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Three Etudes for Marimba and Pandeiro: Contemporary Marimba Music as a New Setting for the Brazilian Pandeiro

Eduardo Marques do Prado

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THREE ETUDES FOR MARIMBA AND PANDEIRO: CONTEMPORARY
MARIMBA MUSIC AS A NEW SETTING FOR THE BRAZILIAN PANDEIRO

by

Eduardo Marques do Prado

A Doctoral Project
Submitted to the Graduate School,
the College of Arts and Sciences
and the School of Music
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Musical Arts

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ABSTRACT

The history of frame drums and idiophones has thousands of years. The modern versions of the pandeiro and the marimba are relatively new to those families of instruments. While the marimba found its niche in contemporary music, the pandeiro has been mostly used in Brazilian traditional music. The current project brings those two instruments together, allowing the pandeiro to express its versatility. Executing the intricate rhythms, uneven patterns, and alternating time signatures from within the Three Etudes for Marimba and Pandeiro is an example of what can be done with this amazing frame drum. These three pieces provide the pandeiro with a series of challenges that expand the Brazilian technique created by the greatest masters of the instrument. Some of these challenges are the interpretation and execution of odd subdivisions and uneven groups of notes on the pandeiro, where the rhythmic patterns create an alternation that forces the beginning of each subdivision to be played on a different part of the drum. These patterns are unusual within the Brazilian styles where the music is mostly in duple, triple, or quadruple meter, and the music is frequently used for dancing. Hopefully, this project will start a path for the pandeiro within contemporary settings, expanding its vocabulary and rhythmic possibilities.

ACKNOWLEDGMENTS

During my academic journey, I was blessed with countless opportunities to study and perform with great artists. They were colleagues, teachers, and mentors for life. They were the ones from whom I directly learned, the ones who inspired me to get better and move forward, even during difficult times. I was fortunate to have amazing colleagues throughout my journey and their contributions are immeasurable, I miss them all. I was also lucky to meet and work with artists that I considered heroes, and for them, I have the utmost respect and gratitude.

The list of names would be enormous, but I want to say, if you have ever played with me, or if you taught me a lesson or a class, or even if we just had a conversation about music in the hall between classes, THANK YOU!

There is one person whose name must be mentioned. The person who gave me the opportunity of my life. The man who taught me and mentored me, with dedication and care. Without him, this project would not exist. My dearest Gordon Stout. For Gordon, I cultivate not only the utmost respect, admiration, and gratitude, but also love, from the bottom of my heart.

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CHAPTER I – INTRODUCTION

This project focuses on the elaboration and execution of odd rhythms and complex time signatures on the Brazilian pandeiro. My Three Etudes for Marimba and Pandeiro are the music venue for the pandeiro to demonstrate its potential outside the traditional styles from Brazil, showcasing its versatility and rhythmic capabilities.

Commonly, the pandeiro is used to play Brazilian traditional music, where most rhythms have a 4/4 time signature. The current project is an attempt to take the instrument into the contemporary world of marimba music, where the alternation of compound meters and odd groupings are frequently present. Naturally, I make use of the traditional techniques created by the most expressive Brazilian pandeiro players from the last seventy years. Without the conventions and innovations stamped by Jackson do Pandeiro, Marcos Suzano, and Tulio Araujo, among others, this project would not be possible.

Based on all their influences, I composed a series of patterns and groupings to match and accompany the music within the Three Etudes for Marimba. These three pieces have a very contemporary style, built upon intricate rhythms and odd subdivisions. Obviously, the pandeiro parts are equally complex. These odd patterns and subdivisions create an alternation, changing the articulation and execution at the beginning of each phrase - measure. This alternation is significantly challenging in terms of technique since the odd groupings are played and articulated on different parts of the drum.

Firstly, in this project, I explain the Brazilian pandeiro's technique learned through the years from the different masters of the instrument. Carefully analyzing the different sounds, articulations, and the proper execution. Secondly, I present detailed

information about the musical aspects within my three etudes, and how all the odd groupings and subdivisions are organized, besides providing details about the form, harmonies, and character. Lastly, I demonstrate how to apply the pandeiro's traditional technique to the odd patterns and uneven groupings within the Three Etudes for Marimba.

Hopefully, the present document will be an addition to the scarce number of sources approaching this “contemporary pandeiro”¹ style that focuses on complex and uneven patterns. And maybe a step leading to the elaboration of rhythmic modulations for the pandeiro in a future endeavor.

¹ Term used by me to describe music written for the pandeiro without following the traditional aspects of Brazilian popular music. The style presents odd rhythms and odd subdivisions, as well as uneven patterns and groupings.

CHAPTER II – THE ROOTS OF THE PANDEIRO

The pandeiro is a very old instrument consisting of a simple wooden frame, a membrane head made with animal skin, and metal jingles that are called *platinelas* in Brazil. It is a versatile instrument, with a unique sound: a combination of warm bass tones, medium frequency staccato sounds, and the high pitches from the *platinelas*.

Relatives of the tambourine have been used to accompany singers and woodwind instruments for thousands of years. Similar instruments date back to at least 3,000 B. C.,² likely used in religious ceremonies and rituals to keep the tempo and the rhythm for the other musicians. The names and the sizes of these related instruments may vary from different periods and places, but the main concept of a short depth frame drum, surrounded by jingles, and with animal skin on top remained the same throughout history.

Archeological artifacts and paintings suggest that the pandeiro has been used in all continents since the Paleolithic period, and it was present in celebrations and religious acts with dance and music.³ The modern pandeiro is different than its predecessors, the newest version was adapted from old instruments that had similar designs and applications. Some of those older variants are the *Tambor de Marco* (*Bendir*, *Bodhran*), the *Khanjari*, the *Shaman Drum*, and the *Pandereta* (*Pandeireta*, *Dayereh*).⁴

In Brazil, the pandeiro is used as an accompaniment instrument to play *samba*, *choros*, and other traditional styles. These Brazilian genres and rhythms are in traditional

² “The earliest record, the fragment of vase from Bismya c. 3,000 B.C., depicts an instrument, somewhat indistinct, but resembling a rectangular frame drum.” Blades, James. 1992. *Percussion Instruments and Their History*. Bold Strummer, 152.

