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Conservation and restoration work carried out in the Conservation and Restoration Workshops of the Ethnographic Museum in Zagreb in 2016

The text presents the conservation and restoration work carried out on some objects from the textile collections of the Museum in 2016. Restoration involves a lower share of work based mainly on preventive conservation carried out in the Textile Restoration and Conservation Workshop.¹ The conservation and restoration operations described below were presented on posters at the Eighth Meetings of the Restorator and Conservator Section of the Croatian Museum Society.²

This year the report also includes contributions of the Wood, Ceramics and Metal Restoration & Preparation Workshop and the description of operations carried out over several years which were also presented at the Meetings of the Restorator and Preparator Section.

By the end of October 11 objects were restored, while 4637 objects underwent preventive conservation. The Workshop was a part of the review commissions for ten collections, and it was involved in the technical realization of the planned exhibitions.

² The Meetings, hosted by the Sisak City Museum, were held on 5 and 6 May 2016.

CONSERVATION & RESTORATION OF MAN'S BELT (ET 17304)

Procedure carried out by

Jasminka Vujićić, Senior Preparator

Object data

Collection: Collection of National Costumes of Coastal

Croatia

Type of object: man's belt

Date: first half of the 20th century

Locality: Popovići, Konavle

Dimensions: 246 cm long by 66 cm wide

Material: flax and home-made silk

Object description

The Traditional man's belt from the Collection of National Costumes of Coastal Croatia is made of natural colour home-made flax and silk dyed with madder root, double woven manually.

Description of object condition before restoration

The belt arrived in the Museum in the mid-20th century in very poor condition, most probably because of frequent use. Along with mechanical damage and dirt, corrosion stains are also visible.

Conservation & restoration work

The fibers were analyzed after the detailed examination of the damage. Flax fibers and home-made silk threads were discovered on sample microshots. Because of the unstable silk thread dye, the belt was thoroughly cleaned with a restoration vacuum cleaner. The relaxation procedure followed. Restoration began by placing the belt on an adequately dyed silk *crepeline* support. The damaged spots were closed with a restoration silk thread stitch. After the work was completed the belt was placed in an acid-free box and returned to the storeroom of the Collection of National Costumes of Coastal Croatia.

PREVENTIVE PROTECTION OF PEASANT WOMAN'S SHIRT (ET 5135 A)

Procedure carried out by

Ljiljana Vilus Japec, Senior Preparator

Object data

Collection: National Costumes of Central Croatia

Object name: (short) peasant woman's shirt

Date: late 19th century

Locality: Gušće, Sisak

Dimensions: 43 cm wide by 28 cm long

Material: flax, cotton

Object description

The woman's dress (Inv. No. 5135) on the mannequin in the permanent display of the Ethnographic Museum is part of working clothes worn by girls in the field. It was bought for the Museum on Kaptol Square on 17 February 1926. It comes from the village of Gušće near Sisak and it was used in the late 19th century.

The non-tailored *opleće* is made of home-made plain weave cloth. The front consists of two linen *halves*,³ plaited in vertical folds 4 mm wide. The *opleće* is buttoned in front. The back consists of one *half*, and it is folded just like the front. Both the back and the front are joined in a narrow hem, *ošvica*. The sleeves are made of one and a half linen *half*, folded on the neck and fixed into a neck hem (*ošvica*); on the wrist they are tied by a ribbon drawn through loops; a rectangular piece of cloth, *latica*, is inserted under the armpit.

Description of object condition before restoration

The woman's costume has been exhibited in a showcase of the permanent Museum display since 1972, and wet cleaned on several occasions. The shirt is dusty, and there is no visible damage on warp and weft threads.

In the past village women washed their laundry by bucking it in a bucking-tub (*parenica*), then rubbed it and rinsed in the stream. The women prepared lye from sifted ashes. The laundry was not dried completely but left wet, and individual parts were stretched flat on a level surface and folded into small folds. They were

³ Single-width cloth.

folded by folding and ironing fold after fold, beating the folded part with a small stone; finally, all the folds were weighted by a heavy tub with a large rock on top.

Conservation & restoration work

After photographing and microscopic fibre analysis⁴, the shirt was wet cleaned in a neutral detergent (*Orvus Textile WA Paste*) and water bath. It was rinsed in distilled water baths, laid horizontally and dried. After drying, the cloth was folded. The shirt was laid on a level surface and covered with several layers of cotton fabric. The parts to be folded were soaked in distilled water and the folds pleated by fingers along the cloth threads from the neck hem (*ošvica*) downwards. The part to be folded was covered with cotton cloth, weighted with stainless steel weights and left to dry. The sleeves were straightened by ironing.

