Tradition and Innovation in the Drumming of Airto Moreira: A portfolio of recorded performances and exegesis

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B Mus (Hons) 1997

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ABSTRACT

This project explores the relationship between traditional Brazilian rhythms and the more contemporary, innovative playing style developed by percussionist/drummer, Airto Moreira (b.1941). The submission for the degree of Master of Philosophy in Music Performance investigates how traditional rhythms, and to a lesser extent, influences from outside Brazil, have shaped Airto’s contribution to the development of Brazilian influenced jazz-fusion in the United States in the late 1960s and early 1970s.

The research addresses how aspects of Airto’s style can be successfully assimilated through transcription, analysis and performance. It focuses on the two main areas of every drummer’s musical vocabulary – time functioning and solo material and presents relevant case studies from two recorded recitals. The first recital features traditional Brazilian songs along with compositions from Airto’s recording career. The second recital explores a more contemporary approach to samba. Each recital demonstrates the application of aspects of Airto’s style and innovative approach.

The dissertation comprises CD recordings of two 60-minute public recitals and a 7,500 word exegesis.
DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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John McDermott

1 November 2015
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NOTATION KEY

All transcriptions assume the conventional right hand drum kit configuration.
CHAPTER 1

INTRODUCTION

Ever since the explosion of *bossa nova* in Rio De Janeiro during the 1950s and 1960s, American jazz musicians have drawn inspiration from Brazil’s rhythmic diversity and complexity. The dialogue has been two-way; *Samba* in particular has had a profound effect not only on the development of *bossa nova* in Brazil itself, but on North American jazz – especially jazz-fusion.¹

This apparent reciprocal influence between genres from Brazil and North America inspired creativity in a number of Brazilian musicians and composers who were eager to further advance the evolution of Brazilian music. One such musician was percussionist/drummer, Airto Moreira (b.1941). Commonly referred to simply as Airto, he became one of the most influential and groundbreaking contributors in the evolution of jazz-fusion. His contribution was such that *Downbeat* magazine added a percussion category to its readers and critic’s poll awards specifically for Airto, as he was consistently taking out the Miscellaneous Instrument award. He has since won the new category over twenty times since 1973.² In their book *The Brazilian Sound*, McGowan and Pessanha summarise his importance:

> Airto spearheaded the Brazilian ‘percussion invasion’ of the late 1960s and ’70s that infused American jazz with new rhythms, percussive textures, and tone colors … Airto would have the biggest impact outside his country of any Brazilian drummer or percussionist.³

With this in mind, this study identifies and interprets through performance the bridge between the influence of traditional Brazilian rhythms and genres on Airto’s style, and his innovative approach to its application in Brazilian influenced jazz-fusion. Through transcription, analysis, assimilation and performance, the study investigates

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³ McGowan, Pessanha. 185.
the idiosyncrasies of *samba* rhythms predominantly, the techniques involved, and the rhythmic devices and improvisational language intrinsic to Airto’s musical language. Although Airto is primarily recognized as a percussionist, the study focuses exclusively on his drum kit playing.

Airto Moreira was born in 1941 in the south Brazilian village of Itaiópolis and raised in the city of Curitiba. He began his professional career as a teenager playing percussion, drums and singing. He was a member of the *bossa nova* group Sambalanço Trio in the early 1960s before forming the Sambrasa Trio which later became Quarteto Novo. Airto met singer Flora Purim in Rio De Janeiro and in 1968 followed her to the United States where his knowledge of Brazilian rhythms and vast collection of percussion instruments soon impressed musicians who were creatively involved in the evolution of jazz-fusion. He would go on to perform and record with many bands and artists but most notably with Miles Davis on the ground breaking fusion album, *Bitches Brew* (Columbia, 1970). He was then invited to play percussion on Weather Report’s debut self-titled album in 1971. After touring with Miles Davis, he played drum kit with Chick Corea’s group, Return to Forever on the albums *Return to Forever* (ECM, 1972) and *Light as a Feather* (Polydor, 1972). Since 1970, Airto has released over twenty solo albums.

In terms of existing literature, there appears to have been no publications written on the dynamic between Airto’s rhythmic innovations and his loyalty to tradition in the development of Brazilian fusion. Airto’s own instructional book, *The Spirit of Percussion*, touches on some of his drum kit interpretations of various Brazilian styles, as well as transcriptions of a small selection of excerpts from his recordings, but overall, the content is quite minimal and solo transcriptions are non-existent. Several instructional books on traditional Brazilian rhythms and their drum kit adaptations exist, but none that specifically target Airto’s contributions to the development of more contemporary, innovative processes. It is the author’s hope that this study will offer insight into Airto’s innovative style, his improvisational concepts inspired by traditional *samba* and his contribution to the development of jazz-fusion.

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4 McGowan, Pessanha. 185-187.
The research methodology pursues three tiers of investigation. Firstly, Airto’s vocabulary of time functioning and solo material are identified. Second, the vocabulary is assimilated and incorporated into two recital performances. And third, the impact of this study on the recital performances is evaluated and analysed.

Research questions addressed during this study were:

- What are the historical precursors of Brazilian fusion?
- What is the impact of the drummer on Brazilian fusion from a rhythmic perspective?
- What musical influences (both traditional and modern/global) have impacted on the modern Brazilian fusion drummer?
- What are the key characteristics of Airto’s innovative style?
- How can the dynamic between tradition and innovation in Airto’s drumming be best explored through performance?

Responses to these questions are incorporated into each of the chapters, outlined below.

The first tier involves comprehensive listening and analysis of recorded material to better understand the influence of traditional Brazilian rhythms on Airto’s musicality. During this stage, two main components of his playing style are investigated – time functioning and solo material. These two components are divided into sub-categories that best represent Airto’s musical vocabulary. In some instances, transcriptions of complete solos and extended time functioning were necessary for analysis and these are documented in Appendix B. In other cases, smaller excerpts deemed relevant are documented. These transcriptions are cross-referenced with well-documented traditional time keeping rhythms, and material gathered during a field trip to Rio De Janeiro in December 2013.

The second tier of the research addresses the practical application and assimilation of the material gathered. This involves the practice of complete transcriptions and excerpts as well as the development of assimilation exercises. These exercises are necessary to facilitate a methodical approach to gaining mastery over a considerable number of rhythmic variations and possibilities. In turn, through familiarization and
muscle memory programming, an extended skills set in this genre is developed. These newly acquired skills are then put into practice during two 60-minute public performance recitals (submitted here as CD 1 and CD 2).

The **third and final tier** of the project involves the analysis of the recorded performances. The success of assimilation during performance is assessed and examples are given that best represent the application of Airto’s musical language.

The first recital features the traditional styles of *samba*, *baião* and *partido alto* as well as compositions from Airto’s recording career in a genre best categorized as Brazilian fusion. Stylistic nuances are observed and arrangements closely resemble the original recordings. The second recital features *bossa nova* and works from the Brazilian fusion genre, some of which are original compositions composed by the current author. This recital more deeply explores the application of Airto’s innovative playing style in a contemporary setting.

The **content of the dissertation** centres on case studies drawn from the two recitals, respectively. Chapter Two – ‘Case Studies from First Recital’ – outlines key stylistic features of Airto’s playing under the categories of ‘Time Functioning’ and ‘Solo Material’. Sub-categories address the historical precursors to Brazilian fusion and the elements native to traditional *samba*, the influence of traditional rhythms on Airto’s development, and the evolutionary aspects of his playing that steer away from tradition towards innovation. The chapter outlines the ways that these elements have been applied in performance, referencing specific recorded examples on CD 1.

Chapter Three – ‘Case Studies from Second Recital’ – investigates a broader application of the concepts presented in Chapter Two. The focus is again on the categories of ‘Time Functioning’ and ‘Solo Material’, but here in the context of contemporary performance. Contemporary performance in this regard is considered to be a more improvisational approach to performance within the framework of non-traditional musical arrangements. The chapter analyses the influence of Airto’s musical language on a selection of contemporary works and original compositions. A discussion is presented on the improvisational aspect of assimilating this language in performance, referencing specific recorded examples on CD 2.
The overall findings and potential for future development are then discussed by way of conclusion. Appendix A contains an overview of the recital recordings; Appendix B contains extended transcriptions of Airto’s work; Appendix C comprises of charts used in both recitals; and the two recital programmes are found in Appendix D.

