

Making Inventory of Craftsmanship and Performing Arts of Bamar Traditional Musical Instruments

No	-	Mya/ 1(M)
Instrument	-	Myanamr harp (<i>Saun:</i>)
Material	-	String Instrument. The part where the neck joins the sound box is shaped like a leaf of the saga: (champac) while the stern is shaped like bowl. The tip of the nek is shaped like the leaf of the banyan tree. The neck is made of sha: (acaciacatechu) wood. The sound box is covered with a membrane of deer skin. Holes are perforated along the ridge to hold the ends of the strings. The intervals between theholes need to be of correct proportion, otherwise, theharp tends to be out of tune and also lacks proper form. Hence, the ridge is a critical component of the harp.
Background History	-	The harp is one of the earliest musical instruments of the world. World musicologists believe that the Harp was a musical instrument used by ancient man who hunted with bows and arrows. Harps now being used by people of the contemporary world fall into two types the bow shaped type and the trangle shape type. Of the two the bow shaped harps are said to be the earlier type. In Myanmar, ancient chronicles say that harps were being played as early as in the Pyu Period. In February of 802 A.D. Sri Khettra despatched a Pyu music and dance ensemble to Chan-ann the city of the Tang Dynasity of China. Tang Dynasty chronicles say that the Pyu musicians had with them two harps with pheasant's head shapes, two harps with corcodile's head shapes, one flat harp in the shape of a dragon's head, one flat harp in the shape of rain clouds, two flat harps of big gourds, one flat gourd-harp with a single string and one small flat gourd-harp. Among rock relief sculptures found on the walls of the Ananda pagoda built by king Kyansittha in A.D 1084- 1113 is a harp which indicates that the harp was in general use in those days. Some historical researchers say that Myanmar harp began with 7 strings and is used 13 strings until the

down of Konbaung period. And then the harpist U Nyein added one more string in the late of Konbaung period and the harpist

U Ba Than added two more strings in the year of 1960s. So Myanmar harp has played with 16 strings from that time to now.

Myanmar harp strings are strung and fastened to the arm of the harp by means of fastening cords or by means of pegs pushed through the arm it is called Let yone. In the old days, fastening cords were tied to the arm in a special kind of knot to prevent the cords slowly slipping down. The present way of making such a knot is of a reef-knot method.

The strings of the harp are raw silk twisted to different thicknesses. They are tuned not with pegs but by adjusting the tautness of the strings through loosening or tightening the tassels round the neck.

The part where the neck joins the sound box is shaped like a leaf of the saga: (champac) while the stern is shaped like bowl. The tip of the neck is shaped like the leaf of the banyan tree. The neck is made of sha: (acaciacatechu) wood. The sound box is covered with a membrane of deer skin.

Holes are perforated along the ridge to hold the ends of the strings. The intervals between the holes need to be of correct proportion, otherwise, the harp tends to be out of tune and also lacks proper form. Hence, the ridge is a critical component of the harp. Today Myanmar harp is being used not merely as musical instruments they are also being used as artifacts to decorate the top room of dwellings. This is being done by way of honouring a musical instrument that has played an important role in development of Myanmar Culture. More sophisticated musical gaegets may emerge time passes, but the harp will ever remain as a heritage of Myanmar musical traditions.

Making Process

- **Making of the Myanmar Harp**

The body of Myanmar harp resembles the shape of a boat and its arm or curvature is similar to a bow. Myanmar harp, unlike those from other foreign lands is a stringed musical instrument significant in the Myanmar way. The structure of Myanmar harp conveys two portions, the arm portion and the body section.

A harp may have various forms of arm, essential to the instrument. The arm may take the shape or curvature of Thazin flower (Bulbophyllum auriculum), or of sitting posture of a monkey or oval shape mirror or that of scepter or may have similarity to the form of a fish hook.

- Thazin (Bulbophyllum auriculum) flower arm means the structure of the arm is constructed somewhat as the curvature of bending at its tip.
- Monkey sitting arm means to say the bending posture of a monkey sitting when one sees from the side.
- Round mirror arm refers to the bending shape seen in the middle portion of such a mirror.

Out of these three Kinds of arm, monkey sitting posture arm was widely used in the past. This was because that in using such type of harp it is learnt that the development of tightening and loosening of strings is less due to the loop of string tethered to the neck of harp or to the arm is fast and tight. Nowadays, as tabs are fitted for tuning the instrument, beautiful Thazin curve arms are found to be using popularly.

The arm of harp has to be made with Shar-wood this mean is catechu wood. Catechu is hard and fast type of wood. As it cannot be carved into bends or curves, one has to look for a half trunk, half root cutch tree for making a Myanmar harp. The root is meant to use in internal section of the body and the truck is made into an arm with its end carved out the shape of banyan leaf called(Nyaung Ywet) circumference of the arm measures 1.25 inches while it usually must have 39-inches in length when the body of harp holds the length of 28 inches.

Nyaung Ywet is carving made at the end of the arm in the shape at a banyan leaf.

Construction of the Body of Harp

The body of harp resembles the shape of a boat. According to old saying, the badauk wood collected from gumkino tree (pterocarpus macrocarpus) grown an highland is more preferable in making Harp. On preparing for construction, a piece of

gum-kino wood having 6.5 inches circumference, 30 inches length has to be taken out and after marking it with lead pencil the shape of a harp, it has to mould out by using knives, saws and gouges at various sizes. In shaping the upper part of the body, carving is done by the use of small size and larger size of gouge, leaving space for the rims of instrument.

In carving the body, the bow or front portion takes the shape of leaf while the stern or tail portion has to carve as the bottom circular shape of a bowl. Afterwards, the rims of instrument are smooth out while the body of harp is kept thick at 3-places and at other 3-places it is much thinner. This notable factor was prescribed to follow in making a harp so as to enjoy good tuning in playing the instrument. And besides this makes the body of harp lies still and steady when it rests on the laps, keeping in front of the breast of player.

3-thick places (or sections) means to refer to the front portion (or bow section), back portion (or stern section) and the bottom part where thickness instrument must have approximately (0.25 inch).

3 thin places or sections mean to refer to the left-hand side, right hand side and side walls of the body of harp and shall have thickness of about (0.18 inch). The leather, covering the body must also be thin suitably. And besides, string bar must also be thin. In followance to the finishing touch made in construction of a harp, flat surface of front portion or its bow measures 6.25 inches while the flat surface of the tail portion (on its stern) must have a width of approximately 5.25 inches.

Sting Bar (Khin tan or Mhin yoe)

String bar is made of gum-kino wood. String bar a flat piece of the mentioned wood containing holes to fasten strings of harp. The length of this bar has 28 inches commonly used harp. Its height must be 0.75 inch. The string bar must be placed in the body of harp before it is covered with the leather. The extreme (end) of this bar lying at the stern of harp must bore a hole and also the stern of harp must be bored to tie up the string bar with a screw. Sometime it may be tied up with strings. Thickness of string bar must be approximate (or 0.31 in). The

middle portion of string bar having a length 14.5 inches lies above the leather coverage, the stern portion 4.5 inches , and the bow portion 9 in must be under the leather coverage of the harp. The middle portion of the bar (lying over the leather coverage) must bore 16 holes to fix strings through them.

