Two ceremonial Yup'ik masks from the Smithsonian Institution's National Museum of Natural History (NMNH) are the focus of a current conservation project. Both are part of the Nelson Collection, a cache of almost 10,000 objects collected by Edward William Nelson on his expedition to Alaska from 1877 through 1881.

The two masks, the largest ceremonial Yup'ik masks owned by the Smithsonian Institution (their faces measuring 55 x 32 cm and 52 x 29 cm) resemble each other closely in appearance, and share the same materials and techniques of construction. They are carved from wood, painted, and decorated with feathers. Both masks have the same prominent facial features, attached arms that extend directly from their mouths, side bars, two labrets, and attached carved animals. They are also painted in the same manner with the same colors.

Though we do not know the precise year in which the masks were manufactured, or whether they were originally used ceremonially, they are nonetheless well documented. Mask 33118 is one of the few masks of the large Nelson Collection to be described and illustrated in Nelson's monograph:

"This image represents the tunghâk or being that controls the supply of game. It is usually represented as living in the moon. The shamans commonly make a pretense of going to him with offerings in order to bring game into their district when the hunters have been unsuccessful for some time. The caribou is one of the most prominent features, attached arms that extend directly from their mouths, side bars, two labrets, and attached carved animals. They are also painted in the same manner with the same colors."

Figure 1: Illustration of mask 33118 from Nelson's 1899 monograph, with the center caribou already missing

Figure 2: Mask 33119 after conservation and restoration treatment

Figure 3: Detached pieces are relocated through matching broken dowels

We do not know the condition in which the masks arrived in Washington D.C. Ledger drawings from 1878 show both masks assembled, and an illustration published in 1899, in Nelson's monograph "The Eskimo About Bering Strait," shows mask 33118 assembled.

However, at some point, both masks were disassembled. During the course of the Anthropology Inventory Project that took place at the Smithsonian between 1978 and 1980, the masks were placed in two storage boxes along with their various detached parts. Since the first field numbers were written on almost every one of the attached pieces during Nelson's expedition, the pieces detached through disassembly could be correctly regrouped with the masks to which they properly belonged.

In May 2003, the Tunghak masks were transferred from the storage units of the NMNH to the laboratories of the Smithsonian Center for Materials Research and Education (SCMRE), where they received conservation and restoration treatment. The treatment report will be available as dissertation project.

To prepare for the treatment of both masks, the materials and techniques of manufacture were analyzed to gather technical information that served as the background for optimal conservation and restoration. The pigments and binders used, as well as the paint application, are
still under investigation and the analytical results will be published. This new set of analytical data, derived from objects of a generally known age and origin, will support and add to the information available, and it will also serve as a reference for future studies of objects from the Arctic region.

Because the masks are important representations of the Yup’ik culture, one main goal of this project was to reassemble the masks correctly and restore them as closely as possible to their original condition.

The 1878 ledger drawings of the masks and the 1899 illustration of mask 33118 in Nelson’s monograph helped guide our understanding of the relationship between the detached parts and the original masks. However, a comparison between the masks and the drawings suggests that the masks were already partly disassembled when the drawings were made. The masks are shown differently than they actually exist, and they are shown with parts attached in ways that cannot be logically duplicated, due to a lack of appropriate joinery (dowels, holes, etc.). By matching the broken dowels in both the detached pieces and the masks, most of the pieces could be relocated in their original positions.

Before considering the reconstruction of missing parts, substantial time was spent looking through the Arctic storage units. These units contain boxes with a collection of various single or broken parts of unknown origin. An additional fifteen pieces (bearing the original Nelson field numbers, or matching broken dowels on the masks), have been found in NMNH storage units.

Five pieces were relocated for mask 33118: the center caribou on the forehead (which was shown missing in the illustration of 1899), two teeth and two wooden sticks for attaching the side bars. The mask is now almost complete. A few teeth, seal flippers, caribou legs, and antlers remain missing, as well as unknown parts indicated by three broken dowels in the chin region.

Ten pieces were relocated for mask 33119: three seals, two labrets and five pieces of bent wood. We are still missing a few of the mask’s teeth, some seal flippers, and another element belonging to the forehead region, which is presumably another carved seal. Lost mask parts were reconstructed by comparison of the masks to existing drawings and photographs. Due to the symmetry of the objects, additional information about missing parts was obtained through the examination of the opposite sides of the masks. The replacements were carved from wood and inpainted using dry pigments and water colors. Each inpainted replacement carving was marked on its back in pencil with the date of its creation (2003). Like the original parts, they were carved with an end shaped into a dowel or re-doweled and inserted mechanically into already existing drilled holes.

For mask 33118 three teeth, one eyebrow peg, two seal flippers and eight caribou antlers were carved. All disassembled, relocated and reconstructed parts were assembled with the mask. In addition, missing feathers were replaced with new swan feathers. The conservation and restoration treatment of this mask is now complete.

For mask 33119 the conservation and restoration treatment is almost complete. So far, one eyebrow peg, seven teeth and six seal flippers have been carved. There are still a few flippers and the seal of the forehead to be made. In addition, the appropriate locations for four pieces of bent wood belonging to the mask are still unknown.

The conservation and restoration treatment has greatly changed the overall appearance of the two masks. Through the relocation and reconstruction of their missing parts, and their reassembly, the two Tunghak masks are now closer again to their original impressive and powerful appearance.