Analyzing Hermeto Pascoal's Calendário do Som

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ANALYZING HERMETO PASCOAL’S CALENDÁRIO DO SOM

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Music

by

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Abstract

Hermeto Pascoal is one of the most prolific composers of the twentieth and twenty-first centuries, having composed thousands of pieces across his career. Despite his immense and eclectic catalogue, the current analytical literature on him is comparatively scant, particularly outside of the composer’s native Brazil. In order to represent the diversity of his music, this dissertation studies a collection of his works entitled the Calendário do Som. This collection was an exercise in daily composition and comprises 366 short pieces written from July 23, 1996 to July 23, 1997. Through the analysis of the pieces in this collection, this dissertation situates Hermeto’s music in the context of the many genres upon which it draws, including Brazilian instrumental music and jazz. While various methodological frameworks, including Schoenbergian, neo-Riemannian, and jazz theory explain parts of the composer’s oeuvre, his idiosyncratic style necessitates analytical and interpretational flexibility. This dissertation analyzes four aspects of the Calendário do Som. First, I begin with an overview of many subgenres of instrumental Brazilian popular music including choro, samba, and baião, as well as exploring Hermeto’s place in the context of North American jazz to show the influence of these genres on Hermeto’s music and his place within these musical lineages. Next, I study how the extra-musical factors Hermeto recorded on the manuscripts to this music affect musical style throughout the collection. Following these discussions of genre and style, I explore Hermeto’s unique conception of harmony and study its intersections with other established views of harmony, particularly those of Schoenberg, George Russell, and Dave Brubeck. Finally, this dissertation ends with an analysis of representative pieces from the collection demonstrating analytical tools which may help in further understanding and interpreting Hermeto’s music.
Chapter 1. Introduction

Hermeto Pascoal is one of the most prolific composers of the twentieth century, having composed thousands of works across his career that have been published, recorded, or performed. Hermeto’s music encompasses a wide range of styles, owing in equal parts to the breadth of his influences, the volume of his output, and his lack of formal training.\(^1\) The *Calendário do Som*, a collection of 366 short pieces, provides a sample of his music that is representative of both the stylistic variety of his compositions and his unique approach to harmony. The goals of this study are twofold. First, I seek to situate Hermeto’s unique musical style in the context of both the post modal jazz and Brazilian popular music to which it owes its greatest influence. In addition, I use diverse music theoretical methodologies to study Hermeto’s music through the lens of existing frameworks, while adapting those frameworks to accommodate his unique conception of harmony. This dissertation ends with an analysis of representative pieces from the collection demonstrating some analytical tools which may help in further understanding Hermeto’s music.

This introduction serves to acquaint readers with current scholarship concerning Hermeto, as well as an introduction to the collection and to Hermeto’s unique form of chordal notation. While scholarship about Hermeto’s music is relatively small compared to his voluminous output, it has grown over the past twenty years, particularly owing to the work ethnomusicologists based in the United States and scholars in the composer’s native Brazil.

Review of the Literature on Hermeto’s Music

Despite the breadth of Hermeto’s output, relatively little analytical work has been written on his music, especially in English. The only book on Hermeto in English is the translation of Luiz Costa-Lima Neto’s thesis, *The Experimental Music of Hermeto Pascoal and Group (1981-1993).*\(^2\) In his book, Costa-Lima Neto touches on many aspects of Hermeto’s music focusing on the period from 1981-1993, during which Hermeto worked with his most stable group of collaborators. Particularly relevant to this dissertation is an analysis of some of Hermeto’s most well-known works.\(^3\) There are factors that come into play in Costa-Lima Neto’s analyses, such as

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\(^1\) This document will follow the common practice in Brazilian scholarship, which is to refer to famous people by their first names or nicknames as opposed to their surnames. Brazilian scholars in this document will be referred to by their surnames, with the one exception being Jovino Santos Neto, who is also a famous composer and performer. Composer, arranger, and bassist Itiberê Zwarg, a collaborator and interpreter of Hermeto’s music, is also commonly referred to by his first name and will be referred to as such throughout this document.


Some of the research from that book is also found in an earlier article:


timbre and the energy of the rhythm section, which are outside the scope of the main analyses in this study because of the fundamental differences between analysis of a recording and analysis of symbolic musical notation. However, these factors will be briefly discussed in the section of this dissertation dedicated to performance practice. Costa-Lima Neto also wrote an article situating the Calendário from a cultural perspective by developing an ethnomusicological method of analysis for the collection known as the paradoxical separation-fusion continuum. Through his analysis, Costa-Lima Neto unearths several interesting thoughts about the construction of many pieces, such as linking the rhythm of “#80,” the piece from September 10 dedicated to Antonio Carlos Jobim, to the rhythm of Jobim’s piece “Chovendo na Roseira.” This article is valuable for its in-depth view of social meaning in the Calendário as well as for its commentary on Hermeto’s musical philosophy and personal style. For those able to read Portuguese, this article presents many culturally nuanced points and would be a valuable resource when approaching or performing music from the Calendário for the first time.

Vilson Zattera’s 2011 dissertation is the other large analytical work on Hermeto’s music, though its focus is different than that of Costa-Lima Neto. Zattera’s dissertation focuses on an analysis of Hermeto’s music that highlights hybridism, the use of multiple styles and sound resources, and situates his music within Brazilian culture from the perspective of a Brazilian. Zattera’s work is cited extensively in Chapter 2 of this dissertation, where I discuss the various styles whose influence pervades the Calendário. Situating Hermeto’s music within the subgenres of MPB, or Música Popular Brasileira, is the most popular area of study in current Hermeto scholarship. Aside from Zattera’s dissertation, there is also the work of Côrtes, who focuses on hybridization and the distinctions between different styles in his oeuvre, and Campos, whose work focuses specifically on the influence of Brazilian choro in the Calendário do Som.

Connell’s work focuses on Hermeto from an ethnomusicological perspective. In his dissertation, he presents three ethnographies of musicians and musical groups from Rio de Janeiro, one of which is Hermeto, and another of which is led by Itiberê Zwarg, Hermeto’s bassist. In addition to his dissertation, Connell has written on Hermeto’s som da aura.

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5 Ibid, 167.


compositions, a style created by the harmonization of human speech. While this is important in the overall scope of Hermeto’s music, the som da aura is distinct from the \textit{Calendário}, and therefore beyond the scope of the current study.

Richard Boukas’s lecture at the University of Denver in 2013 entitled “Hermeto Pascoal: Visionary of Contemporary Brazilian Music” was posted to YouTube and reviews Hermeto’s music across his career. The lecture, which was derived from his master’s research, is divided into 9 parts spanning 14 videos. The lecture begins, as most Hermeto research does, with his biography, followed by a progression through the different styles with which Hermeto is associated. The \textit{Calendário} has its own section, as does Hermeto’s chordal notation, his reharmonizations, and his two most famous musical groups, Hermeto Pascoal e Grupo and Quarteto Novo.

Apart from Campos’s and Costa-Lima Neto’s articles and one section from Boukas’s lecture, there are two studies that deal specifically with the \textit{Calendário do Som}. The first is the work of Zago, who presents a panoramic study of the first 50 pieces found in the collection. As Zago describes, panoramic analysis is a style analysis through the practice and performance of a given repertoire, focusing on all aspects of the music. In his study, Zago highlights numerous aspects of the \textit{Calendário} that are salient to the performer. The other study is a collection of three articles by Araújo and Borem from a special issue of the Brazilian journal \textit{Peri Musi}. The first of these, and the only one of the collection available in English, studies Hermeto’s unique harmonic concepts and his biography. The second part uses Schoenberg’s writings to view the \textit{Calendário} through the lens of monotonality as a way to explain Hermeto’s unusual harmonic movements. The final part of the study analyzes the pieces of the \textit{Calendário} from a motivic perspective, applying Schoenberg’s concept of developing variation as a method of displaying structural coherence.

In addition to their analysis of Hermeto’s music, the works of Costa-Lima Neto and Zattera are important for their critiques of two currently untranslated theses in Portuguese on Hermeto’s music found in their literature reviews. While these two theses will be addressed sparingly, engaging with these critiques influences the methodology and fundamental assumptions underpinning this dissertation. The first is a thesis by Taborda, whose research

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focused on situating Hermeto within the experimentalist composers of the Western Art music tradition, focusing on the similarities between his music and the musique concrète of Paul Schaeffer. While there are similarities in the music of these composers, Hermeto’s lack of formal training and his lack of familiarity with a large portion of the tradition with which he was being linked make any connection somewhat tenuous. Therefore, it is important to remember that influence cannot be claimed with regards to Hermeto’s music without evidence of direct contact via collaboration or anecdotal evidence from either the composer or one of his collaborators. While influence should not be claimed, analyses of music written by similar composers can still be a good starting point for an analysis of Hermeto’s music, one which will be used in Chapter 4 of this dissertation.

The other thesis was that of Prandini, who developed a motive-based theory of improvisation in Hermeto’s music. While noting that an improvisational quality is an important aspect of Hermeto’s compositional style, Costa-Lima Neto disagrees with two aspects of Prandini’s approach. First, Costa-Lima Neto criticizes Prandini for attempting a functional analysis on the basis that the influence of modality and free jazz are integral to Hermeto’s harmonies. Zattera is also critical of the use of functional harmonic analysis, particularly noting the difficulty of reconciling the traditional chord-scale relationships in jazz with Hermeto’s solos on “Ilha das Gaivotas” and “O Tocador Quer Beber.” Second, Costa-Lima Neto notes during the period studied by Prandini, Hermeto focused more on his compositions and arrangements than on improvisations, sometimes omitting traditional jazz solo sections completely on his recordings and rarely featuring other members of the group in an improvisatory manner outside of live performance. While this study deals with interpretation and improvisation, the primary objects of concern are not the improvisatory process, but the notated music in the Calendário. Therefore, studies of improvisation will be invoked only regarding interpretive practice of pieces in the Calendário and to discuss strategies for improvising on Hermeto’s music.

The *Calendário do Som*

The collection studied in this dissertation, the *Calendário do Som*, was composed between June 23, 1996 and June 23, 1997. There are 366 pieces, one composed for each day of the year, including February 29. Since 1997 was not a leap year, Hermeto composed that piece on June 23, 1997 to complete the collection. Hermeto’s manuscripts were compiled and published through the partnership of Itaú Cultural and SENAC in 2000. Most of the pieces are written in lead sheet notation, with a single melody line and chord symbols notating a harmony to be realized along with the melody. Hermeto takes the unusual step of notating the harmony in

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18 Ibid.
a separate staff below the melody, however this allows him to more clearly notate the intended harmonic rhythm. A handful of other pieces are written as solo piano works, and one, “#213” from January 21, is written as a theme and piano accompaniment on three staves. In addition to the melody and chord changes, each piece is inscribed with the date of composition and a number, 1-366 that serve as titles. Both the date and number of the piece are used interchangeably among performers, so this dissertation will list both when referring to specific pieces, although the number will be preferred to the date unless discussing a recording titled with the date. Each manuscript also contains the place of composition, time the composition was finished, and Hermeto’s signature, which usually is placed at both the top and bottom of the page. Along with the signature at the bottom of the manuscript is a variation of one or more of three phrases which serve as a cross between a signature and a motto; “viva o som,” “tudo de bom sempre,” and “um grande abraço,” which translate to “long live the sound,” “everything’s always good,” and “a big hug,” respectively. Most of the pieces also contain an inscription that contains Hermeto’s thoughts, inspiration, or a journal entry about Hermeto’s day. These discuss wide ranging subjects, including but not limited to the piece he just finished composing, his favorite soccer team, his family, his travels, or reminiscences about other musicians.

Hermeto began this project after he got the inspiration to compose one piece a day for an entire year immediately following his sixtieth birthday. His stated purpose was to write a piece to honor the birthday of everyone in the world. They were all composed on paper before they were performed or recorded, and they lack style and tempo markings as well as performance instructions, so that they would challenge the “worthy interpreter” to create their own unique interpretation. The manuscripts also feature artwork by Hermeto. The repeat signs are all ornate drawings of birds, with one exception in “#78,” the piece for September 8, which is an ornate monkey instead.

**Reading Hermeto’s Chordal Notation**

The largest barrier for those first attempting to read Hermeto’s music is his unusual system of chordal notation. He not only uses these to notate jazz influenced pieces and harmonies, such as those in the *Calendário*, but also as shorthand for piano parts in some of his avant-garde through composed music, such as the flute and piano duet “Bacurau.” The symbols themselves are a blend of jazz chord changes and figured bass. The root is presented as a large letter, with the extensions of the chord presented next to it. Minor chords are denoted by a small minus sign next to the root, as you can see in the second chord of the first measure of Figure 1.1. Unless modified, all extensions are assumed to be diatonic to the root of each separate chord, with major chords based on the Mixolydian mode and minor chords based on the Dorian mode. This unusual modal basis has interesting effects on Hermeto’s harmonic style, something which will be addressed more fully in Chapter 4. There are two further differences between Hermeto’s chord symbols and jazz chord changes with regards to extensions. The first is that they are octave specific, so C⁴⁷⁹ and C⁻¹¹ represent different voicings. The second main difference is that in jazz notation, the modifier is placed before the extension, whereas modifiers are always placed after the extension in Hermeto’s notation, with plus signs indicating the need to raise the

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20 Jovino Santos Neto, phone interview with the author, 12/22/16.
extension a half step, and minus signs indicating the lowering of an extension by half step. This is reflective of the syntactical differences between the English and Portuguese languages. Instead of the English “G major seventh,” the Portuguese “sol maior com sétima maior,” translates literally to “G major with the seventh major.”

In addition to these chords, Hermeto uses a form of slash chord notation which he refers to as “multi-floor” chords. When reading multi-floor chords, the top floor always implies a full sonority, while the bottom note implies either a single note, or a bass note and specific extensions. Some of these chords are simply used to denote inversion. For instance, in mm. 8 of “#336,” the chord progression D/C-G/B is simply a D dominant chord in third inversion resolving to a G major triad in first inversion. Other chords, however, represent more complex harmonic structures. A common example from the Calendário is the chord G\(^7\)/E\(_b\). As a tertian structure, this would aggregate to an E\(_b\)maj\(^7\)/E\(_b\)\(^#5\)/E\(_b\)\(^#9\) chord, which makes little sense fitting into any functional harmonic progression. Given Hermeto’s fondness for polychordality, it is important to conceive of the two floors as unrelated in cases such as these. An example of a more complex multi-floor chord is shown in Figure 1.3, the G\(^6\)/A\(^6\) chord, taken from “#360” in the collection. Note that in the top floor, the G\(^6\) implies a major triad with an added sixth, whereas the bottom floor simply has A with a major sixth above it.
Due to Hermeto’s unusual system of notation, there are a few intricacies and possible areas of confusion worth disambiguating before any analysis. First, chords based on the Mixolydian mode that use the 4th, like $G^\text{4568}$, do not contain an implied third. These chords frequently are used as the top floor in multi-floor chord notation, as in “#11,” the piece from July 3, in which chords such as $B^\text{4568}/E$ are used as a salient harmony throughout the piece. A realization of the chords in mm. 1-4 of “#11” is presented in Figure 1.4. As Jovino explains, the functional root of $B^\text{4568}$ is actually $E$, the chordal fourth, and Hermeto uses this notation to denote a specific inversion. This chord would be written in jazz notation as $E^\text{add2}$ and is a common harmony in Gospel music. Other pieces of Hermeto’s music have a different system of notation for inversion, in which $E^1$, $E^3$, and $E^5$, specify an E major triad and which chord tone should be voiced on top with the triad in a closed position, either the root, third, or fifth respectively. This method of chordal notation was created by Itiberê, and does not feature in the Calendário, though it can be found in other works by the composer.

Another challenge when learning to read Hermeto’s notation is that some chord symbols may look like jazz chord symbols yet have a different meaning. $G^7$ is frequently mistaken for a $G$ dominant chord with an augmented fifth by those who are unfamiliar in reading this notation. I made that mistake myself when I was first introduced to the collection in 2009. For those who know that Hermeto’s chord symbols are based on the Mixolydian mode and have modifiers after the extension, however, this mistake is significantly less likely. Attention to the melody can also

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22 Jovino Santos Neto, Phone interview with the author, 12/22/17.
24 The more common jazz notation for this chord is $G^+7$, yet before learning how to read this notation, most musicians I discuss this collection with recall making the same mistake.
help disambiguate unfamiliar chord symbols. Figure 1.5 shows the first four measures of “#90,” the piece written on September 20. This excerpt contains numerous chords with the C\^{7+} voicing, all of which harmonize the chord’s major seventh, perfect fifth, or both in the melody. A trickier example is the chord G\textsuperscript{69}. In jazz notation, this voicing denotes a major chord, usually one in which the root is placed high in the voicing, making the major seventh undesirable because of the creation of either a harmonic minor second or a minor ninth in the chord. In Hermeto’s notation, however, it is more like G\textsuperscript{13} in jazz notation, a dominant chord with the thirteenth and ninth added, since there is no modified seventh indicating that the chord is major. “#40,” the piece composed on August 1, features numerous 69 chords in a dominant context, along with the use of the lowered seventh as a melody note over the harmony. Measures 1-9 of “#40” are presented in Figure 1.6. The chord G\textsuperscript{67+9} is a much thicker sounding voicing than a “jazz chord” G\textsuperscript{69}, yet accurately denotes the major seventh in the chord. Figure 1.7 shows example voicings of G\textsuperscript{7+} and G\textsuperscript{69} in both jazz notation and Hermeto’s notation to show the possible confusion.

For the purposes of this dissertation, I primarily use traditional jazz lead sheet notation. This decision was made for a number of reasons, though it is primarily due to the likely higher level of familiarity with that notation by most readers. There are some points, however, when discussing Hermeto’s specifically notated voicings is necessary to the analysis. In those cases, I will mention in the text when I am referring to Hermeto’s voicings to avoid confusion. Despite
my lack of reliance on them, it is important to learn these voicings when studying Hermeto’s music. While lead sheets of Hermeto’s work prepared by other musicians such as Jovino and Boukas use traditional jazz notation, Hermeto has been using this system for decades, and most of his works not yet edited by another musician will use these symbols. The other is that they may contain insights into the composer’s thinking from an analytical perspective. For instance, in “#31” from July 23, Hermeto writes the chord B♭/C♯. Whether this was a reflection of the lack of attention Hermeto pays to orthography or a reflection of polychordal thinking is a question that will not be addressed in this dissertation, but it could prove to be a fertile area of study in the future.

Each of the following chapters studies a different facet of the Calendário. Chapter 2 describes the various genres of Brazilian music with which Hermeto is most closely associated. A brief history of these styles; choro, maxixe, samba, bossa nova, batão, maracatú, marcha, and guarânia, will be presented along with a brief overview of Hermeto’s connection to them. Following the historical overview, musical examples outlining the rhythmic basis of each style will be presented along with comments on performance practice and other descriptions of musical style. Following the Brazilian styles, Hermeto’s work will be situated within the context of both jazz and the Western Classical tradition, with the caveat that his connection to jazz will be explored more thoroughly due to that genre’s stronger connection with the Calendário do Som. The chapter will end with a review of the performance practice of Hermeto’s music garnered through the study of select recordings and interviews with performers and former collaborators of Hermeto’s.

Chapter 3 provides an analysis of the Calendário through the use of encoded corpus. This chapter analyzes the collection searching for extra-musical influence on the collection. Since Hermeto tracked his daily inspiration for many of the pieces, as well as tracking the date, time and place of composition, these pieces are grouped by various factors to see what, if any, effect they have on musical composition.

Chapter 4 is an analysis of Hermeto’s concept of harmony and musical structure. The beginning is a discussion of his concept of harmony as essentially triadic, yet non-linear and non-hierarchical. The second part of the chapter compares his conception of harmony to extant frameworks, particularly Schoenberg’s concept of monotonality and Neo-Riemannian concepts of pitch space. The chapter ends by comparing Hermeto’s concept with similar jazz concepts including George Russell’s book on the Lydian chromatic concept, as Hermeto frequently uses both Lydian and Lydian dominant modes in the melody, and Dave Brubeck’s use of

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25 I asked both Jovino and Boukas about this system of chordal notation. They both acknowledged its utility and expressed their comfort reading it, but said they are hesitant to introduce it to North American musicians not familiar with it because of the learning curve necessary to gain fluency in the system, among other reasons.

Jovino Santos Neto, phone interview with the author, 12/22/2017
Richard Boukas, phone interview with the author, 12/26/2017

26 The scale or mode known as the “Lydian dominant” (F-G-A-B-C-D-E♭-F) goes by many names, most commonly “Lydian flat 7,” “northeastern mode,” “fourth mode of the melodic minor,” and “acoustic scale,” among others. Each of these names has an unwanted or ambiguous connotation for the purposes of this study. “Lydian flat 7” suggests an alteration of the Lydian mode, which obfuscates the fact that this mode is in fact in its “diatonic” state. There is more than one “northeastern mode,” which in the literature studied for this dissertation includes both Mixolydian and Lydian, thereby making it unsuitable for its lack of specificity. The term “fourth
Chapter 5 presents two methodological views for analysis of the pieces in the *Calendário do Som* and discusses their applications and limitations. The first will continue to view the collection through the lens of Schoenbergian analytical thought and undertake a motivic analysis of pieces from the *Calendário* in deference to the research done on that subject by Araújo and Borem. Comparing Hermeto’s strategies for motivic use to Schoenberg’s writings on motivic coherence demonstrates the utility and difficulties of considering his music through such a lens. The other analyses will demonstrate a modified neo-Riemannian approach to Hermeto’s harmony. This section uses neo-Riemannian theory to propose a novel form of considering structure in improvisation and arranging the most tonally challenging sections of the collection, focusing on the application of multiple contextual operations which highlight potential voice leading in strings of high-cardinality major and minor chords.

mode of the melodic minor,” aside from its length, ties this mode to a pitch collection which is significantly less salient throughout the *Calendário*, and is therefore undesirable. “Acoustic scale” suggests that this collection’s use is somehow tied to the overtone series, which overlooks the cultural importance of this scale in the tradition of northeastern Brazilian music. “Lydian dominant” suggests a scale or mode with an augmented fourth scale degree that has a dominant quality tonic seventh chord, a common synonym for major-minor seventh chords in the jazz world. As for the differentiation between scale or mode, the terms will both be used in this dissertation, due to the blurred distinction created by the different criteria for what constitutes a mode between the jazz definition and the definition in non-jazz music.

Sources referenced in this chapter include:
Araújo and Borem, “A Harmonia Tonal.”
Fabiano Araújo and Fausto Borem, “Variação Progressiva.”
Chapter 2. Style in the Calendário do Som: Contextualizing Musical Influences in Hermeto’s Music

Common to almost all analyses of Hermeto’s music is a statement about the eclectic traditions to which it is connected. Zago ends his article on the Calendário by saying, “Samba, choro, regional Northeastern music, jazz, free-jazz, [and] contemporary music were all observed, assimilated, and incorporated in his music…” Zattera notes that even as a young man, Hermeto learned to play the piano in many different styles, including jazz, as well as French, Italian, and Gypsy songs. Opting for brevity, Connell begins his article on the Som da Aura style by asserting that Hermeto is “a musician who seems to defy categorization.” With similar brevity, Côrtes starts his article on hybridization by stating, “Pascoal’s oeuvre is very complex, covering a wide range of techniques and musical elements.” The ingredients for Hermeto’s music are almost always listed as jazz, Brazilian music, and the Western art music tradition, sometimes singling out either the tonal repertoire or musique concrete apart from the rest of European music. Quotes by Hermeto about the “universal” nature of his music seem to support this. Hermeto noted at a workshop that “I have various musical styles in my head, and my music draws on all of them.” Furthermore, Eduardo Lis notes the difficulty in separating two of the three constituent elements, Brazilian music and jazz, noting their cross-influence since the early twentieth century. Other sources illustrate Lis’s point, as Connell notes that Pixinguinha, one of the most important composers of Brazilian instrumental music in the twentieth century, played in numerous jazz bands that were immensely popular in Brazil in the 1920s. This chapter follows the work of Almir Côrtes and Vilson Zattera in identifying stylistic traits of the different genres that appear in and influenced the writing of the Calendário situating Hermeto’s music within the disparate genres to which he is linked. While a number of musical features can work as a determining factor of style, not all of them are present in the Calendário. For instance, tempo and tone quality in the melody are two main ways to aurally separate samba and bossa nova, yet there are no tempo markings in the Calendário, and there is no way to mark tone quality of a

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35 Andrew Connell, “Jazz Brasileiro?” 52.
36 Côrtes, “Brazilian Styles” and Zattera, “Liminality and Hybridism.”
performance in the score without style markings or expression markings, both of which are almost completely absent from the collection. \(^{37}\) Rhythmic features are the most common method of differentiating between styles, yet many common rhythmic figures are found in multiple genres. The 3+3+2 rhythm shown in Figure 2.1 is an important stylistic trait of both the baião and marcha styles, though those styles have other distinguishing features not specified in Hermeto’s music. \(^{38}\) Almost all the pieces in the Calendário are also hybrids in some way. Côrtes refers to Hermeto’s work with the qualifier “modern,” using the terms “modern baião” or “modern choro,” reflecting the jazz influenced harmonies that are atypical in those styles, while Costa-Lima Neto refers to this style as the “new-old,” signifying Hermeto’s use of new harmonies with traditional styles. \(^{39}\) The final complicating factor is that of performance practice. On Mark Weinstein’s Tudo de Bom, “#153,” the song written on November 22, is presented as a samba in 2/4 even though it is written in 3/4 in the original manuscript. As Jovino explains, “Hermeto’s concept is not for his music to be hermetic, to be closed. Hermeto’s concept is for his music to be open to everybody.”\(^{40}\) Boukas reflects on Hermeto similarly encouraging musicians in his own groups, saying of the process of learning a new Hermeto composition, “He didn’t want the musicians to be just human sequencers. He wanted them to have a creative role in the creation of a piece.”\(^{41}\) Zago also notes in his article that a goal of the lack of specificity was to challenge performers and arrangers to search for their own interpretations while relying on the score.\(^{42}\) These confounding variables make style analysis difficult for individual pieces from the Calendário, but nonetheless, a general knowledge of these genres remains necessary for understanding Hermeto’s music. This chapter gives a brief historical overview of Hermeto’s music within the context of several musical traditions, before showing common identifying stylistic features and examples of rhythmic grooves that can be used in interpreting the pieces in the Calendário.

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\(^{39}\) Côrtes, “Brazilian Styles,” 5, 7.


\(^{40}\) Jovino Santos Neto, Phone Interview with the Author, 12/22/17.

\(^{41}\) Boukas, “Hermeto Pascoal,” part 3, 6:23.

\(^{42}\) Zago, “Composition and Improvisation.”
While this chapter primarily deals with styles of Brazilian Popular Music, or MPB, it is important to note that the current study is more analysis driven than ethnomusicological. Therefore, the complex racial and socio-economic factors that drove the development and current culture of these styles is not necessarily the focus of this chapter, though the histories of each style are briefly presented. Further research into any of these genres will be rewarding for those who undertake it. To that end, the work of Livingston-Isenhour and Garcia, Seigel, Zattera, Metz, Crook, and Appleby discuss those factors in the depth they deserve. The goal of this chapter is to articulate which styles combine to influence Hermeto’s music and how the influence of those styles can be seen in the Calendário do Som. As a secondary goal, this chapter will hopefully give performers of the Calendário who are unfamiliar with Brazilian music a starting point from which they may begin to reproduce the music therein with some grounding in these genres.

This chapter’s analytical considerations are also limited by what is musically conveyable through the format of a lead sheet. Most of the pieces in the Calendário are written in this format, and as such, this constraint sets the limits of what is analyzable. While texture and timbre are main ways of articulating style, as Lis observes, they are secondary considerations in this study. Instrumentation, tempo, and, to some degree articulation are also largely absent from the collection, and therefore are discussed only to familiarize the reader with the genres discussed in this chapter.

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43 A general note on figures in this chapter: the rhythms presented here will be presented in a variety of ways, as either single rhythms, in rhythm section notation, or as percussion section scores. As Lis notes, many of the single line rhythmic figures presented are reductions of composite accents, though the accents create this composite rhythm as the most salient temporal pattern. Lis, “Creating a New Tradition,” 28.
44 Música Popular Brasileiro.
Zattera, “Liminality and Hybridism.”
General Considerations

While the principal concern of this chapter is to discuss musical facets that can be notated on the score, the issue of phrasing and feel is often discussed in the literature about Brazilian music and omitting this discussion entirely would run counter to the successful performance of these styles by musicians to whom this music is unfamiliar. Most Brazilian styles discussed here, with the exception of the xote (Schottische), are straight-sixteenth styles, meaning the primary subdivision of the tactus is the sixteenth note and those notes are not swung. Jovino stresses the evenness of the sixteenth notes, yet Lis notes that a microtiming study done for his thesis shows variants within the subdivisions of the beat for samba, though the microtiming variation is less than that found in swing. He further asserts that a lack of total evenness is inherent in most Brazilian styles represented in this study. Aside from the inherent difficulties of performing at a perfectly metronomic tempo, this study is also likely a quantification of a particularly Brazilian rhythmic feel, which has been discussed via microtiming studies by Gouyon and Naveda, et al. This characteristic rhythmic feel, famously called a “little nothing” by Darius Milhaud when praising the performances of Ernesto Nazareth, refers to the concepts known as ginga and balanço in Brazil. Jovino defines ginga two ways. First, he refers to it in a lecture as the dynamic balance of the group, and alternatively as a “Brazilian way to groove” in his article on the subject. Balanço is defined by both Coelho and Lis as analogous to the concept of swing in jazz music, though they describe it in the context of choro and bossa nova, respectively.

The previously mentioned difficulty in taxonomization stems from a teleological view of Brazilian music which prizes nationalism by elevating musical styles associated with Rio de Janeiro at the expense of styles from other parts of the country. In this view, modinha and lundu gave birth to choro and maxixe, which then created samba, bossa nova, and MPB. Styles such as marcha and baíão were dismissed as regional, though Brazilian scholarship has begun to examine them in closer detail. Appleby in particular tends to lump the characteristics that would come to define these genres into a “nationalist style” which includes the use of the habanera rhythm and its variants, ornamentation of the melody, and the switch between major and minor modes, particularly those that share a parallel relationship. At the extreme other end of the spectrum

54 Appleby, The Music of Brazil, 85.
are overly taxonomized studies that create many subgenres of the major genres discussed here, which are then frequently mixed by musicians. Some of these differentiations are informed by cultural factors, which will not be discussed here, but are nonetheless important to consider when undertaking an intense study of any single genre. For instance, subgenres of samba are usually associated with different geographic regions, and sound radically different. Some of these subgenres will be discussed in the section on samba, but that section will focus mostly on the samba’s rhythmic skeleton, the rhythmic elements that define samba. Similarly, Coelho cites Altamiro Carrilho and asserts that there are more than 20 subgenres of choro alone. This document will not go into detail identifying the subgenres of choro, which Coelho also omits, but the figures representing common accompanimental patterns for six of the subgenres have been reproduced in that section.

This chapter is divided into sections based on genre. Those genres that fall into the mainstream lineage of Brazilian music, the maxixe, choro, samba, and bossa nova, are discussed first, while the music from northeastern Brazil that influenced Hermeto’s writing including the baião, marcha, and maracatu will be discussed after. The guarânia is the odd Brazilian style out in this format, as it is neither mainstream nor northeastern, yet its inclusion is due to Richard Boukas’s use of the style in an arrangement on Tudo de Bom. After discussing the Brazilian styles, this chapter will briefly analyze Hermeto’s history within the context of jazz and Western Art music and how they pertain to this collection. The chapter will end with a discussion on solutions to difficulties in performance practice garnered from analysis of recordings of the Calendário by Mark Weinstein, Itiberê Orquestra Família, and Jovino Santos Neto.

Modinha, Lundu, and Commonalities Among the Subgenres of MPB

As Jovino remarks, Brazilian music “is a funnel that has a very wide mouth.” In its 500 years of history, musical traditions from all over Africa, including west Africa, south Africa, east Africa, sub-Saharan Africa, Muslim Africa, as well as music from modern day Pakistan, India and Afghanistan, American jazz, native influence on the different African music, French music and music from the Iberian peninsula have blended to create the music of Brazil. It was during the nineteenth century that these various traditions began to coalesce into the music that will be the focus of this chapter. In the salons, arias and art music, European dances like the waltz, schottische, mazurka, and polka, as well as the modinha and lundu began to meld together. The modinha is a lyrical salon song that eventually grew to feature singers accompanying themselves on guitar. While the modinha is no longer popular, Hermeto still composes in this genre. The guitar’s role as the main accompanimental instrument replacing the more traditional keyboard differentiated the Brazilian modinha from the Portuguese. Modinhas were described in the nineteenth century as being quite sensual and often featured melodic leaps of a seventh or larger,

56 Coelho, “The Brazilian Choro,” 47.
58 Jovino Santos Neto, Phone Interview with the Author, 12/22/17.
60 Livingston, Choro, 17-23.
a stylistic trait common in the *Calendário*. A typical modinha rhythm is reproduced from Zattera in Figure 2.2.\(^{61}\)

![Figure 2.2. Typical Modinha Rhythm](image)

Lundu is a song and dance of Angolan origin brought to Brazil by slaves. It was the rhythmic structure of the lundu that gives many of the genres of MPB their rhythmic structures.\(^{62}\) The lundu sounded exotic due to the melodic use of a subtonic as opposed to a leading tone and frequent switches between parallel major and minor tonalities.\(^{63}\) Musical characteristics of the lundu, especially its rhythmic feel, were applied to the previously mentioned European dance styles throughout Brazil, giving the nation’s music an identifiable sound.\(^{64}\) It was these early hybrids that formed the core of the repertoire as performance practice in the new styles developed, and musicians continued to tie themselves to these two genres well into the coalescence of the new styles which will be discussed in depth below. The reasons for the continued association were usually monetary, in some cases having to do with a composer wishing to avoid unseemly connotations with a new style or simply wishing to make more money with published works abroad in a more recognizable genre.

There are some general commonalities shared by the Brazilian subgenres discussed throughout this chapter, primarily the use of the *garfo* rhythm, shown in Figure 2.3. The *garfo*, which translates to fork, is so called because the three note heads and stems resemble the three tines of a fork. In performance, it can be interpreted either with the second note played short and the figure in time or as a relaxed, more legato eighth note triplet.\(^{65}\) Jovino does note, however, that in pieces where Hermeto uses both eighth-note triplets and the garfo that he likely intends for it to be interpreted straight with the second note staccato.\(^{66}\) Other common rhythms include the aforementioned 3+3+2, a 3+2+3 variant of that rhythm, and a three over four grouping of sixteenth notes.\(^{67}\)

![Figure 2.3. Garfo Rhythm Found in Many MPB Styles](image)

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\(^{61}\) Zattera, “Liminality and Hybridism,” 42, fig. 2.3.


\(^{64}\) Appleby, *The Music of Brazil*, 42.


\(^{66}\) Jovino, Phone Interview with the author, 12/22/17.

\(^{67}\) Jovino, “Ginga,” 4.
The northeastern genres are generally considered separately from the genres in the main nationalist line of musical development, but they too are generally comprised of some combination of European and African musical influences, though they tend to not reflect the same mixture as the choro and samba. Among the common stylistic traits Appleby gives are folk melodic constructs such as the use of Lydian, Mixolydian, and Lydian dominant modes, the use of hexatonic scales, and cadential patterns ending in notes other than the tonic, usually the mediant. Zattera concurs with Appleby regarding the importance of the Lydian, Mixolydian, and Lydian dominant modes, referring to them as the “Northeastern modes.” Connell also suggests that two and four measure repeated melodic sections are a stylistic feature of Northeastern music.