The chest and the sleeves of the display mannequin are lined with padding in order to get the appropriate body form and covered with acid-free *Avos*. The mannequin was dressed and returned to its showcase in the permanent Museum display.

CONSERVATION & RESTORATION OF SMALL CAP, HOLUBINKA (2/3241)

Procedure carried out by

Marijana Najjar, Senior Preparator

Object data

Collection: Collection of Nat. Cost. of the Peoples of Europe

Object name: small cap
Name: holubinka
Date: 16th century
Locality: Bohemia

Material: metal threads, linen, silk
Technique: relief gold embroidery

Ornament: floral

⁴ In central Croatia flax was mainly used for producing textile; the peasants grew and processed it themselves. Fiber analysis confirmed flax.

Object description

The Czech *holubinka* cap originates from the 16th century. It is made of relief gold embroidery with a linen lining, while the inner brim is trimmed with pillow lace. In the middle of the back part there is a silk ribbon tied into a bow.

Description of as-found condition

The condition of the cap is good, but dust and dirt settled on the object owing to unfavourable climate conditions and inadequate storage in the storeroom. Because of the sensitive linen lace and silk ribbon fibres there was visible damage in the form of smaller and larger holes and cracks.

CONSERVATION & RESTORATION WORK

Documentation

Detailed photo documentation was applied before, during and after the operations. The silk bow was removed from the cap along with all traces of previous interventions.

Dry cleaning, wet cleaning and relaxing

After the stability of the silver ribbon dye was tested, it was not possible to employ wet cleaning, and the ribbon, cap and lining were accordingly dry cleaned with a restoration vacuum cleaner. The pillow lace on the inner side of the brim was wet cleaned in a mild neutral *Restore Detergent* and distilled water solution by light sponge tapping in order to dissolve the dirt and let blotting paper absorb it. It was then rinsed in the same way with distilled water, and dried and relaxed in the air.

Consolidation and closing of damage

The silk ribbon, 15cm long by 8 cm wide, in natural silk colour with a green-yellowish floral pattern was plain-woven with a warp density of 34 threads/cm and a weft density of 24 threads/cm. After the separation of the silk ribbon from the cap and relaxation, it was pasted on naturally coloured silk treated with a 1:4 solution of *Mowilith DMC* adhesive and distilled water. The damaged spots were then closed with naturally coloured silk filament (restoration stitch). The silk ribbon was returned to the cap, attached to the main cloth and tided into a bow.

Storage

The cap was stored, in a protective *Avos* slip-on cover, in the storeroom of the Collection of National Costumes of the Peoples of Europe.

CONSERVATION OF PAINTINGS ON SILK (EX 1655, EX 1656, EX 1657, EX 1658)

Procedure carried out by

Mihaela Grčević, Restorer

Object data

Collection: Word Culture Collection

Object type: silk

Date: early 20th century

Locality: Japan

Dimensions: Ex 1655: 93.5 cm by 33.5 cm

Ex 1656: 90.5 cm by 30.5 cm Ex 1657: 91 cm by 33.5 cm Ex 1658: 92 cm by 31.5 cm

Material: silk, tempera

The Japanese paintings of silk (Ex 1655, Ex 1656, Ex 1657, Ex 1658) were purchased in 1937 for the World Culture Collection from Mr. Marko Anić. They show human figures in traditional Japanese clothing painted with tempera.

Object description

Painting Ex 1655, 93.5 cm by 33.5 cm, shows a female figure in a blue-grey chequered kimono with an *obi* green belt with a stylized white ornament. She wears traditional *geta* or *zori* Japanese footwear. The hair is arranged in a high top knot with inserted jewelry; she holds a closed parasol in her hand.

Painting Ex 1657, 90.5 cm by 305 cm, shows a male figure in semi-profile wearing a brown-blue suit and a blue overcoat. He holds a sword in his left hand; a dagger handle is visible in his belt.

Painting Ex 1657, 91 cm by 33.5 cm, shows a man in profile with prayer beads in his clasped hands; he wears a dark green and purple suit, his head is shaved, and he wears wooden sandals.

Painting Ex 1657, 91 cm by 31.5 cm, shows a man in a long blue and grey dress with a closed fan in his hand and a weapon in his belt.

Description of as-found condition

The paintings are stored in wooden frames with a grey paper and glass passe-partout. There was no preventive protection and because of the unfavourable microclimate in the storeroom of the Collection dust particles settled on the objects. The condition of the paintings is poor, with visible dirt and mechanical damage such as holes and cracks along the rim of the silk, whereas the painted part is well-preserved.

