

**Adapting the marimba into a  
Tango quintet in Astor  
Piazzolla's music**

A marimba method by *Yves Popow*

## *Preface*

The idea of writing a method of adapting the marimba into Astor Piazzolla's music came during my Master study at *Codarts*, conservatory of Rotterdam. I have been really into Tango music but without knowing the style. I noticed that many marimba players, including myself, play many works by Piazzolla being not familiar with the style. Usually people just copy the guitar or arrange the piano parts for marimba. While researching about this music by analysing the functions of each instruments, experimenting with different line-ups and combinations of instruments and trying to put the marimba into context, I came to the idea of writing a method about this which could be used as an approach for people who are not familiar with Tango music and wanting to adapt the marimba into this style.

As a musical example I have chosen Piazzollas *Otoño Porteño* for bandoneon, violin, piano, electric guitar and double bass. As a main score I have been using a reference the transcription by Christian van Heemert, Master teacher at *Codarts*, Rotterdam.

All explanations under \* are from the *Transcription course* book by *Leo Vervelde* and *Wim Warman*, both Tango teachers at *Codarts*, Rotterdam.

## Adapting the marimba into a tango quintet into Otoño Porteño by Piazzolla

### 1. Function Analysis

To start with, first analyse the functions of each instrument and make groupings of the different sections:

#### Melody:

- Bandoneon is playing main melody from bar 9 on and is the main character in Piazzolla's music.

Musical score for bandoneon and piano starting at bar 8. The bandoneon part begins in bar 9 with a melodic line featuring triplets. The piano accompaniment consists of a steady eighth-note pattern in the left hand.

- Violin is playing a varied melody together with bandoneon from bar 48 on.

Musical score for bandoneon (Bd.) and violin (Vln. I) starting at bar 41. The bandoneon part features a complex melodic line with triplets and sixteenth-note patterns. The violin part provides a varied melody that complements the bandoneon. The piano accompaniment is also visible, featuring a sixteenth-note pattern in the left hand.

#### Rhythmical and harmonic accompaniment:

Violin, electric guitar and right hand of the piano are responsible for the rhythmical and harmonic accompaniment. In comparison with electric guitar and right of piano, the violin plays no double stops or chords, but only single notes. However, the rhythmical accompaniment is exactly the same.

Violin is playing a rhythmical effect in the *yumba*\* called *chicharra*\*\*

\* *Yumba* is a figure of speech introduced by Osvaldo Pugliese who was looking for a way to accompany soloists on piano.

The name *yumba* (pronounced: shooom --- baaa) represents the sound produced by the double bass.

1st and 3rd beat are stretched which represents this elastic feeling : shooom (long).

2nd and 4th (off-beat) are hit on the back of the double bass (baaa, short)

Yumba

The musical score is for the piece 'Yumba' and is written in 4/4 time. It features five staves: Bandoneon, Violin I, Electric Guitar, Piano, and Double Bass. The Bandoneon part plays a melodic line with slurs and accents. The Violin I part plays a rhythmic accompaniment consisting of eighth notes with 'x' marks above them, indicating unpitched sounds. The Electric Guitar part plays a series of chords. The Piano part provides harmonic support with chords and single notes. The Double Bass part plays a rhythmic line with eighth notes and slurs, and includes 'x' marks above some notes, indicating unpitched sounds.

More about the definition of the *yumba* and more examples can be found in the *Transcription course* of Leo Vervelde and Wim Warman.

\*\* *Chicharra*: unpitched rhythmical accompaniment usually over 1 or 2 measures, in which the violinist uses the bow on the wrong side to produce a sound effect similar to the guiro, a percussion instrument.

- Violin, unpitched, *chicharra* (bar 1-8)

The musical notation shows a violin staff with a rhythmic accompaniment. It consists of eighth notes with 'x' marks above them, indicating unpitched sounds. The notation is spread across two measures, with a double bar line in the middle.

