

Myanmar Lacquer Techniques

Introduction

The making of lacquerware is one of the traditional arts, which can look back onto a long cultural heritage in Myanmar. For centuries, Myanmar lacquer techniques have been passed from one generation of Myanmar craftsmen to the next. Lacquer art is renowned in Myanmar as 'Pan-yun'. The art or craft, which creates aesthetic beauty, is prefixed with the word 'Pan', which literally means 'flower'. The ten traditional arts in Myanmar are: 'Pan-chi' (painting), 'Pan-pu' (wood, ivory carving), 'Pan-tain' (gold- and silversmith work), 'Pan-tei' (bronze and copper casting), 'Pan-pei' (blacksmith work), 'Pan-taw' (stucco), 'Pan-tamaw' (stone sculpture), 'Pan-put' (lathe turning), 'Pan-yan' (masonry), 'Pan-yun' (lacquerware).

Archaeological findings have proven, that the art of lacquering had its origins in Myanmar in the 12th century. The lacquerware production in Myanmar is still run on cottage scale, and the techniques differ slightly depending upon location. The lacquerware production centers in Myanmar are: Bagan and Nyaung U in Nyaung U township, Myingaba in Nyaung U township, Kyauk Ka in Monywa township, Maung Daung in Budalin township, Inwa in Tada U township, Lei Cha in Kyaing Ton township, Eastern Shan State (fig. 1).

Myanmar Lacquerware

In Myanmar, the 'Thit-si pin' or lacquer tree (*Melanorrhoea usitata*, genus *Anacardiaceae*) grows in native form in areas up to 3000 ft. above sea level such as Shan, Chin, and Kachin States. The 'Thit-si' or lacquer sap is tapped from the V-shaped incision in the trunk of the lacquer tree. The sap is strained to remove the dirt and solid impurities, resulting in the liquid 'Thit-si', which is stored in tin or usually in wooden containers. The unique colour of Myanmar 'Thit-si' in its original forms is red, brown or black. The best quality grade is termed in Myanmar as 'black variety', and comes from the Moe Nae area in the Shan States.

Because of its excellent spreadability in painting, 'Thit-si' serves as a natural form of lacquer. The 'Thit-si' film, when coated on an article, has elegant charm and indoor weatherability. One of the salient features of 'Thit-si' is, that it attains maximum hardness when dried in a moist surrounding. The dried film of 'Thit-si', despite the well-knit and highly cross-linked structure, is both, flexible and rigid, having high frictional resistance. And, it is on these unique features of 'Thit-si', that the art of lacquerware has developed.

Production of Myanmar Lacquerware

The materials needed and the process and techniques involved in the production of Myanmar lacquerware will be discussed in the following paragraphs, as well as some of the unique features of this traditional Myanmar art (Myanmar 'Pan-yun').