**Choro and Maxixe**

The first generation of music that was clearly marked as having matured in Brazil began to coalesce in the late nineteenth century with the advent of the choro and maxixe. The maxixe developed into a distinct genre earlier than the choro. The maxixe is descended primarily from the polka, and its original distinction was due to differences in choreography. The addition of a dance move known as the *jeitinho* turned a polka into a “polca-maxixe,” or a polka that was danced in the style of a maxixe. Due to the high amount of body contact between dancers, the maxixe was among the most risqué and controversial dances and genres of its era. Despite the fact that maxixe developed earlier than choro, choro is largely considered Brazil’s first “authentic” national music. This view grew in a wave of anti-Americanization sentiment in the 1940s and 1950s when choro concerts were organized to promote Brazilian music free of foreign influence. Part of the reason that this view may favor choro is because the maxixe fell out of favor earlier than choro, and it was subsequently absorbed into the choro repertoire, though maxixes are still composed today, with Hermeto among the composers who favor the genre.

As the maxixe had already been absorbed into the choro by the time Hermeto’s musical career began, his experiences playing the two styles are intertwined. As a youth, Hermeto played in *regionais*, ensembles that played to back live acts on local radio stations. These regionais performed a lot of choro, though they also played other styles, including jazz, Argentine tangos, and sambas. Hermeto is known as one of the great composers of choro in his generation. His work “Chorinho Pra Ele,” recorded originally on *Slaves Mass* in 1977, has become a staple of

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69 Zattera, “Liminality and Hybridism,” 145.
70 Connell, “Jazz Brasileiro?,” 286.
73 Connell, “Jazz Brasileiro?,” 11.
74 Ibid, 61-2.
75 Livingston, *Choro*, 37.
77 The suffix “inho” creates a diminutive form of a word, so “chorinho” translates literally to “little choro.” This diminutive can either be used to denote affection or to refer to the length of a piece, though in this case it is the former.
the choro repertoire. Both choros and maxixes are found throughout the *Calendário*. The only piece in the *Calendário* with a traditional style marking at the top of the page is “#51,” which Hermeto marks as a maxixe.

Since the choro and maxixe are both derived from the performance of the same genres of European dances, they share many musical characteristics. Both are duple meter, usually written in 2/4 and tend to be in some form commonly used in stylizations of European dances. Coelho says that maxixes usually use variation sets or ternary forms, while choros are generally in rondo form. Connell goes into greater specificity saying that choros are most commonly in a 5 part rondo with the first A, B, and C sections repeated. In terms of the traditional styles discussed in this chapter, choros have the most complex harmonies, similar to those found in European music in the middle of the nineteenth century, though the harmony is almost always functional and rarely features more complex sonorities than a dominant 7th chord. Common secondary key areas are VI and IV in major and III and V in minor. The harmonic rhythm of many contemporary choros is two chords per measure, though older ones can be one chord per measure, and like many jazz standards, the tonic chord often occurs in the penultimate bar of the section, and sections are usually 16 bars long. The melodies frequently feature multiple arpeggios and chromatic incomplete neighbor tones.

Rhythmically, the two genres are also largely similar, though there are some distinguishing features. Melodies in choros frequently have a constant rhythm of either eighth notes, or more commonly sixteenth notes, while maxixes frequently use the garfo rhythm interspersed with straight eighth or sixteenth notes. Choro melodies also often feature a pickup of either three sixteenth notes, an eighth note followed by a sixteenth note, or an eighth note by itself. These pickups act as a way of setting the tempo for the coming piece without the band leader needing to audibly count in. Both styles also tend to have syncopated accompaniment figure, with the garfo being most prominent, especially in choro. Maxixes can use a 3+2+3 groove, which is often interpreted as 2 garfos that alternate low and high pitches, as shown in Figure 2.4. Figure 2.5 shows Zattera’s example of a standard maxixe groove.

![Figure 2.4. 3+2+3 Interpreted as High-Low Pitches Alternating in the Garfo](image)

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79 Coelho, “The Brazilian Choro,” 45-47.
80 Connell, “Jazz Brasileiro?,” 43.
81 Ibid.
83 Côrtes, “Brazilian Styles,” 8.
84 Jovino, “Brazilian Piano,” 3.
85 Coelho, “The Brazilian Choro,” 47.
86 Côrtes, “Brazilian Styles,” 8.
87 Jovino, “Ginga,” 4, fig. 2b.
88 Zattera, “Liminality and Hybridism,” 43, fig. 2.4.
In addition to the written-out characteristics of these styles, there are performance practices that are not always notated in the score. One such performance convention is the use of a double time ending, which can be found throughout Hermeto’s recordings as well. Another common performance practice is the improvisation of a baixara, which is an ornate bassline featuring fast runs that also outlines the harmony. While this is usually played by the 7-string guitar, Connell notes that in modern performance practice it can be played by another soloist such as a clarinet or trombone, and that this figure is one of the most distinctive parts of the choro style. The earliest example of an improvisationally elaborated bass line is in the 1913 recording of “Falena” by Chiquinha Gonzaga. Improvisation is important for all choro performers, not just those creating the baixara. Choro improvisation is distinctive from jazz in that choro solos rarely occur over the entire form of the piece and are usually confined to variations on the melody. Soloists are judged on tone, technical ability, and their creativity in varying and ornamenting the melody. There is also a generally agreed upon method of interpreting ornamentation, with Coelho stating that trills in choro are generally fairly short and descending glissandi are often chromatic and accompanied by a decrescendo, while ascending glissandi are normally diatonic. As stated earlier, there are more than 20 forms of choro. Choro musicians need not restrict themselves to any one of these patterns in any single performance,

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90 Coelho, “The Brazilian Choro,” 47.
91 Connell, “Jazz Brasileiro?,” 44
92 Livingston, Choro, 6.
93 Connell, “Jazz Brasileiro?,” 46.
94 Coelho, “The Brazilian Choro,” 51.
but may call upon any of these standard patterns. The accompaniment figures from Coelho are shown in Figure 2.6-2.12 and the rhythmic patterns frequently performed by the guitar cited by Connell are presented in Figure 2.13. Note that the first of Connell’s guitar patterns is simply a series of garfos while the third would become a garfo when mixed with the downbeats of the bassline. The middle guitar figure is also the upper voice rhythm for Coelho’s choro-maxixe accompaniment.

Figure 2.6. Choro Maxixe Rhythmic Accompaniment

Figure 2.7. Choro Polka Rhythmic Accompaniment

Figure 2.8. Choro Tango Rhythmic Accompaniment

Figure 2.9. Choro Samba Rhythmic Accompaniment

95 Connell, “Jazz Brasileiro?,” 44.
96 Reproduced from Examples 2-8 of Coelho, “The Brazilian Choro,” 47-8. Reproduced from Figure 2.3 of Connell, “Jazz Brasileiro?,” 44.
While choro predates samba considerably, samba is generally the first music most foreigners and many Brazilians associate with Brazil. The term samba was first used in the Suite Brésilienne by Alexander Levy in 1891, though the first true samba was the song “Pelo Telefone” by Donga in 1917.\footnote{Appleby, The Music of Brazil, 112. This is a matter of some scholarly debate, however, as Connell argues that this was simply the first samba to gain national attention and other recordings, such as 1910’s “Brasilianas” have a stronger claim as the first true samba, while Zattera also suggests that because there is evidence that the term “samba” is linked to the Luba...} What made samba distinctive from its forebearers was the...
increased use of responsorial singing and the increased clarity of accents on downbeats.98 Residents of Rio de Janeiro consider the samba to be uniquely theirs, and the visibility of Rio’s Carnival celebration has led to samba being considered the favored national style despite the popularity of frevo in the northeast.99 The view of Samba and Carnival as national symbols became entrenched as Getúlio Vargas and the Estado Novo government used them to drum up nationalist sentiment in the 1930s and 1940s. The government used the radio to make samba singers into stars, and the music soon eclipsed choro in popularity, as that style had previously reached the zenith of its public popularity in the 1920s, despite the artistic growth in the choro community. In addition to its political uses, radio also helped shape the subgenres of samba including samba-canção, samba-choro, samba de breque, samba de morro, enredos, and samba-romantico.100 Each of these substyles has a certain geographical or social connotation, though all of them are generally referred to in the same group. Bossa nova is a substyle of samba created by the combination of samba with American jazz that began to coalesce in the second half of the 1950s and reached the peak of its popularity in the 1960s. The common association of Hermeto’s music with choro and baião overshadows his work in samba and bossa nova. The regionalism he played in performed in a multitude of styles including samba, and he moved to Rio de Janeiro from the northeast around the birth of bossa nova, playing at many of the same clubs as bossa stars like Antônio Carlos Jobim and João Gilberto.101 Two of Hermeto’s earliest groups, Som 4 and the Sambrasa Trio, were major bossa nova groups. During his time with Sambrasa Trio, Hermeto’s compositional style was already taking shape, as he fused bossa nova and samba with rhythmic patterns from the northeast and odd meters, as he did on his piece “Coalhada.”102 In the Calendário, Hermeto continues to draw on bossa nova as he mentions Jobim as an influence in his dedications in “#79” and “#80,” the pieces from September 9 and 10.103

The underlying rhythmic structure is the same in bossa nova as it is in samba, as bossa nova grew from mixing jazz with samba. Due to their rhythmic similarity, harmonic sophistication, instrumentation, tempo, and interpretation may all serve as signifiers between the two. For instance, in opposition to the jazz influenced harmonies of bossa nova, many traditional sambas use only I and V.104 Bossa novas are also more likely to use piano and drum set, while many other samba styles have multiple percussionists, each of whom fills a different rhythmic role. With regards to tempo, different substyles have different standard tempi. According to Lis, bossa nova is generally between 60-98 bpm, partido alto is around 82-84 bpm, and samba de enredo is usually between 120-140 bpm.105 With regards to interpretation, singers perform bossa

and Bantu languages brought to Brazil by African slaves, that the style likely predates Donga considerably.

Connell, “Jazz Brasileiro?,” 50, note 19
Zattera, “Liminality and Hybridism,” 63.
98 Appleby, The Music of Brazil, 112.
105 Lis, “Creating a New Tradition,” 60-1.
nova in an almost whispering voice, whereas samba is more energetic and may feature many people all singing in unison.\textsuperscript{106}

Samba, like choro, is a duple meter dance style. It is generally broken into two main rhythmic levels, one of which is syncopated, and the other of which is not. The drum called the \textit{surdu}, sometimes replaced in a jazz group by the bass, bass drum, and left hand of the pianist is responsible for keeping a steady, non-syncopated pulse. Beat two is emphasized by a surdu accent, with beat 1 sometimes being played as a ghost note or omitted from the groove entirely. In his Berklee lecture, Jovino remarks that ghost notes are important in the realization of samba in both syncopated and non-syncopated rhythms, as they act as an externalization of the subdivision. The other rhythmic part of the samba is very syncopated and is traditionally played by the \textit{tamborim}, which is a small drum that can be played with a drumstick, by hand, or with a small plastic beater while the other hand mutes the skin of the drum to create changes in pitch for an accent. The tamborim rhythms need not be any one specific pattern, but the rhythms feature duple subdivisions of the beat at one or two metrical levels below the tactus.\textsuperscript{107} Partido alto sambas may also feature the 3+3+2 rhythm shown in Figure 2.1 with the beginning of the cycle on the accented second beat, as shown in Figure 2.14.\textsuperscript{108}

![Figure 2.14. Partido Alto 3+3+2](image)

Accompanying musicians that play chordal harmony generally anticipate the harmony, though bass players do not have to. This stands in opposition to the practice of delaying the chords on the downbeat as jazz musicians from the United States do, though in both cases musicians generally avoid placing the chord directly on the beat.\textsuperscript{109} Below in Figure 2.15-2.21 are common rhythmic patterns found in many subgenres of samba. Figure 2.15 shows a common pandeiro pattern, while the other patterns depict full percussion section scores for different substyles.\textsuperscript{110} Figure 2.21 shows a simplified version of a pattern related to those in full score, with just the pandeiro and surdo parts shown.\textsuperscript{111} Figure 2.22 shows Lis’s reduction of a standard bossa nova groove.\textsuperscript{112} As is the case with choro, these patterns need not be adhered to strictly in performance, though each is generally indicative of a different geographic location or social group.

![Figure 2.15. Common Pandeiro Rhythm](image)

\textsuperscript{107} Ibid, 4:51.
\textsuperscript{108} Ibid, 28:57
\textsuperscript{109} Ibid, 38:59.
\textsuperscript{110} Connell, “Jazz Brasileiro?,” 44, fig. 2.2
\textsuperscript{111} Zattera, “Liminality and Hybridism,” 64-72, fig. 2.16-2.21.
\textsuperscript{112} Jovino, “Ginga,” 5.
\textsuperscript{112} Lis, “Creating a New Tradition,” 75, ex. 4.3.
Figure 2.16. *Tambor de Crioula* Rhythm

Figure 2.17. *Samba de Roda* Rhythm

Rhythm 2.18. *Partido Alto* Rhythm
Figure 2.19. Samba Enredo Rhythm

Figure 2.20. Samba Canção Rhythm

Figure 2.21. Côco Rhythm
Baião

Baião is an umbrella term for a number of different substyles from Northeastern Brazil including forró, xote, and xaxandu among others. Baião coalesced during the 1940s, and is known for its inherently contradictory nature: it is a happy sounding dance music that usually features sad lyrics drawn from real life situations. Like the choro and samba, the baião is descended from both the music of Europe and Africa, though the baião contains many grooves, patterns, and modes that came from the Middle East via Portugal and took root in northeastern Brazil. Scholars believe that African musical influence in the western hemisphere is strongest in Haiti, the Guianas, and in the northeastern Brazilian state of Bahia, the home of baião. This style, therefore, represents a close link to the musical traditions brought to the western hemisphere from Africa. While this music was originally not highly regarded because its earliest practitioners were generally poor, Lis notes that along with samba and bossa nova, baião is one of the three most influential Brazilian styles in North American Brazilian jazz.

The traditional baião ensemble is a trio featuring accordion, triangle, and a small hand drum played with a bamboo beater called a zabumba. Traditional baião musicians are proficient on all three and generally rotate rolls. It was in this musical setting that Hermeto first

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116 Appleby, The Music of Brazil, 104.
117 Jovino, “Rhythmic Language,” 42:40
began to perform, playing baíão with his brother and father along with frevo, embolada, and maracatú. The famous group Quarteto Novo, of which Hermeto was a part, was responsible for bringing northeastern styles to the south and popularizing this music in other parts of Brazil and abroad, along with other important musicians like Luiz Gonzaga. Their music also included frevo and maracatú, and eschewed the then popular bossa nova. Hermeto’s first major composition that is considered one of the cornerstones of this music was “O Ovo,” a baíão written and recorded during his time with Quarteto Novo. “Bebê,” another one of Hermeto’s most famous compositions is also a baíão. Though Quarteto Novo was a short lived group that recorded only one album, their popularity boosted the members to international acclaim. In the 1970s, the popularity of MPB, especially the focus on northeastern rhythms used by Quarteto Novo, began to garner national and international attention. Hermeto did extensive international touring throughout the decade and Aírtó Moreiera, Hermeto’s Quarteto Novo collaborator, moved to the United States to collaborate with some of its most prominent musicians.

The baíão is a duple meter dance style, and like choro, frequently features melodies that are straight eighth or sixteenth notes. It is generally played at a comfortable medium tempo, between 90-123 bpm. Baião melodies are sometimes angular and modal and use a cadence that resolves with 6 leading to the tonic, as opposed to the leading tone or the subtonic resolving upwards. Like the blues in the United States, dominant seventh chords are used in many baíãos as the basic harmonic structure as opposed to major or minor triads. Many of these baíãos also often use vamps, which is distinct from the quick harmonic rhythm of the choro and maxixe.

Rhythmically, there are three noteworthy layers of the baíão. First is the bassline, which is relatively simple, yet syncopated, in opposition to the straight bassline of the samba and the ornate baixara of the choro. The bottom of the rhythmic skeleton is the 3+3+2 rhythm, although some baíãos use a 3+2+3 variation. The zabumba drum comprises the middle rhythmic layer of the baíão, which is comprised of two distinct pitches and shown in Figure 2.24. The low part of Figure 2.24 is played by the mallet on the top head of the zabumba and the higher voice is played by the bacalhau, a bamboo stick used to strike the lower head. The final rhythmic layer is the triangle pattern, which consists of straight sixteenth notes that have the first and last note of each beat closed with the middle 2 open, and is what Boukas refers to as the “heartbeat” of the style in his University of Denver lecture. This pattern is shown in Figure

119 Connell, “Jazz Brasileiro?,” 179.
122 Côrtes, “Brazilian Styles,” 5.
124 Côrtes, “Brazilian Styles,” 5.
125 Lis, “Creating a New Tradition,” 61.
128 Ibid, 6.
131 Jovino, “Rhythmic Language,” 1:05:18
2.25. Figure 2.26 shows a Zattera’s transcription of how a full percussion section would perform a baiao rhythmic pattern.\(^{132}\)

Among the baiao subgenres, one deserves special mention for its musical characteristics. The xote, which grew out of the European schottische, is the only one of these styles that is swung in the same way jazz is in the United States. Boukas compares this swing feel to reggae, citing the rhythmic feel on Hermeto’s xote “Candango.”\(^{133}\) In Jovino’s article on ginga, the rhythmic subdivision shown was at the eighth note level, though on his recording of “July 17” from the *Calendário do Som* on the album *Serenata*, the swing feel is present on the sixteenth note level.\(^{134}\) Figure 2.27 shows the triangle and surdo accompaniment figure from that recording, though it should be understood that the sixteenth notes in the figure could be eighth notes in a different context.


\(^{132}\) Zattera, “Liminality and Hybridism,” 55, fig. 2.12.

\(^{133}\) Boukas, “Hermeto Pascoal,” part 7a, 0:45.

\(^{134}\) Jovino, “Ginga,” 2.
Marcha

Marchas are derived from Portuguese marches, particularly the Catholic processionals. For many years the carnival celebration in Rio de Janeiro was dominated by marchas, to which the samba was later added. These are highly syncopated marches that developed with some American influence and are associated with the city of Recife, where Hermeto lived and performed as a teenager. The fast marchas performed in Recife’s Christmas and Carnival parades are particularly associated with the city. The marcha has two main styles, which like samba and bossa nova, can be separated by tempo, instrumentation, and interpretation. The marcha rancho is the slower of the two. It has a lyrical melody and is usually in a minor key. The marcha rancho, which translates literally to “wanderer’s march,” draws on the traditions of European wind and string chamber music that is played over a march beat. The faster of the two is known as frevo, from the Portuguese ferver, meaning “to boil,” and was one of the northeastern styles Quarteto Novo popularized in the south in the 1960s. Frevos are played at a breakneck speed showcasing the virtuosity of performers and usually feature many horn players, while the dancers accompanying them in the parade dance with umbrellas. Both frevo and marcha rancho accent the 3+3+2 pattern as the basis of their skeleton. Figure 2.28 shows Jovino’s reduction of the marcha rhythmic skeleton. Common frevo accompaniment rhythms are shown in Figure 2.29. The various styles of marcha, including marcha rancho and frevo were the most commonly cited musical styles in Hermeto’s inscriptions in the Calendário, with Costa-Lima Neto citing 7 pieces where Hermeto mentions either “frevo… marchas, dobrados, and other musical genres and rhythms played by bands of the interior.”

136 Crook, Brazilian Music, 55.
137 Zattera, “Liminality and Hybridism,” 44.
141 Zattera, “Liminality and Hybridism,” 43, figure 2.5.
The maracatú was originally derived from a spiritual African ceremony for the coronation of royalty, which was transplanted to Brazil and is now associated with Carnival celebrations in the state of Pernambuco. The “King of Congo” was the title bestowed upon the elected Afro-Brazilian leader of Pernambuco, who mediated between the white upper class and the African slave population. This power dynamic was contradictory, as the Kings of Congo were themselves an instrument of the systematic structure that oppressed Afro-Brazilians, yet some scholars argue that the Kings of Congo represented mythical African figures, were well respected in the Afro-Brazilian community, and offered Brazilians of color a chance for agency through their representative. With the abolition of slavery in 1888, however, the original purpose of the ceremony was lost. Through the middle of the twentieth century, it was widely associated as a Carnival style, which is how Hermeto learned it, writing maracatú pieces such as “Quiabo.” As of 2008, there were as many as 65 active maracatú nations in Pernambuco, though only half that many were registered with the state’s Carnival association. The music now has nebulous cultural meaning, as new groups and older traditional maracatú nations perform and discuss the music differently. As one of the popular northeastern Brazilian styles, Hermeto began playing maracatú at a very young age, and continued to perform in the style through his time with Quarteto Novo. Connell also notes that during his second attempt at daily composition, which was stopped by a heart attack in 2000, Hermeto grouped pieces by genre, intending to write a set of maracatús among the collection.

While each maracatú nation plays the music in a slightly different way, there are commonalities that are enough to define it as a genre. It is a duple meter genre, and unlike samba, it has a strong accent on the first beat. Most melodies are derived from or consist wholly of arpeggiated major triads. The rhythmic skeleton is based on the pattern played by the agogo.
bells and bass drums called alfaias. Metz notes that the double agogo bell has taken the place of the large single iron bell called a gonguê, which was traditionally used. Rhythmically, maracatú is unusual among Brazilian genres, because unlike most other patterns (including the baião, to which it is related) it utilizes a two measure repeating pattern as opposed to a single measure pattern. The basic maracatú rhythmic pattern that is varied by each nation shown by Jovino is presented in Figure 2.29, while the maracatú rural rhythm shown by Zattera is shown in Figure 2.30. Metz shows alternate bell rhythms, which are presented in Figure 2.31.

Guarânia

The guarânia has received little scholarly attention despite its popularity. It is considered the national musical genre in Paraguay and was created by composer Jose Asuncion Flores in the 1920s. In Brazil, it is most common along the border with Paraguay, as the style is most popular

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152 Lis, “Creating a New Tradition,” 64, note 57.
153 Zattera, “Liminality and Hybridism,” 45, fig. 2.8.
in urban areas of its home country, and the largest population centers in Paraguay are in the eastern half of the country which borders Brazil.\textsuperscript{155} Guarânia came to Brazil in the 1940s, when it was commonly accompanied by the “hick violas” (ten stringed instruments used in Brazilian country music, similar in size to a Spanish guitar) in Brazil, but Paraguayan harps have been in use in Brazilian guarânia records since the 1960s.\textsuperscript{156} Currently, the Brazilian musician whose work best exemplifies the genre is accordionist Renato Borghetti, with whom Hermeto recorded an album in 1993.\textsuperscript{157} Hermeto, however, is not as frequently associated with this style as he is with the other genres presented in this chapter. The inclusion of the guarânia is largely due to Richard Boukas’s arrangement of “#5” on \textit{Tudo de Bom}, as Boukas demonstrated the utility of this genre in realizing some of the triple meter pieces in the collection.

In his section on the guarânia, Watkins classifies the genre by its slow tempo, frequent use of the minor mode, characteristic \textit{rasgueado} style guitar strumming, and the use of the \textit{sesquiáltera} meter.\textsuperscript{158} \textit{Rasgueado} is a style of strumming that incorporates the right thumb and other fingers in the right hand. It is primarily used in popular music and flamenco, as its popularity in Western art music died out in the nineteenth century.\textsuperscript{159} \textit{Sesquiáltera} is a meter in which 3/4 and 6/8 are superimposed, creating a constant hemiola, though Watkins notes that this meter may also be achieved through the alteration of the two meters instead of strict superimposition.\textsuperscript{160} Appleby highlights the use of this meter as an example of the Moorish musical heritage being transported to Latin America via the Iberian peninsula.\textsuperscript{161} With regards to form, Higa suggests that most guarânias are in binary form, but that in Brazilian guarânias, there may be an added section such as an interlude or coda, and that sometimes the differences between the A and B sections are fairly minor.\textsuperscript{162} The feeling of a measure as being in a “big 1,” so that neither the duple nor triple subdivision is too prominent can be accomplished through the use of an ostinato found in the guitar part of Boukas’s guarânia arrangement on \textit{Tudo de Bom}. It also appears in the backgrounds of his guarânia inspired movement of the string quartet \textit{Campeão}, dedicated to Hermeto.\textsuperscript{163}

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\textsuperscript{156} Zattera, “Liminality and Hybridism,” 58.
\textsuperscript{157} Boukas, Phone interview with the author, 12/26/17.
\textsuperscript{158} Watkins, “Paraguay,” 289.
\textsuperscript{160} Watkins, “Paraguay,” 289.
\textsuperscript{161} Appleby, \textit{The Music of Brazil}, 80.
\textsuperscript{163} Boukas, “Hermeto Pascoal,” 9, 1:15.
North American Jazz

Hermeto’s contributions to North American jazz primarily occurred during his time in New York in the 1970s, though his music was largely influenced by dissonant harmonies and improvisations in American free jazz.\(^{164}\) Hermeto moved to New York to record *Natural Feelings* (1970) and *Seeds in the Ground* (1971) with his former bandmate from Quarteto Novo, Airto Moreira, and Airto’s wife, vocalist Flora Purim.\(^{165}\) These albums also featured Sivuca, another virtuosic Brazilian multi-instrumentalist who had known Hermeto since his time in Recife, and legendary jazz bassist Ron Carter. In contrast to his most famous work in North American jazz, writing pieces on *Live/Evil*, these arrangements are sparse and feature plenty of room for improvisation.\(^{166}\) Hermeto’s compositions for Airto were “Andei,” “Uri,” “Papa Furado,” “Junos,” “Bebê,” and “O Galho da Roseira.” Lis credits Airto with bringing the baiao rhythm into the Brazilian jazz style being cultivated in the U.S., but one of the pieces he cites is Hermeto’s composition “Papa Furado,” indicating that Hermeto contributed to the style’s spread into mainstream fusion of the 1970s.\(^{167}\) Hermeto’s first album, titled *Hermeto* (1970) was also influential among jazz musicians.\(^{168}\) Hermeto claims credit for influencing Herbie Hancock’s use of bottles as a musical instrument on the arrangement of “Watermelon Man” from his 1973 album *Head Hunters*, as Hermeto had done on his composition “Velório.”\(^{169}\) Hermeto is not the only one who sees the similarities, as bassist/pianist Don Thompson compares Hermeto’s piano playing on *Seeds in the Ground* to Herbie Hancock’s style.\(^{170}\)

Hermeto met Miles Davis through Airto, who was playing in Davis’s band at the time. After playing the trumpeter 10 pieces, 3 ended up on the Davis record *Live/Evil* (recorded 1970, released 1971): “Little Church (*Igrejinha)*,” “Selim,” and “Nem Um Talvez.” Although it is well documented that Hermeto wrote these three pieces, all three were originally credited to Davis, though after a lawsuit, CBS granted Hermeto the composition credit and rights to “Igrejinha” on the album’s re-release.\(^{171}\) All three recordings are relatively short and far more indicative of Hermeto’s performance style than Davis’s. While many Davis sidemen were known as master arrangers, particularly Hermeto and Gil Evans, Davis is known more as an improviser. Despite this, all three of these recordings feature a through composed melody with no traditional

\(^{164}\) Zattera, “Liminality and Hybridism,” 141.


\(^{169}\) Lis, “Creating a New Tradition,” 62.

\(^{170}\) Connell, “Jazz Brasileiro?,” 197.


\(^{169}\) Connell, “Jazz Brasileiro?,” 197.


\(^{171}\) Thompson quoted in Lis, “Creating a New Tradition,” 92, note 56.
improvisation section, a form commonly found on Hermeto’s recordings. While this recording was the most influential, it was not his only time working with American jazz legends. When in the US to record Slaves’ Mass (1977), he met with Cannonball Adderley while Airto was producing Adderley’s record. Hermeto wrote the tune “Nascente” that night, and Adderley recorded it the next day, a week before the saxophonist’s death. A year later, Hermeto was the hit of the first São Paolo International Jazz Festival while collaborating with American jazz legends. The festival was designed to feature both native instrumental musicians and foreign artists in equal number. Hermeto’s set included guest performances by Chick Corea, Stan Getz, and John McLaughlin. Brazilian musical festivals were frequently treated as competitions, and while this one was not, the consensus among the crowd was that Hermeto’s set was the “winner” of the festival. Hermeto claims that this performance of two forró mentioned above changed Getz’s musical style. Connell asserts that this performance resituates the American master jazz musicians into Hermeto’s worldview. Being Hermeto’s set, with Stan Getz playing forró instead of bossa nova or swing, this viewpoint certainly holds weight, and yet despite this, the intersections with North American jazz are still present. This performance is a good encapsulation of Hermeto’s music in general, combining jazz with Brazilian music, combining international and regional influences with master musicians in many styles to create a sound that is not uniquely Brazilian or uniquely jazz, but rather uniquely Hermeto’s.

Jazz in Brazil

The terms “Brazilian jazz,” “música improvisada,” “música instrumental brasileira contemporânea,” “hard-bossa,” “jazz-samba,” and “samba novo” are all used somewhat interchangeably and represent different many overlapping musical traditions. Some have more common usage in different geographic regions, and carry slightly different connotations, but artists cross whatever faint boundaries exist between them. For the purposes of this section, all are acceptable, since they refer to Brazilian music that has some commonalities with jazz, including harmonic structure and the use of jazz style improvisation. In Piedade’s study on Brazilian jazz, he situates Hermeto’s place within the Brazilian conception of Brazilian jazz. He does this by defining the three linhas, or lines of Brazilian jazz. Each line represents a way of playing, though all three are usually present to at least some degree in a given record or performance, and can even be present within the same piece. The ECM line shows the influence of European Avant Garde and world music, while the fusion line is rooted in the combination of funk and samba. Hermeto’s music is most associated with the Brazuca line, which “articulates the jazz language in a dialogue with the expressive elements of these [samba, baião, frevo, maracatú, etc.] rhythms.” Hermeto is considered one of the forefathers of this line, highlighting the fact that even within Brazil, the combination of styles that create his sound is highly influential.

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173 Ibid, 205-6.
174 Ibid 206.
175 Ibid, 9.
177 Ibid, 49.
Western Art Music

The Western art music tradition has the smallest influence on the Calendário of any tradition discussed in this chapter. As forthcoming analysis will show, this music owes little to the musical style of the Western tradition, with the main influence coming from Hermeto’s philosophical approach to composition. Zago notes that in the MPB styles discussed above as well as in jazz, the main artifact of the music is a recording or a performance, with scores becoming available only after listeners are familiar with a piece. With these 366 pieces, however, Hermeto challenges the popular and jazz musician to approach his work like a Classical musician might, with the score as the primary reference and their interpretation informed more by their own musical experience than by a recording from the composer. Only five pieces in the Calendário are notated as through composed works without lead sheet style chordal notation, thereby making them good examples for the tenuous aural relationship between the Calendário and Western art music.

Figure 2.34 shows the sheet music for “#58,” the piece from the Calendário composed on August 19. The careful avoidance of the leading tone throughout mm 1-4, during which the piece oscillates between I and V over a dominant pedal, leaves the piece modally ambiguous. The use of a tonic mixolydian sound would definitely give the piece a northeastern Brazilian flair, yet the lack of a leading tone makes it sound at least somewhat less reminiscent of the Classical tradition. The transition from 4/4 to 2/4 and the reinterpretation of the melody in double time is reminiscent of the improvised double time endings common in choro and other MPB genres. From mm. 5 to the end, the high level of ornamentation and chromatic inflection of a simple melody is reminiscent of the malandro playing style popular among choro musicians in the late nineteenth century, which is defined by chromatic inflections, modulations, and shows of unexpected virtuosity. In particular, the shifting of the registral accents from the first thirty-second note of the beat in mm. 7-10 to the second thirty-second note in mm. 11-16 is particularly reminiscent of descriptions of spirited malandro improvisations.

“#328,” shown in Figure 2.35, represents an even clearer picture of a concert setting of a dance that is relatively unaltered from its original form, in this case, a maxixe. The constant garfo rhythm as an accompanimental figure left hand is a hallmark of the maxixe and choro styles, and the interspersion of garfo figures in the melody tends to suggest a maxixe. There are northeastern Brazilian musical features in this piece as well, particularly the use of the Lydian dominant mode over each harmony, all of which are dominant seventh chords. The triplets found in the melody are unusual for choros or maxixes in general, but as Campos notes, the use of nonduple subdivisions is more common in Hermeto’s music than that of others. One thing that does set this apart from the other through composed works is the coda. This coda is repeated and ends on an offbeat cadence that is not satisfying in terms of closure for the piece and seems to suggest a “vamp and fade” ending common in jazz. It is therefore important to consider that even in his through-composed music, the interpreter may be forced to make interpretive and improvisational decisions in areas of the piece like the coda, where jazz and MPB musicians commonly “arrange” live during a performance.

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178 Zago, “Composition and Improvisation.”
Figure 2.35. “#328”
The presence of chord changes is not always a determining split between the realms of popular and art music in Hermeto’s mind. Jovino pointed this out to me when discussing a recording he did with flutist Paul Taub of Hermeto’s Avant Garde piece, “Bacurau.” When discussing the utility of Hermeto’s chordal notation, he pointed out that the piano part of this piece, which bears little, if any resemblance to jazz, was originally notated with Hermeto’s chord changes.180 “#189,” the piece composed on December 28, is notated in a grand staff, yet also has chord changes, which to many would suggest the influence of jazz or MPB. Consideration of the inscription on this piece, however, illustrates Jovino’s point. On the manuscript of this piece, Hermeto writes, “This music is very erudite - its full of modulations.”181 The shifting key centers in the piece, which is shown in Figure 2.36, lead the piece away from and back to D minor, which may be considered an overall tonic, albeit a weak one. This piece features good examples of an idiosyncratic take on chromatic common practice harmony. The E♭/G-Cº-D progression in mm. 5-7 is a stylization of a Neapolitan Six-V-i progression, although the melody stresses the 6th and 7th of the Neapolitan chord and the V chord has been substituted with a viiº. Texturally, it is reminiscent of Baroque music, to which Hermeto is frequently compared, especially by Boukas. Even in the texture, however, Hermeto is able to personalize the music, with mm. 10-13 presenting a four against six polyrhythm in each beat of that span.

**Interpretation of the *Calendário do Som***

The lack of style markings is not the only difficulty in the performance of pieces in the *Calendário do Som*. The brevity of the pieces, many of which lack an introduction or an ending beyond a single chord with a fermata, the difficulty of the chord changes, and the lack of tempo markings leave a significant amount of room to the interpreter. As Richard Boukas put it, the pieces are “just raw music that poured out of him.”182 While there are many recordings of pieces from the *Calendário*, including some projects dedicated solely to the collection, there are three sets of recordings by musicians who had previously collaborated with Hermeto and were intimately familiar with his style, suggesting they may have some viable approaches as to these difficulties. The first set consists of three recordings from two albums by Jovino, all of which are in a small ensemble setting. As Jovino is Hermeto’s longtime collaborator and archivist, he is more intimately familiar with Hermeto’s music than anyone else. Richard Boukas arranged an entire album of music from the *Calendário* for a quintet recording project led by flutist Mark Weinstein entitled *Tudo de Bom*. Boukas is an expert in various Brazilian styles and in the music of Hermeto, and his arrangements range the gamut from traditional performances to radical reinterpretations. The final set of recordings is from the double record entitled *Calendário do Som* by the Itiberê Orquestra Familia, led by Hermeto’s bassist Itiberê Zwarg. This group has unique connection with Hermeto, as Itiberê considers Hermeto the group’s “musical grandfather.”183 This group is also the largest of the three and demonstrates a few arranging possibilities for these miniatures.

