be the kick on 1 and 3 (downbeats) and snare on 2 and 4 (the backbeats).[122] This solo is a conceptual meeting of clave and backbeat as concepts as he abstracts this low to high motion (kick to snare) within clave and folkloric language.

I am reminded of a conversation I had with the great drummer Henry Cole in Puerto Rico. When I asked him about adapting folkloric Puerto-Rican music styles (Bomba and Plena) to the drum-set his answer was simple. He explained that I needed to look for low and high melodic contours. In so much of folkloric music, particularly in styles that use hand drums like Tumbadoras (congas), Djembes, or Barriles (Bomba in Puerto Rico), the low-high contour comes from the back-and-forth motion of open tones and slaps. Piri is able to fluidly switch between stylistic abstraction of this low-high melodic contour and denser sheets of rhythmic sound that channel more modern jazz and fusion drummers such as Chris Dave or Justin Brown.

1.6 DAVID VIRELLES

David Virelles is a Cuban American composer and pianist based in New York City. He is a band member of both AACM member Henry Threadgill and contemporary jazz saxophonist

[122] Note that outside of folkloric contexts in modern production spaces producers such as Monte Booker are abstracting this contour and high-low relationship of kick and snare in highly elastic ways. A great example is "GIRL" by Monte Booker. Booker crafts the melodic relationship of kick and snare in a manner that almost sounds like the itótele and iyá enu heads in modern ñongo.
Monte Booker, "girl," Independent, May 30, 2016, https://montebooker.bandcamp.com/track/girl.

Chris Potter, as well as a sideman with many other jazz musicians. Virelles has also worked consistently with Roman Diaz, a master percussionist from Havana, Cuba. Virelles' composition and improvisation is heavily influenced by Afro-Cuban religious music. His first record *Continuum* was a collaboration with Andrew Cyrille, Ben Street, Roman Diaz, and Cuban painter Alberto Lescay. He has made subsequent recordings (*Antenna EP & Transformación del Arcoiris*) that heavily utilize electronics. On *Antenna EP*, Virelles produced drum ensemble music in line with folkloric percussion ensembles under the pseudonym *Los Seres*.

I will focus predominantly on his record *Mbókò,* released in 2014 on ECM records. As a departure from my earlier analyses, I will look at the full album and each individual track in reference to "essence" and form. The ensemble consists of Marcus Gilmore on drums, Roman Diaz on Biankoméko (a four-part drum ensemble used in Afro-Cuban Abakuá music), Thomas Morgan and Robert Hurst on upright bass, and David Virelles on piano.[123] The Abakuá men's secret society in Cuba has roots in the Cross-River region of southeastern Nigeria and southwestern Cameroon. The drumming, rituals, dances, and art associated with the brotherhood is still quite protected in secrecy, arguably more so than Lukumí music at this point.

[123] I should note a great conversation I had with Raul Fernandez about the upright bass as an epitomic symbol of the intersection of European harmony and African rhythm in Latin music, a binary that holds water but is often mentioned in a highly reductive manner. The bass often is the foundation to the harmony while also locking into the rhythmic interplay as a second percussive voice. We spoke about Israel "Cachao" Lopez and treating rhythmic attacks on the bass like a drum or voice. I find it interesting that Virelles chose to have two bass players here, almost accentuating its multifaceted positioning.

1) WIND ROSE (ANTROGOFOKO MOKOIRÉN)

The album opens with patience. In a duo between Virelles and Diaz on Biankoméko, a minimal piano "Base" leaves space for the drums to color textures and "speak." Although Biankoméko drums do not have the same history of speaking like batá, Virelles seems to be tapping into the histories of Cuban and African drums' literal and mimetic speech functions. I see an affinity between Valdés and Virelles not in the fact that space is left, but in their intentionality in how space is used. The space left is not silent and devoid of voice but warm and brooding, sitting contently just as much as wanting to eagerly jump back in. Virelles uses space and events in a dialectic manner much like one can envision in relation to tension and release in Afro-Cuban religious music. A western reductive understanding of syncopation, in thinking of off and on-beats at odds with one another, does not exist. In turn, events do not exist without their parallel spaces of silence.

The duo setting in "Wind Rose" allows us to hear the dynamic possibilities of a liminal space between quasi-pulsed and gestural "out of time" entrainment. As I listen to Virelles' harmonic language and rhythmic approach, I am reminded of similar ways of approaching polyrhythm "gesturally" in the music of Alexander Scriabin. Pianists interpret loose phrases of 7 and 9 over 8 as two parallel lines of motion push forth towards a common endpoint. Much like the rhythm of spoken language, the way that pianists learn this is both embodied or intuitive and cognitive or intellectual.

As Diaz and Virelles move between spheres of antiphony and oblique homophony, there are beacons of rhythmic contours that shine through clearly. One is that of a low to high ki-la

motion that I hear clearly in a quasi-pulsed manner throughout the piece in the left-hand pedal going from C# to D#. Virelles improvises antiphonally with himself as well as with Diaz, multivalent, kaleidoscopic, and cyclic.

2) THE SCRIBE (TRATADO DE MPEGÓ)

"The Scribe" opens with a lilting drum set intro by Marcus Gilmore that aligns with a contour similar to the Rezo batá rhythm for Obatala. Gilmore barely moves from this pattern for the whole composition. Like "Wind Rose," "The Scribe" is a ritualistic exploration of how an ensemble, as a dynamic body, can effectively leave as much space as possible while keeping forward motion. The work again allows Diaz to "speak" over the holistic texture. A good example of Diaz's off the grid "talking" is heard at 1:44. I envision Virelles' approach throughout this piece as following and supporting an imaginary singer in a folkloric setting. Harmonically, Virelles circles around shapes that would hypothetically support a folkloric melody well. Many Afro-Cuban religious melodies are situated in pentatonic spaces but find so much of their essence in how they slide in between each note of the scale.[124] Registrally distant dyads, shapes of fourths and fifths stacked, and polytonal pentatonic chords all abstract yet support the contour of these melodies. One could consider much of Bela Bartok's work in parallel in marrying post-tonal harmony and folklore.[125]

[124] Peter Manuel has an important article on mode, melody, and harmony in Afro-Cuban folkloric music. Peter Manuel. "Mode, Melody, and Harmony in Traditional Afro-Cuban Music: From Africa to Cuba." *Black Music Research Journal*. Spring, 2007, Vol. 27, No. 1

[125] Béla Bartók, Béla Bartók Essays (St. Martin's Press, 1976).

3) BIANKOMÉKO

"Biankoméko" begins with a piano intro of twelve angular beats that follow an isochronous pulse. The band enters and instantly creates a thick in "fix" texture that never compromises the forward motion. This texture clearly plays with 3 over 2 polyrhythms and 4 over 3 polyrhythms in tandem. Also, Gilmore often adds phrases of quintuplets, sextuplets, and other odd groups in dialogue with the foundational polyrhythms. Gilmore, a long-standing member of pianist Vijay Iyer's trio, has created organic ways of approaching odd "little phrases" more commonly found in South Asian and Balkan traditions, with an Afro-diasporic sensibility. I mean this to say that he loosely paints around these micro-rhythmic groupings with elasticity and polymetric sensibilities that do not exist as clearly in rhythmic spaces that are not Afro-diasporic.[126]

In opposition to "The Scribe," Gilmore has all the flexibility here and Diaz keeps clearer time in the mix. The holistic ensemble creates a 3 over 2 pendulum rhythm much like batá ensemble archetype two. In this archetype, Virelles' left hand on the piano would outline the itótele part. The basses function much like more drums in how they slide into the open spaces. At 2:42 a chord in the higher register of the piano, bell-like in its rhythmic shape and timbre, seems to almost gesturally call a transition to a new space of energy. Here, Virelles is the iyá drum. The ensemble continues to move forward in this massive "fix" texture until a fade and transition into an outro call, similar to the beginning pattern, at 4:30.

[126] I remember a conversation I had with Iyer at the Banff Center in 2017 where he spoke on many of his compositions that utilize odd subdivisions (i.e., quintuplets, septuplets) as dealing with base rhythms rooted in clave and Topoi-based bell patterns.

4) ANTILLAIS (A QUINTÍN BANDERA)

The fifth track *Antillais (A Quintín Bandera)* is an ephemeral study in entrainment. It starts with a stuttered groove by Gilmore that shapes a melodic contour between cross-sticks on the snare drum and a high tom with swirling "in fix" rim clicks and left foot hi hat "chicks." The groove at first could be heard more easily as a divisive rhythm, with two repeated phrases of 5 and 7 loosely carving the time. When one hears the hi-hat chick enter, one could decide that that is where the downbeat is as the hi-hat traditionally tethers the downbeat and other prominent "on-beats" on the drum-set. However, when the low bass part enters, the mind could choose to entrain to a downbeat on the second bass attack or keep the downbeat as is and make the bass play 4 and the "and" of 4 respectively. In the tradition of Son bass playing, this phrase (3 and 4, or 4 and the "and" of 4) is common but the tempo of this piece is much faster than any Son piece would be. Compare in the diagrams below the contour of Gilmore's original pattern with the first note on the downbeat with Gilmore's pattern in relation to the bass pattern leading into one.

Figure 2.4 (Marcus Gilmore Drum-set Antillais Contour)

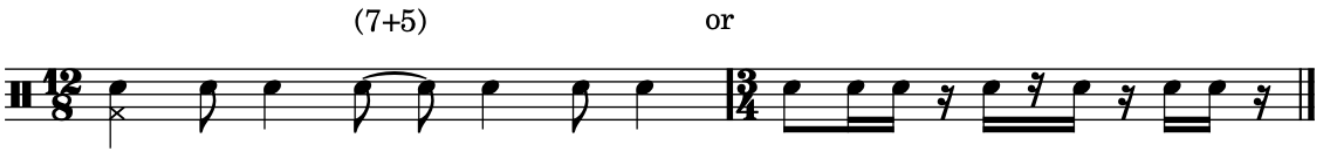
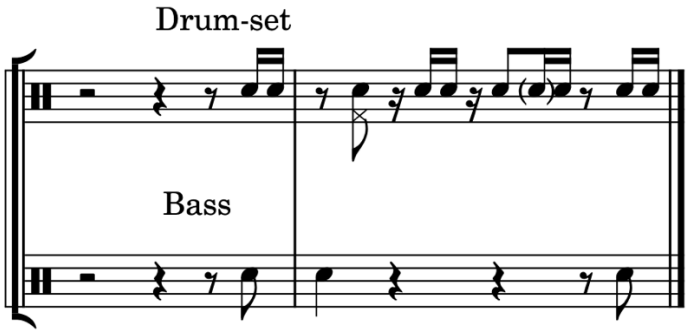


Figure 2.5 (Antillais Drum-set Contour with Bassline)



It is not that there is a "right" downbeat, although I would assume that the score has one the ensemble was referencing, but rather that their playing as an ensemble makes this conversation moot to a degree. On top of Gilmore's drum-set pattern, Roman Diaz plays loose phrases in "fix" of six notes per bar in between half note triplets and the tresillo pattern. When the two basses enter, one more clearly entrains to 4/4 but the looseness and collective phrasing hints at phrases of three (i.e., groupings of four triplets) as well. This is a strong example of an anti-hierarchical way of playing meter reminiscent of batá music. With a unison "and" of 4 attack, the band locks into a clearer 16th note pulse together in 4/4 around 1:13 and then falls into a wash at 1:27 that falls into a slower pulsed in "fix" texture that leans towards 12/8. Rhythmic ideas are interjected that thicken the rhythmic texture from all members of the band. Also, timekeeping/comping seems to be conceptualized on equal grounds by all members of the band. I mean this to say that they are all "comping" collectively by carving around the time, as well individually marking consistent time. This is in opposition to many traditional modalities of jazz improvisation, where certain instruments like piano comp around the time

and are not obligated to mark it as clearly as say the drums.[127]

Part-way through Virelles' more soloistic improvisation at 3:12, the sonic world seems to open up. Gilmore creates "arrhythmic" washes and paints intricate nuanced textures that imply different subdivisions, as muscle memory codependences are obfuscated. For example, certain phrases become even more ambiguous by innovative orchestrations of grace notes. An example of this is playing a "flam" or grace note leading into downbeats on an open hi-hat or ride cymbal, as we often hear loose grace notes ending on snare or kick on downbeats. Another example of this is playing a metric accent on a cymbal crash without a kick drum as they are almost always heard together. Batá music also plays with this abstraction of grace note placement between the hands. The time completely opens up at the five-minute mark under a thunderous piano wash. Then the original groove returns and becomes fragmented.

In the ensemble's treatment of time as a collective whole, the work becomes trance-like. Breaking away from hierarchical roles of improviser and supporter, timekeeper and soloist, "Antillais" moves towards similar improvisational aesthetics that are key to Afro-Cuban ritual music. This concept is also clear in the recordings of Miles Davis' Second Quintet, in how the ensemble listens and interacts at such a high level without adhering to the preconceptions of their instruments' presupposed functions. In alignment with Piri's statement that opened this chapter, innovation does not compromise listening and playing what serves the music. Both drummers play melodically and "speak," while the piano plays rhythmic phrases that treat all 10 fingers like a drum ensemble, and the basses act like hinges.

[127] For a more in-depth analysis of traditional ensemble "roles" in jazz improvisation, see Ingrid Monson.
Ingrid Monson, *Saying Something, Jazz Improvisation and Interaction* (The University of Chicago Press no.1, 1996).

5) ABERISÚN Y ABERIÑÁN

"Aberisún y Aberiñan" is a constrained exploration of the dynamic possibilities of timbre and sound in Abakuá traditional music. At first, constraint exists in the timbral material used with a lack of an obligation to keep "consistent" musical time. Then at 1:04 constraint exists in minimal use of contrasting material in clear consistent musical time. Both approaches, one maximal, the other minimal in density, highlight how broad the timbral palette is for each instrument and particularly the biankoméko. In counterpoint with the lyrical bass expression throughout the track, the subtle biankoméko, mixed low in the track, breathes in its organic state. Constraint opens the door for a microcosmic window into the traditional ensemble role of the instrument.

6) SEVEN, THROUGH THE DIVINATION HORN

"Seven, Through the Divination Horn" is, among many things, an exploration of the liminal nature of "swing" in modern jazz improvisation. The work begins with a short call from Roman Diaz on a bell that outlines a contour loosely. The ensemble then enters with a cue from Virelles on piano. Gilmore is one of a few drummers, also including Justin Brown, Craig Weinrib, and Nasheet Waits, that find a liminal space in contemporary improvisation between a traditional "swing" rhythm and a 12/8 "Afro-Cuban" rhythm on the drum-set. The time is much less reliant on the ride cymbal and the whole drum-set plays counterpoint that outlines time and dances with the ensemble. Hierarchical notions of the hi-hat and ride cymbal keeping time and the snare drum and bass drum comping in reference to the cymbals and the rest of the

ensemble are broken down in dialogue with histories of post-bop drummers such as Tony Williams, Jack DeJohnette, and Al Foster.

Looking back at the history of bebop and post-bebop drummers such as Art Blakey, Philly Joe Jones, Roy Haynes, Elvin Jones, and Max Roach, time oscillated in swing and "Latin" sections in compositions with clear shifts between the motion of singular quarter notes. An interesting movement away from this distance between sections is swinging in a very straight manner like Jack DeJohnette on Charles Lloyd's *Forest Flower: Charles Lloyd at Monterey*.[128]

Gilmore's beat is undeniably thick and swinging and both bass players oscillate between walking and outlining the 12/8 contour. The marriage of the distance between histories of swing drumming and "jazz-latin"[129] drumming a-la Max Roach and Elvin Jones may be due to Gilmore's embodiment of "fix" phrasing much like batá drummers. A great example of this motion is from 1:30 to 2:30. Gilmore has a very similar approach in recordings with Vijay Iyer such as their arrangement of Thelonious Monk's composition "Work."[130] Traditionalist critics of modern jazz drummers could feel that this manner of drumming is too busy and soloistic in a way that cuts off the soloist, and yet, when done well, this nature of playing facilitates whole ensemble dialogue and breaks away from a notion of an individual soloist. This is a similar dialogue to what was brought up above in regard to Piri and modern batá.

[128]Charles Lloyd, *Forest Flower: Charles Lloyd at Monterey*, Atlantic Records, 1966.

[129] I see a divide between Latin-jazz and jazz-latin traditions in the history of drum-set. Latin-jazz is a broader term that follows the history of artists that synthesized jazz harmony and melody with Afro-Cuban and Afro-Latin rhythmic structures with an emphasis on a correct reading of both sides of the clave. Jazz-latin drumming, as heard in the playing of Max Roach, Elvin Jones, and Philly Joe Jones was an abstraction of Afro-Cuban rhythms that aligned with the consistent dance but did not adhere to sides of the clave. There are many examples that blur this binary, but I feel it is a helpful heuristic.

[130] Vijay Iyer, "Work," *Break Stuff,* ECM*,* 2015.

A few key examples of how this approach facilitates dialogue in this recording are found at :58 seconds where Roman Diaz's bell pattern nestles perfectly into Gilmore's wash of sound. Virelles plays an ostinato-like pattern at a lower dynamic and has more rhythmic flexibility that locks in the ensemble sound. It is as if, for a short moment, the ensemble all replicates the interlocking of a drum-ensemble. Another example is at 3:15, where the biankoméko is more clearly heard and both drum parts dance in "fix" while the bass and piano hold down the time.

7) STORIES WAITING TO BE TOLD

"Stories Waiting To Be Told" alludes to my thoughts on polymeter. It begins with a striking piano intro by Virelles that seems to reference harmonic spheres reminiscent of Wayne Shorter.[131] At 2:00 the piano starts to outline the time. When the full ensemble comes in at 2:28, one can entrain to 3/2 or 12/8 or 4/4 with equal capability. This polymetric space calls forth the feeling of the first road of the batá seco rhythm for Yemaya, as well the rhythms for Orichaoko, Osun, and Obba.

Virelles' playing aligns clearly with a batá aesthetic in a few key ways. His left-hand dances around and plays on all three partials of the triplet in different sections and deals with many of the base archetypes outlined in Chapter One, Section 3.1. His playing treats the ensemble like an iyá would treat the rhythmic combination of okónkolo and itótele. The piano does not enunciate the downbeat, but it does not sound as if it means to be "offbeat" either.

[131] It is interesting to note how effortlessly much of Wayne Shorter's harmonic vocabulary, particularly in the fusion era and with his final quartet, aligns with folkloric pentatonic melodies. This makes sense in how much ground is covered in his use of quartal shapes with melodic bass counterpoint.

Virelles has an approach to off-beat comping that helps create a holistic ensemble dance but does not enunciate the existence of a downbeat. This way of playing, antithetical to off-beat comping that creates tension, aligns with ideas of "tension as release" and negates western conceptual ideas surrounding syncopation as a concept. These ideas are addressed in more detail in Chapter Four.

8) TRANSMISSION

"Transmission" feels in many ways to be a departure from the consistently minimal, dynamically patient textures of the rest of the record. This piece is key in reference to my thoughts on the idea of a modern jazz drum-set aesthetic, one that is in dialogue with batá drumming. I am speaking of a way of playing, pulling from particularly fusion and ECM traditions, that many reductively speak of as "straight." I personally prefer to call this approach "new-time." Like many prolific fusion drummers from the 1970s and 1980s, such as Tony Williams, Vinnie Colaiuta, and Jack DeJohnette, "new-time" includes traditional jazz language from the whole history of the instrument but with a tighter and more straight way of phrasing. What differentiates "new-time" from many past drummers in the fusion idiom is that it is less reliant on the contour of a backbeat (i.e., back and forth motion of kick and snare) and deals at its most basic level with the quarter note pulse. When playing in 4/4 in new-time, all the quarter notes have equal weight metrically, much like many Afro-Cuban folkloric traditions if one were to disregard the clave. In this manner, "new-time" pulls from ECM traditions metrically yet often utilizes a stricter more concrete acknowledgment of the grid than looser "floaty" ECM drummers. A great example of epitomic playing in this style in the past 10 years is

that of Justin Brown on "Maurice and Michael (sorry I didn't say hello)" from trumpeter Ambrose Akinmusire's album *A Rift in Decorum: Live at the Village Vanguard*.

Modern jazz drumming most clearly pulls from two seemingly opposite poles of music outside of jazz histories—folkloric (largely religious traditions) and electronic music idioms. Drummers, such as Dan Weiss and Eric Harland, have long-standing relationships with North and South Indian music while drummers like Craig Weinrib, Marcus Gilmore, and Justin Brown have relationships with Afro-Cuban ritual and popular folkloric traditions.

More than any other piece on this record, Transmission acknowledges the existence of a "post-industrial grid."[132] This acknowledgement is most clearly displayed by Gilmore's choppy and dense yet lyrical drum-set playing. The rest of the ensemble approaches time more loosely around Gilmore's playing and calls forth folkloric conceptions of time in dialogue with some notion of a "perfect grid." The ensemble improvises together throughout the work and each musician brings equal intensities. Communication comes more from dynamic changes in energy and density than from interlocking melodies and notes as is true in other idioms of jazz-influenced improvisation.

9) THE HIGHEST ONE

The ninth track, "The Highest One," places much of the ensemble in a supportive minimalist role. It begins with one resonant cymbal attack paired with Diaz playing two metal

[132] I began thinking about this idea and the grid after a conversation and lesson with the drummer Craig Weinrib in May, 2019. More on this is covered in Chapter Four.
Craig Weinrib, in discussion with the author, May, 2019.

options, guiro-like, in the sense of the ritual performance and the instrument of the same name. The piano enters with attacks that periodically increase the space in between, giving the illusion of slowing down. The drum-set plays an ostinato almost all the way throughout the piece, allowing space for the bass and piano to sing. At 3:30 a loosely homophonic line is woven together with both the bass and piano and then at 3:35 Roman Diaz starts to play over the texture. This is reminiscent of Oscar Valdés' percussion playing on Chucho Valdés' aforementioned recording, "Son no. 2." The drums speak "out of time" in dialogue with the history of Oriki praise poetry and Moyuba phrases.[133] The work ends with the whole ensemble fading to Diaz, praise-like, as the drums continue to speak like words.

10) EFE (A MARIA TERESA VERA)

The album closes with a simple yet profound musical statement. "Efe (A Maria Teresa Vera)" includes a bell pattern on claves by Diaz that calls forth Arará longer-form bell patterns with an Ives-esque harmonic matrix on piano by Virelles. Without the rest of the ensemble, the bell pattern is clear and leaves sonic after-images.

MBÓKÒ (PATTERNS & AFTER-IMAGES)

Mbókò as an album touches on many of the ideas I brought up in Chapter One regarding kaleidoscopic entrainment, polymeter and in "fix" phrasing, and rhythm as melody. The ensemble make-up and orchestration of each voice in fluid dynamic form channel Afro-Cuban

[133] I mention these concepts in reference to rhythm as melody in Chapter One, Section 4.3.

folkloric traditions in a beautifully inventive manner that follows in line with many of the preceding artists considered above such as Chucho Valdés, Manley Lopez, and Pancho Quinto. The record also exemplifies many dialectics that I will bring up in Chapter Four in relation to tension and release and blurring of traditional hierarchical roles of instruments in an improvised ensemble.

The first three tracks on the album highlight space as a musical tool and the dialectic relationship between space and events. The intentionality in the space left by the ensemble feels deeply connected to the history of language in Afro-Cuban religious music and "rhythm as melody" mentioned in Chapter One, Section 4.3. The ensemble all speak as "drums" but leave space, because of the necessity to breathe as well as to leave space for the sonic whole.

The third, fourth, and seventh track are exemplary of a dialectic blurring of meter and entrainment to the grid as seen in Chapter One, Section 1. Gilmore's playing on each of these tracks extends upon batá aesthetics as he plays with "little" phrases of 5 and 7 while still playing with the entrainment to the grid spectrum mentioned in Chapter One. This dialectic blurring of meter and entrainment is key to many of my observations about a modern jazz drum aesthetic as analyzed in the fourth, sixth, and eighth tracks. Gilmore's playing creates a thread between batá aesthetics and the history of jazz drumming after the post-bop era.

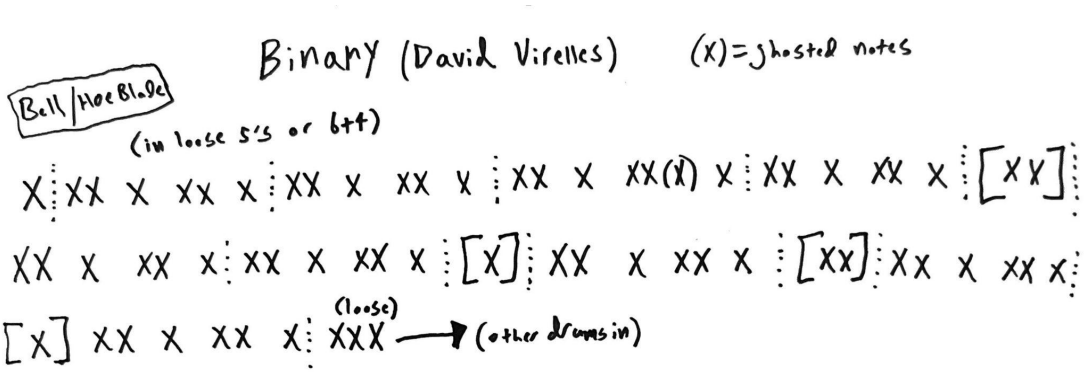
The ensemble's use of intentional space and the idea of a "drum" aesthetic all contribute to the notion of anti-hierarchical improvisation that is heard throughout the record. Each track places each instrument in different functional roles, roles that often obscure and evade the traditional functions of each instrument. The ensemble itself, with two drummers, two basses, and a pianist also contribute to this blurring. Mbókò weaves together histories of

improvisation in jazz and Cuban folkloric worlds in an innovative yet aesthetically deeply traditional manner.

