The Conservation Process: Revitalizing a Collection of Hand Fans

One of the most important and largest collections of historic fans in Mexico belongs to the National Museum of History (NMH) in Mexico City. It has about 225 extraordinary pieces made up of different materials such as carved ivory, mother of pearl, tortoiseshell, wood, bone and silver for the sticks; and silk, vellum, lace and paper for the leaf. These luxury items were an essential part of Mexican female fashion from the 17th to the beginning of the 20th century, in which the use of the fans was almost exclusive to the elite society. Through these items, the wealthy could acquire precious and exotic materials from all over the world, mainly due to the strategic geographical position of Mexico (acting as a bridge between Europe and Orient) and its world famous silver abundance [1]. Therefore, Mexican aristocratic women would be expected to exhibit their expensive fans from China, Japan, Spain, France, Italy or Germany in many social and recreational activities, as a key element of the female clothing and visual language. Consequently, the collection of hand fans is an artistic and historic treasure from the past worthy to be studied and conserved.

1. First Stage Safekeeping

The earliest recollection of the fan collection of the NMH dates back to 1954, the year in which the museum’s depositories were built and equipped with rudimentary heating and drawers [a]. At this point in time, the fans were wrapped in tissue paper and lacked an inventory number, which left them practically unprotected [b].

Fortunately, in the year 2000 the situation changed dramatically. The NMH underwent a renovation process that involved giving the depository proper conditions for safekeeping cultural heritage. For the collection of hand fans this was the perfect opportunity to come to life by catching the attention of the museum personnel as they realized its value. As a result, each fan was given an inventory number and they were classified by material. Furthermore, industrial designers designed special modular cases for them with conservation appropriate materials in order to facilitate consulting with the least possible manipulation [c]. This contribution had three positive results:

a) Conservation: each fan is now kept in a separate slot covered by Tyvek® which was made to the particular shape of each object avoiding diffusion and providing stability.

b) Control: the cases have a Hygrometrics® which provide perfect visibility of the fans and each one is numbered.

2) Functionality: researchers can view the fans without directly having to touch nor open each one avoiding unnecessary deterioration and making the collection an easy one to study or exhibit.

The relevance of this stage resides in the effect of organizing. The Collection of Fans went from ad hoc to constant attention set by providing them with dignified storage conditions. As a result, the collection is even more valued and thus conserved.

2. Second Stage Conservation

For this stage it was decided that before intervening the collection it was necessary to classify the fans according to their material condition. For this, an indicator method was devised and it consisted in placing adhesive bands beside each inventory number with red, yellow, green, blue following the type of a traffic light. That is, green for the stable ones, yellow for careful handling and red to indicate a critical condition and thus the need for urgent restoration [1].

Once classified, emergency treatments were done in those fans that had red stickers. Those processes mainly dealt with the structural damage. They included the realignment of the sticks, adhesion of fragments, and replacement of structural elements like the ribbon that connects the sticks as shown in the picture below [d].

Additionally, many of them were cleaned with a soft bristle brush to eliminate the dust and in some cases, acetone was used for the elimination of tags and adhesive laces. This stage is the direct consequence of the first one and the reason for the third one. It attention had not been drawn to the collection, the authors of this paper would not have participated in the conservation of the most delicate fans.

3. Third Stage Restoration

The piece that was chosen to be restored is made up of mother of pearl sticks and a paper leaf decorated with a lithographic print; this graphic technique allowed during the fan to the 19th century.

The principal problems of the fan were structural: Mainly, the creases on the paper leaf and some of the sticks broke leaving a fragmented fan [e]. With the above considered, two problems had to be solved:

1) Stability: had to be restored in order to retain the fan its functionality as a museum piece.

2) Aesthetically, the fan was altered because of the dirt, the missing leaf pieces and the broken sequences of the image.

Restoration

To solve the fragmentation and stiffness of the leaf, Japanese paper reinforcements were placed with Tsubaki® because it provides sufficient adhesion plus it has been proven to return some flexibility to the paper.

Secondly, the broken sticks were joined with cyanoacrylate and a plastic reinforcement was glued with Mangla® to the back of the sticks. Finally, paper integrations were made and later retouched [f].

A new special case was designed to both exhibit and store the fan in an open position. This advance in the storage conditions concurs with the conservation of the fans in that it eliminates the need to open and close them each time they need to be consulted. For this reason, the case designed will be the model for the rest of the collection. It is worthwhile mentioning the disposition of the museum personnel to frequent improvement especially if it concerns the collection of cultural heritage.

This last step in the process of revitalizing the collection is just an example of how a museum object which was once forgotten is now restored and ready to be placed in front of a public that can appreciate its cultural and artistic values.

Tzauhtli

an adhesive obtained from the orchids

The word tzauhtli was given by the Aztecs to the mucilage with adhesive properties extracted from the pseudo-bulbs of certain species of orchids. This was used in Mexico during Prehispanic and Colonial times for the elaboration of handicraft objects such as featherwork mosaic, corn stalk paste sculptures, amate paper and as a binder for local painting techniques [2].

Through careful observation and analytical studies made on some Mexican pieces of 15th century featherwork mosaic, it has been demonstrated that this adhesive has a number of interesting properties: (1) It is a transparent and flexible film resistant to ageing; (2) It is soluble in water and easily re-covers its adhesive properties when moisturized; (3) It does not form harmful deteriorating products; (4) It has neutral pH; (5) It does not affect the appearance of the support [3].

Due to these suitable properties, a method to extract the mucilage from the orchid has been developed following written and depicted Colonial sources [5]. The adhesive obtained has proved very efficient for consolidating and fixing deteriorated silk and thus the experimental process is strongest in regard to textile conservation.

References