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180 Jovino, Phone interview with author, 12/22/17.
181 Hermeto, *Calendário*, 211.
182 Richard Boukas, phone interview with author, 12/26/17.
Figure 2.36. “#189”
The first two recordings, “July 17” and “September 1” are from Jovino’s collaboration with Mike Marshall entitled *Serenata*, which is a CD dedicated to Hermeto’s music. Both tracks feature the duo on their respective principle instruments, guitar for Marshall and piano for Jovino, along with percussion; a drum set in “September 1” and a triangle and surdo in “July 17.” Hermeto makes a guest appearance on the album but does not feature on either of these pieces. Critics John Kelman and Egídio Leitão both note the unusual simplicity with which Hermeto’s music is presented. This is an astute observation, as the intimate setting of each piece leads to a relatively straightforward arrangement in both cases. “July 17” opens with the triangle and surdo establishing a xote groove before Marshall and Jovino enter. The two play the melody in unison before Jovino begins comping and Marshall continues the melody solo. Among the noticeably simple parts of this is the presentation of the melody, which Marshall does not vary from the lead sheet. This is unusual in jazz performance, as melodists generally take liberties with the melody either rhythmically or via the addition of solo fills, though the lack of recordings of this piece may have played a factor in the decision to perform the melody entirely as written. Also notable is the fact that the recording takes the first ending twice on the opening head, once with Jovino and Marshall playing in unison and once with Jovino comping for Marshall, presumably as a way to lengthen the piece. After the head in, Jovino and Marshall take solos which are roughly equal in length before performing the head out in the same manner as the head in. As an ending, the group repeats the first four measures of the second ending, and then hits the final chord of the piece. Repeating the final few measures of a piece, or “tagging” the ending, is among the most common ways to end a jazz standard, further giving the feeling of simplicity in the recording.

The third recording is a duo featuring Jovino and Anat Cohen on soprano saxophone on “February 1” from the 2010 recording *Vejo o Som*, a CD featuring each piece as a duo with Jovino and a different collaborator. The form of this piece is similar to that of “July 17,” though it features an improvised chorus before the opening head. It is also notable because it gives an indication of how to interpret one of Hermeto’s more idiosyncratic performance instruction. Slightly before the indication, *bem ritmo*, which translates to “good rhythm” or “well in rhythm,”

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185 For those readers who are unfamiliar with jazz terminology, the “head” refers to the melody. Therefore the “opening head” or “head in” refers to the iteration of the melody at the beginning of the performance and the “head out” refers to the iteration of the melody after the solo sections at the end of the performance. “Comping” is short for accompanying and refers to the act of improvising an accompaniment, usually based on the harmonic structure of the piece. The term comping most frequently refers to chordal instruments such as piano and guitar, though it may also be used for a particularly active and responsive drummer, or in the case of a duet, for a single line instrument.
Jovino loosens his time feel and plays more legato as a rhythm section player, before locking back in metronomically upon the arrival of the instruction. While this was a jazz duo recording and tempo fluctuation is normative in this context, Jovino’s performance suggests an implied loosening of time before all “bem ritmo” markings, whether or not a rallentando precedes it, as is sometimes the case.

_Tudo de Bom_

This Mark Weinstein led project was the first recording to entirely consist of pieces from the _Calendário_, coming out in 2002, two years after Hermeto’s manuscripts were published. Though Weinstein was the leader of the ensemble, Boukas was responsible for all the arrangements, some of which he graciously gave me to analyze. As this CD featured thirteen pieces meant to form a cohesive whole, there was more opportunity for variety of interpretation than in Jovino’s three recordings. Stylistic variety was among the most important aspects of the project, which was accomplished through the selection of pieces based on which had melodies best suited to various styles. No style was represented on more than four pieces, which was the waltz, though two of those, “#5” and “#1,” switched styles in the middle to the guarânia and marcha rancho, respectively. There were also three choras, which was the most represented genre among pieces that did not change styles. Some melodies were interpreted in as traditional a manner as possible, including the maxixe, “#2” and the choro, “#10,” as well as both baiãos, “#23” and “#29.” Other pieces Boukas took more liberties with, including the guarânia arrangement of “#5” and the arrangement of “#153,” which looked like a ballad waltz, but Boukas thought would work well as a samba. According to him, the quarter note triplets at the opening of “#5” gave him the idea to reinterpret it in triple meter, though he described “#153” as a more organic stroke of inspiration. The opening 8 measures of the original version and Boukas’s arrangement of “#5” are presented in Figure 2.37, while the first 8 measures of the original version and Boukas’s arrangement of “#153” are presented in Figure 2.38.

![Figure 2.37](image)

_A_ Hermeto Pascoal

_B_ Hermeto Pascoal arr. Richard Boukas

Figure 2.37. Melody from “#5” mm. 1-8. A) Original; B) Boukas’s Arrangement
Boukas also spoke to me at length about the problems of form and harmonic difficulty in the collection. When arranging, he began by calculating a rough tempo and how many solo choruses it would take to make the piece the length he needed. Due to the difficulty of the changes, he took creative control in arranging them, always attempting to keep the “perfume de Hermeto,” a phrase in Portuguese that translates to “essence of Hermeto,” and refers to the overall sonic quality of the original composer’s work. With the addition of solo choruses, he also felt it necessary to extend the codas for the pieces beyond what was written, usually a single chord with a fermata, for the sake of balance. In “#81,” Boukas inserts a double time vamp and fade ending featuring group improvisation. This ending takes approximately 0:50, which constitutes almost 1/6 of the length of the entire recording, and nearly as long as the two statements of the head which open the recording. Other pieces, including “#153” and “#29,” also use similar endings. Similarly, he added introductions to some of the pieces, as he did to “#29” and “#153,” the former of which is the only piece to have an introduction of the same length as the codas discussed above. While the above pieces are all examples of using added sections to lengthen the recordings, he also changed the codas for the sake of variety. In the recording of “#10,” Boukas adds a two-measure coda, shown in Figure 2.39, that takes the formal place of the turnaround in mm. 19 of the original lead sheet. This coda ends with a short eighth note, and due to this brevity the original coda from the lead sheet, a half note with a fermata, may have been longer in performance. Due to the overwhelming number of similar codas in the collection, this ending provides a contrast to the other pieces on the CD that use such endings.
Due to the size of the ensemble, Boukas elected to use his guitar synthesizer and use several different patches to gain timbral variety in the project. He is also an accomplished vocalist and vocal arranger, and performed as both a vocalist and guitarist on the album. In some cases, he exploited the variety of timbres at his disposal by taking solo choruses as a guitarist and vocalist, as he did on “#153” and “#10.” In addition to using different instruments for solos, he was also able to provide timbral variety to the melodies. In most cases on the CD, the head was presented twice at the beginning of the piece and once at the end, with some pieces adding a second or a second partial statement of the head before the coda. Between his use of Weinstein’s flute, his own vocal and melodic guitar timbres, as well as different guitar patch timbres for accompaniment, the orchestration was different for each iteration of the head. This allowed for the contrast between intimate moments, such as the flute, guitar, and bass trio that presented the first statement of the head in “#31,” with moments of dense orchestration, when Boukas assumed the role of multiple instrumentalists. Among the most interesting moments of dense texture is the head at the end of “#1,” where Boukas records himself singing the melody with a canonic echo for the first 8 measures. This contrapuntal addition ends when the flute joins the voice playing the melody in mm. 9, yet it is one of the most striking uses of timbre on the entire recording.

When discussing how he approached soloing, he referenced a multitude of approaches. On the most harmonically complex pieces, Boukas aimed to “thread the needle” on the changes and bring out the harmonic nuance of the piece. On other works, however, particularly those with lyrical melodies, Boukas’s playing became more lyrical. When discussing advice for novice improvisers over this music, he told me he instructs his students to improvise “with great risk taking and trepidation.” Due to Hermeto’s unique style, he also advises less focus to be placed on chord-scale relationships and more attention to be placed on the rhythmic structure of the music.

Recordings by the Itiberê Orquestra Familia

Itiberê Zwarg is Hermeto’s bassist and one of his most frequent collaborators. The Itiberê Orquestra Familia began with Itiberê teaching young musicians at Pro Arte music school, and eventually evolved into a professional group. Due to the vast amount of time he spent performing with Hermeto and the fact that Itiberê worked with both Hermeto and his own group simultaneously, there are a number of similarities between the groups, helping to create the familial feel between the musicians that play with Itiberê and Hermeto. This makes Itiberê’s interpretations of these pieces particularly interesting for study. The recording Calendário do Som is a two CD set that came out in 2005 featuring 27 of the pieces from the collection. Due to the size of his group, the arrangements offer the chance for complexity rarely afforded in duo or quintet settings. The issues of style and brevity are addressed in complementary ways. One of the most frequent forms on Itiberê’s recordings is a variation set. For instance, “16 de Maio,” the piece

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\[^{186}\text{Connell, “Jazz Brasileiro?,” 251.}\]
shown in Figure 2.35, is interpreted with drastically different timbral and stylistic variations. It begins with a dissonant three measure introduction, which is presented in Figure 2.40. Dissonant introductions are a common feature of these recordings, and many are significantly longer the three measures presented here. The melodic construction also forces a reinterpretation of the phrase structure of the piece. As the clarinet’s statement of the melody begins on the consequent measure of the repeat of the two-bar phrase, mm. 4 of the arrangement sounds like a pick up to a phrase that will begin in mm. 5. The original music shown in Figure 2.35, however, shows this to not be the case, as the melody played by the clarinet occurs in mm. 1 of the original music beginning a clear four-bar phrase. Following this newly composed introduction, the clarinet plays the melody as a solo against a legato background, with the garfo bass figure and the thirds harmonizing the melody absent. At the end of the first statement of the melody, flute enters the texture and provides the written harmony. After the first statement of the melody, which includes the repeated coda figure, the introduction returns with mallet percussion added prior to the second statement of the melody. This section has the melody mixed lower than the soli line presented by the high winds and percussion, and when the brass enters with another background figure midway through the chorus, the melody is almost lost completely. At mm. 13, the arrangement gains energy as the soli line begins to suggest a double time feel. A drum break between the second and third variations establishes the previously suggested double time as the new tactus and sets up a characteristic statement of the melody as a maxixe. The violin and flute each take a chorus long solo before the maxixe statement of the melody returns to close the piece. In the theme and variations pieces such as these, there are often multiple statements in each feel with solos or solis inserted, yet there are also multiple feels throughout the piece. The drum break between the second and third variations feels as if it could be the beginning of a new arrangement yet do to the brevity of the form of both the slow dissonant beginning half and the upbeat maxixe second half, neither is as convincing on their own as an arrangement as they are together.

Another method of elongating the pieces in the Calendário utilized by Itiberê is changing the metric level of the perceived tactus. The arrangement of “24 de Janeiro,” is in an arch form with three distinct sections, only one of which is comprised of Hermeto’s melodic material. The A section, which comprises the introduction and coda suggests a beat at one metric level below the notated meter of the original lead sheet. Figure 2.41 shows mm. 1-7 of the introduction notated in the same meter as the lead sheet. The beat groupings bracketed in mm. 1-4 sound like 6 measures in 4/8 without prior knowledge of the piece, and the drums playing thirty-second notes behind the melody reinforces the tactus at the eighth note level. The thirty-second note in the melody of mm. 7 is not a common MPB figure either, and its presence further hints at the eighth note being the beat around which the piece is centered. When the B section, which is Hermeto’s original melody comes in at mm. 15, the clarity of the 3/4 meter is striking in
comparison to the opening melody, though the rhythmically active snare drum accentuates the perceived meter of the A section, creating a hemiola and linking the two sections. The opening six measures of the written melody, mm. 15-20, are shown in Figure 2.42.

The C section of the arch form presents a third interpretation of the beat, as the ensemble switches to a swing feel for the improvised solo section. This swing feel reestablishes the eighth note as the tactus, with the swing feel in 6 rather than 4 beats per measure. After two choruses of improvised solos, the 3/4 feel returns even more abruptly than its initial entrance, with the only difference between the opening and closing heads being orchestration. While this recording is an example of metric ambiguity and change across the piece, this need not be the case. In “18 de Agosto,” and “11 de Março,” the melody is presented by the soprano saxophone with the perceived beat at the sixteenth note level with a background that is much more rhythmically active behind it. These recordings do not have the same change in meter as the recording of “24 de Janeiro,” but the reinterpretation of the tactus to a different metric value may make some of the more difficult pieces in the collection more approachable, especially with regards to improvisation, as is the case on “11 de Março.”

![Figure 2.41. Introduction from Itibere Orquestra Familia Recording of “24 de Janeiro,” mm. 1-7](image1)

![Figure 2.42. Beginning of Original Melody from “24 de Janeiro,” mm. 15-20 on Recording](image2)

Overall, Itiberê’s arrangements are easily the least influenced by North American jazz of those discussed here. That these recordings are an outlier among the three reviewed here is sensible, as this was the only one done in Brazil without North American jazz musicians. While these recordings present a survey of the possibilities, there are many other recordings that exist of pieces from the *Calendário*. It would be impossible to present them all, though others may offer novel approaches to interpretation as well.

**Conclusion**

This chapter outlines features of the various genres of Brazilian Popular Music which have influenced the composition and interpretation of pieces in the *Calendário*. Hermeto’s music was also contextualized in the lineage of those genres, as well as in the lineage of both North American and Brazilian jazz. Three pieces of the through composed pieces were studied to see the influence of the Western Art Music tradition on this collection, though analysis shows that even through composed pieces bear little aural semblance to that tradition. After the discussions of each genre, select recordings from Mark Weinstein with arrangements by Richard Boukas, the
Itiberê Orquestra Família, and Jovino Santos Neto were discussed to demonstrate how interpreters of Hermeto’s music deal with the various difficulties in the realization of the pieces in the Calendário.

During the discussion of genre, the main problem identified was the lack of systemization in extant taxonomies of the subgenres which fall under the umbrella of MPB. Over-taxonomization, as shown in the multiple grooves that are subgenres of choro, can distort the lines between some of the larger genres. For instance, should a choro-maxixe be considered a choro, a maxixe, or due to the overlap in repertoire, is differentiation between the two no longer desirable? Are the two choro-samba grooves in Figure 2.8 more representative of samba or choro? If they are representative of samba, should they be considered representative of two of the many substyles of samba that are separated by geography, social function, and fundamentally different sounds? Conversely, given the wide variety of sambas, is that genre marker too broad, given the inherent differences in the sound of a performance of samba enredo, samba canção, samba de morro, and the other substyles? These questions have no simple answer, but they do highlight the difficulty in discussing this type of music. In descriptions of the roda style jam sessions, especially the one from Livingston-Isenhour and Garcia, it is apparent that grooves are not discussed, but rather musical intuition and familiarity with the multifaceted nature of MPB drives performance, as opposed to strict preset patterns.¹⁸⁷

While over-systemization can be problematic in analyses of this type, the desire to undertaxonimize is also omnipresent. Appleby’s broad groupings of nationalist and northeastern musical characteristics do highlight the commonalities shared by the various MPB subgenres that descended from common musical ancestor, namely the lundu and the modinha. However, this approach risks a lack of attention to the stylistic nuances that define each subgenre. When Appleby groups choro and samba together when discussing features common to “national” Brazilian music, it tends to downplay the differences in the rhythmic skeletons of each accompaniment style that many scholars, including Jovino and Zattera, use to define these styles. The rhythmic skeleton and overall sound of a maxixe, already cannibalized into the choro repertoire, is incredibly different from that of a samba de enredo, and grouping them together feels as if musical characteristics are entirely subjugated to social ones in the taxonomization process as opposed to having the two work in concert. The pinnacle of undertaxonimization from the perspective of performance is Brazilian jazz, as it is defined by Lis. Due to both the consolidation of the percussion section into a single drum set player and the use of these rhythms to accompany melodies that were not written with any specific style in mind, Brazilian jazz has become a conglomeration of common Brazilian rhythmic figures, most prominently those associated with samba and baião, which are freely interchanged at the discretion of the rhythm section players. This conglomeration has created yet another new genre, though because of its indebtedness to MPB, MPB is now sometimes conflated with Brazilian jazz.

The problems with over and under taxonomization are best shown through the difficulties discussing certain pieces. For instance, American jazz musician Stan Kenton’s recordings of “Tico Tico no Fuba” and “Delicado” was discussed in the context of multiple styles. According to Zattera, “Delicado” by Valdir Azevedo was one of the first baiãos to gain national prominence.¹⁸⁸ Connell, however, cites the influence of American jazz musician like Benny Goodman and Stan Kenton on early bossa nova, including Kenton’s recordings of choros “Tico

¹⁸⁷ Livingston, Choro, 75.
¹⁸⁸ Zattera, “Liminality and Hybridism,” 56.
This problem brings up an interesting point raised by Jovino, which is that rhythms and rhythmic patterns are highly localized, but harmony and melody are not. Each of the rhythms discussed in this chapter might be performed in a different manner by the residents of different neighborhoods according to their aural traditions, yet no melody is a baião melody or a choro melody, they are simply melodies which may lend themselves to interpretation as a baião or a choro, or have aspects common to those styles within them.

Another difficulty posed to this study is the relative unevenness of the analytical and ethnomusicological literature on these genres. While choro and samba are very well represented, other genres, particularly the guarânia, are largely ignored. Any all-encompassing ethnography of Brazilian music that represents the whole image of the country’s music is a daunting task, given not only the breadth of the MPB styles presented here, but the breadth of the rap, música sertaneja, tropicalia, indigenous, religious, and Classical musical traditions of the country. However, articles dedicated to the study of one or a few MPB subgenres, like the work of Jovino, Côrtes, Higa, Coelho, Campos, Siegel and, on a larger scale, Livingston-Isenhour and Garcia would be valuable areas for further study.

One factor to remember is that despite the necessary taxonimization presented here, these genres do blend, and do so more in Hermeto’s music than in that of most other composers. While some of his music is relatively straightforward in its style, such as “Bebê” and “Chorinho Pra Ele,” some are intended to draw upon a genre in unusual ways. Campos notes this in her study of the influence of choro in the Calendário by calling attention to some of Hermeto’s inscriptions for these compositions. For instance, on “#224,” the piece from February 1, Hermeto writes, “Here’s one more for you in 7/4. I am inspired by chorinho. I think it is time to get accustomed to playing choro in 7. It is ‘a thing.’” It is worth noting that Hermeto has written in odd meters for his entire career. “Mixturada,” written when Hermeto was still in Quarteto Novo is also in 7/4. In other pieces, Hermeto speaks of actively blending genres. He refers to “#222” from January 30 as being, “a waltz like a chorinho,” and more quizzically, of “#125” from October 25, Hermeto says, “This music is a mixture of chorinho with baião, samba and with everything. Just as time changes, everything has to evolve always.” While Hermeto’s music is integral to this evolution, a knowledge of his influences and his place in the traditions of these styles is essential to the understanding and performance of these works.

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189 Connell, “Jazz Brasileiro?,” 66.
191 “Vai para vocês mais uma em sete por quatro. Me inspirei numa chorinho, acho que já está na hora de tocar chorinho em sete para acostumar, é um barato.” Pascoal, Calendário, 246.
193 “Esta é uma valsinha com gosto de chorinho.” Pascoal, Calendário, 244.
194 “Esta música é uma mistura de chorinho com baião, samba e com tudo. Assim como tempo muda, tudo tem que evoluir sempre.” Ibid, 147.

The influence of non-musical factors on musical creativity is an important part of composition, yet it is difficult to study. Inspiration serves a vital role in Hermeto’s approach to composition, of which the composer says, “Music is everywhere in the air and can be heard by all who have an antenna for it.” Hermeto’s belief in this philosophy is confirmed when studying his Som da Aura works, for which he gives the subject that created the original sound credit for composing the piece and lists himself as an arranger. Due to the information Hermeto records on each lead sheet and the similar structure of the pieces in the collection, the Calendário do Som provides a unique opportunity to study which non-musical factors may influence Hermeto’s compositions. This chapter uses an encoded corpus and separates the collection by various non-musical aspects to search for musical trends which may indicate the effect of non-musical influence on a musical composition.

As stated in Chapter 1 of this dissertation, each of Hermeto’s compositions of in the Calendário contain multiple pieces of non-musical information which were used in the current study. Three of the non-musical aspects tested are temporal, as Hermeto recorded time of completion each day and the day of the week on each page, along with the date. The other two non-musical factors are the place of composition and the subject of Hermeto’s inscriptions. A subset of the 308 pieces with inscriptions more substantive than Hermeto’s three signature phrases were categorized by the topic of inscription and analyzed by group. This chapter begins by surveying research on why each of the non-musical aspects under study may influence musical composition. Following the study of the non-musical factors, I discuss the rationale and method of measurement for each of the musical aspects of the compositions that were measured. The chapter ends by discussing the results of the study and suggesting areas for future research.

197 The one piece of non-musical information that was recorded and varied on each page that was not tested was a comparison of the use of Hermeto’s three different signatures. This decision was made for a number of reasons, including the many variants of each signature phrase, the frequency with which pieces would contain multiple signature phrases, and the advice of Jovino.
198 The inscriptions were included typeset in the back of the Calendário in its printed format, though the typeset list is not available online in the online copy. The one way in which my list of inscriptions deviates from that one is that my list includes the inscription “Viva a mente” (long live the mind), from “#43.” It was included as I consider it distinct enough from Hermeto’s signature “Viva o som” (long live the sound).
Hermeto Pascoal, Calendário do Som (São Paolo: Editora SENAC and Itaú Cultural, 2000), 389-413.
Extra-Musical Factors

Location

Over the course of composing the *Calendário*, Hermeto wrote music in thirteen cities across five countries. As the growing popularity of soundmaps illustrate, each city has a different sonic identity. Soundmaps have differing aims, but they all feature recordings of found sounds, presented by location, to give the sonic impression of a given place. If Hermeto’s quote about using “antennas” to hear “the sound” is to be taken literally, it would stand to reason that any sonic inspiration would vary upon location. In addition to this, Hermeto makes reference to the noises he hears while composing, referencing things as disparate as bricklayers and bird songs. As Atkinson remarks, “…urban sound, even in its complexity, has a tendency for repetition and spatial order which, while not fixed, also displays a patterning and persistence…” Of the thirteen places Hermeto composed, many are large cities where Atkinson’s statement is likely to hold true. While Jabour is in suburban Rio de Janeiro, and not a traditional urban space, Atkinson’s supposition may also include suburban spaces to a lesser degree than a bustling metropolitan center.

Along with the differences in external sounds, cities also differ in pace of life. Levine and Norenzayam borrow Werner, Altman, and Oxley’s definition, the “relative rapidity or density of experiences, meanings, perceptions, and activities” to describe the concept. Pace of life is generally correlated with multiple factors, with faster places more likely to have a higher local population, as well as a colder climate and a healthier economy. Levine and Norenzayam also found that places in northern and western Europe tended to have the highest pace of life, while

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199 Two cities were actually different areas of Rio de Janeiro; Jabour, where Hermeto lives, and Sitio Cobra Coral. Two early pieces, “#7” and “#35,” were simply labeled Rio de Janeiro, but were not included in the count of the thirteen cities.


202 The only place that is neither urban or suburban where Hermeto composed a piece is Ilha Terceira Açores, an island in the Azores archipelago. According to the Azores tourism website, the island has only 58,000 inhabitants and its economy is largely agrarian, yet Hermeto was visiting for a jazz festival, and the island was likely more densely populated than usual. “Terciera,” accessed 8/16/18, https://azores.com/azores/islands/terceira.


the United States was roughly average, and Latin America was very slow, with Brazil among the slowest countries in their pace of life study.\textsuperscript{206} Research shows that pace of life has an effect on the people’s listening habits, and therefore may have an effect on composition as well.\textsuperscript{207} Pace of life is intrinsically linked with cultural values.\textsuperscript{208} Therefore, any effect found in Hermeto’s composition during his travels may or may not have more to do with the different sound environments provided by each city than by this measure. However, Adam Krims suggests that there is an inherent interconnection between urban space, cultural production, and musical style and representation.\textsuperscript{209} This interconnectedness may be construed as giving what Levine refers to a place’s personality, and therefore his research on pace of life provides a guide to which places may have inspired Hermeto to write more similar or dissimilar music.\textsuperscript{210}

In addition to noting the place of composition for each piece, Hermeto also wrote about places in his inscriptions. His mentions of places can be broadly interpreted as falling into one of three categories. The first is the use of a place as a stylistic reference. For instance, in the inscription for “#316,” the piece from May 4, Hermeto writes, “I think that in another incarnation I certainly lived in Vienna, because I remember many rhythms in 3/4, but now I have influences of the whole world, [so] everything comes out all mixed up...”\textsuperscript{211} In this case, the allusion to rhythms in 3/4 is a clear reference to the historical connection between the waltz and Vienna. Hermeto’s inscription is akin to the style marking “waltz,” as the piece features a predominantly half note-quarter note harmonic rhythm that clearly articulates the meter and lacks the \textit{garfo} and other traditional markers of Brazilianness often found in Hermeto’s music. Another type of reference Hermeto makes to places is one in which he is reminded of something non-musical about a certain city. In “#298,” from April 16, Hermeto writes, “This piece makes me remember Lagoa da Canoa, when I swam and fished for piaba, we used to make \textit{jangadinhas} [a type of toy sailboat] with the banana tree, because it was very strong. But when you listen to the music you will certainly remember things differently.”\textsuperscript{212} In this case, Hermeto does not reference another musician or style, as he does in other inscriptions about Lagoa de Canoa, but rather the activities he took part in, or sometimes just the place itself. The third type of place-based inscription usually has to do with a specific memory or person. In cases like these the place mentioned is the setting of that memory. This type of inscription is typified by “#223,” from January 31, for

\begin{itemize}
\item \textsuperscript{206} Ibid, 191.
\item \textsuperscript{207} Daniel Shanahan and Erin Allen, “Using Big Data to Examine the Effect of Environment on Listening Habits,” Paper Presented at the 58th meeting of the Society for Ethnomusicology, Indianapolis, IN, November 14-17.
\item \textsuperscript{208} Robert Levine, \textit{A Geography of Time: The Temporal Misadventures of a Social Psychologist, or, How Every Culture Keeps Time Just a Little Bit Differently}, 1st ed. (New York: Basic Books, 1997), XV.
\item \textsuperscript{209} Adam Krims, \textit{Music and Urban Geography}, (New York: Routledge, 2007).
\item \textsuperscript{210} Levine, \textit{A Geography of Time}, XVII.
\item \textsuperscript{211} “Eu acho que na outra encarnação com certeza vivi em Vienna, porque me lembro muito do rimto em três por quatro, mas como eu tenho influência do mundo todo sai sempre tudo misturado, assim é que é bom.”
\item \textsuperscript{212} “Esta música me fez lembrar de Lagoa da Canoa, quando eu nadava e pesava piaba, a gente fazia jangadinhas com o pé de bananeira porque dura muito. Mas quando você escutar esta música com certeza lembrará de coisas diferentes.”
\end{itemize}
which Hermeto writes, “I composed this piece thinking a lot about when I lived in Recife, at the Rádio Jornal do Comércio, and the rehearsals with the orchestras of the great maestro Clóvis Pereira, maestro Duda, maestro Guerra Peixe, and others.”\(^{213}\) Here, Recife is used to mark a time in Hermeto’s life more than as an allusion to the city, as it is referencing specifically the rehearsals Hermeto attended at the Rádio Jornal do Comércio, and not the musical culture of Recife at large. If the physical place of composition affects the qualities of the piece Hermeto composed, it is possible that the location that inspired a piece may have a similar effect, particularly if the place is used to evoke a similar style.

Temporal Factors

Temporal measurement is very important to human beings. The *Calendário* was born from Hermeto’s desire to compose at regular intervals over a certain span of time, and his impetus was to celebrate temporal milestones, the birthdays of the world’s population. As Levine points out, the way we conceive of time is often tied to social and cultural influence, but our bodies also naturally regulate themselves biologically based on temporal cycles.\(^{214}\) The confluence of both social and physiological factors influencing our concepts of time suggests that pieces that are similar by some temporal measurement will likely share musical similarities as well.

The first temporal study undertaken tracks changes in the collection over the course of the year. Hermeto himself suggests that seasonal changes may affect his pieces. For the inscription to “#93” from September 23, he writes, “I finished at 10:34 pm, well into spring, in the beginning of heat. Now I think that the pieces will be very hot.”\(^{215}\) While there may be temperature variations throughout the season, in general the expectancy would be for some musical aspects of the piece to differ significantly in the winter and summer months. In addition to Hermeto’s musings, there is evidence that seasons may influence musical preference. Pettijohn, Williams, and Carter found that college students prefer different types of music in winter and fall than they do in spring and summer.\(^{216}\) Helmolz, Siemon, and Robra-Bissantz found that listeners in Germany generally prefer happier and more energetic popular music songs.

\(^{213}\) “Compondo esta música me lembrei muito de quando morava em Recife, na Rádio Jornal do Comércio, e os ensaios com os orquestras dos maestros Clóvis Pereira, maestro Duda, maestro Guerra Peixe, e outros.”

Ibid, 247.

\(^{214}\) Levine, *A Geography of Time*.


\(^{215}\) “Terminei às 22:34 h. bem na primavera, no começo do calor. Agora creio que as músicas vão sair bem quetinhas.”


in the warmer spring and summer months. These preferences may be similar in both listeners and composers, and Hermeto’s music from the summer months may have been written to be performed with more energy. One facet particularly likely to show measurable evidence of this is density. Since the *Calendário* lacks tempo markings, Richard Boukas suggests that performance tempo is frequently calculated according to melodic and harmonic density, as more dense melodies and harmonies make the piece more difficult to play at higher tempi. These pieces that lend themselves to faster performance tempo are more likely to rate higher in energy, though it is impossible to deduce energy from symbolic notation.

The time of day a piece was composed may also have a significant effect on the musical features of the piece. Numerous studies show that human behavior is predictably variable throughout the day. Brabant and Toiviainen showed that listeners are more receptive to perceiving certain emotions in music at different times of the day and perceived some musically conveyed emotions more strongly when tired. Keller *et al* conducted a study which found certain musical features of a raga are predictive of the time of day in which it is intended to be performed. This intended performance time is based on the Hindustani tradition which relies on a system of time associations for certain melodic frameworks to convey the maximum emotional impact of a piece. While these studies deal with perception and performance, respectively, a similar effect may be found in Hermeto’s compositions. This unusual style of daily composition is ideally suited to studying the effects of diurnal variation on musical creativity, as most large-scale works take more than one day to compose and are frequently not done on a fixed schedule.

If other cyclic time keeping measures affect Hermeto’s compositions, it is possible that time of the week would influence these as well. Costa-Lima Neto details how Hermeto’s routine varied slightly during different days of the week between 1981-1993, noting that Friday rehearsals were open to the public, and therefore presented a changed environment when compared with the other days of the week. Similarly, Costa-Lima Neto describes Saturday *feijoadas*, large meals where Hermeto would gather with his family and friends, thus providing another outside stimulant at a regularly timed interval. While there is scant empirically tested evidence on how human behavior and musical preference change on a weekly cyclical structure,

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218 Richard Boukas, Phone Interview with the Author, 12/26/17.


222 Ibid, 145.
the week is a commonly used temporal measure and study of the *Calendário* through this lens may yield significant insights.

Time of Day and Location

While time of day and location have been discussed separately thus far, many researchers acknowledge how the two may interact in affecting human behavior. Bowerman’s study found that ambulatory velocity, one of the most popular measures of pace of life originally used by Bornstein and Bornstein, differed during crowded and uncrowded times of day in the same location.223 This variability means that both time of day and location should be factored into considerations of pace of life.224 Atkinson’s use of the phrase “patterning and persistence” when describing urban sound also suggests that external sound sources are likely to inspire even more similar pieces when the time of composition and place of composition are both similar.225 To test whether the combination of time of day and location of composition produced an effect, pieces written in Jabour were compared with pieces written at similar times in other cities.

Sources of Inspiration

Inspiration’s effect on music is the most thoroughly studied of all the non-musical factors discussed in this chapter. Due to Hermeto’s wide-ranging influences, his unique compositional approach, and the physical format of the music, however, not all of this research is instructive in this analysis. For instance, Chlopicka describes how Penderecki draws on non-musical sources for inspiration in an attempt to create a unique musical language, specifically trying to “transfer” artistic conceptions from the plastic arts.226 Katz discusses how non-musical influences (particularly other artforms like painting and poetry), affect the compositions of three composers, Michael Gandolfi, Shulamit Ran, and Ken Ueno, focusing on large scale structure along with chord choices and instrumentation.227 Each of these composers describes their process differently than Hermeto, as they discuss the inspiration for a large scale form based on their extra-musical model.228 Duchesneau’s book is a wide-reaching history of inspiration and discusses it through the lens of several case studies of notable Western composers from Hildegard von Bingen to Arnold Schoenberg.229 In these studies, composers are focused on aspects of music including timbre and large-scale form that are mostly absent from the *Calendário*. Additionally, these works were much larger in scope than a single lead sheet from the *Calendário*, and, therefore,


224 Bornstein and Bornstein, “The Pace of Life.”

225 Atkinson, “Ecology of Sound.”


228 Ibid, 178-179.

the process of the composer reflecting on that inspiration is necessarily different and spans a longer period of time.

Other methods have been used to study inspiration and the compositional process, though their aims differed slightly from this dissertation. In order to study the creative process, Bahle conducted experiments where he had composers write musical motives based on his instructions, expressing either a specific emotion or a musical depiction of a person, like a juggler. Bahle’s goal was, “To let composers report on his or her manner of working immediately after the emergence of a concrete work.” Pohjannoro conducted a similar study on the compositional process in 2014 by asking a composer a series of questions every two weeks during the composition of a large scale work. Our studies differ, however, in that both Bahle and Pohjannoro are specifically studying the composers’ conscious processes, while my study is interested in musical factors that are the result of both conscious and subconscious processes.

The current study of inspiration is drawn from the composer’s inscriptions at the bottom of his lead sheets. Only certain sources of inspiration were tagged for analysis as a sample. This decision was made for a variety of reasons. First, some sources of inspiration occur only once, and therefore did not constitute a large enough sample size to be examined. Hermeto’s only mention of seamstresses, for instance, was in “#237,” the piece from February 14, which reads, “When I was writing this piece I remembered the seamstresses with their sewing machines on the base of their hands and feet, there were many in my mind, because of this a very simple piece came out. Long live love!” As none of the other inscriptions could be easily grouped with this, it could not be analyzed in a meaningful way. The second main reason is that some pieces did not have an inscription that were readily about anything that would be meaningful in this study. One such piece is “#48,” composed on August 9, whose inscription simply reads, “I finished [composing] with this flat pen.” Another inscription, this time from “#240,” February 17, reads, “One piece in the hand is worth a lot of flying.” This inscription, a translated idiom, again doesn’t fit into a category in any meaningful way.

In order to get a diverse cross section of possible sources of inspiration, the chosen categories represent a wide grouping of Hermeto’s musings. A single piece could be tagged with multiple sources of inspiration, though the mere presence of a word in an inscription was not

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230 Duchesneau, The Voice of the Muse, 33.
233 Bahle’s insistent view of the conscious mind’s role in the creative process being dominant over the subconscious mind’s role fueled a career destroying feud with one of the subjects of his study, Hans Pfitzner, who was a prominent champion of an opposing viewpoint at the time.
234 “Quando estava compondo esta música lembrei das costureiras com aquelas máquinas na base de mãos e dos pés, eram muitas em minha mente, por isso saiu uma música bem singela. Viva o amor!” Pascoal, Calendário, 261.
235 “Terminei com esta caneta chata.”
Ibid, 72.
236 “Vale mais uma partitura na mão do que um monte voando.”
Ibid, 264.
enough to merit its inclusion in one of the groups for this study. A fully detailed table of the criteria for each category as well as the pieces in each category can be found in Appendix B. The only two musical sources of inspiration included on this list were the cavaquinho and flugelhorn, the two instruments mentioned most frequently in the *Calendário*. Hermeto’s family constitutes one of the largest sources of inspiration. While he sometimes mentions separate members of his family, many of the inscriptions mention his family as a singular unit. Another large category was comprised of Hermeto’s mentions of God or religious observance. Other sources include weather related topics, like rain and heat, mental images associated with the pieces, like the moon and flowing water, and activities in which Hermeto took part. Two of the activity-based inspiration sources have a subset/superset relationship. Fifteen of Hermeto’s inscriptions mention him watching or thinking about soccer, mostly about games of his favorite team, Fluminense. They have been included as separate source of inspiration to see if the pieces written about Fluminense differ from the others in the soccer group. Table 3.1 shows the fourteen non-location-based sources of inspiration chosen for this study along with the number of pieces in each group.