While the bandoneon plays the main melody the violin plays a chromatically descending line as a rhythm accompaniment.

- Violin, pitched (bar 9-15)

Electric guitar and right hand of the piano play the same rhythmical accompaniment by adding colour through chords.

- Electric guitar (bar 9 to 15)

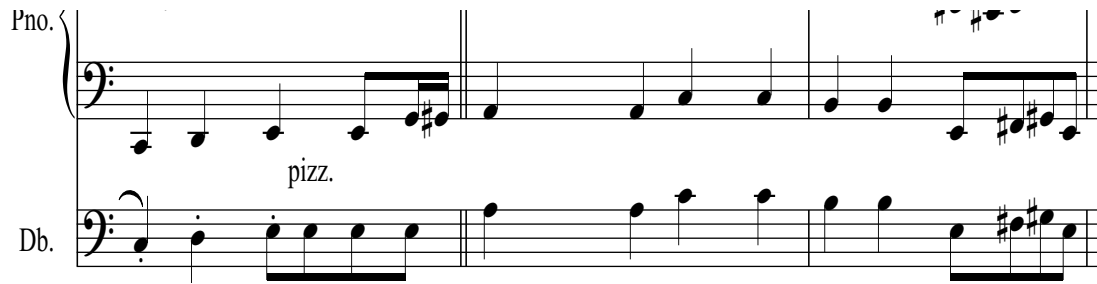
- Right hand of piano (bar 9 -15)

### Bass accompaniment:

The double bass and left hand of piano are the engine of the music. They bring the necessary drive and groove.

Throughout the entire piece they play the bass part.

Example from bar 8 on:



→ As you discover, the piano incorporates every of the 4 functions in Piazzolla's music. It has a very important role.  
The next step is find out if there are correlations between instruments and analyse those.

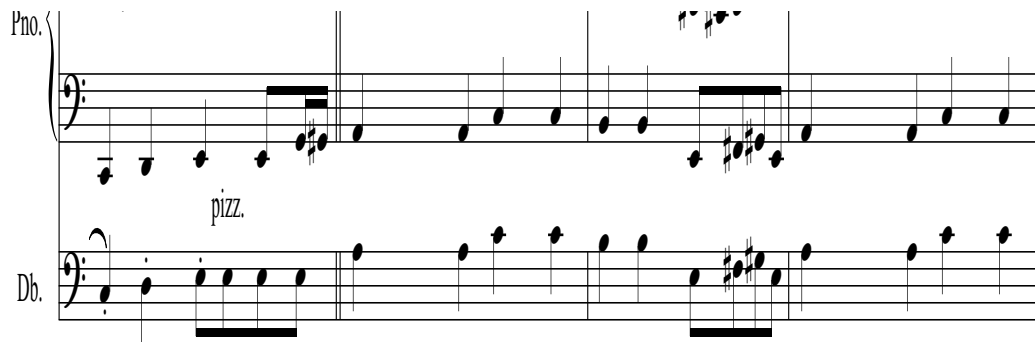
## 2. Correlations

One of the most important correlations is the one between:

- Left hand of the piano and double bass

Example in *Otoño Porteño*, bar 9-16:

In bar 9-12, the double bass plays *pizzicato* while the piano plays an opposite technique, *legato*.



One probably asks the question why, since both techniques are the opposite.

The answer is that both techniques combined, create a new sound:

- Attack of double bass (pizzicato) and sustain of piano (legato) = nice sound effect → light accompaniment

In 13-16, the double bass changes from pizzicato to Arco. Is there another relation between both instruments?

The answer to this question is also a yes.  
 The Arco technique represents a heavy and pronounced walking bass.  
 The left hand of the piano plays an octave lower than the double bass (very low register)  
 which also represents the same feeling and character which the double bass does:

Low register, heavy and full sound walking bass.