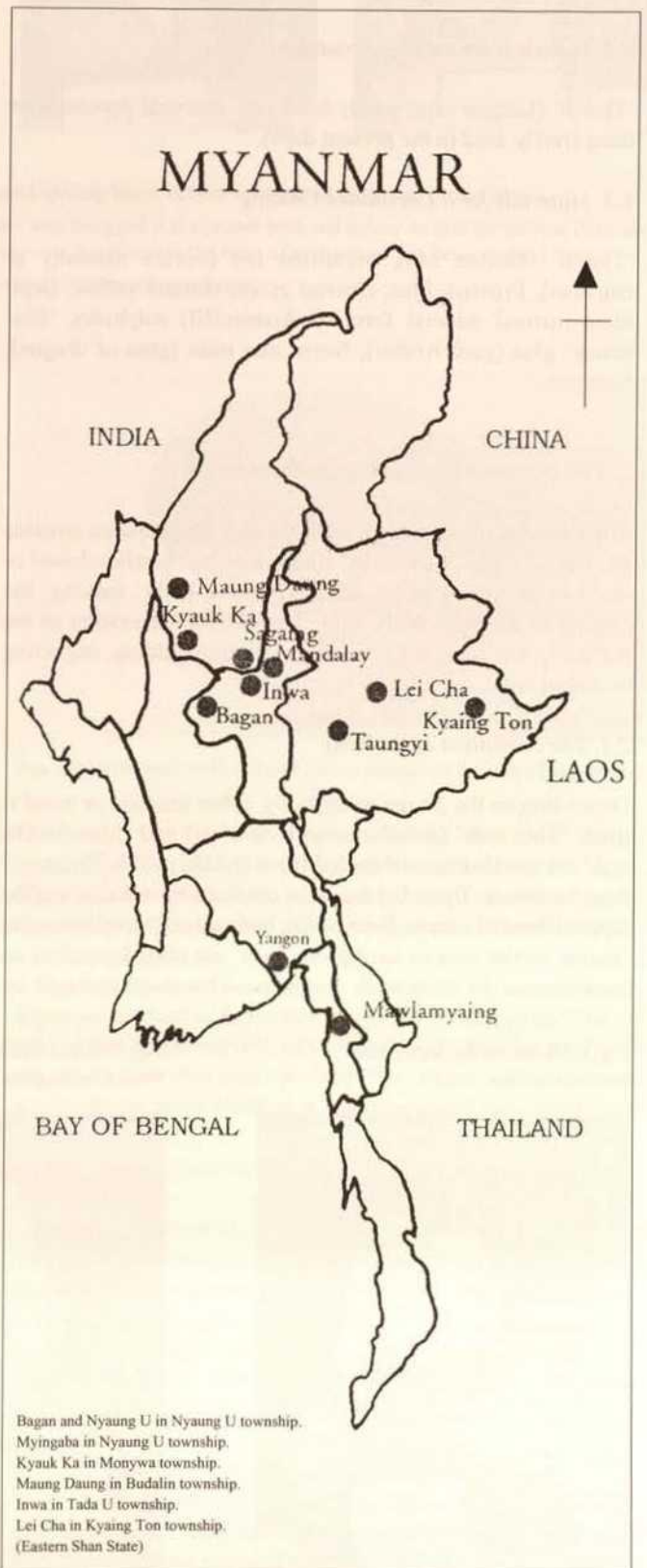


Fig. 1. Map of the Union of Myanmar, showing the lacquer production centers

1. Materials

The materials used for the manufacturing of lacquerware are:

1.1. Materials for the Body

Bamboo, wood, straw, horse-hair, cloth, 'Maing Kaing' paper (hand made bamboo paper from the Shan States).

1.2. Materials for an Undercoating

'Thit-si' (lacquer sap), paddy-husk ash, charcoal powder, cow dung (rarely used in the present days).

1.3. Materials for a Decorative Coating

'Thit-si' (lacquer sap), vermilion red (occurs naturally as cinnabar), Prussian blue, chrome green, chrome yellow, Orpiment (natural mineral form of Arsenic(III) sulphide), 'Hta-naung' glue (gum Arabic), Neem tree resin (gum of dragon), bone ash.

2. The Process of Lacquerware Production

The manufacturing process of Myanmar lacquerware consists of: The forming of the body, which is either bamboo-based or wood-based 'plain body' making; 'black body' making, the coating of the plain body with 'Thit-si'; the decoration of the surface of the black body by either painting, gilding, engraving or embossing.

2.1. The Formation of the Body

Depending on the design of the body, either bamboo or wood is used. 'Thin wah' (*ephalostachyun bamboo*) and 'Mae-tin-kha wah' are used because of the lightness and the pliable features of these bamboos. These bamboos are obtained from Katha and the Upper Chindwin areas. For wooden bodies a softwood known as 'Baing' or the famous hardwood 'Teak' are used depending on the design of the framework. Bamboo is first sliced and split in-



Fig. 2. Bamboo is sliced into narrow pieces and cleaned thoroughly before a body can be formed



Fig. 3. Sliced bamboo stripes are manually wound to form a round body as shown in the foreground



Fig. 4. Completed bodies of bamboo ready for lacquering

Fig. 5. Lacquered boxes made out of bamboo stripes

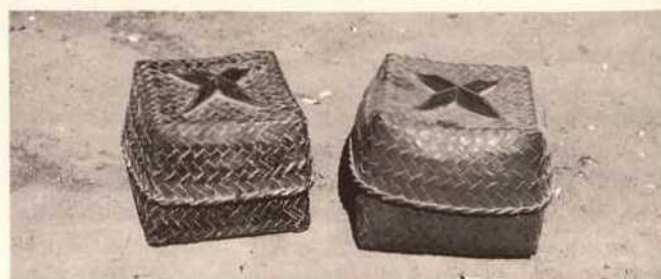


Fig. 6. Finishing the surface of bamboo bodies



Fig. 7. Sliced bamboo stripes are woven to form a rectangular body



Fig. 8. Sliced bamboo stripes are wound to form a body with the support of a wooden mold