In sum, the study finds that aspects of Airto’s time functioning and solo repertoire can be successfully assimilated through performance. Elements of traditional Brazilian rhythms can be identified in his approach to jazz-fusion and its application in contemporary performance can be effectively realized.

Note on transcriptions: In contrast to the Brazilian practice of notating samba rhythms as semiquaver subdivisions in 2/4 time, throughout this exegesis, notation will feature the equivalent quaver subdivisions in cut-common time (with the exception of odd meter examples) to align with Western practice (as per charts in Appendix B). All transcriptions are by the current author.
CHAPTER 2

CASE STUDIES FROM FIRST RECITAL

This chapter presents a collection of case studies from the first recorded performance. Examples of Airto’s solos and time functioning from compositions recorded during his career between 1967 and 1980 are transcribed and analysed. Cross referencing is conducted with existing literature to determine the similarities and differences between elements of traditional Brazilian rhythms and those played by Airto. References and comparisons are also made to knowledge acquired during a field trip to Rio de Janeiro and Belo Horizonte in Brazil in 2013. During the trip studies were undertaken with prominent Brazilian drummers and the performance of traditional music was observed and documented.

The analysis of time functioning and solo material are divided into sub-categories listed below.

Time Functioning

1. Variations on traditional samba
2. Left hand partials
3. Left hand orchestration
4. The jazz samba
5. Hands in unison
6. Samba with brushes
7. Time functioning in 7/4
8. Genres other than samba

Solo Material

1. Variations on batucada
2. Rhythmic variation in 7/4

The works in the first recital are presented almost chronologically, acknowledging a timeline of musical development in Airto’s style. Four compositions are by Airto Moreira – ‘Misturada’ and ‘Tombo in 7/4’ address time functioning in 7/4 and rhythmic variation in 7/4. ‘Creek’ and ‘Partido Alto’ cover genres other than samba. There are also performances of two compositions by Chick Corea – ‘You’re Everything’ and ‘Spain’ feature Airto on the original recording of the album Light as
a Feather. These two pieces look at Airto’s approach to samba with brushes and jazz samba. To acknowledge the obvious influence of traditional samba on Airto’s musical development, the tunes ‘Só Danço Samba’ and ‘Tristeza’ were also included.

2.1 Time Functioning

2.1.1 Variations on Traditional Samba

To effectively discuss this chapter we must first determine what defines traditional samba rhythms. Samba is a rich and diverse musical style with many sub-genres and is an intensely integral part of Brazilian culture. Its most recognizable form would be associated with street celebrations in Rio’s carnaval. In samba batucada (or ‘street samba’) the tamborim is one of many percussion instruments that make up the bateria – an ensemble often consisting of hundreds of percussionists. The tamborim is a small frame drum approximately six inches in diameter played with a multi-pronged stick. Due to its proportions and design, the tamborim’s high pitched sound is very cutting sonically making it aurally discernable amongst the ensemble. For this reason, its rhythms have traditionally translated well to the higher pitched parts of the drum kit – namely the hi-hat or ride cymbal. Figure 1 presents the most commonly played tamborim rhythm. This pattern serves a similar purpose in samba as the clavé rhythm does in Cuban salsa music, in that it provides a rhythmic foundation on which rhythmic elements of the music can be developed.

![Figure 1: Traditional two bar tamborim rhythm](image)

Played on the drum kit against a samba bass drum/hi-hat ostinato with the feet, the tamborim rhythm would translate to the ride cymbal or hi-hat as in the pattern below. This is widely accepted as one of many traditional approaches to playing samba on drum kit. For the purpose of this discussion, left hand rhythms have been excluded from the notation but are often played in unison with the right hand. This traditional
two bar repetitive approach on the ride cymbal can be heard on the tune ‘Tristeza’ (CD 1, track 2) from 0:50 – 1:20.

![Figure 2: Drum kit adaptation of traditional samba featuring tamborim rhythm](image)

Examples of other variations of tamborim rhythms are presented below. Note the common theme of tension and release between downbeats and offbeats crossing the barline. More precisely, the offbeat quavers create the rhythmic tension so it could be more appropriately labeled release and tension. Within the context of traditional samba batucada, these are invariably played as a repetitive two bar pattern.

![Figure 3: Tamborim rhythm variations](image)

Airto demonstrates in the early part of his career, his reference to this traditional approach but regularly intersperses this with syncopated, more innovative variation. Refer to Appendix B for a transcribed excerpt of Airto’s time functioning from the 1965 recording of the Sambalanca Trio’s ‘Samblues’ (piano solo at 0:42).

The time-honoured tradition of tension and release is a mandatory rhythmic characteristic of many genres and samba is no exception. Also referred to as call and response or question and answer, Airto takes the concept even further. His approach in the example below shows how a traditional two bar ride cymbal pattern is answered with a two bar rhythmic variation creating a four bar sequence.
This multi-layered call and response technique creates an effective and creative improvisational language.

Figure 4: Ride cymbal variation showing multi-layered call and response in a 4 bar sequence

This adds refreshing interest to the rhythmic flow of the accompaniment and is usually a spontaneous and improvisational reaction to the immediate musical environment, such as a developing instrumental solo. The initial two bar traditional pattern could be thought of as a base that is returned to frequently to keep the rhythmic feel of the piece settled and within the stylistic parameters of the idiom.

This approach can be heard regularly throughout both recital recordings but in particular on ‘Tristeza’ (CD 1, track 2) from 1:32 – 1:41. In this instance (figure 5), the traditional two bar pattern is played followed by four bars of rhythmic variation (i.e. 2x2 bar variations) before returning to the initial two bar phrase.

Figure 5: Traditional rhythm with two bar variations (CD 1, track 2, 1:32 – 1:41)

The number of possible combinations of traditional two bar rhythms and call and response variations is overwhelming. However, the performer’s improvisational language should be guided by the underlying pulse of traditional *samba* rhythms.
2.1.2 Left Hand Partial and Orchestration

Essential to Airto’s time functioning vocabulary is his use of left hand partials. Put simply, the left hand’s contribution to time functioning is less than that of the right hand’s rhythmic activity on the hi-hat or ride cymbal but generally, a considerable percentage of left hand function is played in unison with the right hand. For example, in the figure below it becomes evident that both hands are predominantly being played in unison.

![Figure 6: Excerpt from Airto’s ‘Samblues’ showing left hand partials](image)

Through aural analysis it can be determined that as a general rule, consecutive eighth notes in the left hand are mostly avoided – particularly at bright tempos. In figure 8 the offbeats on the ‘and’ of 3 in both bars are omitted from the left hand and in figure 9, beat 3 in bar 1 and beat 4 in bar 2 are excluded from the left hand. This gives the combined rhythm the perception of space and a vast number of possibilities for syncopated variation. The unison rhythm in figure 7 has a heavier, more laboured feel leaving less opportunity for improvised interaction with other ensemble members, and it occurs much less frequently than the partial left hand rhythms in figures 8 and 9.

The latter examples are just two of many options using combinations of left hand partials that embrace Airto’s style of time keeping.

![Figure 7: Both hands played in unison](image)

![Figure 8: Left hand partial – example A](image) ![Figure 9: Left hand partial – example B](image)
Again, this concept can be heard regularly throughout both recitals but specifically during the first recital it can be heard in ‘Tristeza’ (CD 1, track 2) again from 1:32 – 1:41 (see figure 10). If we consider the example in figure 5, adding left hand partials to the snare drum, the result is a cohesive and traditional method of time functioning in the _samba_ style represented below.

![Figure 10: Traditional time functioning with left hand partials (CD 1, track 2, 1:32 – 1:41)](image)

Another facet of Airto’s time functioning is the orchestration of left hand rhythms around the kit. This technique adds a melodic quality to the accompaniment as well as the perception of percussive density. It is an effective method in creating added rhythmic intensity and interest to the genre. During the tune ‘Samblues’, Airto orchestrates left hand partials between cross-stick on the snare, the head of the snare, two rack toms and a floor tom. Below is an excerpt of Airto’s orchestrated approach during the piano solo in ‘Samblues’ from the album _Sambalâncio Trio_ (Audio Fidelity, 1964). The complete transcription is found in Appendix B.

