

Design Resource

Sitar Making - Varanasi

Folk Instrument of Ancient India

by

Prof. Bibhudutta Baral and Rakshitha

NID Campus, Bengaluru

Source:

<http://www.dsource.in/resource/sitar-making-varanasi>



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Introduction

Sitar is a handmade instrument which belongs to lute family and has its origin from South Asia. It is larger than its European partner (guitar) by having more strings and featuring its unique sound. This unique sound is due to its two layered strings with a deep and curved chamber. It is mostly known for its role in Hindustani music as it is considered as the main instrument of the Hindustani culture. Stringed instruments has its existence since hundreds of years. They are the oldest types of instruments made by people. Sitar is a fusion of two instruments. One was veena which is 3,000years old instrument. Second was 'seetar' i.e three stringed instrument, newly introduced to north India that was carried by first Persian Muslim soldier who arrived during 800AD. During the reign of Mughal rule in northern India and Pakistan, as the cultural and political turmoil begun the instruments and music evolved with it. Thus sitar flourished during 16th - 17th century by native Indian court musicians, who made the modifications and bought in the changes to veena with the taste of Persian nobility and the Persians would give an adaption of their instrument name seetar to this as 'Sitar'. And the present form of sitar flourished during 18th century. After India and Pakistan gained independence in 1940s sitar was left as the court instrument for both the nations. In later days in 1960s sitar was the only one most prominent musical instrument which was exported from Indian music.

As making of this instrument has its tie knotted its root to village craft it is considered as one of the folk instrument. The making of this Indian sitar needs at least five craftsmen to build a single instrument. During olden days sitar was made of teak wood but now a days due to lack of teak wood rose wood or tun wood (Cedrela Toona) is being used for making sitar. Its general length is about 1.2 meters (4 feet) with a pear shaped gourd body, hollow wooden neck, tuning pegs in both front and side ways and 20 arched movable frets. The strings attached to this instrument is of metal in which five are melody strings, one or two are drone strings and nearly 13 sympathetic strings underneath the frets that are tuned to the tones of raga. Usually sitar is held in 45degree angle on their lap while seated. The sitarists play the instrument by plucking the strings with a wire plectrum worn on forefinger of the right hand while the left hand is used for manipulating the strings with subtle pressure on the frets.

Today sitar is used as a solo instrument with tambura (drone-lute) and table (drums) at concerts. The two modern schools for sitar playing in India are Ravi Shankar School and Vilayat Khan School. Each school has its own playing style, tuning system and type of sitar. Ravi Shankar School follows the 12-14 sympathetic stringed sitar with secondary gourd attached to it. This type of sitar typically produces deep, bass-filled sound and has an elaborate penwork and carvings on the instrument. Whereas Vilayat Khan's sitar is a single gourd instrument that is slightly smaller than Ravi Shankar's sitar. This instrument has fewer sympathetic strings with no bass strings but produces more chordal and maximum sound.

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The interesting fact about the instrument is, it is still continuing to evolve even today. Vilayat Khan introduced the instrument to western world during early 1950s whereas Pandit Ravi Shankar who was born and brought up in Varanasi took over and started touring the western world and played in enormous concerts starting from 1956. He toured extensively and composed music. Thus through him (Pandit Ravi Shankar) sitar was noted as a popular instrument in West. Even today many Western musicians uses this sublime instrument in their creations and some composers imitated the sitar sounds on guitar. Some used an electric sitar – a modified version to ease the performance and preserved its primary tonal gleam. And in 21st century Ravi Shankar's daughter Anoushka Shankar joined musicians around the world and performed on Hindustani principles, later for which she was noted for her expertise in playing sitar.



With the help of customized tools artisan fixing the both half of the product clad rudra veena.

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Twenty frets are fixed on fingerboard of sitar.



Wooden gulu (neck of resonator) is attached.



Artisan is checking the measurement of resonator cover called tabli.

