

ROOTS OF RHYTHM - CHAPTER 11: THE *PANDEIRO* FROM BRAZIL

Instrument:

Pandeiro, a Carnival tambourine

Country:

Brazil



Flag:

The green Brazilian flag features a large yellow diamond in the center with a blue celestial globe. Twenty-seven white five-pointed stars represent each of 26 states and the Federal District. The stars are arranged in the same pattern as the night sky over Brazil. The globe has a white equatorial band with the motto *ORDEM E PROGRESSO* which means Order and Progress in Portuguese.



Size and Population:

Brazil is the largest country in South America. There is a total area of 3,286,488 square miles, making it slightly smaller than the United States. It occupies almost half of the subcontinent of South America, and it is the fifth largest country in the world.

As of July 2013 Brazil had an estimated population of 201,009,622, ranked 5th largest in the world. About three fourths of Brazil's population lives in urban areas and mostly along the coast. São Paulo, with over 7 million is the seventh largest city in the world. There is considerable diversity in the population including 55 percent white including Portuguese, Germans, Italians, Spanish, Polish, 38 percent mixed white and black, 6 percent black, and 1 percent others including Japanese, Arabs, Amerindians. Brazil's Indian population of over 200,000 live mainly in the northeastern Amazon region.

Geography and Climate:

The landscape of Brazil is mostly flat with some rolling lowlands in north and some plains, hills, mountains, and narrow belt on the coast. The eastern side of Brazil faces the Atlantic Ocean and the country borders ten other countries: Argentina, Bolivia, Colombia, French Guiana, Guyana,

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Paraguay, Peru, Suriname, Uruguay, and Venezuela. Brazil has the world's largest rainforest that covers most of the north, which includes the enormous Amazon River that winds through the humid jungle. There are over 1000 rivers in Brazil. Mountains rise north of the forests and in the southeast. Across parts of northeastern Brazil there are dry plains, while the low plateaus of southern and central Brazil have fertile farmlands and ample grazing area. Along the Atlantic coast there are wide white beaches. Travel is restricted in the large interior, which remains mostly undeveloped.

The climate is mostly tropical, but it is temperate in south. The lowlands are generally warm, the mountains and plateaus are usually cool, and some coastal areas are cooled by sea breezes. Since rain falls heavily across Brazil, the country is one of the world's largest crop-growing countries.

Background and History:

When Pedro Álvares Cabral, a Portuguese commander, landed in the area now known as Brazil in 1500, the land was populated by indigenous Indians, including the Guaraní and Tupinamba. After a treaty with Spain, Cabral claimed the area for his country, and this began three centuries of rule of under Portugal. At that time Brazil was named after certain trees or *brazilwoods*, because the wood looked like a glowing ember, called *brasa* in Portuguese.

With the arrival of colonists in the 1530s, settlements were established in the northeast and in southern Brazil. At first local Indians were enslaved to work these plantations. But in 1538, African slaves primarily from Angola were brought to replace the Indians who had died or were killed. The infusion of this almost free labor force had a profound influence not only on Brazil's economic development in the world, but also on its cultural evolution notably through African influence in music and dance.

Though the Dutch invaded Brazil in 1630, they were driven out 24 years later. By the end of the 17th century, the discovery of diamonds brought thousands of Portuguese to the interior regions of Brazil and great riches to Portugal. In 1750, Portugal and Spain signed a treaty settling ruling areas in South America. By 1800, there were 3.5 million people in Brazil and half of this number were slaves. Beginning in 1808, the Portuguese royal family moved from Portugal to Rio de Janeiro, ruling both countries from Brazil's capital.

In 1822, Brazil won its independence from Portugal. This began a period of great progress including the building of railroads and telegraph communication systems. By the mid-1800s there was a global demand for rubber products and coffee from Brazil. At this time, thousands of immigrants from Germany, Italy and other European nations began to arrive. When slavery was finally abolished in 1888, nearly 750,000 slaves were freed.

