
TECHNIQUES THAT
SUPPORT JAPANESE
PERFORMING ARTS

II

Koma

Ivory bridge
for
Shamisen

三味線象牙駒

Koma Craftsman
Masanobu
Okouchi



Independent Administrative Institution
National Institutes for Cultural Heritage

Tokyo National Research Institute
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The *shamisen* is a string instrument played with a plectrum. The vibrations of the strings when they are struck are conveyed to the skin of the body via bridges called *koma* and reverberate inside the body.

The *koma* is an essential part of the *shamisen*. It connects the strings and the main body of the *shamisen* and determines the sound quality of the instrument. Most are made of ivory, but there are some made of buffalo horn, mulberry and bamboo. Masanobu Okouchi is a rare *koma* craftsman who, based on his wealth of experience and exquisite skills, hand-carves ivory *koma* with precision to suit each need.

Okouchi's *koma* are beautiful works of fine art. Displayed in array, it becomes apparent that the shape of the top of the *koma* that receives the vibration of the strings (*itodai*), the line from the top to the base of the *koma*, and the almost translucently thin slopes that form the sides of the *koma* (*mine*), all differ according to the genre of *shamisen* music for which each *koma* is made.

These respective characteristics are tangible results of Okouchi's pursuit of quality *shamisen* sounds.

To pursue optimal forms is to pursue optimal sounds

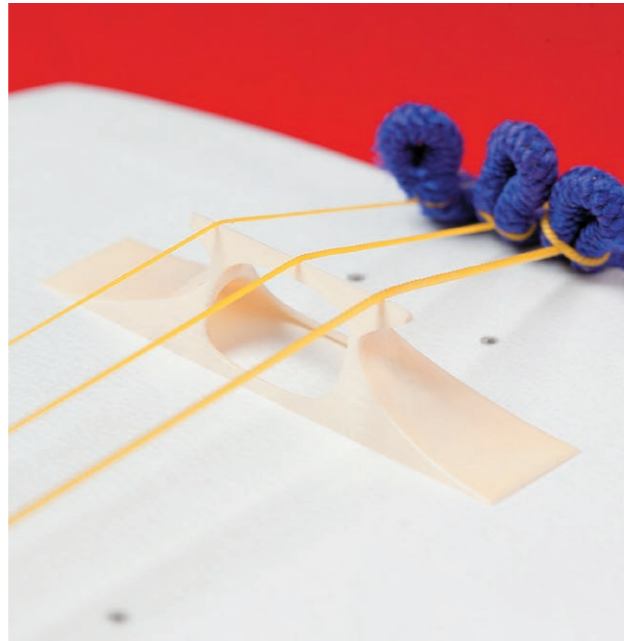
A piece of ivory cut into a triangular prism is filed and smoothed repeatedly. However, this is not simply a repetition of the same process. Okouchi frequently switches work boards, rotates the ivory piece every which way, and swaps one tool for another, using files, water-resistant sandpaper, and horsetail plant. As he does so, the *koma* that is sought by the performer begins to take shape.

“It matches my nature to keep plowing on, seated all the while. It’s not a hardship to me. I think I’ve encountered an ideal job. After all, I’ve been able to keep at this for more than 40 years now.”

——Masanobu Okouchi

Sound

Shamisen music is wide-ranging. *Gidayu-bushi* is performed in Bunraku puppet theater. *Nagauta*, *Tokiwazu-bushi*, and *Kiyomoto-bushi* are performed in Kabuki plays and classical Japanese dance performances, while *Fiuta*, *Shinnai-bushi*, *Kouta*, *Tsugaru-jamisen*, *Minyo* and *Rokyoku* are mainly performed in concert format. Just as different types of *shamisen* are used for different genres of music, diverse types of plectrums and *koma* are also needed. The shapes of ivory *koma* differ not only according to the genre of music, but also to each performer. Performers have their preferences with regard to the width, height, and detailed shape of the *koma*, and most of them use a multiple number of *koma* to suit each program or venue.



A *koma* attached to the *shamisen*. It has the role of conveying the vibration of the strings to the skin on the body of the *shamisen*.

Technique

Crafting an ivory *koma* for *shamisen* is long and slow work. It is filed, smoothed, and filed some more, over and over using files, water-resistant sandpaper, and horsetail plant. While a machine is used to some degree for rough carving work, the rest is meticulous work done by hand. All *koma* have the same general shape, but the respective thicknesses of each part that has direct bearing on the sound and reverberation of the instrument can only be achieved with experience and technique.

Okouchi crafts ivory *koma* shaped to match the needs of each performer (height, and in some cases, width and details) according to the genre of *shamisen* music for which the *koma* is intended, whether it is for *Nagauta*, *Tokiwazu-bushi*, *Kiyomoto-bushi*, *Kouta*, *Rokyoku* or *Minyo* (photo below, from the left).



Files

Koma, despite their small size, differ in their detailed shape according to each genre of *shamisen* music. Moreover, they need to be shaved down to an extreme thinness in some areas to efficiently convey the vibration of the strings. They cannot be thinned in one stroke, however. Okouchi uses many different files (files with different grain sizes, files having a cross grain, etc.) to craft a thin and smooth *koma* little by little.



Work boards



In the process of crafting a *koma*, the *koma* is placed on a small board that is changed with each task. Okouchi makes all of these work boards himself so he can work easily and efficiently. Even for similar tasks, a different work board is used that suits the type of *koma* being made and the specific orders of the performer for whom it is being made. Thus, a considerable number of work boards become necessary.

Tools



Preparing the bottom surface of the ivory

A corner of a triangular prism of ivory is fitted into the groove of a handmade work board so the bottom surface can be leveled with a file. The sides are also filed with the final dimensions of the *koma* in mind, leaving some margin. The filed surfaces are smoothed with water-resistant sandpaper.