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Tools and Raw Materials

The tools and raw materials that are used for sitar making are as follows:

- **Tun or Rose Wood:** It is the basic raw material used for making the instrument Sitar.
- **Tumba Gourd:** It is used for making the resonant body of the instrument.
- **Camel Bone:** To tighten the strings camel bone is used.
- **Strings:** They are the part of the instrument, usually plucked to produce sound from it.
- **Chisel:** It is Used for carving the wood.
- **Handsaw:** This is used for cutting the wood according to the requirement.
- **Bamboo Stick:** They are used as the support in shaping the tumba part.
- **Glue:** It is the mixture of sawdust and local adhesive used for pasting/assembling all the body parts of Sitar.
- **Varnish:** It is used for polishing Sitar.
- **Nylon Threads:** These threads are used for tying the frets on top of dandi.



AWL tools used for marking and making holes in wood.

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Hand drilling tools for making holes in wood.



Mallet is used as hammers to shape the wood.

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Chisel is used to carve the wood.



Wood scraper tool.

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Making Process

In general sitar is constructed in two phases. The first phase starts from selection and ends with assembling all the parts of the instrument. The second phase deals with designing, carving and gets complete with the final product produced.

The process of making the musical instrument 'sitar' begins with the selection of well-seasoned wood. Usually all the parts of an instrument is made of single wooden / tree trunk. Initially the seasoned wood is processed to make lumber. The wood is segregated to make the parts of sitar like gulus, tablis, dhandis, pta and tumba. Tumba part of the sitar (the resonant body) is made of tumba gourd that is generally cultivated at the banks of the river. These are neither too thin nor too thick. As the texture of it is smooth and symmetrical without any ridges with minimal flaws and not being too dense or heavy it is easier to use it in sitar, and they play a very important role in regulating the overall quality of sound produced in sitar. The proportion of tumba bounds the length of sitar. Generally large sized gourd are preferred by professional sitarists. To make tumba the top portion of the gourd is cut off and the pulp which is inside is scrapped out completely. Then the remaining portion of the gourd is soaked in water for few hours. By doing this the gourd procures the consistency of thick leather. Later bamboo stick is used as a support for this and it is placed at the accurate point from within (inside the gourd) with a few cursory measurements of height and width. Then it is set for drying in sun, thus determining the perfect shape of tumba.

Dandi is considered as the neck of this instrument. As it is hollow the sound vibrates through it and thus it enhances the influence of generating sound when the instrument is played. Traditionally it is made of single piece of wood that makes it prone to twisting and distorting over a period of time. This dandi is usually covered with pta as top cover. Dandi is based upon six pieces. The major portion is the neck region and there are three front plates with two camel bone bridges known as patri, arda-patri. And gulu is the hollowed wooden cover that joints tumba and dandi together.

Tabli is the main soundboard of the instrument, made of single wooden piece. This should be free of any knot-holes or imperfections. The breadth of the tabli shouldn't be neither too thick nor too thin, as the thinner tabli weakens the sustainability of the instrument but gives louder sound and the thicker tabli gives good durability with a lower volume. Thus the choice of selecting the appropriate tabli plays an important role in this phase. The shape of tabli varies from instrument to instrument, depending on the certain parameters of tumba's and gulu's dimension and proportion. Thus all the body parts of sitar is glued together and allowed to set. The process of assembling the parts of sitar begins from joining dandi and gulu by clamping it with two screw that remain inside the instrument. The tabli is glued little extra with the mixture of local glue and sawdust that is applied to the outside joints. After assembling all the parts of the instrument craftsmen focus on engraving/decoration of sitar. Usually it is floral design carvings made on wood which are seen on professional sitar. The intricate carvings on the instrument varies on the quality of the instrument that is commissioned.

