Zusammenfassung


Key words: Stupica, Tempera, Bild, Transparentpapier

Introduction

At the start of 2019, the Book and Paper Conservation Centre of the Archives of the Republic of Slovenia in collaboration with the Moderna galerija/Museum of Modern Art in Ljubljana restored a severely damaged painting by Gabrijel Stupica, titled Žena v belem/Woman in White (97 × 62 cm). Owned by a private collector, the painting is one of the sketches Stupica made for his series Neveste/The Brides, around 1975, using tempera on tracing paper. The painting is double-sided; on recto there is an image of a woman, and on verso, a drawing in pencil (Fig. 1).

Outline of the problem

In modern art, the material most often conveys the artistic idea and is, as such, technologically interesting, making preservation of the material structure an essential element that complements the whole. Stupica’s work of art is a typical open work – the artistic technology co-defines the significance of the artwork, posing the question of how the artist was even able to achieve a certain complex visual effect, optical impression, technological perfection, material play, or figurative composition. Stupica followed his unique inner creative purpose and managed to accomplish it to a
The painting discussed here shows no visible stages of development: what we see is the final image condensing the painter’s intentions.

The drawing/sketch “moves” over the tracing paper, which is used as the support and which exposes various time sections in the creative process. By doing so, it offers us an insight into a particular stage of the creative process and in what follows that stage, when the artist paints over surfaces already painted on, enriching them with a brushstroke, leaving unpainted areas (the bouquet is not painted or collaged), disintegrating them in various ways and overpainting them, all of which indicates his artistic idiom.

Inappropriate past storage has led to considerable damage to the paper support, leaving it torn, warped, and wrinkled. The stiffness and mechanical sensitivity of the paper support is also the reason for its numerous cracks, wrinkles and fold marks, long tears, and missing parts. Due to complex mechanical and chemical damage, the conservation treatment was challenging and made further complicated by poorly preserved layers of degradable paint.

To achieve translucence in paper, fibres in cellulose pulp are mechanically disintegrated (defibrillated), or the pulp is chemically treated. Tracing paper made by disintegrating fibres is mechanically more durable than that produced with chemical treatment, since the latter accelerates the degradation of cellulose fibres and makes paper more fragile and brittle.1 Tracing paper has many subtypes that all share a sensitivity to humidity, especially water, which causes permanent deformation – warping.2

Flattening warped surfaces and repairing tears and missing parts are the most challenging processes of conserving and restoring tracing paper, because they require humidity, which, however, has to be minimal to prevent additional warping. The diversity of tracing papers makes their restoration quite complex, which is why we always conduct preliminary testing of the support to establish the behaviour and compatibility of the materials that are to be used in the conservation treatment to strengthen the support and to replace its missing parts. In our case, Japanese paper was used for repairing the

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tears and filling in the missing areas on account of its semi-translucence and strength.

**Assessing the condition of The Woman in White**

The examination of the painting before the restoration treatment revealed that analyses of the binder and the paint layers were required due to the complex painting technology and the poor condition of the painting. We decided to take four samples; two from the front (black and white paint layers) and two from the back (white and yellow stains). The samples were analysed using gas chromatography coupled with mass spectrometry (GC-MS), FTIR and Raman spectroscopy (RS). Based on the obtained FTIR spectra, two pigments were identified: carbon black and zinc white. The analysis of the binder with RS showed the presence of oil and a protein component, which indicates the usage of tempera with the addition of oil. Additionally, GC-MS analysis of the fatty acid composition of the binder showed the presence of linseed oil and egg. The results of the analyses conducted on the samples confirmed our hypothesis about the materials used and helped us decide which materials to use during the conservation procedure to strengthen the paper support and replace the missing parts (Fig. 2).

**Working procedures**

Having completed our examination, we established that the painting was not a complete whole, either from the aesthetic or from the technological points of view. In our case, the traditional method of saving this artwork was the most suitable one. Using a soft brush, we cleaned both sides of our object carefully so as not to cause any additional damage. We deliberately left all the stains and paint layers created by the artist or occurring later on, as they are part of the work’s history. The next step was flattening the numerous wrinkles and fold marks, which was our biggest challenge in restoring the artwork. Damage of this kind is usually repaired by first humidifying wrinkles and then flattening them. Tracing paper, however, is quite sensitive to humidity and, when coming in touch with it, tends to react by developing permanent deformations (warping). The wrinkles in our painting were carefully humidified bit by bit, using a highly absorbent Kanebo® sponge, which helped control the amount of humidity used. The humidified parts were then flattened under weights. In paper conservation, Japanese paper with long and firm fibres is used. Due to the nature of the damage in our object (very long tears) we used Japanese paper in which fibres run in one direction only. Strips of Japanese paper were placed perpendicularly on a tear, thus “suturing” it. In places where the tears were pasted together, the support was flattened due to local intervention (being left under weights). Although this suggested a possibility for saving (flattening) the entire paper support, such a procedure would be highly risky due to the fragility of the paint layers (attempting to flatten the whole painting by leaving it under weights could lead to additional flaking of paint layers), which is why we decided against flattening the entire painting. The aesthetic aspect of the strip-pasted tears on the artwork is questionable at present, since only the pasted sections are now flattened, while the surrounding areas are quite warped. The support received the first shock when the layer of tempera (containing water) was originally
applied, causing the paper to warp. Through the years, the material became fragile and inappropriate storage only caused its further deterioration.

When adding the missing parts, we consistently followed the principle of minimum intervention and added Japanese paper in such a way as to preserve the original shape of the artwork; the painting is roughly in the shape of a trapeze, and its edges are not straight.

Retouching was done using QoR Watercolor combined with Aquazol® 50, which is a stable system against light-induced ageing (e.g., colour changes), forms a strong and flexible paint film, and has a low health hazard. With these materials, we achieve visual match of the added materials with original ones. In the agreement with results of FTIR analyses, the following pigments were used: carbon black, zinc and titan white (Kremer). This selection of colour technique enables us to produce the desired aesthetic effect.

By using watercolours and matching the brushstroke to the original, we managed to approximate the original chromatically and in terms of texture (Fig. 3).

**Conclusion**

Most of all, however, conservators were challenged to clearly identify and grasp the inner rhythm of Stupica’s creative mood and orientation, and recognize the technical and subject clues, which are neither causal nor rational, but instead follow the innovative whims of the artist’s thought. Perhaps nowadays conservators are turning into modern analysts of artistic procedure in order to be able to “reproduce” in restoration creative techniques that are quite singular and particular only to the painter who produced the painting in a way not to copy or duplicate any already established procedures. Whenever an artist breaks conventional rules and standards of artistic techniques, a conservator also needs to accept such an approach in order to expertly save a damaged work of art.

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