In 1889 Brazil became a republic and soon thereafter adopted a constitution. From that time through the 1930s two presidents were elected but ruled as dictators. After WWII, Brazil joined the United Nations, wrote a new constitution, and restored individual rights. In order to represent more of the interior of the country, the capital was moved from the coastal city of Rio de Janeiro to the modern inland city of Brasilia in 1960. In 1964, the military took over the government, a change that lasted for over 20 years; this was followed by a peaceful transition back to civilian rule. The current elected leader is President Dilma Rousseff (2011). Brazil continues to grow as the largest economic and regional leader in South America

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through industrial and agricultural growth and development of its interior. Assisting this is the vast natural resources in its interior and a larger labor pool. Brazil's economy is expanding its markets all over the world.

Culture:

Brazil shares many traditions with Portugal since it was a Portuguese colony for over 320 years. The Portuguese colonists also brought Roman Catholicism which is now the dominant religion the country at around 80 percent. The remaining 20 percent is a mixture of other religions including Lutheran, Jewish, and Buddhist. Today, about 10 percent of Brazilians, mostly those with African heritage, practice *macumba* (mah-ku-mah) and *candomblé* (con-dome-blai), a combination of African and Catholic spiritual beliefs.

While Portuguese is the official language, Spanish, English, and French are also spoken. About 80 percent of Brazil's adults can read and write. Public education is free, but many children in the rural areas leave school after the age 14 in order to work. The country's literature has revealed much about its past including poems about slavery and the Indian population.

Although there is a productive economy, a great difference exists between rich and poor, with a small minority living very well, some living comfortably, but the vast majority living under very poor conditions. Those with European backgrounds, often have better educational opportunities and have higher paying jobs than other ethnic groups. In spite of these social imbalances, there is much less racial discrimination in Brazil than in other multi-ethnic nations.

Brazilians take pride in many aspects of their culture and one important aspect is their music and dance. The focus of this chapter, a tambourine called *pandeiro* (pon-day-roh), has three important cultural connections: a martial art, Carnival and current events.

The martial art called *capoeira* (cah-pooeh-eh-rah) uses several musical instruments including the *pandeiro* to accompany the performers. Around 400 years ago *capoeira* was brought by slaves from Angola, Africa and became a type of protection against their violent overlords. Disguised and hidden from slave owners as an entertaining non-threatening dance, it was performed with singing and musical instruments. After being outlawed for many years, in 1937, *capoeira* was legalized by Brazil's president in order to promote it as a Brazilian sport. Around this time the first legally-sanctioned *capoeira* academy opened in Salvador, Brazil. Today, this martial art is performed internationally both as an expressive remembrance of past harsh times and as an artistic competition sport.

Another application of the *pandeiro* is in the Brazilian samba music used in Carnival. This celebration dates back to Portuguese religious festivals around the time of Lent. After it changed into a masked ball in Rio de Janeiro, it became a procession with floats in 1850. Soon afterward, people paraded in costumes with musicians in large numbers. Samba music evolved out of the music called *choro* (chaw-roh), a European influenced music in Brazil. The first samba schools, or *Escolas de Samba* (es-koh-las day sahm-bah) started in the late 1920s in Rio de Janeiro. These were groups of blacks and others who wanted to make music and then parade during Carnival. They were called schools because performers would practice at a local school. In the

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1930s the samba rhythm and dance became Brazil's official music. Some samba schools have 4,000 participants and more than 300 percussionists.

The *pandeiro* is also used in rural areas of Brazil as an accompaniment to singers who literally sing the news. The singer collects current events about a village, then moves on to the next village, stands in a central area and sings about the news he or she has collected. In the 1970s transistor radios became more available in areas without electricity, and there became less of a need for these musicians.

Music: Instruments and Rhythms

Instruments: Indigenous people of the Amazon rainforest in Brazil play whistles, flutes, horns, drums and rattles to maintain the traditions of their ancestors. When the Portuguese arrived in Brazil, missionaries introduced songs in the local Tupi (too-pee) language in order to convert the indigenous people to Christianity. They also brought many types of European instruments including the guitar, clarinet, accordion, and an early type of piano called the clavichord. Other instruments included the Spanish *pandero* (pon-day-roh), a round frame drum usually with no jingles, as well as the Spanish *pandereta* (pon-deh-ree-tah) and the Arabic, *riqq* (rick) both tambourines with jingles. The name *pandeiro* is related to the older Spanish instruments. The *adufe* brought from Portugal had a major influence on the development of the *pandeiro*. Many other instruments were brought to Brazil from Africa during the slave trade particularly from Angola. All of these instruments were blended into what became Brazilian instrumental music.