Fig. 9. First stage of lacquer coating



Fig. 10. Last stage of lacquer coating. The lacquer coating is finished when a shining black surface is obtained as shown to the right

Fig. 11. After the body was covered with Neem tree resin and the ornament was designed it is covered with red colour so that the incised lines are filled with red pigment. The red motif appears on the black lacquered surface on the object to the right after the resin has been washed away

Fig. 12. After the red ornament has been finished the same procedure is repeated with yellow pigment

to narrow pieces (fig. 2), which are then thoroughly cleaned. They are next wound or woven into the desired shape, which may be done with or without any support on a wooden mold (figs. 3–8). The wooden body is formed from the dried and seasoned wood pieces.

2.1.1. The Technique of 'Mann' Image Forming

A technique known as 'Mann' image forming or wickerwork frame making needs to be mentioned here. This technique is also known as 'dry lacquer' technique. Well-kneaded clay is shaped into a rough form, usually the image of Buddha. A plaster of straw, ash and water is smeared over the clay image. Pieces of cloth and 'Maing Kaing' paper are soaked in lacquer sap and applied over the lacquer smeared image. For extra flexibility of the wickerwork frame, horse-hair can be fabricated in this process. The paste known as 'Tha-yo' may have a thickness up to half an inch in places wherever it is necessary. Details of the image are executed with an iron implement called 'Than-let'. When the image has dried and hardened, the clay is removed by washing and cutting, and the openings are sealed.

2.2. Black Body Making

This process comprises the coating of the plain body. The whole surface of the body is coated with a thin and even coating of 'Thit-si' and then dried in a cellar. The cellar may be either one above ground, called 'Yay-taik', or a basement cellar, called 'Myay-taik'. To attain maximum hardness of the 'Thit-si' coating, the cellars are kept at the relative humidity of 80–85 %. In about four days the 'Thit-si' coating becomes dry. The coating process is repeated until a good quality is obtained (figs. 9, 10).

2.3. Decorating the Black Body Surface

Various methods are known for decorative coatings on the surface of the black body. Depending upon the method, the following types of lacquerware can be distinguished: Plain lacquerware ('Kyauk-ka' ware; fig. 10), incised lacquerware ('Yun'



Fig. 13. 'Yun' ware with red and yellow design on the black background

ware; figs. 13, 23), gilded lacquerware ('Shwe-za-wa' ware; fig. 16), relief molded lacquerware ('Tha-yo pan-kywa' ware; fig. 20), glass mosaic and gilded lacquerware ('Hman-si shwe-cha' ware; fig. 21).

Plain undecorated lacquerware or 'Kyauk-ka' ware is an indigenous product of Myanmar. Successive coatings of 'Thit-si' are applied on the surface of the black body, and the surface is smoothed with whet stone powder. The 'Kyauk-ka' wares come out in classic plain black or a characteristic two-toned black outside and a bright vermilion red inside. 'Kyauk-ka' wares are appreciated for their utility, durability and simplicity in design (figs. 9, 10).

In the production of incised lacquerware or 'Yun' ware, the black body is first coated with 'Hta-naung' glue (gum Arabic) to a considerable thickness. Next, the decorative design or motif is traced lightly on the surface with a steel stylus. The traced lines are then incised and the incised area covered with pigment. The lacquerware is then dried in the drying chamber for about five days. The treated surface is next washed and scrubbed with a powdered paddy husk. The body with the pigmented lines is then masked with 'Hta-naung' glue again using a fine paintbrush. The lacquerware is then dried. Again, the lines, which are to be pigmented with the second colour, are incised and filled with the respective pigment (figs. 11, 12). The process of scrubbing and masking is repeated. In these steps a multicoloured incised lacquerware ('Yun' ware) is produced (figs. 13, 22).