BINARY (FROM *ANTENNA EP*)

Virelles has also created work in electronic music idioms that is in dialogue with Afro-Cuban folkloric traditions. A key example is "Binary" from *Antenna EP*, released in 2016 by ECM Records. Below is a loose transcription.

Figure 2.6 (Binary Transcription)



This work was produced electronically by Virelles with samples and is credited to "Los Seres," a ghost technological drum ensemble. Note my transcription does not include the duration of the spaces in between, as the rhythmic events are loose and gestural. However, the rhythms still clearly imply rhythms that are referential to timelines and/or clave. This implication derives more from the fact that the instrument played is a bell or hoe-blade and that the rhythm is predominantly made up of individual events or two events together. The rhythm also includes mostly spaces that are loosely the length of one event. In timelines, one would not often hear three sonic events next to each other without a rest, nor would one

usually hear rests longer than one space.[134]

There are two binary poles that exist here: (1) the idea of an event and a space (i.e., an interval that separates one event from another), and (2) an individual event in contrast to two events played in succession. Virelles is abstracting this idea by eliminating iso-rhythmic spaces and allowing the contour of the rhythm and phrasing to shape the work. He also abstracts the notion of a timeline by loosely grouping the phrase into 10 beats (2 pairs of 5) instead of 12 beats. After the transcription ends at 0:28, the pattern falls into a looser 12/8 bounce. In the transcription there are a few stutter phrases in boxes that interrupt the pattern.

A compelling parallel to this sound is Milford Graves' 1966 recording of "Nothing 19" from *Milford Graves Percussion Ensemble*. This collaborative record with percussionist Sonny Morgan utilizes a very similar, yet much more maximalist, loose gestural rhythmic bounce at 3:10 with talking drums. I find it intriguing that this way of gesturing towards folkloric contours in a more "quasi-pulsed" manner can exist in very similar feelings in a produced space and with live musicians.

[134] Note that clave, conceptualized as a simplified contour based on the standard Yoruba bell pattern, does have spaces that are longer than one event.

CHAPTER 3: GATES (PRE & POST)

(translation & transmission)

Gates(horizonsseenandpresenc(e)cut)

Atticus Reynolds
UCI ICIT PhD Dissertation Concert
March 21st, 7:30 PM, 2023, MoCAP studio

Solo (one movement)

1. para Elegua (3 roads) (piano & drum machine)
2. para Aggayu y Max Roach (drum-set)
3. para Ogun y Jeff Mills (small metals & computer)
4. bäbi Etude (for Milford Graves) (large metals & drums)
5. para Oya (brushes & computer)
6. para Yemaya (with referent) (drum-set)
7. para Piri y Los Chinitos (guiro) (drum-set & computer)
8. para Elegua (cierre) (piano & voice)

Duo (w/ drums & cymbals)

1. Ñongo Etude (w/ Prawit Siriwat, guitar)
2. Night Sea (for Agnes Martin)
   (w/ Rajna Swaminathan, mridangam)
3. Rezo (para Obatala) (w/ Isaac Otto, bass clarinet)
4. Chachalokpfun Etude (w/ Evan Abounassar, trumpet)
5. for Elvin, McCoy, and John (w/ Kei Akagi, piano)

ON TRANSLATION (CAPSTONE PROJECT)

On March 23rd, 2023, I performed my dissertation capstone concert at UCI. In curating the music for *Gates*, my goal was to apply concepts that I have associated with Lukumí music, as listed in Chapter One, as well as take influence from influential composers who have done the same, as addressed in Chapter Two. Although many of the pieces were etudes aimed to address specific concepts, this work also aimed to embody the ritualistic aspects of batá performance as related to nuance in repetitive structures and long-form pacing, particularly in regard to creating emergent form.

I did not aim to replicate Lukumí ceremonies in *Gates* but instead sought to allow all the musicians' personal relationships with musical transcendence to breathe together. I am thinking of transcendence in this context as an oxymoronic departure from traditional notions of temporality, one in which feeling out of time or frozen in time is equal to a sense of hyper-presence, or even a feeling of time moving too quickly. I will touch on some of these ideas briefly regarding possession practice in Lukumí ritual ceremonies in Chapter Four. While I was in no way attempting to force these sacred embodied practices into the compositions, many of the concepts I addressed, particularly those that dealt with pacing in dynamics and density, felt clearly referential to the ritual aspects of the music. In writing this music, I contemplated how my artistic practice in improvised spaces could open up comparative studies into cultural relationships to trance and transcendence in musical practice.

Composing this work was a highly personal process that was at times hyper-formalized and at times completely open-ended and intuitive. Although I knew I would write a chapter

about this work after its completion, in composition, creation for the purpose of explication of concepts was not my focus. In essence, I felt that prioritization of the sonic object would speak more to the tradition with which I am in dialogue. An example of this is the system I developed of mapping batá strokes to brush strokes on the piece for Oyá in the solo set. Initially, I created a fairly strict system that kept the phrases in time, but in the actual concert, as I played along to the piano track, the phrases spoke more clearly to the Orisha rhythm when played gesturally out of time and with more improvisation around the system.

I continued to ruminate on saxophonist Charlie Parker's ideas on "learning everything and forget[ting] it"[135] in an effort to stay fluid and organic in my compositional practice. I attempted to allow everything I had conceptualized and "learned" in my research to find its way into the music intuitively and embrace the accidents. Those accidents often breathed more authenticity and life into my "translation" than strict adherence to the compositional strategies that I experimented with.

This chapter is broken down into two sections; one analyzing a solo set of music performed on a few different instrumental setups, and another analyzing five compositions for different instrumentalists performed as duets. The chapter closes with an analysis of larger trends and take-aways from both sets in relation to many of the ideas from Chapter One and Two.

[135] Gene Lees, *Meet Me at Jim and Andy's* (Oxford: Oxford U press, 1988), 82.

SOLO SET:

The first half of the capstone dissertation concert was a solo set including eight movements utilizing different stations.[136] These stations included a grand piano with a vocal microphone, a drum-set and gong setup, a setup of small metal objects (bowls, bells, plates), and an iyá batá drum that was amplified and played with brushes.

1) PARA ELEGUA (3 ROADS) (PIANO & DRUM MACHINE)

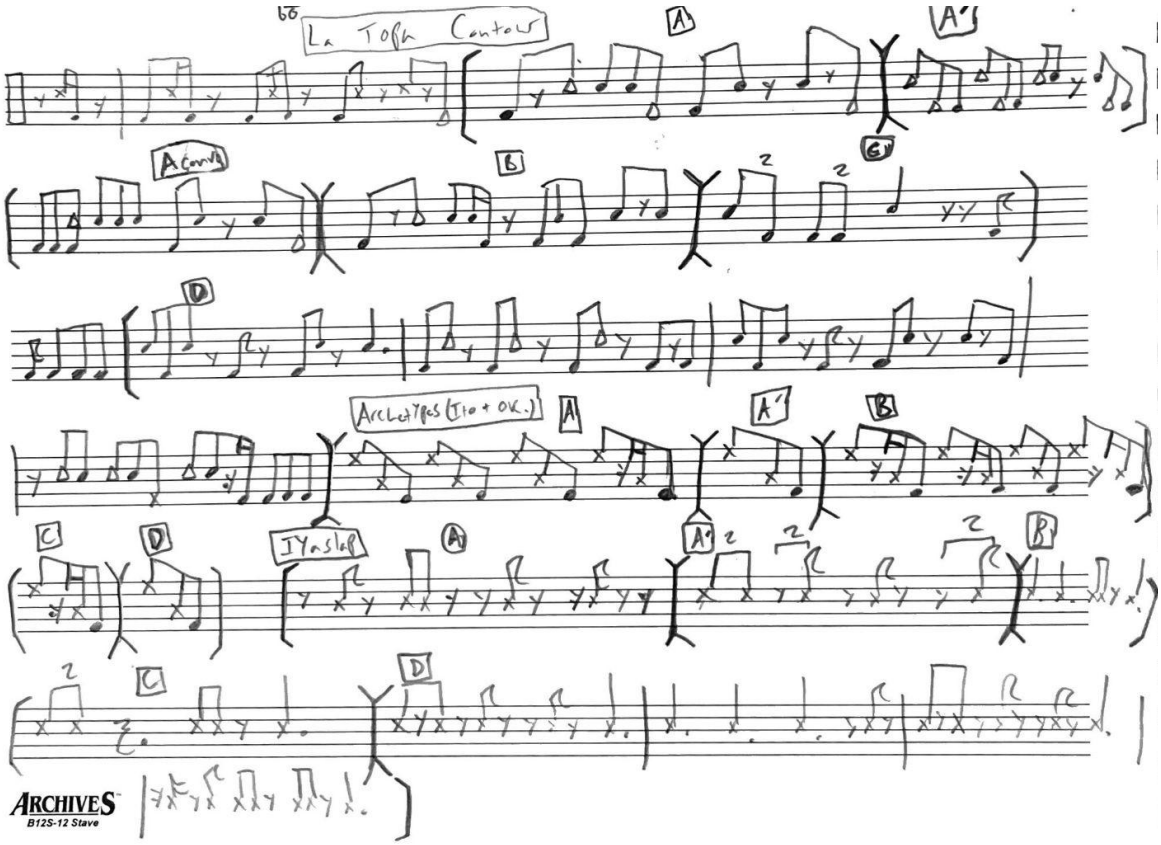
The solo set began on the piano with an individual note. The first movement had three main predetermined harmonic sections with pockets of open improvisation in between as transitions. Each section outlined the melodic dialogue of each subsequent road from the La Topa rhythm for Elegua, played in the Oru Seco. For full transcriptions of the Oru Seco in the style of Regino Jiménez, see Michael Spiro and Justin Hill's text.[137] I was stylistically pulling from these arrangements for much of the material in the capstone concert.

In writing this piece, I gesturally improvised around the contour of the iyá and itótele enu melodies and disregarded the type of stroke each one had (i.e., open, slap, or muted tone). I have attached my initial sketches of the contours below in Figure 3.1. At times, the itótele and iyá enu heads were outlined back and forth in my right hand between two fingers, with my left-hand giving harmonic support. At other times, each hand acted as each drum. I wondered what

[136] Atticus Reynolds, "Gates(horizonsseenandpresenc(e)cut) (Atticus Reynolds)," YouTube, April 23, 2023, 47:35, https://www.youtube.com/watch?v=qJZG2o3sgiI.
[137] Hill & Spiro. "*Roadmap for the Oru del Igbodu (Oru Seco)*."

might happen when I used the capabilities of maximal resonance and sustain on a piano to highlight batá melodic contours without the same elasticity of multiple drummers playing with short attacks.

Figure 3.1 (La Topa Contour Abstraction)



The first road was played with no harmonic support and short breaks in between individual notes. In these breaks, I played the okónkolo part for the third road of Elegua (the one departure from ki-la) with only my nails on G and A natural in an effort to not strike the hammer but to allow for the slight possibility that it may strike. This was in reference to "a

ghost of time" that would be present throughout much of the rest of the solo set.[138] The piece then transitioned into the second road where I started to improvise more around the phrase but always left some notes out between beats 3 and 4. This road in practice in a batá ensemble includes consistent 8th notes in 12/8 on every beat except for the third partial of beat 3 (see A' in Figure 3.1 above).

After an open improvised transition, I then moved into a faster rendition of the third road where my right hand danced back and forth between the itótele and iyá enu head melodic dialogue. This road plays more clearly with a 3 over 2 shape than the roads before and after it and the diatonic stagnancy of the harmony in this section enunciates that rhythmic departure. The fourth road included a ritardando into denser ascending harmony in my left hand outlining a hinge-like motion between E and A natural in my right hand. Another openly improvised section then led into the final road where I first played the harmony reduced to whole notes and then the motion of the four-bar phrase that makes up the final road of La Topa. I finally raised the volume of a Korg Volca Beats drum machine that was already playing silently and improvised phrases of the same harmony angularly around the drum loop. My goal was to deal with a modern expression of in "fix" phrasing that referenced triplets, sixteenth notes, and groups of five and seven played hyper-metrically.[139] This was also an expression of how in "fix" phrasing can exist in human collaboration with technological and algorithmic tools. The quantized sequencing of the drum-loop was programmed without any direct reference to

[138] Note in Chapter One, Section 3.2, I mentioned the second okónkolo archetype as circling around the ghost of ki-la. This pattern played with my nails is a reference to ki-la, okónkolo archetype 1, and its "function" in the batá ensemble.

[139] I find that in much contemporary rap music, rap phrasing in triplets aligns in a similar way with perfectly quantized sequenced drum patterns that sit more clearly in 4/4.

batá.[140]

2) PARA AGGAYU Y MAX ROACH (DRUM-SET)

As the drum machine volume was pulled down, I raised a set of brass bells and shook them as I walked to the drum-set. Brass bells, or chaworo, are traditionally placed around the iyá in batá ritual practice to symbolize that the presentation of music is for the Orishas and not for Egun (ancestors). I consistently used the bells as transition material in between sections of my solo set.

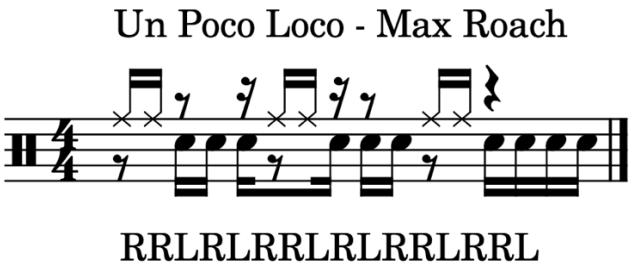
The second piece was in reference to the Orisha rhythm for Aggayu and drummer Max Roach. The okónkolo part for the seco batá rhythm for Aggayu outlines a common drum rudiment called a paradiddle. The itótele and iyá parts dance around this contour in long form repetition. In this improvisation on drum-set, I was referencing the sonic whole of the Aggayu phrase across the whole batá ensemble, Max Roach's artful use of many possible abstractions of a paradiddle, and Roach's inventive pattern on Bud Powell's "Un Poco Loco" from the 1952 record *The Amazing Bud Powell*.

After a short open improvisation in which I primed the drums and cymbals, I started the Aggayu pattern. My feet outlined the paradiddle, also reflected in the enu part of the okónkolo pattern, and my hands, iyá like, danced around the phrase. I then sped up the phrase and slid into the "Un Poco Loco" pattern with my hands, consistently speeding up until just the hands

[140] I am interested in future work that utilizes algorithmic randomization and chance functions to fill out a human and machine feedback loop, a contemporary representation of "fix" phrasing.

were left. I then began to improvise in a linear “new time” fashion around the phrase until I forced the kick pattern of the original Aggayu/paradiddle phrase back onto the sheets of sound and fragmented the holistic phrase. I then phased back into the original pattern and de-primed the drums and cymbals with more improvisation around the paradiddle.

Figure 3.2 (Un Poco Loco Pattern)



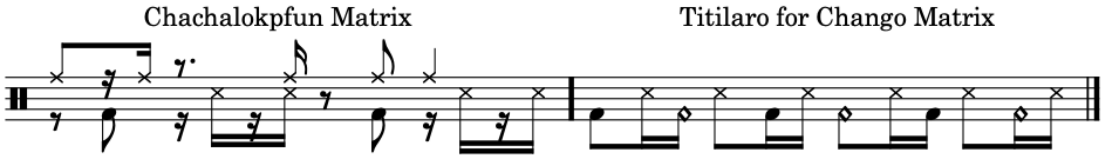
3) PARA OGUN Y JEFF MILLS (SMALL METALS & COMPUTER)

The next piece was played on a trap table setup that included a series of metal bells from Ghana, Mali, and the Ivory Coast, a copper bowl, an LP cowbell, and a few small metal plates. This etude was an abstraction of the seco rhythm for the Orisha Ogun as well as a tribute to the influential Detroit House producer Jeff Mills. I began the rhythm with the melodic contour of the first road for Ogun between the okónkolo and itótele enu heads. I then nestled the enu head part for the iyá into the pattern on the large copper bowl. I proceeded to run through a variation for the first road and second road in this manner, sped up slightly, and died off again to play a reprise of the first road.

I then sped up the original pattern of the okónkolo and itótele enu head contour until I started to pull back the note on beat 3 just slightly to create a Rumba clave pattern. This

pattern then modulated into a matrix of the chachalokpfun okónkolo pattern with clave. I used a specific bell that allowed my rubber mallets to get a clear higher pitched tone by muting the bell to show the back and forth of the okónkolo pattern between the cha and enu heads. I then modulated this pattern into the itótele pattern from the Titilaro rhythm for Chango. I continued to speed up and faded to a similar pattern on the small metal plates. These two rhythms have similar contours and motions and some batá drummers feel that chachalokpfun may have developed out of the Titilaro rhythm.

Figure 3.3 (Chachalokpfun & Titilaro Matrices)



My process in creating the synth track, made on a Dave Smith Instruments Prophet Rev2, was to record a take of the full form on the metal setup and then improvise along to it on the prophet. I attempted to follow the contour of dynamic energy, without too much rhythmic motion that could cut off the flexibility of the improvisation on the metal bells. I also rode the filter cutoff and volume knobs in an effort to match certain rhythmic shapes I was playing.

4) BÄBI ETUDE (FOR MILFORD GRAVES) (LARGE METALS & DRUMS)

The next piece was a tribute to Milford Graves performed on drums, cymbals, and gongs with timpani mallets. My kit had clear heads and no bottom heads much like Graves' drum set. Graves described this approach as one aimed for "maximum resonance."[141] Although the drums do not actually resonate as long with no bottom heads, this allowed me to have a clear distinction between a muted tone (with the mallet left in the drum) and an open tone. I began the improvisation with consistent slow repeated notes on a small gong mounted on top of a bass drum on my left side. The notes faded in and out until I began to add alternating individual attacks on a large wind gong and a smaller Chinese opera gong. This simple pattern became the texture for the whole piece that I improvised around.

The etude was an exploration of Graves' Bäbi system, discussed in Chapter One, Section 6.1. I tried to "speak" on the drums with open tones (breath) and muted tones (heartbeats). At first, I left the texture bare in dialogue with the repeated gong hits, but, as I built up the density, I started to connect the small gong to the larger melodic dialogue with the toms. The piece then slowed down and faded to the original gong pattern. Although I did not design it this way, this piece was also a great example of a manner of improvising on the drums using movement between gestural, quasi-pulsed, and isochronous-based time as a compositional formal device. Graves was a master of maneuvering the space between these conceptions of

[141] Institute of Contemporary Art, Los Angeles, "Milford Graves: Fundamental Frequency," ICA LA Exhibition Guide, (2023)

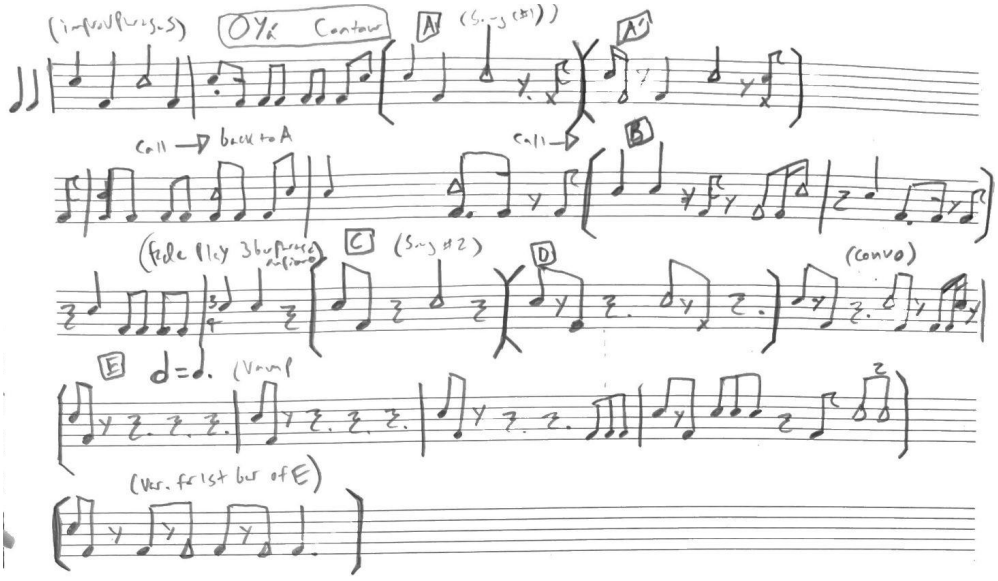
time in relation to the grid.

5) PARA OYA (BRUSHES & COMPUTER)

The next work was an exploration of a system that maps different batá sounds onto different brush techniques. As a jazz drummer, I realized that the control of resonance, sustain, and very different attacks on the brushes allows a clearer channel of translation from hand-drums than sticks. In composing this work, I first wrote out the melodic contours of each road (mostly itótele and iyá enu heads) for the seco rhythm for Oya and then experimented with different adaptations on the brushes.

I generally moved my left hand in circles to create the background texture and timekeeping function of the okónkolo pattern. My right hand either complemented the okónkolo texture with circular sweeps or played the melodic contour of the iyá and itótele parts. I ended up mapping itótele muffs to an individual attack on the head with my right hand left in the head and itótele tones to an individual attack with my right hand rebounding off the drum. I mapped iyá muffs to shorter sweeps across the drum and iyá open tones to longer, more resonant sweeps on the drum, as shown in Figure 3.4.

Figure 3.4 (Oya Contour Abstraction)



After I created the system, I recorded a piano improvisation of two traditional songs for Oya with improvised changing harmony in my left hand to a slow quarter note click track. I consistently used dyads in my left hand that helped support the pentatonic shapes of the vocal melody. While recording, I attempted to play phrases with distance from the attacks of the click track in an effort to keep the illusion of time and pacing without too much clarity of pulse. Along with the recording, I then practiced improvising the different roads of Oya on brushes and found pacing of each road that complemented the piano track. I found that with the beginning of the track, I could play wind-like textures that were connected to my breath before I began the seco rhythm.

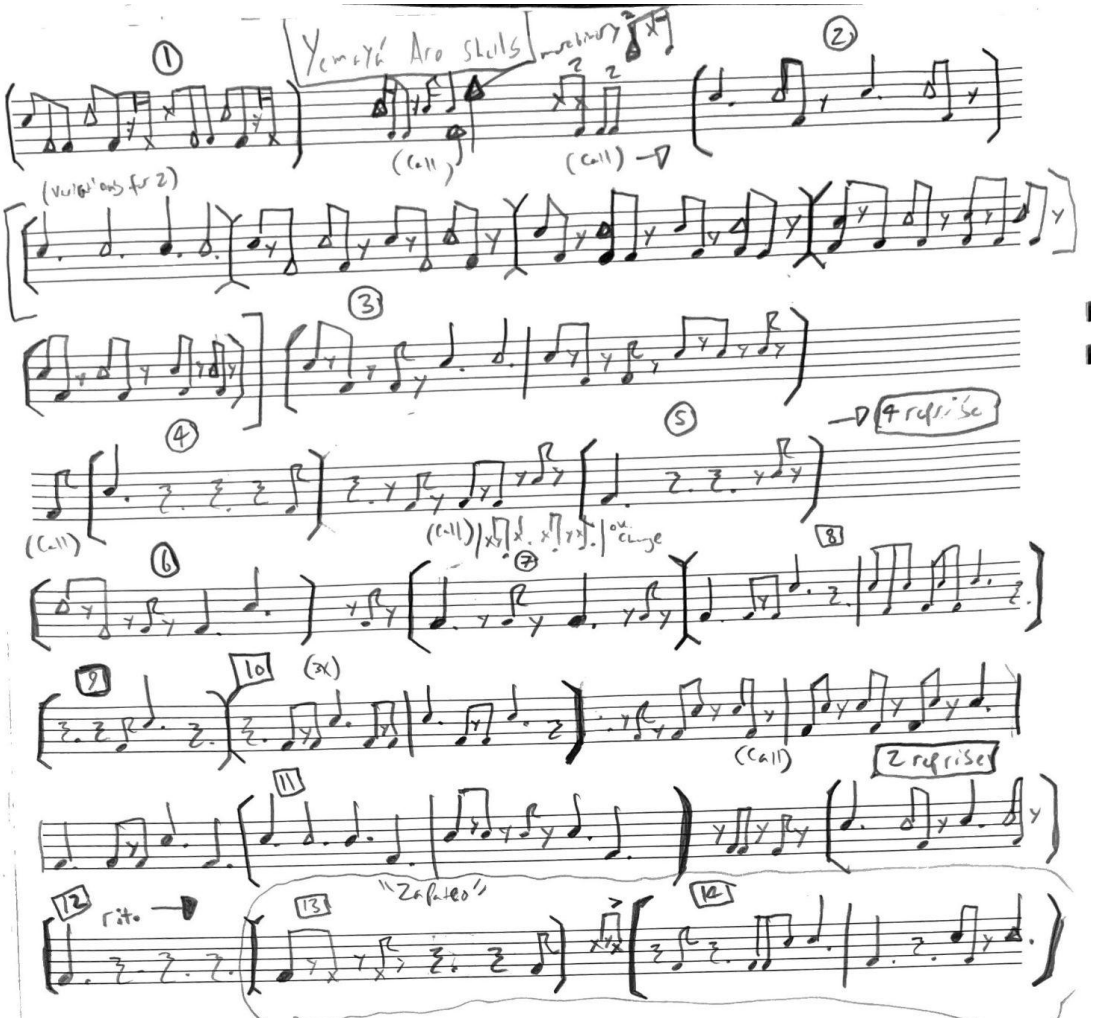
In the performance, I also amplified the brushes on the iyá with a reverb pedal to pull the textures together in the room. In this work and much of the solo set there was a feedback

loop between my own processes of improvisation/composition. I oscillated between improvising around patterns, composing forms that were more fixed, improvising again around them with tracks and outside technological tools, and then concretizing compositional forms. Reacting to the technology, in this case the piano track and reverb pedal, helped blur the boundary between pre-supposed definitions of "composition" and "improvisation."

