

LESSON 12

Untuned-Percussion Instruments (Indefinite Pitch)

Membranophones

Tom Tom



The toms that we see on modern drum kits are descended from a form of Chinese drum called Pieng Ku, which were brought the USA by Chinese immigrants and quickly adopted by American drummers who mounted them on their bass drums. These traditional Chinese drums eventually evolved into the types of modern tom-toms that we are familiar with today. Whilst the exact size and number toms used might vary depending on the tastes of the drummer or the style of music being played, the smallest toms are mounted on the bass drums and are collectively referred to as rack or hanging toms. The larger toms normally come with built in legs and stand on the floor hence they are called floor-toms. Tom-toms are normally arranged in ascending order of size - and therefore descending order of pitch – and the kit pictured shows a typical set-up.

Floor Tom



A floor tom is a double-headed tom-tom drum which usually stands on the floor on three legs. However, they can also be attached to a cymbal stand with a drum clamp, or supported by a rim mount. The floor toms are the lowest tuned drums played with sticks in the regular 5-piece drum set. Common sizes are 16 x 16, that is, 16 inches (41 cm) in both depth and diameter. This was the original size and is still most common. 14 inches (36 cm) x 14 for jazz and fusion kits. 18 x 16; that is, 18 inches (46 cm) in diameter and 16 in depth, for a second floor tom. 16 x 18, a rarer size sometimes used for a second floor tom.

Bongo



Bongos are an Afro-Cuban percussion instrument. The drums are of different size: the larger drum is called in Spanish the hembra (female) and the smaller the macho (male). They are membranophones, or instruments that create sound by a vibration of a stretched membrane.

Congas



The conga, or tumbadora, is a tall, narrow, single-headed Cuban drum. Although ultimately derived from African drums made from hollowed logs, the Cuban conga is staved, like a barrel.

These drums were probably made from salvaged barrels originally. They are used both in Afro-Caribbean religious music and as the principal instrument in rumba. Congas are now very common in Latin music, including salsa music, merengue music and reggae, as well as many other forms of popular music.

There are five basic strokes:

1. Open tone is played with the four fingers near the rim of the head, producing a clear resonant tone with a distinct pitch.
2. Muffled or mute tone (tono ahogado): like the open tone, is made by striking the drum with the four fingers, but holding the fingers against the head to muffle the tone.

3. Bass tone (tono bajo): played with the full palm on the head. It produces a low muted sound.
4. Slap tone (tono seco): the most difficult technique producing a loud clear "popping" sound (when played at fast and short intervals is called floreo, played to instill emotion in the dancer).
5. Touch tone (toque de punta): as implied by the name, this tone is produced by just touching the fingers or heel of the palm to the drum head. It is possible to alternate a touch of the palm with a touch of the fingers in a maneuver called heel-toe (manoteo), which can be used to produce the conga equivalent of drumrolls.

Bass Drum



The composer Mozart added the deep, booming, un-tuned sound of the bass drum to the orchestra in 1782. Constructed like a snare drum, but without snares, the bass drum is much larger and is played on its side, so that either head may be struck. The beater or mallet for a bass drum is large with a soft material such as sheep's wool covering the end.

Snare Drum



The snare drum joined the orchestra nearly 200 years ago. It has two calfskin or plastic drumheads stretched tightly over a hollow metal frame. The top head is struck with wooden drumsticks, and is called the batter-head. The bottom head, or snare-head has catgut or metal wires called snares stretched tightly across it. When this un-tuned drum is struck on the top head, the snares produce a characteristic sharp rattling sound as they vibrate against the bottom head.

Idiophones

An idiophone is any musical instrument which creates sound primarily by way of the instrument's vibrating, without the use of strings or membranes. Most percussion instruments which are not drums are idiophones.

Castanets



Castanets consist of two pieces of hard wood in the shape of a shell that are hinged together. When the wood pieces strike each other, they create an un-tuned sound that is often associated with Spanish dances.

Claves



Claves are a percussion instrument (idiophone), consisting of a pair of short (about 20–30 cm) thick dowels. Traditionally they were made of wood, typically rosewood, ebony or granadilla. Nowadays they are also made of fiberglass or plastics due to the greater durability of these materials. When struck they produce a bright clicking noise. Claves are sometimes hollow and carved in the middle to amplify the sound.

Claves are very important in Cuban music, such as the son and guaguancó. They are often used to play a repeating rhythmic figure throughout a piece, known as clave, a key pattern (or guide-pattern, timeline patter, phrasing referent, bell pattern) that is also found in African music and Brazilian music.

