

# Care and conservation of frames and gilding

Picture frames and gilded objects are often more complex than they first appear and can be made from a wide variety of materials. In the UK, the wooden element of picture and mirror frames is often a species of pine but oak, lime and a spectrum of other hard and softwoods are also found. Generally, ornament in relief is made from either:

- Carved wood.
- A solid moulding material that has been cast in moulds while still in a 'plastic' form, and applied to the wood, e.g. 'composition' ornament, most commonly seen on frames and other objects from the nineteenth and early twentieth centuries.
- Hollow papier-mâché, also cast from moulds and applied to the underlying surface.
- Plaster.

The materials and techniques of a gilded finish can vary enormously from one piece to another; note that varieties of metal leaf other than gold may be used, most commonly silver which may be varnished to look like gold. The base for the gilding is likely to consist of a hard white coating of chalky appearance, commonly called 'gesso', covered with one of two finishes:

- A smooth, coloured (frequently red-brown) clay 'bole' with gold leaf directly applied – 'water-gilding', which is water-soluble.
- A yellow oil paint or varnish layer and then with gold leaf – 'oil gilding', which is not readily water-soluble.

## Effects of changes in environment: heat and humidity

Changes in the environment can cause movement of timber and applied finishes, resulting in the opening of structural joints and cracking of the finish. The appearance of cracks in a gilded surface around the mitred corners of a picture frame may not necessarily be a real cause for concern, but should be carefully monitored and assessed, as major opening or loose joints can put frame and picture at risk.

**A conservator can help reassure you by assessing your frames and checking any movement in joints.**

The appearance of cracks in the gilded finish is a common symptom of ageing and not normally a cause for concern. If however the gold and gesso layer is lifting, loose, or falling flakes appear, this may indicate that the gilding layers are delaminating from the substrate. Cracks in the applied composition ornament are also a common symptom of age-related shrinkage, but be aware that this could lead eventually to detachment of the ornament.

Both conditions can be remedied through conservation treatment. A conservator can also advise you on the best means of displaying or storing your frame or gilded item to minimise or avoid risks from a poor environment.

## Pests and moulds

The common furniture beetle (*anobium punctatum*) is the most frequent cause of pest damage to gilded objects with a wooden substrate, evident by 1–3 mm diameter flight holes in the surface of the item. The extent of damage underlying the finish will vary, but may be extensive enough to weaken an object's structure. Inactive woodworm may cause concern structurally and aesthetically; active woodworm can and should be treated immediately. Wood-rots and moulds on the wood or gilding can also cause staining and structural damage where an item has been stored in or subject to wet or damp conditions.

It is best to employ a specialist conservator of gilded artefacts to eradicate active damage caused by these biological agents, to ensure minimum disturbance to the valuable surface-finish. A conservator can also help repair and restore a damaged finish and improve the appearance and structural integrity of the frame.

## Wear and tear and old repairs

Frames and other gilded items are subject to a degree of wear and tear resulting from life in a domestic or gallery environment, e.g. surface damage from minor scratches, dents and abrasion, or staining from accidental contact with water or other solvents. Gold leaf wear is apparent when the clay bole layer (often a shade of red) begins to show through the worn leaf on the most prominent parts of the object. It is also common to see gilded surfaces stained and damaged by inappropriate cleaning agents used in the course of attempted repair by amateurs.

For these reasons it is best not to attempt any repair or consolidation yourself. Gilding conservators are skilled and knowledgeable in identifying original surfaces and evaluating options for treatment.

A common result of amateur repair is 'gold' or 'bronze' paint applied to a gilded finish in order to cover damage or to brighten or even tone down the gilding. Such paints are made with non-gold metal



Photograph taken by Alastair Johnson

Detail of an eighteenth-century English frame (private collection).

## Find a conservator by using the conservation register

The Register is free to use; it provides detailed information on conservation-restoration practices based in the UK and Ireland including contact details, referenced examples of previous work and the qualifications of members of staff. It is searchable by specialist skill and geographical location and each business has been required to meet rigorous criteria which include professional accreditation of the lead conservator of the business; the information is regularly updated..