6) PARA YEMAYA (WITH REFERENT) (DRUM-SET)

The Aro rhythm for Yemaya is one of the longest and most challenging batá rhythms in the Oro Seco, as it has so many changing sections and moves from a very slow tempo to a blistering pace. This piece on drum-set took influence from sections of the Aro both literally as well as gesturally. See Figure 3.5 below, for the full contour I used to create my drum-set arrangement. The first section was an exact rendition of the first road of the seco rhythm for Yemaya where a rim click and hi-hat chick were mapped to the 8th note matrix of the okónkolo and itótele cha heads respectively, my kick drum mapped to the iyá enu part, and my right hand on the muted floor tom mapped to the okónkolo enu head. I left the beater in the head for muted sounds on the kick drum and let it resonate for open sounds. The lack of a front head on the kick drum and clear batter head helped to differentiate these sounds. Note that the itótele enu head part, including a back-and-forth motion of muted and open tones on the downbeats, was left out of this matrix.

Figure 3.5 (Yemaya Contour Abstraction)



I then phased the kick rhythm into 8th notes and phased the whole rhythm into even triplets as is customary between three drummers in the accelerando section in the Aro. After the accelerando, I started to improvise around an abstracted improvisational space that I have found aligns with the rhythm for Yemaya. In this space, I kept consistent alternating phrasing between my hands and feet in groups of three and at times put an extra beat on the kick drum to scoot the phrase over one triplet. It is crucial in batá drumming to be able to feel strongly all three options of groups of two consecutive triplets and this improvisational space channeled

that. The rhythm then was squashed into consistent quarter notes, and I improvised around certain melodic dialogues that exist between the through-composed movement of the itótele and iyá enu heads in the later sections of the Aro. These options for improvisation can be seen in roads two through eleven in Figure 3.5. The rhythm then slowed down and phased back into even triplets with a reprise of road two, referencing a traditional ending to the Aro.

In the process of composing this work, I was also considering a well-known artwork by American conceptual artist Joseph Kosuth titled *One and Three Chairs*. This work includes a text description of a chair, a physical chair, and a photograph of a chair presented next to each other. While the liminal space between semiotic definitions of icon, index, and symbol is what makes many historical works profound and innovative, I found it interesting to humor distinct cuts between them.

Looking at *One and Three Chairs*, I was considering Rosalind Krauss' classification of photograph as index,[142] the text description as symbol, and chair as icon and/or object. This work for Yemaya gave semiotic meaning to each section. The first road was as close to "iconical" as possible, as I attempted to replicate the pattern as close as I could on drum set matching timbres, rhythms, and phrasing. Although in some ways, the timbral distance between batá and drum-set made this approach pseudo-indexical. The next triplet abstraction space was symbolic or referential, as I took the concept of all three options of two consecutive triplets out of the Aro and improvised around it. The final section of improvising around exact melodic dialogues was indexical, as the phrases indexed their original form but were slightly

[142] Krauss, Rosalind, "Notes on the Index: Seventies Art in America," *October* 3, (1977): 68–81. https://doi.org/10.2307/778437.

different as improvisational tools.

7) PARA PIRI Y LOS CHINITOS (GUIRO) (DRUM-SET & COMPUTER)

The next work was a tribute to Manley "Piri" Lopez and the Los Chinitos Family. Using a recording of a Guiro ceremony played by Piri and the Los Chinitos family in Cuba from the 1980s, I improvised a synth backing track to a thirteen-minute recording of songs for Elegua. I aimed to leave as much space as possible and map slight timbral changes in the synthesizer track to dynamic energy shifts throughout the ceremony. I then muted the Guiro ceremony and practiced improvising along on the drum-set to only the synth track. Guiro ceremonies traditionally have a lead singer, a bell or hoe-blade player, a conga player (called caja), and two to three chekeres. On the drum-set I aimed to improvise around the bell pattern with my right hand, gesturally hint at clave in the left foot hi-hat pattern, and improvise caja patterns on the kick drum and rest of the kit.

My aim here was to be patient above all else. Ritual master performers in Lukumí traditions, like Piri and his family, use patience in a profoundly beautiful way partially because of their trust in one another. They listen carefully to each other and deeply trust the communities they are playing for. I found that in playing alone it is more difficult to embody that patience. I made a point to not bring in the kick drum at all until the bass dropped in after 6 minutes and broke into an angular phrasing of the 12/8 bell pattern that sounded more like two separate phrases of 5 and 7 than an even 4 beats. This way of playing emphasized the dialectic relationship between additive and divisive conceptions of clave as mentioned in

Chapter 1, Section 3. The shift into the climax, heard at 39:55, sat more clearly in a divisive rhythmic space, ripping apart the contour that was bubbling up for so long.

At first as I was improvising along to the full Guiro ceremony with the synth track, I had to fit the drum-set part into the dense rhythmic material that already existed. When playing along with the caja part, I aimed to adapt certain rhythms that exist in ñongo improvisation on batá into dialogue with caja improvisation in Guiro ceremonies. When I finally muted the Guiro ceremony in performance I instantly had more space to fill up, but I attempted to channel some of that energy and improvise along to a silent caja improviser like Piri.

8) PARA ELEGUA (CIERRE) (PIANO & VOICE)

The final piece began with piano improvisation over the tail end of the drone from the Guiro piece for Piri. I then moved into a very simple piano repeated phrase over which I sang a song for Elegua. The harmony was stagnant in a way that allowed me to keep the pentatonic contour of the melody stable. The solo work began and ended with pieces for Elegua, as is traditional in Guiro and batá performance practice. It was also important to me as a tribute to my teachers Lázaro Galarraga and Manley "Piri" Lopez, who are both children of Elegua. Elegua, as a gatekeeper of the crossroads between innovation and tradition and other important dialectics discussed further in Chapter Four, was present in much of this work.

DUO SET:

The second half of the capstone concert included five duets composed for select musicians that I performed with on drum-set. Although I wrote these compositions with similar aesthetic guidelines to those considered in the solo set, many of these duets were dealing with broader abstract concepts as starting points for improvisation and less with specific batá contours. An exception to this is the Rezo for Obatala utilized in the duet with bass clarinetist Isaac Otto. Two pieces utilized drum-set adaptations of the two most common batá "dance" rhythms, chachalokpfun with trumpeter Evan Abounassar, and ñongo with guitarist Prawit Siriwat. One piece was a tribute to painter Agnes Martin, in which we took text scores and theory from Chapter Four as a point of improvisational departure. This work was written for Mridangam player, Rajna Swaminathan. The last piece was a duet for pianist Kei Akagi, in tribute to the John Coltrane quartet. It was an abstraction of a hermeneutic circle, in considering the influence of folkloric music on Coltrane's band as well as the influence of Coltrane's band on contemporary Cuban improvisers.

1) ÑONGO ETUDE (W/ PRAWIT SIRIWAT, GUITAR)

The first work from my set of duos was a study in orchestration of the ñongo batá dance rhythm on the drum-set with guitarist Prawit Siriwat.[143] As mentioned in Chapter One, Section

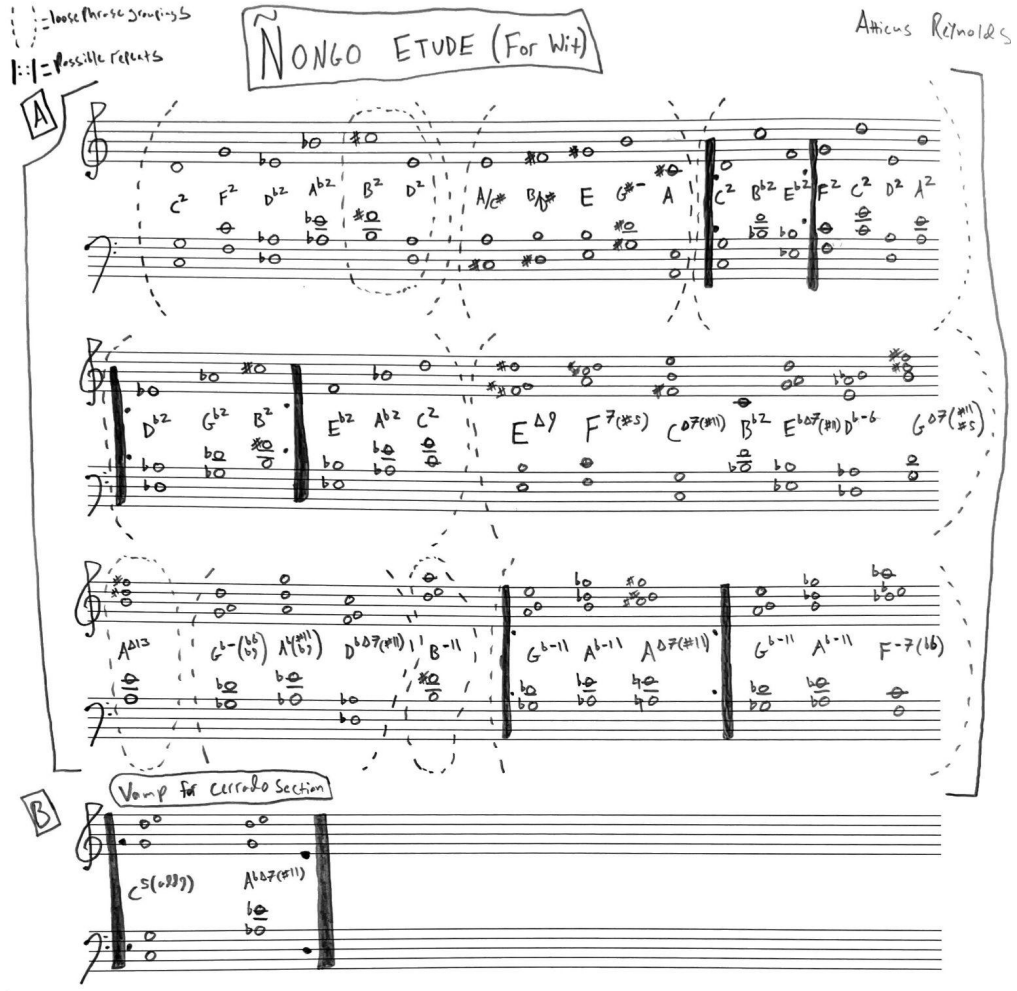
[143] Atticus Reynolds & Prawit Siriwat, "ñongo etude (Atticus Reynolds & Prawit Siriwat)," YouTube, April 23rd, 2023, 9:42, https://www.youtube.com/watch?v=2Cd3WVgaPLs.

5, many modern batá ensembles improvise long streams of melodic counterpoint in ñongo. Many of these streams cross over each other in “oblique” phrase lengths. Here, the term oblique is in contrast to linear phrasing. Oblique phrasing has a loose melodic dialogue with a good amount of cross over whereas linear phrasing is always alternating and has no synchronous attacks. As explained in my analysis of the “open and closed” system in Chapter 1, Section 5, the ñongo rhythm usually has a base phrase as well as small iyá variations that cue answers from itótele. In more modern contexts, the itótele and iyá improvise “obliquely” for longer periods of time until the iyá cuts off the space of improvisation and moves back to the base section.

For the guitar, I wrote out a series of harmonic shapes with no durations to improvise around my orchestration of ñongo on the drum-set. The score in Figure 3.6 is attached below. Though the way I heard the phrases was loosely outlined by dotted lines to show groupings, I gave Siriwat liberty in how to interpret the durations of each chord. The first time through the form, Siriwat only played the individual chords and the second time through he improvised around the phrases.

The challenge for me on drum-set was to play in a manner where the iyá part, played by the kick drum, and the itótele part, played by the rim click on the snare and hi-hat, felt like two different performers. I was attempting to channel true independence and not coordination. The piece started with an open space of improvisation with a consistent isochronous pulse but no metric hierarchy (i.e., in one/four). At around 1:10, I brought in the hi-hat pattern outlining the itótele part for ñongo on beats 1, 3, and 4.

Figure 3.6 (Ñongo Etude Score)



Siriwat used a pedal board including looping effects in the intro and outro that enunciated a comment he made to me in rehearsal about the composition channeling triggered samples of different tempos in DAW production. While I loosely kept an isochronous grid going throughout the piece, his playing referenced different grids and approaches to musical time in oscillating counterpoint to my more consistent pulse.

2) NIGHT SEA (FOR AGNES MARTIN) (W/ RAJNA SWAMINATHAN, MRIDANGAM)

The second duo was a piece for mridangam, performed with Rajna Swaminathan. Integrating text scores as well as traditional western notation, the work was in tribute to the Canadian American artist and abstract painter Agnes Martin.[144] This work was an exploration of how differing positionalities to the notion of a grid contribute to conceptualizations of music as language and music in ritual contexts. These positionalities were addressed in compositional study of how visual artists' relationship to a spatial grid in the digital age aligns with musicians' relationship to a temporal grid. I will address some of these ideas in more detail in Chapter Four. The ending of the piece, Section C, was an attempt to translate components of the batá "open and closed system," mentioned in Chapter One, Section 5, between drum-set and mridangam.

Section A, an intro of theme and variations, danced around a phrase in XO variation with both drum-set and mridangam repeated four times. In between each theme, mridangam and drums took turns improvising around text score material that was in reference to components of Agnes Martin's seminal 1963 work, *Night Sea*, and art historian Suzanne Hudson's text in reference to the work.[145] Night Sea is composed of intricately hand-scored rectangular grids on a large blue canvas with hints of gold.

The first text was a reference to the notion of aggressive negation as equal to an ultimate confirmation of an idea. This text notes the lack of depth that often exists in

[144] Atticus Reynolds and Rajna Swaminathan, "Night Sea (for Agnes Martin) (Atticus Reynolds & Rajna Swaminathan)," YouTube, April 23rd, 2023, 10:50, https://www.youtube.com/watch?v=uIMF1pKY2ME.
[145] Suzanne Hudson, *Night Sea* (Afterall Books: One Work, MIT Press., 2017).

unfettered dualist perspectives. I listed the facets of the work that I, taking influence from Suzanne Hudson's text, aligned with complete openness and subjectivity, or the "anti-grid."

Text A

- anti-grid, subjectivity and openness, (negation as tension and discontent and/or freedom)
  - Music: no consistent time, focus on sound/timbre, floating textural wash that pointillistic ideas carve through
  - Painting: priming gesso, color ambiguity, gold leaf
  - *"In this alternation of swell and recession, Night Sea performs the ceaselessness of pictorial reversibility; when the colour overtakes the linearity of the matrix, it also recedes, leaving the structure intact."*[146]
    - In this section allow the colour to overtake the linearity, don't let it recede…
  - *"Accident betrays her. Martin's lines force the issue of whether the fall away from the ideal condemns the inevitability of embodiment, and how this is to be valued. For Martin, it was negative. This was not necessarily the case for others, however. Far from the aspirational logic of her professed 'classicism' - a perfection that is, of course, unattainable - these marks positively evidence what Annette Michelson once characterised as a distinctively human 'visual tremolo', which is to say, that they are aleatory and minutely flawed."*[147]

Musical components of this mentality align with a lack of a consistent pulse, a focus on sound, timbre, and the character of individual events, and a de-prioritization of rhythm and its "followers," melody, harmony, and pitch. In a way this mentality is the intentional disregard of how musical objects are grouped. It is a determined focus on the present "cut" of improvisation, a "cut" that feigns the possibility of an escape from past and future. In the painting one could note Martin's priming Gesso, use of gold leaf hues in an aleatoric fashion, and ambiguity of blue created from three different hues. I reference a possible mapping of grid structures and hierarchies between fixed visual art and musical rhythm in the relationship

[146] Suzanne Hudson, ibid., 1.
[147] Suzanne Hudson, ibid., 17.

between color and line/shape, or rhythm and the individual musical transient. Hudson's quote in the third bullet above, about the "ceaselessness of pictorial reversibility" speaks to this idea.[148] In this first text, I wanted the improviser to allow the color to overtake the linearity of the matrix without its concurrent recession.

The second text for the performers was an exploration of the opposite end of this dualist perspective, that of the "perfect grid."

Text B

- 2) trying to replicate a "perfect grid"
  - Music: clean, tight, as close to metronomic as one could get, dance in the accents and not the phrasing
  - Painting: illusion of drawn grid lines (illusion of creation of time), illusion of uniform color, illusion of perfect squares, grid as readymade idea
    - *"Her parallel move from compositions involving discrete objects affixed to surfaces to painted relationships of figure and ground led her to the grid, where the priority of any one aspect was subsumed within the integrity of the whole. This first principle in the development of mathematical perspective, and a trope in its own right for modernists, became her readymade."*[149]

Here, one would play as tight and stiffly as possible and attempt not to "phrase." Yet, much like the first text, when one attempts not to use any micro-timing and elastic placement of notes, their negation becomes a confirmation of its opposite. This text asked for an attempt to sound like a perfectly quantized computer. As referenced in my work for Ogun and Jeff Mills, the third piece in the solo set, dance and motion can be beautifully profound with perfectly sequenced time when the musician interacts with accents and silences. The perfect pulse is always there but the dance is in the larger contour of the phrases and not necessarily a

[148] Suzanne Hudson, ibid., 1.
[149] Suzanne Hudson, ibid., 36.

"groove." In the painting, one could see these characteristics in parallel in Martin's illusion of a perfect grid, illusion of uniform color, and illusion of perfect squares (they are in fact all rectangles). Here, the grid is a ready-made in Duchampian fashion as the drum machine treats a rhythmic grid as a sonic ready-made to abstract and dance around.

The third text is a dialectic understanding of the grid, an understanding that I look at in more detail in Chapter Four. A performer acknowledges its existence and its merits, but not in an attempt to replicate it. One also acknowledges its efficacy as a vehicle for humans to speak musically together in a common language.

Text C

- 3) acknowledgement of the grid and its merits, but not as law, grid as a language between yourself and an invisible improviser, dance
  - Music: dance, feel, ~consistent~ pulse but phrase however feels good to you
  - Painting: rectangles not squares, slight lilt of the lines not super even horizontal lines, 3 different blues (polymeter, in fix, can't tell at first), not creating time but carving time (grid is pulled apart and scored not drawn on, while paint still ductile)
  - *"In its 'flaws', and in other ways, Night Sea manifests one of many dualities in Martin's work: the tension between the ideal - what she understood to be a near platonic conception of perfect geometry and materialised form - and the human."*[150]
  - *"curve on the straight line"*[151] *-milford graves*

While Swaminathan and I were each improvising on our own around each text, in this section we aimed to dance with an invisible and silent improviser. If anything, this acknowledgment of the grid as an unreachable platonic ideal is what most musicians strive for

[150] Suzanne Hudson, ibid., 16.

[151] Milford Graves & Melvin Gibbs, "Making Contact," *A Mind-Body Deal*, (Inventory Press, 2022).

in phrasing and manipulating musical time. In *Night Sea*, Martin's use of rectangles and not squares, slight lilt of the lines slanting across the canvas, and contrast of three blues that combine into an individual nuanced hue reflect this dialectic understanding. I see her use of blues as a visual representation of polymeter or in "fix" phrasing. When one looks closely at the canvas, the paint is ripped apart and scored, aligned with a rhythmic approach to carving time and not an attempt to create it. The grid seems solid and perfect yet is pulled apart by the human artist while still ductile and fragile.

The bones of this work were products of intuitive improvisation. The short fragment and theme from Section A that became the compositional base for this piece was a product of open improvisation on the drum-set. I then found the meter and divisions of the phrase by figuring it out with a consistent hi-hat pulse and found that up-tempo phrasing of it easily phased into other spaces in a similar manner to seco batá rhythms for Oya and others mentioned in Chapter One. I used this small phrase, seen in Section B, and then derived an abstracted contour in XO notation from that phrase (seen in section A). Then I took a section of that phrase and phased it into groups of 7s, 8s, and then finally into a faster triplet space to get into the ending and Section C.

Section C was an abstraction of the "open and closed system" used in ñongo as mentioned in Chapter One, Section 5. The drum-set acted functionally as an iyá, making calls and directing transitions, and the Mridangam acted as an itótele, following and interacting with the drum-set. I kept a consistent 12/8 pulse with the kick drum on many of the quarter note downbeats and my right hand danced around the time on a muted floor tom as my "open" feel. I then would cue "closed" sections by pulling the kick drum out of the texture and moving my

right hand to the rim of the floor tom for a sharper less dense texture and Swaminathan pulled her left hand, which usually played more open sounding tones, out of the texture. I then interjected a few sparse kick drum hits in to create the oblique call and response sections that call to histories of modern batá improvisation such as that of Abbilona, Manley "Piri" Lopez, and the Los Chinitos family.

The beginning of the score, aside from the reference text scores already attached above, can be seen below in Figure 3.7.

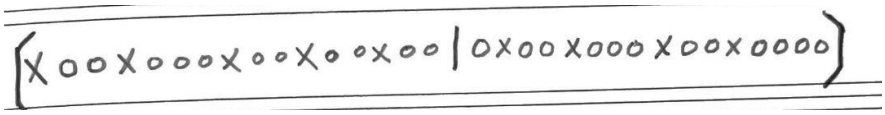
Figure 3.7 (Night Sea Score)

Night Sea (for Agnes Martin)

Section A

"caution[ing] against an equation between simplicity and guilelessness"
-Suzanne Hudson, Night Sea, 19[152]

(play theme 4x, then each musician improvises taking into account guidelines on subsequent pages, this will happen 3x starting with Mridangam, after your improvisation is done start the phrase and the other musician will join in)
(solo 1, use text A, solo 2, use text B, solo 3, use text C)

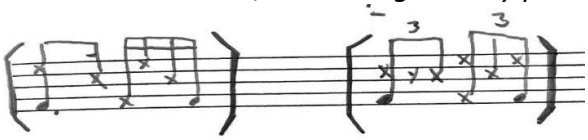


Section B
(After final drum solo, start to play this pattern, gradually speed up and improvise around contour of phrase together)

(cue: right hand goes down to the floor tom on the last phrase and start repeating 7-phrase (outlined by dotted lines))

[152] Suzanne Hudson, ibid.

(phase the 7-phrase into 16th notes, and then gradually phase into triplets)



<u>Section C (Cerrado, open/closed system)</u>

Improvise together in 12/8 space. time is generally "open" (i.e. improvising together around the groove) until the kick drum leaves the texture. At this point mridangam uses mostly muted sounds and tightens up the texture, then more sparse kick phrases will trigger call and response overlapping lines until finally the groove is clearer and you are back in "open" space.

3) REZO (PARA OBATALA) (W/ ISAAC OTTO, BASS CLARINET)

The third duo was for bass clarinetist, Isaac Otto, and was in reference to batá rhythms for the Orisha Obatala.[153] It utilized the Rezo as well as the full seco rhythm for Obatala. A Rezo is often used to describe Lukumí songs that flow loosely "out of time" over the top of fixed pulsed batá rhythms. Like some of my works in the solo set, I transcribed the melodic contour between the itótele and iyá enu heads and experimented with how to orchestrate the melodies between drum-set and bass clarinet. The main goal in this work was to experiment with utilizing the cueing system that batá drummers manipulate to create emergent form. The drum-set functioned loosely as the iyá in guiding the form but also filled out many of the full batá ensemble textures. The bass clarinet oscillated between improvising around the form and

[153] Atticus Reynolds & Isaac Otto, "Rezo (for Obatala) (Atticus Reynolds & Isaac Otto)," YouTube, April 23rd, 2023, 8:07, https://www.youtube.com/watch?v=Ga7EfX6LafU.

following cues or filling out sparse batá rhythms, such as the okónkolo ki-la pattern at D, as seen in Figure 3.8.

After the score was developed, Otto and I improvised around the form to see how long sections should be and how to utilize the pedal setup that was attached to the bass clarinet. I found that timpani mallets filled out the texture in a clearer way to complement the muffled attacks of the enu heads, particularly in the Rezo introduction.

