Conservation Terms

Source: https://aiccm.org.au/conservation/visual-glossary/

Abrasion - Roughening or wearing away of an object's surface due to repeated friction or contact with other surfaces.

Accretion - A solid piece of foreign matter attached to the surface of an object.

Acid Migration - The transfer of acidic substances between two surfaces in contact with each other; often causing localised staining and discolouration. Also called acid transfer.

Adhesive - A substance capable of bonding materials to each other by chemical and/or mechanical action. Adhesives may be activated by water, solvents, pressure, heat or other means. Not all adhesives have good ageing characteristics and may become insoluble, yellow and brittle with time.

Blanching - Where a previously clear and transparent surface (e.g. a varnish) has become white and/or opaque. Similar in appearance to bloom.

Bleaching - Where a material becomes lighter in colour due to the action of various solvents or light. Sunlight, especially the ultraviolet component, can be particularly damaging.

Bleeding - Where an ink, paint or dye has become partially soluble and has wicked into surrounding areas of the support (usually paper or textile), resulting in a "blurry" appearance.

Blistering - A raised area, bulge or bubble on the surface of an object, often between adjoining layers of different materials. May be caused by a loss of adhesion between two layers, excessive heat, or pockets of trapped air or liquid.

Bloom - On metals, a loose, flower-like corrosion product which forms when certain metals are exposed to a moist environment. On paintings or varnished objects, a cloudy appearance within the varnish, probably caused by the presence of moisture on the surface of the paint or within the varnish itself. Also used to describe the visible appearance of active mould spores.

Break – A separation between areas of a hard material, like glass, ceramic, wood and stone. Usually caused by a sudden shock and often occurring at weak points. May also be used to describe damage to brittle paper or cardboard, where pieces have been snapped off.

Brittle - A property or condition of materials such as paper, cardboard and adhesives that causes a loss of strength and flexibility, often causing the material to break when it is deformed by bending. Paper is said to be brittle when a corner will not withstand two complete folds without breaking. Plastics also become brittle, through the loss of plasticising agents.

Bronze disease - Corrosion of copper and bronze objects caused by the production of copper chlorides, which break down the normally protective surface patinas. Light blue-green blisters form on the surface. When they are touched, they crumble and fall away leaving a pitted surface. The corrosion is cyclic, setting up reactive and destructive corrosion cells on the surface of the metal.

Buckling - Distortion caused by shrinkage or compression.

Burn - Where a surface has been damaged by fire. Burned surfaces are usually black or brown in colour, friable and brittle. May be accompanied by soot and smoke damage, water damage and melting

or softening. May also be used to describe damage caused by sunlight or chemical pollutants – e.g. light burn, mat burn.

Chalking - In plastics, where the outer surface oxidises and becomes dry and powdery, reducing the surface lustre or sheen. The plastic will become more susceptible to ingrained soiling.

Cleavage - The separation of paint from the ground layer of a painting, which may cause cracking, blistering and flaking.

Cockling - Wrinkling or puckering that occurs when paper, fabric, or any sheet of support material dries unevenly.

Corrosion - Gradual deterioration of a solid (especially metals) due to chemical processes such as oxidation or the action of a chemical agent. Some corrosion products, like metal patinas, can be protective; others, like rust, can be harmful. Corrosion is often accelerated by contact with materials that generate acidic vapours – e.g. wood, plastics.

Crack/fracture - A narrow opening between two parts of a material that have split or become broken but may not be separated from each other. Usually used to describe breaks in more solid materials, such as stone, ceramic and wood. In plastics, refers to splits that follow the grain or direction of manufacture.

Craquelure - A network of fine cracks in a varnish or paint layer, which may be caused by several different deterioration mechanisms; e.g. different rates of drying between two layers, or the increasing brittleness of one layer relative to another.

Crazing - Describes a fine or microscopic network of cracks in a varnish or coating. Can cause the surface to appear cloudy due to changes in the way the surface reflects light.

Crease/fold - Where a sheet material (e.g. paper) has been unintentionally bent over on itself.

Deformation - Occurs when a material loses its strength and creates an area of collapse. Can also occur where an external impact or pressure causes a depression or indentation.

Delamination - Separation of individual layers of a laminated material from one another – e.g. the emulsion layer from a glass plate negative; layers within a sheet of board.

Detached - Where a portion of an object has become separated from the main, due to physical damage such as breaks or tears, or by failure of an adhesive or another attachment method.

dirt, dust - Particulate material which has settled on the surface of an object. Contributes to corrosion, staining and abrasion of surfaces.

Discolouration - Overall change in the colour of a material, usually to a darker, more yellow or brown appearance. May be caused by light damage or by exposure to acidic substances.

Distortion - A concave, convex or twisting change of form, used to describe stiff organic materials that have become misshapen, such as paper, card, plant fibres and wood.

dry rot - A fungal disease which attacks seasoned timbers, often causing the wood to be reduced to a dry, crumbly texture or to structurally collapse.

exit holes - Adult female borer beetles lay eggs within susceptible timbers; books and stacked paper may also provide a suitable habitat. The eggs hatch into larvae, which feed on the starch content of the wood and create networks of tunnels. When fully grown, the larvae pupates to become an adult beetle, finally emerging through a hole made in the surface of the wood to continue the life cycle. The presence of exit holes and frass indicates the presence of borers. Exit holes are perfectly round; an elliptical hole usually means the hole existed before the wood was shaped or cut.