³ Adato, Joseph, and George Judy. 1985. *The Percussionist’s Dictionary: Translations, Descriptions, and Photographs of Percussion Instruments from Around the World*. Belwin-Mills, 18.

⁴ Santos, Ednaldo Dos. 2019. *Evolução do Pandeiro*. Independently published, 8-9.

2/4, 3/4, and 4/4 meters. The phrases are even and rounded, the lyrics are playful, and the music is often used for dancing.⁵

In 1955, the pandeiro artist Jackson do Pandeiro started a major revolution with his unusual technique and became one of the most popular artists of his time. He both played the pandeiro and sang, accompanied by accordion, flute, backing vocals, and percussion instruments (*zabumba* and *triangulo*).⁶ The next big step in the evolution of pandeiro playing happened in the nineties with Marcos Suzano, a left-handed and self-taught percussionist. He completely inverted the traditional technique, thus rhythms that were played starting on the bottom half of the instrument began to be played on its top half. He also started making new experiments, including using a microphone under the head of the instrument, greatly amplifying the bass sound.⁷ These innovations made by Suzano transformed the pandeiro into a portable drum set since the amplification gave the instrument the power that its acoustic nature could not provide.⁸

Currently, it is common for people - especially in the United States - to refer to these instruments as Brazilian pandeiros since it was in Brazil that the instrument became widely popular and because that was the place where an entirely new technique was created. Over the last seventy years, Brazilian virtuosos have reinvented the way it is played, making it a national passion. Its warm bass tone combined with the high-frequency pitch from the metal *platinelas*, make it perfect to be used as an

⁵ Vianna, Hermano. 2000. *The Mystery of Samba: Popular Music and National Identity in Brazil*. Univ of North Carolina Press, 17.

⁶ Jackson Do Pandeiro - Jackson Do Pandeiro. In <https://www.discogs.com/master/1078112-Jackson-Do-Pandeiro-Jackson-Do-Pandeiro>.

⁷ CD OLHO DE PEIXE - Lenine e Marcos Suzano. In <https://www.immub.org/album/olho-de-peixe-lenine-e-marcos-suzano>.

⁸ In Moehn 2009; Potts 2012; Vidili 2018.

accompaniment instrument in Brazilian traditional music. The Brazilian way of playing allows the percussionist to play the subdivisions within the rhythm, mixing the bass with the high pitches. It became the perfect percussion instrument for the *samba* and *choro* styles, where it accompanied the classical guitar, clarinet, flute, and *violão de sete cordas*.⁹

My first experiences with the pandeiro were playing *sambas*, *choros*, and other traditional genres. I was encouraged by a colleague to play all the different Brazilian styles on the pandeiro, even those where it was not one of the conventional instruments. For example, *baião* and *coco* are two similar styles where the *zabumba* and the triangle are frequently present, so I would use the pandeiro to simulate the sounds and rhythms of those two instruments. Or I would play *frevos*, which are in quadruple meter, but where the beginning of each grouping alternates and starts on a different side of the drum every time.

After practicing and experimenting for a couple of years I became acquainted with the work of Marcos Suzano through his album *Olho de Peixe*. It brought a lot of ideas, and some questions as well. First, I started playing the most common drum set patterns of rock'n roll, funk, and blues. Then, influenced by Suzano's style, I started playing along with tunes from famous bands such as Earth Wind and Fire, Commodores, Pearl Jam, and others. Approximately a year later I met Gordon Stout, he was performing his arrangements for marimba based on *choros* from the Argentinean classical guitar composer Augusto Marcelino, and I accompanied him on the pandeiro. Based on that experience, I decided to write music for both instruments, and so I wrote my three etudes

⁹ In Gloss 2017 and Neto 2017.

for marimba and accompanied pandeiro. These pieces were first composed on the marimba, and they work well on their own as stand-alone pieces. However, through the compositional process, I already had in my mind that I wanted to use the pandeiro as an accompanying instrument for the marimba and those complex rhythms. Every motive and phrase within my three etudes were conceived with the pandeiro's capabilities in mind. I made sure that the music that I was writing for the marimba would fit the pandeiro, which parts were written later.

CHAPTER III – THE TECHNIQUE AND THE POSSIBILITIES OF THE PANDEIRO

The pandeiro has a similar grip as the orchestral tambourine and the half-moon tambourines used by pop artists. It consists of a naturally closed fist with the palm pointing upwards and the back of the hand at a horizontal level (like holding seeds or grains). Although, the Brazilian pandeiro has a unique technique, which is quite different from other frame drums. In an orchestral tambourine, the percussionist holds the instrument stationary and strikes with the other hand, thus producing the sound. The tambourines used in pop music are frequently played with a horizontal motion that goes from left to right and vice versa.

The pandeiro's technique consists in using the hand that holds the instrument to rotate the frame on its axis, while the free hand strikes the head or the rim by using the thumb, the base of the wrist, the hand palm, or the tip of the fingers. In this technique, the hand holding the instrument has the difficult task of keeping a smooth non-stopping rotation movement, while the other hand gently touches the surface (head and rim) of the drum.¹⁰ The wrist's rotation starts with the instrument in a horizontal level (as if holding a plate), rotating the drum around 60° (close to vertical position), and returning to its original position.

This rotation motion is considered by many renowned pandeiro players in Brazil as the most important aspect of the Brazilian technique, and it is one of the main factors that collaborate for the uniqueness of the style. The hand that holds the instrument has a role that requires much more effort than just holding, it spreads the effort between the two hands. Thus, allowing greater speed, power, endurance, clarity of articulation, and

¹⁰ Lacerda, Vina. *Pandeirada brasileira*. Curitiba, Brazil: Published by Author, 2007, 34-35.

smoothness of the sound. In other words, with this technique, it is possible to play fast, loud, and for long periods, without compromising the rhythm and the different timbers that the instrument has to offer, in addition to a better sound quality overall.

This technique may create some confusion with beginners, who frequently make a misinterpretation of the movement by concentrating most of their energy on the hand that strikes the drum. That type of playing usually results in excessive tension and stiffness, leading to difficulty of execution and in worst cases even injuries.