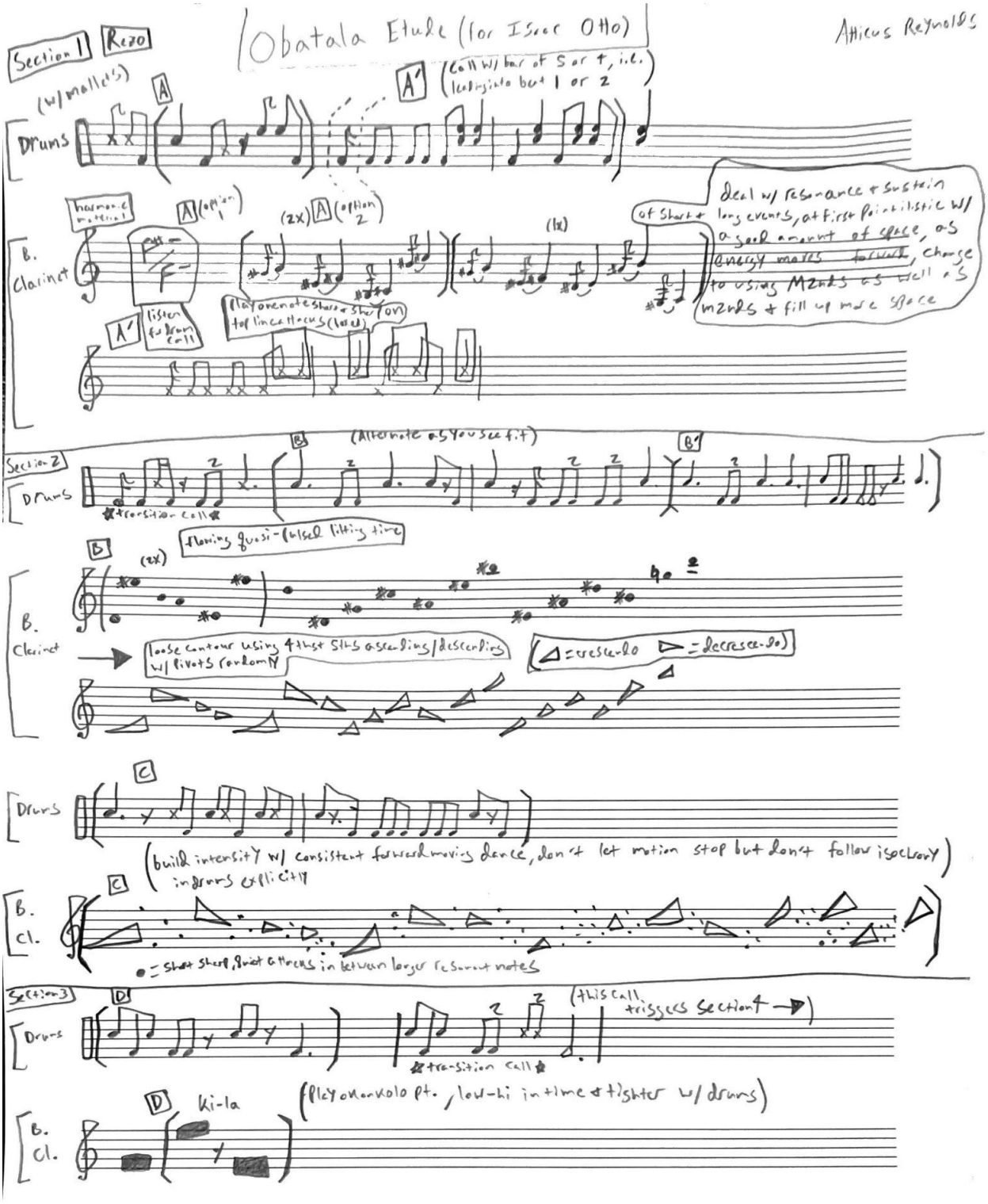
As referenced in Chapter One, Section 2, cues can take very different forms and could lead to drastic tempo or subdivision changes. They could also lead directly into very subtle changes, such as the doubling of a cha part in the okónkolo pattern part way through the seco rhythm for Obatala. My cues and calls on the drum-set attempted to channel these nuanced options. In the Rezo beginning to the work, Otto and I played loosely out of time textures that outlined the batá ensemble's basic part. I then cued a variation call that Otto answered (examples of this call are at 1:40, 2:03, and 2:32). This call could be done in a phrase of five beats, where it begins on beat 2, or in a phrase of four beats, where it begins on beat 1. Different generations of batá drummers play this call in different ways but one is expected to be prepared for either. This is a cogent example of prioritization of the melodic dialogue over western conceptions of metric hierarchy as mentioned in Chapter One. I experimented with calling the phrase in both ways.

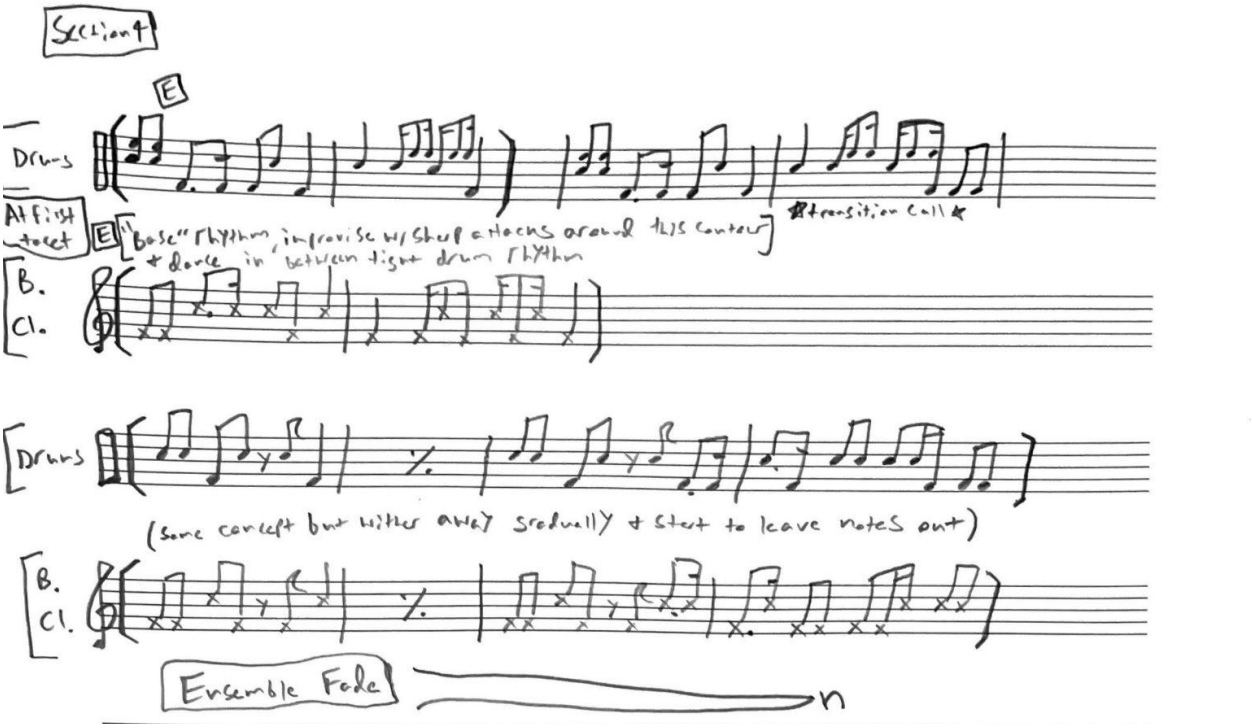
The calls to cue Section B and C were more subtle and fluid and Otto was not required to catch them exactly. Instead of making an instantaneous change, it was more important to loosely follow the flow of motion after they happened. The call into Section D was sharper and required him to move into improvisation around the ki-la okónkolo phrase. I finally called, with

two duple phrases and a clear muff tone on the floor tom (at 6:11 in the recording), for the final two roads for Obatala which are slightly slower and duple based. Here Otto's part played the itótele and iyá enu counterpoint but with high and low pitches reversed to complement my phrase that was the traditional high and low contour. I created a melodic palindrome of two phrases nestled into each other, much like the Aggayu pattern I experimented with in the solo set.[154]

[154] An alternate score was created by Isaac Otto using his own "Otto" notation and can be found in the appendix, including all the scores for the duo set. His work looks at gradients of fixity and openness in notation and each section of Obatala reflects how "open" my original score was. The notation is designed to formally encode open musical structures. For more information see his forthcoming dissertation.

Figure 3.8 (Obatala Etude Score)





4) CHACHALOKPFUN ETUDE (W/ EVAN ABOUNASSAR, TRUMPET)

The fourth etude, for trumpet player Evan Abounassar, was like the first in that it was an etude examining my system of orchestration of another batá dance rhythm called chachalokpfun.[155] Using the matrix of intersections between the itótele and okónkolo parts in relation to the clave, I improvised different ways to approach the sonic whole of the batá ensemble on the drum-set. As chachalokpfun includes the low and high "backbeat-like" contour of open tone and slap on the iyá between beats one and three, I placed that on the kick and snare drum. I took the okónkolo pattern and played it on the ride cymbal or the rim of the floor

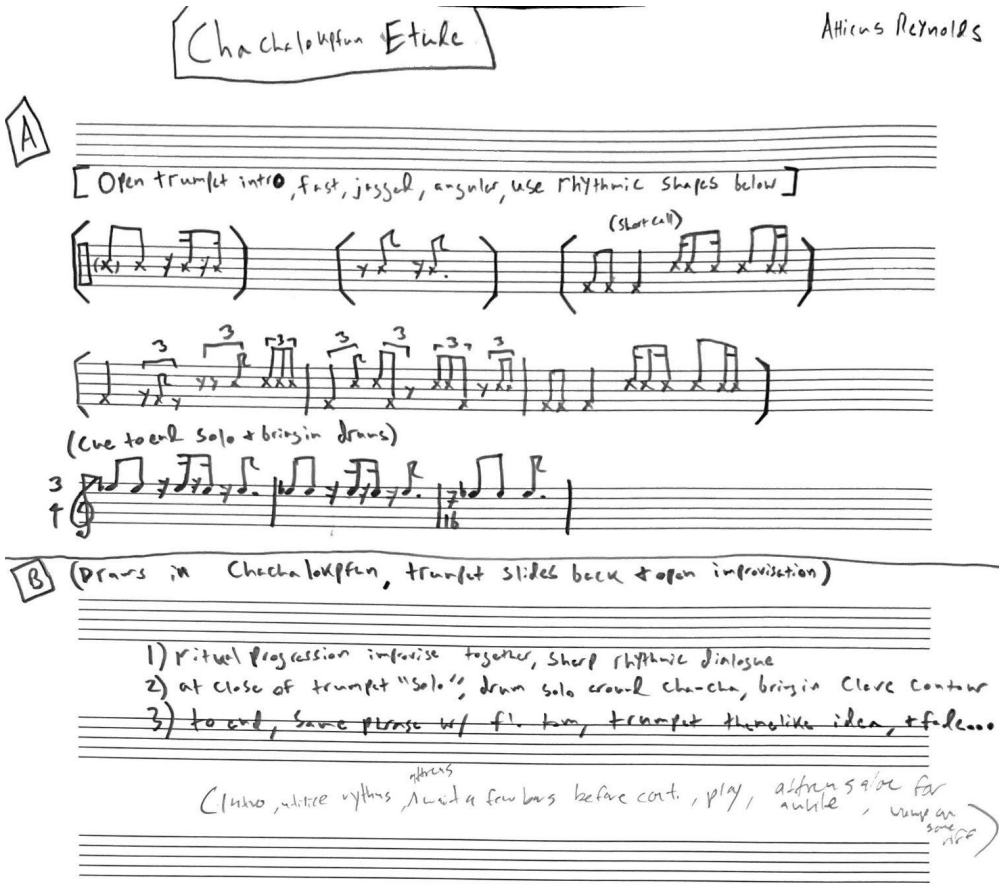
[155] Atticus Reynolds & Evan Abounassar, "Chachalokpfun etude (Atticus Reynolds & Evan Abounassar)," YouTube, April 23rd, 2023, 7:22, https://www.youtube.com/watch?v=_W5FGYdvS88.

tom. The hi-hat was placed on beats 2 and 4 as a timekeeper and slight reference to the itótele part.

Variations of this pattern included changing the hi-hat to clave or alternating the clave between my feet, kick drum and hi-hat, nestled into the ride cymbal okónkolo contour. Another variation was to alternate notes of the okónkolo pattern between the floor tom head and rim to hint at Titilaro for Chango as also referenced in my piece for Ogun in the solo set. The clear snare drum backbeat on beat 3 referenced Cuban Timba drum-set playing. It also referenced the okónkolo contour that fits into the Rumba cata pattern or "cascara" pattern used in salsa and Latin-jazz traditions on timbales or drum-set. I found that my body instinctively had more improvisational freedom to dance around the phrase with the snare and ride cymbal as is idiomatic of jazz traditions in drum-set playing. I tried to include the hi-hat in melodic shapes and allow each limb to contribute equally to timekeeping and the holistic melody.

The score was minimal and open-ended to both highlight the density of the drum-set part and to see how an improviser, one not particularly familiar with batá drumming aesthetics, would fit into an adaptation of chachalokpfun intuitively. The trumpet introduction used a few rhythmic contours from chachalokpfun as improvisational material and led into a short cue that brought in the drum-set. After a long improvisation, the drum part broke down into hinting at Titilaro for Chango on the floor tom and floor tom rim and then led into an improvised trumpet theme to close.

Figure 3.9 (Chachalokpfun Etude Score)



5) FOR ELVIN, MCCOY, AND JOHN (W/ KEI AKAGI, PIANO)

The final work was a meditative duet for pianist Kei Akagi.[156] While the piece was not specifically utilizing batá rhythms or abstracted concepts, it was in reference to a historical dialogue between Cuban pianists and drummers and the playing of McCoy Tyner and Elvin Jones. Highly influential pianists previously discussed such as Chucho Valdés, Gonzalo

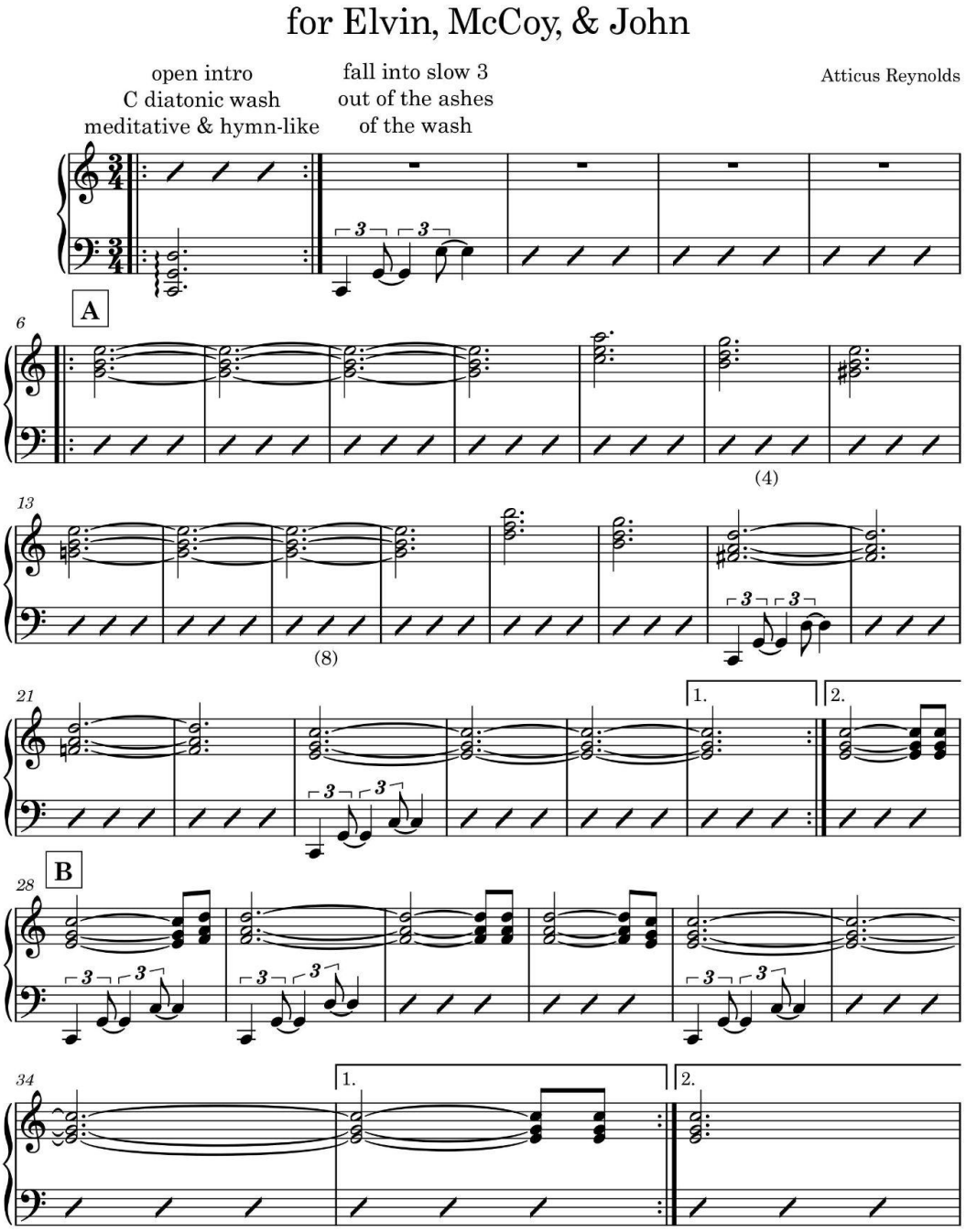
[156] Atticus Reynolds & Kei Akagi, "For Elvin, McCoy, & John (Atticus Reynolds & Kei Akagi)," YouTube, April 23rd, 2023, 13:36, https://www.youtube.com/watch?v=FscTw_BjH7o.

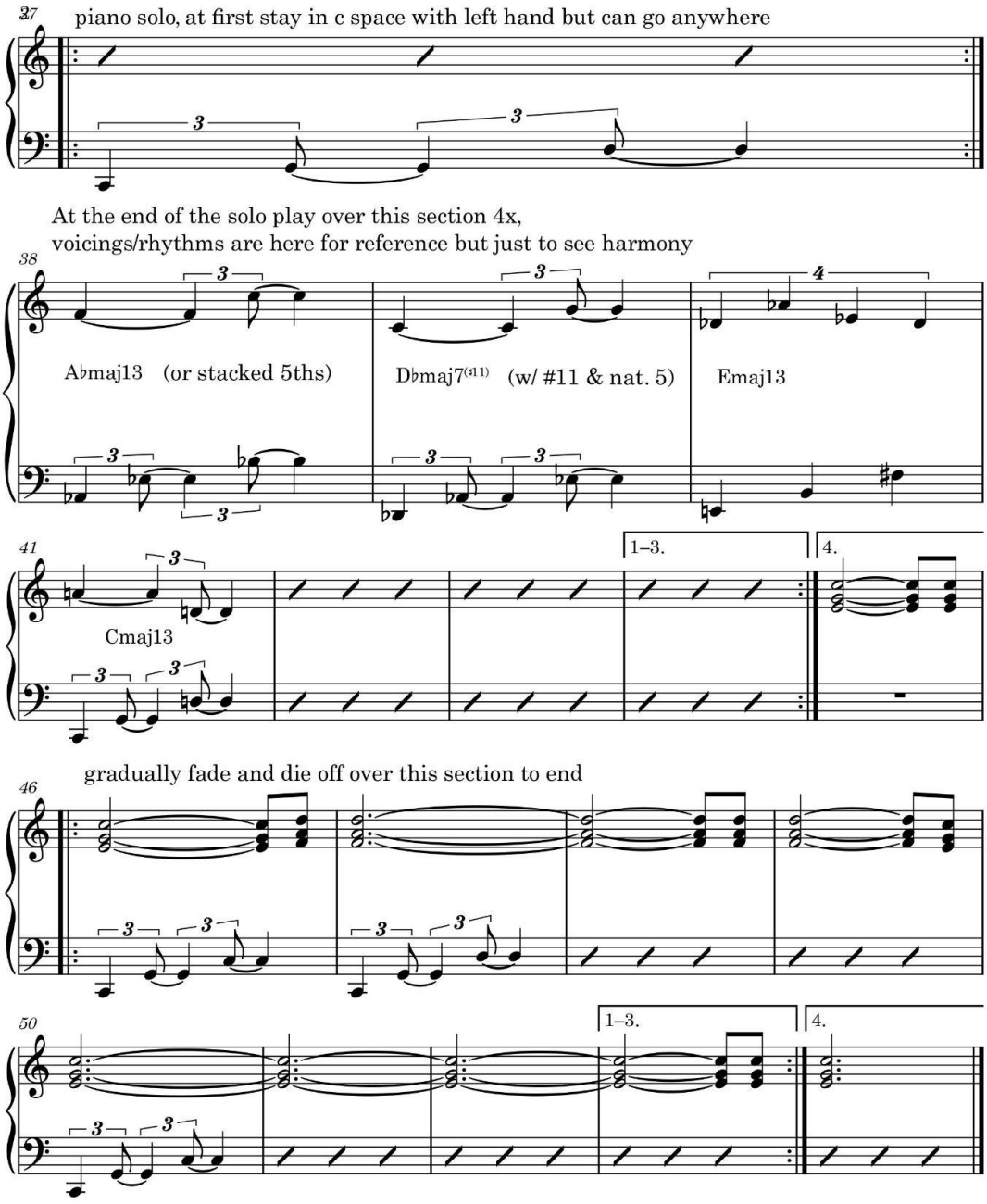
Rubalcaba, and David Virelles, appear deeply influenced by Tyner's playing and harmonic material and transported much of that into Latin-jazz histories. Similar historical dialogues on the drums are seen with drummers like Ignacio Berroa who swing in a unique way that extends on Elvin Jones' aesthetic.

The piece was influenced by Tyner ballads such as "Contemplation" or his playing on John Coltrane's "After the Rain" or "Central Park West." My waltz drumming was channeling Elvin Jones and sheets of thick sound as well as modern swing playing that sits in both Afro-Cuban 12/8 and swing traditions as mentioned in Chapter Two in relation to Marcus Gilmore on David Virelles' "Transmission."

There were some key moments in our improvisation where both of us pushed forward with long dense phrases in a way that sounded atemporal but never lost the quarter note. When listening back, I found that at times our pulses shifted away from each other but always wrapped back around to find each other at the ends of long phrases. Often, when sections get maximal, musicians agree subconsciously to throw the time away for a bit and then come back to time together. In contrast to that way of improvising, Akagi and I approached sections of this piece in a way that channeled some of my ideas related to pure "independence" and not coordination. We were completely in our own pulse spaces while still listening to each other's pulse, echoing the Coltrane quartet's approach to temporal transcendence.

Figure 3.10 (for Elvin, McCoy, & John Score)




27
piano solo, at first stay in c space with left hand but can go anywhere
At the end of the solo play over this section 4x,
voicings/rhythms are here for reference but just to see harmony
38
A♭maj13 (or stacked 5ths)
D♭maj7(♯11) (w/ #11 & nat. 5)
Emaj13
41
Cmaj13
1–3.
4.
gradually fade and die off over this section to end
46
50
1–3.
4.

IN POST:

One of my aims was to compose works that teased out a dialogue between Lukumí music and other musical histories and idioms that have been influential to me. I hear so many similar aesthetic approaches to micro-timing, rhythmic elasticity, and polymeter/in "fix" phrasing in modern electronic production as well as modern jazz/creative music spaces. Some of my compositions were very direct and literal in how I referenced batá aesthetics and rhythms and some were much more open, such as the work for Kei Akagi in tribute to the John Coltrane Quartet and the work for Rajna Swaminathan in tribute to Agnes Martin. When the ideas were used literally, I sometimes tried to insert a small degree of distance. An example of this is shifting phrases over slightly. Pedrito Martinez spoke about this idea in relation to utilizing batá rhythms on the Congas in conversation with Kenneth Schweitzer.[157] My choice to compose predominantly solo and duo pieces was partially to reach a level of granularity and control in testing out diverse strategies of reference to batá "essences."

The electronics throughout the two sets often functioned as secondary to the acoustic instruments. In the solo set, I used a drum machine in the first piece for Elegua and backing synthesizer and piano tracks for the works for Ogun, Oya, and the Guiro piece. In the solo set, the synth and piano textures were essential, as they felt like a support to the audience, or another community in the room. In tambor ritual practice, drummers feed from the energy of the community moving, dancing, and singing. The tracks became an artificial Coro section of singers for me to feed from in "transmission." Many of the tracks had carefully recorded "hand-

[157] Kenneth Schweitzer, ibid., 140.

drawn" automation of certain parameters, allowing me to play with a mercurial version of myself and escape the stagnancy that one often assumes when seeing musicians playing with tracks.

Consideration of pacing was a central point in my compositional process. The solo set was in some ways intended to channel the ritualistic contour of an Oro Seco or a long Orisha sequence of rhythms in later sections of the ceremony that is for a specific Orisha. While one would not reference more meditative minimal musical practices in looking at traditional Afro-Cuban religious music, sections of my solo set, such as the first piece that took influence from composers such as Morton Feldman, was an exploration of how one would abstract larger contours of motion out of denser "maximalist" ceremonies including a full batá ensemble. Another example of this technique was the Guiro ceremony muted in the work in tribute to "Piri" and the Los Chinitos family.