Fading - Loss of brightness or intensity of a colour, usually due to the action of light but may also be due to pollutants and other chemical interactions.

Fill - Where a small piece has been added to an object to replace a missing piece. Fills may be coloured and textured to blend in with the original surface.

Flaking - Where extreme cracking causes small, thin pieces of varnish, paint or other layers to become completely detached from the main support material.

Foxing - Localised discolouration of paper, usually appearing as random rust-coloured spots. Caused by both mould growth or metal impurities within the paper and exacerbated by high humidity, dampness and airborne acids.

Frass - The dust-like debris or excrement left behind by wood-eating larvae and borers.

Friable - Some materials used to create works of art, such as pastels and charcoal, contain very little binding agent. Friable media can separate from their support through friction or abrasion, or may easily crumble into a powdery form. Wood damaged by dry rot may also have a friable surface.

Grazing - Where surfaces have been partially eaten by insects such as silverfish and booklice. Most frequently found on paper-based items such as labels, photographs and sized papers.

mat burn - A localised stain, usually on paper, caused by contact with an acidic mat board. The cut edge of the window mat releases a higher quantity of acidic vapours, which discolour the adjacent paper.

Mould - Another word for fungi; mould spores can germinate and grow within organic materials to cause staining and structural weakening. May appear as colourful powdery or downy growth on an object's surface, or as black spots.

Offsetting - Where a plastic sheet or sleeve adheres to the ink or image layer of documents or photographs. Often occurs with polyvinyl chloride (PVC) plastics, as the plasticiser used in PVC acts as a solvent which attracts toners and dyes.

Overpaint - Where colour has been applied over the original surface to disguise damage or loss.

Peeling - Usually used to describe a thin layer of paint that is becoming detached from a surface and curling back on itself. May also be used to describe the appearance of veneered surfaces that are delaminating.

Rolled - Where a sheet material (e.g. paper) has become tightly curled. Rolled materials will often exhibit a "memory" of being rolled, and will be difficult to lay flat. Brittle materials may break on unrolling.

Rust - Corrosion products (iron oxides) that form on the surface of iron and iron alloys. Rust is not protective and will accelerate the corrosion of the metal until there is no iron left.

Scratch/marks - An indentation caused by physical damage; the term usually implies that there has been some loss to the original material, e.g. to surface coatings or paints.

Shredding - Shredding occurs primarily in late nineteenth and early twentieth century silk fabrics that were "weighted" with metallic salts to make the fabric feel more luxurious. The metallic salts catalyse chemical deterioration, making the fabric extremely brittle and prone to crumbling. Also called "shattered" silk. The term "shredded" may also be used to describe fabrics that have been severely damaged by light exposure or insects, resulting in similar losses.

silver mirroring - Describes the mirror-like appearance of some black and white photographs, where oxidation has caused silver to migrate to the surface of the emulsion.

Skinning - The removal of the top layer of a material (e.g. paper) due to physical action – e.g. fibres pulled up by removing a piece of sticky tape from a sheet of paper.

Softening - Occurs when heat-sensitive materials such as wax, vinyl and some adhesives are warmed – e.g. on a hot day, in direct sunlight or under hot exhibition lights.

Spalling - Where small pieces of stone flake off or split into chips; usually caused by frost damage.

Split - A separation between the fibres of canvas, plant, paper or textile surfaces caused by expansion or contraction of areas under tension. Also used to describe a continuous break in a piece of wood that travels along the direction of the grain. Often caused by the dimensional changes that occur as organic materials expand and contract with changes in humidity.

Stain - A localised discolouration, often caused by splashes of liquid or by contact with an acidic material, such as an adhesive or ink.

surface dirt - Dirt and grime transferred to a surface through air currents, humidity and handling. Some surface dirt can be greasy or ingrained, making it difficult to remove.

Sweating - In plastics, where various additives (e.g. plasticisers, stabilisers and fire retardants) leach out of the plastic and cause the surface to become moist and tacky.

Tarnish - Discolouration of a metal surface due to the formation of a thin film of oxide, sulphide or some other corrosion product. Used most often to describe the black corrosion product that forms on silver.

Tear - Separation between or across the fibres of canvas, paper or textile objects, usually beginning at the edge of the object and often following areas of weakness (e.g. folds) and initiated by physical damage.

Tenting - Delamination of paint layers above a crack or network of cracks, where the delaminating material lifts upwards to resemble a peaked tent.

Tidemark - Localised discolouration that forms at the edges of liquid stains, on drying. The staining material may have been within the liquid or the object; both will be carried to the edge of the evaporating liquid and "pinned" in place by surface tension, causing the characteristic pattern.

vinegar syndrome - A condition of acetate film decay characterised by shrinkage, embrittlement and the generation of acetic acid vapour, which smells like vinegar.

Warping - Results in changes to the object's original dimensions; often occurs along lines of stress within the material. More often applied to wood and other more solid constructions than to thin materials such as paper.

Yellowing - Discolouration that affects the whole surface of an item – e.g. an entire sheet of newspaper or the entire varnish layer of a painting – and that has a yellow tinge.