Capoeira was practiced with rhythms played on the musical bow, called *berimbau* (bee-rem-bow), the *agogo* (ah-goh-goh), a double bell, the *atabaque* (ah-tah-bah-keh), a large single-headed conga drum, and the *pandeiro*, a single-headed tambourine.

The musical instruments used for sambas in Carnival consist of a large ensemble of percussion instruments that included the following:

- 🕒 *agogo*, a double bell
- 🕒 *apito* (ah-pee-toh), a three-pitched whistle
- 🕒 *repinique* (heh-peh-nee-keh), a medium double-headed drum and lead drum
- 🕒 *surdo* (sir-doh), a large double-headed bass drum
- 🕒 *rocas* (row-kas) or *ganzas* (ghan-zahs), metal or gourd shakers
- 🕒 *cuica* (kwee-kah), a friction drum that can sound like an animal
- 🕒 *timba* (tim-bah) a single-headed, cone-shaped drum
- 🕒 *tamborim* (tom-bow-reem), a small single-headed frame drum
- 🕒 *pandeiro*, a tambourine

The *pandeiro*, is a single-headed tambourine with five sets of jingles, with three jingles per set, not the usual two per set. Each set consists of two concave metal discs facing each other with a flat disc in between. The cupped discs have a very high dome, and this along with the flat disc dampens the ring, giving the *pandeiro* a short low "chuck" sound rather than the usual high ringing "ching" sound of many tambourines. Most *pandeiros* today have a tunable drumhead made from goat skin or more recently from a thin plastic film like Mylar. These drumheads might be transparent or have colorful designs. The instrument is hit or rubbed with one hand while the other one shakes the jingles and/or dampens the drumhead from underneath.

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Rhythms: The three *pandeiro* rhythms presented here, *capoeira*, samba, and six-beat, each require specific combinations of high, medium, and low tones on the drum. High tones involve the slap and jingle shake, medium tones the finger or heel hit, and low tones the thumb stroke. Sometimes it is necessary to combine the motions of both hands, for example, when the left hand dampens the drumhead with a finger while the other hand hits with the thumb to produce a medium tone instead of a low tone. A more advanced technique is the finger or thumb buzz, which is created by lightly pressing the tip of a finger or thumb into the drumhead and moving it in an arch or circles so as to cause friction on the head.

In *capoeira*, the *ginga* (ging-gah), possibly translated as "swing," was the basic movement invented to disguise the movements as dance instead of a fight practice. The *ginga* is set to the rhythm of the *berimbau* and other percussion instruments or *bateria* (bah-the-ree-ah) to reinforce the idea of dance but mainly to teach a critical element in *capoeira*, the timing of their moves.

Choro rhythms of the 1800s led to invention the samba in the late 1800s. The greatest *choro* musician of all time was perhaps Pixinguinha (1897-1973). He was the first to incorporate percussion instruments into *choro* and the *pandeiro* is still the rhythmic base in traditional *choro* music. Some people call the *choro* "the musical soul of the Brazilian music." Jorginho do Pandeiro (hor-heen-ho doh pon-day-roh) is one of the most famous *choro pandeiro* players.

This lesson includes examples of the *capoeira* rhythms (8 counts) and the *samba batucada* (bah-too-kah-dah) rhythms (8 counts) on the *pandeiro*. While samba rhythms grew out of *choro* music in the early part of the 20th century, they have evolved into many types. The type featured here is *samba batucada*—the driving samba rhythm played during Carnival by large percussion ensembles (see rhythms in Resources below).

Listen & Play Along:

Note to teachers: if instruments are not readily available, consider having students make their own (a general activity for making drums can be found in the Roots of Rhythm: Extensions Introduction Section, and a specific activity for making pandeiro is described below) or encourage them to improvise - using everyday items such as buckets, containers, phonebooks, desktops, etc., as instruments. Rhythms can also be created with body percussion including handclapping, foot tapping, finger snapping, etc.

Listen to Tracks 1-7 of the Roots of Rhythm: Extensions Companion CD to hear the sound of the pandeiro. Now it's time to play the pandeiro. You can also use a tambourine or other frame drum to play along with music on the Roots of Rhythm: Extensions Companion CD. Or, if you don't have these instruments, make your own substitutes (see activity below for making homemade pandeiro).

