Paintings problem area and purpose of the conservation and restoration

The four paintings were presumably made in the 19th century by unknown artists in the technique of oil on canvas (Picture 1 – 4). They were painted on commercially prepared linen industrial woven canvases. At first sight all four paintings had similar problems to address; deformation of the textile support and yellowed varnish with surface dirt. The goal of conservation-restoration treatment was to restore the paintings aesthetic point of view because they are intended to decorate rooms of the Brdo Castle near Kranj, which holds protocol events of the Republic of Slovenia at the highest level.

Treating deformations

Conservation-restoration intervention began with researching the paintings in detail, then a conservation-restoration plan was set. Examination of the paint cross-section under an optical microscope showed that picture layer is composed of preparatory ground without a size layer, followed by the paint layer and the varnish (Picture 6). After we cleaned the surface dirt and yellowed varnish, we removed the paintings from their stretchers to treat deformations of support and to clean the back of the paintings. We planned to eliminate deformations of support (creases) with combination of pressure, temperature and moistening in vacuum envelope [1] using low-pressure table. During conservation-restoration procedures we noticed that the textile supports were highly sensitive to moisture. Flattening the edges with low amount of water applied with the brush on the edges fold didn’t give adequate results. Any introduction of water, even in minimal quantity and shape, could lead to extreme shrinkage of the canvas and considerable tent shaped picture layers despite pre-performed preventive procedures (Picture 10). That made us to rethink our work approach. For softening the edges the heated spatula was used. Beva 371 film was used for attaching a canvas strips on the edges instead of Lascaux Acrylkleeber 498-20x to eliminate water influence on the support (Picture 7). Solution of Beva 371 was also used for consolidation of flaking picture layer on the edges. For elimination of creases we stretched the paintings on special working frames that can be screwed apart (Picture 9). We treaded creases locally, only with temperature and by weight (Picture 8).

Conclusion

Problems mentioned above probably occurred because of oil-based preparatory system. A large proportion of 19th century recipes of commercially prepared grounds do not include a size layer. Also oil-based ground materials detaches itself when the oil becomes brittle with age [2]. All this is probably the reason for extreme sensitivity to moisture.

References