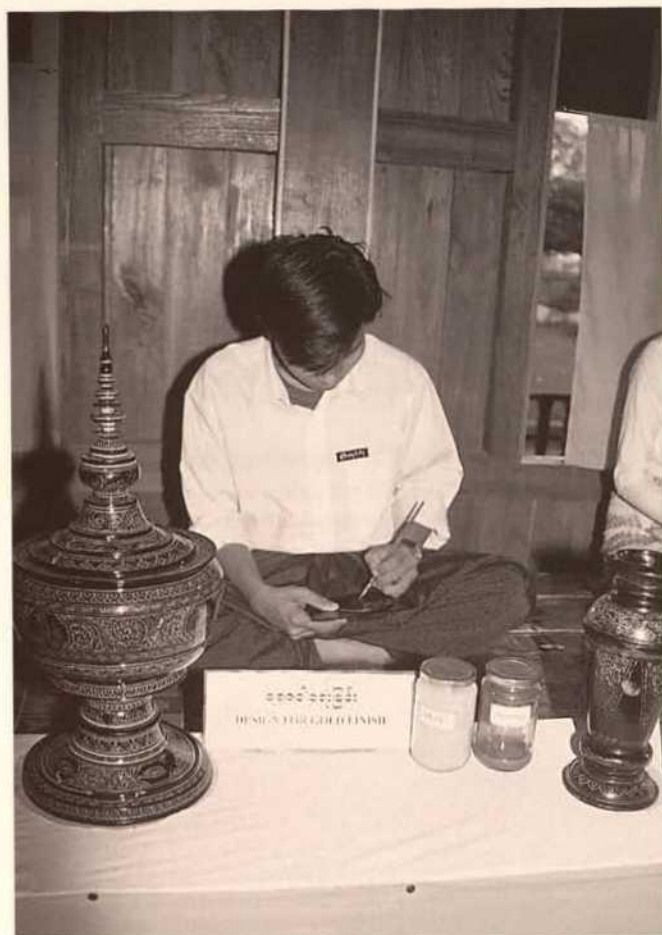


Fig. 14. The outline of the motif depicted on the lacquered body is sketched with a pen using a paste made of Orpiment



Fig. 15. Washing away the resin mask with clean water. After the removal of the mask the ground colour (black or red) reappears forming a contrast to the gilded design

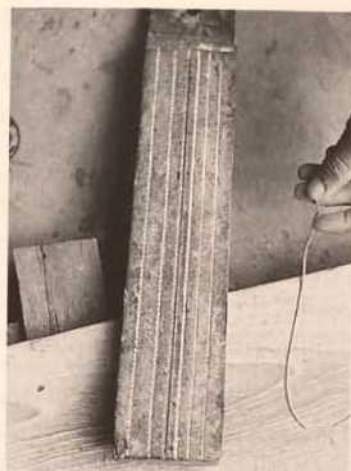
Fig. 16. Gilded object

In the production of gilded designs, the surface of the black body is first coated with 'Thit-si' to a considerable thickness. The surface is next smoothed with whet stone powder. The outline of the desired motif is then sketched with a pen, using a paste made of Orpiment, Neem tree resin (dragon's gum) and water (fig. 14). Next, those parts of the object on which no gilding is required, are masked by covering them up with the same paste. After drying, the painted figure is treated with a thin layer of 'Thit-si' and gilded. This type of lacquerwork requires a special skill.

After the gilded lacquerware has dried in the drying chamber, the Neem resin mask is washed away with clean water (fig. 15). The result is extremely regal and strikingly beautiful. 'Shwe-za-wa' wares, which used to be the ornaments exclusively for royal and religious affairs, are now the most costly lacquerwares because of the soaring price of gold (fig. 16).

A very good quality 'Tha-yo' is essential for the production of the relief-molded lacquerware. 'Tha-yo', which literally means bone ash, is a plastic paste, a mixture of bone ash, paddy-husk ash, teakwood sawdust and the lacquer sap. Fine threads are made out of this 'Tha-yo' paste (fig. 17). By means of an iron or wooden stylus, these threads are stuck on the outlines already sketched on the lacquered surface of the object to form a relief design.