Listen to Tracks 8-14 of the Roots of Rhythm: Extensions Companion CD and play along with the rhythms. To begin, just try to have fun. Read the box notation in the Resources section that shows each of the various rhythms, and begin again with the count and drum sounds.

Making Your Own *Pandeiro*: To make your own homemade *pandeiro*, hammer some holes in the rim of a sturdy pie tin with a nail, open the holes a bit wider with a screw driver, then fasten some metal washers through the holes with brass paper fasteners. Be sure to hammer flat any rough edges left from making the nail holes.



***Pandeiro* and Performer:**

Chalo Eduardo



Pandeiro



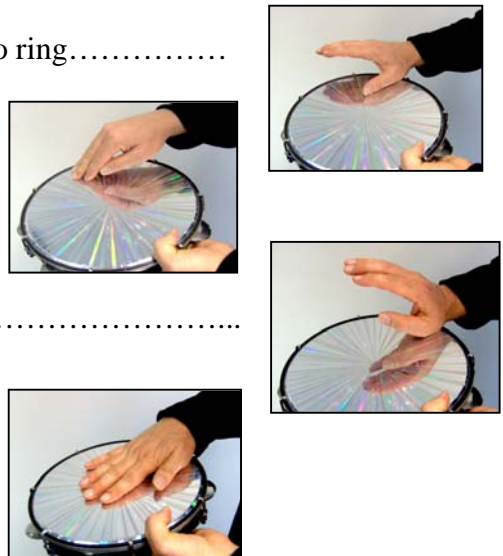
Photographs by Craig Woodson.

Resources: The *Pandeiro*, Playing Techniques, and Rhythms

The *Pandeiro* and Playing Techniques

The six beginning strokes used in playing the *pandeiro* (shown in photographs) are as follows:

1. **Thumb Stroke** – a hit with the thumb that bounces off the drumhead near the rim allowing the tone to ring.....
2. **Fingers stroke** – a hit with the finger tips that press into the drumhead briefly, stopping the tone.....
3. **Heel stroke** – a hit with the heel of the right hand near the rim of the drum.....
4. **Slap** – a hit near the center of the drumhead with fingers spread apart and left briefly on the drumhead.....



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5. **Drumhead finger damp** – press the middle finger of the hand holding the drum into the drumhead. L = dampen; _ = hold finger on drumhead; empty box = release finger from the drumhead (see photograph # 6)

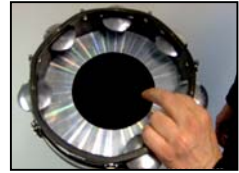


6. **Shake** – this shows the undamped finger for # 5 and the following:
 (a) twist the *pandeiro* with a motion like opening a door knob to get two or more "chick" sounds from the jingles with each twist.
 ◄► = a twisting shake.

(b) wave the *pandeiro* up and down vertically like fanning someone else; this gets a jingle or "chick" on each wave.

▲ = a vertical shake up

▼ = a vertical shake down.



After practicing these strokes try the following *pandeiro* rhythms with the Companion CD. They are written for a right-handed drummer; simply switch hands for left-handed playing.

Pandeiro Rhythms

Capoeira #1– Right hand only

Count	1	2	3	4	5	6	7	8
Say	Ca	po	ei	ra	Ca	po	ei	ra
Fingers			R					R
Thumb	R				R			

Capoeira #2 – With left hand shake

Count	1	2	3	4	5	6	7	8
Say	Ca	po	ei	ra	Ca	po	ei	ra
Fingers			R					R
Thumb	R				R			
Shake							◄►	

Samba #1– Right hand only

Count	1	2	3	4	5	6	7	8
Say	Ba	tu	ca	da	Ba	tu	ca	da
Fingers		R		R		R		R
Thumb	R				R			
Heel			R				R	

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Samba #2– With left hand damp

Count	1	2	3	4	5	6	7	8
Say	Ba - tu - ca - da		Ba - tu - ca - da					
Fingers		R		R		R		R
Thumb	R				R			
Heel			R				R	
Damp	L	-	-	-		L	-	-

Samba #3– Right hand slap

Count	1	2	3	4	5	6	7	8
Say	Ba - tu - ca - da		Ba - tu - ca - da					
Slap				R				
Fingers		R				R		R
Thumb	R				R			
Heel			R				R	
Damp	L	-	-	-		L	-	-