Skin (Thayae)

In ancient period, deer skin was used for covering the body of harp. The old saying remarks that the skin from the belly of a doe which already gave birth to a mirideer is the best for the use. But the deerskin being getting scarce as time passes, goat skin replaces the former.

Decorate Loop (Babyin:)

Decorate Loop is made either of gum-kino wood or at teak. In tuning the harp, the tuner places it in between his calf and lap when bending his knee while he is sitting cross-legged. The tuner uses the loop in such a way when he ties to tune up the strings forcibly.

Lacquer (Thayoe)

For decoration of harp two Kinds of lacquer and used. Lacquer is produced from lacquer tree one lacquer is brown while the other is black. When producing lacquer the required amount of black juice is heated over the intense fire till it becomes thick and starchy. The thick lacquer must be mixed with charcoal till it becomes neither soft nor stiff. Then it must be placed on an even surface and a wooden roller has to be rolled upon it till it becomes a starchy stage. It reaches to glass mosaic stage and it has to be placed on flooring with ash to get good and hardened. The required glass mosaic (lacquer) must be prepared all at once, at the same time.

Assembling

When all materials and parts are ready in assembling a harp, the arm has to fit at the top of the body, for combination of accessories, the bow (front portion) the end of arm and decoration loop, two holes must be bored to tie up with screws. When covering the body with leather fixed with string bar, the leather, cover should have an extra length of 2-inches. Rivets (0.5 in: size) must be

pressed in two rows at the lower place standing one inch from the rim of the body. It must be dried under the sun, letting it to receive moderate heat. When it is dried rivers controlling for the timbering must be taken out and extra leather coverage must be cut out. Then mixture of brown lacquer and burnt paddy husk must be applied to the whole body of harp (except surface of leather). Then it must be kept dry. After that a brown lacquer must be applied about one inch wide over the rim of harp. In this way glass mosaic fancy flowers are laid out. Then it is kept for about two nights in a den about 4 feet deep and 6 feet wide for drying it up. When glass mosaic gets dry brown lacquer has to be applied twice and the black has to apply one coat. Let it dry and it gets the desired result, it shall be decorated with gold leaves. Under this stage it shall be kept one night and the next step shall be application of red mercuric sulphide over the leather.

After all these have been done, finishing up glass mosaic embedded gilding, on the right side of the stern, at the middle portion, between front section of the arm and string bar (left and right) four holes have to be made for releasing music through them, size of holed shall be narrow at stern and those at the middle and front portion (bow) shall be wider. These holes bear various names. The two holes at the front portion are called “ Angel Holes ” while the middle one is named as the “King Hole” and the one at stern is known as “ Nostril”.

After all these preparations the prescribed number of silk (or) nylon strings from the 1st to the 16th string, are tied to the arm tightened by the loop at string called “ Bwekyo” and the strings are fitted to the holes in String bar. Thus all Strings are well fitted at the arm, placing them in respective holes in string bar. Then, after tuning the strings till the player gets the desired perfect tune he or she now possess a glass mosaic building harp ready to play.

Playing Method -

The playing techniques of Myanmar Harp

When playing, the harp player sits cross-legged on the floor and rests the front of the body of the harp in his or her lap, with the arch on the harp player’s left and the rear of the harp’s body angled slightly

upwards so that the strings are almost horizontal. The fingers of the left hand are braced against the outside of the arch and moved agilely up and down. A stopped tone is produced when the left thumb nail is pressed against the string from the inside to increase its tension and thus raise its pitch. The thumb and forefinger of the right hand, either separately or together, pluck the strings at their center while the right elbow rests on the top of the rear of the harp body outside of the strings. The left thumb may be used to pluck the bass of the harp figuration while the right thumb and forefinger pluck the melodic pattern. A skilled harpist promote clarity by jumping the string just sounded while sounding the next string. This jumping may be done with the middle finger, the palm of the hand, or the forefinger just after the activation when a staccato note is desired.



Saun:
Harp

- No Instrument Material
- Mya/ 2(M)
 - Myanmar Xylophone (*Pa'tala:*)
 - Clapper Instrument. Earlier, softwood was used for the mallets. Now they are made of teak, padauk, cutch, yindai or pyinkado. The mallets are eight inches long with a soft knob of cotton, felt or velvet at the tip.
The resonance box is usually made of teak and decorated with pieces of glass of various colours and gilt. Earlier the box constituted one body. Now it is made collapsible for easier transportation. Thought the slats are generally bamboo, there can also be brass or iron.
- Background History
- The earliest mention of the pattala (*pa'tala:*) is in the Bago Kalyani Sima lithic inscription of A.D. 1479 enumerating the presents exchanged with the king of present day Sri Lanka. It was mentioned by Court official Twinthin Mingyi in 1798 as one of the six instruments of the anyein (non- dramatic dance and comedy) ensemble.
F.A Neilly, author of a book on Thailand, wrote "The Thai xylophone is derived from the Myanmar xylophone which the Myanmar play exceedingly well".
Thai Research Society Vol 69 Part 1-2 of January-July 1951 carried long article by USA Kent University School of Music Terry E Miller and Music Department of Shrinaken University researcher Jaran Chaichonperut. War between the two countries made cultural exchange of musical instruments. There is evidence to show that the xylophone was extant earlier in Myanmar than in Thailand.
- Making Process
- The bamboo is cut in November – December to reduce the possibility of infection by pests. A bamboo plant with a broken tip is discarded. A knife is not used to cut the slats but a saw with sharp teeth is used instead. The knife produces uneven cuts and loose chips.
The slats are then boiled together with sour leaves, covered with mud for several months, soaked in water, dried and placed on a rack above the fireplace to catch the smoke till the slats are void of moisture, oil and bitter elements. The longer they are kept the more seasoned they become.

Earlier, softwood was used for the mallets. Now they are made of teak, padauk, catch, yindai or pyinkado. The mallets are eight inches long with a soft knob of cotton, felt or velvet at the tip.

The resonance box is usually made of teak and decorated with pieces of glass of various colours and gilt. Earlier the box constituted one body. Now it is made collapsible for easier transportation.

Though the slats are generally bamboo, there can also be brass or iron.

A person intending to become a player of the drum circle first has to learn to play the pattala before he enters the circle of drum. The pattala is the accompanying instrument in presenting the anyeint, in the classical music ensemble and sitting – singer troupe. The pattala is widely employed in Myanmar music.

The parts of the xylophone are the pedestal, the front board, the back board, the side boards (mjim: mou), the turned posts, the "duck wings" at the upper ends of the boards, and the slats. The mallets' top is called "the head" and the stick, the stalk.