[www.conservationregister.com](http://www.conservationregister.com)



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powders which can oxidise and change to brown or green; they can be identified as a muddy, slightly granular, streaky coating against the bright sheen of real gold leaf. Beware however that in some cases, non-gold metal leaf and 'bronze' paint may be part of the intended original finish of an object.

Gilded items are often complex, conservators may recommend further investigation or tests to get an accurate assessment of the condition. Although it is not always feasible to predict exactly what may be involved in a treatment before the conservation work begins, your conservator will make you aware of any issues that arise in the course of the conservation.

## Monitoring

It is a good idea to monitor an object's condition at regular intervals. This can be as simple a process as taking a photograph and writing down the position of any areas or signs of damage (such as new flight holes) on an annual basis.

Any pieces of ornament or gilding that may have become detached should be carefully retained and reinstated by a conservator.

## Moving

Keep moving or handling of gilded objects to a minimum. If moving cannot be avoided, wear vinyl or latex snug-fitting gloves, as oil or moisture from hands will damage the finish on a frame. Make sure there are enough people to lift it slowly and safely if it is heavy, preferably lifting underneath a frame's lower member to avoid putting too much pressure on the joints. Make sure you have the route and a space prepared to take the frame before you start. If you are moving smaller objects, they should still be moved one at a time.

## Cleaning

Keep cleaning to a minimum; dusting once per year is enough as the action will gradually wear away a gilded surface. Even the movement of the dust itself will cause some abrasion, so a very soft-haired brush should be used. The brush's metal ferrule should be wrapped in tape to protect the object against accidental knocking. Dust can be collected using a vacuum cleaner set on minimal suction, lifting the dust with a small nozzle covered with a piece of gauze secured with an elastic band. This ensures that no pieces of loose ornament are lost. Care should be taken not to touch the object with the nozzle.

## Storage and display

Store and display gilded objects away from direct heat sources such as radiators or fires. Likewise, avoid placing them against or near a wall or surface that has, or may be at risk from, damp or leaks. Gilded objects are fragile and should be displayed away from major thoroughfares or anywhere where they may be vulnerable to knocks, such as behind doors or directly behind the backs of chairs. Always make sure objects are properly secured to the wall or relevant area.

## Lacquered, japanned, painted, varnished objects

Much that applies to frames and gilded objects also applies to lacquered, japanned and painted objects. Factors that accelerate deterioration, such as fluctuations in relative humidity, remain constant for any wooden substrate but such surfaces are at additional risk from light damage and atmospheric pollution. Always try to strike a balance when choosing appropriate display lighting and location. Lacquered and varnished surfaces are also susceptible to handling damage; finger marks can become indelibly etched into surfaces.

Light brush cleaning is permissible but it is advised that any solvent cleaning of lacquered, japanned or painted surfaces be carried out by a professionally qualified conservator. Even water can cause significant damage. It is also strongly advised that any refinishing or coating, even wax, only be undertaken after consultation with a conservator. Particularly with lacquer, such action can destroy the balance between matt, semi-matt and gloss in the decoration which was likely the intention of the maker. Remember also that much of the decoration can be surprisingly close to the surface and at subsequent risk from vigorous or injudicious cleaning.

Nonetheless, it is understood that such decorative objects are meant to be enjoyed, possibly used for their intended or some modified purpose, be they tables, trays, tea caddies or games boxes. Good housekeeping usually obviates damage but it must be accepted that wear and tear will eventually take its toll and one must be especially cautious of spillage, be it water or gin and tonic. Alcohol and water have the potential for serious damage, especially to japanned artefacts or others coated in shellac.

## Consulting a conservator

Bear in mind that an object can be irreversibly changed and its historical and / or monetary value damaged by ill-advised interventive treatment. Even taking a picture out of its frame yourself or trying to carry out more than dusting to clean a frame or other object can result in serious damage. It is always advisable to seek professional advice. A conservator can help by:

- Examining the object carefully before providing a written estimate, giving you options for the extent of treatment and its related costs.
- Providing you with accurate documentary records, ranging from condition surveys of large collections to detailed treatment reports.
- Applying the latest methods and materials to clean, consolidate and help ensure the longevity of your object and the reversibility of work.
- Giving you practical advice on preventive care and further treatment, explaining the reasons behind the options.

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