◁ Fig. 17. Fine threads made out of 'Tha-yo' paste

Fig. 18. Threads of 'Tha-yo' paste are stuck on the outlines sketched on the lacquered surface by using an iron stylo. A relief design is formed at the bottom of the object



18 △



Fig. 19. Gilding of the surface with gold leaves



Fig. 20. Example of 'Tha-yo pan-kywa' ware with relief design and gilding

Fig. 21. 'Hman-si shwe-cha' ware ▷

The lacquerware is next kept in the drying chamber for about three days. It is coated with lacquer or given two light coatings of 'Thit-si' and then gilding is done as mentioned previously, using gold leaves (fig. 19), Orpiment and Neem resin. The whole process of producing relief molded lacquerware ('Tha-yo pan-kywa' ware) takes about two to three months (fig. 20).

For the production of glass mosaic and gilded lacquerware ('Hman-si shwe-cha' ware), pieces of mirror, coloured glass or mother-of-pearl are cut into different sizes and shapes to fit into the inlaid pattern (fig. 21). Next, these pieces are inlaid onto the surface of the ('Tha-yo' ware) relief molded lacquerware, using a high-grade 'Thit-si' as adhesive. This process of inlaying is followed by the process of gilding. This type of lacquerware can be very costly, not only for the materials, but also for the skill and amount of labour involved. A variety of museum pieces of glass mosaic and gilded lacquerware ('Hman-si shwe-cha' ware), using genuine gems can be seen as the epitomes of Myanmar's cultural heritage.

The 'Mann' image forming or hollow 'dry lacquer' technique has been mentioned before in the context of the formation of Buddha's image ('Mann pha-ya yot-tu-taw'), employing the wicker framework. After the framework of the image is completed, 'Tha-yo' plaster is applied to work out the details of the image. The techniques of ('Yun' ware) incised lacquerware, ('Tha-yo pan-kywa' ware) relief molded lacquerware, ('Hman-si shwe-cha' ware) glass mosaic and gilded lacquerware are all involved in this process.



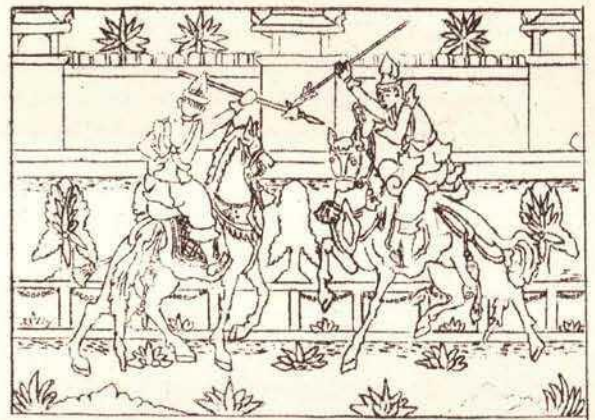
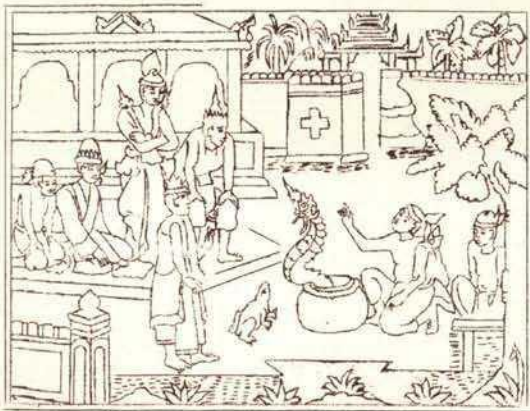
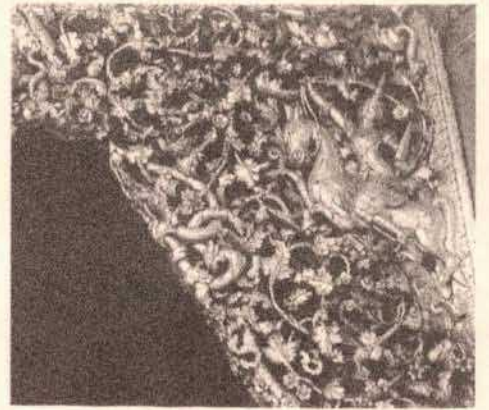
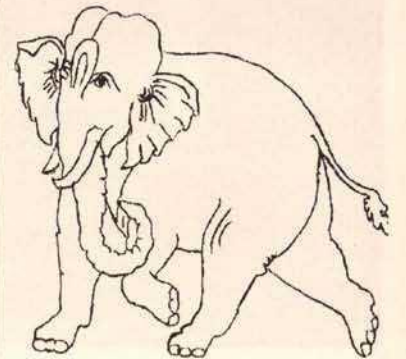
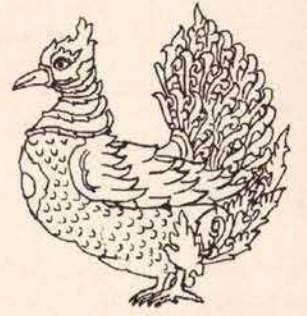