Three distinct sounds can be produced in the pandeiro: The high pitch sound from the *platinelas*, which can be used to simulate the hi-hat of a drum set. It is produced by striking the instrument with the tip of the fingers (upper part) or the base of the wrist (lower part) at the very edges of the instrument (on top of the rim).¹¹ A more brilliant and articulated sound can be achieved by striking the rim on top of where a set of *platinelas* is placed. The sound of the *platinelas* may confuse someone with the sound of the tambourine's jingles, due to their similarity. However, the jingles in the tambourine are significantly more numerous than the *platinelas* in the pandeiro. Besides, the different metals and shapes used in the construction of these parts also contribute to their uniqueness of sound.

The slap sound is produced by striking the center of the head with the palm (upper part) or with the thumb (lower part), and it can simulate the snare drum sound. The bass tone is produced by striking the head of the instrument with the thumb (lower part), or

¹¹ Sampaio, Luiz Roberto and Victor Camargo Bub. *Pandeiro Brasileiro*. Florianópolis: Bernúncia, Brasil, 2004, 10-11.

with the tip of the fingers (upper part). This bass sound can be used to simulate the sound of a bass drum in a drum set.¹²

The pandeiro can be divided into two parts, the upper half and the lower half. That allows for all the three main sounds to be produced in any of the two parts of the instrument. On the lower side of the drum, the thumb can articulate bass notes or slap notes, and the base of the wrist can articulate *platinela* notes. On the upper side of the drum, the fingertips articulate *platinela* notes, and the palm of the hand articulates the slap notes.



Figure 1. Pandeiro's division in two parts.

The pandeiro is divided into two parts, the upper half and the lower half. (photography by author).

Additional sound effects are also possible, the bass note, for example, can have an open tone and a muffled tone, perfectly matching the articulation of samba patterns where

¹² Sampaio, Luiz Roberto and Victor Camargo Bub. *Pandeiro Brasileiro*. Florianópolis: Bernúncia, Brasil, 2004, 10-11.

the first beat is softer than the second, which is an accent.¹³ Also, the bass note can be shaped in a glissando effect, gradually changing the pitch with the thumb in the hand holding the pandeiro. This effect can be used to simulate the cuica when playing Brazilian music or to simulate the tom-toms of a drum set when playing pop grooves. It is important to mention that the glissando sound from the bass tone does not appear within the current project. The effect of tremolo is also possible, similarly to orchestral tambourine parts. The tremolo is frequently used within the different Brazilian rhythms, and to simulate the sound of 32nd notes on the hi-hat of a drum set. Most players use the thumb or the middle finger to play the tremolo, using the friction of the finger across the surface of the head in a fast whereas relaxed motion.¹⁴ The use of beeswax on top of the head may greatly improve the necessary friction for the tremolo to happen. Within the current project, the effect of tremolo became an important tool at the end of sections where the marimba has long chords and fermatas, and so it appears in all three etudes.

The Brazilian technique, combined with the variety of sounds provided by the pandeiro, gives the performer an endless road of rhythmic and timbral possibilities. The style allows the performer to play all the subdivisions and inner partials of the rhythms, as well as syncopations, and rhythmic modulations. Despite its many uses in Brazilian music, the full potential of this versatile instrument has not yet been tapped. These three different sounds in partnership with the technique created by Brazilian percussionists gave the pandeiro new horizons, such as simulating drum set rhythms and grooves.

¹³ Carvalho, Gustavo Vinicius S. de and Luiz Roberto Sampaio. *Estudos e Peças para Pandeiro Brasileiro: Composições para um, dois, três e quatro Pandeiros com Diferentes Níveis de Dificuldade*. Florianópolis: Bernúncia, Brasil, 2010, 10-13.

¹⁴ Sampaio, Luiz Roberto and Victor Camargo Bub. *Pandeiro Brasileiro*. Florianópolis: Bernúncia, Brasil, 2004, 12.

Although, it is important to find new ways to move forward in the search for innovation. That sentiment moved some of the greatest composers in history. The names of Monteverdi, Beethoven, Stravinsky, Schoenberg, John Cage could be used as remarkable examples of composers who tried to go beyond the trends of their respective eras. They were ahead of their time, and some of their works were harshly criticized. At no point, I would dare to compare myself to such masters. But based on all their influences, and stimulated by curiosity, I started a journey experimenting with odd rhythms, uneven grooves, and complex times signatures playing the pandeiro.

CHAPTER IV – THREE ETUDES FOR MARIMBA AND PANDEIRO

Before explaining the execution of these odd rhythms and complex time signatures on the pandeiro, it is critical to analyze and understand the Three Etudes for Marimba, since these are the three pieces being accompanied by the pandeiro.

Etude 1

The first etude begins with the A section in 7/16, which is subdivided into a group of four notes and a group of three notes, respectively. This section could be mathematically written in 7/8 but it was written in 7/16 to emphasize the four + three subdivision, but more importantly, to make it clear that there are two voices rather than a single melodic line. The two different dynamic levels also emphasize the two distinct voices. The end of the A section has a short bridge in 7/4 leading to a new section.



Musical Example 1 “Etude 1”

Measure 1

The B theme is only six measures in length. The first half of this section has the intention of being rhythmically ambiguous. The first three measures are mathematically

in 6/8 time signature, although written as 7+5/16 to emphasize the phrasing and articulation from the odd number of notes within those groupings (7+5). In the second half, the 7+5/16 pattern is broken and mirrored to a single 5+7/16 bar followed by a single short 5/16 bar. To finish the section, a strong and traditional 6/8 bar to emphasize the difference between the “6/8” (7+5/16) bar from the beginning.



Besides the time signature, other factors within the notation collaborate to emphasize the 7/5 feel. For example, the music could have been written as a single melodic line. However, the double staff makes a clear separation of the two voices. In addition, the different dynamic levels happening at the same time is another highlight for those different voices.

It is important to mention that even though the B section goes through the alternation of different time signatures, there is no rhythmic modulation such as we see in Elliott Carter's music, where a certain rhythmic figure modulates and becomes the equivalent of a different rhythmic figure in a new section.¹⁵ Thus, the value of the sixteenth notes remains the same throughout the B section, despite all the time signature changes.

