

Glossary of Leonardo's drawing materials and other art terms

All of Leonardo's drawings were created on paper, usually white but sometimes blue, made from pulped clothing rags. The book-printing revolution of the 15th Century had led to a rapid fall in the cost of paper. It would still have been a substantial expense for Leonardo. He used his paper wisely and preserved many of his drawings carefully.

Leonardo was left-handed, and his personal notes are written in mirror-image, from right to left with every letter reversed. This was not an attempt to conceal his investigations. It was simply easier for him to pull the pen rather than push it against the fibre of the paper. He also used dilute washes applied with a brush to add shading, and occasionally watercolour to create his maps.

Bodycolour

Watercolour made opaque by adding the mineral white lead. Unlike transparent watercolour it does not allow the whiteness of the paper to show through. It was used by artists from the 15th century onwards to provide highlights or dense flat areas of colour.

Cartoon

Preparatory drawing for a painted composition, named after the large piece of paper (*cartone* in Italian) on which it was drawn.

Chalk

Leonardo began to use natural red and black chalks in the early 1490s. He used chalk to obtain a wider tonal range than *metalpoint*.

Charcoal

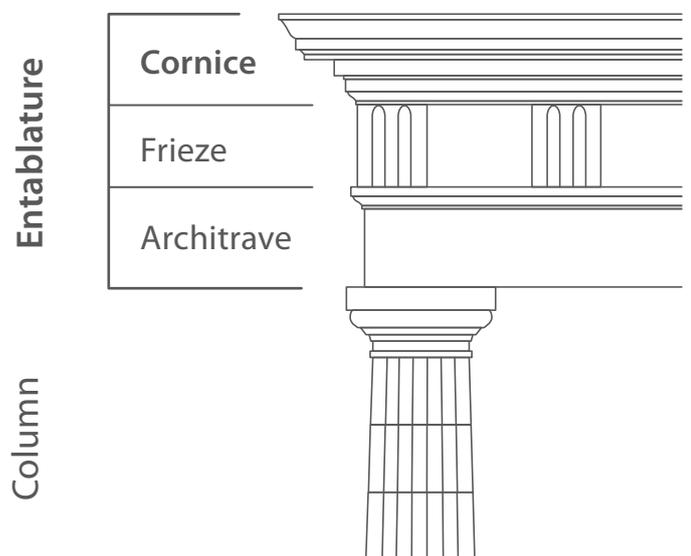
A soft drawing material made of charred wood.

Cornice and entablature

Architectural terms used to describe the projecting part above the columns of a classical building.



A microscopic view of the oak leaves of Leonardo's botanical drawing showing, particles of red *chalk* deep within the paper fibres, traces of white *chalk* on the paper surface and the red tinge of the *prepared paper*.



Foundry

A workshop where metal is melted and poured into shaped moulds to make objects.

Iron gall ink

Ink made by mixing iron salts with crushed oak-apples (called galls).

Metalpoint

Involves drawing with a metal stylus (or rod), usually of silver, on paper coated with a preparation of ground bone and pigment. The stylus leaves a grey trace of the metal on the rough surface of the ground. The mark cannot be erased. So metalpoint demands control and discipline of the artist. Nevertheless it was the standard way to train young artists in Italy until 1500 when *chalk* became more popular. Leonardo stopped using metalpoint in the 1490s.

Pen

Cut from a goose's wing feather.

Pilaster

A classical column built flat or in shallow relief against a wall.

Prepared paper

Paper coated with a preparation of ground bone and pigment – often tinted blue or rose red.

Ultramarine

The name given to the blue pigment made from crushed lapis lazuli gemstone. During the Renaissance it had to be imported from Afghanistan, hence its name (meaning 'beyond the sea'), and its great expense.

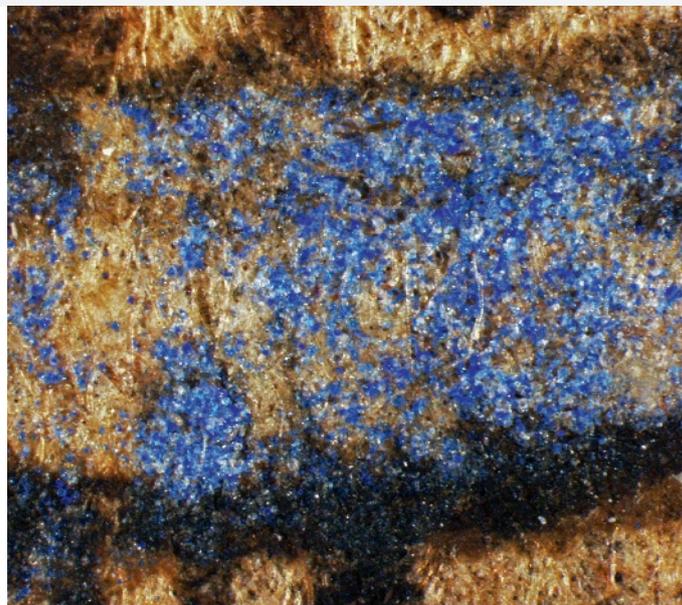
White heightening

A dense white pigment made from white lead, used to add highlights to drawings in *metalpoint*, black or red *chalk*, or pen and *ink*.

All image details are taken from Alan Donnithorne's book *Leonardo da Vinci: A Closer Look*, available in the Walker Art Gallery shop.



Reflected light image of the *Sforza horse* showing the shininess of the metallic silver *metalpoint* deposited from Leonardo's stylus.



A microscopic view of the *Three Emblems* drawing showing ground particles of lapis lazuli on the surface of the paper. The plant fibres of the paper are stained dark with *iron-gall ink*.