<table>
<thead>
<tr>
<th>Source of Inspiration</th>
<th>Number of Pieces in Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality</td>
<td>21</td>
</tr>
<tr>
<td>Soccer</td>
<td>15</td>
</tr>
<tr>
<td>Family</td>
<td>12</td>
</tr>
<tr>
<td>Fluminense</td>
<td>11</td>
</tr>
<tr>
<td>Rain</td>
<td>9</td>
</tr>
<tr>
<td>Party</td>
<td>8</td>
</tr>
<tr>
<td>Birds</td>
<td>6</td>
</tr>
<tr>
<td>Cavaquinho</td>
<td>6</td>
</tr>
<tr>
<td>Water</td>
<td>6</td>
</tr>
<tr>
<td>Concert</td>
<td>5</td>
</tr>
<tr>
<td>Heat</td>
<td>5</td>
</tr>
<tr>
<td>Flowers</td>
<td>5</td>
</tr>
<tr>
<td>Moon</td>
<td>4</td>
</tr>
<tr>
<td>Flugelhorn</td>
<td>3</td>
</tr>
</tbody>
</table>

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237 Hermeto’s mother is the single family member mentioned most often, as she died during his work on this collection.
Duchesneau’s work features a different categorical taxonomy of the sources of inspiration, including inspiration from “above,” “inside,” and “outside.”\textsuperscript{238} The “above” category refers to divine inspiration, while inspiration from “inside” and “outside” comes from the composer’s mind and surroundings, respectively. A study of the diverse sources of inspiration presented in Table 3.1 shows that this taxonomy is too narrow for the present study. Compounding this, Hermeto’s diary like entries focus more on “outside” sources that the other two categories combined. In addition to these difficulties, it is important to consider Huron’s critique of this taxonomy, which is that the category of inspiration from “above” may be subsumed by the categories of inspiration from “inside” and inspiration from “outside,” further limiting the analytical usefulness of this taxonomy.\textsuperscript{239}

Among the most likely sources of inspiration to effect Hermeto’s pieces are his mentions of instruments. The only four instruments he mentions specifically are the flugelhorn, cavaquinho, accordion, and piano. In his inscriptions, these instruments are clearly important to the compositional process. For instance, he mentions that he chose the key for “#249” based on what sounds good on the flugelhorn, and that he wrote some pieces using specific instruments, including “#84” on the cavaquinho. Huron and Berec discuss the subject of idiomaticism and put forth a model of idiomaticism in their study of trumpet repertoire.\textsuperscript{240} As they note, melodic range is especially likely to differ among these pieces.\textsuperscript{241}

**Musical Factors and Methodology**

The encoded corpus contains 355 of the 366 pieces in the *Calendário*, each containing the melody and harmony. The melody for each piece was encoded with the melodies in **kern** representation and the harmonies in a variation of the **jazz** representation developed by Broze and Shanahan.\textsuperscript{242} The only variation on the **jazz notation was the addition of an ampersand (&) to notate the extensions of bass notes in multi-floor chords. Each piece also includes metadata for each of the non-musical factors analyzed. All analyses were run with the Humdrum toolkit.\textsuperscript{243} For this study, seven musical factors were isolated and used as rough proxies for a piece’s

\textsuperscript{238} Duchesneau, *The Voice of the Muse*, 55.
\textsuperscript{241} Ibid, 104.
\textsuperscript{243} Yuri Broze and Daniel Shanahan, “The iRb Corpus in **jazz format,” Ohio State University Cognitive and Systematic Musicology Laboratory, last updated 12/26/12, https://csml.som.ohio-state.edu/home/index.php/iRb_Jazz_Corpus, accessed 1/18/18.
It should be noted that the goal of this study was not genre identification, as due to the hybridization in Hermeto’s music, signifiers of different styles frequently occur within the same piece. Though each of the facets studied could be used to help identify one or more of the styles that influences the Calendário, that merely suggests influence, or, in Jovino’s words, that a certain piece may lend itself to being performed in a certain style. For each piece I analyzed meter, melodic range, melodic entropy, melodic density, harmonic syncopation, the amount of multi-floor chords used, and the amount of complex polychords used.

Meter is among the most important characteristics of style definition, especially in the multitude of Brazilian styles that were originally derived from dances. Hermeto used only five meters throughout the collection; 2/4, 3/4, 4/4, 5/4, and 7/4, with 5/4 and 7/4 being far less common than the other three. Although a few pieces change meter, most do not, and in each of those cases, the first meter was recorded. In all these cases except for “#190,” the changes were generally to infer a change of feel (e.g. 4/4 to 2/4) or because Hermeto created a phrase with a number of beats that did not fit the meter. The group of pieces whose meter changes is a small subset of the Calendário, however, and will not receive further mention.

Range is generally not associated with genre, but it has been associated with style. Greenwalt used wideness of melodic range to highlight the difference between twentieth century symphonic composers in the national Russian style and those who composed more similarly to continental Europeans. While there is no similar differentiation between the Brazilian styles, pieces with an expansive range create a notably different character than those with a more modest melodic range. Melodic entropy measures uncertainty in the succession of melodic pitches. Specifically, the entropy measured here is the entropy of the intervals between pitches, an approach used as a measure of style by Pfleiderer and Abeßer in their analysis of musical style in the Jazzomat corpus. Low entropy signifies a stronger pattern governing the melody, or at least a lesser degree of uncertainty about what is to come. High entropy, on the other hand, suggests that the melody is not based on a set pattern and there is a high degree of uncertainty about what may come next. Entropy would likely vary between the genres discussed in the

246 Jovino Santos Neto, Phone interview with the author, 12/22/17.
247 “#190” changes from 5/4 to 3/4.
249 I should note here that all of the melodies in the collection have a range of over an octave, falling somewhere between 14-36 semitones. Despite the wide range compared to other music, a melody that largely stays within one octave is noticeably different than one that spans three octaves.
250 Pfleiderer and Abeßer, “Statistical Feature Selection,” 86.
251 For more on the melodic entropy in music analysis, see:
previous chapter, as maracatu style melodies based on major triads would have a much lower entropy than a melody with characteristics of a chromatic bossa nova or a piece influenced by the chromatic and improvisational *malandrinho* style of choro. Melodic density measures how many notes are in a melody relative to the length of a piece. This is measured in the unit attacks per beat, or APB. A piece in 4/4 with quarter notes on every beat would have an APB of 1, while a piece that consists wholly of sixteenth notes in 4/4 would have an APB of 4. 252 The density of pieces correlates strongly with meter, as this is another way the Brazilian dance derived styles may be separated. Choro and baiao, especially those written by Hermeto, tend to have very dense melodies dominated by sixteenth notes. Note that both genres are duple meter and notated most frequently in 2/4, leading to this correlation. Styles which rely more heavily on syncopation in the melody, like samba and bossa nova, generally have a medium level of density, while lyrical pieces like waltzes tend to have low densities.

Only one of the harmonic measures, harmonic syncopation, is a measure that correlates with genre to the same degree that melodic measures like density do. Styles built on syncopated rhythms, like samba and jazz, tend to have more syncopated harmonic attacks occurring off the beat, while it is less common to anticipate or delay these harmonies in styles whose rhythmic basis is less syncopated. Harmonic syncopation was calculated by dividing the number of syncopated chords in a piece by the total number of chords and expressed as a percentage. 253 The other two measures, the amount of multi-floor chords and the amount of complex polychords, are measures of harmonic style rather than genre. While multi-floor chords represent a diverse group of harmonies, including polychords, common slash chords, and inversions, they all show a bifurcated thinking in which bass movement and harmonic movement are linked, but not the same, as they are in most North American jazz. While the presence of these chords is analyzed here, further analysis of the multifaceted nature of these harmonies may be found in Chapter 4. The amount of complex polychords are a subset of multi-floor chords, which are defined as chords with a bottom floor of more than one note, and with at least two notes distinct from those found in the top floor. This chord type is dissonant and represents the use of a non-traditional, personal harmonic style.


252 When measuring density, the rare contrapuntal lines in the collection were omitted. This affected pieces like “#80” and “#81” which both had small 2 measure counter lines. Repeats were omitted, but codas were included. Repeats are incredibly variable in performance. For instance, Jovino takes the first repeat in “July 17” three times instead of two, and some other pieces seemingly have a “vamp” section, like “#71” from September 1.

253 2:3 and 4:3 harmonic subdivision was not included in the study of harmonic syncopation for pieces in 3/4. As discussed in Chapter 2, this continuous cross rhythm or the alternation of syncopation is sometimes considered its own meter, and therefore does not fit within the same category. Exceptions were made in pieces like “#71,” in which the beaming in the final section clearly indicates a 3/4 melodic rhythm with a syncopated harmony. This is one area where Hermeto’s notation is fairly consistent, as he usually will notate dotted eighth notes and dotted quarter notes when they are supposed to be a consistent part of the piece.
For melodic measures, pieces can be described as being low, average, or high in any given facet.\textsuperscript{254} The cutoffs for “low” and “high” are equivalent to roughly the mean of the corpus +/- 1 SD. In the case of wide range, narrow range, and high-density pieces, a second further measure was taken to ensure an even distribution between low and high measures. This number is referenced in parentheses in Table 3.3. For the amount of multi-floor chords and harmonic syncopations, only a high range is analyzed because each measure is entirely absent from a subset of the collection. Complex multi-floor chords are scarce enough in the collection that there is no high range cut off. Table 3.2 shows the number of pieces in each meter, as well as the means for each of the statistical musical facets measured. Table 3.3 shows the ranges for determining the cutoffs for high and low measures of each piece.

<table>
<thead>
<tr>
<th>Table 3.2. Composition of Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Pieces</td>
</tr>
<tr>
<td>Pieces in 2/4</td>
</tr>
<tr>
<td>Pieces in 3/4</td>
</tr>
<tr>
<td>Pieces in 4/4</td>
</tr>
<tr>
<td>Pieces in 5/4</td>
</tr>
<tr>
<td>Pieces in 7/4</td>
</tr>
<tr>
<td>Avg Melodic Range</td>
</tr>
<tr>
<td>Avg Melodic Entropy</td>
</tr>
<tr>
<td>Avg Melodic Density</td>
</tr>
<tr>
<td>Pieces of Pieces with Multi-floor Chords/Avg % of Multi-floor Chords\textsuperscript{255}</td>
</tr>
<tr>
<td>N of Pieces with Complex Multi-floor Chords/Avg % of Complex Multi-floor Chords</td>
</tr>
<tr>
<td>N of Pieces with Syncopated Chords/Avg % of Syncopated Chords</td>
</tr>
</tbody>
</table>

\textsuperscript{254} In range, I use the terms narrow and wide instead of low range and high range, as those have an unwanted connotation of tessitura.

\textsuperscript{255} All percentages in the last 3 rows of this table disregard the pieces that do not use the type of harmony being measured.
Table 3.3. High and Low Measures of Each Tested Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Range</td>
<td>n&gt;27 (28)</td>
</tr>
<tr>
<td>Narrow Range</td>
<td>n&lt;19 (18)</td>
</tr>
<tr>
<td>High Entropy</td>
<td>n&gt;0.891</td>
</tr>
<tr>
<td>Low Entropy</td>
<td>n&lt;0.813</td>
</tr>
<tr>
<td>High Melodic Density</td>
<td>n&gt;3 (n&gt;3.3)</td>
</tr>
<tr>
<td>Low Melodic Density</td>
<td>n&lt;1.36</td>
</tr>
<tr>
<td>High Density of Multi-floor Chords</td>
<td>n≥30%</td>
</tr>
<tr>
<td>High Density of Syncopated Harmonies</td>
<td>n≥15%</td>
</tr>
</tbody>
</table>

Results and Discussion

Surprisingly, the study uncovered few trends. Location of composition particularly yielded no significant results. The unevenness of the distribution of location made analysis difficult, yet even studying simpler categories by splitting the data into a home or away binary construct or isolating specific tours failed to highlight any consistent musical similarities between the pieces. Despite the difference in pace of life between Boston and Jabour, the pieces composed in Boston may well have been written in any of the other cities to which Hermeto traveled over the course of that year. It may be that either the cities themselves were not different enough to produce a result. As pace of life is a cultural measure, it may also be that Hermeto simply did not spend enough time in any of his non-home cities for the new city to measurably affect what he wrote. It appears then, that the influence of exterior sounds is a micro, rather than macro event. The presence of a bricklayer or a songbird may have influenced specific pieces, but the presence of sounds that are constant do not seem to affect any low-level musical features. This is also true when grouping pieces by the time of composition and their location.

Despite the fact that physical location did not seem to impact the music Hermeto composed, the group of pieces whose inscriptions referenced Recife (n=7) produced a fairly strong profile. They were all composed in 2/4, with a relatively average range that skewed narrow (18≤n≤25). They also had average to low harmonic entropy (0.75868≤n≤0.85653), including 4 pieces considered low-entropy. 6 of the 7 pieces also had higher than average densities, with 3 of those being above 3.3 ATB high density threshold. Harmonically, five pieces were considered highly syncopated, and there was only one complex multi-floor chord in the entire group, which was the final chord of “#162,” the piece from December 1. That this profile is similar across so many musical facets may be due to either Hermeto using Recife as a form of style marking, or because Hermeto has internalized that city’s culture more than almost any

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256 Because of the left skew of this measure, this is closer to mean + 0.5 SD, but there are only 18 pieces in the collection where n> mean + 1 SD.
other, due to the amount of time he lived there. The two pieces whose inscriptions reference Vienna, “#316” and “#341,” were also very similar across all measures, however, as I stated earlier in the chapter, the reference to Vienna appears to be a clear style marking for a waltz. Interestingly, Hermeto’s pieces that referenced his hometown, Lagoa da Canoa (n=7), were not very similar, as they varied highly across almost all musical facets studied.

Analysis of inspiration via the inscriptions yielded mixed results. For soccer, the moon, heat, and flowers, trends emerged. In pieces about soccer, especially those about Fluminense, the pieces were more likely to have high density melodies, as 4 of the 11 pieces that reference the team had melodic densities above 3.3 APB. Pieces about soccer in general also tended to have higher entropies and narrower ranges, as 5 of the 15 pieces had ranges of 19 semitones or less and 4 pieces had entropies above 0.891. In addition to that, 11 of the 15 pieces were in 2/4, a much higher percentage (73.3%) than the corpus as a whole (48.5%). Pieces about the moon all had melodic densities lower than average, (1.5-1.9 APB) along with at least 13% multi-floor chords (2% away from the cutoff for being considered dense with multi-floor sonorities). Of the 5 pieces whose inscriptions discussed flowers, only 1 was considered low density, but 3 others were infinitesimally above the cutoff, all 3 of which had densities 1.367, .007 ATB over the low-density cutoff of 1.36. The pieces Hermeto wrote when discussing the heat were all in 4/4 with the exception of the “forrozinho” in 2/4, written on June 13, “#356.” These pieces also have higher than average entropies (0.87279-0.90227) and slightly below average melodic densities (1.42-2.04 APB). Density in particular is noteworthy, as pieces with lower densities may be performed at a faster tempo more easily, suggesting that Hermeto’s compositional preferences may mirror listeners’ preferences discussed earlier in this chapter.

This trend, however, did not hold over the course of the summer months, therefore this profile only seems to be common when heat is something actively noticeable to Hermeto.

Categories in which no trends were observed may have been due to my method of overly inclusive taxonimization, especially for the broad categories of family and spirituality. Family included pieces about diverse subjects, from Hermeto’s grandchildren’s birthday parties to the passing of his mother. These pieces, while all falling under the broad category of Hermeto’s family, deal with some of Hermeto’s strongest emotions, both positive and negative. With the benefit of hindsight, the fact that these pieces are as different as they are should not be surprising. Spirituality was similarly broad, as it encompassed prayers, thanks to God, and meditations on the spirit of the holidays. For pieces referencing Hermeto’s spirituality, 3 of the 4 pieces that were high in melodic density have inscriptions that Hermeto was particularly energized while composing. For “#137,” in place of his normal “Viva o som,” Hermeto wishes “A huge sound, always sound.” In another, “#267,” he had just watched a program by a spiritual healer, and for a third, “#245,” he used an exclamation point to praise divine inspiration

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[^257]: 5 of the 7 pieces were in 2/4 and none of them contained any complex multi-floor chords, but over half the collection contained no multi-floor chords and/or was written in 2/4, so these make for unconvincing trends.

[^258]: Three of these pieces, “#75,” “#91,” and “#102,” had both high entropy and a narrow range.

[^259]: Forrozinho is the diminutive form of the forró style, with the diminutive used to denote affection or brevity, or in this case possibly both. Pascoal, Calendário, 378.

[^260]: Pettijohn, Williams, and Carter, "Music for the Seasons."

[^261]: "Viva creatividade que Deus me deu! Um grande som, sempre som!" Pascoal, Calendário, 159.
before writing down what the piece reminded him of.\textsuperscript{262} This, combined with the trends found in the inspirational categories with a smaller sample suggests that a narrower grouping of the sources of inspiration may more accurately help portray how inspiration affects the compositional output. The narrowing of these categories increases the possibilities of erroneous trends due to small sample size, however, it seems that overly broad categories of inspiration are unhelpful in making broad generalizations about musical style.\textsuperscript{263} Other smaller categories, including rain, parties, birds, and water, also failed to produce any noticeable trends that would signal stylistic similarity.\textsuperscript{264}

Of special note was the lack of results for the inscriptions mentioning the flugelhorn and the cavaquinho. Hermeto’s music is notoriously difficult, mitigating some of the surprise that these pieces may not fit a certain technical profile. The pieces for the flugelhorn all had a slightly lower than average density (between 1.95 and 2.05 APB) but the proximity to the mean and the sample size of 3 make this a reasonably weak trend, especially when considering the lack of a trend in any other facet of the music. The most logical thought, then, is that Hermeto may simply prefer a certain timbre or possibly a key for those pieces. There is no way to test for timbral preference, but key may be equally important when considering orchestration of a work. Hermeto does reference the importance of key in the inscription on “#249,” and the works of both Huron and Berec as well as Baker, \textit{et al} affirm the importance of key when describing idiomaticism.\textsuperscript{265} To determine whether key choice played a role, I analyzed the harmonies of

\textsuperscript{262} “Compus esta música pensando muito como o nosso Deus é incrível. Vi e ouvi ontem pela televisão mais uns dois programas de cura do dotour Fritz e seus irmãos espirituais. Estar consciente de que qualquer mundo só é bom para que é bom. Viva a luz!”

“Viva a inspiração divina. Esta música tem muito a ver com coreto e passarinho.”


The fourth high density piece, “#198,” is curiously different from these, with Hermeto writing,

“I wrote this piece asking God and Saint Peter ‘Let rain fall on the paths, let the city and the herd quiet.’”

“Escrevi esta música pedindo a Deus e a São Pedro que façam a chuva cair nos roçados, que deixem a cidade e o rebanho tranqüilos.”

Ibid, 220.

\textsuperscript{263} There is research in emotion that suggests that reasonably broad emotions are conveyed through certain musical parameters. This study, however, dealt with the object of inspiration rather than the emotional reaction it elicited, although emotional reactions are necessarily linked with the objects themselves. For more on emotion conveyed through instrumental music see: Patrick N. Juslin, “Emotional Communication in Musical Performance: A Functionalist Perspective and Some Data,” \textit{Music Perception: An Interdisciplinary Journal} 14 (1997): 383-418.

For more on emotion conveyed through the lead sheet format, see:


\textsuperscript{264} Of the pieces in the water category, the subset that referenced the sea as opposed to rivers (n=3), had above average density (2.86-3 ATB) and were all composed in 2/4. While this lends credence to the idea that overly broad categorization is undesirable, however the subset mentioning rivers (n=3), shared no musical commonalities.

\textsuperscript{265} Pascoal, \textit{Calendário}, 271.
each piece and compared my analyses with Humdrum’s “key” command which assigned a key and level of confidence for each of the melodies.266 Key finding algorithms have inherent difficulties, as probabilistic models of key detection fail to account for many factors that influence the perception of tonality, including harmonic, rhythmic, and structural aspects of the music.267 While these factors limit the usefulness of this algorithm across the corpus, the combined eight pieces written with these two instruments in mind is a small enough sample that if specific harmonies or keys were intended, it should be fairly evident. Despite the promise of finding a unifying key area for either set of these pieces, neither the Humdrum analysis nor the manual analysis found any significant similarities. Complicating the matter for the key finding algorithm was the use of harmonic vamps in “#89,” from September 19, and a piece without a clear key center in “#190,” from December 29.268 For these pieces, it appears that timbral preference was the only overriding thought in Hermeto’s inscriptions.

Analysis of temporal factors uncovered few results. As days, weeks, and years are all cyclical measures of time, one would expect any patterns found to be cyclical, although this does not appear to be the case. Meter, specifically the use of odd meter, produced the strongest results on a year-long and day-long scale.269 Of the 23 odd meter lead sheets, none were composed before “#190” on December 29, after which point, Hermeto wrote a handful per month. Similarly, he composed all but 6 of these works between 1-3:30 pm, including 9 of the 11 pieces written in 5/4. While Hermeto composed roughly a quarter of the pieces in the collection during that two-and-a-half-hour span, odd meter pieces accounted for 18.7% of those, compared with 6.5% of the collection overall.270 In addition to metric choice, there appears to be a small pattern in entropy over the course of the night. Between 7:00-10:00 pm, 8 of the 28 total pieces composed were low-entropy pieces, compared with only a single high-entropy piece. The

Huron and Berec, “Characterizing Idiomatic Organization.”
While the “key” command does not account for modes other than the major/minor binary, it performed well on a sample of pieces from the Calendário that are clearly in the Dorian mode, suggesting Hermeto’s unusual modal choices would be manageable.
268 D minor has a weak claim as tonic, as the piece starts in D minor, uses harmonies commonly found in that key in mm. 1-5, and has a turnaround that leads back to it via a ii-V7/sus in mm. 19, however, the amount of complex multi-floor chords and the distant chromatic movements make this tenuous.
269 Odd meter is defined here as either 5/4 or 7/4.
270 Hermeto also wrote “#219” for piano in 5/4 and “#342” in 7/4, as well “#213” in 5/4 for piano and another instrument. All of these pieces are in the second half of the collection with the other odd meter works, but none of them were written between 1:00-3:30. These pieces were written at 10:46 pm, 7:40 pm, and 4:39 pm, respectively.
entropy measures were more even until midnight, (9 high-entropy, 7 low-entropy out of 40 total pieces), before there was an uptick in the frequency of the high entropy pieces between 12:00-2:00 am (6 high-entropy and no low-entropy pieces out of 18 total). Outside of this seven-hour window, however, entropy appears to have been relatively random over the course of the rest of the day. There were also slight trends in the collection when studying it across the full year. 21 of the 34 pieces with melodic ranges of 18 semitones or less were written in the first 100 pieces, between June 23 and October 1. Pieces with high entropy were less likely to be written as the year wore on. 22 high-entropy pieces were written between June 23 and October 2, with only 8 written between February 1 and June 23. When studying week long trends, Hermeto produced pieces with a wide melodic range roughly half as often on Friday, Saturday, and Sunday as he did from Monday to Thursday. This data supports my own observations about Hermeto’s harmonic style, as his pieces from the second half of the collection use the dense C67+9 voicing significantly more frequently than in the first half of the collection, especially when moving in parallel. These trends show changing of compositional styles when the collection is viewed temporally, yet the sharpness of the change in trends remains vexing.

Overall, it appears that non-musical factors have some impact on low-level features indicative of style found in the Calendário, though not all non-musical features seem to have any measurable large-scale effect, nor are all musical parameters affected. Despite the lack of overall trends in the location of composition, any future studies of this type with less skewed data sets may find different results. It also appears that some sources of inspiration may affect low-level musical factors in a set of a composer’s compositions, though which factors did and did not display trends in the Calendário displayed no clear reasoning. Temporal factors may also influence musical facets of a composer’s work, however it is important to note the distinctive compositional style of Hermeto’s work here, as most other composers are less likely to complete an entire piece over such a short time span. The trend of sudden, sharp changes in the musical parameters studied in this chapter is worthy of further investigation, especially when considering the expected cyclical patterns.
Chapter 4. Hermeto’s Conception of Harmony

This chapter discusses Hermeto’s overall approach to harmony and his conception of harmony as fundamentally triadic, yet non-linear and non-hierarchical. This is described in various sources by Costa-Lima Neto, Zattera, Jovino, and Araújo and Borem, yet relation of Hermeto’s conception of pitch space and harmonic structure to the existing theoretical literature is scarce.\(^{271}\) The chapter opens with a discussion of Hermeto’s conception of pitch space as described by these sources and will include a brief discussion of some of the methods he uses in triadic combination. Hermeto’s harmonic conception will then be compared to different harmonic concepts that are related to his own, and which have been or could be invoked to discuss Hermeto’s harmonies. First Hermeto’s harmonic conception compared to Schoenberg’s writings on monotonality and neo-Riemannian literature. Monotonality is particularly important due to the invocation of Schoenbergian analytical concepts in the literature about Hermeto’s music.\(^ {272}\) Despite previous work on Hermeto’s music invoking this concept, a comparison of Schoenberg’s method of mapping pitch space, the “Chart of the Regions,” and a mapping of Hermeto’s Lydian-based triadic combination shows fundamental differences in measurements of tonal distance between the two systems. The other major problem in reconciling Hermeto’s music with monotonality is that monotonality is only one hierarchical method of pitch organization while Hermeto’s music uses multiple methods of tonal organization. Viewing Hermeto’s harmonies through the lens of neo-Riemannian theory allows us to understand Hermeto’s music relationally instead of hierarchically, yet the analytical concern with parsimonious voice leading is problematic due to Hermeto’s use of lead sheet notation as opposed to written notation. Adopting a polychordal view of Hermeto’s harmonies allows many of the complex high cardinality voicings found in the *Calendário* to be viewed in relation to each other as opposed to being viewed through a tonal lens, yet studying these transformational properties show the limitations of this approach when dealing with Hermeto’s tetrachordal and pentachordal voicings. The chapter will end with a comparison of Hermeto’s conception of harmony to two related jazz harmonic concepts. Due to the influence of the Lydian and Lydian dominant modes in this music, Hermeto’s conception of harmony will be compared to George

Jovino Santos Neto, Phone interview with the author, 12/22/17.
Russell’s *Lydian Chromatic Concept*. Finally, for an example of another explicitly polychordal sense of jazz harmony, I will examine Dave Brubeck’s use of polychordality that Brubeck learned from studying with Darius Milhaud. By situating Hermeto’s harmonic conception within the existing theoretical literature, we can better understand Hermeto’s unique style.

**Harmony in Hermeto’s Music**

While I have thus far eschewed the traditional discussion of Hermeto’s biography, as it has been covered more completely elsewhere, it is at this point necessary to discuss his earliest exposure to music since all his collaborators agree that Hermeto’s early childhood was the source of his idiosyncratic harmonies. When Hermeto was young, he did not play outside in the sun due to his albinism. He therefore searched for other pursuits and became intensely fascinated by sound. As a young child he would take scraps of iron from his grandfather’s shop and strike them, attempting to hear the harmonics generated by each piece or play small flutes he would carve for himself. The first pitched instrument Hermeto formally learned was the *oito baixos*, or the eight-bass accordion, also colloquially known as *a pé-de-bode*, or “goat’s hoof,” on which he performed at parties. This accordion does not have a keyboard, but rather rows of buttons that sound the notes. The young Hermeto experimented on this accordion combining triads with unrelated notes in his first experiments with polychordality.

Before this discussion of Hermeto’s style continues, it is important to note that Hermeto’s harmonies are as variable as any other facet of his music. While a good deal of his music is non-functional, other pieces use common-practice tonality, standard jazz harmony, and the blues, all of which he learned during his time performing with the *regionais*. While this section focuses mostly on Hermeto’s most dissonant and idiosyncratic harmonies, traditional chords, especially in highly extended tertian voicings, that are used in these genres may also be derived through the same method described below.

In addition to triadic combination and influence from various popular genres of the twentieth century, the third important portion of Hermeto’s harmonic language is found sounds, particularly those in nature. Connell notes the influence of natural sounds on Hermeto’s music,

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273 The Lydian dominant mode is an important melodic mode from northeastern Brazil that features both an augmented fourth and a minor seventh. George Russell, *The Lydian Chromatic Concept of Tonal Organization*, (Cambridge, MA: Concept Publishing, 2001).


277 Borem and Araújo, “Life Experience.” He also performed on the *pandeiro*, as he and his brother would switch instruments.


something that is far more evident in his recorded music than in the *Calendário*, due to the inability of symbolic notation to capture the natural sounds Hermeto uses. As Hermeto describes, “Music is everywhere, everything is music. A slamming door, a knife spreading butter on a cookie, a blow on the table. That doesn’t mean that you just have to make a noise to make music. Being a musician is knowing how to use those noises.” Hermeto’s records feature for hammocks, human speech, pigs, and dogs, though this is the farthest that this dissertation will delve into sounds of that type.

A common refrain among experts in Hermeto’s music is that it is fundamentally triadic. How such dissonant music can be triadic is not immediately intuitive. A quick glance at one of the composer’s lead sheets shows chords that have numerous upper extensions, including some that are meant to be played in the same octave as the third and the fifth. Compounding the difficulty of construing a chord labelled $A^{67+9}$ by Hermeto as “triadic” is the frequent use of what Hermeto refers to as “multi-floor chords,” such as those found in the lead sheet to “#26” from July 18 in the *Calendário*. The term “multi-floor” is a method of describing what is generally referred to as “slash chords” in English and comes from a direct translation of the Portuguese *andare*, which is how Hermeto refers to the constituent harmonies on either side of the slash. The lead sheet of “#26” is shown in Figure 4.1 with the multi-floor chords circled.

There are four multi-floor sonorities in Figure 4.1. The first two are in the second measure, $A^{b458}/F^{5+7}$ and $D^{b6}/E^{b}$. Later, in the final chord of mm. 10, Hermeto uses an $A^{b458}/E^{7}$ to harmonize a $C^{#}$ in the melody. Hermeto then ends the piece on $C^{#7}+A^{6}$. For ease of analysis, all these harmonies are presented voiced out in a grand staff in Figure 4.2. Paradoxically, while these chords are notated in an unusual manner, they are mostly straightforward to analyze, regardless of whether they are analyzed as extended tertian sonorities or as chordal combinations. Before this analysis, there are three caveats to remember about the term “triadic combination.” The first is that the triads being combined may be either whole or partial. Partial triads are generally discussed only in notated multi-floor chords, however, and generally voiced in the bass register. Triads may also be altered, though alterations to the fifth of the chord would usually generate another triad. The alteration of a triad’s third, however, generally yields either a sus2 chord or a sus4 chord, both of which appear frequently in the collection, and for the

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283 Boukas, Jovino, and Costa-Lima Neto all mention this, and it was the largest single topic of discussion during my phone interview with Jovino.
284 A major chord with a raised fifth and a minor chord with a lowered fifth produce an augmented and diminished triad, respectively. A minor triad with a raised fifth yields a first inversion major triad. The only case in which a full altered triad is truly no longer a triad is a major chord with a lowered fifth.
purposes of this discussion fall into the loose definition of a triad.\textsuperscript{285} The final caveat is that in this instance, seventh chords may be used as constituent chordal parts. While this clearly stretches the definition of “triadic” combination passed its breaking point, there is a justification for this final caveat that is personal to Hermeto’s music. The oito baixos that Hermeto played is a diatonic instrument that can voice dominant seventh chords other than the tonic V\(^7\), though only in three note voicings without the secondary leading tone, so the combination of these chords with unrelated triads fits the narrative of the practice’s origin. Also, since most of these chords are limited to six pitch classes or less, the need to invoke a full seventh chord and a full triad, or more exotically two full seventh chords, is unnecessary.

\textsuperscript{285} “Sus\textsuperscript{2}” chords are generated by lowering the third of a minor chord a half step (C-D-G) and “sus\textsuperscript{4}” chords are generated by raising the third of a major chord a half step (C-F-G). The term “sus” indicates that the chordal third has been replaced with an adjacent note, forming a suspension or retardation that may or may not resolve.
For the purposes of comparison, each chord shown in Figure 4.2 will be analyzed both polychordally and as a tertian sonority. The first chord, A♭₄₅₈/F⁵+⁷ is an A♭sus₄ chord combined with an altered F⁷. The voicing of F⁷ shown in the left hand is a fairly common one in Hermeto’s oeuvre, as that is the voicing for a V⁷/vi chord on the oito baixos.²⁸⁶ Analyzed as a tertian sonority, it is a D₃majadd₂ in first inversion, a common chord found in gospel music.²⁸⁷ The second chord shown in Figure 4.2 aggregates to a E♭⁷sus₄b⁹ when analyzed as a tertian harmony, but when analyzed as a polychord, it can be analyzed in multiple ways, which is frequently the case in Hermeto’s music.²⁸⁸ This chord could be construed as an incomplete E♭ chord (missing its third) with a D♭, E♭sus₄ combined with B♭, or E♭⁷ combined with F♭₅, with none of these options being any more correct than another. The chord with which Hermeto ends the piece, C⁹⁷+/A⁶, is a first inversion F₉minmaj♯₁₁, or polychordally, F♭ in first inversion combined with E♭⁹A. The third chord shown above illustrates two important points. The first of which is that orthography is not important in the analysis of Hermeto’s music. As he was a self-taught musician, his harmonies are based on intuition and experimentation more than they are on any theoretical system.²⁸⁹ Secondly, while it is not difficult to analyze this chord as a polychord, where it is E⁷ (the A♭ acts as an enharmonic chordal third) combined with A♭sus₄, it is very difficult to analyze as a large tertian harmony. The closest analyzable structure it could be construed as would be E♭¹³ with the major seventh added into the dominant chord, a voicing which would be unacceptable in most settings due to the muddying of the chordal quality created by the presence of both qualities of chordal seventh. This shows that while some chords can be construed as either tertian structures or polychords, Hermeto’s systems of chordal notation and chordal combination allow for the notation and creation of the unusual harmonies to which he is so frequently linked more than traditional lead sheet notation and tertian chord building. To further illustrate the point, Jovino uses the example of one of Hermeto’s dissonant, yet undeniably triadic harmonies, E/D/C.²⁹⁰ The first two chords are both full major triads, while C acts as a solitary bass note. This sonority forms the aggregate of the ascending form of the A melodic minor scale, yet it does not sound like A minor. From a tertian perspective it is nonsensical, best named Cmaj¹³♯₅♯₁₁. It is, however, a perfect example of this concept, since triads are voiced together and keep a triadic sound, even if it is one completely divorced from tonality.

While the multi-floor chords are the most readily analyzable as polychords, the single-floor sonorities can also be derived from triadic combination. One method for this is combining triadic parts to create chordal clusters within the voicing. To demonstrate this, the A♭₄ found in the beginning of mm. 4 in “#26” is voiced out on a grand staff in Figure 4.3. To show that the same principles apply to Hermeto’s major chords, a B♭⁶⁷⁹ is presented alongside it. In both of these sonorities, there is a cluster of three consecutive notes separated by major seconds in the middle of the chord. When attempting to analyze these chords bi-triadically, it is impossible to do so without separating the members of the cluster into multiple constituent triads. The two voicings presented in Figure 4.3 contain interesting properties that make them suitable for an

²⁸⁶ The oito baixos, being a diatonic instrument, cannot voice altered dominant chords. Diagrams for chordal voicings can be found at http://leandron.github.io/accordion-map/diatonic-map/diatonic21.html#.
²⁸⁷ When Jovino described Hermeto’s method of polychordality, he used an example of this type, noting that Hermeto used it frequently. Jovino, interview with the author, 12/22/17.
²⁸⁸ Zattera, “Hybridism and Liminality,” 149.
²⁸⁹ Borem and Araújo, “Life Experience.”
²⁹⁰ Jovino, interview with the author, 12/22/17.
adapted form of neo-Riemannian analysis, which will be discussed more later in this chapter and in Chapter 5.