Playing method

-

The Myanmar pattala is tuned to the diatonic scale. However, Myanmar chau' pau' and hni pau' instead of being equivalent to international E and B notes are a semitone each lower. The Myanmar pattala covers one octave below middle C and two octaves above thereby encompassing altogether three octaves.

The Myanmar pattala is composed of the slats, the resonance box and the mallets. The beginner is trained to first play left and right strikers alternately in the "maun nin:" method of play. Then the student is trained to strike the mallets simultaneously using the "zoun" method. Traditionally, the player learns to keep to the timing beats by playing the short music piece beginning "htan taya tei: shin" . Then the player is taught the combined "htan", the combined "dun", the combined "djan" and the detached "djan".



Pa' ta la;

Myanmar Xylophone (Bamboo)



Pa' ta la;

Myanmar Xylophone (Metal)

- No
Instrument
Material
- Mya/ 3(M)
 - Drum Circle (*Hsine: Wain:*)
 - Leather Instrument. The slats are made of Yamane (*Gemelina arborea*) which is smooth-grained, tough, not easily chipped, which propensity not to warp and easy to transport.
- Background History
- The drum circle is classed as "royal" for performance in the palace or "common" for the citizens. All the royal drum ensembles are embellished with glass mosaic and gilded. The ensemble with white glass mosaic is termed the "royal diamond ensemble". The one with red glass is the "royal ruby ensemble". The one with multi-coloured glass is called "royal nine-gems ensemble". The gild ensemble is the "golden ensemble", The silver-coloured ensemble is the "silver ensemble".
The drum circle was already established A.D 1544 according to a mention in the Glass Palace Chronicle. In the Inwa period (1364- 1555), The drum circle was already established as part of the ceremonial entrance and exit of the kings of that time.
When the Konbaung Period ended with the annexation by the british in 1886, theatrical troupes decorated the drum circle with glass mosaic, and gilded even the two-headed horizontal drum on a stand part of the embellished ensemble. The circle of drum was made easier to transport by collapsing the slats which formed the circle.
The slats are made of Yamane (*Gemelina arborea*) which is smooth-grained, tough, not easily chipped, which propensity not to warp and easy to transport.
- Making Process
- The drum ensemble (*sain: wain:*) is composed of the drums formed into a circle, gongs similarly hung, gongs within a frame work, shawm (*hne:*), big drum, horizontal drum (*sakhun.*), six small upright drums, short drum, cymbals and clappers.
The drum circle (*sain: wain:*) is constituted of graduated drums slung from slats which form a circle. There are 18 to 24 drums so hung and given names from left to right.
The drum are tuned by sticking various amounts of a lump of dough to the membrane. The dough is a kneaded mixture of violed rice and wood ash.

The circumference of the circle is 15' 10½". The total height is 3' 8". The part between the ground and the slats is the pedestal. The length of canes strap which keeps the slats and hung drums upright is the "pillow". The circle of cane which wraps around the upper part of the slats is the "arm", while that which coils around the feet is the "hood". The three- inch peg above the arm on which the drums are hung is the "upright ears".

The stand on which the two- headed big drum is hung on the left side of the drum circle is the "big" drum bearer. The posts near the drum circle which supports the big drum bearer is the "witness stand". The big- drum bearer is in the figure of a serpent and the post which support the near end of that figure are the "pig bipod".

The low stool on which the shawm musical sits is the "monkey stool".

Playing method

- Drum players for the monarch are expected to be quick at withdrawing their hand after striking a drum or else the hand could be caught in the strings of hide which hold the drums hung from the tips of the slats.
It is essential for the sound of the drum to be firm, distinct, loud sounding as desired, accurate and resonant.



Hsain: wain:
Drum Circle

No	-	Mya/ 4(M)
Instrument	-	Brass Gong Circle (<i>Kjei: Wain:</i>)
Material	-	Brass Instrument.
Background History	-	The brass gone was called the " <i>naji: zaja dhe</i> " in Bagan days. It is learned from Queen Saw's lithic inscription in North Guni pagoda that wealthy persons used to dedicate musical instruments to the pagoda. The brass gong was one of the ten instruments of the Bagan period. It has a special melody to itself, <i>kyei: thaw:</i> .
Making Pocesr	-	The brass gong circle (<i>kjei: wain:</i>) has 18 or 19 brass gongs in a circle similar to the drum circle
Playing method	-	It accompanies the drum circle and the hne. Its sound is more melodious than the sound of the framed gongs (<i>maun: zain:</i>). The player strikes the boss on the gong with a mallet. Two mallets are used for the two hands, and when required, the sound is dampened by the free fingers. The gong is tuned by adjusting the amount of beeswax attached inside the boss. The brass gong player is generally the number two man in the ensemble.



Kjei: wain:
Brass Gongs Circle

No	-	Mya/ 5(M)
Instrument	-	Framed Gones (<i>Maun: Zain:</i>)
Material	-	Brass Instrument
Background History	-	The framed gongs became a member of the drum circle family in about 1904. The gong was earlier called naun- nin:. Zeyathein lithic inscription and Myauk Guni Pagoda inscription of 1197 and 1241 support this. The gong by itself was used in war or to assemble people. Now the gongs are hung in a frame- work.
Making Pocesr	-	The brass Framed Gones (maun: zain:) has 8 or 10 brass gongs in a framed.
Playing Method	-	At the start, seven gongs were framed. The gongs of the upper frame were tuned to the fifth, first and seventh degrees whiles the lower four were tuned to the second, first, seventh and second degrees. Later, nine gongs were framed and tuned to the second, first, seventh and sixth degrees in the upper frame and to the fifth, fourth, third, second and first degrees in the lower frame. Now, seventeen gongs are framed to the lowest fifth degree and the highest third degree.



Maun: zain:
Framed Gongs

No Instrument Material	<ul style="list-style-type: none"> - Mya/ 6(M) - Oboe (<i>Hne:</i>) - Win Instrument. There are two kinds of hne, the big and the small. The hne consists of five parts: <ol style="list-style-type: none"> 1. Reed which is made of the leaf from the toddy palm; 2. Mouth piece made of gold, silver, brass, bronze or steel 3. Tube or body of wood from padauk, yindaik, pyinkado, teak 4. Horn 5. "dano" or "cheek- guard" made of metal which encircles the upper moulding of the body; it guards the cheek which swells when blowing.
Background History	<ul style="list-style-type: none"> - The hne or oboe- like wind instrument occupies a critical position in the Myanmar music troupe. It belongs to the group of wind instruments and can cover the chromatic scale. It is found portrayed on the wooden door of the northern building on the platform of Bagan's Shwezigon Zedi.
Making Process	<ul style="list-style-type: none"> - Various kinds of hne in the different historical periods. <ol style="list-style-type: none"> 1. the big hne 2. the medium hne (three holes closed for the fundamental) 3. the small hne (four holes closed for the fundamental) 4. the wunthanu nationalistic hne (four holes closed for the fundamental) 5. the tube which produces choky sound (five holes closed for the fundamental) 6. the tube which produces sticky sound (six holes closed for the fundamental) the tube which produces C sharp note.
Playing Method	<ul style="list-style-type: none"> - The big hne is an essential instrument which is played pleasantly occasions such as the ploughing ceremony or royal regatta when it accompanies the big drum, the bjo, <i>sidaw</i>, boating song, <i>yeginthan</i> theme. The big hne plays mournfully on inauspicious occasions when lamentation is called for. It accompanies the <i>braintaung</i> (egret wing) theme. In earlier days the big hne was accompanied by two short drums and one vertical drum when

