If the cause of the fading and tarnishing is the quality of the framing materials, then a professional conservator can conserve and reframe the photograph using good quality materials.

CONSULTING A CONSERVATOR

The aim of conservation is to reverse damage where possible and ensure future deterioration is reduced to a minimum.

- The skills of a photographic conservator are not restricted to treating individual items; he or she is also qualified to deal with collections and associated materials, and will advise about the general context, display, storage and handling.
- If you are responsible for a group of photographs, a
 conservator can give useful advice on the care and
 management of the collection. This advice can
 comprise recommendations for comparatively minor
 changes to the general environment such as changing
 the cleaning materials used in a storage area or
 hanging a photograph on a different wall which will
 nevertheless have a substantially beneficial impact on
 the condition of your photographs over time.
- At the other end of the spectrum, a conservator's advice can also help in planning a new store or advising on a display policy for a museum or historic house.

Some suppliers:

Conservation by Design Limited
Tel +44(0)1234 853555
Email info@conservation-by-design.co.uk
pHoton™ paper, Melinex® enclosures

Conservation Resources (UK) Ltd Tel +44(0)1865 747755 Email conservArts@aol.com Silversafe® paper, Melinex® enclosures

John Purcell Paper Tel +44(0)20 7737 5199 Email jpp@johnpurcell.net Argentia paper, Heritage 100% TG off-white museum board

Secol Limited Tel +44(0)1842 752341 Email sales@secol.co.uk Melinex® enclosures

Find a conservator by using the Conservation Register.

The Register is free to use; it provides detailed information on conservation-restoration businesses 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; the information is regularly updated.

www.conservationregister.com info@conservationregister.com +44(0)20 7785 3804

This article offers general guidance and is not intended to be a substitute for the professional advice of an accredited conservator. The views expressed are those of the author or authors, and do not necessarily represent the views of the Institute of Conservation. The Institute of Conservation and its partners accept no liability for any loss or damage which may arise if this guidance is followed.

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Care and conservation of photographic materials





Photographs can be the most poignant of cultural objects, and yet few people stop to think about how diverse they may be. Photographs can be negative or positive images; the majority are found on supports made from paper, glass or film, but occasionally they may be on a metal, leather or textile base. Frequently, they are also associated with frames, albums, cases and even jewellery. In most photographs the main image-forming substance is silver, but dyes and pigments are found in colour photographs and in digital prints.

Photographs frequently consist of multiple layers, each layer containing different substances which behave in a variety of ways. This complex structure can make certain types of deterioration untreatable: what might be beneficial to one layer may be harmful to another. Consequently, the first line of defence for the owner is to prevent problems occurring in the first place.

Photographic conservators have wide knowledge of photographic techniques; they can identify processes and materials used in your object or collection as a preliminary to improving storage or carrying out treatment.

CAUSES OF DAMAGE AND DETERIORATION

- High temperatures will speed up chemical deterioration such as fading and tarnishing (also known as 'mirroring').
- Exposure to light, especially sunlight, causes fading.
- Damp conditions can result in mould or discolouration.
- Very dry conditions can cause cracking and brittleness.
- Poor-quality storage and framing materials emit pollutants which can cause chemical changes such as fading, discolouration and tarnishing.
- Poorly-designed storage and frames and inappropriate mounting techniques can cause physical damage such as tears and creases, staining from adhesive tapes, or photographs sticking to glass.
- Some photographs (and their associated cases, frames, albums and boxes) are susceptible to insect attack by silverfish, woodworm, booklice and carpet beetle.
- Handling causes further deterioration for vulnerable photographs; fingerprints leave marks on emulsion and dirt can scratch delicate surfaces – the popularity of a photograph can be a source of its demise.

SIMPLE ACTIONS FOR OWNERS TO PREVENT AND REDUCE DETERIORATION

- Store photographs in a cool environment as this will help to slow deterioration.
- Avoid very damp or dry conditions, and particularly fluctuations between the two. Aim for a stable environment and if possible, a relative humidity within the range 30–40%.
- Avoid displaying photographs at high light levels or for extended periods of time. Ultraviolet filtering glazing helps protect photographs during light exposure.
- Keep handling to a minimum and avoid touching the image layer. Make sure your hands are clean and dry or wear cotton gloves and handle photographs by the edges, using a support such as a sheet of stiff paper or card to move fragile photographs.
- Keep and display photographs in good quality storage and framing materials. Most photographs can be safely kept in good quality paper enclosures; some can also be safely stored in some types of plastic enclosures. However, plastic is not suitable for hand-coloured prints, prints with surface damage, glass or metal-based photographs, nor for film-based negatives and transparencies from the 1950s, unless the latter are in cold storage.

MATERIALS FOR STORAGE AND DISPLAY

Choosing the right types of paper and plastic is costeffective and will ensure your collection does not deteriorate. Papers and boards used in frames or to make enclosures should be of a very high quality to avoid future problems – they should be 100% cotton, unbuffered (i.e. pH neutral and not acid or alkaline) and free of impurities. The most widely-used materials recommended in the museum world are:

Papers for enclosures: Argentia, Silversafe® and pHoton™.

Mount board: Heritage 100% cotton TG off-white unbuffered museum board.

Plastic: Melinex® (inert polyester). Although some grades of polyethylene and polypropylene are acceptable, PVC (polyvinyl chloride) should never be used and no plastic should include plasticiser (used to make the plastic flexible).

TREATING DAMAGE AND DETERIORATION

Despite taking the above actions, an owner may have photographs which have already deteriorated. If a damaged photograph is not conserved, further damage can result. Be aware that many types of damage can be exacerbated by a well-intentioned amateur repair, adding to the cost of professional treatment.

Specialist conservators can carry out structural repairs, such as mending tears or holes, or even flattening creased or rolled photographs.

Cases, frames and albums should be regarded as integral to the photograph(s) they house and it is important to keep the whole artefact intact. For example, if a case is left broken, a photograph may fall out of the case and be badly scratched. Therefore if these associated objects have structural problems they should be also be dealt with by a conservator; the conservation process is geared to maintaining the integrity of the original photograph in its context.

A conservator will be familiar with the composition of such objects and know how to conserve them in a sympathetic way, so that their life can be extended as far as possible.

In some cases, a conservation process may be quite subtle. For example, conservation quality materials will be secured in the back of an original frame or case as part of the structural repair – ensuring a future for the photograph for generations to come. Sometimes the effects can be more dramatic, for example removing substantial surface dirt to reveal hidden detail.

A conservator will know what cleaning and repair methods can safely be used, whereas an untutored hand can end up removing the image as well as dirt.

FADING AND TARNISHING

There is unfortunately one area where damage is irreversible, and that is fading and tarnishing. This can result in a considerable loss of detail and once it has happened it cannot be reversed, so the advice given above about care of photographs is particularly important. Conservation can only help to keep what remains, but a conservator will be able to give pragmatic advice about what can nevertheless be achieved.