When this phrase comes back after the bandoneon cadence, a development happens.  
 Piazzolla changes the sound colour by letting play the double bass pizzicato while the piano  
 plays in its lowest register.  
 Piazzolla combines now in bar 48-56 what he used separately in bar 9-12 and 13-16.

Another similar relation can be found between the right hand of the piano and the electric  
 guitar.  
 They have the same sound relation as the double bass and left hand of the piano.

- Right hand of the piano and electric guitar

Example in Otoño Porteño, from bar 9-12:

While the right of piano has the same sound effect than the left hand of piano (sustain, marcato), the guitar has a very thing but pronounced sound. This is idea is the same as the pizzicato of the double bass. Both relations fit together and create a very light accompaniment (attack and sustain).

As we realised what the role of the piano is, the next step is to skip the piano. One keyboard instrument is enough → so we get this line-up:

Bandoneon, violin, electric guitar, marimba and double bass

Since we know already the different role of the piano in this arrangement, we have next to analyse its relation with other instruments.

### **3. Line-up including marimba**

After having analysed the functions of each instrument and the correlations between each one, the next step is to find a suitable place for the marimba inside this line-up.

In order to find this out, we have first to figure out the strong and weak points of the marimba:

- No sustain no melody/ legato
- Articulated, rhythmical, attack
- 5 octaves, more registers → different sound possibilities, colours and effects
- Chord instrument: possibility of using 4 sticks
- More voices are possible: bass, chords and melody without sustain

By reflecting about the strong and weak points of the marimba, one realises that it is very similar to the piano and guitar with its possibilities.

It is not a melodic instrument as the bandoneon or violin because of the missing sustain. But it has a very percussive sound and harmony possibilities that counts as well for guitar and piano. Also one can play more voices at once.

Now, having found a function for it, we have to consider that we might have to leave out the piano since we want to figure out how to adapt the marimba into Piazzolla's music. In order to find this out, having one keyboard instrument is the easiest most logic way to approach.

So we get this line-up:

Bandoneon, violin, electric guitar, marimba and double bass

The next step is to decide which instruments can take over the marimba.

Decide which instrument(s) can take over the function of the piano.

To make it clear from here on, there is no instrument who can replace the piano. From now, all results will be different from the original one. But I am trying to be as close as to the main idea by using the possibilities I have within the quintet without piano.

### **4. Who could take over the role of the piano?**

#### **Option 1**

1) First, the bandoneon should not and cannot take it over as it is the main solo /melody instrument in Piazzollas music.

2) Violin will be also used as a melodic instrument and as well as a rhythmical support.

Furthermore it is limited as accompaniment, as it does not have many harmonic possibilities (double stops mostly, hardly triple or quadruple stops)



3) Electric guitar and marimba can take over the harmonic and rhythmical part of the piano, as well as supporting partly the double bass for a longer sustain or creating a thicker bass sound, which happens originally with the left hand of piano and double bass. To go on with this strategy one should do experiments with marimba, electric guitar and double in order to find out what combination would be the closest to the original one.

### **Option 2**

Another thought is that nowadays the double bass hardly gets doubled. Reinforcing the bass part is an old-fashioned idea, which derived from the early years of Tango. Since at that time there didn't exist any kind of amplification, the left hand of the piano got used as a support. Modern Tango composers as Gustavo Beytelmann broke this line by using the piano with filling ins, counter melody, chords or in a free way.

I have chosen to start first start with the being as close as possible version. Approaching the first option, I expanded my knowledge in Tango music. Especially working with proper Tango musicians who really know the style helped me a lot. Therefore I strongly suggest working with Tango musicians and not classical. The approach in classical music is different from Tango music.

The second option can be chosen for instance when using the marimba in an independent way such as writing a solo for it as a starting point. Before you start writing a marimba solo, make sure to think first what is a typical marimba solo. Look up for different solo which exist or you may have performed. Don't copy, but try to get an inspiration as a starting point and develop it.