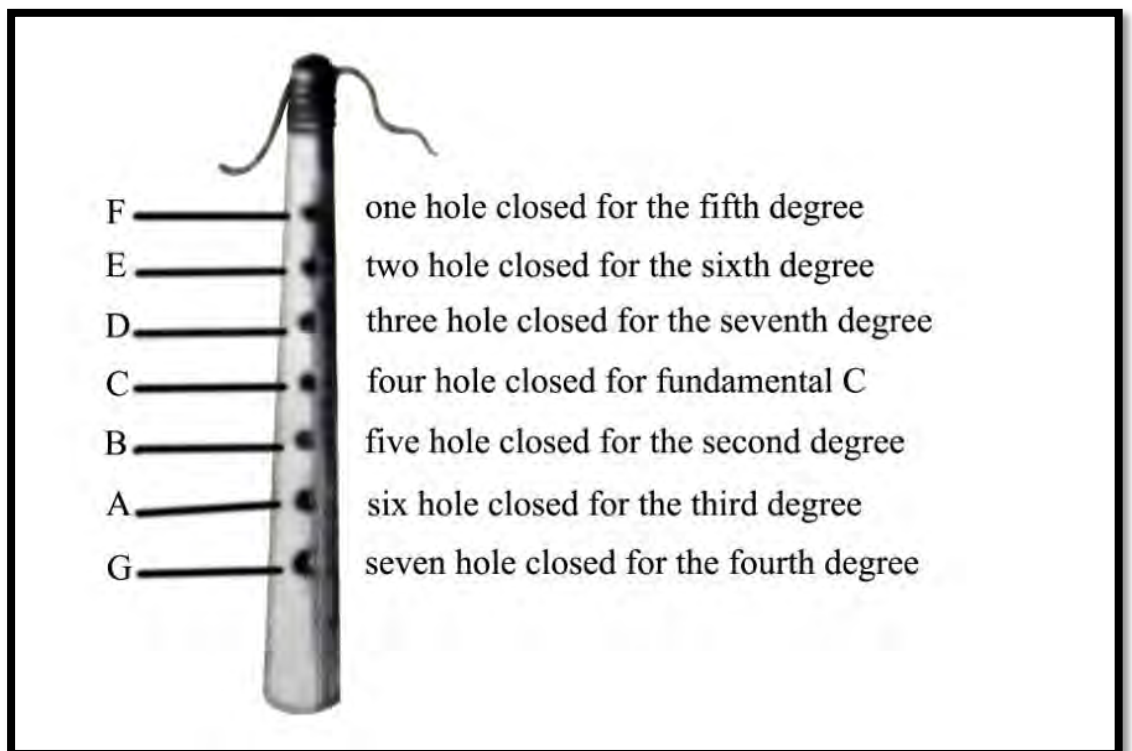
propitiating the *nats* (spirits) with *bpunza* (drum food).

The small hne is played briskly to accompany the pot- drum and dobat.

Currently used is the hne which produces C sharp note when four holes are closed. The tones produced by the hne are;

1. one hole closed for the fifth degree
2. two hole closed for the sixth degree
3. three hole closed for the seventh degree
4. four hole closed for fundamental C
5. five hole closed for the second degree
6. six hole closed for the third degree
7. seven hole closed for the fourth degree

When all holes are open the tone produced is of the fourth degree.





Hne: gyi:

Big Oboe



Hne: ga lei:
Small Oboe

No	-	Mya/ 7(M)
Instrument	-	<i>Principal drum (Pa'ma)</i>
Material	-	Leather Instrument.
Background History	-	<i>Pa'ma</i> is also known as <i>Pa'ma - Gyi</i> . It is the biggest double-headed drum in ensemble which is hung on a horizontal beam on tripods to play it. But, today, the <i>Pa'ma</i> drum is not placed on tripods, but placed on the forks.
Making Process	-	<p>Kokko wood is used to make <i>Pa'ma</i>. Though the Padauk wood is more suitable for making it, it is hard to find the flawless and big Padauk wood because the size of the <i>Pa'ma</i> drum is bigger than other drums.</p> <p>The thickness of ox skin is important in making its drum head. The leather stretched of the female side (wider drumhead) must be thinner, whereas the leather of the male side (narrower drumhead) be thicker. The size of taught cord used to tighten the leather is about one inch.</p> <p>The <i>Pa'ma</i> is a double-headed drum with two drumheads called female and male drumheads. The circumference of female drumhead is wider than male drumhead's. And there is a dome shape on the surfaces of both sides. The four-third of female drumhead is dome shape, making the biggest dome shape among leather-covered drums. The <i>Pa'ma</i> has a strap which can be used to hang or to carry it.</p>
Playing method	-	<i>Pamatee</i> or members of drums ensemble playing big drums and bass drums plays a leading role in musical troupe.



Pa' ma
Principal Drum

No	-	Mya/ 8(M)
Instrument	-	Rhythmic drum (<i>Sakhun</i>)
Material	-	Leather Instrument.
Background History	-	<p><i>Sakhun</i> is a doubled-headed drum on a stand which appeared together with Pa' Ma, the big drum of the Myanmar orchestra. It contains six drums set. In Myanmar drum circle, it seems to start using when the rhythmic percussion drums of Myanmar orchestra appeared.</p> <p>In Myanmar era 1265, the player of drum circle played not only six drums set and Si To but also Sa Khun'. The sound of <i>Sakhun</i> is loud and it is associated with six drums set so that cymbals is added playing with it. In the player of six drums set, <i>Sakhun</i> is played in a manner of the Pa'Ma with stopper music or breaking music. <i>Sakhun</i> is made of Padauk wood or the rain tree (Kokka). The Padauk wood has to be made a hollow that covered with tough ox hide.</p>
Making Process	-	<p><i>Sakhun'</i> is a doubled – headed drum that laid horizontally on the stand. It has the feminine side (left) and male side(right). Both two sides stick with <i>Pa' Sa</i> (paste of rice kneaded wood-ash used for tuning drums). The wide feminine head of <i>Sakhun</i> has a diameter of 11 inches and the narrow male head of <i>Sakhun'</i> <i>Sakhun</i> has a diameter of 8 inches and the horizontal is 18.5 inches.</p>
Playing method	-	<p>The feminine side has “basic note”, the male side has “fourth note”(G note of western music). Sometimes no tuning dough is added the male side but tuning dough is added when the male side of ox hide is hard.</p>