![Figure 11: Airto’s left hand orchestration in ‘Samblues’](image)

This concept was explored briefly in the first recital during the first tune, ‘Só Danço Samba’. The composition by Antonio Carlos Jobim is a medium tempo _samba_. As is traditional practice, a medium _samba_ is played with mostly continuous eighth notes in the right hand. This best simulates the rhythmic density of the _chocalo_ – a Brazilian shaker made from a metal canister. The practice of playing traditional broken eighth
note *samba* rhythms in the right hand at faster tempos is due partly to the physical inability of playing continuous eighth notes at those tempos. This is not the case with a tune such as this, hence the density of the right hand pattern against an orchestrated left hand rhythm around the kit in the example below. This can be heard on CD 1, track 1 from 1:59 – 2:11.

![Figure 12: Left hand orchestration during ‘Só Danço Samba’ (CD 1, track 1, 1:59 – 2:11)](image)

2.1.3 The *Jazz Samba*

Widely considered a pioneer in Brazilian jazz and jazz-fusion, Airto adopts a different approach to time keeping during the 1972 recording of Return to Forever’s album, *Light as a Feather*. The tune ‘Spain’ was featured in the first recital to draw attention to this aspect of his innovative contribution in this genre.

During the original recording of ‘Spain’, Airto plays a *jazz samba* pattern throughout most of the improvised instrumental solos, with some variation and rhythmic development as the solo builds. His time functioning for the majority of the tune is rhythmically quite repetitive – repetition being a traditional virtue of the Brazilian percussionist. Represented below are two examples of Airto’s approach throughout most of the solos.

![Figure 13: Examples of Airto’s time functioning in ‘Spain’](image)
The ride cymbal pattern in the figure above is widely accepted as a jazz samba rhythm due partly to its resemblance to the standard swing pattern used universally in jazz. Note the static left hand rhythm and the linear nature of the first pattern.

To further illustrate the traditional influence on Airto’s musicality, let’s look at a Brazilian percussion instrument called the repinique (also called repique in the north-east of Brazil). According to Uribe, the repinique ‘is a small double-headed drum played with a stick in one hand, with the other hand playing directly on the head. It often serves as a sort of internal musical conductor in the Escola de Samba playing cues for the ensemble.’ 6 Below is a common timekeeping pattern played on the repinique.

![Figure 14: Repinique time keeping pattern](image)

A comparison to the pattern played between the hands in figure 13 shows a distinct similarity between the two. Airto’s jazz samba pattern is compatible with a permutation of the repinique rhythm commencing on the second beat of the phrase. It was also discovered during studies in Brazil that a relatively modern approach to timekeeping on the ride cymbal adopts the right hand repinique rhythm as opposed to the ride cymbal rhythm in figure 13. This would imply that the jazz samba pattern is not widely embraced by Brazilian drummers.

To acknowledge Airto’s style of time functioning in ‘Spain’, the jazz samba approach was featured on CD 1, track 6 sporadically throughout the piece but particularly during the flute solo from 1:56 – 2:18 and the bass solo from 5:20 – 5:35.

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2.1.4 Hands in Unison

The previous method of static timekeeping is in stark contrast to Airto’s approach when he is interacting with the soloist. In the original recording of ‘Spain’ during Chick Corea’s electric piano solo, Airto can be heard revisiting the traditional approach of hands being played in unison, interspersed amongst extended measures of the jazz samba pattern. The excerpt below is at 5:53 on Return to Forever’s version of ‘Spain’.

![Figure 15](image15.png)

Figure 15: Airto plays hands in unison during piano solo in ‘Spain’

This concept of hands in unison can be heard being utilized more frequently during the recital recording of ‘Spain’ (CD 1, track 6) at moments where the ensemble is being particularly interactive or rhythmic variation is needed to influence the direction of the solo – this can be heard at 4:13 during the keyboard solo (see Fig. 16 below).

![Figure 16](image16.png)

Figure 16: Hands played in unison during keyboard solo (CD 1, track 6, 4:13 – 4:17)

… and again at 5:41 during the bass solo (Fig. 17).

![Figure 17](image17.png)

Figure 17: Hands played in unison during bass solo (CD 1, track 6, 5:41 – 5:45)
2.1.5 *Samba* with Brushes

The tune ‘You’re Everything’ (CD 1, track 5) features *samba* being played with brushes to acknowledge the technique used by Airto in the original recording of the tune. The application is generally quite repetitive and produces an effect similar to that of a shaker. Shakers of various materials and design are used in traditional *samba* using a static eighth note rhythm with accents that emphasize the two feel. Fills are occasionally added by doubling up the rhythm (see figure 18).

![Figure 18: Samba shaker pattern with fill](image)

An added advantage of playing *samba* with brushes is the ability to execute accented rhythms between the hands to create the traditional *tamborim* rhythm (see figure 1). Using a single stroke roll predominantly, this facilitates easier attainment at brighter tempos compared to the more complex level of coordination needed with sticks.

In comparison with the accented brush pattern that Airto played on the original recording (see figure 19), a different approach was taken on the recital recording of ‘You’re Everything’. The underlying rhythm or *clavé* more closely resembles the traditional *tamborim* pattern. Over this *clavé*, brush patterns were played with more accented rhythmic variation, fills and density compared to that of Airto’s. An example of this can be heard from 0:44 – 0:56 on CD 1, track 5 (see figure 20).

![Figure 19: Example of Airto’s brush pattern on ‘You’re Everything’](image)
2.1.6 Time Functioning in 7/4

Two works in 7/4 time were presented in the first recital – ‘Misturada’ and ‘Tombo in 7/4’. Although the vast majority of samba compositions are written in cut-common time (or 2/4 in Brazil), a surprising number of more contemporary Brazilian composers and arrangers have written samba tunes in 7/4. Airto has been a major contributor to the creation of Brazilian music in time signatures other than cut-time. Throughout his career he composed and/or recorded pieces in 3/4, 5/4, 6/8 and more commonly, 7/4.

Airto’s approach to playing in 7/4 features a variety of concepts worthy of analysis, both in time functioning and solo material. Consider the timekeeping pattern played by the hands in figure 21 from the tune ‘Misturada’.

It could be argued that two things are happening here. Firstly, the right hand hi-hat pattern looks and sounds similar to the third tamborim rhythm variation seen in figure 3, but with the last beat omitted. Secondly, the pattern created by the right hand is symmetrical. In other words, the bar can be divided evenly into two as indicated by the dotted line in figure 21. This may also be interpreted as either a 2 over 7
polyrhythm or as two bars of 7/8 within a bar of 7/4 – the latter being a less practical interpretation when considering the bass drum pattern. An alternative and syncopated representation of symmetry in 7/4 can be seen here in figure 22.

![Figure 22: Syncopated symmetry in 7/4](image)

Underpinning this pattern in the hands is a bass drum/hi-hat ostinato that conveys a strong feeling of 4 with the ‘and’ removed from the end of the phrase as seen below. This gives the pulse an implied half-time feeling and is a dominant feature in Airto’s approach to playing *samba* in 7/4.

![Figure 23: Half-time feeling of 4 in 7/4 samba](image)

An example of the symmetrical approach can be heard on CD 1, track 3 from 2:03 – 2:34 (figure 24) coming out of the drum solo into the flute solo. This excerpt features the symmetrical ride cymbal pattern against an ostinato between snare and toms with some variation. Note the more syncopated bass drum pattern.

![Figure 24: Right hand rhythm featuring symmetry in 7/4 – ‘Misturada’ (CD 1, track 3, 2:03 – 2:34)](image)
An example of the strong half-time feeling of 4 as per figure 23, can be found throughout track 3 but particularly during the melody from 0:00 – 0:14 (see figure 25).

![Figure 25: Implying half-time feeling of 4 during 'Misturada' (CD 1, track 3, 0:00 – 0:14)](image)

In contrast to Airto’s timekeeping concept in ‘Misturada’, a much more repetitively percussive and soloist method of time functioning is employed in the tune ‘Tombo in 7/4’. This concept is reminiscent of the batucada tradition simulating a multitude of percussion instruments creating dense and insistent rhythms. Below is what Airto played during the ‘A’ sections on the original recording of ‘Tombo in 7/4’.

![Figure 26: Airto’s soloistic time functioning in ‘Tombo in 7/4’](image)

On CD 1, track 8 from 0:55 – 1:08, a similar example of soloistic time functioning can be heard but with more activity from the ride cymbal and toms, and more space added to the bass drum pattern as seen in figure 27 below.