CONSERVATION & RESTORATION WORK

Documentation

The paintings were photographed before, during and after the operation. The cloth and the damage on the cloth were photographed by a *Dino-Lite* digital microscope; the fibers were analyzed microscopically and the damage on the objects was recorded graphically.

Object cleaning

The objects were cleaned mechanically with a powdered restoration eraser and dry cleaned with a restoration vacuum cleaner.

Consolidation and closing of damaged parts

Since the objects involved are paintings on silk, they were consolidated by ironing on a new support. Silk crepeline was used, treated with a 1:4 solution of *Mowilith DM C2qw* adhesive and distilled water. Along with the consolidation by gluing onto a new support the damaged spots were closed with silk filament (restoration stitch).

Storage

After the work was completed the objects were placed in an acid-free cardboard album and stored in the storeroom of the World Culture Collection.

CONSERVATION & RESTORATION OF IVORY HORN (EX 216)

Procedure carried out by

Marko Gašparić, Restorer

Object data

Collection: World Culture Collection

Object type: horn

Date: unknown
Locality: Congo
Dimensions: 187 cm
Material: ivory

The upper and the lower part of the object are cracked. The crack in the upper part stretches perpendicularly to the object, and the upper part, i.e., the tip, is completely separated from the object; the lower crack stretches parallelly to the object, cuts it across two-thirds of its length and turns spirally to the centre of the horn.

The restoration started in the upper part of the horn by drilling holes for dowel anchorage in the upper and lower part. The metal dowels were inserted into the holes and the connected parts were glued with epoxy resin. Part of the form was missing at the point of fracture, requiring reconstruction performed with epoxy resin, dye and a filler. After drying the form was processed and patinated into the almost original condition.

The lower part was restored by placing wooden bobbins inside the horn perpendicularly to the crack; they were pressed in the form of the curved horn, i.e., the original position. The inside was reinforced and glued with epoxy resin and filler. The last resin layer was dyed to resemble the original, but with a slight difference in order to detect new damage.

CONSERVATION & RESTORATION OF ROUNDABOUT WITH HARES (ET 2575)

Procedure carried out by

Marko Gašparić, Restorer

Object data

Collection: Pottery collection

Object type: roundabout with hares

Date: 1923

Locality: Jerovec

Dimensions: height 20 cm, diameter 14.3 cm

Material: clay, glaze

The ceramic sculpture is a composition of 5 hares/instrument players combined into a whole. Ears were missing on four hares, a leg on one, and the seat on one. The missing parts were not found and reconstruction was required at all fracture points.

The reconstruction started by drilling holes, used to anchor metal dowels, at all fracture points. The holes were drilled at points where the ears protrude, in the leg, in the fist and in the neck of the instruments. After anchorage, the modelling of the missing forms started in several runs until a mass required for moulding into the wanted form was obtained. After the grinding of the form and modelling, the reconstructed parts were patinated with watercolours in the same colour and tone used on these spots. The patina was impregnated with shellac. After the successful reconstruction of the missing parts and patination the object was assembled into the whole original form. Epoxy resin was used as a binder. After completion, the objects was polished and protected with restoration *Renaissance Wax*.

CONSERVATION & RESTORATION OF WAX DOLL (EX 1468)

Procedure carried out by

Marko Gašparić, Restorer

Object data

Collection: World Culture Collection

Object type: female figure

Date: 20th century

Location: Java

Dimensions: 46 cm high Material: wax, textile

The arm of the doll was broken. The restoration started by drilling the object on both sides of the fracture and the anchoring of a wooden dowel because of the property of the material (wax). After the drilling of the holes for the dowels,

the wax taken from these holes was used for the final form on the work at the point of fracture. After restoration the doll was cleaned with a moist cloth and polished with restoration wax.

CONSERVATION & RESTORATION OF CERAMIC BOWL (ET 15447)

Procedure carried out by

Marko Gašparić, Restorer

Object data

Collection: Pottery Collection

Object type: pot

Date: 20th century

Locality: Jerovec

Dimensions: 11 cm high, diameter 15.5 cm

Material: ceramics

The object was broken into four parts; smaller pieces were missing. During pasting the form had to be retouched. Restoration began with the pasting of the chipped-off parts to the base of the object. After all the existing parts were connected into a whole, the small cracks along the rim were retouched with modelling mass: the rim was restored with modelling clay and, after drying, processed into the original form. The final part of the restoration process, patination, was performed with acrylate reinforced watercolour.