Sa khun

Rhythmic drum

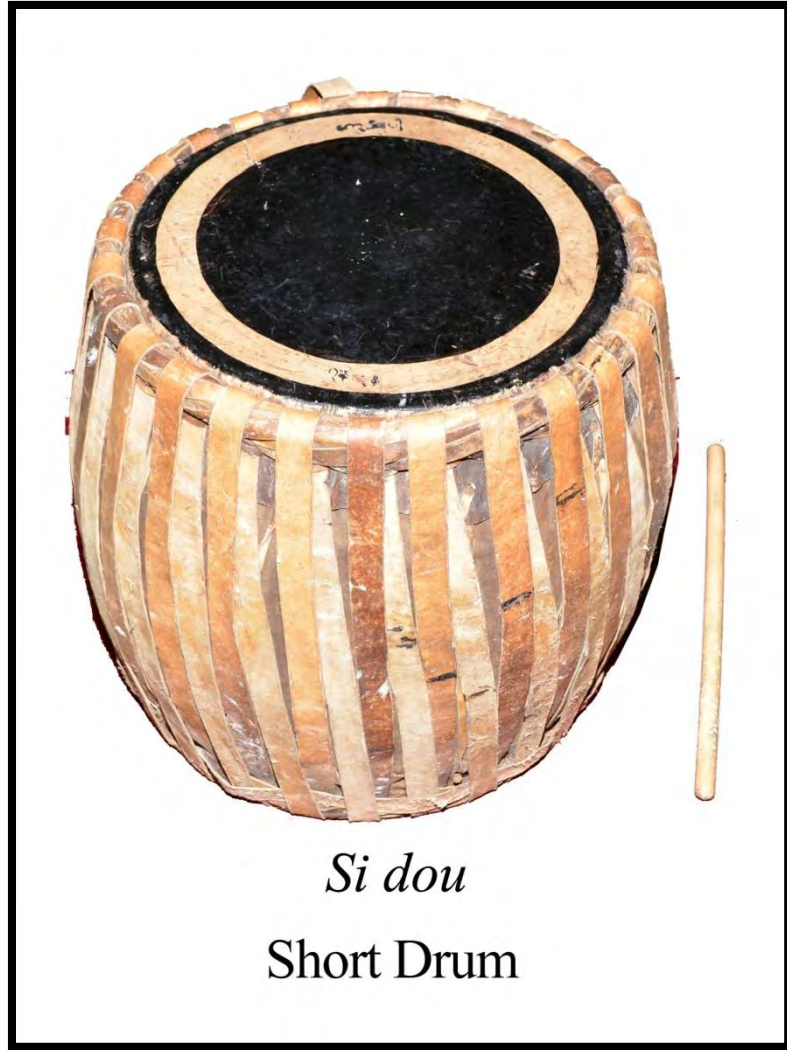
No	-	Mya/ 9(M)
Instrument	-	<i>Six Drums (Chau'loun: Pa')</i>
Material	-	Leather Instrument
Background History	-	-
Making Process	-	<p><i>Chau'loun: Pa'</i> includes a <i>Sakhun'</i> or horizontal drum and other small drums from drum circle. The small drums from the drum circle are (1) <i>Laypauk Don</i> or lower Fourth Note of Supported drum (2) <i>Than-mhan</i> or <i>Tapauk</i> or First Note (3) <i>Chaukpaug</i> or Sixth Note (4) <i>Laypauk Du:-lone</i> or Fourth Note (5) <i>Than-hman</i> and (6) <i>Laypauk</i> or Fourth Note.</p> <p>They are also known as(1) <i>Don-Kae</i> (2) <i>Ta-Sik</i> (3) <i>Du:-Lone</i> (4) <i>Tayar-Latt</i> (5) <i>Chauk-Pauk</i> and (6) <i>Lay-Pauk</i>. As these drums have to be played together with <i>Sakhun'</i> and <i>Pa'ma</i> drums, there are eight drums in this ensemble.</p>
Playing method	-	<p>The fourth note must be tuned to the female drum-head of <i>Sakhun'</i> or horizontal drum, and first note to male drum-head.</p> <p>The small drums must be tuned as follow:</p> <ol style="list-style-type: none"> (1) Fourth note to Don-Kae (2) Basic note to Ta-Sik-Lone (3) Fourth note to Du:-Lone (4) First note to Tayar-Latt-Lone (5) Sixth note to Chauk-Pauk-Lone and (6) Fourth note to Lay-Pauk-Lone <p>If the <i>Pa'ma</i> is included in the ensemble, the fourth note must be tuned to it female drum-head and basic note to male drum-head.</p>



Chau' loun: pa'

Six Drums

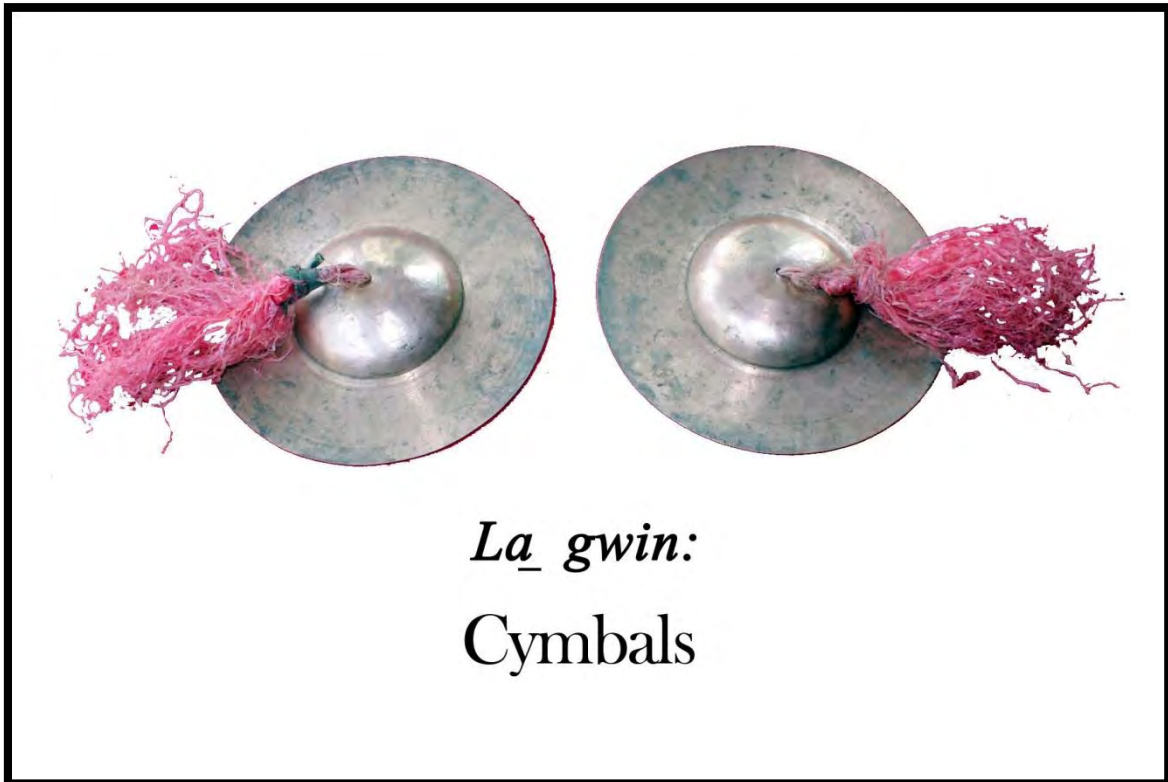
No	-	Mya/ 10(M)
Instrument	-	<i>Short Drums (Si Dou)</i>
Material	-	Leather Instrument.
Background History	-	-
Making	-	<p>“<i>Si Dou</i>” is mostly made of the wood of Padauk. The wood of Padauk is compact . Sito which is made of Padauk is melodious and joyful and it comes to the force during truth-revealing scenes. It can also be made by the rain-tree but it is not as good as Padauk.</p> <p>It is made of tough -cow hide. The drum head is made of thick tough- cow hide so that it can be resistance when the strike with beaters. Near the drum head of Si To, there is the loop of leather which is like as a garland.It can be placed at an angle on the stand obliquely towards the Si To player.It is the leather instrument and the two heads of Sito are same and both of them can be struck with beaters. The middle portion is expanse and dome.</p>