Another important note on the concert as a whole was my goal to approach similar improvisational concepts on different instruments. My own practice as a multi-instrumentalist and singer has been key to my own musical upbringing and is very common in Lukumí practices. Lázaro Galarraga is well known as a drummer, singer, and dancer, and drummers are very often talented singers as well. One could question why this "jack of all trades, master of none" mentality, often associated with American ideologies in relation to music making, is less of a conversation in Lukumí music and other Afro-Latin traditions. I notice that many of these prolific multi-instrumentalists have distinct approaches on batá that are influenced by their approaches to singing or dancing. I found myself at times improvising Moyuba-like phrases and

calls for certain Orishas in my solo improvisations, specifically in the work for Milford Graves.

While I have more of a foundation on the drum-set than any other instrument, I have surprisingly "composed" very little from the drum-set. Much of my music in the past was first written on piano or in my head and I would then improvise and find drum parts that I liked in real-time with the ensemble playing the music I had already written. In preparation for this capstone performance, I spent long periods of time improvising on the drums as a "composer." I found sections and ideas I liked and created compositional forms out of my improvisations that I replicated quite closely to what I envisioned. The drum-set works for Yemaya, Milford Graves, and Aggayu and Max Roach were all quite through-composed in my mind. This process and detailed planning of how to approach solo drum-set improvisation helped to engage multiple communities in the audience that may have had less of a relationship with improvised music and Lukumí music.

I found that much of the drum-set playing oscillated between spaces of laser focus in creating maximalist densities of tiny rhythmic interlocking phrases and a contrasting maximalist thickness of sound. I associate these two spaces of improvisation on the drum-set with drummers Tony Williams and Elvin Jones. The sound of my drum-set with towels on the toms and no bottom heads on any of the drums except for the snare drum at times pushed my sound more into the thick "Elvin" space even when I was aiming for a Tony-esque hyper clarity. These two spaces also align with Roman Diaz's conceptualization of the full batá ensemble as one drum or individual parts having clearly distinct functions.

All the musicians I collaborated with on this concert did not have much of a background

with Afro-Cuban music and batá drumming. In writing this music, I wanted to inhabit a sense of openness to allow each musician to bring their own improvisational background into dialogue with batá aesthetics, as opposed to short-term internalization of these concepts and rhythms. The number of rehearsals were minimal as improvisation in the moment was prioritized except for the piece for Isaac Otto, as the rhythmic cueing system took time to internalize. Each of these works were also specifically written not only for the instrument but for the performer, considering my own knowledge of their interests and musical upbringing.

Coming from so many different angles and approaches in how I integrated folkloric influence was ultimately a form of respect to my teachers and the tradition itself. As a national and cultural outsider to this music, I hope to facilitate musical and philosophical dialogues with elders of the tradition in a similar form to in academic spaces. In conversation with my committee, I was given important advice on how dangerous a theoretical and practical binary is in being a practice-based researcher. I understand that my music and this project, without some of the written background in this dissertation, could feel foreign and detached from the tradition in a way that could be criticized by certain practitioners. To some degree, my focus on distance from utilizing exact patterns was in response to this possibility. Yet, focusing on the music and being open to criticism with my teachers is ultimately more respectful than always using an opaque lens of “abstraction.” I hope that I can continue these dialogues in creating future work and embrace the conversation, as opposed to keeping theoretical and musical worlds detached.

CHAPTER 4: TIME, TRANSCENDENCE, & THE GRID

"What the West has done for me … they gave me an intellectual insight through arithmetic and physics of how stuff works, man. They are just straight line. They only approximate … The Western guys, they have a way of organizing things which is great. So, I've learned how to curve on the straight line."

-Milford Graves[158]

"Graves say (sic) the phrase 'drum machine' refers to the people who make long, complex accompaniments to various rearrangements of air. They say they generate numerical relations, equations, thought experiments, and proofs in an economy of disproof and approval, conjecture and refutation, abandon and apprehension. The drum machine feels, they say, with a propensity for the absorption and diffusion of biological knowledge, which is offered in vibratory code born of frustrate (sic) touch, where hand—or stick—on skin, in recoil and repeat, reminds us that the heartbeats of the beaten to death can't be unheard in the music. They say the drum machine is a middle bypass whose animechanical (sic) caress, given in the abductive throwing of hands, shows breath and pulse in the general plain."

-Fred Moten[159]

"In the cultist space of modern art, the grid serves not only as emblem but also as myth. For like all myths, it deals with paradox or contradiction not by dissolving the paradox or resolving the contradiction, but by covering them over so that they seem (but only seem) to go away. The grid's mythic power is that it makes us able to think we are dealing with materialism (or sometimes science, or logic) while at the same time it provides us with a release into belief (or illusion, or fiction)."

-Rosalind Krauss[160]

[158] Milford Graves & Melvin Gibbs, "Making Contact," *A Mind-Body Deal*, (Inventory Press, 2022).
[159] Fred Moten, "Graves Say, Graves Says," *A Mind-Body Deal*, (Inventory Press, 2022).
[160] Rosalind Krauss, "Grids," *October*, Vol. 9, (1979).

1. FAITH, *AÑA*, & NECESSITY

Consecrated batá—those that hold the spirit of the Orisha *aña* inside of them— allow initiates to commune directly with the Orishas. *Aña* is a term used for both an Orisha and a brotherhood of drummers, a sacred and protected community.[161] Initiated drummers are held in high regard by Lukumí communities for their ability to open up both literal and metaphorical spaces of conversation with the Orishas, and to summon them directly down into ritual spaces.[162] Amanda Villepastour observes how the act of drumming is "both a form of worship and a medium to facilitate the worshiping gestures of others."[163]

Orishas are summoned to possess or "mount" initiates in later sections of the ceremony when the drummers are playing with a singer and dancers. In an account on the practices and cultural "rules" of possession performance, Katherine Hagedorn identifies the reasons for the Orishas' being brought down.

> In fact, the main goal of these rhythms, songs, and dances during a toque de santo is to summon (or goad) the santos to earth, so that the deities may soothe those who

[161] For more information on *aña* in Africa as well as in Cuba and other diverse Afro-Latin traditions, see Amanda Villepastour, *The Yorùbá God of Drumming, Transatlantic Perspectives on the Wood that Talks* (University Press of Mississippi, 2015).

[162] Gender identity and sexual orientation in relation to the religion and its embodied practice are important and nuanced conversations that are outside the scope of this dissertation. Historically, only black heterosexual Cuban men were allowed to be initiated into *aña*, yet currently, heterosexual men from diverse ethnic and racial backgrounds around the world have been initiated as drummers. Many women and queer musicians from around the world have learned the tradition deeply and at times play in Aberikulas (Tambors with non-consecrated drums). Pertinent scholarship on this topic includes writing by Aisha M. Beliso-De Jesús (2015) and Victoria Jassey (2019). Aisha M. Beliso-De Jesús, *Electric Santeria: Racial and Sexual Assemblages of Transnational Religion*, (Columbia University Press, 2015); Victoria Rosemary Jassey, "Tambor Reverberations: Gender, Sexuality and Change in Cuban batá Performance." (PhD Dissertation, University of Cardiff, 2019).

[163] Villepastour, *The Yorùbá God of Drumming*, 13.

are grieving, heal those who are sick, rebuke those who have acted unwisely, bless those who appear to be deserving, and set the tone for the next few weeks or months in the community.[164]

Hagedorn regards possession performance as "a clearly visible manifestation of the convergence of humanness and divine potential."[165] While I am hesitant to make reductive mappings of causality between musical aspects of batá performance and ritual possession performance, I feel that so much of what makes this music beautiful in analysis is also what makes it "functional" in sacred contexts. In other words, the drumming, in both secular and ritual settings, cannot ever be stripped of its sacredness. As exhibited in Chapter One, rhythmic elasticity and in "fix" phrasing, emergent form in manipulation of the cueing system, dynamic ritual pacing, highly nuanced control of sound in modern and traditional contexts, and constraint in improvisation are also deeply intertwined with how initiates relate to the practice of possession and musical "transcendence."

I question how many of the ideas mentioned in Chapter One, particularly those of rhythmic elasticity, kaleidoscopic entrainment, and emergent form, are uniquely Afro-diasporic, and have historically functioned very differently across African batá lineages. Batá drumming in Cuba and the Lukumí religion as practiced in enslaved communities morphed in its musical aesthetics over time as well as in spaces of survival and oppression. Ritual was of practice and necessity, "show[ing] breath and pulse in the general plain," as Fred Moten

[164] Katherine Hagedorn, "Bringing Down the Santo: An Analysis of Possession Performance in Afro-Cuban Santería," *The World of Music*, Vol. 42, No. 2, (Spirit Practices in a Global Ecumene, 2000): 99-113.
[165] Katherine Hagedorn, "Bringing Down the Santo," 1.

suggests with regards to a human "drum machine."[166] The triptych of religion, music, and community is an entanglement of necessity, each cannot exist without the other.

One could consider to what degree interpretation of "clave as law," as opposed to African timeline patterns as looser reference points, is specific to Afro-Cuban rhythmic aesthetics rather than its African roots. I consider "clave as law" in relation to clave as a term and kaleidoscopic tenet, one that is forced in-post onto many Afro-diasporic musics as well as concretely utilized in creation of new styles of music. Its almost ubiquitous prevalence, as a tool of analysis connecting many styles of Afro-diasporic music, could be argued to be, to some degree, connected to colonial and imperial approaches to rhythmic hierarchy. Yet it is also undoubtedly a source for an apogean approach to rhythmic improvisation, as born in the diaspora.

In looking at musical generative practices positioned against and in-line with clave, a movement from Topoi to "clave as law," one that batá drumming positions itself starkly in between, happened under oppression and colonial/imperial power structures. Yet its Pan-African concretization as a term and framework for improvisation, as related to its existence in many diverse Afro-diasporic musics, has also connected transnational communities of people with African roots.

[166] Fred Moten, "Graves Say, Graves Says," *A Mind-Body Deal*, (Inventory Press, 2022).

2. TRANSCENDENCE & THE GRID

It is an understatement to say that transcendence is a heavily loaded word. Here, I define transcendence in relation to trance, limit experiences, and altered states of consciousness.[167] In other words, transcendent experiences are those where a feeling of time stops and freezes, moves too quickly, or warps in dialogue with music. While these experiences are highly subjective, there is a mode of being and reacting to batá performance that brings people together in praise and meditation both collectively and as individuals. Rhythmic transcendence allows people to simultaneously feel purely at one with themselves and deeply connected to others. It is an act of letting go.

It is my strong, somewhat intuitive conviction, that this rhythmic transcendence has much to do with a relationship to some preconceived notion of the grid. As a drum-set player greatly indebted to histories of Afro-diasporic music such as jazz, hip-hop, and electronic music, my initial attraction to Lukumí music and batá drumming had much to do with the flexibility and elasticity of time expressed in the dialogue of three drums. I would listen to phasing in rhythms, such as Titilaro for Chango, and to the artful use of cues in La Topa for Elegua; I found myself entranced by how perfectly the ensemble moved together. As mentioned in Chapter Two, I was more comfortable with "monorhythmic" phrasing, as Dizzy Gillespie mentioned in line with be-bop and histories of jazz drumming. Within these

[167] Note Judith Becker's text regarding many different cultural spaces that are associated with trance and possession performance from an artistic, aesthetic, and biological perspective.
Judith Becker, *Deep Listeners: Music, Emotion, and Trancing* (Indiana University Press, 2004).

musical idioms, polyrhythms existed in dialogue with one another in a space of coordination and not "true independence." Batá, as well as other styles of Afro-Latin religious music, felt so drastically different to other music I had experienced in terms of how one listened to others in ensemble contexts and how rhythmic elasticity was used.

Yet, in looking at other idioms in electronic music genres such as early House music and other produced beat-musics, I found myself having similar "rhythmically transcendent" experiences. How could a producer like Jeff Mills create compelling ritualistic type contours with only a Roland TR-909 drum-machine with the capability to only control the sequencing of perfectly quantized samples.[168] Secular communities have similar transcendent experiences in electronic performances in which elastic rhythmic flexibility in real-time performance is less of a part of the compositional process.[169] Folkloric religious traditions and electronic contemporary traditions are two poles towards which contemporary improvisers on the drum-set have consistently gravitated, as influences outside of the jazz tradition. This is, I contend, because of each idiom's dialectic acknowledgement of, on one hand, the purity of "the grid;" and equally, of its unattainability in imperfect human performance.

I feel that how we align ourselves with some preconceived notion of the grid is key in looking at the aesthetic similarities between experiences of rhythm in electronic spaces

[168] Jeff Mills, "Jeff Mills Exhibitionist 2 Mix 3," January 26, 2017, 11:05, https://www.youtube.com/watch?v=eU-UsvYbIV0.

[169] Use of note-repeat functions, delay and reverb effects, filter controls, and other effects on samplers and drum-machines are used in similar ways to parameters I have spoken about in Chapter One in relation to batá drumming. That is, many talented electronicists control rhythmic flexibility with technological tools in similar aesthetic manners to great folkloric percussionists.

and ritual folkloric sacred spaces. The grid in music functions as a perfect isochronous pulse with perfect subdivisions infinitely expanding on top of that pulse. To negate the existence of the perfect grid and accept only an empiricist conception is akin, in its limits, to a purely rationalist notion that a human could ever truly replicate that perfect grid. In collective ensembles, master batá drummers acknowledge this grid and the beauty of its pursuit with an equal understanding that it is ultimately unreachable. It is my belief that an acceptance of this dialectic is what connects someone like Jeff Mills to Manley Piri Lopez.

The grid is not only a perfect division that we pseudo-strive for but a space of common language. Sharing a consistent rhythmic pulse is how we speak together inside of constraints as improvisers, speak in dialogue with dancers, and praise together as communities. The grid, as a medium for conversation, serves as a critique of written language in ritual practice.

3. THE PERFECT GRID

(AS PLATONIC IDEAL IN THE POST-DIGITAL AGE)

Considering the grid's axiomatic "ideal" nature raises an ontological question: a question of how we align ourselves with the "perfect" unknown. This question has equivalents in the disciplines of aesthetic theory and visual art creation. A reading of the grid in this manner hints at its function in a master-signifier relationship, in that all rhythms could signify towards the grid, but the grid cannot signify anything other than itself.[170]

[170] There are some traditions that are at odds with the idea of a grid as master-signifier. For example, one could consider music such as South Korean shamanistic traditions that align rhythmic phrases with breath lengths. See

However, the perfect grid as the platonic ideal in a musical context, one towards which all musicians strive for undialectally, is a far more contemporary concept.

My ideas surrounding the grid were initially inspired by a drum lesson I had with the drummer Craig Weinrib in 2019. In speaking about different musical spaces he performed in, he interrogated the notion of having "good time" and the idea of the grid. "Good" or "bad" time, or precise consistency of isochronous pulse and tempo across pieces of music, was to his mind an idea characteristic of the contemporary post-quantization era. We spoke about "strong rhythm" as antithetical to this metronomic notion, as an intentionality and a consistency of pulse that does not compromise listening to the ensemble above all else. In my mind, the idea of "strong rhythm" is directly correlative to the grid as an ontological question, representing a symbol of the absolute that musicians play with. Weinrib references below the power of "strong rhythm" as being at odds with a different perception of the grid, one as a subconscious platonic ideal.

> The reason that I play music is because every human being is capable when equipped to do so to shape rhythm in an incredibly unique proprietary hereditary natural way, so the idea of a grid of course implies a certain standardization of feeling….[171]

When musicians strive for perfect grid-time, they necessarily forego the power of

Emma Franz' film for more information on this tradition.
Intangible Asset No. 82, directed by Emma Franz (Alive Mind Cinema, 2009), 1:30:00. https://vimeo.com/ondemand/intangibleassetnumber82.

[171] Craig Weinrib, Drum Lesson, May 30th, 2019, NYC.

shaping rhythm individually. Standardization of feeling is impossible and striving for it is antithetical to uninhibited ensemble improvisation.

One could imagine a stage of apperception of rhythm in time as an initial understanding of subjectivity in hearing musical rhythm. This apperception is not one of a person first acknowledging themselves as an object subjectified by the world, but as a person first acknowledging their distance from perfect grid time. I imagine this stage as the first time a child hears music that has been created with close to perfect quantization in a digital space. In the 21st century, one grows up with the feeling of "perfect" time as the norm; this is a recent phenomenon, extending the 20th century practice of playing along to a click-track, which was preceded by manual conduction. Quantization is no longer novel and has been quietly accepted as an absolute. Furthermore, this inexorable enculturation of quantized time has gradually instilled in performers a subconscious drive for temporal "perfection." I feel a musical imperative to consider how, in the 21st century, global instrumentalists might acknowledge the quantized "grid" without necessarily attempting to continually reinforce it.

I posit that mine and many other contemporary jazz drummers' interest in folkloric—specifically religious—musical idioms derives from a desire to break away from the ideology of accepting the rigidity of the grid, with its post-digital and platonic-idealistic overtones.[172] While these philosophical ideas relate to many of the rhythmic paradigms that

[172] I see post-digital as a sort of subconscious internalization of many digital and algorithmic processes that are built into cultural art-making spaces beginning in the new millennium. To some degree these tools can be utilized dialectically, as seen for example in the work of Jeff Mills, heightening our understanding of this dialectic tension

influence me, they are particularly and beautifully enveloped in batá aesthetics. Throughout its evolution, batá drumming has embodied this nuanced relationship to the grid and blurred many implicit binaries I have sought to dismantle throughout this dissertation.

4. RHYTHMIC DIALECTICS

In Chapter One, I considered a recurrent trend of blurred binaries regarding internalized western notions of how to conceive and embody rhythm. Many of these concepts, such as polymeter, "fix" phrasing, ambiguity in cueing systems, and spectra of entrainment, are best explained in the form of a dialectic, finding their truth in apparent contradiction. Much of my work in the first three chapters—via abstracting concepts, finding "essences," and intellectualizing embodied processes to study folkloric music—aims to better understand concepts as dialectics rather than oppositional binaries. While I will focus on these dialectics in more practical musical analysis, these dialectics can also be considered in relation to tensions between logical and cultural analysis, rationalism and empiricism, and subjectivity and objectivity.

The first dialectic worth considering is that of straddling evenness and oddness. In an interview with trumpeter and composer Wadada Leo Smith, musicologist Nina Eidsheim questions Smith about his conception of rhythmic time.[173] Smith describes western notions

between perfect quantized time and the human touch and giving us new inventive techniques to abstract time and the grid.

[173] Wadada Leo Smith & Nina Eidsheim, "Cosmological Compositions: Wadada Leo Smith & Nina Eidsheim," YouTube, Hammer Museum, November 8, 2019, 1:51:58, https://www.youtube.com/watch?v=WCov9YsqCuY&t=1520s.

of meter as being stuck within a binary of either even or odd rhythms. His method of moving past this notion and keeping some sort of consistency in an ensembles' rhythmic language was to use proportions of either "long" or "short." Functionally, the long sounds establish stasis, whereas the short sounds establish movement. This is perfectly representative of the ideas discussed in relation to David Virelles' electronic production in the track "Binary" (Chapter Two, Section 2.6). Smith's model of musical time as reflected in long or short silences or events allows one to feel a pulse in a similar nature to how I described quasi-pulsed time in Chapter One.

The smallest mathematical ratio that is not evenly divisible is 3 in relation to 2. The ratio respectively connotes oddness and evenness and defines the harmonic relationship of a perfect fifth. This is, in turn, the crux of western tonal harmony. It also exists in the dual poles of clave-based music, as sides of 3 and 2, as articulated by numerous scholars such as Chris Stover in relation to push and pull, or else to tension and release. Yet, as previously mentioned (Chapter One, Section 1.3), consideration of clave with diametrically opposed sides is yet another binary that does not adequately represent its use in Latin music, particularly in batá drumming.

The reductive binary of evenness and oddness is also expressed in the ideas of coordination (an even process), and independence (an odd process). As a jazz drum-set player, I grew up learning to internalize rhythmic counterpoint across my limbs as described as "independence." Yet, what I was learning was coordination, and over time I realized that the process of learning and embodying complex rhythmic contrapuntal lines is cultural to

some extent. For example, I often found myself unable to play complex rhythms with one limb over an ostinato in the other unless I was able to first hear exactly how they fit together.

In batá music and other Afro-diasporic Cuban secular and religious idioms, so much of the learning process involves “independence” instead of coordination. I use “independence” to describe throwing yourself into the rhythmic counterpoint instead of waiting to hear and internalize the relationship cognitively. Drummers sing while playing, clap clave while singing, or tap clave with their feet while they play batá. Piri’s innovations have pushed this concept even further as he sings and plays his multi-setup with clave in his feet. There is a trust in the practice of allowing your body to play or sing the rhythms together without knowing their exact relationship. That relationship then moves from your body into your mind as opposed to the opposite in learning “coordination” on the drum-set. In my own work I strived for “independence” in my tribute to Piri and Los Chinitos in the Solo Set. I attempted to let my left foot highlight clave and oscillate with my body as opposed to intellectualizing exactly how the phrases fit together.

The second rhythmic dialectic is associated with polymeter, “fix” phrasing, and kaleidoscopic strata of entrainment. “Fix” phrasing, as an elastic space between 12/8 and 4/4, exemplifies a dialectic, polymetric understanding of meter. Paralleling my aforementioned notions of coordination and “independence,” Milford Graves describes polymeter as “two feelings at once,” distancing himself from coordination and

mathematical "cross-rhythmic divisions."[174] Feelings, on this view, imply modalities and approaches to phrasing that do not fit cleanly into mathematical ratios.

While "fix" phrasing references elasticity between agreed-upon isochronous pulses, differing strata of entrainment consider what pulse is chosen. Batá drummers can choose individually and simultaneously to entrain to one or more different signposts. Divisive and additive conceptions of clave or Topoi in relation to the degree of prioritization of the isochronous grid exist together dialectically in batá improvisation. It is helpful to consider a "chicken or egg" paradigm in looking at two spectra: one of the liminal space between divisive and additive conceptions of a phrase, and the other of the liminal space between gestural time and perfect grid time. We intuit that the macro, hierarchical conceptions of pulse or meter predate the micro, clave long-short patterns and Topoi ostinatos. In contrast, one could consider heuristically the idea that isochronous consistent pulses only developed out of the long-short patterns of Topoi or clave, and in turn consider additive conceptions of rhythmic time as pre-dating divisive conceptions. A dialectic understanding in relation to these spectra is the most nuanced way of looking at entrainment and polymeter.

A third dialectic, that of tension and release, becomes apparent in the case when batá drummers such as Lázaro Galarraga move significantly off the prevailing pulse while clearly remaining aware of and situated within it. The scholarship pertaining to Afro-diasporic music has repeatedly addressed moments of tension and release in extended,

[174] Milford Graves & Jake Meginsky, *Milford Graves Full Mantis*, (Zeitgeist Films, 2018).

elastic rhythmic phrases that ultimately resolve to a clear endpoint.[175] This motion is often connected to moments of climax, transcendence, trance, and ecstatic experiences. Tension and release in batá improvisation is again a reductive binary; the rhythmic dance of differing degrees of elasticity and stability is what constitutes the lifeblood of much of the music. Batá drummers push to find the apogee: the farthest point away from a rhythmic grid that still stays in orbit of the rhythmic thickness and flow.

I feel rhythmic tension and a somewhat reductive notion of "syncopation" including on- and off-beats are insufficient to describe these spaces of rhythmic flow. Rather, the temporal motion requires a dialectic consideration of tension-as-release or release-as-tension. If rhythmic tension is the norm, this modality of ensemble interaction begins to feel like a continual release. This way of playing exists very clearly in modern jazz drum-set improvisation, as exhibited in Marcus Gilmore's playing on much of David Virelles' *Mbókò* (analyzed in Chapter Two). In his autobiography *Beneath the Underdog*, Charles Mingus described this apogean way of playing, that is, stretching as far from the isochronous pulse as possible, as "strolling."[176] Afro-diasporic expressions of tension-as-release have long histories in jazz traditions and other Black American musics that align aesthetically with batá drumming.

[175] Scholars such as Chris Stover have also spoken on microcosmic strata of tension and release in looking at the push-pull feeling of 3 & 2 sides of clave. It is important to remember that labeling those two sides as separate was a byproduct of American composers notating the music with western notation. To what degree is this conceptualization of tension and release in relation to clave attributed to a feedback loop in regard to Western analysis.
Chris Stover, "A Theory for Flexible Rhythmic Spaces for Diasporic African Music."
[176] Charles Mingus, *Beneath the Underdog* (Knopf Doubleday Publishing Group, 1991).