The C section in 7/4 borrows the musical idea from the bridge between the A and B sections, which is followed by the repetition of the B section. This second appearance of the B section comes in a higher register and with a thicker texture (octaves are added in the melody). After that, the etude goes to a coda, which starts with long and spacious notes and morphs into the fast rhythm from the A section at the very end.

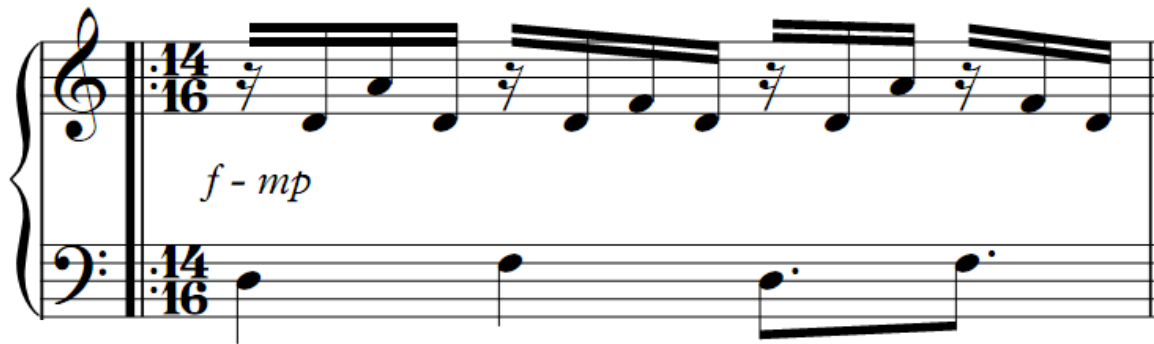
Etude 2

The intent of the Etude 2 is to resemble a funk groove where the second half of the measure is shorter than a tune with a regular 4/4 'backbeat'.¹⁶ The time signature for the Etude 2 is 14/16, and it is subdivided into two groups of four notes followed by two groups of three notes. Again, similarly to Etude 1, this piece of music could have been

¹⁵ Carter, Elliott. 1968. *Eight Pieces for Four Timpani (One Player)*. Associated Music Publishers, 19.

¹⁶ Backbeat is the common term for American traditional genres in 4/4 with an accent on beats two and four, such as rock' roll, funk, RnB, blues, etc.

written in 7/8. However, the 14/16 is applied to emphasize the articulation created by the subdivision $4 + 4 + 3 + 3/16$ and to avoid a misinterpretation that a 7/8 time signature (2 + 2 + 3 subdivision) could create.



Musical Example 4 “Etude 2”

A section, first measure $4+4+3+3/16$

The Etude 2 is an ABA form with a coda. The first statement has four measures and a repetition sign. It starts to develop in measure eight moving through different harmonies until measure eighteen. Bar nineteen brings a long bridge that will modulate transitioning to the new section in F major. This new slightly slower B section still has the same strong backbeat as the A section, but with a different type of voicing. It consists of double verticals on the right hand and extra-large intervals¹⁷ on the left hand. To finish, the first statement is revisited and followed by the coda, which is a variation of the A theme combined with a variation of the bridge’s material.

¹⁷ Stevens, Leigh Howard. 1979. Method of Movement for Marimba. Marimba Productions, Incorporated, 12-14, 19-21, 32.

In terms of harmony, the etude is centered in D minor, and it has a chord progression that is diatonic and goes from D minor to the first inversion of E diminished, then moving to F major, to G minor in the second inversion, then to A major, and going back to D major two measures before the bridge. This transition between the A and B themes moves from D minor to C major, then C major seventh (V/III), and modulates to F major for the entirety of the B section. The re-statement of the A section takes the music back to the main tonal center of D minor, which lasts until the end of the piece.

It is interesting to note that even though this etude is not in 7/8, the number seven does play a role within the form. Except for the first statement, every other section in the music is organized in groups of seven measures, which is shorter than the usual eight measures phrases that can be observed in backbeat tunes. The development is fourteen measures long, the bridge has seven bars, and the B section has fourteen bars. In the coda, again, the seven measures pattern is repeated.

Etude 3

The Etude 3 is constructed upon four short different sections (ABCD A). In the first part, the character of the marimba as a contemporary instrument is emphasized by the uneven rhythm in 10/16. The pattern splits the ten sixteenth notes within the measure into two groups of five notes. The first group has one single accent on the first sixteenth note. The second group is the same as the previous one, with the addition of an accent on the third sixteenth note. Thus, the second half of each measure is subdivided into 2 + 3 sixteenth notes. Measures nine and ten are a short transition into the new section. This B section is only six measures long, and similarly as in the Etude 2, it tries to simulate a rock'n roll groove with a strong backbeat feel.



Musical Example 5 “Etude 3”

A section, first measure



Musical Example 6 “Etude 3”

B section, measure 11

The sections C and D are a return to the Brazilian styles, with a fast and light samba in the C section, followed by the climax of the piece, the Baiao in section D. The etude ends with the repetition of the A theme in 10/16.

The tonal center of the Etude 3 is around the key of A major. The chord progression for the first section is A major, C sharp minor, G sharp diminished in the first inversion, and E major seventh. The C section alternates between A major and D major in the second inversion, moving to a D major in root position, B minor seventh in the first inversion, and modulates with a B major seventh chord (V in the key of E major) that leads to the next part. At the C section, the music arrives at a new tonal center, E major. The repetition of A also happens in the key of A major.

CHAPTER V – ACCOMPANYING ON THE PANDEIRO

After studying and understanding the form and the time signatures of all three etudes, more specifically, the subdivision of the individual rhythms within those pieces, it is possible to start translating those odd groupings to the pandeiro.

