# Art Conservation and Restoration



She is hung on the northwest wall of the Salle des Etats behind a two-inch-thick pane of protective Plexiglas.

- The Da Vinci Code

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#### **Definitions**

 Art Conservation: the process of controlling the conditions in which artwork is kept. Some examples of this include, putting the painting behind a thick panel of glass, controlling the temperature around the piece, or placing the art in an inert atmosphere.

#### **Definitions**

 Art Restoration: The Process of restoring a piece of Art to its original Appearance.



Erminia and the Shepards- 1648 Restored- 2004



www.artsmia.org/restoration-online

## What is a painting?

Paintings actually have 6 layers.

- Varnish and Retouching
- Paint Layer
- Primer or Ground Layer
- Primary support
- Lining Fabric
- Auxiliary Support



#### How Restoration Works:

- The first step is Pigment Analysis.
- Pigment Analysis can be done using several techniques.
- These techniques can be destructive or nondestructive.
- Destructive- Mass spectrometry & gas chromatography
- Non-destructive- X-ray fluorescence spectrometry & Raman spectrometry

#### Treatment:

- 1. The painting is examined and photographed. The treatments are proposed.
- 2. Treatment begins with the removal of dirt, grime, and other accretions from the varnish layer by means of aqueous solutions.
- 3. The back of the painting is cleaned and re-tacked down if needed.

#### Treatment Continued:

- 4. A non-yellowing, stable synthetic resin varnish is applied to the painting.
- 5. Losses in the paint and ground layers are filled and textured to match the surrounding original paint layers. Losses are in-painted with a stable, non-yellowing, non-discoloring synthetic medium.
- 6. A protective backing is placed on the painting and it is reframed.

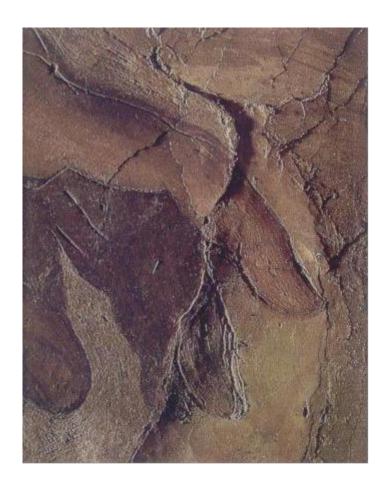
### The Sistine Chapel

- Painted 1508-1512
- Restoration announced by Vatican in 1980.
- This intensive civic project cost the Vatican millions of dollars and twelve years.
- Restoration still debated today.



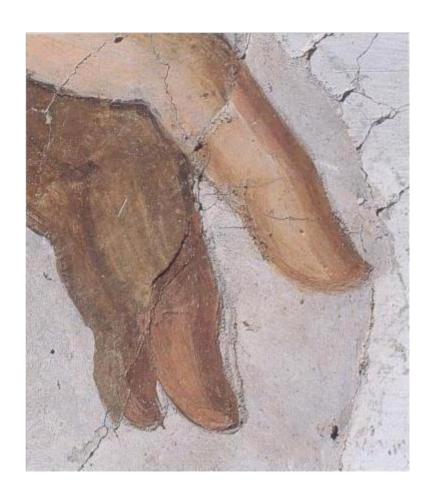
#### **Previous Restorations:**

- Scientists identified two major restorations that had occured: the 1570 Carnevali and the 1710 Mazzuoli. Carnevali's restoration was carried out in almost all fresco while Mazzuoli's was executed in tempera.
- A shift in the foundation caused parts of the fresco to crack.



The Creation of Adam

Restorers filled the crack in with a special type of acid free wax and then proceeded to clean the fresco.



## Why is this important?

- Art Restoration combines art and science.
  - It allows art to be preserved for future generations.
- It allows us to look at cultures of the past.







#### Sources:

- <a href="http://www.artsmia.org/restoration-online/">http://www.artsmia.org/restoration-online/</a>
- <a href="http://www.chemsoc.org/ExemplarChem/entries/2001/esharp/default.htm">http://www.chemsoc.org/ExemplarChem/entries/2001/esharp/default.htm</a>
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