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Some Remarks on the Conservation and the Exhibition of Ethnographic Leather

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Introduction

Every ethnographic object has its own life we can schematize along a temporal axis with a starting point corresponding to the time of the manufacturing of the object. Along this axis it is possible to locate two full stops and several variables. The two constants are: the pre-existent conditions of the artifact before its arrival to the museum’s collection and its present condition and location. As the first constant divides the temporal axis in two parts we can imagine two different lives of an ethnographic object: the former in the place of origin and the latter in a private or public collection.

Sometimes the position of the first constant along the axis changes from case to case and often it can be coincident with the manufacturing itself because a considerable part of these objects, as we know, were ordered by explorers or missionaries. As these objects were not made to be used but to be taken from their place of origin to end up in a private collection or museum, they have a different value from those that were made to be used. As well as conceptual differences, real ones such as the lack of signs of wear and tear and possible changes in the normal aboriginal manufacture occur.

On the contrary the variables could have resulted from moving the objects from their original location to their present one or from the methods used in their preservation. This last variable is often lacking as a lot of specimens of Italian ethnographic collections are still in packing cases or resting on some shelf, table or frequently on the floor in a sort of limbo. Some of these variables could be already present in the first life of an object. The example of the harness belonging to the Pigorini National Museum is peculiar for its original repairs. Damask cloth covering the saddle had a strange patch in the middle made of a similar damask. This patch was an aboriginal repair to hide the underlying shabby part before the harness was to be given as a present to the King of Italy, Vittorio Emanuele III. However this is a singular case as generally, the artifacts that we have conserved, have been used as in the case of a quiver with a hunter-pouch coming from Somalia. This object showed obvious signs of wear and inside the pouch were still to be found organic remnants, like feathers, berries and vegetal fibres. On the other hand a pair of kabu (feminine sandals) could be the result of a specific request as they do not show any sign of wear.

In the second life of the ethnographic object, starting from its arrival in Italy, the situation grows more complex (Fig. 1): we can presume six routes in which each of them has two moving variables, exposition and storage. In the first two examples the situation is simple as the object has always been exhibited or it has not. In the other hypothesis these two variables alternate and can move along the temporal axis. However this temporal axis related to the object’s life is something of an ideal, it is the goal we have to reach before conserving or restoring. In fact a typical situation corresponds to a broken line with several gaps as the information on constants and variables is often incomplete. Unfortunately both carelessness and thoughtlessness may occur in a chain of events causing a loss of data. In order to have a complete picture on ethnographic objects we have to consider all of these points because the presence of a gap along this axis would prevent a complete understanding of the condition of the artifact.

We must fill these gaps using all the suggestions at our disposal as every kind of written information, former or present, any visual evidence (drawings and photos) belonging to the museum or related to other collections and last but not least the so called oral tradition reported from the curators themselves. Collecting this data before starting treatments, enables us to operate in the best way possible as we know everything about the object.

Two different situations of ethnographic collections: central, or the Pigorini National Museum of Rome and peripherical, or the Ferrandi Civic Collection of Novara.
The Pigorini National Museum is carrying out its plan for the new exposition of its collections. This plan follows a technical filing and a preventive conservation on artifacts started in the ‘80s and still in progress [1]. A part of these artifacts came from previous expositions and a part was still in storage. The entire project is coordinated and executed by the museum’s staff with a contribution during the last years of private conservators. The technical filing emphasized the condition of the artifacts and enabled us to establish a plan of priority in the conservative treatments. We identified traces of pests, so reducing deterioration factors. On the other hand the preventive conservation of the objects in the Novara Civic Collection was an attempt to repeat, in a different way, a similar experience restricted to African artifacts, in particular from Somalia, and noted by the National Museum’s curators.

The damages we have found in the objects are due to wrong exposition or incorrect storage. The leather conditions of the specimens belonging to the Ferrandì Collection were not so disastrous. Generally there was a medium stiffness of the skins and many of them were covered with a thick sedimentary layer of dust. The leather conditions got worse where particularly mechanical damage was connected with the objects’ exposition. Leather shields were hanging on the wall by means of metal wires driven in the edges while the sandal labels were brutally attached to their inner soles. Moreover many leathers were covered by a kind of varnish irrelevant to the object as in the case of a leather pillow-case; the varnish made both pattern and colours illegible. Thanks to the oral tradition of the curators themselves we knew that it had been over-zealous action of custodians doing their duty. These coverings were easily removed by an organic solvent.

In other specimens the mechanical damage was the result of clumsy handling which occurred during the removal from the old exposition to the present temporary storage.