Before moving into the next section, it is important to remember that the pandeiro used in this project is an instrument as described in chapter two, where natural animal skin is applied, giving a rich bass tone to the drum. This pandeiro is the same used in most groups of *samba* and *choro*. The same type of instrument was used by one of the pandeiro's biggest masters, the famous Jorginho do Pandeiro from the group *Época de Ouro*.¹⁸ Marcos Suzano and Tulio Araújo also use this same type of pandeiro in their recordings to fulfill the role of a drum kit in the music.¹⁹

Another crucial aspect is that the pandeiro's notation used to write the scores within the current project was created by the Brazilian composer Carlos Stasi. His notation system for the pandeiro became widely spread between percussionists and scholars. This notation is adopted by the most popular pandeiro method books published in Brazil during the last twenty years.²⁰

It is also important to remember that the necessary technique for the execution of the three etudes should follow the description presented in chapter three, where the sound is partially produced by the rotation motion of the wrist - hand holding the instrument. Thus, using this rotation motion to share the effort of playing between the two hands,

¹⁸ Vidili, Eduardo. 2018. "Perspectivas de Abordagem Da História Oral Para Os Estudos de Música Popular: Jorginho Do Pandeiro e Os Pandeiristas Dos Regionais de Choro." OPUS 24 (April): 127, 128.

¹⁹ Túlio Araújo - East. 2014. In <https://tidal.com/browse/album/124217341>.

²⁰ Giancesella, Eduardo. 2012. "The Idiomatic Use of Brazilian Percussion Instruments: Main Notational Systems for the Brazilian Pandeiro." *Musica Hodie* 12 (January): 188–200.

rather than having one hand solely to hold the instrument and the other hand to strike it. This Brazilian style of playing the pandeiro not only gives more clarity to the articulation of the rhythm but also produces a brighter and crispier sound from the *platinelas*. In addition, this technique creates significantly less tension, providing a more relaxed execution for the performer.

Etude 1

As previously seen, the A theme in 7/16 is subdivided into 4+3/16, and the pandeiro part plays that same subdivision. The odd nature of the number seven creates an alternation that happens every measure on the pandeiro's part. On measure one, the first note of the first group is a bass note on the lower part of the drum (thumb), and the first note of the second group is a slap note on the lower part of the drum (thumb). The natural alternation of the 7/16 time signature inverts the pattern on measure two and every other measure after that. Consequently, measure two has the bass note at the beginning of the first group played at the upper part of the drum (fingertips), and the slap sound played on the upper part of the drum at the beginning of the second group of notes (hand palm). The inner partials (notes two, three, and four) within the first group are *platinela* notes, as well as the inner partials (notes two and three) within the second group. All these inner notes are played with the base of the wrist (lower part), or with the fingertips (upper part).²¹

²¹ More detailed information about the articulation of the inner partials can be found in the scores within the appendix.

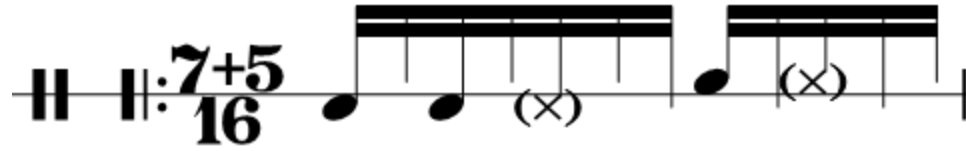


Musical Example 7 “Etude 1”

A section, measures 1 and 2

The B section starts in $7+5/16$, where each measure contains twelve sixteenth notes, and it is subdivided into one group of seven notes followed by a group of five notes. As previously explained, these two groups of seven and five notes have their inner subdivisions ($2 + 2 + 3$ for the $7/16$, and $2 + 3$ for the $5/16$). These subdivisions emphasize the strong partials within each measure, thus collaborating with the intended phrasing. For a clear explanation of the pandeiro’s execution I will number the partials 1 through 7 for the $7/16$ group, and the partials 1 through 5 for the $5/16$ group.

With that taken into consideration, the pandeiro has the same pattern for the first three measures. The seven notes group has a bass note on partials 1 and 3 (thumb – lower part), and a slap note on partial 5 (thumb – lower part). The partials 2, 4, 6, and 7 are *platinela* notes (2, 4, and 6 with fingertips – upper part, 7 with the base of the wrist – lower part). In the five notes group, the pandeiro plays a bass note on partial 1 (fingertips – upper part), and a slap note on partial 3 (hand palm – upper part). Partial 2, 4, and 5 are *platinela* notes (2 and 4 with the base of the wrist – lower part, 5 with fingertips – upper part).



Musical Example 8 “Etude 1”

B section, measure 33

In the fourth measure of the B section, the pattern is mirrored ($5+7/16$), changing the pandeiro’s articulation. In the five notes group, it plays a bass note on partial 1 (thumb – lower part), and a slap note on partial 3 (thumb – lower part). The inner partials 2, 4, and 5 are *platinela* notes (2, 4 with fingertips – upper part, 5 with the base of the wrist – lower part). For the seven notes group the pandeiro plays a bass note on partials 1 and 3 (fingertips – upper part), and a slap note on partial 5 (hand palm – upper part). The partials 2, 4, 6, and 7 are *platinela* notes (2, 4, and 6 with base of the wrist – lower part, 7 with fingertips – upper part).



Musical Example 9 “Etude 1”

B section, measure 36

Measure five, the lone $5/16$ bar, is executed exactly as the first five notes group within the previous measure. And on the next measure, the $6/8$ bar ($12/16$), the pandeiro plays a bass note on partials 1, 3, 5, 7, 8, 10, and 12 (1, 3, 5, and 7 with fingertips – upper part

part, partials 8, 10, and 12 with thumb – lower part). After that, the repetition sign takes the music back to the beginning of the B section.

The repetition of the B section must sound exactly like the first time. However, there is a big change in the execution. Because of the odd nature of the two groups within the 12/16 measure (7 + 5), the execution of the whole B section is mirrored from its first occurrence. The bass, slap, and *platinela* notes (timbers) are still placed at the very same partials as before, thus making it sound the same. Only the location where these timbers are articulated on the drum is mirrored. On the repetition, every note that started on the lower part of the drum will now start on the upper part of the drum, and vice-versa.²²

For the C section in 7/4, the pandeiro plays a different rhythm than the marimba part. The described tempo Prestissimo – as fast as possible (quarter note = 240) is faster than the pandeiro can articulate. For that reason, instead of having sixteenth notes as the marimba, the pandeiro's part is written in eight notes, with a total of fourteen partials within each measure. These notes are subdivided into two groups of four notes each (partials 1 through 4), and one group of six notes (partials 1 through 6).