Si dou

Short Drum

No	-	Mya/ 11(M)
Instrument	-	cymbal (<i>la gwin:</i>)
Material	-	Bress Instrument.
Background History	-	During the Bagan period, the cymbal was called khwe' khwin: according to various lithic inscriptions.
Making	-	The cymbal (<i>la gwin:</i>) is a circular, slightly concave bress instrument usually used in pairs which are struck together to produce a crashing, ringing sound. The larger cymbals accompany the big drum (<i>pa' ma</i>), the middling size is played with the horizontal drum (<i>sa khun</i>) and the smaller size in pot- drum or dobat troupes. The cymbals are played in grand drum ensembles, anyein ensembles, instrumental ensembles and to provide music for nat festivals.
Playing method	-	The two cymbals are clashed against each other to produce the full sound, or its edges are hit against each other to produce a soft sound. When the sound of clashing cymbals are not interfered with the sound produced is called open. When the sound is dampened, it is "closed". The muffling is done by putting the cymbals to the chest and thereby killing the sound.



<p>No Instrument Type Background History Making Process</p>	<ul style="list-style-type: none"> - Mya/ 12(M) - Timing Bells And Bamboo Block (<i>SI: -WA:</i>) - Bress and Clapping Instrument. - Non - The small timing bells (<i>si:</i>) and block (<i>toun:</i>) determine the speed, rate of movement or tempo of the music. There are two kinds of timing bells: those held in the hand and struck to each other, and the mellifluous bells. There are three kinds of timing blocks (<i>wa:</i>). The "<i>bjau</i>", the wooden block (<i>toun:</i>) and the bamboo clapper. The time keeper in the classical song ensemble holds the two timing bells in the right hand and strikes the timing block with the left. Sometimes one bell is placed on the coin of cord and is struck with a wooden stick. The mellifluous bells and timing block are seen in the <i>sain:</i> ensemble. The hollow timing block is about 8 inches in length and is struck with a smooth wooden striker. The bamboo clapper is of slit bamboo with three nodes. The length of bamboo from the node to the first node has some of the material removed for the hands to hold the clapper. The length of bamboo from the second node to the third is left as it is. The clapper has a node at the top so that it will not break easily when struck. The bamboo clapper is seen in the <i>sain:</i> assembly, and in pot- drum and doubat troupes.
<p>Playing method</p>	<ul style="list-style-type: none"> - The manes of timing species are <i>toun:</i>, <i>na_uji</i>, <i>wa_u la'</i> and <i>soun</i>. Three beats of the timing bells and one beat of the clapper produce four beats repeated produce eight beats or two common bars of notes. These two bars constitute one <i>toun:</i>. Three beats of the bells and one strike of the block (bamboo) constitute a bar of <i>na_uji</i> timing. There are two <i>na_uji</i> bars in a <i>toun</i>. One beat of the bells and one beat of the block constitute a bar of <i>wa_u la'</i> timing. There are four <i>wa_u la'</i> bars in a <i>toun</i>. The bells and block played together produces a bar of <i>soun- si:</i>. There are 8 <i>soun- si:</i> bars in a <i>toun</i>. Each beat of the bell in a <i>na_u- yi</i> bar has a name.

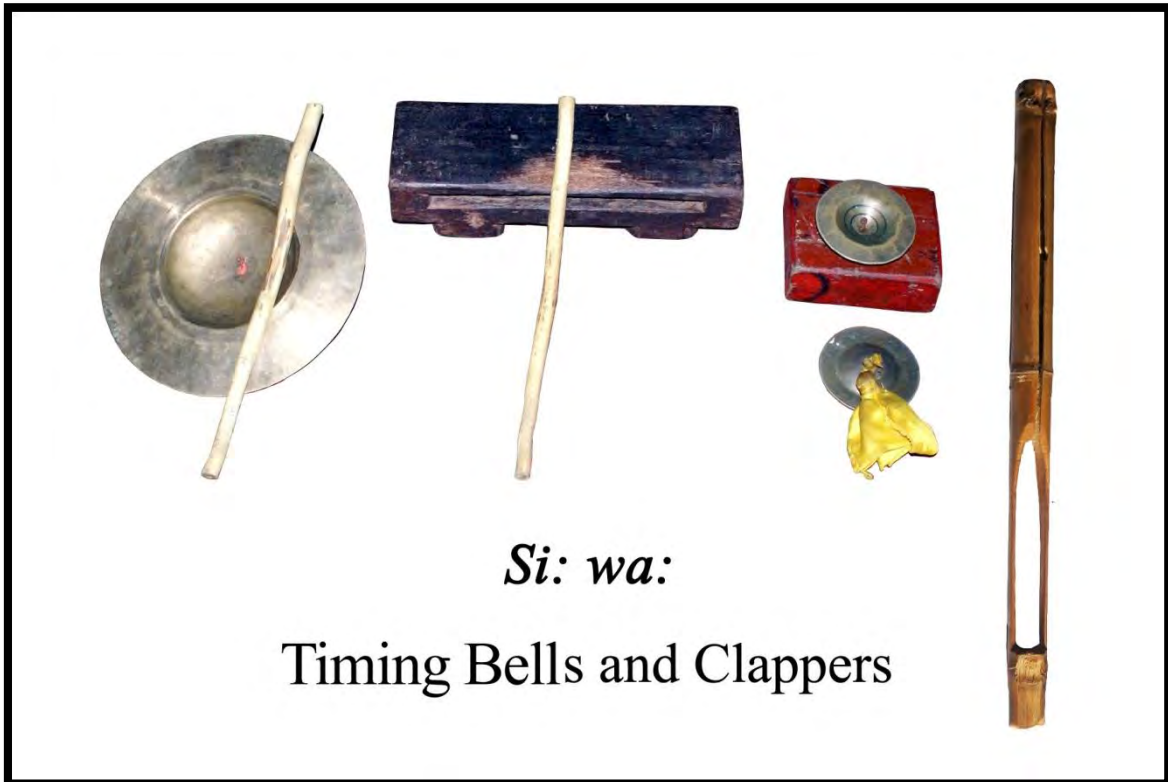
The first beat is the *pannet- si:* because it provides the foundation. The second beat is the *san- si:* because it creates divisions of equal value in each bar.