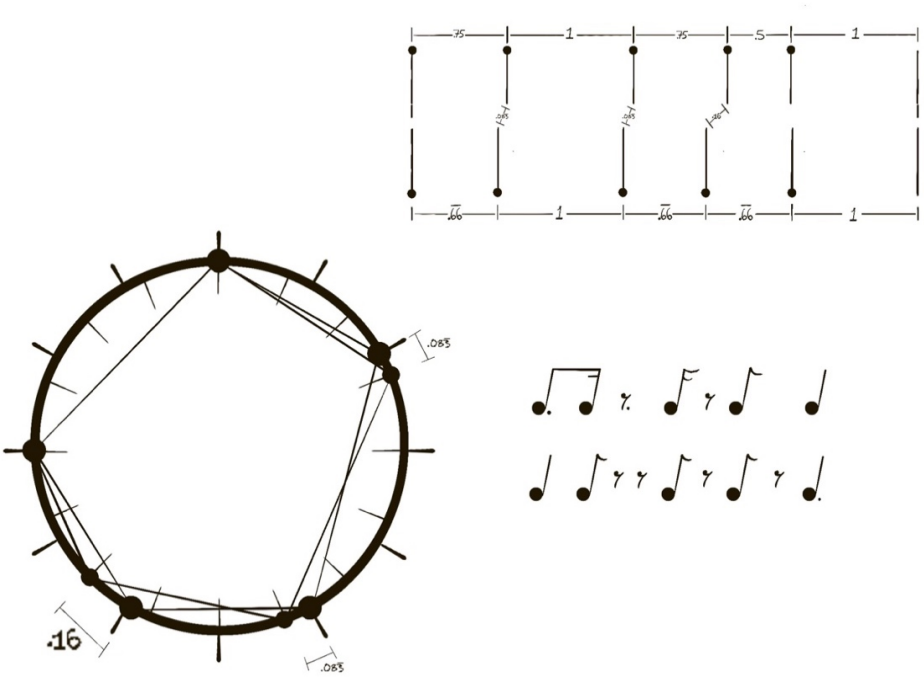
We can more clearly understand tension-as-release and its inverse, release-as-tension in relation to Kant's notion of the mathematical sublime.[177] One perceives a musical object as a whole, before breaking it down into individual parts, and finally reassembling it with a subtle memory of its initial perception. The sublime exists when the musical experience surpasses our imaginations' limit in estimation, pushing forth into spaces of trance and transcendence in ritual practice. Yet crucially, this experience proceeds in such a way that the listener is not discomfited or confused, but rather "opens up" to a space beyond understanding. In essence, a dialectic notion of tension as release aligns a distance from the grid in improvisation as reaching for that mathematical sublime.

The fourth and final dialectic to consider is related to the phrasing of clave. Clave can be perceived as a noun, a specific rhythm with extensions and variations, i.e., Son, Rumba, 6/8. But clave can also be a verb: a modality of approaching musical improvisation. This sentiment echoes Amiri Baraka's analysis, in *Blues People*, of "swing" as both a noun and verb.[178] When first learning many clave-based musics, I initially assumed a functionality akin to swing – a modality of approaching phrasing that, while highly individual, nevertheless references multiple idiomatic histories. While clave phrasing certainly varies across musical styles—much like "swing" feels different in different eras of Jazz—the prevailing attitude nevertheless identifies a normative "Cuban" approach to clave phrasing. Yet this approach is difficult to define either empirically or in a mathematical, notated sense.

[177] Immanuel Kant, *Critique of the Power of Judgment* (Cambridge University Press, 2000).
[178] Amiri Baraka, *Blues People: Negro Music in White America* (Greenwood Press, 1980).

In Rumba settings, as well as in more binary (duple-based) batá rhythms such as chachalokpfun, clave phrasing sits in “fix” and changes slightly in different tempos - just as a ride cymbal pattern swings differently at different tempos in jazz settings. In a correct reading of clave, as described to me by Piri and Antoine Miniconi, the first and last beats sit clearly on 1 and 4 regardless of the phrase or tempo. The middle beats, however, can occupy different temporal positions depending on the musical context. It was expressed to me by some drummers that the fourth note is the most crucial to an idiomatic interpretation of clave; that is to say, for a 4/4 division, the attack between beats 3 and 4. The figure below exhibits the distance between attack onsets of Rumba clave in 4/4 and clave in 6/8. It is interesting to observe that the 4th note has the largest distance span (0.166666…). This distance is twice that of the distance between the second and third attacks (0.083333…). I have exhibited this in a clock structure as well as a linear chart below.

Figure 4.1 (Clave Phrasing Chart)



[179]

Yet, this analysis, much like my "downbeat-finder" analysis of David Virelles' "Antillais" from *Mbókò*, ultimately falls short as clave also exists as an empirical, embodied truth. In attempting to understand clave both rationally and empirically, Maya Kronfeld offers an insightful anecdote. In an interview with drummer Savannah Harris, pianist and scholar Kronfeld discusses rhythm section responsivity in the jazz context:

> MK: I once overheard a musician at Small's [Jazz Club in New York City] trying to work out the puzzle of describing what makes jazz improvisation really happen: "it's not predictable, and yet that sh*t is right." By the way, this is a one-sentence gloss on

[179] This chart was created in collaboration with theorist Nate Schwartz.

Kantian aesthetics: it's a philosophically nuanced, still countercultural position: we must play correctly what could never be prescribed by a formula. There's no rule that tells you how to do it, and yet it can be right or wrong.

SH: Not only can it be; it really is right or wrong. There really is a right or wrong binary here.[180]

The idea of something being correct without formulaic predetermination speaks wonders to the interpretation and performance of clave as a construct, as well as the notion of "true independence" in contrast to coordination as mentioned earlier. Yet striving for a complete lack of predetermination, as an "uninhibited" conduit, does not accurately describe the phrasing of and around clave either. Building on the dialectics of even-/oddness, polymeter, and tension/release, clave in batá improvisation exists as a rhythmic emblem that sits enigmatically in the liminal space between rational and empirical truth.

5. THE GRID IN MUSIC & VISUAL ART:

(ON NARRATIVE & DISCOURSE)

Many of my thoughts in relation to the grid in both batá drumming and rhythm in general began in dialogue with visual art theory, particularly with the ideas of Rosalind Krauss and Charles Gaines. Krauss' influential 1979 article *Grids* positions the grid as a reference point

[180] Maya Kronfeld, "Structure in the Moment: Rhythm Section Responsivity," *Jazz & Culture*, Vol. 4, Issue 2, (2021).

and departure, "declar[ing] the modernity of modern art."[181] Krauss outlines distant historical references in the 15th and 16th centuries where the grid, or "perspective lattice" was used as a functional frame, outlining perspective and striving for a perfect harmony of representation and abstraction. Yet, the grid in the space of 20th century modernity is functionally the opposite.

> Unlike perspective, the grid does not map the space of a room or a landscape or a group of figures onto the surface of a painting. Indeed, if it maps anything, it maps the surface of the painting itself. It is a transfer in which nothing changes place. The physical qualities of the surface, we could say, are mapped onto the aesthetic dimensions of the same surface. And those two planes-the physical and the aesthetic-are demonstrated to be the same plane: coextensive, and, through the abscissas and ordinates of the grid, coordinate. Considered in this way, the bottom line of the grid is a naked and determined materialism.[182]

In music and rhythm, I see a transition from the grid as an ontological question, acknowledging the absolute, to a more modern subconscious treatment of the perfect grid as a platonic ideal, paralleling Krauss. The grid, like a metronome, was historically a perspectival tool, one of pseudo-quantization, but now is used as a tool of anti-representational "naked and determined materialism." In searching for a parallel temporal definition of materialism in

[181] Rosalind Krauss, ibid., 1.
[182] Krauss, ibid., 3.

music, I am considering the creation of form with a focus on rhythm and deprioritization of melody, harmony, and timbre. In essence, the "materiality" of time is made bare by the space in between the notes and not the character of the notes themselves.

Translating Krauss's frame of analysis to the musical, temporal paradigm, materialism can be conceived as the pure mapping of the surface of "grid time." In modern settings of batá ensemble improvisation, apogean movements with respect to the grid are to some degree musical manifestations of "determined materialism," though as I have spoken about in Chapter One, I am hesitant to essentialize the music by stating that rhythm is the crux of it. One could consider minimalist movements in reference to Philip Glass and Steve Reich as more clear examples of "naked and determined materialism," as no representational transfer is taking place. The grid is merely stated, without performers rhythmically "speaking around it." As the idea of representation in music is so difficult to transplant from its meaning in visual art, I consider representation as performers speaking around a rhythmic framework and playing what they are hearing.

Yet, as referenced in Section 1 of this chapter, the grid in music is not only a positioning of the absolute, or a subconscious modern platonic ideal, but it is also a language for musicians. It exists as a conceptual frame through which to function in the world in communication with one other. In contrast, in the late 1970s, Krauss felt that the grid in contemporary art was wholly anti-narrative and anti-discursive, outlining a rift between the grid in visual art and music.

> There is no necessary connection between good art and change, no matter how conditioned we may be to think that there is. Indeed, as we have a more and more extended experience of the grid, we have discovered that one of the most modernist things about it is its capacity to serve as a paradigm or model for the antidevelopmental, the antinarrative, the antihistorical.[183]

One could argue that someone could interpret the visual information that exists around a grid in dialogue with an artist, as another space of common language between artist and spectator. Yet, Krauss speaks on the nature of the grid in modern art as anti-narrative and anti-discursive. While Krauss aligns materialism with anti-narrative and anti-discursive sentiments in relation to the grid, I feel that the grid in batá improvisation is materialist but is not anti-narrative. Instead, the grid in batá drumming exhibits a restructuring of musical narrative. Long repetitive phrases in Oro Seco playing and nuanced intricate phrasing choices in a three-person ensemble exhibit narrative in emergent form, as noted in Chapter One, Section 2. Narrative is created in rhythmic dialogue with the other drummers, the community of singers and dancers in the room, the akpon, and the grid itself.

A common term used to describe Afro-diasporic music, one that is intrinsically connected to this restructuring of narrative, is that of cyclicality. Why does a musical work feel cyclical, either experientially or abstractly? The most obvious logical definition of cyclical rhythm is that of repetitive phrases that do not have a clear beginning and end and could hypothetically start anywhere in the phrase. To say that something is cyclical because it is

[183] Krauss, ibid., 16.

merely repetitive is reductive, because repetition exists in all music to some degree and is not exclusive to Afro-diasporic music. I feel that experientially cyclicality is equal to an awareness of and nuanced positioning against the grid without acceptance or negation. This idea is deeply connected to kaleidoscopic entrainment; the ability to hear different starting points in a musical phrase while improvising and performing.

Cyclicality is also a question of form in the micro and macro, where small ostinato-like phrases dance and morph in the micro and nuanced changes in dynamics, density, and degrees of elasticity, off of the grid, change in the macro. Cyclical narrative exists, as "naked and determined materialism" in relation to the grid. This notion relates to long-form modern performances of ñongo or chachalokpfun as opposed to circumscribed Oro Seco rhythms that follow more of a western conventional sense of form. These modern performances create form out of nuanced phrasing of the same pattern repeated for long periods of time as opposed to changing patterns and material in the Oro Seco.

Much of batá improvisation in regard to entrainment and rhythmic hierarchy blurs the lines between these micro and macro spaces. David Peñalosa, in his book *The Clave Matrix* notes that "if a circle is big enough we perceive it as a line."[184] There is a dance of repetition and formal movement that allows practitioners to oscillate between perceptions of large formal structures and the dance of individual phrases. One questions to what degree these cyclical

[184] David Peñalosa, *The Clave Matrix*, (Bembe Books, 2009).

conceptualizations of rhythm in Afro-diasporic spaces align with anti-linear, anti-imperial conceptions of linear time.[185]

Many of these blurred binaries that are more conceptual exist as conversations in both visual art spaces and musical spaces. For example, binaries are considered between sacred and secular, modernity and tradition in religious practice, abstraction and representation, and form and content. Future research could look at contemporary Cuban artists such as Belkis Ayón, Ana Mendieta, José Bedia, and Carlos Estévez in contrast to composers like Tania León, David Virelles, and Gonzalo Rubalcaba. How are their approaches to the grid aligned or divergent? It is fitting to close this section with a passage from Krauss's *Grids* on the sacred and secular binary in modern art. The grid is a tool for contemporary musicians and artists to abstract, dancing around the absolute, in dialogue with spirituality in sacred and secular spaces.

> Given the absolute rift that had opened between the sacred and the secular, the modern artist was obviously faced with the necessity to choose between one mode of expression and the other. The curious testimony offered by the grid is that at this juncture he tried to decide for both. In the increasingly de-sacralized space of the nineteenth century, art had become the refuge for religious emotion; it became, as it has remained, a secular form of belief.[186]

[185] This dialectic of cyclical and linear perceptions of form is also interesting to look at in regard to Moor Mother's thoughts on cyclical and linear perceptions of time. A subconscious internalization of "perfect grid" time is in line with her thoughts on linear time as an oppressive ideological tool.
Philippe Roberts & Camae Ayewa, Black Encyclopedia of the Air-Album Review, Pitchfork, (2021), https://pitchfork.com/reviews/albums/moor-mother-black-encyclopedia-of-the-air/.
[186] Krauss, ibid., 6.

6. CONCEPTS (IN POST)

My personal practice in working with Afro-Cuban religious music, as well as that of many of the artists analyzed in Chapter Two, continually maneuvers around this blurring of sacred and secular. Going through the process of examining many of the concepts in Chapter One at times felt like it was distancing me from what made these traditions so beautiful and spiritual. As a performer, there was an internal tension in many of the ideas I put forth. This tension was seen in how many of my ideas were posited as heuristics and compositional experiments as opposed to universalizing "arguments." I was afraid of what would happen to my own embodied practice when I defined these "essences" and created new work out of them. In many ways, this process was unique and almost antithetical to how some batá drummers learn the drumming as children. I questioned how my future experience in playing batá in ritual practice would change by taking this approach as opposed to consistently playing the music without abstracting anything from it.

However, the process of finding these "essences" also allowed me a stronger dialogue between batá drumming and other styles of music that I have internalized and performed on the drum-set for decades. Without going through this meticulous process, these throughlines in creating inter-cultural work would not have been nearly as deep. As mentioned in the beginning of Chapter Two, abstracting ideas and intuitively allowing them to emerge in secular musical spaces was much more honest to the tradition than replicating them "iconically." As a theorist, these concepts allowed me to find beautiful through-lines across generations in secular "fusion" contexts in the work of many of the artists analyzed in Chapter Two.

I became much more comfortable with these tensions after the completion of my capstone concert, *Gates*, and the subsequent analysis of the work in Chapter Three. In compositional practices that were intuitive and born out of improvisation as well as intellectualized and systematic, I was able to create sonic objects that grappled with "essences" like many of the inter-cultural works that inspired me so much in Chapter Two. In practice as a soloist as well as in dialogue with the other five musicians, I became much more comfortable with the tension between practice and research that I feared would negatively impact my artistic work.

Finding influence as a performer from spaces of scholarship outside of musical theory and analysis was crucial for me in moving past these tensions. Batá drumming may not often be described in line with many of the ideas associated with the grid, philosophy, and visual art as exhibited in this chapter. While these ideas are highly personal and, in some ways, detached from batá practice, they allow us to look at how the tradition differs from other Afro-diasporic musics centered more around "improvisation."

I see the sentiments regarding the post-digital platonic ideal of a grid as telling of what will happen to the future of batá practice as well as electronic music idioms that take influence from folkloric musics. I hope that this dissertation will serve as a framework that could be referenced for other composers and improvisers who wish to channel traditions that are outside of their own musical upbringing in honest, nuanced, and thoughtful ways.

REFERENCES

Agawu, Kofi. *Representing African Music: Postcolonial Notes, Queries, Positions*. Routledge, 2014.

———. "Structural Analysis or Cultural Analysis? Competing Perspectives on the 'Standard Pattern' of West African Rhythm." *Journal of the American Musicological Society* 59, no. 1 (April 1, 2006): 1–46. https://doi.org/10.1525/jams.2006.59.1.1.

———. "The Metrical Underpinnings of African Time-Line Patterns," YouTube. June 20, 2017. 20:45. https://www.youtube.com/watch?v=8ypTYNGLr5A.

Amira, John & Steven Cornelius. *The Music of Santeria: Traditional Rhythms of the Bata Drums*. Performance in World Music Series, Mel Bay, 1999.

Baraka, Amiri. *Blues People: Negro Music in White America*. Greenwood Press, 1980.

Bartók, Béla. *Béla Bartók Essays*. St. Martin's Press, 1976.

Becker, Judith. *Deep Listeners: Music, Emotion, and Trancing*. Indiana University Press, 2004.

Beliso-De Jesús, Aisha M. *Electric Santería: Racial and Sexual Assemblages of Transnational Religion*. Gender, Theory, and Religion. New York: Columbia University Press, 2015.

Benadon, Fernando. "Meter Isn't Everything: The Case of a Timeline-Oriented Cuban Polyrhythm." *New Ideas in Psychology* 56 (January 2020): 1-6. https://doi.org/10.1016/j.newideapsych.2019.03.002.

Burns, James. "Rhythmic Archetypes in Instrumental Music from Africa and the Diaspora." *Music Theory Online* 16, no. 4 (December 1, 2010). https://mtosmt.org/issues/mto.10.16.4/mto.10.16.4.burns.html.

Cantor-Navas, Judy. "Discover the Sacred Afro-Cuban Chants That Are Celia Cruz's First-Known Recordings." Billboard (7/16/2020)

Cohn, Richard. "A Platonic Model of Funky Rhythms." *Music Theory Online* 22, no. 2 (June 1, 2016). https://mtosmt.org/issues/mto.16.22.2/mto.16.22.2.cohn.html.

———. ‘Damaged Cargo: Concerning the Unfortunate Voyage of Poetic Meter to the Land of the Modern Music-Theory Textbook.’ Lecture Delivered at the 2019 Annual Meeting of the Society for Music Theory, November, 2019.” n.d.

Davis, Miles. *Harmon Gymnasium, University of California, Berkeley, CA, April 7*. Keyhole – KHLP9034, 1967. vinyl.

Deleuze, Gilles and Felix Guattari. “A Thousand Plateaus.” *University of Minnesota Press*. 1980

Dessen, Michael J. “Improvising in a Different Clave: Steve Coleman and AfroCuba de Matanzas.” In *The Other Side of Nowhere Jazz, Improvisation, and Communities in Dialogue*. 2004. Wesleyan University Press, 2004. https://escholarship.org/uc/item/9n2184ws.

Diaz, Javier. “Meaning Beyond Words: A Musical Analysis of Afro-Cuban Batá Drumming.” PhD diss., City University of New York, 2019.

Font-Navarrete, David. “Writing Orisha Music: Text, Tradition, and Creativity in Afro-Cuban Liturgy.” *Religions* 12, no. 11 (November 3, 2021): 964. https://doi.org/10.3390/rel12110964.

Franz, Emma, director. *Intangible Asset No. 82*. Alive Mind Cinema, 2009. 1:30:00. https://vimeo.com/ondemand/intangibleassetnumber82

Frias, Johnny. “Afro-Cuba Transnational: Recordings and the Mediation of Afro-Cuban Traditional Music.” PhD diss. City University of New York, 2019.

Gillespie, Dizzy. *The Dizzy Gillespie Orchestra – The Dizzy Gillespie Orchestra At Pleyel; Paris, France*. Prestige Historical Series PR 7818, 1970.

Gillespie, (Dizzy) John Birks with Al Fraser. *To Be, or Not to Bop*. Da Capo Press, 1979.

Graves, Milford & Jake Meginsky, Milford Graves Full Mantis, Zeitgeist Films, 2018.

Graves, Milford & Melvin Gibbs. “Making Contact” A Mind-Body Deal Inventory Press, 2022.

Graves, Milford. 1977 Lecture at Bennington College, Exhibition Guide Milford Graves: Fundamental Frequency, Institute of Contemporary Art Los Angeles, 2023.

Hagedorn, Katherine J. “Bringing Down the Santo: An Analysis of Possession Performance in Afro-Cuban Santería.” The World of Music 42, no. 2 (2023).

———. *Divine Utterances: The Performance of Afro-Cuban Santeria*. Soho Press, 2001.

Hasty, Christopher. *Meter As Rhythm: 20th Anniversary Edition*. Oxford University Press, 2020.

Hudson, Suzanne. *Night Sea.* Afterall Books: One Work, MIT Press. 2017.

Iyer, Vijay. *Break Stuff*. ECM 2420, 2015.

Institute of Contemporary Art, Los Angeles. “Milford Graves: Fundamental Frequency” ICA LA Exhibition Guide (2023)

Jassey, Victoria Rosemary. “Tambor Reverberations: Gender, Sexuality, Bata.” PhD diss., Cardiff University, 2019.

Kant, I., and P. Guyer. *Critique of the Power of Judgment*. Cambridge University Press, 2000.

Krauss, Rosalind. “Grids.” *October* 9 (1979): 51–64. https://doi.org/10.2307/778321.

———. “Notes on the Index: Seventies Art in America.” *October* 3 (1977): 68. https://doi.org/10.2307/778437.

Kronfeld, Maya. “Structure in the Moment: Rhythm Section Responsivity.” *Jazz & Culture* 4, no. 2 (2021): 14–22.

Lacan, Jacques. *Écrits. Paris: Seuil, 1966*. Écrits, Trans. Bruce Fink, in Collaboration with Héloïse Fink and Russell Grigg. New York: W.W. Norton, 2006.

Lees, Gene*. Meet Me at Jim and Andy’s*. Oxford: Oxford U Press, 1988.

Leo Smith, Wadada & Nina Eidsheim. “Cosmological Compositions: Wadada Leo Smith & Nina Eidsheim.” Hammer Museum. Youtube. Nov. 8, 2019. 1:51:58. https://www.youtube.com/watch?v=WCov9YsqCuY&t=1211s

Lloyd, Charles. *Forest Flower: Charles Lloyd at Monterey*. Atlantic Records 1473. 1966, vinyl.

Locke, David. “Simultaneous Multidimensionality in African Music: Musical Cubism.” *African Music* 8, no. 3 (2009): 8–37.

López, Manley. “Entre Abbure.” YouTube. Feb 9, 2023. 3:20. https://www.youtube.com/watch?v=t-TwCZHzJLo

López, Manley. “Funcionalidad Del Trío Batá,” YouTube. June 9th, 2020. Educational Video. 1:55. https://www.youtube.com/watch?v=X-N_31GYxN8

López, Manley. “Orun Seco 🌎🌎🌎 COMPLETO. 13 MINUTOS. BatáBatería. Estudiando en casa, 12 Noviembre 2018. Nereo Gonzalez, Ayan Sayeró, Rangel,” Facebook. 13:04. https://www.facebook.com/watch/?v=210521679720111

Manuel, Peter, and Orlando Fiol. “Mode, Melody, and Harmony in Traditional Afro-Cuban Music: From Africa to Cuba.” *Black Music Research Journal Columbia College Chicago and University of Illinois Press* 27, no. 1 (2023)

Mauleón-Santana, Rebecca. *101 Montunos.* Sher Music Co., 1999.

Miller, Ivor. “A Secret Society Goes Public: The Relationship between Abakuá and Cuban Popular Culture.” *African Studies Review* 43, no. 1 (2000): 161–88. https://doi.org/10.2307/524726.

Mills, Jeff. “Jeff Mills Exhibitionist 2 Mix 3.” YouTube. Jan. 26, 2017. 11:05. https://www.youtube.com/watch?v=eU-UsvYbIV0

Mingus, Charles. *Beneath the Underdog: His World as Composed by Mingus*. Knopf Doubleday Publishing Group, 1991.

Miniconi, Antoine. “Manley Lopez.” *Manleycvenglish* (blog). *blogspot*, 2007 https://manleycvenglish.blogspot.com/

Miniconi, Antoine. “Pedro Lopez Interview” *Manleycvenglish* (blog). *blogspot*, 2007 https://manleycvenglish.blogspot.com/2007/03/Pedro-Lpez-in-This-Interview-Conducted.Html

Monson, Ingrid. *Saying Something: Jazz Improvisation and Interaction*. University of Chicago Press, 1997.

Moreno, Jairo. “Bauzá–Gillespie–Latin/Jazz: Difference, Modernity, and the Black Caribbean.” *The South Atlantic Quarterly Duke University Press* 103, no. 1 (Winter 2004)

Moten, Fred. “Graves Say, Graves Says.” In *A Mind-Body Deal*. Inventory Press, 2022.

Quinto, Pancho. “Cuban Jam, Pancho Quinto En Casa de Steve Bloom,” YouTube. Jan 5, 2009. 8:10. https://www.youtube.com/watch?v=l8uRR7uF85c

Reynolds, Atticus & Evan Abounassar. “Chachalokpfun Etude (Atticus Reynolds & Evan Abounassar).” YouTube. April 23rd, 2023. 7:21. https://www.youtube.com/watch?v=_W5FGYdvS88

Reynolds, Atticus & Isaac Otto. “Rezo (for Obatala) (Atticus Reynolds & Isaac Otto).” YouTube. April 23rd, 2023. 8:07. https://www.youtube.com/watch?v=Ga7EfX6LafU

Reynolds, Atticus & Kei Akagi. “For Elvin, McCoy, & John (Atticus Reynolds & Kei Akagi).” YouTube. April 23rd, 2023. 13:35. https://www.youtube.com/watch?v=FscTw_BjH7o

Reynolds, Atticus & Prawit Siriwat. “Ñongo Etude (Atticus Reynolds & Prawit Siriwat).” YouTube. April 23rd, 2023. 9:42. https://www.youtube.com/watch?v=2Cd3WVgaPLs

Reynolds, Atticus and Rajna Swaminathan. “Night Sea (for Agnes Martin) (Atticus Reynolds & Rajna Swaminathan).” YouTube. April 23rd, 2023. 10:50. Https://Www.Youtube.Com/Watch?V=uIMF1pKY2ME

Reynolds, Atticus. “Gates(Horizonsseenandpresenc(e)Cut) (Atticus Reynolds).” YouTube. April 23, 2023. 47:35. https://www.youtube.com/watch?v=qJZG2o3sgiI

Roberts, Philippe & Camae Ayewa. Black Encyclopedia of the Air-Album Review, Pitchfork, (2021) Https://Pitchfork.Com/Reviews/Albums/Moor-Mother-Black-Encyclopedia-of-the-Air/

Rubalcaba, Gonzalo. *Son XXI*. 5Passion SP-010, 2011.