![Figure 27: Variation on soloistic time functioning in ‘Tombo in 7/4’ (CD 1, track 8, 0:55 – 1:08)](image)
2.1.7 Genres Other Than Samba

Included in the repertoire for the first recital were two of Airto’s compositions that demonstrate his musical versatility – ‘Creek’ and ‘Partido Alto’. The song ‘Creek’ (CD1, track 4) features a dominant rhythmic influence from baiao – a style from the state of Pernambuco in Brazil’s northeast. The piece also has an obvious element of jazz-fusion with its complex melody and simple harmonic structure. Airto was heavily influenced by baiao from his tenure with the band, Quarteto Novo. Apart from Airto, all other band members were from northeastern Brazil. The band recorded only one self-titled album in 1967 featuring compositions in the baiao style.7

The defining rhythmic essence of the baiao is the pattern played on the zabumba drum simulated on the bass drum in figure 28. Also represented in the example below is a typical ride cymbal pattern played in this style.

Airto’s contemporary approach to this genre was to play the familiar jazz samba ride cymbal pattern over the zabumba rhythm. Below is an excerpt from Airto’s 1972 recording of ‘Creek’.

On CD 1, track 4, a combination of these two approaches can be heard from 0:31 – 0:35 – particularly bars 3 and 4 (see figure 30). The ride cymbal plays more improvised rhythms oscillating between the two ride cymbal patterns in figures 28 and 29.

7 McGowan, Pessanha. 183.
‘Partido Alto’ - track 7 in the first recital – is a sub-genre of *samba* called coincidently, *partido alto* (meaning ‘high party’). Although the rhythms in this style resemble that of *samba*, its orchestration between bass drum and snare produce a more syncopated feel, lending itself to interpretation that corresponds well with funk – so much so that this style is often associated with the modern *funk-samba* despite it being quite an old form of Brazilian music. Airto’s funk interpretation of the style (see figure 31) in his 1980 recording of ‘Partido Alto’ has perhaps become a template for modern *funk-samba* artists and his contribution in this genre is not to be dismissed.

Time-keeping on CD 1, track 7 again featured a more syncopated right hand rhythm on the hi-hat in contrast to Airto’s continuous quavers in the right hand. The example below presents a syncopated approach that can be heard from 1:07 – 1:17.

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Figure 30: Traditional and non-traditional ride patterns in ‘Creek’ (CD 1, track 4, 0:31 – 0:35)

Figure 31: Airto’s drum kit part during the melody of ‘Partido Alto’

Figure 32: Syncopated hi-hat part in ‘Partido Alto’ (CD 1, track 7, 1:07 – 1:17)
2.2 Solo Material

2.2.1 Variations on Batucada

Airto’s improvisational repertoire was heavily influenced by samba batucada. Also known as street samba, the style features many percussionists creating a dense wall of sound with repetitive syncopated rhythms. His soloing is often marked by its repetitive structure with minimal space, yet still explores rhythmic and textural variation. Airto would regularly feature drum kit adaptations of traditional batucada in performances. Its use in time functioning over a melody is widely used in the tradition of Rio’s Carnival and its samba schools. In the first recital, batucada sections can be heard assuming a time functioning role regularly. Examples include track 2 from 0:00 – 0:30, and track 8 from 1:50 – 2:24 and 5:48 – 6:22.

Below is the foundational batucada pattern that has the right hand playing the surdo part on beat 2. Principally, the pattern is executed using the single stroke roll throughout. This recorded example can be heard during time functioning at 0:00 on track 2.

![Figure 33: Drum kit adaptation of batucada in ‘Tristeza’ (CD 1, track 2, 0:00 – 0:10)](image)

To acknowledge this traditional aspect of Airto’s style, an improvised batucada solo was featured on the tune ‘Tristeza’ (CD 1, track 2) from 2:26 – 3.04. The drum kit adaptation in figure 33 demonstrates the fundamental concept of batucada but solo development requires an exploration of rhythmic ideas, embellishments such as accents, buzzed rolls, drags and flams, an understanding of traditional batucada orchestration and feel, and considerable technical coordination. Here, the aim was to
explore *batucada* variations using a combination of these ideas while the right hand predominantly simulates the *surdo* drum throughout the solo. Both hands fill up the rhythm to simulate the role of other *batucada* instruments (particularly the *caxixe* and *repinique*) in an attempt to match the density and orchestration of a *bateria* at Carnaval. The following excerpt can be heard from 2:26 – 2:42 on CD 1, track 2.

![Figure 34: Excerpt of the *batucada* solo featured on ‘Tristeza’ (CD 1, track 2, 2:26 – 2:42)](image)

2.2.2 Rhythmic Variation in 7/4

Airto’s improvisational concepts in 7/4 are extensive and varied. An analysis of his solo on Quarteto Novo’s 1967 recording of ‘Misturada’ reveals a confident and natural command of the time signature utilizing various methods of rhythmic subdivision, polyrhythm, repetition and orchestration. A transcription of the solo in its entirety can be found in Appendix B.

During ‘Misturada’ in the first recital, an example of the traditional and familiar concept of repetition can be heard at the beginning of the solo (CD 1, track 3, 0:52 – 0:59). The two bar phrase is repeated and both bars are virtually identical (see figure 35). Note the half time feeling of 4 in support from the bass drum and hi-hat. This pattern is very similar to the opening phrase of Airto’s solo.
Another example of the implied half-time feeling of 4 as an underlying framework is found at bars 17 and 18 of Airto’s solo. On track 3 from 1:28 – 1:32, a similar pattern was played with doubles between hands and feet being orchestrated around the kit (see figure 36).

Featuring prominently in Airto’s solo is the subdivision of eighth notes using groups of 3s and 2s – a counting technique used widely with odd meters. This concept is applied effectively by further permuting or displacing the sequence at various points in the solo. During bars 5 and 6 of Airto’s solo, a sequence of 3+3+3+3+2 is evident. The strong ‘2 over 3’ polyrhythm in this sequence produces an effective clavé rhythm that allows an easier flow of improvisation in 7/4. This concept can be heard on track 3 from 0:59 – 1:07 and is transcribed below in figure 37.
A permutation of this sequence is featured as a foundation during other sections of the solo. For example, the improvisation seen in the following excerpt (figure 38) is supported by an underlying sequence of 3+2+3+3+3 and can be heard from 1:07 – 1:10 on track 3.

![Figure 38: Permutated sequence of 3s and 2s in ‘Misturada’ (CD 1, track 3, 1:07 – 1:10)](image)

During bars 26 and 27 of Airto’s solo, an implication of symmetry is apparent. As discussed previously with regard to time functioning in 7/4, the phrasing might rhythmically suggest two bars of 7/8 within a bar of 7/4 (see figure 39). This might also be interpreted as a 2+2+3 sequence.

![Figure 39: Implication of 7/8 within 7/4](image)

This concept was employed during improvisation on track 3 from 1:32 – 1:36 and from 1:52 – 1:58. The example presented in figure 40 with orchestration around the kit can be found at 1:32.

![Figure 40: Implied 7/8 orchestrated around the kit in ‘Misturada’ (CD 1, track 3, 1:32 – 1:36)](image)
A further example of polyrhythm in Airto’s solo is discovered at bars 22 to 23. Using a sequence of 2+3, 2+3, 2+2, the implication of 5/8 is produced (2 x 5 quavers) with an implied bar of 2/4 time added (4 quavers) for rhythmic resolution. Again, this pattern serves as an underlying foundation for improvisation.

![Figure 41: Implication of 5/8 within 7/4](image)

Phrasing similar to that of Airto’s using the rhythmic sequence above was utilized from 1:35 – 1:42. The phrase features triplets played over the 2+2 section of the sequence and is repeated with a decrescendo for effect (see figure 42).

![Figure 42: Phrasing with the implication of 5/8 in ‘Misturada’ (CD 1, track 3, 1:35 – 1:42)](image)

In summary, investigation into variations on traditional *samba*, left hand partials and orchestration, and genres other than *samba* respond to research questions regarding historical precursors to Brazilian fusion and the musical influences that have impacted on the modern Brazilian fusion drummer. From a rhythmic perspective, case studies concerning the *jazz samba* reveal the impact of the drummer on Brazilian fusion, and time functioning and rhythmic variation in 7/4 point out some of the key characteristics of Airto’s innovative style.
CHAPTER 3

CASE STUDIES FROM SECOND RECITAL

This chapter presents a collection of case studies from the second recorded performance. This recital presents some challenging pieces that act as a vehicle for the assimilation of concepts investigated in the first recital. An investigation into more contemporary applications of these concepts is a focal point of the second recital. It aims to explore through performance and composition, effective application of material inspired by the style and innovative virtuosity of Airto Moreira, and present a valid inquiry into the evolution of Brazilian influenced contemporary music. Some examples will again reference information acquired during studies in Brazil.

