



Who's Hidden – Art Conservation and Restoration

All art works can deteriorate over time if they are exposed to light, insects, heat, moisture or fungi. Art conservators work to maintain and prevent further damage to an artwork. Art restorators may repair an art piece to try and return it to its original condition.

Canvas was used for painting from the 15th century onwards. Depending on the storage conditions, a canvas may expand and contract with changes in humidity, leading to flaking, cracked or blistered paint.

Sometimes painters reused canvases by painting over them. Art conservators today can see underneath the top layer of paint by using X-rays, infrared and ultraviolet radiation. X-rays are generally used to pass through paints containing heavy metals such as lead. See <http://www.ndt.net/article/v04n12/matsuda/matsuda.htm> for more information.

Infrared and ultraviolet radiation are better for viewing non-metal based paints and carbon based materials such as pencil. This allows art conservators to see what is underneath without doing great damage to the painting.

Other conservation and restoration techniques usually involve chemistry. Alcohol solvents are used to remove dark and discoloured varnishes. Alternatively, the varnish may be cleaned with non ionic detergents or mild solvents. Oil paints undergo chemical change over time and become hard and brittle. Flaking or cracked pieces of paint may be refixed to the canvas using special adhesives. If entire areas are missing, it may be repainted using the artist's techniques and paint texture.