Shaker



The word shaker describes a large number of percussive musical instruments used for creating rhythm in music. They are so called because the method of creating sound involves shaking them—moving them back and forth rather than striking them. Most may also be struck for a greater accent on certain beats. Shakers are often used in rock and popular styles to jive the ride pattern along with or substituting for the ride cymbal.

Tambourine



The tambourine is a shallow, handheld drum made of a circular wooden frame with a calfskin or plastic drumhead stretched across the top. The tambourine has small discs called jingles set into its circular frame which produce sound when the tambourine is shaken, rubbed, or struck on the drum head with the knuckles. Early tambourines were played by Turkish army musicians known as "Janissaries." Mozart first used the tambourine in his music in 1782.

Triangle



The triangle is made from a small round steel tube, and is played by striking it with a steel beater. Its bright shimmering sound is un-tuned and resembles that of a bell. The triangle first joined the orchestra in the late 1700s.

Guiro



The guiro is another un-tuned instrument from South and Central America that is made from a gourd that has been carved or notched to create a ridged surface. The guiro is played by scraping the surface with a stick. Modern guiros are made of materials such as plastic, metal and wood.

Woodblock



A woodblock is essentially a small piece of slit drum made from a single piece of wood and used as a percussion instrument. It is struck with a stick, making a characteristically percussive sound. East Asian music uses a variety of wood blocks ranging from small hand-held instruments to enormous (often immovable) temple blocks which may be sounded by swinging a large log against them. Log drums made from hollowed logs, and slit drums made from bamboo, are used in Africa and the Pacific Islands.

Maracas



Maracas sometimes called rumba shakers and various other names, are percussion musical instruments rattles—that originated in Latin America. Players hold them by their handles, usually in pairs, and shake them. Traditional maracas consist of hollow balls made from dried gourd shell or coconut shell filled with seeds or dried beans and mounted on a wooden handle. Modern maraca balls are also made of leather, wood, or plastic. Often, one ball is pitched high and the other low. They are known in Trinidad, Dominica and the French Antilles as shac-shacs. The leather maracas were introduced in 1955 by a Venezuelan percussionist. Maracas are a simple instrument, but require modest skill to play in time to music. When the player changes the direction of motion to produce the sound, the seeds or dried beans must travel some distance before they hit the hard outer surface. This creates a slight delay that requires that the player anticipate the rhythm. Players also strike maracas against their hand or leg to get a different sound.

Gongs



Gongs are large disc-shaped pieces of brass that are hit with a large soft mallet. In China, gongs were used to make announcements and send signals. In the orchestra, the gong's untuned sound can be a loud crash or a low rumble. Gongs are made mainly from bronze or brass but there are many other alloys in use. Gongs produce two distinct types of sound.

A gong with a substantially flat surface vibrates in multiple modes, giving a **"crash"** rather than a tuned note. This category of gong is sometimes called a tam-tam to distinguish it from the bossed gongs that give a tuned note.

In Indonesian gamelan ensembles, some bossed gongs are deliberately made to generate in addition **a beat note in the range from about 1 to 5 Hz**. The use of the term "gong" for both these types of instrument is common.

Their size can range from just a few inches to huge ones that are larger than a person. Gongs are broadly of three types.

Suspended gongs are more or less flat, circular discs of metal suspended vertically by means of a cord passed through holes near to the top rim.

Bossed or nipple gongs have a raised center boss and are often suspended and played horizontally.

Bowl gongs are bowl-shaped, and rest on cushions and belong more to bells than gongs.

Cymbals



The origins of the modern cymbal can be traced back over 3,000 years to China and other parts of Asia. Sometime after the 13th century, through trade links established by the Ottoman empire, the cymbal found its way to Turkey where it would eventually evolve from the Chinese form, with its square bell and flanged edge, to the Turkish form that is most prevalent today.

Bells

Chimes (Tubular Bells)



Chimes are a tuned instrument consisting of a set of 12 to 18 metal tubes hung from a metal frame. The metal tubes range from 1 to 2 ½ inches in diameter and from 4 to 6 feet in length. The chimes, or tubular bells, are struck with a mallet and sound like church bells when played. The longer the length of tube that is struck, the lower the pitch that is created.

Cowbell (cencerro)



The cowbell is an idiophone hand percussion instrument used in various styles of music including salsa and infrequently in popular music. It is named after the similar bell historically used by herdsmen to keep track of the whereabouts of cows.

Agogô (from Brazil)



An agogô is a single or multiple bell now used throughout the world but with origins in traditional Yoruba music and also in the samba baterias. The agogô may be the oldest samba instrument and was based on West African Yoruba single or double bells. The agogô has the highest pitch of any of the bateria instruments.