Schweitzer, Kenneth. *The Artistry of Afro-Cuban Batá Drumming: Aesthetics, Transmission, Bonding, and Creativity*. Univ. Press of Mississippi, 2013.

Skoog, Don, and Alejandro Carvajal Guerra. *Batá Drumming, The Oru Seco, The Instruments, the Rhythms, and the People Who Play Them.* The Contemporary Music Project, 2010.

Spiro, Michael and Justin Hill. *Roadmap for the Oru Del Igbodu (Oru Seco)*. Michael Spiro and Justin Hill Independently Published No. 1, 2015.

Stover, Chris. “Eight Axioms for a Theory of Timeline Spaces.” Accessed December 26, 2021. https://www.chrisstovermusic.com/eight-axioms.

———. “The Clave Matrix: Afro-Cuban Rhythm: Its Principles and Origins (Review).” *Latin American Music Review* 33, no. 1 (2012): 131–40. https://doi.org/10.1353/lat.2012.0004.

———. “A Theory for Flexible Rhythmic Spaces for Diasporic African Music.” PhD diss., University of Washington, 2009.

Tenzer, Michael. “A Cross-Cultural Topology of Musical Time.” In *Analytical and Cross-Cultural Studies in World Music*, edited by Michael Tenzer and John Roeder, 415–40. Oxford University Press, 2011. https://doi.org/10.1093/acprof:oso/9780195384581.003.0012.

———. “Generalized Representations of Musical Time and Periodic Structures.” *Ethnomusicology* 55, no. 3 (September 1, 2011): 369–86. https://doi.org/10.5406/ethnomusicology.55.3.0369.

Thaler, Richard. “BIOGRAPHY OF LÁZARO GALARRAGA” 2012 Http://Afrocubanpercussion.Com/Aboutlazaro/

Toro, Efrain. *Rhythm in Essence*. Independently Published, 2019.

Valdés, Chucho. *Jazz Bata*. Areito LDA 3409, 1973, vinyl.

Villepastour, Amanda. *Ancient Text Messages of the Yorùbá Bàtá Drum: Cracking the Code*. Routledge, Taylor & Francis Group, 2010.

———. *The Yorùbá God of Drumming, Transatlantic Perspectives on the Wood That Talks.* University Press of Mississippi. 2015.

Weinrib, Craig. Drum Lesson, NYC, May 30th, 2019.

APPENDICES

APPENDIX A

A BRIEF HISTORY OF LUKUMÍ MUSIC: (IN "FUSION" CONTEXTS)

To take folkloric music out of context, regardless of the cultural positionality of the artist, requires consideration of complex social dynamics that become even more nuanced when religiosity is taken into account. In *Divine Utterances*, Katherine Hagedorn addresses the folkloricization of Afro-Cuban religious traditions in secular performances in looking at a "sphere of sacred intent." [187] She marks a division between sacred and religious in showing how sacred intention in musical utterances can exist in secular and religious spaces. In this manner, "sacred and secular inform each other, use each other, and in fact inhabit the same sphere of sacred intent."[188] While her text is primarily looking at folkloric performance in postrevolutionary Cuba, I find this concept key to understanding Lukumí practitioners who find religious essences in popular and secular music contexts.

David Font-Navarrete echoes this sentiment in addressing a historical narrative of a more contemporary Lukumí liturgical text written by Juan García Fernández, a text that has now been accepted into common ritual practice. Navarrete notes that this feedback loop of sacred and secular is characteristic of the tradition.

[187] Hagedorn, ibid., 6.
[188] Hagedorn, ibid., 6.

> *Orisha* music traditions are analyzed as a fertile ground for a multitude of devotional and/or artistic expressions, many of which have a particularly ambiguous relationship to the concept of religion. In this context, the fluid movements of *orisha* music between ostensibly sacred and secular contexts can be usefully understood as not only common, but as a conspicuous and characteristic aspect of the tradition.[189]

Much of the music that I addressed in Chapter Two is secular music that was written by or performed with or by religious practitioners. I use the term "fusion" not in the sense of jazz fusion from the 1970s but as any secular styles that utilize Lukumí music or instruments. Navarrete and Hagedorn's ideas related to a "sphere of sacred intent" are key to the aesthetic decisions made by the artists in those analyses. All these artist-practitioners work in popular music and secular contexts which have influenced their ritual practice as well.

Based on my research, I see four components of Lukumí musical practices that are often used in other 20th and 21st century musical contexts. Musicians could utilize Orisha songs that are in Lukumí[190] (or write new songs in reference to the religion in Spanish), exact rhythms (or abstracted rhythmic contours), the instruments (batá drums), or take broader influence from the musical aesthetics.[191] I have found that, historically, musicians seemed to be most comfortable first with utilizing the songs out of context, then the rhythms and rhythmic contours, and finally the actual instruments in practice.

---

[189] David Font Navarrete, "Writing Orisha Music: Text, Tradition, and Creativity in Afro-Cuban Liturgy," *Religions* 12, 964, **https://doi.org/10.3390/rel12110964**.

[190] The Lukumí language used in Orisha songs in Cuba is derived from Yoruba but has lost many of the tonal aspects.

[191] Taking broader influence from the musical aesthetics is in line with a pure symbolic representation of an "essence" or a metaphorical approach, as opposed to a metonymic approach.

I start this brief history in the late 1920s, when two key Cuban Son ensembles, Sexteto Nacional and Sexteto Habanero, began to make use of Lukumí themes in their music. Ignacio Piñeiro Martínez and the piece "Mayeya no juegues con los santos" by his group Sexteto Nacional is an example of this approach. Sexteto Habanero's "Carmela Mia" and "Nieve de mi Vida" are examples of 6/8 improvisation in the Son tradition that is in line with batá improvisation. The music of the Abakuá Cuban fraternity is also influential in Bongo playing in Son music. Ivor Miller's article "A Secret Society Goes Public: The relationship between Abakuá and Cuban Popular Culture" is particularly helpful in its chronological history of Abakuá influence in popular music.[192]

In 1939, Mario Bauza started a prolific big band with the percussionist Machito. The orchestra played a combination of swing music idiomatic to the era and mambo music, referencing Lukumí in lyrics of pieces like "Tanga." In the late 1940s, with the beginnings of bebop and jazz modernism, came the first recordings of Lukumí music presented more or less "traditionally" as well as integrated into jazz and popular music forms. Celia Cruz and Merceditas Valdés took part in a recording for Havana's Panart Recordings in 1947 of songs for Obatala, Elegua, Ochun, and Yemaya. Entitled *Toques de Santo*, this record would likely not have been made prior to the late 1940s due to apprehension by practitioners to make the religious rites and liturgy public.[193] In 1948, Dizzy Gillespie and Chano Pozo made a live recording of a collective work entitled "Afro-Cuban Jazz Suite." This work, which I analyze in

[192] Ivor Miller, "A Secret Society Goes Public: The relationship between Abakuá and Cuban Popular Culture," *African Studies Review*, Volume 43 (2000).
[193] Judy Cantor-Navas, "Discover the Sacred Afro-Cuban Chants That are Celia Cruz's First-Known Recordings," *Billboard*, (July 16, 2020).

more detail in Chapter Two, utilizes rhythmic contours that gesturally hint at the Orisha rhythm for Ogun as well as vocal Abakuá chants.

Throughout the 1950s, as Latin-jazz small ensembles continued to develop post Gillespie-Pozo collaborations, recordings by Cal Tjader and Mongo Santamaria utilized approaches to improvisation in 6/8 that took broader influence from Rumba music as well as religious traditions. Another example is *Bembe* by Santamaria that utilized batá drums and rhythmic contours in 1958 in more open gestural ways with congas.

A key example from 1963 is Arsenio Rodriguez's "Oracion Lucumi." This work maps an Orisha song for Elegua onto the Tres. Here the rhythmic contours of 6/8 leaning rhythms on batá, as well as the vocal phrasing and folkloric vocal tuning, are referenced in the approach to cross-rhythms and bending notes on the Tres.

By the 1970s, batá drumming and Lukumí music influence was arguably the most prominent to date in secular music outside of religious practice. This is true due to the profound influence of Chucho Valdés and the Afro-Cuban fusion collective Irakere. Founded in 1973, the group integrated batá into a powerfully dynamic sound influenced by Cuban popular music traditions as well as contemporary jazz fusion. In Chapter Two, I address Valdés' small group ensemble record, *Jazz Bata*, released in 1973, that was produced in collaboration with percussionist and singer Oscar Valdés who was also a founding member of Irakere. In the late 1970s as well as the early 1980s, fusion groups such as Síntesis and Mezcla continued to combine Lukumí songs and batá rhythms with 1980s popular music, utilizing synthesizers and minimal pop chord progressions. *Cantos* by Mezcla with master Cuban singer and drummer Lázaro Ros is another great example of this sound from 1992.

In parallel to Irakere, Puerto Rican super group Batacumbele released a 1988 live concert at the University of Puerto Rico with pieces in tribute to Elegua, Obatala, and Ochun. Angel "Cachete" Maldonado, a Santero and master percussionist, found a uniquely Puerto Rican sound in this ensemble that paid tribute to Irakere as well as Bomba and Plena traditions, folkloric musics native to Puerto Rico. These pieces are performed more traditionally with only vocals and batá and act as interludes to their more common popular songs. Also in 1988, Fort Apache Band released a recording entitled *Obatala*. Fort Apache Band was an ensemble based in New York led by Nuyorican trumpeter and Conguero Jerry Gonzalez. The drum-set player for many years in Fort Apache was Steve Berrios, an influential Latin-jazz drum-set player who was also a Santero and established batá drummer.

In the late 1980s and early 1990s, Lukumí influence found more grounding in the instrumental jazz world. Foundational composers, such as Michele Rosewoman and Jane Bunnett, started to experiment with Afro-Cuban religious traditions in using songs, rhythms, improvisational approaches, and traditional instruments. Rosewoman's 1984 *The Source* and Bunnett's 1991 *Spirits of Havana* are key in this regard. Both Bunnett and Rosewoman wrote and performed much of this music with cultural "insider" practitioners in close collaboration.

In the 1990s, in line with shifts in hip-hop and electronic music, Lukumí music found its way again into popular genres. Herbie Hancock's 1994 *Dis is Da Drum* was a collaboration with Lázaro Galarraga. Galarraga, who was a consistent collaborator with Headhunters' percussionist Bill Summers, can be heard on tracks entitled "Dis is Da Drum" that utilizes fragments of chachalokpfun, and Juju, that includes an Orisha song for Chango. The batá rhythm in the beginning of Juju is a final road for Obatala in the Oro Seco that can also be used for different

Orishas in the Cantado/Wemilere sections. The stark transitions between 4/4 and 6/8 are of note in this track.

In 1996, Steve Coleman and his Mystic Rhythmic society traveled to Cuba to work on a collaborative project with folkloric ensemble AfroCuba de Matanzas. The product of this album, *The Sign and the Seal*, was a foundational intercultural collaborative work.[194] The music utilized Abakuá, Lukumí, and secular Rumba rhythms and songs with cyclic compositional and improvisational techniques. Another key 1996 record was *Bata Ketu* by Michael Spiro and Mark Lamson. This record combined rhythms for parallel manifestations of Orishas in Lukumí music and Brazilian Candomble traditions.

In 1998, Pancho Quinto released his first album *En el solar la cueva del humo* and then his second *Rumba sin Fronteras* in 2003. Francisco Hernandez Mora, also known as Pancho Quinto, was an innovative percussionist, singer, and composer who combined modern production techniques with Lukumí music and Rumba improvisation. These works are addressed in Chapter Two. Throughout the 2000s, Lukumí subject matter surfaced in hip-hop worlds, for example with the Cuban hip-hop group Orishas, and in collaborative improvised recordings that started to experiment with electronics and popular production. An example of this is *Echu Mingua* by the late master percussionist Miguel "Anga" Diaz. In 2009, a collaborative record of Abakuá musicians in Cuba and African Ekpe musicians entitled *Ecobio Enyenison* was released under the guidance of Dr. Ivor Miller.

[194] For more information on the cultural dynamics of the processes involved in this collaboration, see Michael Dessen's article.
Michael Dessen, "Improvising in a Different Clave: Steve Coleman and AfroCuba de Matanzas," *The Other Side of Nowhere Jazz, Improvisation, and Communities in Dialogue*, (Wesleyan University Press, 2004).

The 2010's brought forth a wave of creative music and jazz improvisers with links to Afro-Cuban religious music. Some key examples here are Gonzalo Rubalcaba's *XXI Century*, Roman Filiu's *Musae*, Yosvany Terry's *New Throned King*, and David Virelles' *Continuum* and *Mboko*. I consider Virelles' work in much more detail in Chapter Two. Electronic artists and producers such as Ibeyi and Ìfé, crafted contemporary arrangements of Lukumí songs and utilized folkloric rhythms from both sacred and secular spaces, as shown in *III+III* by Ìfé and *Ibeyi* by Ibeyi. Ibeyi is made up of artists Lisa-Kaindé Diaz and Naomi Diaz who are the daughters of the late percussionist Miguel "Anga" Diaz. Anga played with Irakere and Steve Coleman and was an influential bandleader in composing music that fused electronic, folkloric, and jazz influences. In this tradition, spiritual lineages often follow familial lines in musical innovation.

In the early 2020s, a few key records have been released utilizing batá, such as Patricia Brennan's *More Touch* with Mauricio Herrera and Danilo Perez's *Crisalida* with Roman Diaz. Though it is in dialogue with Afro-Haitian traditions, Ches Smith and We All Break's *Path of Seven Colors* is of particular interest to me in its conceptual approaches to composition.

APPENDIX B

KEY RECORDINGS

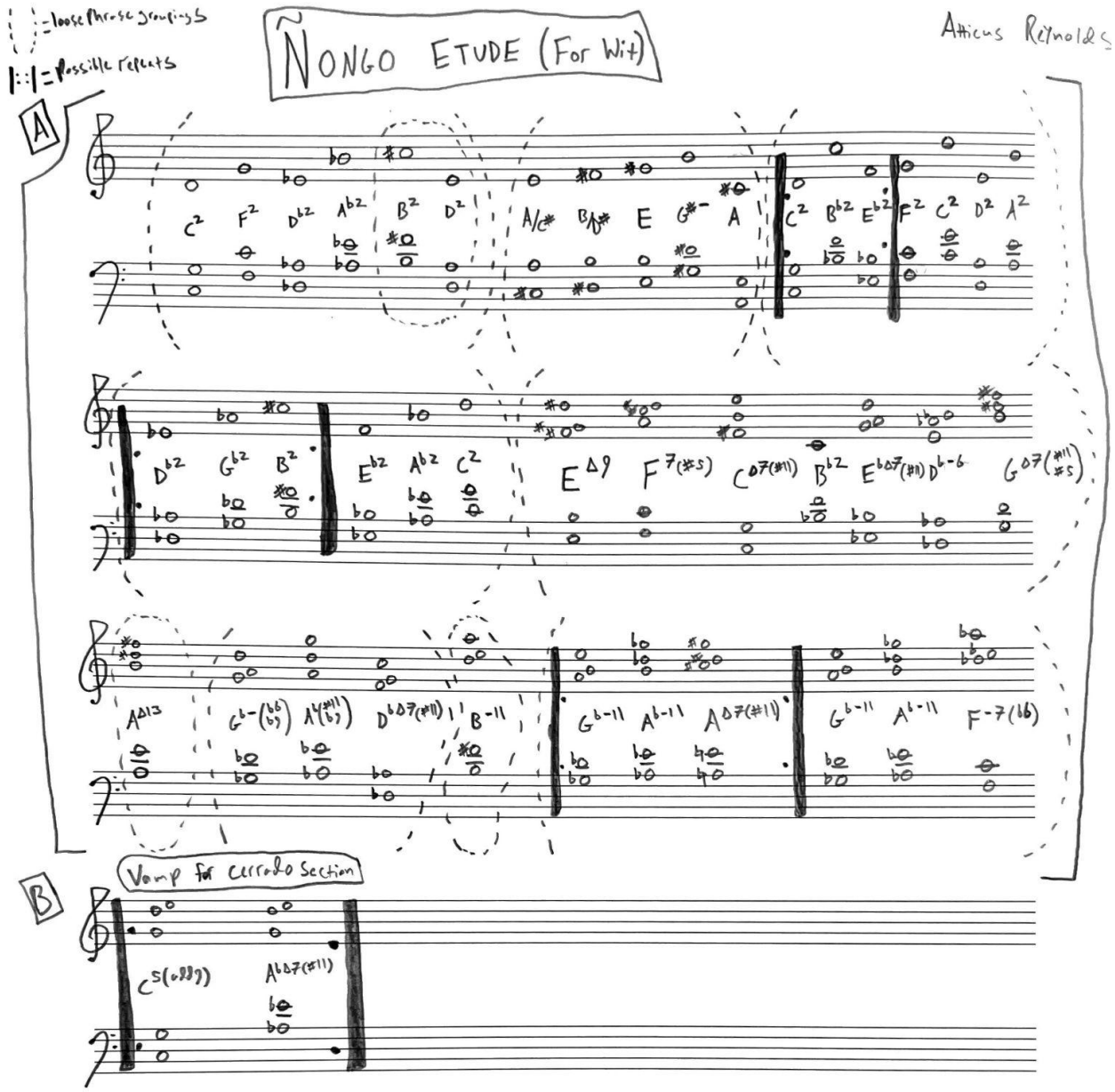
- 1926, Sexteto Habanero, *Carmela Mia*
- 1927, Sexteto Habanero, *Nieve de mi Vida*
- 1927, Septeto Nacional, *Mayeya, No Juegues con Lo Santos*
- 1948, Dizzy Gillespie, *At Salle Pleyel (Paris, France - 1948)*
- 1949, Celia Cruz, *Toques de Santo*
- 1956, Cal Tjader, *Ritmo Caliente*
- 1957, Ignacio Pineiro & Maria Teresa Vera, *En La Alta Sociedad*
- 1957, Tito Puente, *Top Percussion*
- 1958, Mongo Santamaria, *Yambu*
- 1958, Cal Tjader*, Más Ritmo Caliente*
- 1959, Mongo Santamaria, *Mongo*
- 1962, Mongo Santamaria, *Mongo en Havana Bémbe!*
- 1963, Arsenio Rodriguez Y Su Magia, *La Música Afro Cubana*
- 1964, Montego Joe, *Arriba! Con Montego Joe*
- 1967, John Coltrane, *Olatunji Concert: The Last Live Recording*
- 1968, Patato y Totico, *Patato & Totico*
- 1973, Chucho Valdes, *Jazz Bata*
- 1975, Dizzy Gillespie, *Afro-Cuban Jazz Moods*
- 1976, Jaco Pastorius, *Jaco Pastorius*
- 1978, Síntesis, *En Busca de Nueva Flor*
- 1978, Louie Bellson & Walfredo De Los Reyes, *Ecué (Ritmos Cubanos)*
- 1979, Irakere, *Irakere*
- 1984, Michele Rosewoman, *The Source*
- 1987, Síntesis, *Ancestros*
- 1987, Michele Rosewoman, *Quintessence*
- 1988, Batacumbele, *In Concert at the University of Puerto Rico*
- 1988, Fort Apache Band, *Obatala*
- 1991, Jane Bunnett, *Spirits of Havana*
- 1992, Lázaro Ros, *Mezcla*
- 1992, Lázaro Galarraga & Bill Summers, *Iroko*
- 1993, Michele Rosewoman, *Harvest*
- 1994, Herbie Hancock, *Dis is Da Drum*
- 1994, Fort Apache Band, *Crossroads*

- 1996, Steve Coleman, *The Sign and the Seal*
- 1996, Mark Lamson & Michael Spiro, *Bata Ketu*
- 1997, Jane Bunnett, *Chamalongo*
- 1998, Pancho Quinto, *En el solar la cueva del humo*
- 1998, Irakere, *Babalu Aye*
- 1999, Omar Sosa, *Spirits of Roots*
- 2000, Omar Sosa, *Bembon*
- 2000, Jane Bunnett, *Ritmo + Soul*
- 2000, Orishas, *A Lo Cubano*
- 2001, Orlando "Cachaíto" López, *Cachaito*
- 2002, Jane Bunnett, *Cuban Odyssey*
- 2002, Orishas, *Emigrante*
- 2003, Pancho Quinto, *Rumba Sin Fronteras*
- 2003, Los Hombres Calientes, *Vodou Dance Vol. 4*
- 2005, Miguel "Anga" Diaz, *Echu Mingua*
- 2005, Orishas, *El Kilo*
- 2006, Francisco Mela, *Melao*
- 2006, John Santos and The Machete Ensemble, *Machete*
- 2006, Pedrito Martinez, *Slave to Africa*
- 2008, Orishas, *Cosita Buena*
- 2009, Enyenison Enkama Project, *Ecobio Enyenison*
- 2011, Gonzalo Rubalcaba, *XXI Century*
- 2012, David Virelles, *Continuum*
- 2012, Roman Filiu, *Musae*
- 2012, Aruan Ortiz, *Santiarican Blues Suite*
- 2013, David Virelles, *Mbókò*
- 2014, Yosvany Terry, *New Throned King*
- 2015, Ibeyi, *Ibeyi*
- 2015, JLCO & Chucho Valdes, *Ochas*
- 2016, David Virelles, *Antenna EP*
- 2016, Michael Spiro & Wayne Wallace, *Canto America*
- 2017, Ifé, *III+III*
- 2017, (U)nity, *(U)nity is Power*
- 2017, David Virelles, *Gnosis*
- 2018, Roman Filiu, *Quarteria*
- 2018, (U)nity, *Peace Love and Music*
- 2020, David Virelles, *Transformación del Arcoiris*
- 2021, Ches Smith, *Path of Seven Colors*

- 2021, Jamael Dean, *Primordial Waters*
- 2022, Danilo Perez, *Crisalida*
- 2022, Patricia Brennan, *More Touch*

APPENDIX C

SCORES (DUO SET)

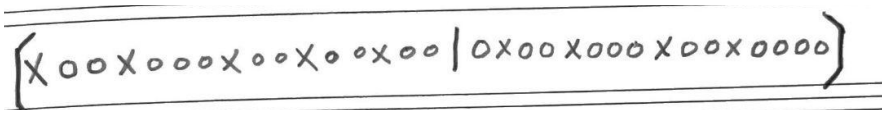


Night Sea (for Agnes Martin)

Section A

"caution[ing] against an equation between simplicity and guilelessness"
-Suzanne Hudson, Night Sea, 19[195]

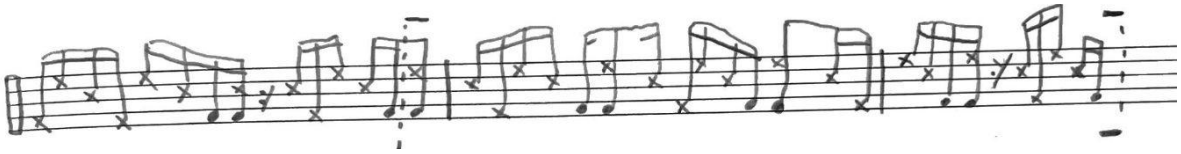
(play theme 4x, then each musician improvises taking into account guidelines on subsequent pages, this will happen 3x starting with Mridangam, after your improvisation is done start the phrase and the other musician will join in)
(solo 1, use text A, solo 2, use text B, solo 3, use text C)



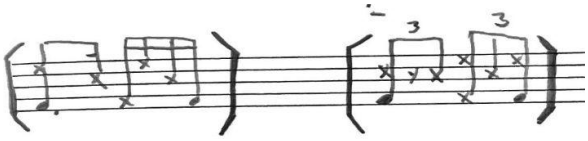
Section B

(After final drum solo, start to play this pattern, gradually speed up and improvise around contour of phrase together)

(cue: right hand goes down to the floor tom on the last phrase and start repeating 7-phrase (outlined by dotted lines))



(phase the 7-phrase into 16th notes, and then gradually phase into triplets)



Section C (Cerrado, open/closed system)

Improvise together in 12/8 space. time is generally "open" (i.e. improvising together around the groove) until the kick drum leaves the texture. At this point mridangam uses mostly muted

[195] Suzanne Hudson, "Night Sea," *Afterall Books: One Work*, (MIT Press, 2017).

sounds and tightens up the texture, then more sparse kick phrases will trigger call and response overlapping lines until finally the groove is clearer and you are back in "open" space.