Constituent triads

\[
\begin{align*}
A^# &- 479 \\
A^# &- \quad G^\# \Delta \\
B^b67+9 &- \quad F^\Delta
\end{align*}
\]

Figure 4.3. Major and Minor Hexachordal Voicings Demonstrating Polytriadic Cluster Construction

Another, more dissonant example of this technique comes from Hermeto’s piece “Ferragens,” the first measure of which is shown in Figure 4.4. In this piece, Hermeto tries to reproduce the inharmonic sounds of striking iron in his harmonies. The first chord combines B^b with F^\#, and the second chord combines E^\#A with B^b. The fourth chord of the measure is the most complex, and is analyzed by Costa-Lima Neto as F^9 combined with A^7. The polychords in this section are distinct from those shown in Figures 4.2 and 4.3, in that they are not meant to resolve, decrease in tension, or fit into any tonal scheme. The dissonance of this section juxtaposed against the polychords of the Calendário shows the range of harmonic possibilities created by this method.

While Hermeto uses triadic combination in his compositions, his improvisational style uses a particularly interesting form of it. Hermeto introduced Jovino to this method when he was in a rehearsal early in his tenure with Hermeto’s group. On the piece “Campinas,” Hermeto sketched out a method of triadic improvisation. Above the chord symbol “Fmaj7,” Hermeto wrote out the five consonant triads related to that chord via its corresponding Lydian collection, E^-, A^-, D^-, G^\#A, and C^\#. As Jovino described it, these chords could all be used as improvisational materials over the written harmony in the piece. These new chords could then be used to reach the chords related to them via their Lydian mode. Figure 4.5 shows a mapping of this process taken to exhaust all 24 consonant triads. Due to the constrictions of space, each level of connection will only be shown through a single branch, and the earliest available place to fit novel triads into the system will be shown.

291 Costa-Lima Neto, Experimental Music, 64.
292 Ibid, 64.
While this representation seems linear due to the limitations of space, it is intended to decrease the linearity of an improvisor’s solo. While $F^{\text{maj}}$ was the starting point in “Campinas,” and was used as a consonant starting point, that need not be the case. When using chords related to a bass in the same diatonic linear system, the resolution may be quick and relatively indistinguishable from other tonal music, yet more exotic combinations are possible. Since Hermeto’s minor chords are based on the Dorian collection, Figure 4.6 shows a map of connectivity derived from the same process as the Lydian map shown in Figure 4.5. While Jovino never explicitly spoke of an analogous process in minor, it stands to reason that one is at least theoretically possible if not used in practice. These mappings display an interesting concept of tonal distance, as by the first level after the diatonically related triads, there is already at least one chord with an avoid tone that would confuse the chordal quality. By the second layer removed from the diatonic chords, the tritone complement is already related back to the starting chord, perhaps a reason that extended strings of this concept rarely play out in practice. Another interesting feature of these relations likely not intended by Hermeto is that the final two chords to be accessed via this connection are chords to which the initial chord would move directly.

Chords in parentheses denote triads that were introduced at a level closer to the initial sonority.

Avoid tones are notes that are dissonant against a chord. Levine uses the 4th/11th of major and dominant chords as an example, but major thirds, major sevenths, and minor sixths over a minor seventh chord and minor sevenths over major seventh chord can be considered avoid tones as well if not resolved properly. The half step above the root is also an avoid tone for both major and minor seventh chords.

The conception of these triadic relations as non-linear is important, as they form more of a network than a line of possibilities. Jovino calls this the “arboreal concept,” likening the triadic possibilities to branches of a tree that sprout omnidirectionally. All of the branches are part of the same organism and are connected, but it is still possible to speak of more and less distant possibilities and relations. Two triads may be joined through an intermediary triad, as a monkey might use an intermediary branch to swing from one part of a tree to another. The metaphor of music as a plant has been invoked frequently by theorists in the past, most notably Heinrich Schenker and Arnold Schoenberg. The arboreal concept, however, is different from past metaphors in both content and application. Schoenberg and Schenker both compare plants to specific pieces, so that each piece would be its own distinct plant. They also spoke of this metaphor referring to musical coherence within that given piece. This coherence is only tangentially related to the arboreal concept, which is an abstract metaphor for harmonic relations, and therefore not specific to any one piece. Either major or minor chords may be used as a starting point for the process of triadic combination, but major chords are more frequently used in large scale combinations, such as a melodic triad being played over a harmony to which it is related via the Lydian collection, which itself occurs over an unrelated bass note. Figure 4.7, which show mm. 1-8 of “#11” provides an example of these triadic relations in one of the Hermeto’s compositions from the collection.

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295 Jovino, interview with the author, 12/22/17.
297 Jovino, interview with the author, 12/22/17.
There is a pedal on E from mm. 1-6, over which Hermeto uses five different harmonic triads. The first chord, B\(^{4568}/E\), is an E\(^{2}\#2\), and melodically, mm. 1 uses only the pitches B and E, both members of the tonic triad. In mm. 3, the tonic chord returns, and the melody consists of G\(^{#}\) and B, again members of the triad. In mm. 4, the melody notes A and F\(^{#}\) again belong to the triadic harmony (now D\(^{2}\#2\)). With the appearance of G\(^{#}\) at the end of mm. 4, the melody swings up a step back to the tonic (or the Lydian major II of the previous D\(^{2}\)), E\(^{#}\). After one beat, B, the 5th of E\(^{#}\), resolves down a half step to \(^{#4}\) of E\(^{#}\), A\(^{#}\), which then initiates an arpeggio that takes up the second half of mm. 5 on the Lydian II of E\(^{#}\), F\(^{#}\), which is harmonized consonantly above the E pedal. While all the aforementioned chords occurring over the pedal are triadically consonant with the melody, that need not be the case. In mm. 2 and 6, the melody notes imply a Lydian related triad to the harmony presented over the pedal. In mm. 2, after the resolution of the accentuated passing tone on beat 1, the melody implies either F\(^{#}\) or A\(^{#}\), both of which are related to the D\(^{2}\) harmony. In mm. 6, the C\(^{#}\)\(^{2}\)\(^{#}\) harmony on the first beat harmonizes C and E\(^{b}\), which can be construed enharmonically as part of either B\(^{#}\) or G\(^{#}\)\(^{2}\) triads that are, like mm. 2, Lydian related triads to the harmony. When the bass moves away from the pedal in mm. 7-8, Hermeto still uses the multi-floor chords to harmonize the chromatically descending bass notes with their II and iii chords in a sequence, always outlining the triads of those chords in the melody.

The triadic combinatory process described above is only one method of a larger concept called “bending,” which Costa-Lima Neto describes as making a consonant harmony dissonant with the use of chromatic notes. This term is analogous to the concept of playing “outside the changes” in American jazz, yet Costa-Lima Neto’s examples infer that in bending, there is an interplay of playing “in” and “out,” that the tension created by the bending is generally resolved, or at least interspersed with consonance, which is not always the case among American jazz players who go outside of the changes. As Jovino describes it, “in this process, you have elasticity of the chords, where you can take an absolutely ‘square’, normal chord & you [imitates the sound of something tearing] open it (...) You can prolong this chord until it becomes

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298 These “triads” derived from the voicing B\(^{4568}\) and its various transpositions are actually major triads with a added 2 for color. They function in the same way as triads with the added second acting mostly as a color tone in this case. This chord will be addressed in more depth later in this chapter.

299 I use the term tonic here in its traditional sense, as “#11,” like many of the pieces in the Calendário, has a chord that functions as its most stable harmony throughout. This piece even features a true cadence, albeit an IAC, that resolves in mm. 14, the penultimate bar of the form.

300 I am excluding the C\(^{#}\) suspension on beat 1 of the measure.

absolutely atonal, and return.” Costa-Lima Neto illustrates this through his critique of Prandini’s analysis of Hermeto’s solo on the piece “Ilha das Gaivotas.” The ostinato figure over which Hermeto solos that is discussed by Costa-Lima Neto and Prandini is presented in Figure 4.8.

Costa-Lima Neto criticized Prandini’s approach saying that, “Prandini’s analysis is restricted to the models of functional harmony and their intersections with the conception of melody as a development of the harmonic bases, a perspective adopted by the American schools of jazz.” For Costa-Lima Neto, Prandini’s most egregious sin here was the omission of a discussion of how Hermeto’s solo interacts with the harmony in the second measure of Figure 4.8. The chord voiced there, $A^{257+/F^6}$ in Hermeto’s notation, is extremely dissonant, and the interplay between consonance and dissonance is what Costa-Lima Neto finds to be the most interesting analytical aspect of this solo. While $A^{257+/F^6}$ is created by neighbor motion in the bass of the ostinato and does not assert itself by occurring outside of that context, that neighbor motion is what creates the most salient aspect of the harmony. In the Calendário, surface level events such as these can be the most interesting, as the brevity of the pieces allows for focus on individual details.

Of all Hermeto’s voicings found throughout the Calendário, there is one that deserves special attention, $C^{4568}$, and its related voicing $C^{458}$. These chords occur frequently and prominently, and served as the compositional basis for “#61,” written on August 22. 4568 chords are major/“add 2” chords in second inversion, and their method of tonic obfuscation encapsulates a number of the concepts discussed thus far. Hermeto’s usage of clusters frequently hide a triadic tonic, as they do in this case and in the case of the major and minor hexachords shown in Figure 4.4. Regardless of the addition of the chordal second into the voicing, the fact that they are in second inversion is also noteworthy. Jovino describes Hermeto’s frequent use of second inversion chords as a method of achieving balance in the voicing. When the tonic is on the edges of the voicing, the tonal gravity becomes too strong and the complexity

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303 Ibid, 5.
304 Ibid, 5.
305 Borem and Araújo, “Life Experience.”
306 As mentioned in an earlier note, the added second is a color note, therefore we would not speak of three inversions in which the added second is given the same stature as the third and fifth.
307 Boukas does show a voicing of the $C^{479}$ chord that in which the cluster has been broken up by dropping the fifth down an octave. This is an improvised choice made in performance, however, as the chord still has the inherent capability to form the cluster if the performer so chooses. Boukas, “Hermeto Pascoal,” Part 5, 1:31.
and beauty of the chord can be lost. By hiding the tonic in the middle of a voicing, the chord can maintain balance without one register overpowering another.308

Hermeto’s conception of harmony that began with experimenting triadic combination on the oito baixos manifests itself in his music in a variety of ways. The use of the Lydian mode to generate closely related triads, the use of triadic combination to construct novel, complex harmonies, and the concept of triads as being fundamentally related to each other via the arboreal concept are all related to other harmonic conceptions, yet the way they combine in Hermeto’s music is unique. The remainder of this chapter is dedicated to situating Hermeto’s harmonic concepts within the broader scope of music theory by comparing them to similar, yet distinct concepts.

Comparisons to Existing Theoretical Traditions

Schoenberg

The invocation of Schoenbergian analytical methods in the music of Hermeto Pascoal is specifically focused around this collection, as both Araújo and Borem and Zago use it in their analyses of pieces from the Calendário. Araújo and Borem’s article is just as much about Schoenberg’s theories as it is an article that uses Schoenberg’s theories to discuss Hermeto’s music, as the authors acknowledge that their goal is to present an alternative viewpoint to the traditional method of discussing Brazilian popular music, which to that point had been derived from the concepts of North American jazz musician and educator David Baker.309 The appeal of Schoenberg’s theoretical writings is twofold, as it gives a method of explaining the distant harmonies used by Hermeto as tonal and highlights Hermeto’s motivic usage through the application of Schoenberg’s theory of developing variation, something which will be discussed further in the next chapter. This section compares Schoenberg’s mappings of pitch space and tonal distance with the concept of Lydian triadic connectivity shown in Figure 4.5. After this comparison, I engage with one of Araújo and Borem’s analyses to show the applicability and practical difficulties of engaging with this concept in the Calendário.

Schoenberg’s concept of monotonality, in which there is only one tonality within a piece no matter how distant the harmonic movements, is one of the facets of Schoenberg’s theory that attracted Araújo and Borem to the concept as a way of explaining Hermeto’s harmonic style in the Calendário.310 Schoenberg construes all digressions from the tonic as fundamentally in the key, though they can be removed from its center at differing distances. All harmonic moves are either centrifugal, which move away from the tonic, or centripetal, which return to the tonic. The “Chart of the Regions” was used to describe the relationship of different chords or harmonic regions to a piece’s tonic. The Chart of the Regions is presented below in Figure 4.9.311 The main similarity between Schoenberg’s concept and Hermeto’s is that the Chart of the Regions is an inherently hierarchical mapping, as Schoenberg uses it to show the relationship of all possible

308 Jovino, interview with the author, 12/22/17.
309 Araújo and Borem, “A Harmonia Tonal,” 36. The authors admit to getting inspiration from another North American jazz musician, Jack Reilly, who used Schoenbergian theory as the basis for his study of the music of Bill Evans.
310 Ibid, 40.
tonal relations back to the tonic, showing a single unified structure of all consonant harmonies.\footnote{Neff, “Schoenberg as Theorist: Three Forms of Presentation,” 57-58.}

For anyone endeavoring to describe the music in the \textit{Calendário} as “tonal,” they can view the Chart of the Regions as a tonal map, plotting the centrifugal and centripetal motion on the chart.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart_of_regions.png}
\caption{Schoenberg’s Chart of the Regions}
\end{figure}

Comparing the Chart of the Regions with the tree of Lydian triadic connectivity in Figure 4.5 highlights a few differences, which arise mainly with their different goals. The four “direct and close” regions to the tonic, bracketed with a cross, show the regions which are easily and frequently tonicized in tonal music. The minor tonic, one of the regions bracketed in Figure 4.9, is not closely related in Figure 4.5, because it would muddy the chordal quality of the tonic major seventh chord, as Figure 4.5 depicts an arrangement of triads intended to be used vertically rather than horizontally. The other three “direct and close” regions represent triads that either can be derived from the tonic Lydian or can generate that triad from their own tonic Lydian collection, but some of the triads shown in the first level of Lydian connectivity, including the Lydian II (represented in the Chart of the Regions as S/T) and the Lydian vii (represented as smS/T, the submediant of the supertonic) are far flung from tonic.

Despite the difference of goals between the two structures, in terms of measuring harmonic distance in a diachronic sense, the Chart of the Regions is easily applicable to the majority of the \textit{Calendário}. The fusing of Figures 4.5 and 4.9 might provide the most holistic view of pitch space from the perspective of tonal harmonic progressions. In this view, the Chart of the Regions forms a horizontal basis for chord progressions, with a tree of Lydian triadic connectivity built upon each region demonstrating vertical pitch proximity for each harmony. This would unify these views into one holistic chart. As Jovino suggests, models of pitch space...
for Hermeto cannot be two-dimensional, and combining these visual representations could reconcile the differences in function between the two concepts.\footnote{Jovino Santos Neto, Phone Interview with the Author, 12/22/17.}

In their analysis of “#48,” which is referred to by its date of composition as “9 de Agosto,” in both the Araújo and Borem’s article and on Araújo’s album, the authors attempt to reconcile the primarily aural and oral tradition of Brazilian popular music with Schoenberg’s concepts.\footnote{Araújo and Borem, “A Harmonia Tonal.”} They do this primarily through tracing the voice leading of the chords, focusing on mm. 7-16, where the centrifugal motion of the B\textsubscript{b}7 chord takes the harmony to the Neapolitan region and must work its way centripetally back towards a the tonic.\footnote{Part of Schoenberg’s theory is that he discusses centrifugal and centripetal tendencies not only of harmonies and harmonic regions, but also of tones. The discussion of this part of Schoenberg’s theory has been omitted from this section, because Hermeto’s concepts are focused on harmony and not on individual pitches.} A lead sheet for the piece is presented in Figure 4.10. Their analysis contains one major difficulty, where they describe the dominant region in mm. 15-16 and the Neapolitan chord in mm. 17 before the repeat sign leads back to the tonic at mm. 1. A method of augmenting this analysis could involve the use of jazz chord substitutions as a way of describing the centripetal tendencies of this section. Though Araújo and Borem label mm. 17 the Neapolitan chord, it could be construed as part of the dominant region, with E\textsubscript{b}maj\textsubscript{7} labeled as a chromatically altered tritone substitute. This modification shows the piece working even better as an example of monotonal writing than they present it.\footnote{While chromatic alteration of the chordal seventh does take away the core part of the voice leading that drives that substitution (the invariance of the thirds and sevenths between a V\textsuperscript{7} chord and its tritone substitute), the b\textsuperscript{II} chord here is taking the syntactical place of the V chord at the end of the form, and the presence of a dominant sus\textsuperscript{4} chord, with the tonic in the place of the leading tone in mm. 7, lend credence to this analysis. They do address the use of tritone substitutions in their analysis of “14 de Novembro,” Araújo and Borem, “A Harmonia Tonal,” 66.}

Taking the tonic resolution in mm. 17 as an affirmation of tonic presents another, slightly less convincing reading, in which the E\textsubscript{b}maj7 represents a return to the tonic region, and the bass affirmation of D at the top of the form is simply delayed by an incomplete neighbor tone. This reading is problematized by the presence of the B\textsuperscript{bmaj7} and G\textsuperscript{11} chords in mm. 16, which expand the E\textsubscript{bmaj7} chord through a bass arpeggio. A way of reconciling this problematic E\textsubscript{bmaj7} chord with the resolution to D would be through the invocation of the Schoenbergian concept of a tonal problem. As Neff explains, a tonal problem is created through the centrifugal motion away from the tonic, which must then be counteracted by motivic transformations that bring the piece back to tonic for its close.\footnote{Neff, “Schoenberg as Theorist,” 59-60.} The variability of the chords built on B\textsubscript{b} serve either as an expansion of the tonic D’ as in mm. 2, as a predominant chord in D’ as in mm. 6 where it leads to the V chord in mm. 7, or as a dominant functioning chord for E\textsubscript{b}, as in mm. 8. The B\textsubscript{b11} in mm. 13 seemingly fits with neither key, reaching the height of its tonal confusion, before ultimately B\textsubscript{bmaj7} in mm. 16 finds its home in the dominant region along with A\textsubscript{maj7}, as the dual presumptive tonics arrive together in mm. 17, with D assuming primacy melodically and E\textsubscript{bmaj7} supporting it harmonically.
This analysis in which the resolution to $E^{\text{bmaj7}}$ represents a return to a D tonic highlights many of the difficulties with applying Schoenberg’s theories to Hermeto’s music. As Araújo and Borem recognize, this method of analysis is ill-suited to pieces with double-tonic complexes, making the proposed resolution to the tonic in mm. 17 seem unconvincing.\footnote{Ibid, 67.} Boukas also suggests that the resolution in “#48,” one in which a diatonic melody is harmonized by an chromatic harmony is a stylistic hallmark of Hermeto’s.\footnote{Richard Boukas, Phone interview with the author, 12/26/17.} Such a stylistic tendency would create a problem reconciling harmonic and melodic tonal closure in any piece in which it is present. This fits into a greater pattern of what Jovino calls “harmonic non-redundancy,” in which Hermeto creates melodic and harmonic interest by avoiding doubling the bass note of a chord in the melody.\footnote{Jovino Santos Neto, Phone interview with the author, 12/22/17.} Such a concept generally goes against Schoenberg’s theories, in which the unification of musical space was of paramount importance. Due to these problems, many of Hermeto’s works resist a coherent tonal analysis, though as Carpenter notes, for Schoenberg, tonality was simply “one of the technical resources facilitating unity in the comprehension of tone-progressions.”\footnote{Carpenter, “Grundgestalt as Tonal Function,” 18.} Throughout the collection, Hermeto makes use of other means to organize and unify his music. For instance, “#235,” the piece from February 12, is best understood modally, as it is in E Dorian, rather than following the principles of tonality. Furthermore, even the analysis of “#48” that reconciles it most easily with Schoenberg’s conception of tonality necessitated the use and alteration of a tritone substitution, a stylistic convention from a
repertoire separate from the one Schoenberg studied. Despite these difficulties, combining the Chart of the Regions with the tree of Lydian triadic connectivity may give us a more holistic, multidimensional view of how pitch space exists in Hermeto’s tonal works.

Neo-Riemannian Theory and the Tonnetz

Neo-Riemannian theory is a branch of music theory that, as Cohn put it, “arose in response to analytical problems posed by chromatic music that is triadic but not all together tonally unified.”322 The main focus of this theory has been to study harmonic progressions from a view other than one governed by the hierarchical principles that define tonality. While neo-Riemannian theory can be used as a tool in the analysis tonal music, it is most readily applied to chromatic sections of music that are comprised of tonal structures such as chords, but without tonal gravity, a description that applies to much of the Calendário.323 Harmonic relationships are explored through transformations, or operations that send one object to another object in a group. The mathematical principles of group theory are beyond the scope of this dissertation, but since all of the invocations of transformational theory in this dissertation discuss chords, for our purposes we may say that the transformations discussed can only send one chord to another if they are members of the same set class.324 Though this branch of analysis originated by studying chromatic triadic music from the nineteenth century European tradition, it was quickly expanded to include sonorities of a higher cardinality.325 This, inevitably, led neo-Riemannian theory to be extended to jazz analysis, particularly that which focused on the modal and post-bop repertoire

324 The full mathematical principles involved in group theory are discussed in David Lewin’s *General Musical Intervals and Transformations*, which is the progenitor of transformational theory:
Though set classes are normally used for the analysis of post-tonal music, they are convenient here due to the different voicings Hermeto uses to convey chords of the same type. An operation may send G−479 to C67+9, because they are both members of the set class 6-32, whose prime form is [024579]. With the stipulation that transformations may not transform objects from one set class into another, a transformation may not send G−479 to G−7 or send G−7 to G−479, despite the functional equivalence of the two G minor voicings. For a full discussion of set class theory, see:

The Tonnetz is a network that shows the relationship between consonant triads. This method of mapping pitch space was originally created by nineteenth century theorist Arthur von Oettingen and was used later in that century by Hugo Riemann. The current incarnation of the Tonnetz designed with equal temperament in mind and enharmonic equivalence assumed was brought into use by Hyer.\footnote{Richard Cohn, “Introduction to neo-Riemannian Theory,” 172.}\footnote{Ibid. 174.} The Tonnetz is comprised of pitches that serve as nodes, to which edges may be connected to form consonant triads. When edges connect these nodes, the consonant triads are arranged so that those with overlapping common tones are adjacent, making it useful for showing triadic passages where parsimonious voice leading, not tonality, drives the harmonic progression.\footnote{Luiz Costa-Lima Neto, *The experimental music of Hermeto Pascoal e Grupo (1981-1993): Conception and Language.* Master’s Thesis, Unirio, 1999, 190, http://tesis.musicodobrasil.com.br/a-musica-experimental-dehermeto-pascoal-e-grupo.pdf, quoted in Araújo and Borem, “Life Experience.”} The Tonnetz shows a different, yet related conception of pitch space than the Chart of the Regions. While both mappings arrange the vertical axis with perfect fifths, horizontally, the Tonnetz uses only major thirds for its nodes as opposed alternating to major and minor thirds. This does, however, create an arrangement of triads that when read horizontally creates a string of triads whose roots have an alternating major and minor third relationship like the Chart of the Regions. The key difference between the two mappings shows the fundamental difference in goals between neo-Riemannian and Schoenbergian theory, which is that the Chart of the Regions is hierarchical and the Tonnetz is not, because Schoenberg considers tonal pieces governed by a single key, whereas neo-Riemannian analysis invokes the Tonnetz to show other forms of musical coherence. The lack of a hierarchically based structure is particularly appealing description of Hermeto’s music. While the fundamental triadic nature of this music has been discussed, Borem and Araújo note Costa-Lima Neto’s observation that for Hermeto, “atonal[ity] is the most natural thing that exists.”\footnote{Luiz Costa-Lima Neto, *The experimental music of Hermeto Pascoal e Grupo (1981-1993): Conception and Language.* Master’s Thesis, Unirio, 1999, 190, http://tesis.musicodobrasil.com.br/a-musica-experimental-dehermeto-pascoal-e-grupo.pdf, quoted in Araújo and Borem, “Life Experience.”} In addition to this, the most important reason the Tonnetz is good for visualizing Hermeto’s conception of pitch space is because it is frequently shown as...
toroidal. This three-dimensional representation is particularly apt, as it echoes how Jovino described pitch space being non-hierarchical and interconnected.

Comparing the view of pitch space shown in the Oettingen-Riemann Tonnetz to the Dorian connected triads shown in Figure 4.6, there are some readily apparent differences. The C$^-$ triad highlighted with bold edges is immediately connected to $E^b_A$, $A^b_A$, and $C^A$ by a shared edge, and with $A^b$, $C^b_A$, $E^b$, $A^-$, $F^-$, $F^A$, $E^-$, $G^-$, and $G^A$ with a shared node. Of the three triads connected by a shared edge, or two shared common tones, only $E^b_A$ is among the closest related triads to C$^-$. Of the next nine triads that share a node, or one common pitch with C$^-$, only $F^A$ and $G^-$ are in the first level of connectivity, leaving D$^-$ and $B^b_A$ completely isolated from a closely related chord due to a lack of pitch retention. Some of the other triads that share either an edge or node with C$^-$ would be the harmonies that would have C$^-$ in their first level of connectivity, namely $A^b_A$ and $F^-$, as well as the aforementioned $E^b_A$, yet the others are of varying degrees of distance. This shows a different but related problem to the one discussed between Hermeto’s conception of pitch space when compared to the Chart of the Regions. Like Schoenberg’s theories, the Tonnetz does not account for the possibility of relative distance of pitch space being unequal in its vertical and horizontal dimensions. While proximity based on tonality may be over-exaggerated when discussing the harmonies in the *Calendário* through a Schoenbergian lens, a neo-Riemannian reading may under-emphasize them, limiting its potential scope.

The use of the Tonnetz as shown in Figure 4.12 also has another drawback in being applied to Hermeto’s music, which is that it is designed for mapping triadic harmonies. While triads appear in the *Calendário*, they are less frequent than seventh chords, pentachords, and hexachords. The Tonnetz shown in Figure 4.11 then, is likely best used in the context of tracking melodic instances of triads, like those discussed in mm. 1-8 of “#11” that were shown in Figure

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331 Jovino Santos Neto, Interview with the author, 12/22/18.
4.7. If the Tonnetz is constricted by cardinality and under-emphasizes the tonal aspects of the Calendário, the question of why neo-Riemannian theory could be important to understanding Hermeto’s music is a fair one. The first point I would reiterate is that a toroidal Tonnetz best shows pitch space as a non-two-dimensional entity. I described stacking the trees of Lydian triadic connectivity on top of the Chart of the Regions earlier in this chapter, but the focus on a toroidal map of pitch space by neo-Riemannian theorists shows a potential avenue for a model of pitch space that more accurately reflects the nature of how pitch space operates in Hermeto’s music. A second important reason is that while much of the Calendário can be reconciled with tonality, there is a significant portion of it that cannot. Since the Calendário is among the most tonal portions of Hermeto’s work, new methods of understanding musical organization are increasingly necessary when dealing with the composer’s other music. As I mentioned before, neo-Riemannian theory is based on transformations that send one chord to another. These chords must be of the same set class, which presents a problem analyzing many harmonic progressions used by the composer. Take for instance, a minor ii-V progression. These progressions consist of a half diminished chord moving to a dominant chord whose root is a perfect fourth higher than the initial chord. In the voicings favored by Hermeto, the half diminished chord is a ninth chord, like D\(^{5-9}\), and the dominant chord is an altered dominant chord, frequently written as G\(^{79+13}\). The half diminished chord is a member of the set class with the prime form \([02458]\), while the dominant chord is a member of the set class with the prime form \([01468]\). While a half diminished chord and dominant seventh chord are members of the same set class without extension or alteration, seeing them in that way is rare in practice. McClimon notes that this is a difficulty in interpreting any ii-V-I through transformations, as major seventh chords, minor seventh chords, and dominant seventh chords are all members of different set classes.\(^{333}\) The ii-V progression, however, is a tonal progression, and is more readily explained through other means than transformational theory. The progressions in the Calendário which necessitate a non-tonality-based method of analysis are fortuitously the ones which most readily lend themselves to a neo-Riemannian reading. Progressions of exclusively high cardinality voicings of major and minor chords are among the most tonally vexing in the collection. Figure 4.12, which is taken from mm. 15-22 of #215, written on January 23, shows a typical example of the progressions in question. Hermeto has an affinity for dense major and minor harmonies and frequently use of them in this manner, as strings of parallels, usually with root motion of seconds or thirds preferred to root motion of fourths. When the root motion does occur by perfect fourth it is almost always with the root ascending by a perfect fourth without a change of quality. Crucially, dominant chords, diminished chords, half diminished chords, and harmonic patterns that would signal a stable tonal center are all absent, giving this section no apparent hierarchy.

The voicings used in this progression, A\(^{67+9}\) and A\(^{-479}\) are both members of the set class \([024579]\), making them suitable for use in a transformational context. They also can be split into constituent consonant triadic parts, as shown in Figure 4.13. The same process was shown in Figure 4.3 to demonstrate how Hermeto uses tone clusters in high cardinality voicings to obfuscate the chords’ tonic. It is through this process that the potential applicability for neo-

\[
\begin{align*}
A^{67+9} & \quad D^{67+9} & \quad C^{67+9} & \quad E^{67+9} & \quad F^{67+9} & \quad D^{-479} & \quad E^{-479} & \quad F\#^{-479}
\end{align*}
\]

Riemannian theory becomes more apparent. Richard Cohn notes the special place of the group of consonant triads in the mod-12 universe, because this is the only trichordal set class that allows for the generation of extended harmonic movement with both double common tone retention and parsimonious voice leading.\(^{334}\) The PLR family of transformations, shown in Figure 4.14, shows how consonant triads can move with the parsimonious voice leading of only one voice while keeping the other two invariant. Notice that the PLR transformations connect the triads depicted as sharing an edge on the Tonnetz, as C\(^6\) can be transformed to C\(^\Delta\), A\(^\Delta\), or E\(^\Delta\) depending on the transformation used.


\(^{335}\) All figures featuring constituent triadic parts in this dissertation are separated into a grand staff for analytical clarity, not to represent performance practice.
The PLR family of transformations is important because they can generate the extended progressions discussed by Cohn. In his study of Wayne Shorter’s “Yes and No,” Steven Strunk expanded these transformations to major and minor seventh and ninth chords. In those cases, more than one pitch moved parsimoniously, but due to the tertian nature of the chords being used, similar voice leading principles yielded a similar harmonic movement. The progressions being studied here, however, with added sixths or fourths, are not tertian, which means that the PLR transformations cannot act directly on these voicings. Operations performed on their constituent triads, however, yield cycles similar to those described by Cohn. By performing a P operation on one constituent triad and an L operation on the other, thereby keeping two pitch classes invariant in each triad and moving one voice in each triad by one semitone, it is possible to generate a progression that exhausts half of all possible pitch collections that form these chords. A chain of chords generated by a combined PL/LP cycle is shown in Figure 4.15. Before studying that, there is an important relationship between the constituent triads which much be discussed. Both major and minor hexachords are created through the combination of one major triad and one minor triad, in which the minor triad’s root is always two semitones above that of the major triad in mod 12 pitch class space. Secondarily, no matter the quality of the hexachord, the chordal root and third are always contained within the constituent minor triad. In the case of major hexachords, a first inversion minor chord built on the overall chordal sixth is combined with a major triad built on the overall chordal fifth. Minor chords are comprised of a root position minor chord with a second inversion major triad built on the chordal seventh superimposed above it. An interesting result of the relationships between the constituent triads of these hexachords is that they are comprised of only 12 possible pitch collections. Chords that share a relative major/minor relationship are made up of the same constituent triads, but in different inversions. Figure 4.16 shows this relationship in the chords of mm. 1-2 of “#320,” which are broken into constituent triadic parts. It is also reflected in the potential PL/LP cycle in Figure 4.15, which is why I initially referred to the exhaustion of half of all possible pitch collections.

![Figure 4.15. PL/LP Cycle Generating Extended Progression of Major/Minor Hexachordal Voicings](image)


Figure 4.16. Constituent Triadic Makeup of Relative Major/Minor Hexachords in “#210” mm.1-2

Despite the potential for smooth voice leading between these harmonies, conceiving of a hexachordal cycle in this manner has one major drawback. One of the properties of the hexachords discussed earlier was that its constituent minor triad is always the lower voiced of the two, because it contains the root of the chord. Because relative major and minor chords are comprised of the same pitches, voicing these chords in inversion leads to harmonic ambiguity leaving the identity of the chord undefinable. In practice, a bassist may be able to play the root of the chord and this approach may work in pitch space, but for the sake of these chords as theoretical constructs, the transformations only work practically in mod 12 pitch class space. An analysis centered around compound transformations is not practical for discussing how the music was originally constructed, but the next chapter shows how this type of analysis may aid in interpreting pieces from the Calendário.

While the Oettingen-Riemann Tonnetz maps triadic space in a way that is similar to Hermeto’s conception, his harmonic progressions are difficult to map in a way that shows musical coherence. The most important similarity might be the conception of the Tonnetz not as a two-dimensional map, but its toroidal representation which is important as a nonlinear model, an aspect of pitch space stressed by Jovino. In addition to the difficulties in mapping Hermeto’s harmonic progressions, the use of varied chordal types makes the use of transformations a suboptimal tool for modelling his progressions on a large scale. One area where transformations are a helpful tool, however, is in the extended strings of major and minor chords used by Hermeto. The hexachordal major and minor voicings frequently used by Hermeto share similar relationships to the group of consonant triads, including the ability to generate extended chord progressions with minimal voice leading motion. This property is not regularly utilized by Hermeto, but the ability to break these hexachordal voicings into two discrete consonant triads yields interesting potential for improvisations created through neo-Riemannian concepts that I will discuss in Chapter 5.

Similar Concepts in Jazz

It is evident so far that the influence of jazz harmony is an essential part of the Calendário. Aside from the use of lead sheet notation, the frequent use of common jazz harmonic devices is evident throughout the collection. Even in the discussions of tonality through a Schoenberghian perspective, the use of a chromatically altered tritone substitution smoothed the analysis considerably. There are two jazz traditions in particular that deserve
special attention when discussing Hermeto’s conception of harmony. The first is George Russell’s Lydian Chromatic Concept, which situates Lydian as the principal major mode. The other is Dave Brubeck’s use of polychordality in a jazz setting, as the concept he learned from his studies with Darius Milhaud is used in similar ways to Hermeto’s use of a similar technique in the *Calendário*.

Though George Russell is not the only proponent of using the Lydian mode as the primary major mode, his Lydian Chromatic Concept is influential among jazz theorists.\textsuperscript{338} The Lydian Chromatic Concept of Tonal Organization arose from a desire to create a theory of tonal organization that encompassed all music, whether or not it obeys the rules of common practice tonality. The Concept, as it is simply referred to, is based on the principle of unity between the melodic and harmonic aspects of music being comprised of a single “chordmode.”\textsuperscript{339} The primary harmonic generating structure in the Concept is the Lydian Chromatic Scale shown in Figure 4.17. It is comprised of stacked perfect fifths above the root that aggregate to a Lydian scale, with the chromatic pitches added mostly in perfect fifths to complete the scale in order of their tonal proximity to the tonic.\textsuperscript{340} Drawn from the Lydian Chromatic Scale, there are seven “parent scales,” shown in Figure 4.18 that are able to generate the harmonies commonly found in Western music.\textsuperscript{341}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{lydian_chromatic_scale.png}
\caption{Russell’s Lydian Chromatic Scale}
\end{figure}

The main appeal of comparing Russell’s Concept with Hermeto’s is not only the prominence of the Lydian scale as a melodic collection, but also its main goal, which is freedom from hierarchical systems governing harmonic movement. Russell posits that the Ionian mode achieved its prominence in the classical era because it embodied the traditional tonic-predominant-dominant-tonic harmonic progression, whereas the Lydian scale, “is the sound of


\textsuperscript{340} There is a gap of a major ninth between the end of the diatonic pitches (♯4) and the chromatic pitches (♯5) as well as a minor sixth between the final two notes, the ♯4 and the ♯2.

its tonic without having to digress from the tonic chord.”\footnote{Olive Jones and George Russell, “Conversation with George Russell: A New Theory for Jazz,” \textit{The Black Perspective in Music} 2 (1974): 71, accessed 9/18/18, https://www-jstor-org.libezp.lib.lsu.edu/stable/1214151. Emphasis original.}  Also, like the Lydian triadic connectivity shown in Figure 4.5, the Lydian Chromatic Concept is described by Russell in the foreword of one edition of his book as a “resource for improvisers,” and a view of tonality rather than a defined system.\footnote{Ibid 63.}  This is similar to how the tree of Lydian triadic connectivity was originally described by Hermeto to Jovino, in that it was meant to express a way of improvising over an $F_{\text{maj}}^7$. Finally, neither Hermeto nor Russell limit their methods to tonal music. Russell spends the latter portion of his book on analysis, including one of Debussy’s \textit{Ondine}.\footnote{Russell, \textit{Lydian Chromatic Concept}, 199-203.}  He further claims that even more chromatic music, such as that of Berg, can be analyzed with the Concept, despite their intentionally obfuscated tonics.\footnote{Jones and Russell, “A New Theory,” 74.}

There is one main philosophical difference between Russell’s conception of harmony and Hermeto’s. Russell describes parent scales as the generative structures for chords, in that chords
are simultaneities of subsets of their parent scales.\textsuperscript{346} As Hermeto describes in the inscription for the piece written on February 15, “#238,” “There are so many harmonic paths for us to go through that I say with much conviction: harmony is the mother, rhythm is the father, and melody is the child.”\textsuperscript{347} These related, yet opposing viewpoints likely lead to different ways in which the two composers engage in the act of composition, though the finished products may yield similar tonal structures in the resulting pieces.

