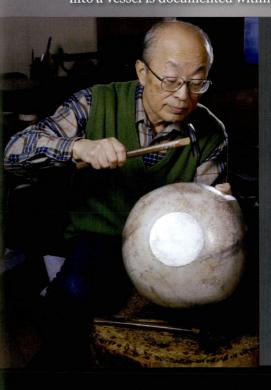
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Metal Hammering – The Art of Taguchi Toshichika –



A long history of metal-shaping techniques exists throughout the world, and by processing metals such as gold, silver and copper, both weapons and accessories were made. Tankin, metal hammering, is a metal-crafting technique that forms 3-dimensional objects by hammering a single sheet of metal. Taguchi Toshichika, the Holder of the Important Intangible Cultural Property technique of Tankin, was born to a family of hammered metal craftsmen who worked in the style of the Chojusai School since the Edo Period. After studying as a craftsman, Taguchi decided to become an independent artist using the alloy called oborogin or shibuichi. Taguchi's works brim with a dignified gravitas, featuring simple forms that are void of decoration. Using detailed camerawork, the entire process behind hammer-raising a single sheet of shibuichi into a vessel is documented within this film.



Taguchi Toshichika

1940	Born in Bunkyo City, Tokyo
1959	Graduates from the Metal Craft Department, Tokyo Metropolitan Kogei High School Begins apprenticeship under father Taguchi Tsunematsu
1972	Work first selected to the 19^{th} Japan Traditional Art Crafts Exhibition
1978	Becomes Official Member of the Japan Art Crafts Association
1984	Receives President of Japan Art Crafts Association Prize, 31st Japan Traditional Art Crafts Exhibition Work "Hammered Oborogin Faceted Bowl"
1996	Receives Encouragement Award, Japan Art Crafts Association Prize, 43 rd Japan Traditional Art Crafts Exhibition Work "Oborogin Rectangular Water Jar"
2006	Recognized as the Holder of the Important Intangible Cultural Property, Metal Hammering



♦ Prologue: History of the Art of Tankin

Tankin is the art of shaping metal through hammering. Its history dates from the 4th century, and beautiful incense burners of hammered brass were shaped in the 7th century.



♦ Tankin Artist Taguchi Toshichika

Metal artist Taguchi Toshichika, the Important Intangible Cultural Property Holder for Metal Hammering, uses the Japanese alloy called shibuichi or oborogin to create his own unique world in metal.



♦ Work "Hammered Oborogin Faceted Bowl"

Taguchi's representative work "Hammered Oborogin Faceted Bowl" is made with the technique of hammering by using the alloy shibuichi, which brims with a dignified and austere silver color.



♦ Alloy Shibuichi (Oborogin)

The alloy shibuichi is also called oborogin, and is made using the ratio of $3/4^{\rm ths}$ copper to $1/4^{\rm th}$ silver. As a further ingredient, 1 percent gold is added, and then the metal is compressed.



♦ Cutting Sheet Metal

From a sheet of metal, the amount of material needed for the work is cut out. From a shibuichi sheet compressed to a thickness of 3 mm, the metal is cut circularly to a diameter of 30 cm.



♦ Heating Metal

Metal must first be heated and made malleable before hammering. As shibuichi is extremely rigid, it must be heated repeatedly during the hammering process.



♦ Hammering - Shaping into Vessel Form

"Uchi-age" is the hammering of a metal sheet into vessel form. Using a nobe-tsuchi metal hammer, a metal sheet is hammered perpendicularly and is stretched. Shibuichi undergoes a "resisting phase," where the metal resists formation and is easily warped. By repeating the hammering process numerous times, a vessel form is shaped.



♦ Hammering the Outer Side

Using a straight anvil called a "buttate," the outer side of the work is hammered. It is often said that Tankin is made through posture, and for this reason, one's posture during hammering is important. Taguchi's posture while hammering always remains the same. The flat side of the vessel's base is placed upon a flat-headed anvil, and is hammered.



♦ Pickling

In between the processes of hammering and heating, pickling is performed. Dipping in diluted sulfuric acid, the blackened surface layer is removed in order to accentuate the hammer marks.



♦ Changing Anvils During Individual Processes

As the well of a work becomes deeper, it is more difficult to hammer. At this point, Taguchi changes his anvil to one shaped in the Japanese character "he."

When determining the form of the vessel, Taguchi uses a wooden mallet that won't stretch the metal.



♦ Adding Edges

Edges are hammered. At this time, the artist uses an anvil that he had invented. Edges are made diagonally to match each corner.

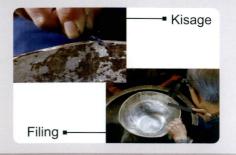
Taguchi believes this line goes well with shibuichi.



♦ Process of Polishing

Pickled after the final heating process, a work enters the polishing stage. In light of the rigidness of shibuichi, a hard ceramic whetstone is used, turning the metal color from white to a red base color.

Next, polishing charcoal is carefully applied to prevent unevenness in color.



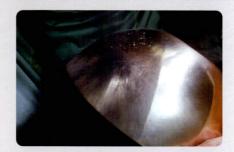
♦ Adjusting the Rims - Filing and Kisage

A rough file is softly applied to a vessel's rims to create balance. Its thickness remains the same, instilling stability in form. A sharp tool called a "kisage" is then used to smooth away the rims.



♦ Polishing the Inner Well with Whetstone

The inside is smoothly polished like a mirror using a whetstone. To create contrast from the outer surface, the well is polished meticulously. Spending more than a week's time, polishing charcoal is first applied, and then finished with fine-grained Suruga charcoal.



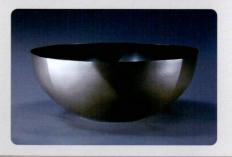
♦ Preparations for Color Finishing

The outer surface is roughened using emery powder. Then it is roughened with brass particles. Next, the work is washed with grated radish juice to prevent color distortions.



♦ Process of Color Finishing

Color finishing is applied by placing within a heated mixture of liquid copper rust and copper sulfate. This process is done quickly to prevent color distortions, and the color begins to emerge.



♦ Completion of "Hammered Oborogin Square Bowl"

The completed work "Hammered Oborogin Square Bowl." The work shimmers in a glow that is neither silver nor black, but is the distinctive and ideal hue of Taguchi Toshichika's shibuichi.

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