In a container made of pumpkin the tape bearing the name of Gondrand, the haulage contractor, was still visible screening a split in the rind. In other African objects of the Pigorini Museum, we noticed a series of damages due to exposition, in fairly sound leathers. A wrong support with evident tensions caused the considerable deformation of a lion skin mantle lined with satin. The fabric’s abrasion along the edge of a shield was due to rubbing on something hard in the past, maybe a shelf.

The situation got worse in ethnographic Eskimo objects. Semi-tanned leathers are usually weaker than the fully tanned ones and they need more particular care to protect them from the effects of pollution and leather pests. The poor durability of this kind of skin increases the seriousness of the damage caused by mistakes in exposition or in storage. An Eskimo coat, according to the museum’s card, has suffered several damages due to pest attacks, heavy disinfection, unusual dressings and storage without any proper support. Every one of these factors has caused a fast biodeterioration visible in the hood’s splits and in the considerable thinning of the sleeves.

In many cases irreversible damage to ethnographic objects, made wholly or partly of leather, occur more often from the type of support they received during expositions than from the softening agents and the repair materials used to reshape and to strengthen them.

Case Study: Inuit Parka

In preparation for the permanent exhibition ‘America’ at the Pigorini National Museum of Rome, an Inuit parka was chosen to be displayed on a support simultaneously constructed to the conservation work.

This artifact, belonging to the Angmangsalik culture, has a long life or a long temporal axis because it was already described and illustrated in the 1667, as we know from the museum’s card, on the Breve Descrizione del Museo Cospi.

Condition

The overall condition of the parka as received was fair. In particular we found out four levels of condition: good for the back prolongation, medium for sleeves and body, poor for the shoulders and bad for the hood called Amaut in Inuit language. Every level corresponded to a different thinning of the sealskin. For example: a good consistence of the back prolongation corresponded on the front side to a progressive thinning upwards; the sleeves with regard to the body were much thinner and stiffer; the top of the hood had reached a dangerous pergameneous consistence.
Traces of old pests were visible from the small and the medium holes on overall checking, particularly on shoulders and hood. A loosening of seams with loss of the sinew threads had occurred on the sleeves, hood and in the upper part of the breast. Previous conservative treatments had replaced the lost sinew threads with white cotton yarn so that they joined the various parts of the hood and the neck. This treatment, even if questionable from an aesthetic point of view, has avoided the risk of losing important fragments. A serious tear of the right sleeve was the consequence of of wrong exposition or clumsy handling. The Pigorini’s example is very symptomatic. The different colours of the parka sealskin are due to several reasons: the manufacturing itself, the ageing and last but not least the previous tests of dressings with olein emulsion soap as mentioned on old museum cards.

Conservation

The goal of the restoration was the conservation of the artifact and its exhibition on a specially constructed support. On account of the condition and since the shoulders and the hood, in an exhibition on a support, should be stretched a under their weight, we decided to reinforce the weakened areas with a consolidating support with the exception of the back prolongation. The steps of the restoration were, in summary:
- softening and turning the parka inside out
- consolidating support
- integrations and seams
- lining.

Softening and Reshaping

Several leather treatments normally used were tested to determine which method would soften the sealskin and maintain the original appearance without darkening. Both the incorporation of olein soap in emulsion form [2] and the impregnation with humectant [3] do achieve a softening, but in our specimen these methods really changed the surface appearance contrary to previous literature [4].

It is to be pointed out that the subjection to high humidity did not change the color of the sealskin [5] but did not soften it sufficiently to be able to turn it inside out.

Based on this experimental data, sorbitol was chosen as the softening and reshaping agent in our specimen which was particularly dried, quite crushed and light coloured.

According to Stambolov’s experiments [6] and after Sturan [7], on objects of the same nature, we slightly modified her recipe and the solution of 1.5% sorbitol, ethanol:water, 1:1 to which several drops of Preventol® were added, was satisfactory.

Consolidating Support

A variety of materials are used to support weakened areas. We tested new leather, silk crepeline, nylon net and nonwoven fabric [8]. Silk crepeline and nylon net proved to have no sufficient mechanical strength and in addition to this the nylon net became very stiff when treated. On the other hand the use of new leather and nonwoven fabric involved an high increase in thickness to obtain a satisfactory resistance to the mechanical traction. An alternative supporting material was tested with good result in this specific case i.e. the Stabiltex® 4/3. Stabiltex® is a polyester multi filament cloth used for textile preservation work as a support fabric with stitching and adhesive techniques. It is heat set, not finished and available in different grades. Stabiltex® 4/3 is a fine plain weave where number 3 is the color indicator, it has a good resistance to mechanical tractions at a minimal thickness.

