

Glossary of Watercolor Materials and Techniques

Watercolor, generally referring to *transparent watercolor*, is a technique of painting in which pigments ground with a water-soluble binder and diluted with water are applied in washes to white or light-tinted papers. "True" or "classic" watercolors are characterized by a luminous transparency: no matter how many layers of color are applied, the paint remains translucent and allows the light to penetrate and be reflected from the paper support. Highlights can be achieved by adding paints, by reserving portions of the paper from color, or by subtracting applied color. Watercolor paints were being made commercially by the late 1700s, at first as hard, dry cakes. "Moist colors" introduced in the 1830s incorporated glycerin, making the colors easier to work into washes and facilitating large, broad applications of transparent color. Working with this essentially liquid medium, painters can achieve a wide range of artistic effects by varying the composition of the paint, the manner of application, and the texture of the paper. There are numerous examples of transparent watercolors in this exhibition, including John Marin, *Deer Isle* (1996.150.3).

Selected works from the exhibition that exemplify some of the techniques and materials in the glossary are illustrated with the relevant term. Examples of watercolor tools and materials can be seen in the case in the gallery.

Binder

The medium that holds pigment particles together in paint, binding it to the support below. Gum arabic, the standard binder in watercolor, maintains a stable blend of pigment particles in water until the film of watercolor has dried and the colors are bonded in place. (See case.)

Dry brush

Dry-brush technique is generally achieved by dragging the brush, loaded with fairly thick paint, horizontally across the paper. The paint remains almost exclusively on the "hills," or high points of a textured paper, creating a broken, mottled effect. This is essentially the opposite of a wash, where the pigment settles in the "valleys," or hollows of the paper, leaving the high points white.

Graphite

Pure carbon, the essential ingredient in pencils. It is often used to make preparatory underdrawings for watercolor pictures.

Highlights

Added highlights: Highlights that are achieved by adding white or light-colored pigments to the surface of the watercolor.

Reserved highlights: Highlights that are created by reserving areas of white paper to prevent the application of color. This is achieved either by strict control of the washes or by applying a water-resistant material, known as a resist, to areas of white paper intended for highlights to block the paper from absorbing paint. Typically, wax or liquid blocking agents are employed and then removed once the watercolor has dried.

Subtractive highlights: Highlights that are achieved by removing areas of color to recover the white of the paper beneath. This can be accomplished by wetting and redissolving areas of color and then sponging or blotting away the softened pigment until the paper is revealed; or by dry methods, using implements such as scrapers, knives, or even sandpaper. Dry subtractive highlighting often gouges and abrades the paper's surface.



Detail of Arthur G. Dove, *[Untitled]* (1992.112)



Detail of Edward Hopper, *House at Riverdale* (2003.1)



Detail of Thomas Moran, *Chicago World's Fair* (31.194)



Detail of William Starkweather, *Gulls at Shipwreck Bay* (27.191). See the outlines of the seagulls.



Detail of Winslow Homer, *In the Jungle, Florida* (11.547). Sponging and blotting can be seen in the palmetto fronds.

Opaque watercolor (also known as *body color* or *gouache*)

Watercolors made opaque by the addition of white pigments, such as chalk, that impart opacity and body (hence “body color”), as opposed to transparent watercolors. Opaque watercolors can be applied in thick layers, sometimes called impasto. Opaque watercolor painting is defined as much by method as by materials. The artist works from dark colors to light, applying the highlights last by adding white paint (in contrast to transparent watercolor, which utilizes the paper’s whiteness for highlights). Opaque watercolors in paste form appeared about 1845 and were sold in tubes.



**Detail of William Trost Richards,
The Sakonnet River (74.30.3)**

Paper

A felted sheet formed from individual cellulose fibers suspended in a watery slurry and then dried flat. Until the nineteenth century in the West, paper was handmade, with fibers obtained primarily from linen, wool, or cotton rags; later it was manufactured commercially from wood. The process for making paper involves beating fibers and water together into a pulp, submerging a wire screen (called a mold) into this mixture, and then lifting the screen to drain the water; the layer of wet pulp caught on the mold dries into a sheet of paper. Laid paper shows the pattern of wires imparted by the mold. Wove paper is made on a mold of wire cloth with a weave so fine that it leaves no discernible mark or pattern. In order to make paper suitable for watercolor painting, it has to be “sized” or coated, usually with gelatin, which prevents the paper from cockling (or buckling) when dampened with watercolor paints. Specialized papers for watercolor with textures ranging from smooth to rough were developed in the mid-nineteenth century to optimize the various effects possible with watercolors. For examples of laid and wove papers, respectively, see William Strickland and Joseph Halfpenny, *View Down the Potomack . . .* (1991.43), and Winslow Homer, *Maine Cliffs* (50.184). For examples of smooth and rough textures of paper, respectively, see Clarence Carter, *Sommer Brothers, Stoves and Hardware* (29.65), and John Marin, *Deer Isle* (1996.150.3). (See case.)

Pigment

A finely powdered colored substance that, when mixed or ground in a liquid binder to form a paint, does not dissolve but remains dispersed or suspended in the liquid. Pigments are derived from both natural and artificial sources. The earliest pigments were mined from colored clays of earth (ochers and umbers), but minerals and plants were also early sources for pigments. (See case.)

Wash

A broad, uniform covering of dilute watercolor applied with a continuous movement of the brush.



**Detail of Frederick Childe Hassam,
The Gorge, Appledore (24.103)**

Wet-into-wet

The application of watercolor onto already wetted paper. Color applied this way usually dries without a hard edge, diffusing and spreading the wash and creating atmospheric effects.



Detail of Adolf Arthur Dehn, *Sea and Rocks* (39.103)