Again, the focus is on two performance aspects – time functioning and solo material – each divided into the sub-categories below.

Time functioning:

1. Linear Phrasing 3. Rhythmic symmetry in odd meters
2. Polyrhythmic orchestration 4. Stylistic duality

Solo material:

1. Orchestration of batucada 2. Rhythmic tension and release in 7/4

Featured in the second recital are works that showcase the influence of the more innovative aspects of Airto’s style. Tunes by contemporary composers in Brazilian fusion include – ‘Samba Song’ by Chick Corea, ‘Yatra-Ta’ by Tania Maria and ‘Enchendo O Latão’ by Hamilton de Holanda’. There are three original compositions by the current author – ‘Igpay Atinlay’, ‘Eastern Standard Time’ and ‘Latinity’ as well as an original arrangement of Duke Ellington’s ‘Caravan’. To acknowledge the impact of bossa nova on Airto Moreira’s career and its relevance in the evolution of Brazilian fusion, two pieces by Antonio Carlos Jobim were included – ‘Chega De Saudade’ and ‘Água De Beber’.
3.1 Time Functioning

3.1.1 Linear Phrasing

Adopting a more contemporary approach in the second recital, the objective was to investigate a wider scope of rhythmic variation and orchestration around the drum kit, exploring beyond the boundaries of traditional *samba*. Some examples were consciously assimilated, others left to the spontaneity of interactive improvisation. This improvisational approach to timekeeping involved the combined rhythms of right and left hands being played with more freedom yet still incorporating elements of both traditional *samba* and *jazz samba*. Included in the time functioning repertoire is a more linear method of playing time where the hands are not (or rarely) played in unison. (In this context, rhythms played by the feet are discounted from the conventional understanding of linear funk drumming) An example of Airto applying this method of time keeping can be heard at 3:40 on Return to Forever’s ‘500 Miles High’ from the album *Light as a Feather* (see figure 43).

![Figure 43: Airto’s linear phrasing in ‘500 Miles High’](image)

From the first recital, brief applications of linear phrasing were used as seen in bar 1 of figure 16 and bars 1 and 2 of figure 17. A considerable percentage of the second recital dedicates a combined approach to time functioning that involves the amalgamation of the three methods summarized below.

1. **Hands in unison** – right hand features traditional *samba* rhythms, left hand plays all or part of those rhythms simultaneously
2. **Jazz samba** – a compound approach where the left hand implies traditional rhythms (partials) against a static ride or hi-hat pattern
3. **Linear phrasing** – featured to a lesser extent, rhythms are divided between the hands via sticking patterns.
An example of this concept can be heard on the original composition ‘Igpay Atinlay’ (CD 2, track 2) from 1:06 – 1:15 and is transcribed below (figure 44).

![Figure 44: Combining 3 methods of time functioning in ‘Igpay Atinlay’ (CD 2, track 2, 1:06 – 1:15)](image)

In the previous example, hands in unison are found in bars 2, 6, 7 and 8, elements of *jazz samba* are found at the end of bar 1 and crossing the barline from bars 2 to 3, brief moments of linear phrasing are found in the second half of bars 3, 4 and 5. Obviously, the improvisational nature of this combined approach will involve an overlap of methods.

Further examples of this concept can be found during ‘Latinity’ (CD 2, track 4) from 1:32 – 1:57 and also from 2:54 – 3:17.

As a consequence of its bright tempo, ‘Samba Song’ (CD 2, track 9) features linear phrasing quite prominently – particularly the three patterns below. Examples can be heard at 1:32, 1:36 and 1:46 respectively.

![Figure 45: Examples of linear phrasing in ‘Samba Song’ (CD 2, track 9, 1:32, 1:36, 1:46)](image)

Lastly, the ‘B’ sections of ‘Igpay Atinlay’ feature linear phrasing almost exclusively as a method of time keeping. Here, a more contemporary approach is adopted with the bass drum simulating rhythms played by the third *surdo* in *batucada*. This bass
drum rhythm was also featured on ‘Enchendo O Latão’ (CD 2, track 7) played with brushes. On track 2 at 0:49, the sticking pattern played by the hands is constructed around the bass drum rhythm and the left hand plays mostly ghost notes on the snare drum (see figure 46).

3.1.2 Polyrhythmic Orchestration

A regular feature of Afro-Brazilian music and indeed jazz-fusion, is the use of polyrhythm. Understandably, the use of polyrhythm and its orchestration on the drum kit are a regular feature of Airto’s musical vocabulary. As an example, on Return to Forever’s ‘500 Miles High’ at 3:13, there is evidence of an implication of 3/4 time over cut-common time, again using linear phrasing. This 3 beat motif is found from bar 3 in the figure below.

Orchestration of left hand partials around the kit (as discussed in chapter 2) is considerably more frequent in the second recital. This is particularly evident during instrumental solos where dynamic and rhythmic interaction develops between the soloist and rhythm section as the solo builds in intensity. An extended example of this can be heard on ‘Igpay Atinlay’ (CD 2, track 2) from 1:23 – 1:40.
Often a feature of this orchestration, polyrhythm and the implication of odd meters in the left hand are effective methods of complimenting the intensity of the solo by adding rhythmic tension. Consider the examples in figure 49 that illustrate the implication of 5/8 and 7/8 in cut common time using the subdivided quaver sequence of 2+3 and 2+2+3 respectively.

In figure 48, from the last quaver of bar 13 to the end of bar 15, a polyrhythmic pattern in the left hand is revealed that implies 5/8. In bar 15, the ride cymbal rhythm is permuted to accommodate the polyrhythm. Further evidence of polyrhythm can be found in figure 44 from bars 6 to 8 where the implication of 7/8 is played in the left hand cross-stick rhythm. Another example appears in 'Igpay Atinlay' from 3:59 – 4:08 (see figure 50) where 5/8 is again implied from bars 3 to 4. In bars 5 to 8 the implication continues but interestingly, it is now played over a 6 beat cycle suggesting a 6/4 time signature (indicated by the dotted lines).
Lastly, an extended example of polyrhythmic orchestration can be found in the tune ‘Yatra-Ta’ (CD 2, track 8). Inspired by the rhythmic development and intensity of the piano solo, from 2:39 – 2:44 a repeated 3 beat phrase was used to create polyrhythmic tension (see figure 51).

3.1.3 Rhythmic Symmetry in Odd Meters

Inspired by the use of symmetry in Airto’s approach to ride cymbal rhythms in 7/4, the second recital features two original compositions and an arrangement that apply rhythmic symmetry in its time functioning.

Firstly, the original composition ‘Eastern Standard Time’ (CD 2, track 3) presents a symmetrical \textit{partido alto} rhythm played in 7/4. Regularly throughout the piece, both the right hand (hi-hat or ride cymbal) and bass drum rhythms are influenced by symmetry. The example below can be heard from 0:13 on the track.
In contrast, at 0:26 the right hand plays a static open hi-hat rhythm commonly associated with *partido alto* but is now played across the barline, essentially in 7/2. The bass drum and cross-stick maintain the original rhythm (see figure 53).

On the following track ‘Latinity’, symmetry can again be heard at the beginning of the piece. The starting measures of solo drums in 5/4 (figure 54) present symmetry in the hi-hat and cross-stick rhythms against a bass drum pattern that implies 5/2 across the barline – a similar effect to that of figure 53. This solo is used to set up the rhythm section’s *tutti* introduction that features groups of 5s, then 7s in its opening bars. (refer to ‘Latinity’ in Appendix B)

Rhythmic symmetry is a dominant attribute in the odd time arrangement of Duke Ellington’s ‘Caravan’ and can be heard frequently throughout. During the 7/4 ‘A’ sections, symmetry in the piano part, bass line and drum kit part are evident. In the
example below, the hi-hat rhythm features symmetry in bars 1 to 4, and in the bass drum rhythm in bars 1, 3 and 5. This is heard from 0:20 – 0:30 on CD 2, track 6.