The third beat is the *lai- si:* because it follows the earlier beats.

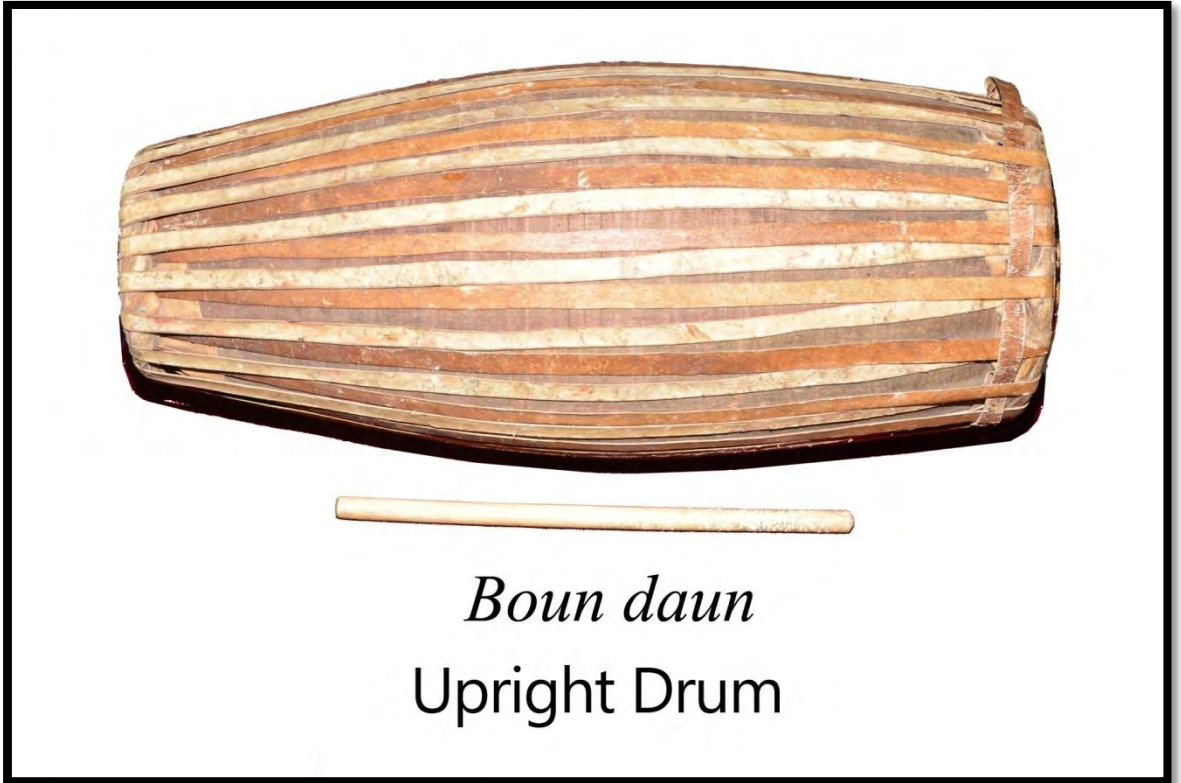
If the timing bell is not played at the first beat, the practice is called "letting go". This is usual in accompanying classical songs.

If the timing bell is not played at the third beat it is called "*hteik- si:*".

The time value of the bar may be lengthened or reduced, especially in the playing of classical music, and invariably when the song is about to end.



No	-	Mya/ 12(M)
Instrument	-	Upright drum (Boun daun)
Material	-	Leather Instrument.
Background History	-	-
Making Process	-	<p>The diameters of the face is 7 inches , the diameters of bottom face is 4.5 inches and height is 32 inches . About 9 inches from the oneside of the face which is struck is smooth but the body is a dome shape and it is smoothly line to the bottom. In some regions, Boun daun are the straight part from top to bottom and there is no dome shape. Boun daun is strange shape among the other leather instruments. The head of Boun daun is small but the length is long .It can be struck one side of the face. It must hang and stand not only at the mast but also at the rope string to be played.</p>
Playing method	-	<p>The Boun daung is played together with big gong, brass gong(Keyi Waing), big oboe(Hne), small oboe , small cymbals (Lingwin) and long drum(Byaw). Today , the band of Boun daun is also called band of Naji: in the region of central Myanmar.</p> <p>It can be struck with two sticks. Normally, it is struck to produce the sound of palou' tou' tou'. It can be played continuously to be melodious and joyful.</p> <p>It is a kind of drum which can stand and there is no tuning dough on the drum-headed that must be beaten with the two sticks.</p>



Boun daun
Upright Drum

- | | | |
|--------------------|---|--|
| No | - | Mya/ 13(M) |
| Instrument | - | Short Drum (<i>Bjo:</i>) |
| Material | - | Leather Instrument. |
| Background History | - | - |
| Making Process | - | The smaller <i>Bjo:</i> or <i>lwal- byaw</i> is a double-headed drum and both of double-headed are beaten with a stick in a sling. It can be beaten with a stick. The <i>Bjo:</i> troupes are differently named after their distinct regions.
(1) <i>Moe-Zar-Bjo:</i> (2) <i>Ma-Khauk- Bjo:</i> (3) <i>Mhon-YwaeKyaе-Mhon- Bjo:</i> (4) <i>Khin-Mon- Bjo:</i> (5) <i>Sin-Tat- Bjo:</i> (6) <i>Chindwin- Bjo:</i> (7) <i>Mandalay's Bjo:</i> troupes, etc. |
| Playing method | - | <i>Bjo:</i> a double-headed drum and it is also a kind of percussion musical instrument. It has to be played together with a small drum called " <i>Pa-loat</i> ". When these two drums are played together, it makes the sound of drumming or the sound like " <i>Pa-lote-tote-tote-Byone</i> ".
<i>Bjo:</i> are not required to stick tuning dough, but has to be played with two sticks. |