Fig. 22. Motifs and designs of 'Kauk-kyang' drawings: 'Kanou', 'Kapi', 'Gaza', 'Nari'

3. The Design and Decoration on Myanmar Lacquerware

Myanmar lacquerware designs, motifs, and decorations are based on Myanmar traditional line drawing techniques known as 'Kauk-kyang' (curve lines) drawing. The motifs and designs usually associated with the 'Kauk-kyang' drawings are: 'Kanou', 'Kapi', 'Gaza', 'Nari' (fig. 22). All of these are Pali words.

'Kanou' is the traditional style of depicting convoluted lotus stems, buds, and blossoms. It may also be a scrollwork on floral motifs, or floral arabesques. Any beautiful floral drawing of intricate design can be called 'Kanou'. 'Kapi' is the traditional style of depicting apes, monkeys and the like. In a broader sense, the actions and the movements of these animals can also be taken as 'Kapi'. 'Gaza' is the traditional style of depicting elephants, horses or cattle (fig. 23). Again, any massive object such as a mountain, a rock and a tree trunk can be classified in this category. The traditional style of depicting a female figure or all human figures can be categorized as 'Nari'. Motives are lotus, orchids, mythical creatures, demons and divas. Scenes and episodes from Buddhist Jatakas and Buddisatva, Pagoda legends, Myanmar folk tales and mythical tales are also depicted. Myanmar festivals, traditional sports, the twelve signs of the Zodiac are the artists favourite. In the 'Kauk-kyang' drawings, perspective is needed. The required effect is achieved by adding lines and colours. Here, the artist has a free hand to express his objectives.

Production and Sales

A rough estimation of the total number of lacquerware craftsmen in Myanmar is about 2500, of which 60 % are working in Bagan. The lacquerware trade is so thriving, that almost every household in Bagan is engaged in either the production or the trading with this handicraft. At least 10 main registered companies and cooperatives are active in this trade. The Ministry of Trade, Government economic enterprises, cooperatives and private companies are engaged in promoting the national and international marketing of Myanmar lacquerware.

Promotion of the Lacquerware Production and Quality Improvement

For the enhancement of the lacquerware production, it is imperative that there should be no lack of raw materials. Myanmar's 'Thit-si', renowned for its high quality, is in constant and great demand both locally and abroad. Thus, forestation campaigns to guarantee the proper maintenance of 'Thit-si pin' (lacquer trees) are in progress.

A lacquerware product takes about 3 months to finish. The main factor being the slow drying and hardening process of the 'Thit-si' coating. Research is underway for a better technique of drying 'Thit-si' coatings more quickly without bringing any adverse effect on its salient properties. Modern methods of preservation of bamboo and wood, the basis for the lacquerware products, are also imperative for a further enhancement.



Fig. 23. Tablet with an elephant in Gaza-style

The Myanmar Lacquerware Institute

The importance of maintaining a national cultural heritage can never be overemphasized. Accordingly, Myanmar 'Pan-yun', the lacquerware technique, has been maintained through generations as a pride of Myanmar. A Government Lacquerware Training School was founded in Bagan in 1924, as a seat of systematic training for the craftsmen. More than 600 trainees have been trained since then. In April 1995, the Government of the Union of Myanmar had authorized the upgrading of the Government Lacquerware Training School to The Myanmar Lacquerware Institute with an annual intake of 60 students for a two-year diploma course in lacquerware techniques. Curriculum includes, in addition to the basic crafts in lacquerware, subjects such as natural sciences, history, as well as culture and business management.

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