![Figure 55: Rhythmic symmetry in 7/4 in ‘Caravan’ (CD 2, track 6, 0:20 – 0:30)](image)

### 3.1.4 Stylistic Duality

Stylistic duality refers to the merging of two styles within a composition or arrangement and may exist simultaneously or independently. This concept is by no means exclusive to Airto’s musical legacy but rather acknowledges the fusion of traditional Brazilian genres with other musical influences, including other Brazilian styles. For example, on Airto’s original recording of his composition ‘Creek’ (featured in the first recital) he plays the northeast Brazilian style, *baião* on drum kit. As an overdub, he records on woodblocks a *maracatu* rhythm – another northeastern style. Featured in his composition ‘Happy People’, are reciprocating four bar sequences of Cuban and Brazilian rhythms. In Chick Corea’s ‘Spain’, there is the obvious influence of Spanish flamenco with the inclusion of castanets on the original recording, and obviously his considerable contribution to jazz-fusion yielded the merging of Brazilian rhythms with jazz and rock in many recordings as both a leader and as a sideman.

To acknowledge this concept, stylistic duality appears in both recitals but has particular relevance to the original compositions and other arrangements in the second recital.
The arrangement of ‘Caravan’ (CD 2, track 6) was inspired by Airto’s ‘Tombo in 7/4’ (featured in recital 1) where the ‘A’ sections are 7/4 samba and the bridge is traditional batucada in 4/4. The two styles can be heard from 0:33 – 1:00 and from 6:23 – 6:50.

Duality features in ‘Igpay Atinlay’ (CD 2, track 2) from 0:00 to 1:07. Following the batucada solo as an introduction, a traditional samba is played during the ‘A’ sections followed by a linear style contemporary samba in the ‘B’ section. This form is repeated throughout the piece.

An example of simultaneous duality can be heard in ‘Eastern Standard Time’ (CD 2, track 3). Accompanying the 7/4 partido alto rhythm during the ‘A’ sections is a Middle Eastern influenced melody based around the harmonic minor scale. This can be heard from 0:17 – 0:36.

Another original composition, ‘Latinity’ features a contemporary samba feel in the ‘A’ sections and in contrast, a baião is played during the bridge. An example of this can be heard from 0:36 – 1:08 but again, the form is repeated throughout the tune.

Finally, Chick Corea’s ‘Samba Song’ (CD 2, track 9) is a complex arrangement that features baião during the melody from 0:07 – 0:26 and again from 7:10 – 7:21, but over the solo form, contemporary samba is played as heard from 1:29.
3.2 Solo Material

3.2.1 Orchestration of Batucada

Expanding on the influence of batucada on Airto’s improvisational language, the second recital features further development of concepts related to soloing in the batucada style and explores orchestral variation around the drum kit.

Upon analysis of Airto’s solo on Quarteto Novo’s 1967 recording of ‘Vim De Santana’ from the self-titled album Quarteto Novo (Odeon, 1967), it was discovered that a variety of sticking patterns were necessary to facilitate many of the phrases used (transcription of complete solo found in Appendix B). This is contrary to the traditionally accepted method of using the single stroke roll to simulate batucada on the drum kit (such as that found in figure 33). In the following excerpt from ‘Vim De Santana’ (figure 56), the opening repeated 2 bar phrase gives evidence of the necessity to use the right hand to orchestrate accents on the toms.

![Figure 56: Sticking pattern used in opening bars of Airto’s solo in ‘Vim De Santana’](image)

The concept of using the right hand predominantly to orchestrate accents around the kit is prevalent throughout the solo and adds a melodic call and response element to the improvisation. It was also noted that many of the stickings contained paradiddle inversions, such as the outward paradiddle in bar 2 of the above figure for example. This warranted investigation into the practical application of sticking variations orchestrated around the kit that were relevant to improvisation in the batucada style. Hence, a comprehensive set of sticking patterns were compiled and explored around the kit. The process of assimilating these patterns into batucada produced a vast number of potential applications to improvisation in this style. Combinations of paradiddle inversions were particularly effective.
This approach to right hand orchestration around the kit was successfully assimilated into the *batucada* solo on the tune ‘Igpay Atinlay’ (CD 2, track 2). Figure 57 shows how this was achieved using various sticking combinations including the use of inward paradiddles in bars 2 and 7. (The bass drum/hi-hat ostinato has been excluded from this transcription). The example below can be heard from 4:42 – 4:50.

![Figure 57: Stickings used in *batucada* solo on ‘Igpay Atinlay’ (CD 2, track 2, 4:42 – 4:50)](image)

### 3.2.2 Rhythmic Tension and Release in 7/4

Borrowing from Airto’s improvisational ideas in 7/4, the arrangement of ‘Caravan’ in the second recital features a solo that expands on concepts discussed in Chapter 2. Supporting the solo is a vamp featuring the bass line seen in figure 58.

To create interest with rhythmic tension and release against the bass line, several rhythmic permutations were explored, inspired by Airto’s subdivision of eighth notes in groups of 3 and 2 when improvising in 7/4. Given that the accompanying bass line is a sequence of 4+4+3+3, it was deemed appropriate to introduce groups of 4 to the equation. Examining the bass drum pattern in the example below, it is evident that the solo phrase initially compliments the bass line before departing from the figure, creating rhythmic tension in bars 2 and 3 with a sequence of 3+3+3+3+2. The phrase in bar 4 then resumes compatibility with the bass line before again adding a little tension at the start of bar 5, then resolving. This is heard on CD 2, track 6 from 5:00 – 5:08.
Further examples of this approach can be heard in ‘Caravan’ from 5:10 – 5:17. In the following figure, solo phrases in bars 1 and 3 compliment the bass line in contrast to bar 2 where tension is created with off-beat eighth notes, and bar 4 where a 4+2+3+3+2 sequence underlines the accented phrase as indicated.

Finally, an extended example of creating rhythmic tension can be heard from 5:28 – 5:34, beginning with a solo phrase built on a permutation of the bass line’s rhythm – 2 bars of 4+3+3+4. This is followed by a longer pattern phrased across the barline featuring groups of 3, resulting in a sequence of 4+3+3+3+3+3+3+3+3. The rhythmic tension is then released when the last 2 dotted crotchet pulses synchronize.
with the bass line. The complete rhythmic sequence is indicated below the drum kit stave in figure 60 below.

![Figure 60: Extended solo phrasing with rhythmic tension in ‘Caravan’ (CD 2, track 6, 5:28 – 5:34)](image)

From a rhythmic perspective, case studies concerning rhythmic tension and release in 7/4, and polyrhythmic orchestration, reveal the impact of the drummer on Brazilian fusion. Stylistic duality and rhythmic symmetry in odd meters point out some of the key characteristics of Airto’s innovative style, and the orchestration of *batucada* and polyrhythmic orchestration address how the dynamic between tradition and innovation in Airto’s drumming can be best explored through performance.
CHAPTER 4

CONCLUSION

This practice based research has attempted to explore the application and assimilation of a considerable cross-section of Airto Moreira’s stylistic traits, in terms of time functioning and improvisational repertoire. The project has identified through transcription, analysis and performance, key concepts that outline the influence of traditional Brazilian rhythms on Airto’s musical evolution and his subsequent influence on jazz-fusion. The concepts identified have been cohesively incorporated into practice for effective assimilation in two recorded performances, with the first focusing on traditional *samba* and the recorded works of Airto, the second exploring the application of Airto’s concepts in contemporary arrangements, including three original compositions.

Throughout this research, a greater understanding and appreciation for traditional Brazilian rhythms and its adaptation to drum kit has been gained. In particular, research in Rio de Janeiro and Belo Horizonte provided invaluable insights into Brazil’s traditional music culture and developments in its contemporary music scene. This combined with the analysis and transcription of recordings has yielded the expansion and enhancement of knowledge and performance techniques, particularly the orchestration of left hand rhythms. It has also brought to light some physical limitations with right hand technique that need to be addressed.