There are other difficulties to reconcile between Hermeto’s and Russell’s conceptions of harmony, mainly due to the straightforward nature of Hermeto’s view and the theoretical nature of Russell’s. For instance, Russell’s Lydian Chromatic Scale introduces accidentals into the F Lydian system one at a time, beginning with the augmented fifth and ascending in perfect fifths as the diatonic section of the scale does, to reflect the tonal distance of each pitch from the Lydian tonic.\textsuperscript{348} Because Hermeto allows for the expansion by related triads, each level removed from the first level of Lydian connected triads allows for the addition of two chromatic pitches, the leading tone and augmented fourth of the second scale degree of each subsequent Lydian collection. Therefore a chord containing the pitch farthest away from the Lydian tonic in terms of tonal gravity as described Russell (the $b^2$), is on the second level of the tree of connectivity shown in Figure 4.5.\textsuperscript{349} The gap of a major ninth between the diatonic and chromatic section of Russell’s Lydian Chromatic Scale that resituates $b^2$ at the furthest edge of the tonal system is not something that would appear in Hermeto’s work, because his concept is primarily concerned with the music he makes, rather than creating a concept that works with an existing repertoire. Bishop recognizes another practical difficulty in reconciling these concepts when he mentions that Russell’s parent chord scales are not always intuitive. He uses the example of E$^b_7$, which comes from the D$^b$ Lydian parent scale, since both have four flats. For E$^{b^7#5b_9}$, however, Russell says the parent scale is a Lydian augmented (whole tone diminished) scale built on G, the chordal third of E$^{b^7#5b_9}$. As Bishop clarifies, “Therefore, any member of the G Lydian Chromatic, the principal scale that agrees with G=tonic - can be used over E$^{b^7#5b_9}$.”\textsuperscript{350} This type of thinking is absent from Hermeto’s statements, who takes each chord free from any prescribed higher systems.

Despite the differences outlined above, the striking similarities in tone and the Lydian foundations of these concepts warrant further discussion. Russell and Hermeto are linked through only one degree of separation through their musical collaborators, Miles Davis. Russell’s work was originally inspired by a conversation with Davis, and in turn Russell’s Concept was known to Davis before the trumpeter recorded his landmark album, Kind of Blue, and therefore would have been well integrated into his thinking by the time he recorded Live/Evil with

\textsuperscript{347} “São tantos os caminhos harmônicos para a gente percorrer que digo com muito convicção: a harmonia é a mãe, o ritmo é o pai e o tema é o filho…” Hermeto Pascoal, \textit{Calendário do Som} (São Paolo: Editora SENAC and Itaú Cultural, 2000), 262. Emphasis mine.
\textsuperscript{348} Russell, \textit{Lydian Chromatic Concept}, 12.
\textsuperscript{349} The farthest note from the Lydian tonic C in the Lydian Chromatic Concept is the flatted supertonic (D$^b$ or C$^#$), yet C$^b$ is related to C major through only one intermediary Lydian collection, the D$^b$ built on 2 of C Lydian.
\textsuperscript{350} Bishop, “Permutational Approach,” 80.
Hermeto over a decade later. Davis and Hermeto were also friends outside of the recording studio, and it is possible that some of the ideas present in Russell’s work were discussed between the two musicians, whether explicitly mentioning Russell or not. Though their impetus for situating the Lydian collection as a central melodic mode came from different places, this potential link makes the Lydian Chromatic Concept an intriguing tool for interpreters of Hermeto’s music.

Dave Brubeck and Hermeto share a number of similarities, including drawing on the multiple traditions in their music and the fact that they taught themselves to play primarily by ear. Their most striking similarity, however, is the way in which they use polychordality. Though Brubeck uses the term “polytonality” to describe his music, McFarland describes Brubeck’s music as inherently polychordal rather than polytonal, as he more frequently uses the combination of chords to enrich his harmony rather than to attempt to use multiple simultaneous tonal centers. Unlike the case of Russell, whose theory may have been passed to Hermeto at some point indirectly, these two composers developed their styles completely independently of each other, as the origins of each method are well documented. The similarities in their compositional styles, however, warrant further investigation in the hopes that Brubeck’s view of polychordality, which is well situated in the twentieth century French musical tradition, might help to situate Hermeto’s more firmly in existing theoretical traditions.

Brubeck learned the use of polychordality while studying with Darius Milhaud at Mills College. As Milhaud and other contemporaries of his wrote, their view of polytonality was “a verticality made up of distinct chords, and partitioned to project this construction.” This definition, given by McFarland, describes the use of multi-floor chords in Hermeto’s music. The lead sheet of “#48” shown in Figure 4.10 translated Hermeto’s chordal notation to traditional lead sheet notation in deference to Araújo and Borem, yet in its original notation, mm. 9-13 are all multi-floor chords partitioned with dyads or trichordal voicings in the left hand and triadic voicings in the right hand. These chords are voiced out with their original notation provided in Figure 4.19. Though these voicings may not project multiple tonal centers and the hands may be close together in pitch space, Hermeto’s partitioning of them is notationally distinct, and can be understood as a similar process to the one described by Milhaud. Charles Koechlin acknowledged that most poly chords would simply sound like chords governed by one root, but with characteristic differences. As Costa-Lima Neto suggests, this characterization applies to many of Hermeto’s harmonies, including all of those shown below.

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353 Ibid, 154.
354 Ibid, 155.
355 Ibid, 155. Although McFarland uses the term “polytonal” throughout in deference to this definition, I continue to use “polychordal” in this dissertation.
356 Mm. 7 also used multi-floor notation, but that was a simple slash chord with a harmony over an unrelated bass note, G6/A, which aggregates to A7b9sus4.
The consequence of this similar process is that analyses of music written by Hermeto and Brubeck become similar. For instance, McFarland hears Brubeck’s “Curtain Music” as either being in a key featuring a liberal usage of “wrong” notes, or as having two harmonic goals separated by a semitone. This is reminiscent of the second analysis I put forth of “#48” from the *Calendário do Som*, where the tonal problem created by B♭’s wavering allegiance to D♭ and E♭Δ created a situation in which E♭Δ helped harmonize the tonic resolution on D. A further example of McFarland’s analytical insight supports that analysis as well, as he notes that the registral prominence of the melodic line may give its tonic more perceptual weight than the chords voiced in the left hand.

Despite the similarities described thus far, Hermeto’s and Brubeck’s uses of polychordality are not governed by the same stylistic rules. Milhaud put the types of polychords he used on a spectrum of consonance and dissonance. McFarland then posits that musical motion may be achieved in polychordal music such as Brubeck’s “as dissonant polychords resolve to consonant ones, just as the resolution of seventh chords to triads create musical motion in tonal music.” While this type of resolution may occur in Hermeto’s music, and while some multi-floor sonorities may be more dissonant than others, their level of dissonance has no bearing on how or if a sonority might resolve. As discussed earlier in this chapter, parallelisms occur throughout Hermeto’s music. Though in the *Calendário* these are generally major or minor chords, they can be more exotic as well. In his University of Denver lecture, Boukas demonstrates a favorite chord of Hermeto’s, B♭5/G6, which despite being extremely dissonant is used in this manner.

**Conclusion**

This chapter has illuminated some of the most unique aspects of Hermeto’s conception of harmony, while also linking it to traditions which share philosophical and practical

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359 Left hand voicings have been notated enharmonically changing #5 to b6 for easier readability.
361 This comes from McFarland’s discussion of Example 2 in his article, where he shows a melody in B♭ by Brubeck in the right hand harmonized in the left hand by triads in G in the left hand. Ibid, 157.
362 Ibid, 159-160.
commonalities. Of particular interest in studying Hermeto’s works built on tonal structures is his multifaceted use of triads. These triads are broadly defined, including consonant and dissonant triads, altered triads, partial triads, add 2 chords, sus chords, and trichordal seventh chord voicings, any of which can be combined to create Hermeto’s multi-floor chords. In addition to multi-floor chords, triads can be played melodically over different harmonies related to them through connected harmonies derived from the Lydian mode in improvisation and composition. Many extant analytical frameworks, such as those with a Schoenbergian perspective, ascribe a linearity to pieces which are fundamentally non-linear, in that resolution to an apparent tonic note or chord is only one of a multitude of equally viable options. Hermeto’s method of harmonic generation may be closest to that of Brubeck, who adopted Milhaud’s use of polychordality in a jazz setting, yet even those methods are not used with the same freedom as Hermeto’s. The closest mappings of pitch space in Hermeto’s music are the toroidal representation of the Tonnetz, or a combination of Schoenberg’s Chart of the Regions with a tree of Lydian triadic connectivity superimposed on top of each region, so as to reflect the multi-dimensional nature of pitch space in Hermeto’s music. The overall problem with fitting Hermeto’s music into any previously established system is that all of them are too narrow in the scope of the repertoire they describe and fit only a subset of Hermeto’s vast catalogue of works.
CHAPTER 5. TWO METHODS OF ANALYSIS

One of the most remarkable aspects of this collection is its diversity. This necessitates multiple analytical frameworks through which the collection must be viewed. This chapter examines the collection through two such frameworks. The first of these frameworks continues an existing thread in the literature on Hermeto’s music and another that provides a new lens through which some of Hermeto’s non-tonal progressions may be viewed. The first section of this chapter examines Hermeto’s use of motives, a subject of study undertaken by Araújo and Borem as well as Zago.364 In this section, I outline the difficulties of applying Schoenbergian concepts to Hermeto’s motivic usage as proposed by Araújo and Borem, and continue to examine the ways in which Schoenberg’s writings illuminate how Hermeto develops motives in the Calendário do Som. The second section of this chapter demonstrates the harmonic relationships in some of the collection’s less tonal works through a transformational approach heavily indebted to Neo-Riemannian theory. These analyses are based on the application of transformations to the strings of high cardinality major and minor chord voicings that were briefly discussed in the previous chapter. This section shows how the application of transformational theory may be applied to improvisation or arranging when interpreting the works in the Calendário.

Motivic Usage

Two previous studies have examined Hermeto’s motivic usage. The first is one of the three articles co-authored by Araújo and Borem.365 In this article, as in their article on Schoenberg’s view of tonality, they desire to adapt Schoenbergian theoretical traditions to MPB and discuss how arrangement can help create motivic continuity in a piece.366 The other is by Zago, whose insights come from his panoramic analysis of the first 50 pieces of the collection, in which he focuses on salient aspects of the music discovered through practice and performance of these works.367 Here, Zago focuses mainly on Hermeto’s use of sequence and melodic rhythm, though he also discusses how Hermeto uses motives to structure some of his phrases. Despite the ample discussion on motives in Hermeto’s music, analyzing them as someone might do with a through-composed piece presents a number of difficulties. Chief among these is the improvised nature of Hermeto’s compositional style. Araújo and Borem cite Hermeto’s inscription for “#66,” written on August 27, which says he wrote the entire piece in under an hour as evidence that the melodies in the collection are largely composed without meticulously worked out sketches and revisions.368 The multitude of interpretational possibilities also makes it difficult to

367 Araújo and Borem, “Variação Progressiva.”
368 Ibid, 71.
367 Zago, “Composition and Improvisation.”
claim that a certain motivic thread may be salient or structural between one performance or recording of the piece and the next. Zago suggests that “the arrangement plays an equally important role in the final result,” as it determines how the raw information of Hermeto’s lead sheets is received by the listener.\footnote{Zago, “Composition and Improvisation.”} I will begin this section by addressing these difficulties, how Araújo and Borem dealt with them, and briefly reviewing relevant Schoenbergian concepts of motivic coherence before analyzing how Hermeto uses motives in the works of the \textit{Calendário}. The analyses will focus on which salient musical parameters may create motivic coherence, how Hermeto varies motivic organization from piece to piece, and how they help delineate the form of each work. Finally, this section will end by addressing how the lead sheets may be altered through arrangement to alter the listener’s perception of coherence by discussing the added formal sections in Richard Boukas’s arrangement of “#10.”

In order to deal with the problem of treating Hermeto’s largely improvised melodies theoretically, Araújo and Borem discuss the pieces in the \textit{Calendário} as rhapsodic. Quoting Schoenberg, they define this style as one “that rests more on its immediate inspiration and vivacity than on its elaboration.”\footnote{Arnold Schoenberg, \textit{Funções Estruturais da Harmonia}, trans. Eduardo Seincman, ed. Leonard Stein, (São Paolo: Via Lettera, 2004), 198, quoted in Araújo and Borem, “Variação Progressiva.” 71.} Schoenberg further asserts that “Generally, an improvisation will cling to its theme more through the exercise of its imagination and emotion” than through its intellectual development. He finally suggests that an improvisation is full of many motives whose total effect is acquired through harmonic movement to distant regions that may not be carefully controlled in their centrifugal and centripetal tendencies. By citing Schoenberg’s descriptions and Hermeto’s professed speed of composition, Araújo and Borem call the lead sheets in the collection “improvisação escrita,” or “notated improvisation,” and suggest that the creation of a piece occurs in two steps: through Hermeto’s original notation of his work and through the realization of it by the interpreter, who decides the large scale form the work is to be presented in and highlights what they consider to be the main motives of the piece.\footnote{Ibid, 71.} Their work, therefore, highlights the thematic coherence of not only Hermeto’s pieces, but also novel arrangements used for Araújo’s \textit{9 Dias} CD.\footnote{Fabiano Araújo, \textit{Calendário do Som: 9 Dias}, Numérica, 2009.} I take a different approach to motivic analysis. While recognizing that interpretation plays a role in the salience of motives, the purpose of this analysis is not to offer a lesson on arranging or to focus on any one interpreter, so I focus primarily on the lead sheets present in the collection. When dealing with the pieces, I analyze them as written works, though their improvisational feel and brevity means that I will largely eschew the type of analysis that focuses on the careful recontextualization of single pitches and other small musical materials.

Before studying Hermeto’s use of motives, I will review pertinent aspects of Schoenberg’s theories of motivic coherence as they relate to the following analyses. Schoenberg believed that pieces were constructed through the coherence of a basic idea, which he called the \textit{Grundgestalt}. The sole definition given to the Grundgestalt comes from a manuscript entry from June 11, 1934 which reads:

\begin{quote}
\textit{...}
\end{quote}
**Grundgestalten** are such gestalten as (possibly) occur repeatedly within a whole piece and to which derived gestalten can be traced back. (Formerly, this was called the motive; but that is a superficial designation, for gestalten and grundgestalten are usually composed of several motive forms; but the motive is at any one time the smallest part.)

This definition is reasonably broad and lacks a prescriptive methodology for the identification of and analysis based on the Grundgestalt. Josef Rufer understands this definition to mean the motive presented at the outset of the piece, a concept Schoenberg later and less famously refers to as the Hauptmotiv, which Neff accepts as her working definition of the concept. Nevertheless, focusing on the phrase “composed of several or more motive forms” in the above definition is the most difficult part to reconcile in this collection. Since a Grundgestalt is larger than the motive, if we understand it as a section of music that can consist of around two measures, then it may take up a sizeable portion of one of the pieces in this collection in its opening statement. As Schoenberg says, the motive “is at any one time the smallest part,” so that is the level that these analyses focus on. When defining a motive, Schoenberg writes, “The features of the motive are intervals and rhythms, with harmonic implications which combine to produce a memorable shape or contour.” Despite Hermeto’s use of salient melodic leaps, he does not use them in such a way that they frequently delineate motivic content. Similarly, the “harmonic implications” of a motive’s intervals are ones Schoenberg describes through tonality. In a non-linear, non-tonal construct, as many of Hermeto’s pieces are, there are no harmonic implications, because tones are not striving toward or away from a tonal center. While a motive might generate centrifugal motion away from the opening harmonic region, there is no guarantee that this harmony is hierarchically important; rather, it may only appear to be due to some sort of primacy effect. While in some cases, Hermeto’s works are tonal, in other pieces, any ascription of an overall tonic is the work of the analyst, and therefore harmonic implications of a motive are simply projections of that analyst’s work. Since the succession of tones and intervals are infrequently used in the manner discussed by Schoenberg, I will primarily discuss rhythmic motives in this chapter. Schoenberg acknowledges the importance of rhythmic coherence in his writing, saying:

> Rhythm (in the sense applicable to the musical work of art) is surely not just any succession of stressed and unstressed attacks, it is also necessary that this succession behave like a motive. In other words, it forms an enduring gestalt, that can indeed be varied, can even be entirely transformed and dissolved, but which,

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374 Neff, “Schoenberg as Theorist,” 59-60.

375 The pieces in this collection are all under 30 measures of written music (not including repeats), so the first statement of a Grundgestalt may take up between roughly 25%-10% of the piece in its opening statement alone.

like the motive, will be repeated again and again (varied or unvaried, developed or liquidated, etc.).\textsuperscript{377}

Schoenberg’s thoughts on form are also important for the following analysis, as Hermeto’s use of salient rhythms and harmonies create the unusual forms that permeate his work. While motives are frequently discussed through the way they relate to harmonic progressions and motivic coherence, they also play a role in the delineation of form. For Schoenberg, a work’s form is not separable from the work itself.\textsuperscript{378} Each piece necessarily has its formal parts, including smaller parts like the gestalt and the phrase marked by musical features, which Schoenberg suggests may frequently be a striking rhythm.\textsuperscript{379} While he further states that these striking features do not necessarily have more than local significance, the brevity of the pieces in this collection make seemingly local occurrences take on larger importance.

“#25,” the piece written on July 17, is an example of how Hermeto uses striking rhythms to form the work’s initial motive, shown in Figure 5.1. This motive serves not only to unify the piece, but also to delineate an asymmetrical and unusual form. The rhythm in mm. 0 and the first beat of mm. 1 is a standard rhythm for the beginning of choro. As discussed in Chapter 2, the opening three sixteenth note pickup can be used to set tempo for a piece, and the marking “ritimo” in the score in mm. 1 suggests a similar function here. The rhythm in the second beat of mm. 1 and mm. 2 gives the piece its distinctiveness. Instead of continuing the flow of sixteenth notes that is characteristic of the style, beat 2 of mm. 1 and both beats of mm. 2 end on the third sixteenth note of the beat and are followed by silence. These distinctive rhythms that form the initial statement of the motive are circled in Figure 5.1.

![Figure 5.1. Initial Motive Statement from “#25”](image)

Figure 5.2 shows how this rhythmic motive permeates the piece and defines its formal structure. In mm. 6, this rhythm of mm. 2 is repeated, once again preceded by an eighth note, which helps to create the feeling of a periodic structure. The use of the two sixteenth notes followed by an eighth note rhythm in mm. 10 echoes its usage in mm. 3, bringing the penultimate measure of the consequent phrase to a close in the same manner as the penultimate measure of the antecedent phrase. Due to the unbalanced proportions of this opening phrase, 4.5+7, beat 2 of mm. 7-beat 1 of mm. 10 should be understood as an insertion into an otherwise balanced periodic phrase to reconcile the unusual structure. The dual melodic and harmonic closure, in which both the bass and melody resolve 5-1 on a downbeat of mm. 12, signal the beginning of the turnaround. The attack on the upbeat of beat 2 of mm. 12, which is accented not by silence, but by duration and emphasis through a change of harmony, not only echoes the harmonic anticipations in mm. 1, 3, and 10, but through its alterations signals a new purpose; to prepare to return to the beginning of the melody. After the repeat of the initial 11 measures, the B section begins a descending scalar sequence that acts as a liquidation, seemingly driving towards

\textsuperscript{377} Schoenberg, \textit{The Musical Idea}, 146.
\textsuperscript{378} Carpenter and Neff, “Commentary,” in \textit{The Musical Idea}, 45.
\textsuperscript{379} Schoenberg, \textit{The Musical Idea}, 129.
a cadence.\textsuperscript{380} This liquidation does not bring about the end of the form, however, as mm. 16 and 17 repeat the rhythm from mm. 3. This ends the phrase, and the form of the piece, not with a statement of music whose characteristic features have been dissolved, but one whose characteristic feature have been reinforced. The final note of mm. 17, on the characteristic upbeat, once again provides both harmonic and melodic closure, strengthening the resolution at the end of the form. Then, to signify a turnaround, Hermeto places an upbeat attack, again accented by duration in mm. 18, linking it with the turnaround of the A section in mm. 12-13.

![Figure 5.2. Rhythmic Motives Defining Formal Structure of “#25”](image)

Despite the unusual formal structure of “25,” Hermeto also uses more familiar four or eight measure phrases with occasional alterations. Due to the constraints created by Hermeto’s idiosyncratic harmonic style, melodic and harmonic closure often do not serve in their traditional role of marking the end of a phrase. In many cases, Hermeto uses striking rhythms unrelated to the motivic content to accomplish this. These are a subset of the concept of a “broken phrase” introduced by Zago.\textsuperscript{381} In a traditional broken phrase, an unexpected rhythm comes in the middle

\textsuperscript{380} The B section is unmarked in the score, but I take it to begin at the second ending originally marked by Hermeto.

\textsuperscript{381} Zago, “Composition and Improvisation.”
of a phrase to disrupt an otherwise regular rhythmic section. To make the concept clearer, Figure 5.3 shows an example of a broken phrase from mm. 9 of “#101,” the piece written on October 1. The piece begins with the alternation of duple and triple subdivision of the bar occurring regularly throughout the first 8 measures. The measures whose melodies and harmonic rhythms accentuate a feeling of 3/4 all feature the same 2+1 harmonic rhythm and do not use sixteenth notes until mm. 9, at which point the harmonic and melodic rhythms both quicken, making the “break” in the phrase feel like an interjection. The only other time the melody returns to a similar feel is at mm. 13, which is the only other broken phrase in the piece.

![Figure 5.3. Broken Phrases in “#101” mm. 1-10](image)

Though broken phrases are used mid-phrase throughout Hermeto’s oeuvre, in this collection they are less common than the breaks that delineate phrase boundaries. Figure 5.4 shows the lead sheet to “#10,” the piece from July 2, which demonstrates this concept. The straight sixteenth notes that make up the bulk of the piece suggest the influence of baiao or choro, but the triplets in mm. 4, 8, 12, and 16 that delineate the end of each phrase are unusual in those genres. The important part of this technique is that in Hermeto’s music, the striking rhythms used as the break are either unnatural in most styles that would best fit the melody or are frequent markers of another style. This rhythmic and stylistic hybridity is the focus of many Hermeto scholars, yet the way in which it impacts form is frequently unexplored. In “#10,” the triplets are repeated enough to take on their own motivic character. By incorporating the triplets and sixteenth notes into a repeating gestalt or a phrase, whose variation occurs only in pitch content throughout the piece, “#10” takes on its own distinct character.

In some pieces, Hermeto confines himself with the use stylistic conventions that would have not occurred to Schoenberg. This is especially true of the baião and choro inspired pieces that use straight sixteenth notes for their primary, or in some cases, exclusive melodic rhythm. These pieces are similar to “#10,” yet in that example, the use of triplets divided the piece. In many other cases, such as “#347,” the piece from June 4, sixteenth notes make up an even larger portion of the melody and only cease in the final measure of the form at the turnaround. While there are sequenced melodic cells of one beat throughout “#347,” which can be found in mm. 6, mm. 8-9, mm. 11, and mm. 16, they are not easy to recall stripped of rhythmic variety, nor are they in any way structural to the work, as an important motive might be. Pieces like this are Hermeto’s most rhapsodic works, as they rely more on vivacity and harmonic interest than motivic development. In this case, harmony must delineate the form of the piece. In “#347,” Hermeto separates the piece through harmonic quality, with the minor chords predominating mm. 1-5 and major chords being the exclusive harmonic quality present in mm. 6-9. Measures 10-12 primarily consist of sus4 chords that drive to a resolution on Gmaj7/Eb in mm. 12, before a

383 The chords marked with a “69” voicing are marked the same way in both the original lead sheet and in Boukas’s arrangement of this piece. As there was no chordal seventh in the melody over any of those chords, they may be interpreted as “69” chords (implying major) or dominant 13 chords.
string of ii-V progressions make up the bulk of the end of the piece. The structure of the piece is shown in Figure 5.5.

Now that I have discussed how Hermeto creates motivic salience, it is also important to understand how the ideas are developed in the Schoenbergian view. Schoenberg was very interested in popular music, mainly due to the ways in which ideas were presented. They are largely unvaried, with a slow “tempo” of variation. An example of this is an analytical sketch of his from the Gedanke manuscripts in which he analyzes “Love Unspoken,” a number from Lehár’s operetta, The Merry Widow. In this sketch, Schoenberg connects the thematic statements with lines, and marks on the paper twice the phrase “nicht sehr logisch,” or “not very logical.” His overall point with this analysis is that popular music is not created by variation, as art music is, but rather by juxtaposition. Since there is little variation and no tonal problem, Schoenberg claims, “There is nothing that asks for expansion. The small form holds the contents firmly, constituting thus a small expansion, but an independent structure.” While some works, like “#25,” show an intricate structure developed through thematic means, other pieces use juxtaposition as an organizational tool. Though arrangement may make them more unified

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throughout the course of multiple choruses, the unrelated juxtaposition of the main ideas is and will always be fundamentally a part of the work.

“#45,” the piece written on August 6, presents its main thematic material through simple juxtaposition. The piece breaks down evenly into three sections of four measures each, with a thirteenth measure acting as a turnaround for each chorus. The three sections’ melodies are entirely juxtaposed, with each one not relating to the other. The second and third sections contain largely one measure of thematic material, which is only slightly varied in its repetition in mm. 6 and 10 respectively, before both two measure phrases are repeated verbatim. This piece is shown in Figure 5.6.

Harmonically, there is coherence which ties the piece together. All the chords are add 2 chords, notated in the same G\(^{4568}/C\) voicing, with the root obfuscated in the right hand as the fourth above C. The first four measures are governed by a simple two chord vamp over a pedal, C\(^{add2}\) - B\(^{badd2}/C\). The two-chord progression returns in mm. 6, but in mm. 5, the C\(^{add2}\) is followed by an E\(^{badd2}\), the first bass movement of the piece. After that two measure progression repeats, accompanied by a strict repetition of the melody, mm. 9-12 contain a new form of the harmony. The chord progression from mm. 1 is now transposed to F, before it is repeated three semitones lower in mm. 10. These two measures, related by the same minor third interval as the two chords in mm. 5 and 7, are repeated in mm. 11-12. The final bar of the form is a melodic resolution to a D whole note, with four separate chords in the same voicing as the rest of the piece. Beats 1 and 2 and beats 3 and 4 are both separated by a minor third, leading to the final G\(^{add2}/D\) on beat 4 that returns to the opening C\(^{add2}\) chord. The coherence of the harmony does not separate the feeling of juxtaposition in the melody for “#45.” This is not a piece that immediately strikes the ear as rhapsodic, nor is there a great amount of variation that drives the piece forward. Nevertheless,
because of the harmony, we can understand the piece as an exploration of neighboring add 2 chords. Like his use of tonality, modality, and the other means of harmonic organization, Hermeto interchangeably uses different methods and levels of development for his motives throughout the collection. To attempt to reconcile all pieces through the same theoretical lens may flatten the collection’s natural diversity.

Despite the difficulties in applying Schoenberg’s theories to the lead sheets of the Calendário, I end this section by echoing Araújo and Borem’s point that Schoenbergian ideas in the hands of an arranger may drastically alter the perception of motives in these pieces. In particular, Richard Boukas’s arrangements from “Tudo de Bom” are noteworthy in that his interpretations make the works easier to reconcile with Schoenberg’s writings. For instance, in his arrangement of “#10,” he added an introduction to the first iteration of the head and an extended interlude between the statements of the head which fundamentally alter the perception of tonality in the work. Though the lead sheet is in D minor, without these sections, the original tonic is heavily obfuscated by mm. 3, and only firmly reasserts itself in mm. 17-19. Boukas takes the harmony from mm. 18-19 and uses it in his added sections, which are shown in Figure 5.7. Because of these additions, the tonic is already affirmed by the time centrifugal motion drags the harmony away from D in mm. 3. The D-C⁵-B-A bassline is also directly related to the C-B⁵-A-G bassline in mm. 13-15 of the melody by fuzzy transposition, as Boukas connects not only a tonally important progression, but also the one which most easily makes a motivic connection to a harmony found elsewhere in the piece. The beginning of that descent is accented by duration, as the chords harmonizing C and B⁵ are the only ones in the form to be played at one chord per measure as opposed to one chord per beat. In this way, he both affirms tonic and helps solidify a salient motive that was only hinted at in the original lead sheet.

![Figure 5.7. Harmonic Progression added by Boukas to “#10;” Played Six Times for the Intro and Three Times Between Statements of Melody](image)

The preceding analyses show some of the different methods through which Hermeto engages in motivic development in the structure of his pieces. The most important organizing device in many of these pieces is Hermeto’s use of rhythm, which not only helps delineate form, as in “#10,” but also can serve as a motive that is subjected to complex development, as it is in “#25.” When rhythm is not the main method for musical organization, Hermeto turns to harmony to unify his pieces. In some cases, like “#45,” this leads to juxtaposed melodic statements over a coherent harmonic structure. In other cases, like “#347,” harmony delineates form in an otherwise rhapsodic work where vivacity is more important than coherent development of thematic ideas. When harmony is the unifying force for one of the works in the Calendário, it usually is not based on tonality, but rather on the use of parallelisms in a highly personalized style. For “#45,” we might say that the two main motives are add 2 chords moving by either major second or minor third. In “#347,” however, each phrase is delineated by harmonic quality, creating a harmonic juxtaposition within a rhapsodic work. Aside from the relative lack of pieces

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386 Richard Boukas, Phone Interview with the author, 12/26/17.
that can be described through traditional Schoenbergian terms in which the Grundgestalt helps
drive the tonal progressions of a work, there are other problems when attempting to apply
Schoenbergian concepts to Hermeto’s motives. When discussing juxtaposition, Schoenberg
likens the stringing together of ideas to a story told using the word “and” to connect every
sentence.387 Schoenberg also argues that, “Just as in primitive forms the motive of tones will be
repeated, unvaried or slightly varied, so too the rhythm.”388 This, however, misses a central
difficulty in dealing with the Calendário do Som, which is that in many cases rhythm is one of
the only facets of the piece which may suggest genre, thereby limiting the ability of the
composer to vary rhythms in the same way he otherwise might. Even when not considering style
constraints, Hermeto is frequently using a harmonic language that is largely personal to him. As
such, ideas which make use of his idiosyncratic language, like “#45,” may use a slower
presentation than those that don’t. Despite the difficulties discussing these motives through a
Schoenbergian lens, studying them remains important. In Green’s words, the “methodological
point of honor,” in treating every piece uniquely that comes with Schoenbergian analysis
provides a necessary starting point for analysts and interpreters who wish to understand these
works more deeply.389 In addition to this philosophical perspective, all of the performers of this
repertoire I have spoken to cite Hermeto’s motivic usage as one of their favorite parts of his
compositional style. Understanding his motivic usage through rhythm as opposed to pitch
content and harmonic implications may yield the most fulfilling understanding of this music.

Transformational Approach

The Calendário presents many barriers to musicians who wish to interpret it. Hermeto’s
chordal notation, discussed earlier in this dissertation, make the music unreadable enough to
deter some musicians before they begin. Another barrier is access. While the music is free
online, the hard copy version of the Calendário do Som is out of print and held by very few
North American libraries. By far the largest barrier to performance is that Hermeto’s music,
including many pieces in the Calendário, is incredibly difficult technically. The composer is
aware of this, and highlights the difficulty in his titling of some works, including “Intocável” and
“Difícil, mas não impossível,” whose English titles are “Unplayable” and “Difficult, but not
impossible,” respectively.390 Costa-Lima Neto even refers to some of Hermeto’s most famous of
pieces, including “Chorinho Pra Ele” and “Irmãos Latinos” as pieces, “which can be viewed as
etudes.”391 The pieces in the Calendário are no exception. The inscriptions for “#295” reads, “I
arrived at the idea to write a very fast waltz to test the soloists, play in tempo if you can.
Everything in life is like arpeggios, very fast.”392 Although many melodies in the collection are

387 Neff, “Schoenberg as Theorist,” 70.
389 Edward Green, “‘It Don’t Mean a Thing if it Ain’t Got That Grundgestalt!’: Ellington from a
391 Ibid, 144.
392 “Me veio a idéia a compor uma valsa bem rápida só para testar os solistas, toque no andamento quem puder. Tudo na vida é como arpejos, bem rápido.” Hermeto Pascoal, Calendário do Som, (São Paolo: SENAC and Itaú Cultural, 2000), 317.
difficult, the greatest challenge is posed by some of Hermeto’s chord changes, which can vex many improvisers.

The format of the *Calendário* necessitates interpreters to create the bulk of a piece. Since all of the works in the collection are no more than a page in length, the notated music only takes between 0:30-2:00 to perform, depending on tempo. In most cases, including the work of Jovino, Richard Boukas, and Fabiano Araújo, improvisation is used to stretch the piece to a length more appropriate for performance. In other cases, as in many of the pieces on Itiberê’s recording of the *Calendário*, arrangements formed the bulk of the musical additions to Hermeto’s original music. The following analyses are meant to aid in either arrangement or improvisation but given that improvisation is used in the bulk of interpretations of the *Calendário*, that will be the focus of the chapter. These analyses will focus on the extended progressions of major and minor hexachords discussed in the previous chapter and highlight three potential ways in which they may change the perception of the harmonic progressions in question; by identifying pockets of less harmonic movement or tonal gravity, by identifying how these constituent triads may serve as chord substitutions, and by identifying potential voice leading lines highlighted through neo-Riemannian analysis.

I should note that the lack of defined tonal centers and dominant chords is not unique to Hermeto. In North American jazz in the 1950s and 1960s, root motion by perfect fourth, essential to the ii-V and V-I building blocks of tonal jazz, declined in usage. The harmonies of pieces composed in the 1960s by musicians such as Chick Corea, Herbie Hancock, and Wayne Shorter have been of particular interest to theorists studying harmonic structure built with tonal materials that lack traditional dominant-tonic relationships. These pieces, though making use of similar harmonic building blocks compared to Hermeto’s music, are constructed differently. Among the largest differences between those works and Hermeto’s progressions is the harmonic rhythm. When using progressions of only major and minor chords, Hermeto’s harmonies frequently feature more than two chords per measure, and in some duple meter pieces, they can be as fast as one chord per beat, while other composers tend to move with a slower harmonic rhythm. Waters further suggests that many of the pieces in this era were governed by planned symmetrical interval cycles, a compositional technique that very different than that used by Hermeto. In other seemingly similar compositions, like those of Wayne Shorter, Strunk notes that the harmony is often built around tonal principles, with the chord qualities altered to obscure their origin. While this negates the perception of tonality, as Hermeto’s harmony does, the chord progressions of major and minor harmonies I will discuss from the *Calendário* are not

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based in tonality, and superimposing tonal analysis on them would be a less helpful exercise compared to the analysis of works by a composer like Wayne Shorter.