Groups one and two are identical. They consist of a bass note on partial 1 (base of the wrist – lower part), and *platinela* notes on partials 2, 3, and 4 (2 and 4 with fingertips – upper part, 3 with the base of the wrist – lower part). Group three has a slap note on partial 1 (thumb – lower part), and *platinela* notes on partials 2, 3, 4, 5, and 6 (2, 4, and 6 with fingertips – upper part, 3 and 5 with the base of the wrist – lower part).

²² That may be observed within the scores in the appendix.



Musical Example 10 “Etude 1”

C section, measure 40

The restatement of the B section is the same as before, but now with no repetition, it is immediately followed by a 4/4 bar. To understand the exact articulation of the notes within this measure, all the sixteen partials (sixteenth notes) are taken into consideration. The partials 1, 4, 6, 10, 14, and 16 are bass notes with the fingertips at the upper part of the drum. The partials 3, 5, 8, 12, and 15 are bass notes with the thumb on the lower part of the drum. The partials 2, 7, 9, 11, and 13 are rests.

Measures fifty-seven through sixty-three are a short transition to the coda. Here, the pandeiro plays a roll that resembles the orchestral tambourine roll, morphing into a traditional Brazilian endless roll.²³

On measure sixty-four, the rhythmic idea from the beginning is revisited, this time with a different voicing on the marimba part and a faster tempo. Here the pandeiro plays the same pattern from the beginning of the piece, and a shake roll in the last two measures.

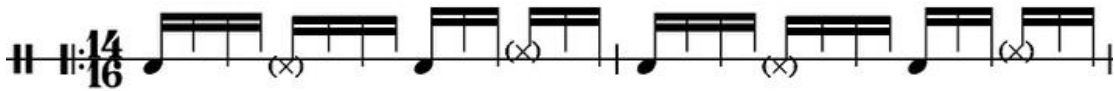
Etude 2

As previously explained in Chapter IV, Etude 2 has fourteen sixteenth notes within each measure. These notes are subdivided into two groups of four notes and two

²³ Called in Brazil of small zero roll, or eight roll, due to the nature of the necessary motion for long rolls, where the finger applies friction to the head of the drum by drawing the figures of the numbers eight or zero, creating an endless tremolo effect on the *platinelas*, similarly to the effect of tremolo in an orchestral tambourine

groups of three notes (4 + 4 + 3 + 3). For an easy understanding of the pandeiro part, it is crucial to analyze each of the four groups separately, by calling them group one (partials 1 through 4), group two (partials 1 through 4), group three (partials 1, 2, and 3), and group 4 (partials 1, 2, and 3). This subdivision happens throughout the whole etude.

In both occurrences of the A theme and the coda, the pandeiro plays the same part. Group one has a bass note on partial 1 (thumb – lower part). The partials 2, 3, and 4 are *platinela* notes (2 and 4 with fingertips – upper part, 3 with the base of the wrist – lower part). Group two has a slap note on partial 1 (thumb – lower part). Partial 2, 3, and 4 are the same as in group one. Group three has a bass note on partial 1 (thumb – lower part). The partials 3 and 4 are *platinela* notes (2 with fingertips – upper part, 3 with the base of the wrist – lower part). Group four has a slap note on partial 1 (hand palm – upper part). Partial 2 and 3 are *platinela* notes (2 with the base of the wrist – lower part, 3 with fingertips – upper part).



Musical Example 11 “Etude 2”

A section, measures 1 and 2

On the B theme, the pandeiro plays a variation of the groove from the A theme. This variation replaces the *platinela* note on the last partial of each group with a bass note, thus creating a thicker texture. Group one has bass notes on partials 1 (thumb – lower part) and 4 (fingertips – upper part), and *platinela* notes on partials 2 (fingertips –

upper part) and 3 (base of the wrist – lower part). Group two has a slap note on partial 1 (thumb – lower part), and partials 2, 3, and 4 are the same as in group one. Group three has bass notes on partials 1 and 3 (thumb – lower part), and a *platinela* note on partial 2 (fingertips – upper part). Group four has a slap note on partial 1 (hand palm – upper part), a *platinela* note on partial 2 (base of the wrist – lower part), and a bass note on partial 3 (fingertips – upper part).



Musical Example 12 “Etude 2”

B section, measure 26

The coda has the same rhythm and the same timbers as the A theme, with a shake roll on the fermata at the last measure.

Etude 3

The third etude presents four different musical ideas. For the A section, the pandeiro plays all the sixteenth notes within the measure and it has the same accents as the marimba. The first group of notes has one accent on the first partial, while the second group has one accent on the first partial and another accent in the third partial. Within the first five partials, the pandeiro plays a bass note on partial 1 (thumb – lower part) and all the other partials are *platinela* notes (2 and 4 with fingertips – upper part, 3 and 5 with the base of the wrist – lower part). Because of the odd number of notes within each grouping, the pandeiro starts the second group of notes on a different part of the drum. For the second group of notes the pandeiro plays a bass note on partial 1 (fingertips –

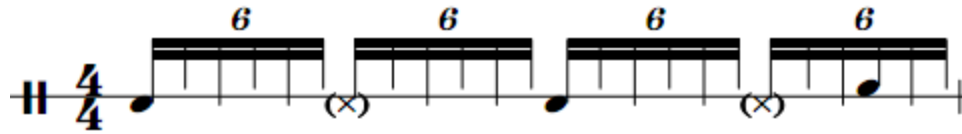
upper part), a slap note on partial 3 (hand palm – upper part), and *platinela* notes on partials 2, 4, and 5 (2 and 4 with the base of the wrist – lower part, 5 with fingertips – upper part).



Musical Example 13 “Etude 3”

B section, measure 1

The B section is only six measures long and the pandeiro plays the same subdivision in sixteenth note triplets as the marimba part. The pandeiro imitates a drum set backbeat groove – with bass notes on beats one and three, and slap notes on beats two and four. The sixteenth note triplets fill in the space, imitating the hi-hat of a drum set. To learn the pandeiro’s part it is important to subdivide each of the four groups of notes within the 4/4 measure into six partials. Group one has a bass note on partial 1 (thumb – lower part), and all the other partials are *platinela* notes (2, 4, and 6 with fingertips – upper part, 3 and 5 with the base of the wrist – lower part). For the second group, only the first notes changes, with a slap note (thumb – lower part) on partial 1. All the other partials are the same as group one. Group three is a repetition of group one. The fourth group has a slap note on partial 1 (thumb – lower part), a bass note on partial 4 (fingertips – upper part), and *platinela* notes on partials 2, 3, 5, and 6 (2 and 6 with fingertips – upper part, 3 and 5 with the base of the wrist – lower part).