Considering the global impact of Brazil’s music that continues today, further study on the influence of a wider scope of Brazilian rhythms on a variety of music genres would be culturally beneficial. As Sérgio Mendes told Chris McGowan in a 1987 interview…

> It’s interesting for me today to see Herbie Hancock doing things with Milton Nascimento. It’s kind of a mutual curiosity between two different worlds. I still listen to Horace Silver and Bud Powell. And Stevie Wonder, Henry
Mancini, Burt Bacharach, Pat Metheny – who has not been influenced by Brazilian music?8

Through the process of designing assimilation exercises for practice in both time functioning and solo material, it was discovered that the potential combinations of rhythmic possibilities are exhaustive and warrant further investigation and expansion, particularly in regards to polyrhythmic orchestration. Given the compounding nature of these exercises and their potential application to improvisation, an educational publication for drum kit is also worthy of consideration.

The project has had a positive influence on the development of compositional concepts. These will be explored further with the intention to compose and record new works that build upon Airto’s legacy.

8 McGowan, Pessanha. 190.
APPENDIX A

OVERVIEW OF RECITAL RECORDINGS

**RECITAL ONE: AIRTO MOREIRA – Tradition to Innovation**
Thursday 7:00pm, 9 July 2015, Electronic Music Unit, University of Adelaide

<table>
<thead>
<tr>
<th>Track</th>
<th>Composer</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ‘Só Danço Samba’</td>
<td>Jobim/De Moraes</td>
<td>5:07</td>
</tr>
<tr>
<td>2. ‘Tristeza’</td>
<td>Lobo/Niltinho</td>
<td>4:12</td>
</tr>
<tr>
<td>3. ‘Misturada’ (‘Mixing’)</td>
<td>Airto Moreira</td>
<td>4:37</td>
</tr>
<tr>
<td>4. ‘Creek’</td>
<td>Victor Brasil</td>
<td>5:12</td>
</tr>
<tr>
<td>5. ‘You’re Everything’</td>
<td>Chick Corea</td>
<td>4:31</td>
</tr>
<tr>
<td>6. ‘Spain’</td>
<td>Chick Corea</td>
<td>7:17</td>
</tr>
<tr>
<td>7. ‘Partido Alto’</td>
<td>Jose Bertrami</td>
<td>6:33</td>
</tr>
<tr>
<td>8. ‘Tombo in 7/4’</td>
<td>Airto Moreira</td>
<td>7:15</td>
</tr>
</tbody>
</table>

**RECITAL TWO: SAMBA – A Contemporary Approach**
Thursday 6:30pm, 27 August 2015, Electronic Music Unit, University of Adelaide

<table>
<thead>
<tr>
<th>Track</th>
<th>Composer</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ‘Chega De Saudade’</td>
<td>Antonio Carlos Jobim</td>
<td>5:56</td>
</tr>
<tr>
<td>2. ‘Igpay Atinlay’</td>
<td>John McDermott</td>
<td>6:33</td>
</tr>
<tr>
<td>3. ‘Eastern Standard Time’</td>
<td>John McDermott</td>
<td>5:29</td>
</tr>
<tr>
<td>4. ‘Latinity’</td>
<td>John McDermott</td>
<td>5:38</td>
</tr>
<tr>
<td>5. ‘Água De Beber’</td>
<td>Antonio Carlos Jobim</td>
<td>3:32</td>
</tr>
<tr>
<td>6. ‘Caravan’</td>
<td>Ellington/Mills/Tizol</td>
<td>7:39</td>
</tr>
<tr>
<td>7. ‘Enchendo O Latão’</td>
<td>Hamilton de Holanda</td>
<td>6:16</td>
</tr>
<tr>
<td>8. ‘Yatra-Ta’</td>
<td>Tania Maria</td>
<td>5:41</td>
</tr>
<tr>
<td>9. ‘Samba Song’</td>
<td>Chick Corea</td>
<td>8:04</td>
</tr>
</tbody>
</table>
APPENDIX B

TRANSCRIPTIONS

Airto’s solo at 0:49 on ‘Misturada’ from the self-titled album *Quarteto Novo* (Odeon, 1967)
Airto’s time functioning at 0:42 on ‘Samblues’ from the self-titled album *Sambalanço Trio* (Audio Fidelity, 1964)
Airto’s *batucada* solo at 4:08 on ‘Vim De Santana’ from the album *Quarteto Novo*
Agua De Beber  
(Water To Drink)  
Music by Antonio Carlos Jobim  
English lyric by Norman Gimbel  
Portuguese Lyric by Vinicius de Moraes

Medium Bossa Nova  
Intro: D7, E7, A7, D7, E7, A7

(D7)  
Your love is rain...

A7  
...my heart the flower... I need your love...

G7  
...an other spring time... I'll never feel...

or I will die... My very life...

the sun... Un less you're there...

E7  
...is in your possession...

E7  
...to share that springtime... Will...

E7  
...I wish and fade or the blossom to the sky?... And like...

G7  
...the rain and the flower...

B7  
...our hearts are one...

Água de beber...

A7  
...opt. (Give the water to drink...)

G7  
...opt. (Give the water to drink...)

Água de beber...
Additional English lyric:
The rain can fall on distant deserts.
The rain can fall upon the sea.
Since the rain has to fall, let it fall on me.

Água de Beber (Portuguese lyric)
Eu quis amar mas tive medo.
E quis salvar meu coração.
Mas o amor sabe um segredo.
O medo pode matar o seu coração.
Água de beber, Água de beber camará.
Água de beber, Água de beber camará.
Chega De Saudade
(No More Blues)

Music by
Antonio Carlos Jobim

Lyric by Jon Hendricks
& Jessie Cavanaugh

Med. Bossa Nova

A

\[ \text{No more blues, I'm going back home, No, no...} \]

\[ \text{(Bb9)} \]

\[ \text{A7(13)} \]

\[ \text{DMi} \]

\[ \text{EMi7(13)} \]

\[ \text{AT(13)} \]

more blues, I promise no more to roam.

DMi

Bmi(7)

E7

Ami

Home is where the heart is, the funny part.

Bma7

Bb9

A7(13)

is my heart's been right there all along.

B

DMi

(DMi7)

E7(13)

no more tears and no more sighs. And no

(D7)

DMi

DMi7(13)

more fears, I'll say no more good-byes. If travel beckons me, I swear I'm gonna refuse, I'm gonna set

Gmi

A7

DMi

(DMi7)

(Bb7)

E7(13)

A7(13)

DMi

EMi7 A7

tie down and there'll be no more blues.
Every day while I am far away my thoughts turn home-
ward, forever home-ward I travelled round the world in search of hap-
pi-ness, But all my hap-
pi-ness I found was in my home town.

No more blues, I'm going back home, No, no,
more days, I'm through with all my wan-
drin' now, I'll set-
tie down and live my life and build a home and find a wife, when we
set-tie down there'll be no more blues, Nothin' but hap-
pi-ness, when we

set-tie down there'll be no more blues.

Chords in parentheses are optional.
Creek

Victor Brasil
(As played by Airto)

Bright Samba
\[ d=272 \]

\[
\begin{array}{c}
F_{13} \\
F_{13}\text{ etc.} \\
F_{13}\text{ sus} \\
F_{13} \\
F_{13}\text{ sus}
\end{array}
\]

(bass rhythm continues through letter A)

A

\[
\begin{array}{c}
F_{7} \\
B_{b} \\
F_{7}
\end{array}
\]

(sop, fl, elc. pm)

F_{7}

(pm. plays lower line)

B_{b}

(pn. plays chords)

C_{7}

(pm. plays upper line)

F_{7}

(pm. tacet)

2nd xi: solo starts

B

F_{7}

after solos, D.S. al Coda

F_{13}

F_{13}\text{ sus}

(bass during solos:)

Vamp, Solo, and Fade

©1975 Good Morning Music. Used by Permission.

Piano doesn't play chords when doubling melody or playing harmony. Sop. & fl. play melody throughout.

Play head twice before solo, once after.

53
Sample bass & guitar:

A (str.)