Though Harrison has described neo-Riemannian theory as “happiest” operating in situations of no tonal gravity, the progressions being studied here all contain areas of greater and lesser tonal movement. Though the last chapter highlighted the problems in discussing tonal distance in this music, Hermeto uses two different ways to create small pockets where the harmonies are less tonally disjunct than they are through the majority of the progression. The first is by using consecutive chords that contain closely related, or in some cases, the same constituent triadic parts. As seen in Figure 4.16, two chords that share a relative major/minor relationship, $A^6_7+9$ and $F^#_479$, as both being composed of $E^\Delta$ and $F^#_4$ triads in different inversions. This progression is found in other places in the *Calendário* as well, including in mm. 1 of “#320,” composed on May 8. In other pieces, like mm. 1 of “#347,” the first two chords are composed entirely of constituent triads that relate to $B^\Delta$ through its Lydian mode. We can say that the first two chords of “#320,” $D^6_7+9$ and $B^#_479$, share an overall R relationship, since the R transformation would transform $D^\Delta$ and $B^\Delta$ triads into one another, and the hexachordal voicings are extended versions of these triads. Similarly, we can say that the first two chords of “#347,” $B^6_7+9$ and $D^{#7}_4$, share a compound L relationship for the same reason. Though $B^\Delta$ is not one of the constituent triads for either chord, both chords are made up of triads that relate to the tonic note of the first hexachord, making anything in this measure feel as if it is in the overall gravity of $B^\Delta$ before that feeling is negated by the string of minor chords in mm. 2-5. “#347” also contains the other method of creating small pockets of tonal gravity, which is through the insertion of a single dominant chord or half diminished chord, frequently with its root a half step away from the root of the following chord. Though the ii-subV-I progression in mm. 5-6 creates this small area of tonal gravity for $E^\Delta$, the continued chromatic descent of major chords downplays any presumed tonal center. In the progressions discussed for both “#320” and

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398 Strunk uses similar logic in his analysis of Wayne Shorter’s “Yes and No.”

399 Hook’s Uniform Triadic Transformations, or UTTs, may also be used to discuss hexachordal transformations that are not part of the easily identifiable PLR family of transformations. This is a formalized method of conceptualizing triadic transformations in which three signifiers detail the transformation being executed. The first is a “+” or “−”, which denotes whether the transformation retains or switches modes. The second and third are integers mod 12, which denote how many semitones the root moves if the initial triad is major and how many semitones the root moves if it is minor. The UTT (−, 9, 3) would be equivalent to the R transformation, as it would send the root of $C^\Delta$ nine semitones to $A^\Delta$, and the root of $A^\Delta$ three semitones to $C^\Delta$. While this notation could be coopted as a “UHT,” or Uniform Hexachordal Transformation, I opted for Strunk’s nomenclature of the extended cardinality PLR system, as it may be more familiar to readers. Furthermore, the lack of a commonly used transformation that is difficult to explain with the common neo-Riemannian operators makes this system unnecessary.


400 The “subV” in ii-subV-I denotes a substitution of the V chord, in this case a tritone substitution.
“#347,” the intense chromatic nature of the harmony denies an overall tonal center, but there are brief sections of each where an improviser or arranger may infer more tonal stability than in the rest of the section. Figure 5.8 and 5.9 present the harmonies for mm. 1-8 of “#320” and mm. 1-9 of “#347,” respectively, with the compound R and L relations highlighted, along with the use of the tritone substitution. The harmonies are presented in inversion chains, such as the one shown in Figure 4.15, where the original harmony is notated in slash notation on the top staff and the grand staff contains alternating major and minor triads with parsimonious voice leading.

![Inversion Chain Highlighting R Related Chords in “#320” mm. 1-8](image)

While these two examples show areas with relatively smooth tonal motion highlighted, they also contain areas which are extremely tonally disjunct. In “#320,” mm. 3-4 provide a prime example of this. Both of these measures contain chords created by a compound SLIDE transformation, which means that they are of opposite chordal quality, share their chordal thirds and sevenths as common tones, and have roots separated by a half step. In both of the inversion chains, there is a total of 5 semitones of movement between the triads of opposite qualities. This represents the maximum amount of movement possible in parsimonious voice leading between triads of opposite quality.  

401 Each major triad has only three minor triads which need five semitones of total movement between the three voices in any given parsimonious transformation: those with roots either two
or D♯ and F♯, the constituent triads of mm. 3 from “#320,” there is also an apparent tonal distance, as their roots are separated by major third. It is worth noting that those third related chords are much more closely related from a voice leading perspective, however, as each pair shares one common tone and the other two voices move by only a semitone. In “#347,” there is a tonally disjunct progression from D♯ to A in mm. 1-2 that immediately counteracts the tonally smooth motion from B to D♯ in mm. 1. While the voice leading is parsimonious in pitch class space, with each voice moving only one semitone, as shown in Figure 5.9, the jump of a tritone in the bass without a shift in quality immediately negates any tonally identifiable progression. Interestingly, both inversion chains feature a hexatonic pole progression, one in which two consonant triads of opposite quality have roots separated by a major third and share no common tones, which is also a progression that negates tonal function.402

While the examples of tonally disjunct sections of the progression may feature chords of the same quality or of differing qualities, it appears that smoother tonal motion tends to happen more at sections where a string of chords of one quality changes to a string of chords in the other.403 A good example of the use of R related chords to change quality is in mm. 17-20 of “#215,” shown in Figure 5.10. The string of minor chords in this example is bookended by strings of major chords from mm. 15-17 and mm. 20-22. In mm. 17, Hermeto uses hexachords that share an overall R relationship to facilitate the change between modal strings. In mm. 19-20, this concept is varied to create another smooth transition between chord qualities. Since B and G also share an overall R relationship, the constituent triads making up the hexachordal voicings are the same for each chord. The A hexachord on beat 2 of mm. 19 creates neighbor chords to each of the possible constituent triads, while also allowing the continuation of the stepwise bass motion in the overall progression.

In addition to highlighting areas of tonal gravity and disjunction, inversion chains may also be used for the generation of chord substitutions. Since all constituent triads are subsets of the original harmony, these chord substitutions are only substitutions from the perspective of improver, as using the constituent triads as a melodic basis for a solo would simply sound like playing inside the changes. They can, however, present novel approaches to some difficult harmonies. The area in which they may be most helpful is extended strings of the same chord type that move by a consistent interval in the bass. For such a progression to exist, there must necessarily be a sequential movement in the inversion chain. In Figure 4.15, the PL/LP cycle generated a progression in which either major or minor hexachordal voicings would move by whole step. In mm. 6-8 of “#347,” the descending chromatic progression of major chords could be construed as an alternating SLIDE/PRP sequence, as shown in Figure 5.11. My goal is not to suggest that moving in alternating SLIDE/PRP movements is necessarily cognitively easier than

403 There is one caveat to this, which I mentioned in the previous chapter. When the chordal root moves by perfect fourth, it is usually an ascending perfect fourth without a change of chordal quality, mimicking a I-IV progression.
Figure 5.9. Inversion Chain Highlighting L Related Chords and Use of Dominant Chord in “#347” mm. 1-9

Figure 5.10. “#215,” mm. 17-20
simply descending by half step. Rather, it is to suggest that by viewing these progressions in an alternate sequential pattern, improvisers may be freed from the initial inclination to riff on descending chromatic motifs. Figure 5.12 shows another example of this principle. In mm. 11-12 of “#210,” a sequential repetition of a three-chord pattern is stripped of its sequential nature as both inversion chains create novel non-sequential progressions.

![Image of musical notation]

Figure 5.11. Compound Transformations Making up Descending Chromatic Progression in “#347” mm. 6-8

![Image of musical notation]

Figure 5.12. “#210” mm. 11-12

The final possibility for using neo-Riemannian inversion chain analysis for these progressions is that they highlight a number of possible voice leading lines which may be followed in either improvisation or through arrangement of a piece. This concept also factored into Araújo and Borem’s work, as their analyses of “9 de Agosto” and “14 de Novembro”

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404 As Norgaard notes, improvisers base many decisions on harmonic priority, and Hook’s root governed UTT conceptualization may be easier to navigate than a compound PRP transformation. A (-, 1, 11)/(-, 4, 8) sequence may be an easier way of grasping the new sequence generated by the inversion chains in Figure 5.11.


Julian Hook, “Uniform Triadic Transformations.”
included the creation of contrapuntal lines when realizing those works. While their contrapuntal lines were based on centrifugal and centripetal tendencies, the ones presented here are simply created through the use of the most parsimonious voice leading possible. These voice leading lines, when exploited in performance, can create smooth counterpoint and may highlight portions of the harmony that are not immediately recognizable as harmonic goals. Take for instance, the opening 9 measures of “#347.” The most salient feature of the section is Hermeto’s use of chordal quality to delineate phrase boundaries, discussed earlier in this chapter. A slightly closer look would probably lead ones’ eyes to chromatic descents in mm. 3-4 and 5-8. The C⁶⁷+⁹ chord looks relatively unassuming, though it is the terminus of the chromatically descending major chords and the beginning of a series of three major chords whose root motions descend by major third. Tracing the voice leading lines of created by the inversion chains from mm. 3-8, however, we see that C⁶⁷+⁹ appears as the potential apex of a stepwise ascent. This stepwise line serves to connect the string of major chords and minor chords, partitioned by the F⁷ in mm. 5, and also denies the tonal gravity of E⁶⁷+⁹ by creating a new harmonic goal only two measures later. Since it is an ascending line, it also creates a wedge when combined with the chromatically descending bass line. As this is the apex, the line also ends when the chromatic descent in the bass does, making it a particularly strong resolution. The inversion chain starting with a major triad and the original chord changes are presented in Figure 5.13

![Figure 5.13. “#347” mm. 3-8 Highlighting Potential Stepwise Ascending Voice Leading](image)

In “#9,” the piece written on July 1, Hermeto uses a variation on the A section to the chord changes from the Gershwin classic I Got Rhythm. In the original Gershwin harmony, the down beat of mm. 7 is the harmonic goal, and the voice leading created by the inversion chains shows this to be the case here as well. In this case, however, the inversion chains show a possible octave descent from D to D in the lowest voice of the triads shown in Figure 5.14. This descent has more repeated notes in it than the highlighted ascent in the top voice Figure 5.13, but any of these may be massaged and likely should be elaborated in practice. Also, though I highlighted the top voice leading line of the previous example and the bottom voice leading line of this example, all of the voice leading lines for a given inversion chain share a similar contour and are thus similarly suitable for use.

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406 F, the root of the dominant chord in mm. 5, was added into the voice leading line to connect the entire excerpt.
407 This harmony is the basis of many pieces and colloquially known as “rhythm changes” among jazz musicians.
While the previous two examples showed inversion chains that highlighted potential voice leading lines that span a major seventh and an octave, respectively, not all inversion chains will show the same amount of movement. Figure 5.15 shows the complementary inversion chain to mm. 1-6 of “#9.” Notice that the bottom and middle voices only move a range of two semitones and the top voice moves the most, with a melodic range of only three semitones.

The majority of the examples in this section are from the second half of the collection. The use of these voicings in this type of progression is not present in the first half, but the harmonic progressions based on the use of exclusively major and minor harmonies is a consistent throughout the Calendário. For instance, “#24” use harmonic language similar to what I have analyzed throughout this section. “#126,” the piece from October 26, shows the use of multiple major chord voicings in similar ways in a single piece. Figure 5.16 shows the lead sheet for “#126,” where the alternation between chords marked with a seventh chord voicing, like the G7+ and D7+ in mm. 1-2, and the hexachordal voicings in mm. 9. It should be noted that there is functional equivalence between these voicings. They signify the same chord-scale relationships to an improviser, and most composers in a similar idiom would not bother noting these different voicings unless they were writing for a large ensemble. Jovino described Hermeto’s specificity in chordal voicings as being motivated by a desire to make sure people played his music with good voicings, and the notational oddity in this piece may simply be an artifact of Hermeto’s changing preference for major chord voicings. Regardless, the concepts discussed in this chapter, while inspired by Hermeto’s hexachordal voicings, are applicable to strings of major and minor chords of any cardinality in the collection.

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The only other standard difference in voicings of major chords that are generally used in North American jazz is the differentiation between Cmaj7 and C6 or C69. In this case, the latter two are generally used when the root is in the melody to avoid a minor ninth or minor second between a chord tone and the melody note. This is not the case here, however.

Jovino Santos Neto, Phone interview with the author, 12/22/17.
Readers may notice that my application of transformational theory is, in some respects, restrictive. I maintain the original stipulations of a well-formed group, that objects, in this case the group of consonant triads, must be like objects, which in this case means members of the same set class. Other theorists, including Michael McClimon, have used cross-type transformations to allow transformational theory to be applied to explain common phenomena found in the repertoire, in his case the ii-V-I progressions, one of the building blocks of tonal jazz harmony. As McClimon suggests, I may have also used other theoretical concepts to get around the constrictions caused by the necessity for chords to have like cardinalities, namely, Clifton Callender’s split and fuse operations. By using these, or even by partitioning non-like chords into triads as I had done with Hermeto’s hexachordal voicings, I could have shown transformational analyses of entire pieces, where in this section I concentrated on smaller sections. The reason for my choice was simple; the harmonic progressions I was most interested in did not necessitate such accommodations. Furthermore, in the case of a piece like “#347,” such an analysis would strip the piece of one of its defining characteristics, namely, the.

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410 McClimon, “Transformations in ii-V Space.”
412 Non-like chords refer to chords that are not the same set class. For instance, I did not use transformational theory to describe the relationship between F\(7^{9+13}\) (a member of set class 5-30) and E\(^{67+9}\) (a member of set class 6-23).
salience of the change in harmonic language between mm. 1-9 and mm. 10-17. While transformational theory may be used to explain tonal harmony, it is not necessary in “#347.” Relatedly, I remained mindful of a point raised by Michael Buchler in his critique of Klumpenhouver networks, where he argues that as the abundance of possible relationships increases, those relationships become less meaningful.\(^{413}\) The reason I admit to these potential analytical additions, however, is not only to justify my own analytical decisions. I have not described any prescribed methodology here, only a possible avenue of exploration into complex harmonies. While the chord changes led me to this reading, those who wish to take this avenue of improvisational study further can and should do so. Hermeto’s goal is for his music to be open, for “worthy interpreters” to find their own way.\(^{414}\) If that way includes methods that I chose to omit for analytically clarity, it makes no difference. I am merely suggesting one possible method of interpretation illuminated through the lens of neo-Riemannian analysis.


\(^{414}\) Hermeto uses this phrase in the inscription to “#99,” written on September 29. Pascoal, *Calendário*, 123.
Chapter 6. Conclusion

Each chapter of this dissertation focused on different ways of viewing the collection. I hope that performers of this repertoire find Chapter 2 important, as it focused on the rhythms and styles that are influential throughout the collection. Arrangement and interpretation are necessary in the Calendário, something which is immediately evident through the brevity of the pieces. While Chapter 5 and the articles of Araújo and Borem also deal with possible methods used in arrangement of these pieces, they are all focused on interpretation of Hermeto’s harmonies, not rhythms, making this chapter a helpful resource for non-Brazilian musicians looking to further understand the styles that primarily influence Hermeto’s works.

The understanding of the musical attributes for these styles is also of paramount importance to analysts, as they may gain analytical insights from this background knowledge that might change their interpretation of a piece. For instance, I was once asked why I analyzed the apparent ii-V progressions as i-IV progressions in the Dorian mode in “#191” and “#235.” Because of the pieces’ rhythmic densities and Hermeto’s affinity for the use of extensions, the melodies do not present themselves strongly one way or the other to someone unfamiliar with the stylistic nuances of baiao. In both cases, a characteristic 6-1 cadence helped delineate the tonic, and the knowledge that melodies in the baiao style frequently use either the Dorian, Lydian, or Mixolydian modes informed my analysis.

Chapter 3 studied the effect of non-musical factors on the low-level musical features of the pieces in the Calendário using an encoded corpus. While location did not seem to affect the compositions, trends were present based on the source of inspiration and temporal factors. Not all sources of inspiration produced a unifying trend, however, and not all low-level features studied showed any trends at all. A particularly interesting phenomenon was the sharp changes in style as opposed to circular trends when the collection was analyzed via its temporal organization. Despite days, weeks, and years all being cyclical measures of time, most temporal trends tended to be immediate changes. This phenomenon may warrant further investigation in the future.

In Chapter 4 I compared Hermeto’s conception of pitch space to other related mappings of pitch space. The opening of the chapter focused on Hermeto’s background and how his early musical experiences formed his unique approach to the creation of polychords. This chapter further analyzed how Hermeto expanded his use of polychordality into a tree of Lydian connected triads, which are meant to only represent a view of harmonic relations in vertical musical space. After studying Hermeto’s concept of pitch space, it was compared to four other views of harmony that are more established in the music theory literature. In practice, Hermeto’s method of triadic combination is closest to the polychordal harmonic style of Dave Brubeck, which is rooted in Brubeck’s studies with Milhaud. Hermeto’s style is much freer than Brubeck’s however, with Hermeto frequently using exotic harmonies including add 2 chords, trichordal seventh chord voicings, and sus chords in his combinations. From a philosophical

standpoint, Hermeto’s view is most closely related to George Russell’s Lydian Chromatic Concept, as both are interested in encompassing music that is organized through both tonal and non-tonal means.\(^{417}\) The neo-Riemannian view of pitch space as toroidal echoes Jovino’s description of pitch space, despite the many fundamental difficulties of applying neo-Riemannian analysis to Hermeto music. Schoenberg’s Chart of the Regions shows a potential map for the horizontal aspects of pitch space in Hermeto’s tonal works, yet because of his lack of interest in unifying musical space, the Chart of the Regions must be combined with the tree of Lydian connected triads in order to properly demonstrate the variable ways in which pitch space can be understood in Hermeto’s music.

Chapter 5 analyzed pieces through two different analytical lenses. The first was a Schoenbergian view of motivic usage that focused primarily on rhythm. The improvisational style of these works means that in many cases, Hermeto did not use characteristic intervals to create a tonal problem or define his motives. Instead, his use of rhythm delineates his musical ideas, as it does in “#25.” The varying types of thematic development were also analyzed through a Schoenbergian lens. While some pieces appeared to use a sophisticated melodic presentation, others, including “#45” are unified through their harmony, and have melodies that are inherently based on juxtaposition. While Araújo and Borem correctly assert that the arrangement of any of these pieces will invariably alter how their motivic structure is perceived, the original lead sheet is the basis of any arrangement. Studying how Hermeto originally uses his motives may inform an arranger’s artistic decisions regarding their own motivic usage.

The second half of Chapter 5 used a modified approach to neo-Riemannian theory to analyze strings of high-cardinality major and minor chords that resist tonal analysis. This analysis necessitated the separation of the Hermeto’s hexachordal voicings into constituent consonant triadic parts and performing dual sets of operations in pitch class space to yield a hexachordal transformation. In this dissertation, I showed how these transformations may be used to generate chord substitutions, create voice leading lines, and highlight small pockets of relatively small harmonic motion in highly chromatic progressions. In addition to these uses, the transformations between the constituent triads may be used as melodic materials for improvisers. Using the transformations this way could yield similar sonic results to other methods of triad-based improvisation, including those described by Gary Campbell and George Garzone.\(^{418}\)

Though this dissertation has explored the *Calendário* through numerous methodological lenses, there are a number of avenues for future research both directly and indirectly related to the collection. While the study of hybridity in Hermeto’s music is currently the most popular mode of research regarding Hermeto, more remains to be done in this field. Baião, choro and samba seem to be the main focuses of hybridity studies, leaving a place in the literature for more research on the influence of other styles, such as frevo, in Hermeto’s music. Similarly, in-depth study into the northeastern Brazilian styles discussed in Chapter 2 on a scale similar to the work of Livingston-Isenhour and Garcia would be a valuable addition to the English language.


In addition to expanding the hybridity studies on Hermeto’s music and ethnomusicological literature of those styles, more studies of Hermeto’s recorded works would be a worthy undertaking. This may include the pieces recorded early in his career, including those by Quarteto Novo and Miles Davis, as well as his most recent works. Of the works that have yet to be analytically studied, the works for flute and piano, such as “Bacurau,” that made up the FLUTEMUSIC project by Jovino and Paul Taub would illuminate a particularly understudied part of Hermeto’s oeuvre.

The Calendário itself also continues to be a fertile area of study. Despite the work on Neo-Riemannian and Schoenbergian analysis of this music, other theoretical traditions may continue to yield interesting results. Studies of melodic contour may reveal links between the strikingly disparate pieces of the Calendário. A modified Schenkerian approach, similar to the one Strunk used in his study of the Chick Corea’s compositions, may provide an enlightening view of the ways in which Hermeto structures his works. The encoded corpus also presents the opportunity for many other future studies. One avenue would be to use the corpus in a comparison against another corpus. This would be particularly rewarding when comparing Hermeto’s personal harmonic style when composing choro influenced pieces against the trends of choro harmony in the choro corpus compiled by Moss and Fernandes. In addition to this project, the corpus may yield valuable insights for those who wish to study high-level features in Hermeto’s music or for researchers on music and emotion. Mearns, et al used high-level features to define composers’ styles, an aim which may be difficult for a composer whose music is as eclectic as Hermeto’s, but which may prove to be a fertile area of study.

While there are many avenues for future research, there are also many pieces in the Calendário that have yet to be recorded, including some of the pieces used as examples in this dissertation. The recordings of Mark Weinstein, Jovino, and Itiberê Orquestra Familia discussed in Chapter 2 are among the many wonderful recordings of this music. In addition to those, there are recordings by Fabiano Araújo, New Orleans based group Brasilliance!, and Mente Clara, based in Denton, TX, among many others. In both analysis and performance, the ideas and concepts presented in this dissertation represent only a small section of the gamut of interpretational possibilities. This music is meant to challenge musicians and bring people joy, two goals which can be best accomplished by performance of this repertoire.

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Appendix A. Translations of Hermeto’s Inscriptions

*These translations are meant to give non-Portuguese speakers a clearer idea of what Hermeto wrote about in his inscriptions. They are direct translations rather than poetic ones and capture as much of the spirit of the inscription as possible. Hermeto, however, uses many colorful idioms, puns, and turns of phrase, and I encourage those able to read Portuguese to read his original inscriptions.

1. Life is only beautiful because we're all always together.
2. Long live the sound more and more.
3. I went to visit mamãe Divina in my brother Manoel's house and in the back wrote this melody soon after, surely inspired by her and also the day June 25, 1996.
14. I am watching TV, Chico Anysio’s program.
18. There are 2 songs composed in day 10 (7/2), therefore the first song composed was a delayed prayer. In truth this piece from Wednesday was written on Thursday, day 10.
19. I just composed these two pieces at once because I have the intuition to compose a piece a day, while living. If I do not have time to do it that day, I have to compose it later.
20. I don’t remember the time I finished writing these pieces. I just know it was at night in a hotel in São Paolo.
34. As payment for the previous day, Thursday day 26
39. I wrote this piece on August 1 as payment for the piece on July 31.
41. Music made watching the gritty game of our national team.
42. Music made by wishing to get at least a few medals, even if they are [made of] iron.
43. Long live the mind.
44. If you want you can perform each note in the ritornello and play until the point of exhaustion.
45. It is for this that the music is beautiful, when it comes out very natural, how plants are born and everything that flows like nature and with nature. Long live music! Thank you, my God!
48. I finished with this flat pen
50. Whenever you want, you can stop. No, no, no, no! Are you going to continue? Oh, you damn little pen, you didn’t hold up your part of the deal!
51. Everyday has a different sound, each one has the sound that it deserves
52. Marvelous day, it’s more a good sound
53. On this day the sun is beautiful, gave me lots of inspiration. Long live him, the sun!
54. One more beautiful [piece] for the Calendário do Som. Long live him, the sound.
55. As me and you expected, it was cool sweet day: finished at 5:37 am. Almost the time of the sports review of José Carlos Araújo and his marvelous group.
56. The day is beautiful, but the furico sucks.
57. Finished at 2:24 pm, I am not watching, it was a coincidence! Crazy to get to the time of the game, today is Botafogo vs. Fluminense, it’s going to be a big game.
58. Ended at 10:51 pm after the birthday cake of our youngest son Flávio Pascoal, 28 years old. Everyday music makes people more happy, happy, happy, happy...
59. I wrote this piece listening to the bricklayer breaking our neighbor’s wall. Afterwards I’ll take my revenge in rehearsals.
60. Today is a big party day in our house; granddaughters, grandsons, sons, friends with my musician friends. It is this that gives me beautiful inspiration - beautiful, beautiful, beautiful...
61. This music is very good so that it can also be composed with a type of chord, only with modulations.
62. Like always, my pieces begin with the style and end with several. It's according to the day and the mind.
63. The day was beautiful as always. God is who makes the days and the people too.
64. As soon as I started to compose, my team ended up losing the game. My team is Fluminense, but the sound always wins everything, long live him always.
65. Beautiful Monday. Attention, the first measure is an anacrusis. It gives the impression that the piece is broken, but no, it will make you go crazy if you don’t pay attention.
66. I composed this whole piece in an hour. Suddenly each day is a history.
67. Finished at 5:28 pm with the rainy weather, remember your friends.
68. This piece reminds me a lot of the rhythm called "calango," which is a very pretty lizard, it runs a lot.
69. This is a rainy day, that is why I am inspired in 3 styles: The big city, asphalt; the countryside, plantations, and principally the hill, the world.
70. I wrote this piece watching the game of my team with Guarani in Campinas, I do not even speak the result.
71. Rainy day with sweet potato taste, but it was a beautiful sound.
72. One more beautiful sound, because the world is marvelous. I just finished writing this piece, listening first to a novel, second to soccer, third, "Graças a Deus," a great spiritual program in Rádio Rio de Janeiro, the program of Horácio Ramazzini.
73. Today is a very important day for me and my family, it is the birthday of my youngest granddaughter, Uina. We are going to the party, she is beautiful, three years old. Happy birthday, kisses!
74. Finished at 6:48 pm with a lack of light. This piece should be baptized with a very short name, because it was written with interruptions. Yesterday and today it rained too much, until the birthday of my youngest granddaughter was postponed. Now it is raining less than yesterday, I am going to the party.
75. Finished at 11:45 with another defeat for Fluminense, it's good that we lost to Palmeiras, I'm also "Verdão" (a fan of Palmeiras). I finished with the game, but the music saves everything.
76. I’m reminded a lot of the serenatas. I composed this piece with the cavaquinho.
77. Remember me today, September 7, in hopes that it is a day instrumental music has a place that it deserves, playing enough on the radio and being respected.
78. Finished at 10:15 pm, after the game, at last Fluminense won.
79. Finished at 1:52 pm on the day when I went to record two songs of the great Tom Jobim sung by the great Jane Duboc. I wrote the arrangements with very different harmonies, the theme, however, without any change. I will not say anything more because it will take away the surprise.
80. I wrote this piece after recording yesterday "Desafinado" and "Chovendo na Roseira" by Tom Jobim. I also tried the flugelhorn, [it has] a beautiful sound, I played the piano in one of the songs with the great Jane Duboc, we did everything we wanted.
81. I finished at 6:06 pm listening to the rain and the smell of dust that we breathe and breathe with the magic of the sounds. And hence it also comes with good intuitive inspiration. I'm going to stop because I'm not poetic but a big wanker. My respect.
82. Finished at night. I don't remember the time because of the very good red wine, but the sound speaks louder.
83. This time I do not know the time [I finished], but I know it was also at night, after we played in the Festival de Florianopolis. We were very excited and motivated with the sound we made. This piece is a lot like the bush leaves and fruit in general, it is quite green.
84. I finished at 3:32 pm, as soon as I arrived from the trip from Florianopolis. I wrote this piece with the cavaquinho, I was very eager to play it.
85. This doesn't have the time because I don't have a watch.
86. Finished at 11:48 pm very sick with the flu, but the energy of the sound causes it to go away.
89. I wrote this brejeira piece with a quite different instrument, which was the flugelhorn. It is like the trumpet, but its sound is more velvety.
90. I finished this piece at 9:08 pm, right at the end of my flu. I wrote this to play a little with you or with you. I continue with the spirit of the child, however, it always evolves beyond matter.
91. Now is the Campeonato Brasileiro, it is a pity that Flu (Fluminense) is not good. But sound is always sound. I finish like always - listening to the game.
92. Today we are in a marvelous day, because almost all the grandchildren came here to our house. There, the inspiration spread to my mind and the sound rolled with lots of light.
93. I finished at 10:34 pm well into spring, in the beginning of the heat. Now I think that the pieces will be very hot.
95. I am waiting for a cold front, but up until now nothing! I hope it does not arrive!
96. I'm going to write according to what my mind says. At times I feel tired, before I begin to compose. When I get into the sound I'm as light as a flying petal. Long live the sound!
99. I do not like to speak about the style of piece and neither of the rhythm, not to influence the worthiest interpreter.
101. I finished this piece in between 5:30 and 6:00 pm in a hotel in Sao Paulo
102. I finished at 11:00 pm with all of Rio’s teams defeated. I wrote this piece listening to the games. I'm not even sure what to say, but as I always say: long live the sound!
103. I composed this piece before I go out to vote. It was a little machine thing. I voted in 45, because he is the son of a genius and another genius.
104. I also wrote this piece with the cavaquinho, so it goes well with its style.
108. In travel season I wrote this piece together with the one from day 7. If they were human beings they would be twin brothers. I was going to do only one, to not let go of ideas I'd rather do the two [of them].
110. "A big hug to the marvelous people of Buenos Aires"
111. I finished at 4:30 am after a concert in Buenos Aires. Long live the sound!
112. "I finished this piece at 4:58 am after the show in La Plata."
113. I finished at 5:49 in the morning, very sleepily, but long live the sound!
116. I finished at 1:59 in the morning, after a concert. And that's why I always say long live the sound!
117. I finished at 10:14 pm on the return from Uruguay.
118. I finished at 12:20 am, on the return from Uruguay.
119. I finished at 5:20 pm already in the heat of Rio. This piece is very hot how everyone likes to play.
120. I finished at 12:45 pm on a day when the sun was scalding hot, but long live the sun!
121. The day is quite cloudy, but through the sound I see the sun.
122. I always write thinking about an ever-better world, with a true music, pure and instrumental; music without borders and without prejudices.
123. This summer isn't arriving, I'll wait calmly with my beautiful birds and the parrot Floriano.
124. Before writing this piece I was dreaming I was paragliding and won a vest as a prize for victory. Suddenly, this piece has a lot to do with all this. Enough talk.

125. This piece is a mixture of chorinho with baiao, samba, and with everything. Just as time changes, everything always has to evolve.

126. I finished at 3:45 pm waiting for the life or death game for my Flusão (Fluminense) with Portuguesa de São Paulo.

127. I finished at 1:33 pm listening to a chat about phone calls. It was very good because I finished very quickly.

128. I finished at 12:36 pm before leaving for the ten-day trip to Portugal. Until the return, I'll bring bacalhau.

129. Ilha Terceira Acores: I composed this piece as soon as I left Brazil, shortly thereafter. I think this piece must be sweet.

130. I came looking for the sea and the mountains of the island, everything is very beautiful.

134. The day is marvelous, long live the sound and nature. Viva!

135. I finished at 8:30 pm, as soon as we arrived from the trip, a little before the concert.

136. I wrote this song after I came back from Portugal. Long live the sound!

137. Long live the creativity God gave me! A huge sound, always sound!

138. I finished a 5:57 pm. Today was a very beautiful day, another beautiful piece came out. This is why I say: that everything is sound!

140. Now yes, the summer arrives.

141. I finished at 5:23 pm listening to the game of Fluminense (vs) Atletico do Parana (Atletico Paranaense). We lost the game, but we did not lose the sound.

143. I composed this piece in the 12 major and minor keys. Long live mother harmony, viva!

144. Play the coda and it's disappearing, disappearing, disappearing, disappearing, disappearing. Long live the sound always!

145. Today it is raining a lot, so this birth was very fast. Mother harmony did not feel anything.

146. I finished at 4:27 pm after I voted for Sergio Cabral, the flag of Brazil in the present and in the future.

148. It is a beautiful 3/4 piece, modesty aside. Long live the sound of the stars!

151. This piece has chords that do not end. Long live the fresh air of sound!

152. I ate shrimp & fish and my stomach did not accept it, but the sound cures, the pain turned to music.

153. I finished at 3:35 pm very preoccupied Fluminense who is going to play Sunday needing to win and afterwards still wait for other results, but hope is the last one to play.

154. I am not going to say that I wrote this piece in the rain because I was inside the house, and I could not write while I drowned.

155. I finished at 2:15 pm one more time waiting for the game Fluminense and Vitoria. I hope His name gives luck to Flu.

156. My Flu, it's always good. As I do not feel sadness and yes reality, I want to say that Fluminense did not lose, just won more vacation time after the season.

157. Modesty aside, there are eleven bars of sound that are worth a thousand.

158. I finished at 4:23 pm after knowing that my always loving mother just died, but life must continue here on Earth, she went to heaven that is the way for everyone.