The next step will be finally practical.

## **5. Experiment**

- 1) The first step for this experiment is to find different ways of combining the marimba, electric guitar and double bass while playing an accompaniment pattern.

Example from Christian van Heemert's transcription:

The image shows a musical score for three instruments: Electric Guitar (E. Gtr.), Piano (Pno.), and Double Bass (Db.). The score is written in 7/8 time. The E. Gtr. part is in the treble clef and features a rhythmic pattern of eighth notes and chords. The Pno. part is in the grand staff (treble and bass clefs) and features a complex rhythmic pattern with chords and single notes. The Db. part is in the bass clef and features a simple rhythmic pattern of eighth notes. A 'pizz.' marking is present under the Db. part, indicating a pizzicato effect. The score is divided into three measures by double bar lines.

Here are a few examples, which I have been looking for and experimenting with:

- Marimba harmonic function  
Double bass (only Pizzicato) and electric guitar bass function
- Marimba harmonic function,  
Double bass (only Arco) and electric guitar bass function
- Marimba harmonic function,
- Double bass (first 4 bars pizzicato and next 4 bars Arco) and electric guitar bass function
- Electric guitar harmonic function
- Double bass (only Pizzicato) and marimba bass function (in single notes)
- Electric guitar harmonic function
- Double bass (only Arco) and marimba bass function (in parallel octaves double stops)
- Electric guitar harmonic function
- Double bass (first 4 bars pizzicato and next 4 bars Arco) and marimba bass function (first 4 bars single notes and the next 4 parallel octave double stops)

Conclusion from this first experiment:

In order to adapt the sustain notes of the piano (legato), the first idea I had in mind was to let the guitar play the part of left hand of the piano. It can easily play long notes and therefore the marimba takes over the rhythmic-harmonic part.

So we get still the idea of pizzicato by double bass and legato sustain of guitar, like the original version by Piazzolla played by the piano.

This is the result of my own arrangement:

The musical score consists of three staves: E. Git. (Electric Guitar), Mar. (Marimba), and Kb. (Double Bass). The E. Git. staff is in treble clef with a key signature of one sharp (F#) and a dynamic marking of *f*. The Mar. staff is in grand staff (treble and bass clefs) with a dynamic marking of *mf*. The Kb. staff is in bass clef with a dynamic marking of *f* and a *(Pizzicato)* instruction. The arrangement spans four measures. In the first measure, the E. Git. plays a chord (F#4, A4, C5) with an accent, followed by a quarter note C4. The Mar. plays a rhythmic pattern of eighth notes in the bass clef. The Kb. plays a single note F2. In the second measure, the E. Git. plays a quarter note C4. The Mar. plays a chord (F#4, A4, C5) with an accent. The Kb. plays a single note F2. In the third measure, the E. Git. plays a quarter note C4. The Mar. plays a chord (F#4, A4, C5) with an accent. The Kb. plays a single note F2. In the fourth measure, the E. Git. plays a quarter note C4. The Mar. plays a rhythmic pattern of eighth notes in the bass clef. The Kb. plays a single note F2.

When more energy needed, the marimba can support the Arco off he double bass with playing parallel octaves in the lowest register, this is very similar in sound and originality.

E. Git. *mp* *mf* *mp*

Mar. *mp* *mf* *mp*

Kb. *mp* *mf* *mp*

Arco

So at the first example the marimba takes over the harmonic part of the piano, while in the second it changes to the bass part of the marimba. Marimba and guitar jump between both function, and being always the opposite. This is my result of this experiment.

- 2) Another experiment can be done with the Yumba:

Bandoneon

Violin I

Electric Guitar

Piano

Double Bass

Find a way to adapt the marimba into this Yumba. First thing you should do is to listen to different compositions of Astor Piazzolla to get to know with this accompaniment pattern.