B (str. tacet)

B (str.) (w/ lots of variation)
Med. Samba

Spain

Chick Corea

\[
\text{\textbf{Spain}}
\]

\[
\text{\textbf{Med. Samba}}
\]

\[
\text{\textbf{Chick Corea}}
\]

\[
\text{\textbf{Spain}}
\]

\[
\text{\textbf{Med. Samba}}
\]

\[
\text{\textbf{Chick Corea}}
\]
Solos on C. To end each solo, play melody at C (use notes in parentheses), then D.S. al 2nd ending. To end last solo, play melody at C, D.S. for 8 bars, then D.C. al Coda.
Mad. Samba

Tristeza

Haroldo Lobo/Niltinho

\[ \begin{align*}
& \text{Form is AABC} \\
& \text{(take first ending only)}
\end{align*} \]
You're Everything (Instrumental)

Med. Samba

[Intro]

[First verse]

[Second verse]

(piano & flute melody)

(Flute)

[Chorus]

(Flute—behind vocal)
Instrumental melody is played on the recording after the vocal melody, in place of solos.
It is inaccurately notated and differs from vocal melody (from vocal sheet).
APPENDIX D

RECITAL PROGRAMMES

RECITAL ONE PROGRAMME

AIRTO MOREIRA – Tradition to Innovation

John McDermott (1041696)

Submitted in partial fulfilment of the requirements for the degree of

Master of Philosophy in Music Performance

Elder Conservatorium of Music
Faculty of Humanities and Social Sciences
University of Adelaide

Supervisors: Professor Mark Carroll
Mr. Bruce Hancock

Thursday 7pm, 9 July 2015

Electronic Music Unit (EMU), University of Adelaide
‘Só Danço Samba’ (Jobim/De Moraes) was first recorded on the album *Getz/Gilberto* in 1963 featuring the works of Antonio Carlos Jobim. More of a medium *samba* than a *bossa nova* (a style for which Jobim is best known), this tune represents a style typical of Airto’s early influences.

‘Tristeza’ (Lobo/Niltinho) is a traditional *samba* composed in 1965. This tune will obviously feature tradition Brazilian rhythms from that era and the *samba batucada* (street samba) as used in Rio Carnival. Airto was heavily influenced by *batucada* and his recorded solos often featured dense, repetitive rhythms multi-tracked on drum kit and percussion.

‘Misturada’ (Moreira) is a tune written in 1967 by Airto in the early part of his career as a member of the Brazilian group, Quarteto Novo. A pioneer of odd time *samba*, Airto’s original recorded solo in 7/4 features some *batucada* style repetition but also explores rhythmic variation around a symmetrical approach to playing in this time signature.

‘Creek’ (Victor Brasil) was featured on Airto’s solo album *Free* recorded very soon after Return to Forever’s first album in 1972 and featuring the same personnel. This tune highlights a *baião* rhythm from Pernambuco in Brazil’s northeast. On the original recording, Airto overdubs a *maracatu* rhythm (also from the northeast) on woodblock. The *baião* was an evident influence on Airto’s career during his association with Quarteto Novo. Although he grew up in the south of Brazil, all other members were northeast Brazilians and the style featured prominently on their first and only album release.
‘You’re Everything’ (Corea) is a bright samba and the first track on Return to Forever’s second album *Light as a Feather*. Airto’s wife, vocalist Flora Purim also appears on this track but we will be performing an instrumental version minus the long-winded intro/verse from the original recording. Airto takes a lighter approach to this tune, playing brushes throughout its entirety. This is an effective method adopted by drummers to simulate shaker rhythms.

‘Spain’ (Corea) is the final track from the same album and one of Chick Corea’s most well known compositions. Nominated for two Grammy awards, this contemporary fast samba has a relatively complex form with influence from Joaquin Rodrigo’s ‘Concierto de Aranjuez’. The Spanish influence is evident in Airto’s overdub of castanet rhythms on the original recording. His time playing on kit during solos is generally static with little rhythmic variation.

‘Partido Alto’ (Bertrami) featured on Airto and Purim’s album *The Colours of Life* released in 1980. The partido alto style is considered a subgenre of samba and although it was originally a traditional song style, a contemporary treatment of its distinct syncopated rhythm has won commercial appeal in modern times amongst samba-funk musicians.

‘Tombo in 7/4’ (Moreira) is a challenging piece first released on Airto’s solo album *Fingers* in 1973. Airto plays the 7/4 sections with quite a repetitive, percussive and dense approach reminiscent of his influence from batucada but with heavy emphasis on beat 1. The bridge of the tune, in 4/4, again pays homage to the traditional batucada style.
**Project Title**

Tradition and Innovation in the Drumming of Airto Moreira:
A dissertation comprising two recorded 60 minute recitals and exegesis.

**Project Summary**

This project looks at the relationship between traditional Brazilian rhythms and the more contemporary, innovative playing style developed by percussionist/drummer, Airto Moreira (b.1941). This study examines how traditional rhythms, along with influences from outside of Brazil, have impacted on Airto’s contribution to the development of jazz-fusion in the early 1970s, and how his style had evolved as a result of both these influences. This is the first of two recorded 60 minute recitals, the outcomes of which will be discussed in an accompanying 7,500 word exegesis.

**Thank you**

Tom Pulford – Flute, soprano, alto & tenor sax
Paul White – Piano, keyboards
Alain Valodze – Acoustic guitar
Shireen Khemlani – Electric bass
Fabian Hevia – Percussion

David Lokan – Sound Engineer
RECITAL TWO PROGRAMME

SAMBA – A Contemporary Approach

John McDermott (1041696)

Submitted in partial fulfilment of the requirements for the degree of

Master of Philosophy in Music Performance

Elder Conservatorium of Music
Faculty of Humanities and Social Sciences
University of Adelaide

Supervisors: Professor Mark Carroll
Mr. Bruce Hancock

Thursday 6.30pm, 27 August 2015

Electronic Music Unit (EMU), University of Adelaide
‘Chega De Saudade’ (Antonio Carlos Jobim) or ‘No More Blues’ as it is commonly known, is credited as being the first recorded bossa nova tune. Written in 1958, its popularity instigated an onslaught of compositions in this style throughout the 1950s and 60s. Unlike the samba with its rhythmic pulse felt in ‘two’, the bossa nova is most commonly felt in ‘four’.

‘Igpay Atinlay’ (John McDermott) is the first of three original compositions to feature in this recital. This tune presents a contrast between traditional and contemporary approaches to playing samba. The batucada solo introduction and ‘A’ sections feature traditional time function from the drums, while the B section and extended drum solo explore more contemporary rhythmic variation.

‘Eastern Standard Time’ (John McDermott) explores influences from outside Brazil with its Middle Eastern melody. Rhythmically, the Brazilian partido alto pattern normally played in 4/4 is here being played in 7/4. The brief percussive drum break and the rhythmically complex tutti ending are reminiscent of Airto’s “Tombo in 7/4”.

‘Latinity’ (John McDermott) is a contemporary arrangement that presents a contrast between samba and northeast Brazilian style of baião. The drum part in 5/4 at the introduction explores Airto’s use of rhythmic symmetry in odd time, before the piece morphs into cut common time.

‘Água De Beber’ (Antonio Carlos Jobim) is another classic bossa nova from Jobim. Known in English as ‘Water to Drink’, this tune was released in 1963 on Jobim’s album The Composer of Desafinado, Plays.
‘Caravan’ (Ellington/Mills/Tizol) is a well known Latin jazz standard re-arranged in 7/4 to again showcase the use of rhythmic symmetry in odd time. Both the piano part and cymbal pattern are played symmetrically, and the bass line and bass drum pattern also feature a symmetrical 2 over 7 polyrhythm. The bridge remains in the original 4/4 time signature and features traditional batucada while the open drum solo in 7/4 presents rhythmic ideas inspired by Airto’s solo in his song ‘Misturada’.

‘Enchendo O Latão’ (Hamilton de Holanda) is a contemporary samba composed by the virtuosic Brazilian bandolim player, Hamilton de Holanda in 2002. This trio arrangement features the bass line and bass drum playing a more modern interpretation of traditional surdo rhythms. Brushes will be used throughout.

‘Yatra-Ta’ (Tania Maria) was released in 1981 on the album Piquant by Brazilian singer/pianist Tania Maria. This challenging but excitingly rhythmic piece will present elements of both traditional and contemporary samba along with splashes of jazz fusion.

‘Samba Song’ (Chick Corea) features on Chick Corea’s 1978 album Friends and received a Grammy award the following year for “Best Jazz Instrumental Performance”. This complex piece has obvious influences from Brazil but is strongly shaped by jazz-fusion. Presented in this recital to follow Corea’s compositional evolution in samba, this arrangement will resemble the original recording with solos from all ensemble members including an extended drum solo over a vamp.
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**Thank you**

Tom Pulford – Flute, soprano & tenor sax
Paul White – Piano
James Muller – Guitar
Shireen Khemlani – Electric bass
David Lokan – Sound Engineer

**BIBLIOGRAPHY AND DISCOGRAPHY**
Bibliography


**Discography**