Text A

- anti-grid, subjectivity and openness, (negation as tension and discontent and/or freedom)
    - Music: no consistent time, focus on sound/timbre, floating textural wash that pointillistic ideas carve through
    - Painting: priming gesso, color ambiguity, gold leaf
    - *"In this alternation of swell and recession, Night Sea performs the ceaselessness of pictorial reversibility; when the colour overtakes the linearity of the matrix, it also recedes, leaving the structure intact." -1*
        - In this section allow the colour to overtake the linearity, don't let it recede…
    - *"Accident betrays her. Martin's lines force the issue of whether the fall away from the ideal condemns the inevitability of embodiment, and how this is to be valued. For Martin, it was negative. This was not necessarily the case for others, however. Far from the aspirational logic of her professed 'classicism' - a perfection that is, of course, unattainable - these marks positively evidence what Annette Michelson once characterised as a distinctively human 'visual tremolo', which is to say, that they are aleatory and minutely flawed." -17*

Text B

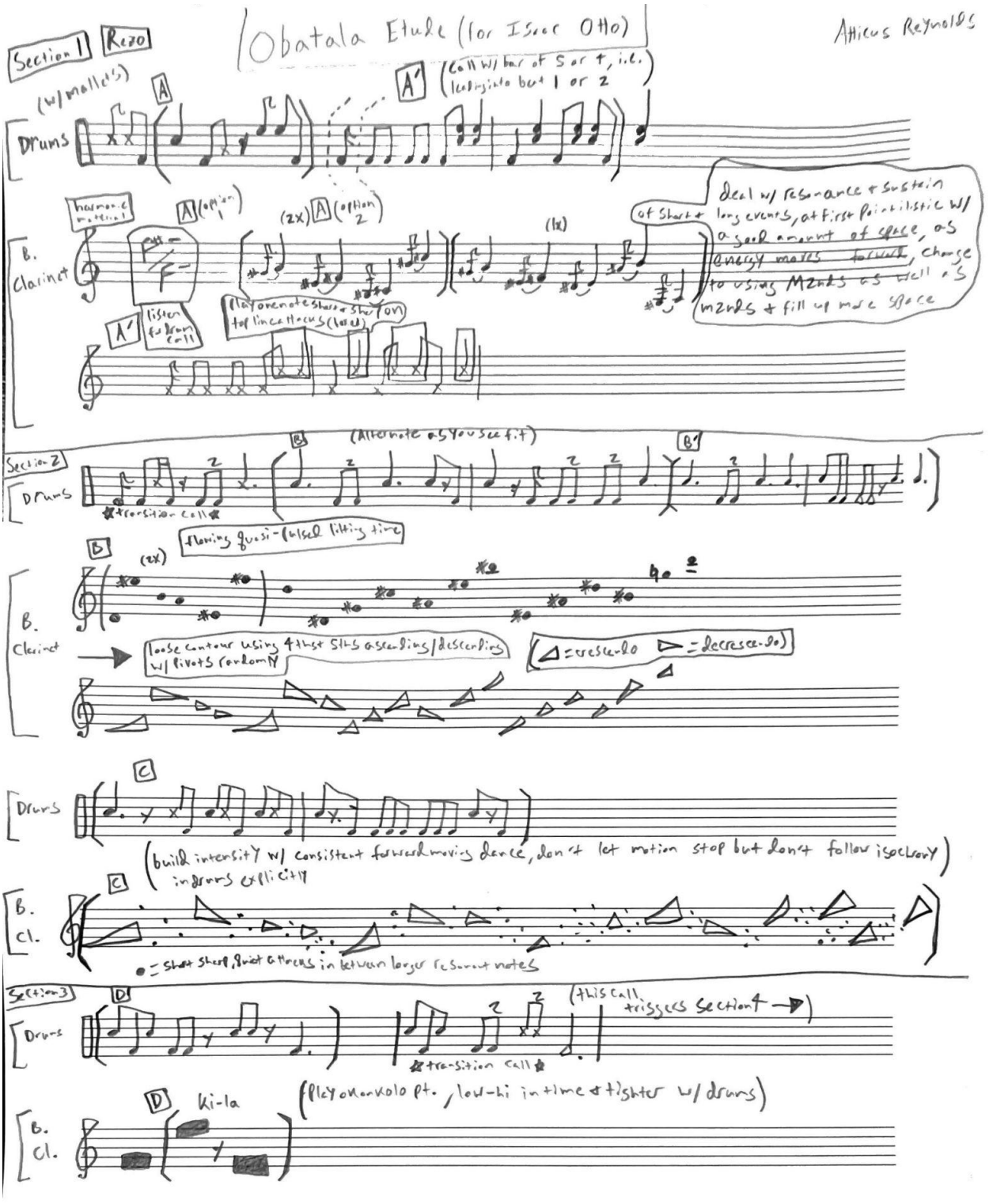
- 2) trying to replicate a "perfect grid"
    - Music: clean, tight, as close to metronomic as one could get, dance in the accents and not the phrasing
    - Painting: illusion of drawn grid lines (illusion of creation of time), illusion of uniform color, illusion of perfect squares, grid as readymade idea
        - *"Her parallel move from compositions involving discrete objects affixed to surfaces to painted relationships of figure and ground led her to the grid, where the priority of any one aspect was subsumed within the integrity of the whole. This first principle in the development of mathematical perspective, and a trope in its own right for modernists, became her readymade." -36*

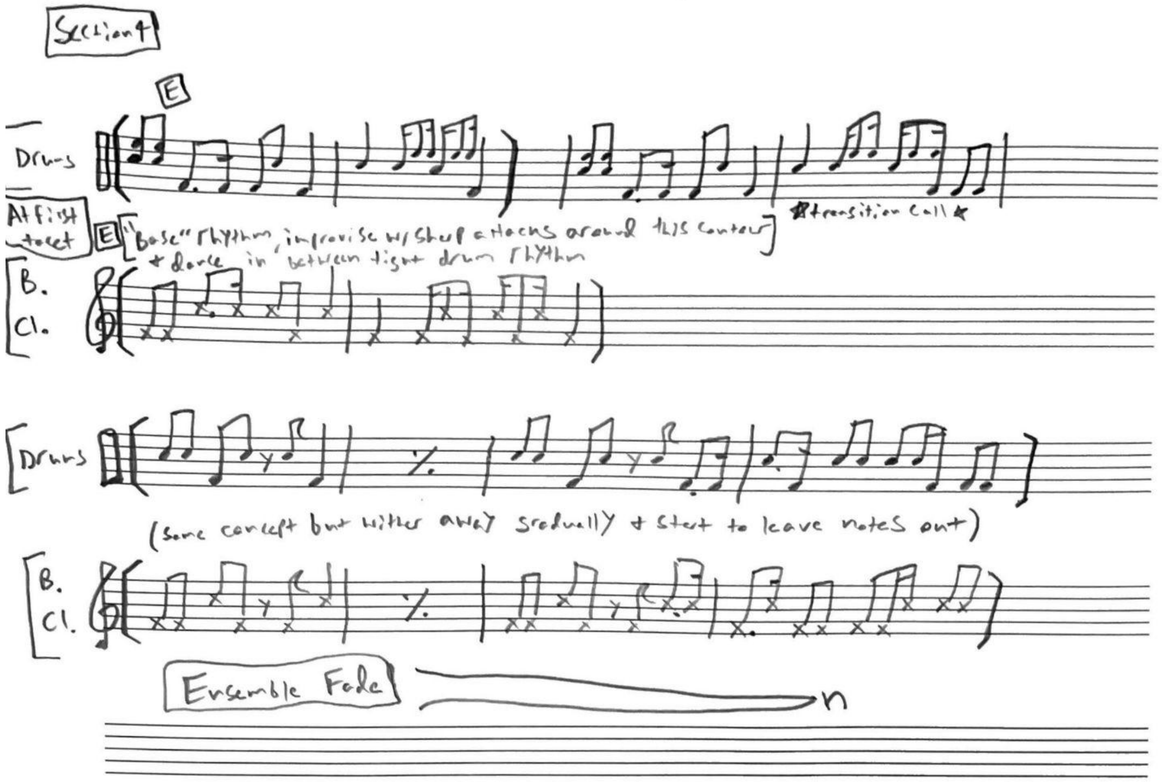
Text C

- 3) acknowledgement of the grid and its merits, but not as law, grid as a language

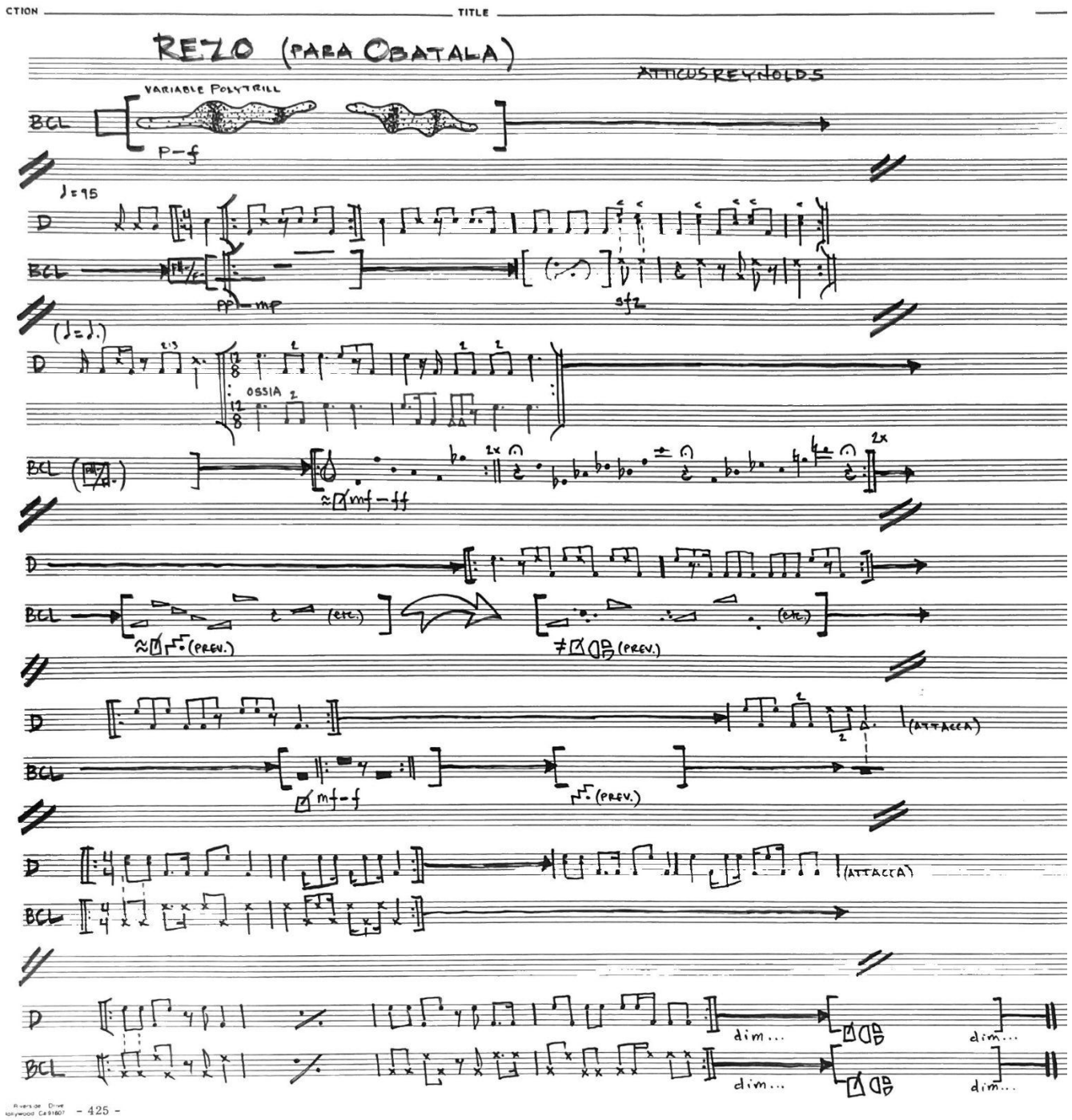
between yourself and an invisible improviser, dance

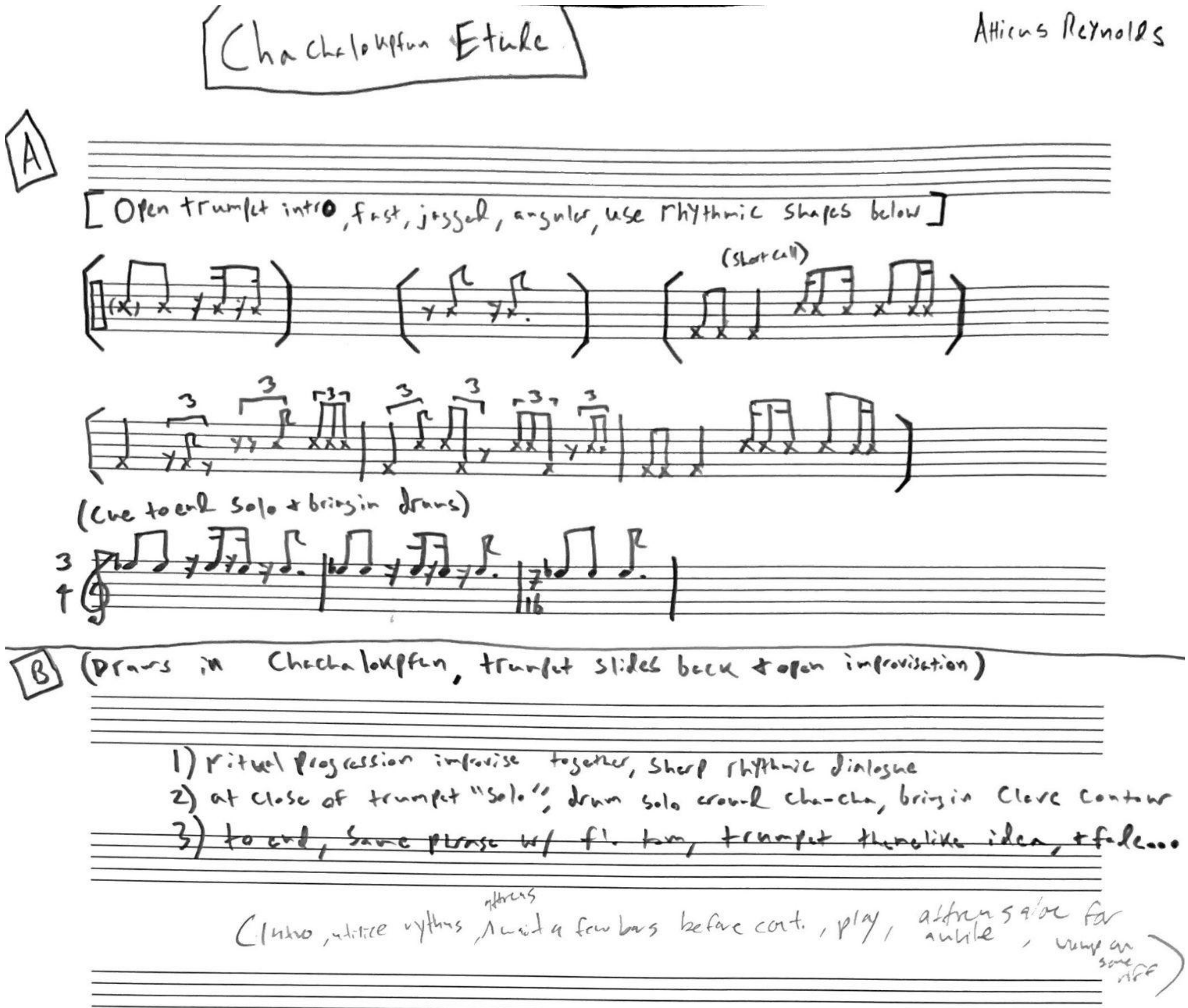
- Music: dance, feel, ~consistent~ pulse but phrase however feels good to you
- Painting: rectangles not squares, slight lilt of the lines not super even horizontal lines, 3 different blues (polymeter, in fix, can't tell at first), not creating time but carving time (grid is pulled apart and scored not drawn on, while paint still ductile)
- *"In its 'flaws', and in other ways, Night Sea manifests one of many dualities in Martin's work: the tension between the ideal - what she understood to be a near platonic conception of perfect geometry and materialised form - and the human." -16*
- *"curve on the straight line" -milford graves*



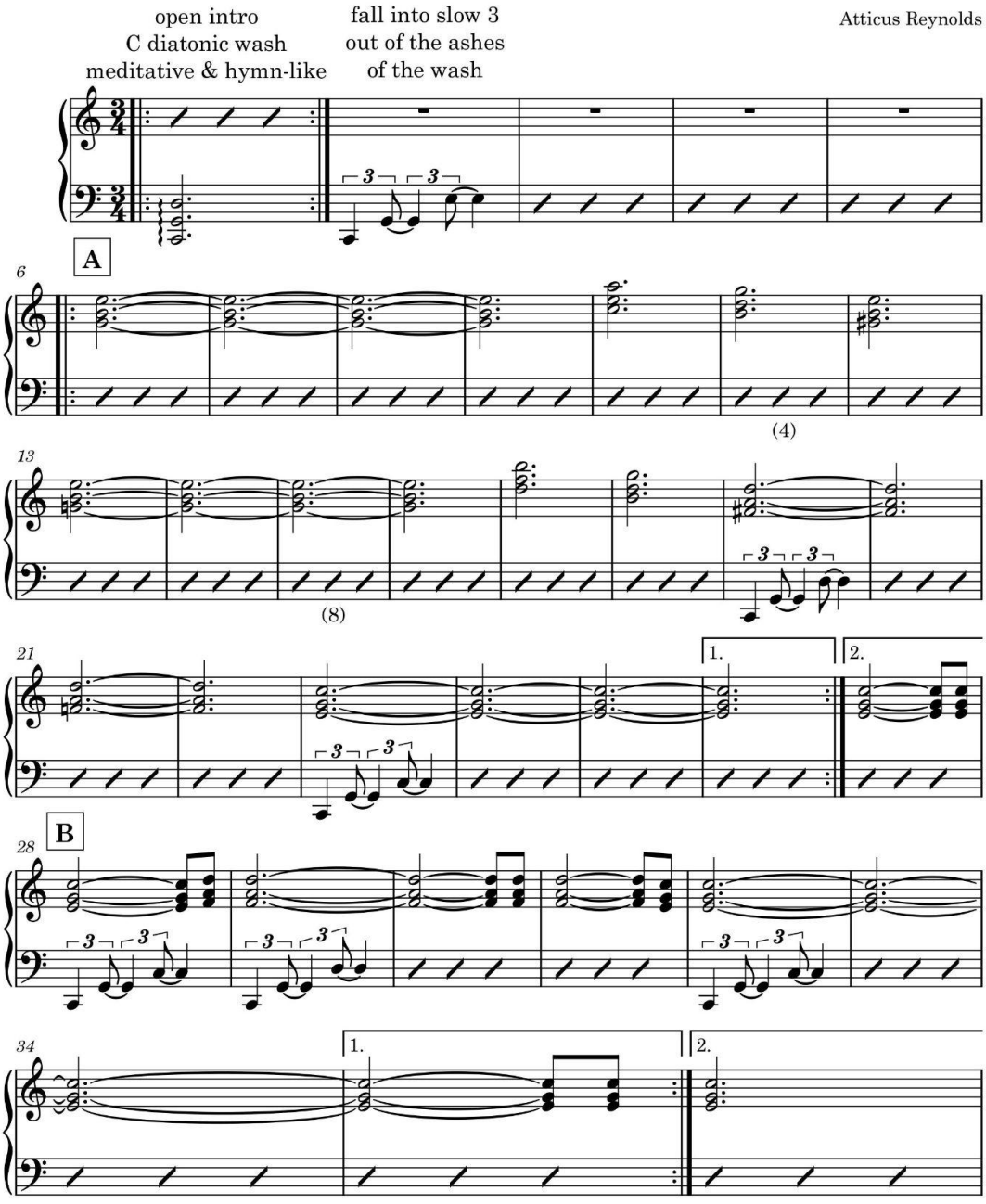

Section 4
E
Drums
At first tacet
E
"Base" rhythm, improvise w/ sharp attacks around this contour + dance in between tight drum rhythm
transition call
B. Cl.
Drums
(same concept but wither away gradually + start to leave notes out)
B. Cl.
Ensemble Fade
n

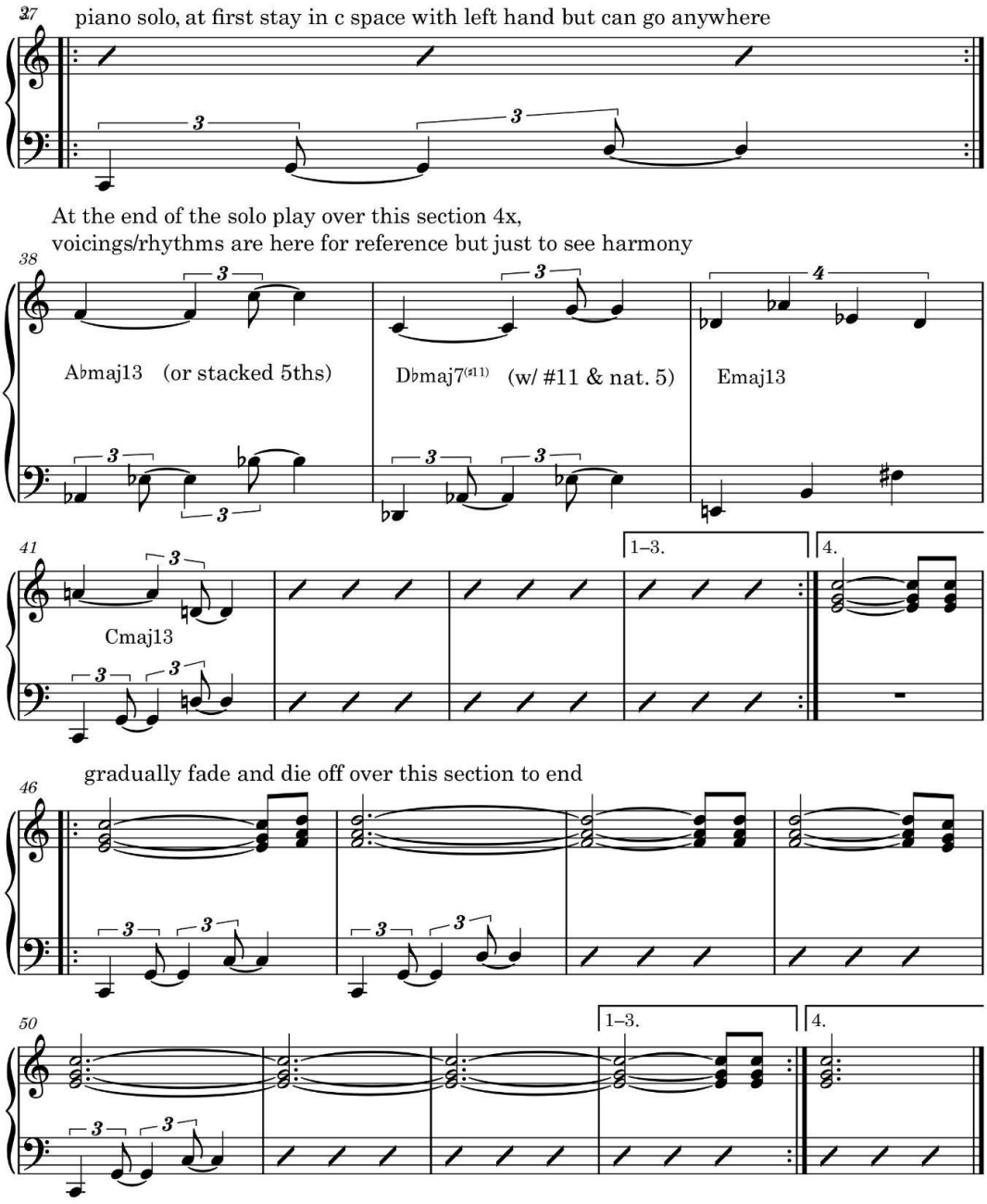
Rezo (abridged score) by Isaac Otto




Chachalokpfun Etude
Atticus Reynolds
A
[Open trumpet intro, fast, jagged, angular, use rhythmic shapes below]
(short cell)
(cue to end solo & bring in drums)
B
(Drums in Chachalokpfun, trumpet slides back & open improvisation)
1) ritual progression improvise together, sharp rhythmic dialogue
2) at close of trumpet "solo", drum solo around cha-cha, bring in clave contour
3) to end, same phrase w/ fl. tom, trumpet themelike idea, & fade...

for Elvin, McCoy, & John




27
piano solo, at first stay in c space with left hand but can go anywhere
At the end of the solo play over this section 4x,
voicings/rhythms are here for reference but just to see harmony
38
A♭maj13 (or stacked 5ths)
D♭maj7(♯11) (w/ #11 & nat. 5)
Emaj13
41
Cmaj13
1–3.
4.
gradually fade and die off over this section to end
46
50
1–3.
4.