A few examples of playing the yumba on the marimba:

- Copy the notes of the piano on the marimba, as a first step → get to know with this pattern  
Use the 4 lowest notes of a 5-octave marimba for the clusters
- Play only the chord part, similar to the guitar part
- As the clusters are used as a percussion effect one also could think of using a kick drum (on beat 2 and 4). Double bass plays on 2 and 4 also a percussion effect called: *Golpe*
- An effect where the player has to hit the back of the double bass with his hand (*Golpe*= stroke).  
This is a more experimental idea.
- Add a glissando to connect the chord with the clusters
- This is a way of also compensating the missing sustain by adding an effect which is also played by the guitar.
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The image shows a musical score for three instruments: E. Git., Mar., and Kb. in 4/4 time. The E. Git. part consists of six measures of chords with glissando markings. The Mar. part consists of six measures of chords with glissando markings and a forte dynamic. The Kb. part consists of six measures of a bass line with glissando markings and a forte dynamic, with 'Pesante' and 'Golpe' markings.

### 3) Writing a solo for the marimba inside a Tango line-up.

An issue what has to be considered is the missing sustain, therefore I suggest that one start with transforming the main melody in a fluent fast sixteenth rhythm. We don't have a pedal like the vibraphone or piano to sustain the sound, so longer notes sound very static.

So how does a typical marimba solo look like?

Which element do composers use?

The first step to approach is a very easy one: one should improvise on the main theme. This is a start into writing a solo for marimba.

Possible techniques: adding chromaticisms or passing note, alternating octaves in sixteenth patterns, or arpeggios. *Hayato Hirose* uses the 2 latter techniques in the *Fantasy for marimba*. This is a typical technical to compensate the missing sustain and colour is added.

Commissioned by Fumito Nunoya, Odate Wind Ensemble and Odate City Band

Solo Marimba **FANTASY FOR MARIMBA** Hayato Hirose

Allegro *M2* 9 23

8 14 Solo mp

- We can see the melody is divided in eighth notes as highlighted in yellow. The composer adds the same notes one octave lower on the sixteenth offbeat by creating more movement and adding colour to the marimba, in purpose of the missing sustain.
- Another technique, which Hirose also uses, are passage notes or moving harmony (highlighted in pink).

*f*

33 *mf*

Furthermore the arpeggio technique (highlighted in green above) is a very simple but effective one. This technique is very piano-like but works well on the marimba. Instead of only playing single quartet notes, which are highlighted in green, the composer uses notes from triads.

A similar improvisation on a main theme is what Eric Sammut, a percussionist and composer for marimba from France, did with Piazzolla's Libertango. He made a variation of it for solo marimba by using the instrument in the way it sounds best.

In bar 11 to 13 he is using ascending chromatic scale. The main notes of this scale have an accent and are played by the right. The left hand is used as a filling up to compensate the missing sustain.

From bar 14 on the melody is played by the right hand while the left hand fills up with a bass note followed by an inner voice.

After having analysed both solos I have put everything into context by experimenting with the discovered techniques and got to this result in my arrangement of Otoño Porteño:

The musical notation shows a maracas solo in 4/4 time. The first four measures use an alternating octaves technique with accents. The next four measures use chromaticisms and passaging notes. The final four measures use a regular repetitive accent pattern.

In the first 4 bars, I have used the alternating octaves technique, which *Hayato Hirose* also uses. I went even one step further by using the melody over 3 octaves instead of 2. Also I added accents to this solo to create a free feeling.

The following 4 bars I based on chromaticisms and passaging notes depending on the fundamental chords on every 1<sup>st</sup> and 3<sup>rd</sup> count.

To end my solo with the last 4 bars, I used the technique that *Eric Sammut* uses in his variation on Astor Piazzolla's *Libertango*.

I exactly approached the way as Sammut; starting with a bass note, main notes on the top and filling up through a middle voice. The melody part on the top consists of a regular repetitive accent pattern.