Opening a hole in the long side of the ivory

A hole is made in the long side of the ivory with an electric drill, and it is filed into a smooth oval from the inside using files with three different grits. The work board is cleverly made so that the files can reach all the way toward the back while holding the *koma* steadily in place. These files are custom-made by file craftsman Toshio Fukazawa (now retired) specifically to allow the curves of the oval hole to be filed easily.



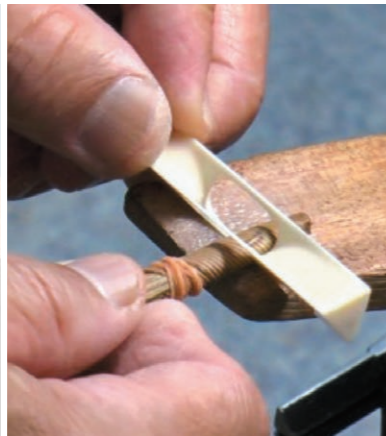
Filing the bottom surface

Grooves are roughly carved in the bottom surface with a motor, and the surface is then filed little by little using several different files having somewhat upright grits made specifically for filing ivory. The top of the *koma* is fitted into a groove in the work board and secured in place by tightening a screw-type key attached to the front of the board. The board is tilted slightly forward to make it easier to work the *koma*.



Filing and smoothening the *tsunagi*

Tsunagi is the portion that extends to the sides of the hole made in the long side of the *koma*. After securing the *koma* on the work board with the bottom surface facing up, the *tsunagi* is filed with moistened water-resistant sandpaper wound around a stick. This is to smoothen the surface that has been filed.



Filing the underside of the saddle

The saddle portion of the *koma* that receives the vibration of the *shamisen* strings is called *itodai*. The underside of it is first filed, and the filed surface is smoothened using horsetail wound around a stick. Okouchi says he uses horsetail because it does not produce powder shavings of ivory that could scratch up the *koma*. Horsetail has become extremely difficult to obtain, but it is essential to creating ivory *koma* that tolerates not even the slightest imperfection. The *koma* is then polished by gently sliding it across a strip of leather wound around a board, polished some more with water-dissolved toothpaste applied to a cloth wound around a stick, and filed again with water-resistant sandpaper.

Filing the ridge

The ridge portions that slope down from the two ends of the saddle toward the bottom of the *koma* are called *mine*. Using a fret saw lubricated with oil, Okouchi draws on his experience and intuition to carve out the ridges from the ends of the saddle he has marked beforehand. The ridges that have been carved are filed using several different types of files, and any traces of the file are thinly shaved away with a knife and smoothened. It is then further filed using water-resistant sandpaper. These ridges, when completed, are so thin that they are almost translucent. Their thinness has direct bearing on how the vibrations of the strings are conveyed to the skin of the body of the *shamisen*. As even the minutest crack would lead to a fracture of the *koma*, this task requires meticulous concentration.



Finishing the *koma*

The *koma* is polished by attaching a buff to a cardboard, and it is given a finishing gloss by sliding it across a board covered with leather.



Tools

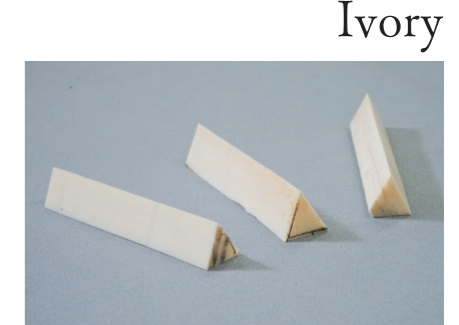
Files are foremost important, but also essential to Okouchi's work are water-resistant sandpaper and horsetail, which he uses to polish the *koma* by winding them around a stick, and toothpaste, buff, and leather, which are needed to achieve a glossy finish. As a multiple number of files with differing grits are required to process each part and they must be able to file even minute recesses in a small *koma*, strong trust is placed in the craftsman who makes such special-purpose files.

Materials

Ivory can be secured only through what stock exists today. Therefore, cutting ivory in workable shapes is essential to ensuring the effective utilization of the limited material. It is hoped that such utilization is maintained through the relationship of trust between ivory stores and craftsmen of ivory *koma* for *shamisen*. Okouchi says ivory from Okada Ivory Store is easy to process, because the store carves out portions that are suited to making *koma* in consideration of the grain of each block of ivory.



Horsetail



Ivory

Koma Craftsman

Masanobu Okouchi

- 1949 Born in Chiba.
- Late 1973 Began learning to craft ivory *koma* for *shamisen* under Heijiro Konishi.
- Ca. 1979 Suspended the crafting of *koma* after Heijiro Konishi passed away, but thereafter brushed up his skills and resumed the craftwork prompted by Kazukiyo Okada, who had also acquired the technique of crafting ivory *koma* for *shamisen* himself.
- 2021 Awarded by the Commissioner for Cultural Affairs in recognition of those who have demonstrated outstanding achievements in cultural activities and contributed to the promotion of Japanese culture, or who have contributed to the transmission of Japanese culture abroad and international cultural exchange.
- 2023 Awarded Medal with Yellow Ribbon which is awarded to those who are diligent in their work and set a good example for others.

Crafts ivory *koma* for *shamisen* in association with Okada Ivory Store. Learned the process of crafting *koma* by watching a craftsman at work and acquired the technique through trials and errors of his own.

Article and photos made possible with the cooperation of Okada Ivory Store

Photos by Kou Shashin Kobo [cover, back cover, top photo on p. 3 (photo of a *koma* attached to a *shamisen*), top photo on p. 4 (photo of a collection of *koma*)]

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