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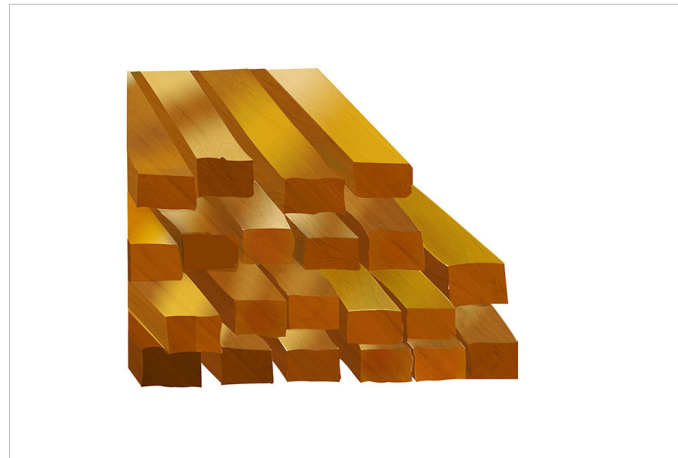
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These carvings are usually simple leaf or flowers which are freehand drawings. As per the commission taken the carvings are changed by referring some ancient carving designs book. The tail piece (langort) of sitar is usually made of tun wood or stag horn. After it is carved / engraved it gets ready for polish. Traditionally before the polish process gets begin, six steps of wet scarping, sanding and sealing is done. This process is called as 'french polish'. And when it comes to the procedure of polishing shellac polish is used. This polish is the resin secreted by the female bug and takes nearly 2-3 days to dry. But now a days varnish is used which dries faster. Along with langort other parts like koonti (tuning pegs), jiwari (main bridges), parda (fret), targon (nuts) and some other tiny pieces of the sitar are also polished thoroughly at the final stage. Kuntis are generally fixed towards the left side of dandi and jiwari made of camel bone is fixed on the top of tabli that enhances the tonal development. Frets are placed on top of dandi and they are adjustable as they are tied in nylon threads. In the final procedure of making sitar, brass strings are attached to kunti to lay emphasis on rhythm. Some sitars also have secondary gourd as per the requirement of the customer. It is believed that secondary gourds also acts as a resonator and enhances better sound quality.



Long wood block is used to make neck of sitar. (Barmatic wood are well seasoned and processed in saw mill).



Excess wood is removed by using wood scraper.

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Thumba gourd is cut in to required shape.



Gourd is filled for even thickness.



Wooden gulu (neck of resonator) is attached.



Chirna tools is used to carve the design.

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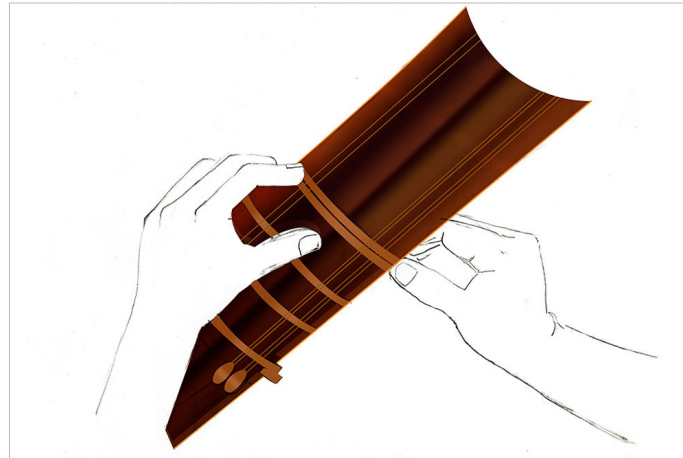
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Resonator is covered with wood plate called tabli.



Twenty brass are fixed on sitar.



Final product sitar for professional.

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Products

Sitar has been charming and serenading the audience from thousands of years. It is much appreciated for its lush, complex harmonies by musicians and its fans. The proudness of this instrument is that, it is the most important instrument that has successfully fused western and eastern music together. And even today it is still predominantly used as the popular Indian instrument by musicians and artists across the globe.

The shops in Varanasi where the instrument is made are not produced in mass or on any speculation. They are only built when the orders are given in advance and booked months earlier. But these days there are some shops that produce these instruments keeping the tourist trade in mind.



Gourd shape decides the size of sitar.



Sitar consisting of 20 strings embellished with inlay work.

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The carved designs give an attractive look to the sitar.

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