159. I wrote this piece with my heart full of longing for who put me in this world. Divine mother is gone, already fulfilled your stay on Earth. I composed this piece as soon as I arrived from the burial. With a broken heart I always say: that life in this world is a divine gift.
160. This piece is also for my eternal and loving mama. Long live the light, the sound and love.
161. With an infinite longing I compose more of this music. Like a divine oration for Divine mama. Blessed be the sound, amen!
162. I composed this piece as I remember a lot when I played in the conjunto regional in Recife and in João Pessoa. and before with Pernambuco do Pandeiro in Radio Mauá. Long live the sound.
163. This piece reminds me of the many times in which I played at night for dancing.
164. Another beautiful day, with the cicada singing already indicating summer. I think it is time, you'll see the summer.
165. This piece reminds me of longing for everything and everyone. Long live peace, the infinite love, the sound and everything that is beautiful.
166. Life, the day will be like the perfect balance, which passes equally to both sides, neither much wealth, nor much poverty. For this I will pray through music with certainty that music is the light of the mind.
167. Money is the cause of arrogance and of foulness.
169. The inspiration is like the solution, it always comes as a surprise. The difference with music is that she brings happiness and the solution bothers us a lot.
170. It is worth much more, the sound so good and deep, with all the musical notes coming from the mind and the heart, than a lot of money in the bank without any emotion.
171. The flowers are as beautiful as the chords and the sound. Long live the sound!
172. One more sound - that came as fast, beautiful like the world; always joyful.
173. I was inspired in this piece with the instrument cavaquinho.
174. I composed this seeing in my mind many stars in vivid and different colors. Long live the sound!
175. Another one as simple as the moon leaving from behind the clouds. It reminds me a lot of the serenatas, long live them!
176. Today will be a good, temperate, and wonderful day, [and] as always, a day different from others.
177. Long live the sound forever and ever, amen.
178. Beautiful is the beauty of the soul, together with the sounds and the animals that even when abandoned love us.
181. I am here in Rosario, land of wonderful people, beautiful people and full of musicality.
182. Long live the sound forever more, the music is the greatest wealth of the land.
183. It is the endless sound.
184. We are traveling to Brazil, thank you beautiful people of Rosario, a beautiful kiss for the children and everyone.
185. It is Christmas Eve and the piece has a lot to do with the spirit of Christmas. May God help us if we deserve it.
186. Today is also a very special day. Long live Jesus Christ, the father of us all.
187. Back to Jabour, after spending Christmas with almost the whole family, more of that music came out in my holy living room.
188. This piece is full of harmonic, rhythmic, and melodic surprises. Suddenly everything changes.
189. This piece is very erudite - its full of modulations. See you later! There's your left hand. (in reference to the difficulty of the left-hand piano part).
190. This one gave me a hard time, because I composed with the cavaquinho and thinking in a harmony. When I got to the piano a harmony came to me that was completely strange. Clearly in a good way!
191. Long live music always! I remember many of the arrasta-pés I played in my homeland, Lagoa da Canoa; I began to play on Friday, and only stopped on Monday afternoon.
192. Happy New Year. This New Year’s Eve is one more step in our lives, I want to tell you that for me it is a great divine mission with lots of music and love.
193. In the first day of the year I want to wish everyone [a year that is] always clear with lots of light, principally the light of heaven that is the truth.
194. Long live the music and your magic harmonies and melodies, and, why not say, long live the theme that is the newest son.
195. It is the appearance of Sérgio Mendes travelling through Brazil in 7/4.
196. Now there's a little piece in 5/4 to fly very high.
197. This piece is a mountain of “I miss yous” in my heart, always increasingly full of sound.
198. I wrote this piece asking God and Saint Peter "Let rain fall on the paths, let the city and the herd quiet."
199. I composed this piece remembering all the tempo das boiadas in Lagoa da Canoa.
200. This is a piece in 5/4 that is full of chords about the theme, so it needs as much rhythmic attention as anything.
201. I finished composing this piece listening to the wonderful sounds of the rain and the thunder, it’s a shame it was at the end, it was only [for] four measures.
202. I dedicate this piece to the great brother of sound Paulo Fortes. I composed this piece thinking about the great man, one of the best singers in the whole world that left for heaven.
203. Long live the sound!
204. I wrote this piece with the cavaquinho, not the one you eat, the one you play. Long live the sound forever more, more light!
205. On occasion I like to compose a piece all with the same phrase, the ears hold the bar because it has a lot of harmonic and melodic surprises.
206. Life is like the sound that never stops, neither here nor there. Long live him always!
207. I wrote this piece in the city, in Cantagalo St, after celebrating Ilza's birthday. Long live the sound!
208. On occasion it is good to carry the sound in the accompaniment of the waltz to clear the mind.
209. It is proved that 7 [7/4] is not a liar's account, but is a beautiful meter in which to play. Long live you, 7, 7/4!
210. Long live the sound and light of truth. I feel like my mind is getting faster all the time.
216. Many flowers, many colors in the infinite road of sound. Long live life and long live the sound!
217. Said the master Crab: I only walk backwards because in front I do not see anyone to challenge me. I run too much, long live me!
218. I wrote this piece after spending a memorable and unforgettable night in the spiritist center of the holy father Joel, it was very beautiful. Long live the light and the sound!
219. Long live love and the sound. This piece has good rhythm and harmony and everything else.
220. Long live the sound and the colored clouds. Our mind is like the air that we breathe, never repeated.
221. Attention: you can play this piece as a cadenza or in time. I wrote this piece thinking a lot about the aboiios of the cowboys leading the cattle through the street and sometimes even having to cross rivers and streams. I have all of this recorded in my mind. Long live the sound, the ideas, the clouds, and the colored stars
222. Long live the sound and the world forever more. This is a waltz with a taste of choro.
223. I composed this piece thinking about when I lived in Recife, the Rádio Jornal do Comércio, and the rehearsals with the orchestras of the great maestro Clóvis Pereira, maestro Duda, maestro Guerra Peixe, and others.
224. Here's another one for you in 7/4. I was inspired by choro. I think it is time that we play choro in 7. It is "the thing."
225. This music is very mixed. Long live the universe! Certainly I see a Cuban here in the room.
226. Long live the sound, long live life and hope.
227. This piece made me burn my eyelashes. So many chords, not to speak of the [rhythmic] division, but this is how it is good. Long live the sound forever more!
228. It's funny, such a beautiful piece came out in a heat of around 40 degrees C, but the sound always speaks higher. Long live the moon.
229. I relax my head and let it flow, it is like if you were entering the inside of clouds until you get into infinity through magic, of the light and of the sound.
230. This piece is a mixture of vegetables, little boats, and bandstands. This is what I felt, then it's up to you. Long live the earth and the animals!
231. This piece is a mixture of mambo in 2, with chorinho and feijão with farinha and rice, the rest is only to play. Long live inspiration!
232. I finished with a lot of the sound of carnival music in my mind, that's good too, because this is what comes out when you're going to play it. Long live the sound!
233. Hey! Do not take more oranges, you already have your hand full. Leave some for others. It is better to listen to a very tasty sound. Let's go!
234. I composed this piece here in Sítio, on Fat Tuesday, that's why a song came out in the weather. Long live the sound!
235. I finished this piece listening to the world's worst songs on a first-class Victrola, but I have to fulfill my devotion. I'm pissed.
236. Oh you damn little 7 [piece in 7/4]! You need to have enough hands to play these chords, but it is important that we always make our harmonic technique better, harmony is everything!
237. When I was writing this piece I remembered the seamstresses with their sewing machines on the base of their hands and feet, there were many in my mind, because of this a very simple piece came out. Long live love!
238. There are so many harmonic paths for us to go through that I say with much conviction: harmony is the mother, rhythm is the father, and melody is the child. This is why I always say long live the sound, eternal sound!
239. Music is like love, it has no borders; it is also like thinking which will not be premeditated, because death also has no premeditation. It is beautiful to know and to live!
240. One piece in the hand is worth a lot of flying.
241. After so many confusions in the world of God and us, we have more to compose and touch love with open hearts and happiness and without preconceptions. We only want the quality and respect [given] to the music that is [given to] all the beings of Earth and other galaxies.
242. You can compare music to all the beautiful things you can achieve because it is beautiful, inspiring, and in any moment of our lives.
243. I wrote this in 7, and am going to lunch in 8 and there goes smoke. Long live the sound!
244. I always start composing in a style and I end mixing everything. With this I always say that music is universal, going and going without end.
245. Long live divine inspiration! This music has a lot to see with a bandstand and a little bird.
246. We are already hoping for autumn, so farewell to the heat leaving this music with the thought of the eternal genius Darci Ribeiro. We are eternal idealists, we value life by love from here and from there.
247. I composed this piece and nightclub music (música da boate) came into my mind, like when I was playing for dancers in the dark with blue and red light. This music is good if you hear it calmly.
248. There goes one more in 5/4 for variety, enjoy it a lot. Long live always the chords that illuminate inspiration. See you later!
249. I composed this piece listening to the low range of the flugelhorn. This piece is not in B minor, because I play it with the piano, it only is transposed to B minor. Long live it's sound!
250. I wrote this piece thinking about Carnival things: confetti, serpentina, whistles, people dancing in the streets with Edu Lobo singing and his guitar. It is a personal style. Long live Edu Lobo!
251. This piece is a mixture of forró with classical played on the edge of the river with a waterfall and other things too. Long live the colors of sound!
252. I began composing this piece remembering the great poet-speaker, journalist at Radio Nacional, Jardel Santos, because he is good at everything and full of happiness, good taste, and perception. Long live Jardel Santos always.
253. When I wrote this piece I was thinking about the wonderful Dominguinhos, accordionist, composer, and singer; it seemed that I was travelling with him in that Estrada de Garanhuns going to Lagoa da Canoa.
255. This music changes rhythmically and harmonically like water into wine. That is why always say, Long live the sound!
256. One day behind the other, it is like where the sea renews itself without end. Music also packs the soul, long live life!
257. This piece is a lot like the beautiful people of Recife; I remember when I first arrived there at 14 years old, always as an observer of good music. I learned a lot listening to the rehearsals of the great maestros Clóvis Pereira, Guerra Peixe, maestro Duda, and many others.
258. I composed this piece thinking about the bandinhas de música of the cities of the interior of all parts of the world, because they are great crystal fountains of music.
259. I wrote this piece that is not a song, but the inspiration to always speak louder, and [dedicated] to women as well. Congratulations on your day. Long live women and the sound!
260. Thanks to Márcio Bahia, Itiberê, André, Vinícius, Fábio, Pernambuco, and Manoel. Long live the sound forever. After a beautiful concert in Iona, just rest, say, "thank you my God."
261. In this piece, I remember Tom Jobim and Edu Lobo, we know each other well, we have a strong spiritual and musical connection. Long live the sound and the light!
262. Every day, I am surprised more by my mind. At times I think she is not going to endure, but sometimes I say: go always in front, that is your beautiful divine mission, I'm very happy. Long live all the minds of the world.
263. I composed this piece thinking about the full moon, when I go out to serenade, I play until the sun rises. Long live the sound always!
264. I composed this piece when I was walking through the interior.
265. This piece makes me remember things I do not know how to say, nor describe because they are memories from here and from there. From where, I also do not know how to say, I feel that it's all wonderful. Long live the sound!
266. I remember a lot from Lagoa da Canoa and the band from Arapiraca playing in squares and parties at the end of the year.
267. I composed this piece thinking about how our God is incredible. I saw and heard two more healing programs by Dr. Fritz and his spiritual brothers on television yesterday. Be conscious that any world is good for who is good. Long live the light!
268. this piece needs a lot that you connect in the rhythmic part because it is very important to get together with the chords without letting it get heavy or gentle. Long live the sound forever more.
269. Frevo remembers Recife, Recife likewise. It was there in Pernambuco that I began everything, music and family, and today música universal, not for success but for music, the people, and family. Long live the piece and spirit of all beings from here and from there.
270. At the end of this piece I felt the spiritual presence of a great musician, always charismatic and sensible. He loves music so much that his club in London always kept top notch music. I was speaking of Ronnie Scoth.
271. [When] I composed this music I only saw curtains over everything that was that way. Really it was very colorful. It is like I always say, that everything is sound. Long live the beautiful curtains, always enjoying the inspiration.
272. All of my compositions begin with an idea and end with changes of style. Why? I respond: It is because music is beautiful and the omnipotent does not have borders or preconceptions either. The true music is like life and nature and love that cure the pain.
273. I wrote this piece thinking about a forró in which everyone danced in strict dress, so I was whimsical in the chords to contrast a lot. The mind is who says everything. Long live peace!
274. Long live the sound and the hot land! A little red and wet to plant manioc and everything else. I am writing this piece now remembering the great Dominguinhos de Acordeon, it's all about him, only now it lacks his physical presence to play and to sing originally like only he did.
275. In writing this song, I only must thank Him, the greatest of all of us that is God. Every day inspiration comes to me falling in my heart, dumping emotion, so I am sure to fulfill my mission.
276. When I composed this piece, I thought about the march of the old through the clouds counting one by one, and I was there also. This also gives sound, long live the old!
277. The day will come when we will have the Minister of Music. I wrote this piece thinking about work for the subsistence of music without lyrics and the musician without money. All of us know that true, pure music is instrumental music, that I call *música universal*.

278. I wrote this remembering my great and encouraging friend Pernambuco do Pandeiro and his *regional*; I remember also two violinists, Jorge and Pinguim, Ubiratan and his cavaquinho. One of the great flutists of all time that they call Manuelzinho da Flauta, and the great Pernambuco.

279. Music composed on Good Friday. It has to have a taste of church and fish, *imbuzada*, shrimp, but without forgetting our God who gave us everything beautiful in the world. Happy Easter to everyone. This music is in the mood.

280. This piece makes me remember a lot of longing. There is a popular saying that goes like this: "It is Saturday of hallelujah, meat on the plate and *farinha* in the bowl." Because on Thursday and on Friday no one eats meat; today is the day that changed a lot in my time.

281. Easter Sunday He gave a piece in 7/4, good rhythm, lots of chords, just play it.

282. This piece is a lot like the old stairs of old houses, in that when we step it makes a happy sound, and the past remembers the silent movies and the musicians played chorinho style American jazz. Abel Ferreira, Pixinquinha, Copinha, Radamés, Altamiro Carrilha, Jacó do Bandolim, Valdir Azevedo and others.

283. The true and honest that April 1st is the day of liars, will it not also be their day also? I hope and am certain that when all of them listen to this piece, the liar will stop being one and be like me, telling the truth through the sound of music and the soul.

284. I asked to compose this piece with only a single one measure rhythm until the last measure. It is a beautiful piece in 5/4. Long live the sound!

285. I composed this piece remembering the weddings of my sons and daughters, with those long, white dresses and the people all around. And now, seeing the, all married with beautiful grandchildren, it is clear that they take after Grandma. But speaking again seriously, I tell them that my sons-in-law and daughters-in-law are beautiful and wonderful, that's why this beautiful music came out for all their birthdays.

286. This piece reminds me a lot of travel, since I'm going to pick up my passport; I have to travel. First to the Avenida Brasil and after abroad. As you can see, even this gives sound. Long live music!

287. This piece reminds me a lot of the great and eternal Jackson do Pandeiro, I thought about him while I was composing, I am sure that he was close. It is more sound for us to enjoy. Long live the light and the sound always!

288. This piece makes me remember the Quarteto Novo a lot, when I was composing it seemed like I was playing with Quarteto Novo. It was when I was a part of Quarteto Novo that I found myself more like a composer and arranger. Long live the sound forever!

289. I composed this piece thinking a lot about the *caboclos* of the *sertão* planting corn and beans to eat day-to-day until the cause arrives. Tell them: what saves us is our sound every day. Long live music and life and love.

290. The first marriage of like people on the planet Earth was by people named Baião and Blues, because harmonically the rhythm and the themes are both very hot; it is only when played modern that they are very pretty.

291. I composed this piece thinking about the little house I bought with the sweat of my body and the sun. I had to play the four day carnival in Clube Jequitimar in Santos, Sao Paulo; I played with a surdão drum and afterwards turned around and played the piano, all this only to get a down payment, because the performance was Cr$ 50,00 a month. I finished paying, how only
God knows, but all this is to say that everything was in vain, because they took my house, even made a false deed, but my sound was never taken. It was at São Miguel Paulista, Vila Mara, Rua Adriana Seabra, number 19.

292. I wrote this piece thinking a lot about my lovely Recife.

293. Composing this piece reminded me of the escolas de samba, their rhythm, their singers, their baianas, drum masters, mestre-sala, and porta-bandeira. Finally, with all of them

294. I am writing this composition that reminds me a lot of when I walked through the woods to taste the sound. I always found it.

295. I came to the idea to write a very fast waltz to test the soloists, play in tempo if you can. Everything in life is like arpeggios, very fast.

296. When I was writing this piece I remembered a lot the gafieira clubs, in which the music had to be played with three very important things; the harmony, the rhythm, and the melody, and mostly the musicians and dancers were beautiful mulatas and mulatos full of molejo (groove).

297. This piece in 7/4 came suddenly, like the hiccups that comes when we least expect, only that it [the hiccups] is annoying, we want to be free of it, the music never.

298. The piece makes me remember Lagoa da Canoa, when I swam and fished for piaba, we used to make jangadinhas [toy boats] with the banana tree, because it was very strong. But when you listen to the music you will certainly remember things differently.

299. I see in this piece a lot of jungle, many bugs, a lot of natural spring water, that there is a lot to see with my music that today is not only mine, it is everyone's, that is why it is called música universal.

300. I composed this piece remembering Lagoa da Canoa, my mom thought of me as a Catarina to play with when I was 8.

301. Long live música universal brasileira, that has its harmonies, its rhythms, and its wonderful melodies, all this. It is because Brazil is “supercolonized,” we have everything here.

302. Look up and see how the moon is beautiful there in heaven. I am certain that one day science is going to discover that the moon has all the energies for our planet, both for human beings and for animals in general. When you feel problems, look at the moon with an open heart, that will get everything.

303. I saw the morning moon through the window of my bathroom, she is pregnant again. For I know she is a unique woman that gives birth once a month and continues beautifully, forever. Music is like this also, when there is more time there is more sound, energy without end.

304. After the victory of Fluminense this piece came out today, because I was still dreaming, but now I see it is pure reality. Long live Flu forever!

305. Today heaven is partying, it is the birthday of the great master Pixinguinha. Those of you who also have a birthday today, feel honored with a great event. In the name of the sound and of the people, congratulations.

306. I composed this piece with a thought hammering all the time in my mind, so I will respectfully make a constructive criticism, I think that the media should enjoy the stay of the people here on Earth to honor them together with their families and the people, because after it's gone, vanity ends. You are already in heaven if you think about music and pray. Thank you.

307. It is another piece in 5/4 full of chords for you to have fun with. The rhythm and the melody are very tasty, it is only put together of three things.

308. Composing this piece reminded me a lot of the pe-de-pau parties that we call the "feast of fresh air." Even this gives sound, and how it gives. Long live the mind!
I had a beautiful dream with my parrot Floriano, I dreamed he was giving me his foot and singing beautiful things, posing on my forefinger. For this, he is also honored with all of you. Long live love!

Now my memory has stopped at Caruaru, in the Radio Difusora where I stayed for more than three years. It was there that I learned to play the accordion together with great musicians, who today are great maestros, composers, and instrumentalists. Caruaru is Jose Gomes, the great Omild Almeida, composer of that beautiful piece called "Feira de Caruaru," together with maestro Joachim Augusto. In Recife, maestro Clovis Pereira and maestro Duda and everyone, a great sound.

I remember the story that I already recounted for various friends, of the time when I lived in a tenement. There was a fight every day, but I always studied in the bathroom.

I composed this piece feeling the presence of many good people that were already gone physically. When I was thinking of a phrase I always felt them smiling, every one of them giving beautiful tips. If I were to accept them all, it would give composition without end. I always appreciate and tell them: I have to compose myself, now you know what my mission is.

This piece is a mixture of everything, with the title "Pixitotinha," but it always holds the energy of the sound.

True music is like destiny and the gift, we are born and live with them, every one of us with our missions, mine you all know!

I wrote this piece thinking about the hill with its energy and its people, always fighting against everything and against everyone. Those that think that the hill does not turn, they do not lose hope. Long live the hill always!

I think that in another incarnation I certainly lived in Vienna, because I remember many rhythms in 3/4, but now I have influences of the whole world, [so] everything comes out all mixed up, which is how it [the music] is good.

I composed this piece remembering my eternal teacher Zelia Gaio. I know that today is the birthday of people from all over, this I want to include as well. Dona Zélia, it is always good!

This piece makes me nostalgic, thinking of memories of almost everyone, from here and from there as well. Long live the sound!

This piece has jungle smell, wildflowers, water in the rivers, and bandinhas playing in the playgrounds full of children. Long live the sound and love.

This piece reminds me of many shadows on the water in the sun, in the woods, in the street, in the clouds. These shadows are full of energies that reflect in us and from us to others. It is always good to be good of spirit because like this they will be wonderful and positive. Long live them!

This piece changes the tonality like water into wine. It is good for everyone to enjoy a sound that is very regional and modern. Long live the sound!

This piece has a lot to see with ass, donkey, rooster, hen, pig and all the animals of the Earth. Long live the cattle and their cowboys.

I composed this piece very strongly feeling the presence of my loving mother who passed away recently. I am sure that she is celebrating together with all of us, and why not say also with the spiritual mothers; so let us all turn sorrow into remembrance, longing into reality, so that we may love each other even seemingly at a distance. So let's enjoy and long live the sunrise, the moon, the children, the sound, and all other things.

My compositions are like a waking dream. In this piece I took a trip in a jeep through a street of red clay full of plantations on both sides. Long live the sound and the colors!
325. Here a pretty little bird passes through my window, good to see you. Today was a day in which he sang more, so I composed this piece listening to him. I think that he also has a birthday today; congratulations to him and all his little friends from the trees.

326. When I composed this piece the day was very rainy and cold, so I had to warm up through the energy of the sound and the harmony with very light chords so that the melody is like a clearing in winter.

327. When I composed this piece, I saw with my mind an auditorium full of very enraptured people with eyes fixed and whispering the melody together with me. Long live the inspiration and the sound!

328. I composed this piece remembering all the time in my homeland Lagoa da Canoa.

329. This piece reminds us of running through I don't know what, and end up finding some important thing that is love and the sound.

330. Today the sun comes out with its rays full of energy for us. The heat of the sun shakes our mind and makes inspiration flow with a lot of force and harmony, rhythm, melody, and everything else.

331. I wrote this piece thinking about the great victory of our Fluminense. I want to give heartfelt congratulations to this wonderful crowd and to the president and to all the board of directors; to the artists with the ball go my thanks for everything they did and are going to do.

332. This piece reminds me of the **festas de cavalhadas** (parties of the horsemen) in my city, Lagoa da Canoa.

333. This piece reminds me of the wedding parties I would play for three days without end, until sunrise.

334. This piece reminds me of the landscape of the streets and the colorful mountains of life. Long live the sound!

335. This piece reminds me of the end of parties without fights, only happiness. The world is tidy or not, but always happy.

336. This piece reminds me of the arrival of parents with a puppy, birds, children with dolls, whistles. Only all together can this group give sound.

337. This piece reminds me a lot of the people going to the countryside in the morning, harvesting corn and beans, with children at least 12 years old; and at the end of harvesting all of them did their part, it is clear that that's better.

338. I wrote this piece thinking about when I lived in a tenement. You should not stay with the truth incubated, wait for the right time and put your mouth on the tuba for anyone who wants to listen.

339. This piece makes me remember a great **serenata** in the wind and rain. I am being very sincere with my imagination.

340. When I composed this, it was like being at a happy picnic eating everything.

341. I wrote this piece imagining the beautiful city of Vienna. I was walking through those narrow streets, full of energy to give inspiration. Ai!! What nostalgia is there! Long live the sound and love!

342. This piece is a mixture of various styles, they inspire me here.

343. This piece reminds me of people riding a tram, a cable car here like that of the Santa Teresa. Long live the sound forever!

344. This piece reminds me of the **cirandinhas** of Recife and the **frevos** in the street, and composers like Capiba, Nelson Ferreira and singers like Claudionor Germano, Expedito Boracho, Paulo Tito and many others.
345. I wrote this piece thinking a lot about sweets. If you have plaque in your mouth, be very careful with the *puxa-puxa*, it grabs (sticks) so much that it holds your breath.
346. I wrote this piece thinking about a great trip I took on a train through the beautiful mountains of my also beautiful Brazil.
347. I wrote this piece soon after conducting an interview for a journalist in New York and Boston. It is clear that I thought a lot about those beautiful cities, we are going to play there on June 19-20, first in Boston.
348. One time I was overjoyed being invited to give a lecture about the *som da aura*, I am certain that it is the music of today and forever. I was honored by four music schools in the U.S.A.
349. This piece reminds me a lot of cloth dolls, made with socks, all very colorful so that the playing field is quite a happy place. Long live the sound!
350. To compose this music reminds me of a phrase I have never thought about: It's no use walking backwards because the world is spinning, spinning without end, it is like the sound.
351. I imagined a person arriving from the interior to the big city wanting to show off a modern *baiao*. That's it, it is a sophisticated *baiao* type of thing, from Hermeto.
352. This piece is very beautiful and sophisticated, but very sweet and full of energy, long live this piece!
353. As soon as I finished composing this piece, next I thought of a wedding in a field full of flowers, and with all the invited guests on their horses until the priest married the bride and groom mounted on their white horse.
354. This reminds me a lot of the meeting of musicians before a *regional* rehearsal with the singers and instrumentalists at the radio station.
355. This piece very clearly portrays a very anxious person waiting for a great love through the sound.
356. When warm weather arrives, only a crazy *forrozinho* can come out, like this one that I finished composing. Let's wait for the day, it is good for all of us.
357. This little piece is small but full of energy, it was not laziness, but a lot of love.
358. This piece makes me remember the sea full of fish looking outside, with the desire to leave, but, they do not know how to walk in the sand, I would go into the water and make a sound for them.
359. I swear that to compose this piece I saw a very blue heaven the whole time, full of stars; it is a vision that I will never forget. Long live the sound and life with love.
360. This piece makes me remember the busses at the bus station arriving and leaving, and the people arriving and leaving looking for the terminals to travel to their destinations.
361. I composed this piece anxious about traveling abroad with the group to show one more time that this sound is loved and admired by everyone.
362. When I was composing this piece, it was like I was walking over several bridges until I got home.
363. This piece makes me remember people riding in a cart through the streets.
364. I composed this piece in Central Park looking at and admiring the landscape and the singing of birds together with people talking. I kept looking in the dressing room and (the sound) gave this song, I hope it's tasty.
365. On my 61st birthday, I want to send lots of kisses to my family in general and my beautiful and wonderful musical group, and to everyone that also has a birthday today. A beautiful sound for everyone.
366. I composed this piece for those born in leap years, because it is very important to honor them as well. Long live the sound and February 29 forever!
## Appendix B. Categories of Inspiration

<table>
<thead>
<tr>
<th>Source of Inspiration</th>
<th>Number of Pieces</th>
<th>Specific Pieces</th>
<th>Criteria for Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality</td>
<td>21</td>
<td>45, 63, 72, 137, 159, 161, 166, 177, 185, 186, 192, 198, 218, 241, 245, 260, 262, 267, 275, 279, 281</td>
<td>The inscription must contain a prayer, a mention of God, a mention of Hermeto’s spiritual mission, or mention a spiritual activity or program which Hermeto took part in or watched that day. References to the spirit of a deceased musician were not included.</td>
</tr>
<tr>
<td>Soccer</td>
<td>15</td>
<td>41, 57, 64, 70, 72, 75, 78, 91, 102, 126, 141, 155, 156, 304, 331</td>
<td>The inscription must reference Hermeto thinking about or watching any soccer team or game.</td>
</tr>
<tr>
<td>Family(^{425})</td>
<td>12</td>
<td>3, 60, 73, 74, 92, 158, 159, 161, 269, 285, 323, 365</td>
<td>The inscription must mention one or more of Hermeto’s family members or the family as a unit.</td>
</tr>
<tr>
<td>Fluminense</td>
<td>11</td>
<td>57, 64, 70, 75, 78, 126, 141, 155, 156, 304, 331</td>
<td>The inscription must reference Hermeto thinking about Fluminense or watching a Fluminense game</td>
</tr>
<tr>
<td>Party</td>
<td>8</td>
<td>60, 73, 74, 266, 308, 332, 333, 335</td>
<td>The inscription must reference Hermeto going to a party (either immediately before, during, or immediately after composing), or must reference the memory or mental image of a party.</td>
</tr>
<tr>
<td>Rain</td>
<td>9</td>
<td>67, 69, 71, 74, 81, 145, 154, 201, 326</td>
<td>The inscription must mention rainy weather. Mentions of rain from past days were not included, nor were pieces written on days that we can infer were rainy from later inscriptions. Mental images of rain and prayers for rain were also excluded from this group.</td>
</tr>
</tbody>
</table>

\(^{425}\)“#58” and “#160” are solo piano works that would have been grouped in with “Family.”
<table>
<thead>
<tr>
<th>Source of Inspiration</th>
<th>Number of Pieces</th>
<th>Specific Pieces</th>
<th>Criteria for Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>6</td>
<td>123, 245, 310, 325, 336, 364</td>
<td>The inscription must mention either the presence, sound, or mental image of one or more birds, including Hermeto’s parrot, Floriano.</td>
</tr>
<tr>
<td>Cavaquinho</td>
<td>6</td>
<td>76, 84, 104, 173, 190, 208</td>
<td>The piece must have been written on or for the cavaquinho. The mention of a cavaquinho player among a group of other musicians was not sufficient for inclusion.</td>
</tr>
<tr>
<td>Water</td>
<td>6</td>
<td>130, 221, 251, 256, 319, 358</td>
<td>The inscription must include inspiration from or mental imagery of a large body of flowing water, either a sea or a river.</td>
</tr>
<tr>
<td>Concert</td>
<td>5</td>
<td>83, 111, 112, 116, 260</td>
<td>The inscription must reference Hermeto having just finished playing a concert or just having returned home from playing a concert. Pieces whose inscriptions mention memories of concerts and future concerts were not included.</td>
</tr>
<tr>
<td>Heat</td>
<td>5</td>
<td>93, 119, 228, 330, 356</td>
<td>The inscription must mention current hot weather.</td>
</tr>
<tr>
<td>Source of Inspiration</td>
<td>Number of Pieces</td>
<td>Specific Pieces</td>
<td>Criteria for Inclusion</td>
</tr>
<tr>
<td>-----------------------</td>
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</tr>
<tr>
<td>Flowers</td>
<td>5</td>
<td>171, 203, 216, 319, 353</td>
<td>The inscription must mention flowers as either a mental image or metaphor for the piece.</td>
</tr>
<tr>
<td>Moon</td>
<td>4</td>
<td>175, 263, 302, 303</td>
<td>The inscription must mention either the moon as a mental image, metaphor, or source of inspiration.</td>
</tr>
<tr>
<td>Flugelhorn</td>
<td>3</td>
<td>80, 89, 249</td>
<td>The piece must have been written for or while thinking about the flugelhorn.</td>
</tr>
</tbody>
</table>
Appendix C. Supplemental Lead Sheets

Lead sheets in this appendix are mentioned throughout the dissertation but either were not shown or were not shown in their entirety in figures. All pieces are presented with Hermeto’s original voicings.

“#5” from June 27
Piece Arranged by Boukas as a Waltz/Guarânia on Tudo de Bom
Referenced on pg. 34, 35, 43

F\(^7\) E\(^b7\) B\(^b7\) E\(^b7\) F\(^7\) E\(^b7\) D\(^479\) B\(^b7\) E\(^5-9\) A\(^9+13\) E\(^5-9\) A\(^9+13\) D\(^479\) D/C B\(^b7\) B\(^5\)

E\(^479\) E\(^69\) A\(^67+9\) A\(^5+79\) A\(^7\) C\(^7\) C\(^5\#-5\) G\(^7\)

E\(^479\) F\(^479\) G\(^479\) B\(^479\) D\(^b7\) D\(^b/C\) C\(^7\) A\(^b7\) G\(^7\) E\(^479\)

F\(^8-479\) B\(^479\) A\(^7\) G\(^7\) G\(^7\) E\(^b9+13\) E\(^7\) D\(^7\) G\(^7\) E\(^479\) A\(^b7\) F\(^479\)

A\(^479\) B\(^479\) G\(^5\) F\(^7\) D\(^b7\) D\(^9+11\) D\(^b7\) F\(^7\)
“24” from July 16

Piece with “7+” Voicings used Similarly to “67+9” Voicings Discussed in Chapter 5
Referenced on pg. 111
“#51” from August 12
Only Piece with Traditional Style Marking (Maxixe)
Referenced on pg. 18
“#61” from August 22
Piece Composed Primarily with Add 2 “4568” Voicings
Referenced on pg. 75
“#80” from September 10
Piece Referencing Jobim in Inscription with a Short Contrapuntal Line (mm. 7-8)
Referenced on pg. 2, 23, 59

G9 C69 A5-9 D9+13 G7+9 G479 C69 Bb9 E69

C69 Bb69 Db69 Eb69 A479 B479 C479 A5 D9+13

Eb7+ C7+ B479 G#479 A#479 F#479 A7+ A#5- D9+13

A479 D7913 G#-5-9 C#9+13 F#-5-9 B9+13 E5-9 A9+13- B7+ A7+ A5-9 D9+13

G7+9 G479 F7+9 F479 C67+9

ARPEGGIO
“84” from September 14
Piece Written on the Cavaquinho
“#93” from September 23
First Piece with Inscription Referencing Heat
Referenced on pg. 52
“#153” from November 22
Piece Arranged by Boukas as a Samba in 2/4 on Tudo de Bom
Referenced on pg. 12, 43, 45
“#190” from December 29
Piece with Inscription that References Cavaquinho
Referenced on pg. 58, 64
“#191” from December 30
Piece in Dorian
Referenced pg. 114

E7 A79
C679 A79 E7 A79 E7 A79
G7 C79 G7 C79 G7 C79
G7 C79 E679 C79

E7 A79 G7
D.S. AL FINE END WITH IMPROVISATION

C79
“#224” from February 1
Piece in 7/4 Written to be Played Like a Chorinho
Referenced on pg. 43 (recorded under the title “February 1” by Jovino and Anat Cohen), 48
“#235” from February 12
Piece in E Dorian
Referenced on pg. 79, 114
“#249” from February 26
Piece Written for Flugelhorn
Referenced on pg. 57, 63

E\textsuperscript{4568}/A A\textsuperscript{4568}/A E\textsuperscript{4568}/A E\textsuperscript{4568}/A G\textsuperscript{4568}/A\#\textsuperscript{4568}/A A\textsuperscript{4568}/D B\textsuperscript{4568}/D

E\textsuperscript{4568}/A D\textsuperscript{4568}/A A\textsuperscript{4568}/D E\textsuperscript{479} A\#\textsuperscript{67+9} F\#\textsuperscript{479} D\textsuperscript{67+9} G\textsuperscript{67+9} G/F\# E\textsuperscript{479}

G\#\textsuperscript{4568}/A A\textsuperscript{4568}/A B\textsuperscript{6} G\textsuperscript{b6} D\textsuperscript{b6} E\textsuperscript{b6} G\textsuperscript{b6} D\textsuperscript{b4568}/E

A/F\# C\textsuperscript{4568}/F\# D\textsuperscript{6} C\#\textsuperscript{7}+13 F/E C\textsuperscript{4568}/E B\textsuperscript{6} E/D C\# B A\#\textsuperscript{479} D\textsuperscript{b6}+9 C\textsuperscript{6}+9 B\textsuperscript{b6}+9

A\textsuperscript{4568}/D D/C\# D/C B\textsuperscript{7} B\textsuperscript{b7}+13 A\textsuperscript{67+9}
“#295” from April 13
Only Piece with a Specified Tempo Marking (Allegro), Waltz Written to “Test the Soloists”
Referenced on pg. 103
“#316” from May 4
Piec with Inscpe Referencing Vienna
Referenced on pg. 51, 61
“#341” from May 29
Piece with Inscription Referencing Vienna
Referenced on pg. 61

G\textsuperscript{67+9}  A\textsuperscript{5-}  G\textsuperscript{67+9}  C\textsuperscript{67+9}  B\textsuperscript{5-}  B\textsuperscript{b}/A\textsuperscript{b}  E\textsuperscript{79+13-}

A\textsuperscript{67+9}  F\#\textsuperscript{479}  D\textsuperscript{67+9}  G\#\textsuperscript{479}  C\#\textsuperscript{479-}  F\#\textsuperscript{479}  F\#/E  E\textsuperscript{b-479}  G\textsuperscript{b6}/A\textsuperscript{b}

D\textsuperscript{b67+9}  C\textsuperscript{79+13-}  D\textsuperscript{b67+9}  G\textsuperscript{b67+9}  G\textsuperscript{67+9}  C\#\textsuperscript{5-}  E\textsuperscript{479}  E\textsuperscript{b-479}  D\textsuperscript{67+9}

B-679  G\textsuperscript{67+9}  C\#\textsuperscript{79+13-}  F\#\textsuperscript{67+9}  E\textsuperscript{b-479}  B\textsuperscript{67+9}  A\textsuperscript{b-479}  A\textsuperscript{479}  D\textsuperscript{479}  D\textsuperscript{79-}

G\textsuperscript{67+9}  E\textsuperscript{b67+9}  A\textsuperscript{5-}  D\textsuperscript{479}  G\textsuperscript{67+9}  E\textsuperscript{67+9}
"#356" from June 13

Forrozinho Written Referencing Heat in the Inscription
Referenced on pg. 62

\[
\begin{align*}
E^{67+9} & \quad D^{67+9} & \quad E^{67+9} & \quad D^{67+9} & \quad C^{67+9} \\
A^{-479} & \quad B^{-479} & \quad G^{67+9} & \quad E^{67+9} & \quad E^{579+13-} \\
& \quad D^{67+9} & \quad D^{579+13-} \\
C^{67+9} & \quad A^{67+9} & \quad A^{-b479} & \quad G^{79+13-} & \quad F^{#67+9} & \quad E^{67+9} & \quad C^{#479} & \quad D^{#479} \\
& \quad (D^{#479}) & \quad E^{67+9} & \quad A^{67+9} & \quad A^{-b479} & \quad G^{67+9} & \quad F^{#67+9} & \quad F^{67+9} & \quad D^{57+9} \\
& \quad E^{67+9} & \quad C^{#479} & \quad C^{#67+9} \\
& \quad A^{#479} & \quad A^{#479} & \quad A^{#479}
\end{align*}
\]
Vita

Adam Rosado received a Bachelor of Music in Composition from Loyola University in 2011, a Master of Music in Jazz Composition and Arranging from the University of Nevada Las Vegas in 2013, and a Ph.D. in Music Theory from Louisiana State University in 2019. In addition to being an active composer and arranger, he has presented on the Calendário do Som in North America and Europe. He has taught Jazz Composition and Arranging, Saxophone, and Improvisation at UNLV and Aural Skills at LSU.