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# CCI Notes

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# 10/7

## Condition Reporting – Paintings. Part II: Examination Techniques and a Checklist

### Introduction

The first step in examining a painting is to determine whether it has any loose, curling, or flaking paint. If there is evidence of paint that is poorly adhered to the surface (e.g., paint that is lifting or peeling), the painting must be placed face-up in a horizontal position for the examination. Unframe the painting only if the paint and ground layers are stable. It is not usually necessary to unframe a work for Inspection Reports or for Cumulative Condition Reports during travelling exhibitions.

Place the painting on a clean, uncluttered work table while unframing or examining it. Cover the work table with a cushioning material, such as thick felt topped with a layer of clear polyester film (Mylar) or other smooth plastic. This will protect the delicate surfaces of the painting and frame from abrasion while both the front and back are being examined.

It is important to work on a smooth surface. If paintings or frames are placed upside down directly on a fibrous material such as felt or cloth, raised areas of paint or plaster may catch in the fibres and be pulled off when the painting or frame is turned or moved. As an alternative to a padded work surface, padded blocks may be used to support the corners

of the frame or painting (see CCI Notes 10/2, *Making Padded Blocks*).

### Examination Tools

The tools required for examining a painting thoroughly and for writing a Condition Report are as follows:

- a photographic floodlight with a 100-watt light bulb
- four padded blocks
- a cloth measuring tape
- a hand magnifier or head-mounted magnifier (e.g., Optivisor)
- pliers and screwdrivers for unframing, as required

Use a pencil for recording information to avoid any accidental markings with ball-point or felt-tip pens.

Generally, paintings should be handled with clean, dry, bare hands. It is preferable to wear cotton gloves when working with gilded frames or unframed paintings with exposed canvas. If the glove fabric may catch, wear plastic gloves.

### Lighting Techniques for Examination

Different aspects of a painting's condition will be revealed under normal, raking, and transmitted light. One or more portable photographic floodlights fitted with normal 100-watt light bulbs can be used for all three techniques.

The 100-watt light bulbs will generally provide adequate illumination and are preferable to stronger lights that may cause appreciable heating of the painting. Even with domestic 100-watt bulbs, take care to avoid overheating the surface under examination. Because radiant heat will not necessarily heat the air between the lamp and the painting, the surface of the area being illuminated should be gently felt periodically. If the surface becomes warm to the touch, the lamp is too close to the painting.

If available, use a fluorescent lamp or a dichroic flood lamp to eliminate the concern of overheating.

**Normal or incident light** is used to assess the general condition of a painting, particularly the presence of surface dirt, discoloured varnish, and cracked or lifting paint.

**Raking light** is achieved by placing a light source to one side of the painting at a low angle to the surface so that the light glances across the painting.

Examination under raking light reveals surface distortions, such as raised paint or undulations in the canvas. The angle of the light can be adjusted to ensure optimum exposure of irregularities. Normally, the painting is placed in a vertical position for this procedure. However, if there are signs of loose paint, the examination may be effectively carried out with the painting in a horizontal position.

**Transmitted light** results from placing the light source behind the painting. With this technique, light is transmitted through cracks, tears, paint losses, and thinly painted areas, thereby making them easier to see.

Examination under transmitted light may be carried out in a darkened room with a single light source placed directly behind the painting. Place a photographic floodlight fitted with a 100-watt bulb no closer than 70 cm from the back of the painting.

Hold the painting or support it on an easel in a vertical position. With this technique, it is especially important to avoid overheating the painting surface. Check the back and front of the painting frequently for heat.

### Specialized Light Sources

Information not readily visible, such as the presence of overpaint or underdrawing, can be detected by using ultraviolet or infrared radiation. Conservators use these specialized examination techniques to look for detailed information about a painting's structure or for previous restoration treatments.

### A Checklist for Examination and Condition Reporting

The following checklist is intended as a guide to the thorough examination of paintings and not as a rigid outline that might limit scrutiny to only those items included on the list. The points are intended as prompts; all will not apply to every painting, and the list does not encompass all possible structures and conditions.

Also refer to CCI Notes 10/11, *Condition Reporting — Paintings. Part III: Glossary of Terms*, for a glossary of terms used to describe paintings.

#### 1. Identification of the Work

Record the following:

- accession number
- artist, title, and date of work
- medium (e.g., oil on canvas, egg tempera on panel)
- dimensions (height before width)
- signature, date (if present), and location (e.g., lower right corner)
- date of examination
- name of person examining the work

#### 2. Paint Layers

##### Description of Material and Application

- What is the paint medium (oil, acrylic, mixed media)?
- How was the paint applied (thinly, thickly)?

- Is there impasto?
- Is there evidence of previous repairs (retouching, overpaint)?

##### Description of Condition

- Are the layers well adhered to each other and to the ground?
- Is there an overall crack pattern or are cracks limited to specific areas?
- Do cracks go through the paint layer only and leave the ground layer intact, or do they go through both the paint and ground layers?
- Are the edges of the cracks rounded or sharp?
- Is the paint lifting or curling anywhere?
- Are there signs of previous paint losses?
- Do paint losses expose the ground layer, the support, or another layer of paint? (Document as follows: "paint loss - paint or ground exposed," "paint loss - canvas exposed," "paint loss - wood exposed," etc.)
- Are there any signs of changes in the paint where the surface has been protected by the frame (e.g., colours darker, lighter, different)?
- Are there any other signs in the image that colours or medium may have changed (fading, yellowing)?

