Mother-of-Pearl Inlay (*Raden*)

Raden is a decorative technique in which small pieces of mother of pearl are embedded in lacquer. It was introduced from China in the eighth century, as indicated by relics found in the Shōsōin treasure house at Nara's Tōdaiji Temple. Raden subsequently became a common technique in Japanese lacquerware, often used alongside gold and silver maki-e embellishments. It was used not only for small personal or household items, but also in grand architecture such as the lavishly decorated ceiling of the Phoenix Hall at Byōdōin Temple, near Kyoto.

"Mother of pearl" refers to the pearl-like substance known as nacre, which builds up on the inside of certain mollusk shells. Different species produce different colors and qualities of nacre, but the species commonly used in *raden* include abalone, pearl oyster, turban, and nautilus. As every shell has individual contours and a unique pattern of iridescence, finding those that will work with the envisioned design is a *raden* artist's initial challenge.

The second major hurdle is extracting suitable pieces of mother of pearl. First, the artist uses a whetstone or grinder on both sides of the shell to produce a flat wafer of nacre with relatively even surfaces. The size and natural curve of the shell limit the number of large pieces that can be extracted. Nacre is brittle, so the thickness of the pieces determines the ways they can be used. Pieces between 0.1 and 2 millimeters thick are called *atsugai* ("thick shell") and those under that size are *usugai* ("thin shell"). In the past, *usugai* was produced by boiling shells for three to seven days, then peeling off thin layers. Today, mechanical grinders are used, so the shell is cooled with water to prevent the buildup of friction. (Otherwise, the heat would damage the shell during the lengthy grinding process necessary to produce such thin layers.) In addition to *atsugai* and *usugai*, small flakes of nacre can be pulverized into an iridescent powder called *mijingai* ("shell particles"), which can also be used in the design.

Once the artist has sufficient mother of pearl pieces, they are cut to the desired shapes. Depending on the thickness of the piece, this can be done with a scroll saw, precision knife, punch template, or acid etching. Shell pieces may be further embellished with hairline engravings, painting, or by applying gold foil to the back of translucent *usugai*.

Next, the cut pieces are applied to the lacquerware, either inlaid or affixed to its surface. The design is then covered with a protective layer of lacquer and burnished. *Maki-e*, another lacquerware decorative technique, is often used in tandem with *raden* to add metallic silver and gold to the *raden* palette of iridescent whites, pinks, and blues.

The Ishikawa Prefectural Museum of Art has many fine examples of *raden* lacquerware in its collection, spanning the fifteenth century to modern times. These include one nationally designated Important Cultural Property and several Important Cultural Properties of Ishikawa Prefecture.

Raden was designated an Important Intangible Cultural Heritage in 1999.