Samba #4– With left hand shake

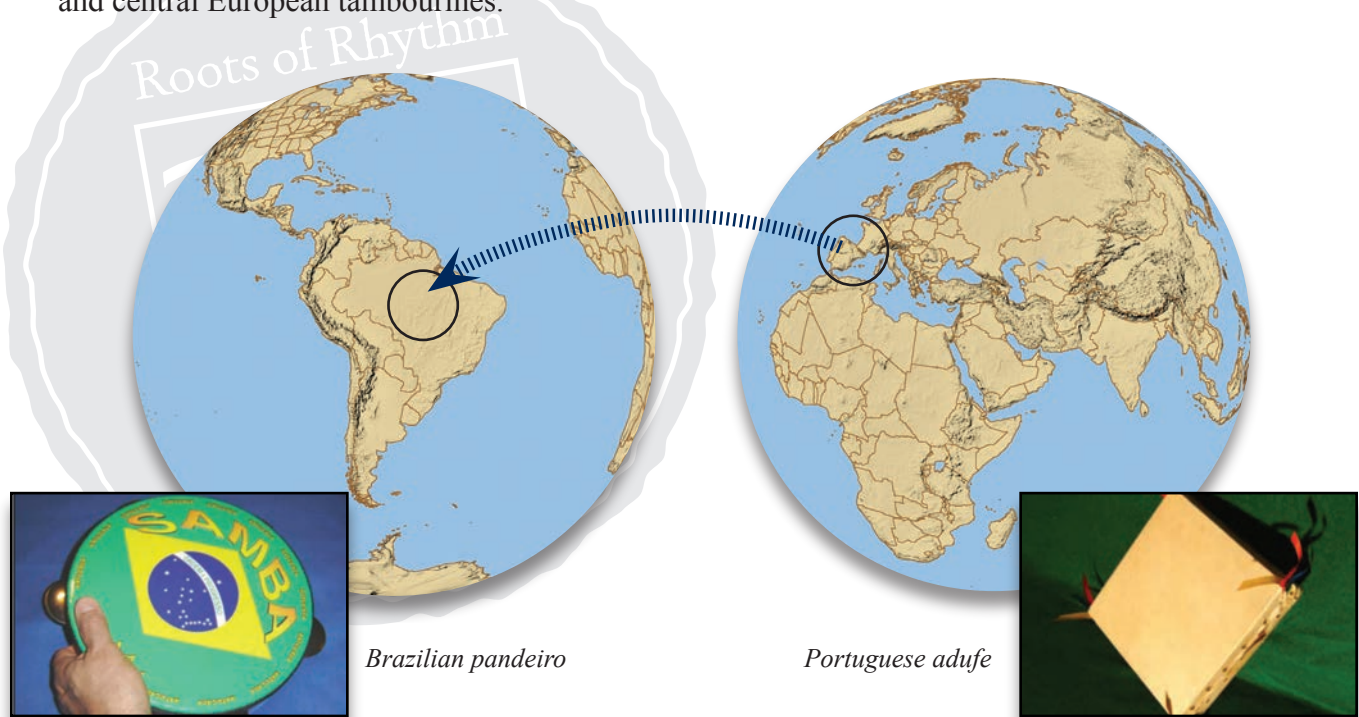
Count	1	2	3	4	5	6	7	8
Say	Ba - tu - ca - da		Ba - tu - ca - da					
Slap				R				
Fingers								R
Thumb	R				R			
Damp	L	-	-	-		L	-	-
Shake		▲	▼			▲	▼	

Six Beat Rudiment

Count	1	2	3	4	5	6
Say	Ba - tu - ca - da		da - ca - da			
Slap				R		
Fingers		R				R
Thumb	R				R	
Heel			R			
Damp		L	-	-	-	-

Extensions:

The *pandeiro* is but one of many extensions of perhaps the oldest and most common type of drum in the world: the frame drum. As such, it is not only a direct extension of the two-headed, rattle-filled Portuguese *adufe*, it also has indirect connections to a host of single-headed frame drums and tambourines (frame drums with jingles), including, for example, the North American Lakota Drum, North African *bendīr*, Middle Eastern *tar and riqq*, Indian *kanjira*, Irish *bodhran* and central European tambourines.