#### 3. Surface Coating

- Can a coating be seen on top of the paint? (This coating is usually a varnish layer, but it may be another material such as wax.)

##### General Description

- Describe the evenness of the application.
- Describe the evenness of the gloss.
- Is the surface coating thickly applied or is it a thin layer?
- What is its colour (clear, milky, yellow)?

##### Description of Condition

- Is the surface layer discoloured, cloudy, and/or powdery?
- Is the surface coating cracked?
- Is there surface dust, dirt, and/or grime?
- Are there any accretions?

## 4. Ground Layer

### Description of Material and Application

- Is the ground layer visible (along the edges; in the image area)?
- What is its colour and texture?
- What is its thickness relative to the paint?
- On a fabric support, what is the extent of application (to the turn-over-edge; to the edge of the fabric)?

### Description of Condition

- Is the ground fresh, dusty, dirty, and/or discoloured?
- Is the ground brittle or crumbly?
- Is the ground sound, cracked, or cupping?
- Is the ground well adhered to the support?
- Is there cleavage?
- Are there losses in the ground?

## 5. Support

Paintings are generally executed either on a flexible support (e.g., fabric) or on a rigid support (e.g., wood panel, artist's board, hardboard). The following checklist includes sections for both flexible and rigid supports. The sections on ground, paint, and surface coatings apply to paintings on either support system.

Remember that if there are any signs of loose, flaking, or curling paint, the painting must not be turned over but must remain in a horizontal position until it can be treated.

### Paintings on Rigid Supports

- What type of material was used (wood, plywood, hardwood [Masonite], chipboard, artist's board, etc.)?
- If artist's board was used, describe its construction (e.g., canvas adhered to cardboard, primed cardboard, illustration board, etc.).
- Describe any stamp or label on the back of the support.

### Description of Condition

- Is the support cracked, chipped, worn, or abraded?
- If the support consists of separate sections, are the joins sound? Have there been any previous repairs?
- Are the corners abraded, delaminating, or torn?
- If canvas is attached to the support, is the attachment uniform or has it become detached in areas?
- Is the support flat or has it become warped or misshapen?

### Paintings on Flexible Supports: Auxiliary Support (Stretcher/Strainer Bars)

- What type of auxiliary support was used (stretcher, strainer)?
- Identify the type of wood used, if possible (e.g., softwood, hardwood, pine, oak, etc.).
- How many keys are present (e.g., 4 of 4, 5 of 8)?
- How are the corners joined (e.g., mitred, square joint)?
- Is there a bevel on the stretcher bar? (Note whether one is present or not.)
- How is the canvas attached to the stretcher (e.g., tacks, staples)?
- Describe any labels or inscriptions on the stretcher bars.

### Description of Condition

- Are the stretcher/strainer bars straight, strong, warped, or split?
- Are the corners sound, separated, or cracked?
- Are all the keys attached to the stretcher?
- Are the tacks/staples rusty or missing?
- Is the wood dusty or dirty?

### Paintings on Flexible Supports: Fabric Support

- What is the weave type and weight of the fabric (e.g., heavy canvas, plain, open weave)?
- Are there any seams in the fabric? If so, where are they located?
- Is there a selvedge?
- Is there evidence of past conservation treatment (patches, lining fabric)?
- Record the information from any labels, stamps, or inscriptions on the fabric.

### Description of Condition

- Is the fabric secured evenly to the stretcher/strainer?
- Is the fabric fresh, discoloured, dirty, or stained?
- Do the tacking margins appear strong or is the fabric weak and brittle?
- Are there holes or tears in the fabric? If so, then where are they located (in the centre, at the turn-over-edge, along the tacking margins)?
- Is the fabric stretched taut or is it slack?
- Are there distortions in the fabric (ripples, draws, bulges)?
- Are there any bulges along the lower stretcher bar? (This may indicate the presence of keys, dirt, or debris between the canvas and the stretcher bar.)

## 6. Frame

### Structure

- What material was used (wood, metal)?
- What is the decorative finish (gilded, painted)?
- Is there a liner or a glazing material?
- Is there a backing board? If so, what material was used?
- What method was used to attach the painting to the frame?

### Description of Condition

- Is the frame strong enough? Is the liner well secured?
- Are the corners sound? Are there any gaps (front or back)?
- Are all elements of the decorative finish intact?
- Is the rabbit padded? Is it strong?
- Is the painting well and safely secured to the frame?
- Is the frame covered with grime and dirt?
- Record the information from any inscriptions or labels on the frame.
- Is the painting able to move slightly in the frame or is it tightly fitted?

## Further Reading

Buck, Richard. "Inspecting and Describing the Condition of Art Objects," In *Museum Registration Methods*. 3rd edition. Dorothy H. Dudley, Irma Bezold Wilkinson, et al., eds. Washington, D.C.: American Association of Museums, 1979.

Gettens, Rutherford J. and George L. Stout. *Painting Materials: A Short Encyclopedia*. New York: Dover Publications Inc., 1966.

Keck, Caroline K. *A Handbook on the Care of Paintings*. New York: Watson-Guption Publications, 1972.

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Copies are also available in French.

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