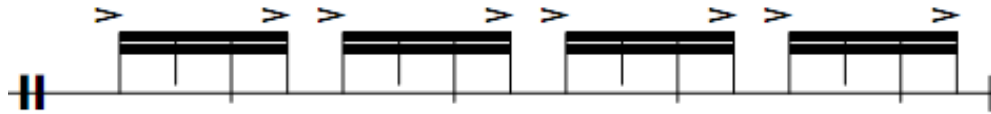


Musical Example 14 “Etude 3”

B section, measure 11

The next four measures within the B section are for improvisation purposes. The idea here is to variate what happened in the first two measures, similarly to how a drum set player would perform. It is important to keep a fluid execution of the sixteenth note triplets, using the bass and slap notes to improvise and the *platinela* notes to fill in the spaces. In addition, it is crucial to understand that a smooth execution requires the wrist’s rotation motion, using notes that constantly alternates between the two halves of the drum (upper/lower parts). Consecutive notes on the same part of the drum are only allowed in longer rhythms, never within rhythms shorter than an eight note.

Section C brings a technique that does not appear within etudes one and two. It consists in playing a samba pattern where the rotation motion is replaced by a vertical (up and down) shaking motion. In this rhythm, the pandeiro plays only *platinela* notes throughout all the four partials within the four beats of the 4/4 measure. All notes are played with the fingertips on the upper part of the drum. Partial 1 is played as a normal *platinela* note, partials 2 and 3 are produced by the shaking motion of the pandeiro going up and down, and partial 4 is played as another normal *platinela* note. When played fast, the two notes that happen in partials 4 and 1 give the samba character to the music, since this pattern is frequently used in Brazilian music.



Musical Example 15 “Etude 3”

C section, measure 17

The D section is a traditional *baião* in 2/4. This rhythm is widely popular not only in Brazil but around the world as well. This rhythmic idea can be articulated with variations as long the accents are kept in their characteristic places. In this project, the primary variation for this section has bass notes on partial 1 (thumb – lower part) and partial 4 (fingertips – upper part). Partial 2 and 3 are *platinela* notes (2 with fingertips – upper part, 3 with the base of the wrist – lower part). In the second group of notes, partials 1, 2, and 4 are *platinela* notes (1 with the base of the wrist – lower part, 2 and 4 with fingertips – upper part), and partial 3 is a slap note (thumb – lower part). The two bass notes in the first group and the slap note in the second group are the accents played by the marimba. These accents give the *baião* feel to the music, and the timbers can be varied on the pandeiro part if the accents are maintained, and the *platinelas* are used to fill in the spaces between the accented notes.



Musical Example 16 “Etude 3”

D section, measure 17

In conclusion, the presentation of Three Etudes for Marimba and Pandeiro intends to provide a good source of possibilities for the contemporary pandeiro, showing that the instrument can be used to play all kinds of grooves and odd time signatures, and not only the Brazilian traditional styles. Playing these odd-time signatures on the pandeiro is quite challenging, even for experienced players who are used to playing the different Brazilian genres. In Brazil, it is common to start the phrases and rhythms at the lower part of the instrument, that is the traditional way of playing *sambas* and *choros*. In these etudes, especially in Etude 1 and Etude 3, the difficulty comes not only from the fact that the player must be able to start the phrases at the upper part of the drum (which is unusual within the Brazilian styles) but also to alternate and start on a different part of the drum at every other measure. In theory, the process is quite simple, however, it is very difficult to execute while maintaining good sound quality when alternating the beginning of phrases between the different parts of the drum.

In the first etude, these challenges are evident from the very beginning. The first 7/16 measure is played starting in the lower part of the pandeiro, while the second measure is played starting on the upper part of the instrument. This alternation of hands or fingers is common when working with odd groups of notes, not only with percussion but with other instruments as well. What makes these odd groupings especially difficult on the pandeiro is the fact that the bass notes are played with the thumb in the lower part of the drum, and with the ring and middle fingers in the upper part of the instrument. At the same time, the slap sound is produced with the palm on the upper half of the drum

and with the thumb on the lower half. Consequently, different fingers and different parts of the hand will produce variations in the sound.

All my Three Etudes for Marimba and Pandeiro are intended to serve as a resource that will help pandeiro players in their journey for a better sound, and at the same time provide them with a broader rhythmic vocabulary, encouraging the research and elaboration of new patterns and musical ideas. Theoretically, when dealing with these odd time signatures, the percussionist should have the same sound throughout the whole piece/section, despite the alternation that happens when starting each phrase on a different part of the drum. Ultimately, with these concepts in mind, the performer must do their best while practicing, striving to achieve uniformity and evenness of sound.

APPENDIX A - Scores

Etude 1

Eduardo Prado

$\text{♩} = 120$

The musical score for Etude 1 by Eduardo Prado is presented in three systems, each containing a grand staff (treble and bass clefs) and a separate line for a percussion instrument.

System 1 (Measures 1-4): The grand staff is in 7/16 time. The bass clef part features a melodic line with slurs and accents, marked *mp* (mezzo-piano). The treble clef part provides harmonic support with chords and single notes, marked *f* (forte). The percussion line consists of eighth-note patterns. Measures 3 and 4 contain repeat signs in the grand staff.

System 2 (Measures 5-8): The grand staff continues the melodic and harmonic development. The bass clef part has a more active line with slurs and accents. The treble clef part continues with chords and single notes. The percussion line maintains its eighth-note pattern. Measures 7 and 8 contain repeat signs in the grand staff.

System 3 (Measures 9-12): The grand staff continues the melodic and harmonic development. The bass clef part has a more active line with slurs and accents. The treble clef part continues with chords and single notes. The percussion line maintains its eighth-note pattern. Measures 11 and 12 contain repeat signs in the grand staff.