The Brazilian pandeiro is a direct relation of the Portuguese adufe as well as the many other frame drums and tambourines that are popular and common around the world.

While the history of the *pandeiro* is not entirely clear, it probably begins with the introduction of Portuguese frame drums into the area of Brazil possibly in the early 1500s. These drums were very portable and were probably brought on voyages to South America in many varieties from both Portugal and Spain, and even from Arabic countries. The drums might have included Spanish frame drums without jingles like the large round *pandero*, the square *pandero cuadrado* or Portuguese *adufe*, and the Basque frame drum (northern Spain), *panderoa* (pon-deh-roh-ah). There might also have been Spanish tambourines with jingles like the *pandereta*, and the Galician *pandeireta* and *pandeiro*, which shares its name with the Brazilian drum. The instruments might even have included the smaller Arabic *riqq*. Drummers may have used all types separately for some time but at some point, possibly in the late 1800s, one form and technique emerged as the *pandeiro* of today.

Records show that the *adufe* was recognized as a major influence in the beginning of samba around 1900. The development of the *pandeiro* may have been taking place long before that time and it simply became a better instrument for use in the music of parades as needed by percussionists. While there are many differences between the *adufe* and *pandeiro*, the similarities eventually dominated.

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To begin with, the *adufe* is constructed very differently than the *pandeiro*. For example, the *adufe* has two drumheads, is square or rectangular, has bead rattles on the inside of the drum, and the rattles hit the drumhead itself. On the other hand, the *pandeiro* has one drumhead, is round, has rattles in the form of jingles on the frame, the rattles are metal and they don't hit the drumhead but hit the frame instead.

The main connection between the two instruments seems to be that the *adufe* and the *pandeiro* are both instruments that can be played loudly and in large ensembles using a variety of hand and finger techniques. Other tambourines have a more subtle technique intended to be played smaller groups and are not particularly loud.

Another extension is that the *adufe* and *pandeiro* are both played in connection with religious and social events. These events are also commonly in motion rather than stationary, that is, with singing and dancing during a parade or procession.

Musical Influences		
	<i>Adufe/Portugal</i>	<i>Pandeiro/Brazil</i>
	Root	Influence
	→	→
Design	rattle	jingles
Rhythms	accented ostinato	
Construction	square wood frame	round wood or metal frame
Technique	shaken, fingers and hands	
Application	religious/social	
		popular

In addition to its direct influence by the Portuguese *adufe*, and the frame drums and tambourines that migrated to Brazil from other parts of the world, the design, playing techniques, quality of sound and musical application of the *pandeiro* also represent indirect extensions of several *Roots of Rhythm* instruments, including the Egyptian *sājāt*, finger cymbals, the Lakota single-headed frame drum from North America and the *djembé* from Guinea. These extensions show that the *pandeiro* is connected to other percussion instruments through its technology, rhythms/usage and history/culture.

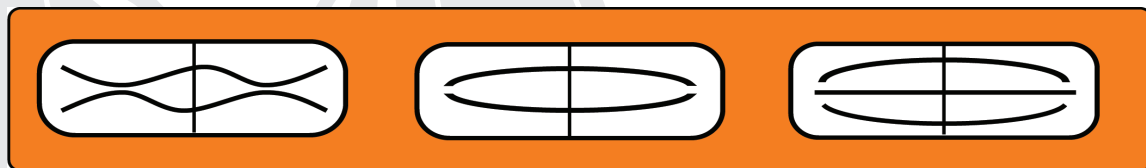
• Design/Construction Materials and Methods

The *pandeiro* borrows its jingles from Spanish, Portuguese and Arabic tambourines. The idea of adding jingles to a frame drum most likely began in ancient Egypt when *sājāt* or *zils* (small metal cymbals) were fixed in openings on the frame so that they would make a rattling sound when the drum was struck. These tambourine jingles are therefore considered an extension of the original Egyptian *sājāt*, small finger cymbals discussed in *Roots of Rhythm*. Originally from Egypt and Assyria, it is most likely that the *sājāt*-style jingles were made with thinner metal and then loosely attached to an opening on the frame. Some drums like the *bendīr* from North Africa already had a snare, or gut cord, that buzzed on the drumhead, so the addition of small cymbals that rattled was probably would not have been considered unusual.