Choice of Adhesives

The adhesive had to satisfy the following requirements: retention of the appearance and character of the skin; reversibility in accordance with the directions of the Museum. Generally, leather objects have been treated with a variety of adhesive including: vegetal glues [9], animal glues [10], polyvinyl acetate, epoxy resins [11] and so on. However leathers and skins, in the case of ethnographic objects, are so variable that the effect of an adhesive is not consistent from one artifact to another. Excluding the epoxy resins for ethical reasons, although they are sometimes used, and the vegetal and animal glues because they are subject to attacks by insects, we chose polyvinyl acetate after negative tests with acrylic resins.
In particular we selected three PVA emulsions (Neovil R, AB 52 and BM 400). After visual results the first of these was chosen. Neovil R is a viscous, quick-drying polyvinyl acetate emulsion with a slightly acid pH, a low penetration and a higher flexibility than the other two tested (AB 52 and BM 400).

**Supporting**

Prior to any operation a full size scale plot of all the parts forming the parka was done with the exception of the back prolongation. Every single part was numbered, transferred onto tissue-paper and then onto Stabiltex®.

As in dressmaking each part was left projecting some 2 centimeters beyond the perimeter of the tissue-paper patterns. The adhesive was spread on the flesh side of every single ‘tessera’ (one of the parts forming the parka) and an equally spare layer of adhesive was spread on the corresponding Stabiltex® part and pressed onto the artifact.

The orthogonal grid of Stabiltex®, in this case, enabled us to spread the emulsion equally and sparingly and also to check the surface and to remove an eventual surplus of adhesive. The stages were conducted step by step in a humid chamber (70% RH) keeping the artifact softness under control in order to turn it back again.

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Fig. 1. **Support for the parka: a schematic mannequin made of stainless steel wires; progressive stage of the support with its basic parts.**
The large tears were mended with leather and the loose seams were replaced with silk thread. The use of silk reduced the stress in the original holes avoiding their breaking.

**The support**

The research into and the manufacture of a suitable support were conducted simultaneously to the conservation work. This approach was already employed in two cases, similar in brittleness but different in culture, period and material: the wig of Merit [12] and the sandals of the Queen Nefertari both dating from the New Kingdom, Ancient Egypt and conserved in the Egyptian Museum of Turin. The supports are based on the fundamental idea of a grid. The use of reticular typology supplied several supporting points to most parts of the artifact. Every line or point is necessary to sustain and sometimes to fix individual parts of an object. It was the case of the archaeological finds above-mentioned, for example, where every single braid or many fragile parts of the vegetal fibre needed systematic anchorage. Moreover the reticular typology can be changed on every moment, as occasion may require, or altered because its structure is composed by moving complex curves like meridians and parallels. Our intent was to achieve a shape keeping to the internal form of the parka, avoiding dangerous creases to the skin and allowing a good exposition without being intrusive or conspicuous.

The support is a sort of a schematic mannequin (Fig. 1): it is not formed with closed volumes fitted together as those used in costume collections or in dressmaking but it is formed with open volumes made of thin metal wires. The parka’s lightness and frailty made it necessary to resort to an easily workable material i.e. an harmonic stainless steel (18/8-1.5/3/8 mm ø). Information about the anthropometric study on the Inuit was supplied by the collection’s curator. It was the starting point for plotting the specimen. Realization was improved by the progressive work of moulding the support. When necessary it was possible to change simultaneously from the practical execution on the model to the full-size scale drawing. All the crossings have been fixed by micro-soldering.

**Conclusion**

In Italy the recognition of the ethnographic collections is a comparatively modern event. These collections have often been viewed as a sort of Wunderkammer: a place where a collection of heterogenous objects, often unusual, and unfortunately was treated with no particular attention because of their strangeness. So the museum life of these artifacts can be long, complex and subjected to mishaps and deterioration along the way. Conservation work, when necessary, can start when the objects are recognized in their own specificity as an aboriginal work of art or as an expression of material culture. A philological research settling the efficacy of every object and a scientific one testing the material condition have to be prior and basic to the conservation work. Moreover the recognition of the physical state of the object is connected with that of its placing in space. Conservation in its entirety must include the preservation of the materials from which an object is made, the way in which it is exhibited and the surroundings in which it is exhibited in order for it to give maximum enjoyment. In tridimensional objects the conservation should be carried out when necessary with the use of a support that is able to convalidate the position of the object in space.

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**References**


10. Stambolov, T., op. cit., 62


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**Materials and Suppliers**

Sorbitol: Ardet Trading, via Vittoria 32, 10100 Torino

Neovil: Bielli, Via Catania 39, 10100 Torino

Preventol: Bayer Italia SpA, Viale Certosa 126/1 30, 20156 Milano

Stabiltext®: S.S. Zurich do Ballerini, Via Edison 193/1 95, 20019 Settimo Milanese (Milano)

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