Bjo:
Short Drum

No	-	Mya/ 14(M)
Instrument	-	Flute (<i>P_a lwei</i>)
Type	-	Win Instrument.
Background History	-	The flute (<i>p_a lwei</i>) is a wind instrument which consists of a hollow tubed played by blowing through a hole at one end. There are two kinds of Myanmar flutes: The " <i>khin ba_lwei</i> " and the " <i>kjo pa_lwei</i> ". The <i>khin ba_lwei</i> is commonly played. It has a ventage and a reed at the blowing end. The <i>kjo ba_lwei</i> has no reed. Blowing the <i>kjo ba_lwei</i> may be seen in the murals at Ananda and Mingalar Zedi in Bagan. Earlier flutes are wood or plastic. The ventage holes are made according to the diameter of the bamboo. Altogether 10 holes are perforated: seven finger holes, thumb- hole, the membrane hole and the " <i>pin_lku</i> " hole. The membrane hole is now not made because it tends to produce a shrill sound.
Making Process	-	In preparing the tube, the lowest hole is perforated at two- thirds of the way up the flute. Then the six holes are perforated at distances according to the diameter of the bamboo. The thumb- hole is perforated on the lower side of the flute at the point half- way between the upper sixth and seventh hole. The " <i>pin_lku</i> : vent hole is perforated between the topmost finger hole and the tubeend. The membrane hole lies between the vent hole and the seventh hole.
Playing method	-	The flute can be seen playing together with the shawm in pot- drum troupe, dobat troupe, classical music troupe, modern music troupe. The flute comes in two sizes: the big and small. The flute can cover the chromatic scale.



Pa_lwei_gji:

Big Flute



Pa_lwei_ga_lei:

Small Flute

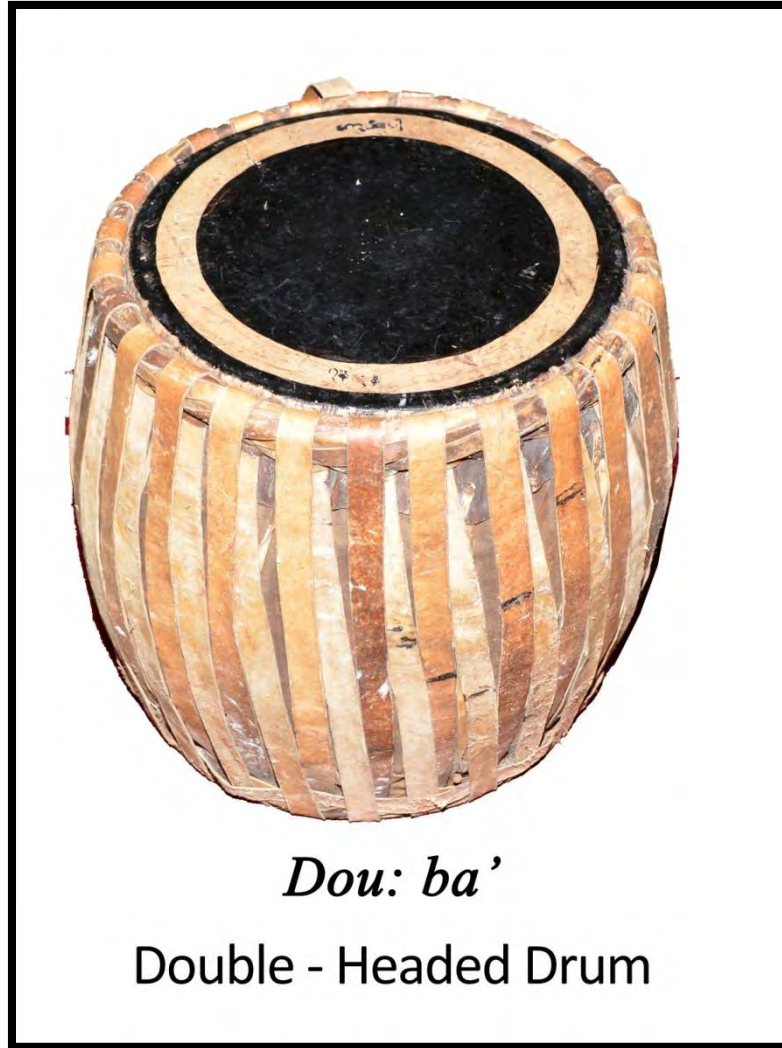
No	-	Mya/ 15(M)
Instrument	-	Pot Drum (<i>Ou:zi</i>)
Material	-	Leather Instrument.
Background History	-	-
Making Process	-	Padauk wood is mostly used to make <i>Ou:zi</i> or pot-drum. But, the most proper wood for making <i>Ou:zi</i> is Pon-yi-taung-sawood that is the big tree. The leather of <i>Ou:zi</i> is mainly made of tough cow-hide. The <i>Ou:zi</i> drum-headed of Myanmar ethnic groups are made of youngox-hide and buffalo skin which is tightly stretched over the round frame of <i>Ou:zi</i> . <i>Ou:zi</i> looks like a clay toy of pitcher or a small pot (round pot that was a toy for children), the middle portion is (waisted) shaped to fit round the waist, (with the neck in the middle) and the other side is the folding lip on the head. The wood have to be made a hollow like the following picture, and the leather is stretched on the head. It has to be played by sticking the tuning dough (Pat-sa) to its drum-head. The upper part of <i>Ou:zi</i> is called " <i>Ohn</i> " or " <i>Ou:-lone</i> " in Myanmar. It is tightly stretched with the leather by tightening with cord.



Ou: zi

Pot Drum

No	-	Mya/ 16(M)
Instrument	-	Double-Headed Drum (<i>Dou:ba'</i>)
Material	-	Leather Instrument.
Background History	-	-
Making	-	<p><i>Dou:ba'</i> or double-headed drum in a sling is a kind of leather-covered drums. It has two drumheads, called male and female drumheads. The length is taller than other drums. The length of <i>Dou:ba'</i> is different from each other according to the different regions.</p> <p>In central Myanmar, the length of <i>Dou:ba'</i> is taller and only a single <i>Dou:ba'</i> is played in the troupe, whereas the <i>Do pat</i> troupes in lower Myanmar (downriver region) include two <i>Dou:ba's</i>, "Male and female <i>Dou:ba's</i>" or "leading drum" and "second drum". The length is shorter. As these two <i>Dou:ba's</i> are about the same size, they are called "Do-Nyi-Naung" or "Twinbrothers of <i>Dou:ba's</i>". The method of sticking tuning dough are same, but the playing methods are different.</p>
Types of <i>Dou:ba'</i>	-	<p>(1) <i>A-Nyar Dou:ba'</i> (a) <i>Mandalay Doe</i> (a) <i>Pin-lal Doe</i></p> <p>(2) Lower Myanmar (downriver region) <i>Dou:ba'</i> (a) <i>Yangon Doe</i></p> <p>(3) <i>Gandamar Doe</i> (or) <i>Leading Doe</i> of <i>Si-Daw-Gyi</i></p> <p>Padauk wood is mostly used to make <i>Dou:ba'</i> because it is hard and there fore it can produce the pleasant sound. The leather of the male side is thicker than the female side's.</p>



Dou: ba'

Double - Headed Drum