There are, however, three important differences in the *pandeiro*'s jingles and the standard jingles on a tambourine. First, those on the *pandeiro* can be made of steel as well as brass. Secondly, on the *pandeiro* a flat disc is placed in between the two outer discs. This has the effect of shortening the jingle sound to a low "chuck" tone instead of a "ching", an important factor in the technique of fast shakes and strokes used on the instrument. And finally, while a standard jingle has several bends, the *pandeiro* has a dome shape for the exterior jingles and a flat shape for the interior one.

A side view of various jingles shows how the shape of the jingles changed over time first from the thick *sājāt* to thinner jingles and then from two curves (A) to one dome (B), and finally to a higher dome with a flat jingle in the middle as on the *pandeiro* (C).

Changes in the design of jingles effects their tone.



A. Spanish/Portuguese
high pitched, ringing jingles
shaped like *sājāt*, but thinner

B. Arabic
low-pitched, ringing jingles
various shapes

C. Brazilian
low pitched, muffled jingles
on the *pandeiro*

• **Playing Techniques**

To understand how the *pandeiro* is an extension of frame drums like the Lakota Drum and others it is necessary to understand how a drumhead vibrates. On most drums the drumhead vibrates the greatest amount in the middle and to a lesser amount around the edges. This results in the lowest tones being near the middle of the head and the highest tones towards the edge. An important technique in playing both the Lakota Drum and the *pandeiro* is that of applying pressure to the drumhead from the underside. This technique causes a change in the way the drumhead vibrates. As shown below, the lower tone occurs when the drum is struck and the head moves freely. When the finger touches, the vibration changes to a shorter length and thus a higher tone. The *pandeiro* player applies this technique to great effect, although it requires considerable pressure to achieve.

Pressure applied to the drumhead changes its pitch.



Free Drumhead
large vibration
low tone

Finger-Damped Drumhead
small vibration
high tone

Geographically and culturally, the *pandeiro* and the Lakota Drum developed thousands of miles apart, so it is unlikely that they influenced each other. However, the fact that they both use a similar technique shows that both drums share playing styles that are generic to this type of drum.

The sophisticated hand techniques used on the *pandeiro* include strokes/motions played on various parts of the drumhead with the fingers, heel, palm and wrist of one or both hands and are often performed while moving or dancing. Other hand drums from around the world share many of these techniques, for example, the *djembé*, *riqq*, conga drum, *kanjira*, bongos, *pakhawaj*, and *adufe*, although it is unclear how much the playing style of those instruments may have directly influenced the *pandeiro* and how much of the style was developed independently. In any event, the speed and dexterity displayed by *pandeiro* players— and their ability to perform fast, repetitive patterns (called *ostinato*) with just one hand— in *samba* and other musical styles is both challenging and impressive.

• Quality or Type of Sound

As previously mentioned, incorporating jingles into the general design and construction of the *pandeiro* allows it to share the basic sound quality of most tambourines. It is therefore an extension of these and other types of drums that use sound modifiers, including the *adufe*, the snare drum and even the Turntable. Another such instrument is the *djembé* from Guinea which has a sound modifier system that adds a buzz to the sound of the drum. The *djembé* rattles, called *sèssè*, are metal rings loosely fixed to metal sheets that are attached to the drum, but removable. The *pandeiro* is related to this rattling idea but its jingles are permanently attached to the body of the instrument. Because of this, the *pandeiro*'s jingles are always an integral part of the sound of the drum, whereas the *djembé* can be played with or without the *sèssè*.

Of course, one of the basic differences between the *pandeiro* and other tambourines is the specific type of sound its jingles produce due to their unique shape and material.

Modifiers change the sound of a drum.



Sèssè on a djembé



Snares on a snare drum



Jingles on a pandeiro

• Musical Style or Application

The *pandeiro*'s use in a variety of popular, dance, religious and social situations connects it with many of the world's percussion instruments, including the Turkish *naqqāra*, Trinidadian steel drums, the Guinean *djembé* and Japanese *kakko*. In fact, in much the same way that the *pandeiro* is closely related to the many types of frames drums that exist and continue to be developed, it also provides us with an excellent example of how all drums are at least distant relations of each other on one or more levels.