2

13

13

17

17

21

21

rall molto... ff p cresc. molto

27 *ff* 3

31 **Prestissimo**

33 $\text{♩} = 120$

36

4 $\text{♩} = 240$
40 **As fast as possible**

41

42

43

44

45 

46 

47 

48 

6

♩ = 120

50

ff

mf

53

56

f *rall. molto*

Slow

59 *mf* *ff* 7/16

♩ = 156
64 *Powerfull and energetic*

fff on the nodes 7/16

66

68 *gradually to center* *sfz*

Etude 2

Eduardo Prado

The musical score for "Etude 2" by Eduardo Prado is presented in three systems. Each system consists of a piano (p) staff, a guitar (g) staff, and a common time (C) staff. The key signature is one sharp (F#), and the time signature is 14/8.

System 1: The piano staff begins with a dynamic marking of *f - mp*. The guitar staff features a series of eighth-note patterns. The common time staff shows a sequence of eighth notes.

System 2: The piano staff includes a triplet of eighth notes and a dynamic marking of *dim. 1st cresc. 2nd*. The guitar staff continues with eighth-note patterns. The common time staff shows a sequence of eighth notes.

System 3: The piano staff starts with a dynamic marking of *f* and ends with a double bar line and a repeat sign. The guitar staff continues with eighth-note patterns. The common time staff shows a sequence of eighth notes.

2

9

System 1, measures 9-11. The system consists of three staves. The top staff is a grand staff (treble and bass clefs) with a key signature of one flat and a 3/4 time signature. It contains a complex melodic line with many beamed sixteenth and thirty-second notes. The middle staff is a single bass clef staff with a simpler melodic line. The bottom staff is a single bass clef staff with a rhythmic accompaniment consisting of eighth and sixteenth notes.

12

System 2, measures 12-14. The system consists of three staves. The top staff is a grand staff with a complex melodic line. The middle staff is a single bass clef staff with a simpler melodic line. The bottom staff is a single bass clef staff with a rhythmic accompaniment.

15

System 3, measures 15-18. The system consists of three staves. The top staff is a grand staff with a complex melodic line. The middle staff is a single bass clef staff with a simpler melodic line. The bottom staff is a single bass clef staff with a rhythmic accompaniment. The system ends with a double bar line and a repeat sign.

19

System 4, measures 19-21. The system consists of three staves. The top staff is a grand staff with a complex melodic line. The middle staff is a single bass clef staff with a simpler melodic line. The bottom staff is a single bass clef staff with a rhythmic accompaniment. The system ends with a double bar line.

mp - cresc.

3

22

Musical notation for measures 22-23. The top staff is in bass clef with a key signature of one flat and a common time signature. It contains eighth and sixteenth notes with accents. The bottom staff is a single line with eighth and sixteenth notes.

24

Musical notation for measures 24-25. The top staff is in treble clef with a key signature of one flat and a common time signature. It contains eighth and sixteenth notes with accents. The bottom staff is a single line with eighth and sixteenth notes.

Slightly Slower

26

Musical notation for measures 26-27. The top staff is in treble clef with a key signature of one flat and a common time signature. It contains eighth and sixteenth notes with accents and a forte (f) dynamic marking. The bottom staff is a single line with eighth and sixteenth notes.

28

Musical notation for measures 28-29. The top staff is in treble clef with a key signature of one flat and a common time signature. It contains eighth and sixteenth notes with accents. The bottom staff is a single line with eighth and sixteenth notes.

30

Musical notation for measures 30-31. The top staff is in treble clef with a key signature of one flat and a common time signature. It contains eighth and sixteenth notes with accents. The bottom staff is a single line with eighth and sixteenth notes.

4

32

34

37

39

mf

with energy

The musical score consists of four systems of music. Each system begins with a measure number: 32, 34, 37, and 39. The piano part is written in treble and bass staves, and the percussion part is written on a single staff. The score includes various musical notations such as notes, rests, and dynamic markings. The first system (measures 32-33) features a piano melody in the treble staff and a bass line in the bass staff, with a percussion line below. The second system (measures 34-35) continues the piano melody and bass line, with a percussion line below. The third system (measures 37-38) features a piano melody in the bass staff and a bass line in the bass staff, with a percussion line below. The fourth system (measures 39-40) continues the piano melody and bass line, with a percussion line below. The score includes various musical notations such as notes, rests, and dynamic markings.

41

5

The image shows a musical score for two staves. The top staff is in bass clef and contains measures 41 and 5. It features a complex melodic line with many beamed sixteenth and thirty-second notes, and some triplets. The bottom staff is in treble clef and contains measure 41, which is marked with a forte (*ff*) dynamic. It features a rhythmic accompaniment of eighth and sixteenth notes, with some rests. The score ends with a double bar line.

Etude 3

Eduardo Prado

Allegro

The musical score for Etude 3 by Eduardo Prado is presented in four systems. The first system begins with a treble clef, a key signature of one sharp (F#), and a 18/8 time signature. The tempo is marked 'Allegro'. The first staff contains a melodic line with many beamed sixteenth notes and accents, starting with a mezzo-forte (*mf*) dynamic. The second staff is a bass line with eighth notes. The second system continues the melodic and bass lines. The third system starts at measure 7 and includes a 'rall' (rallentando) marking over a melodic phrase. The fourth system starts at measure 11, with a tempo marking of $\text{♩} = 102$ and a 'staccato' marking. It features a piano part with a mezzo-forte (*mf*) dynamic and a bass line with a forte (*f*) dynamic. The score concludes with a 4/4 time signature.

2

13

13

15

15

17

17

19

19

21 3

Baiao

23

2x shafts on the edge

27

1. 2.

Allegro

32

mf

4

34

36

38

The image displays a musical score for three systems, corresponding to measures 34, 36, and 38. Each system consists of a treble clef staff and a bass clef staff. The treble staff features a complex melodic line with many beamed sixteenth notes, some marked with accents (>) and slurs. The bass staff provides a rhythmic accompaniment with a repeating pattern of eighth and sixteenth notes, often including rests. A dynamic marking of *f* (forte) is present at the beginning of the second system. The notation is in a standard musical format with a key signature of one flat and a 4/4 time signature.

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