



## THE MATERIALS OF DRAWING

### Drawing and its materials

Drawing emerged as central to the creative processes of European artists during the fifteenth century. While some drawings were created as works of art in their own right, most were either exercises intended to hone an artist's skills and observation or studies for painting, sculpture, or architecture.

All the drawings except one in this exhibition are executed on paper, which in Europe generally replaced parchment (made from prepared animal skins) during the fourteenth and fifteenth centuries.

In early times, the range of materials available to the draughtsman was limited: pen (or fine brush) and ink, charcoal, and metalpoint (in which a soft-metal stylus was used on paper coated with a preparation of ground bone).

After the discovery of natural red and black chalks around 1500, metalpoint soon fell into disuse. Chalks and pastels in other colours were fabricated, and during the eighteenth century the graphite ('lead') pencil became the most common drawing tool.

The monochrome washes of dilute ink commonly added to pen drawings led to watercolour as an independent medium. In the twentieth century, many new drawing media were invented, including ballpoint pen, felt-tip pen, and wax crayon.

### Drawing supports

The 'support' for a drawing is the material on which it is executed. From the fifteenth century, paper replaced parchment as the basic drawing support. Nearly all the drawings in this exhibition are executed on paper.

### Vellum

Vellum is a kind of parchment (prepared animal skin) made from calf skin. It is a much finer material than the more commonly used parchment made from sheep or goat skin.

### Rag-pulp paper

Paper came into common use in the fifteenth century. It was made from pulped rags of linen or cotton, a readily available and more easily processed source of raw material. Paper made from wood pulp was a nineteenth-century development and considered inferior. For many artists, rag-pulp paper continues to be the preferred support for drawings, watercolours, and prints.

### Prepared paper

Prepared paper is used for metalpoint drawing, a technique rarely used today. To prepare the paper, a mixture of water and ground bone is brushed over the surface.

The dried surface or 'ground' provides enough texture to scrape off a trace of metal from a gold, silver, or copper stylus as it is drawn across the page.

### **Charcoal, graphite, and metalpoint**

**Charcoal** has been in common use for drawing since the Renaissance. Its broad, somewhat imprecise lines make it a particularly suitable medium for freer studies of figures and heads. It is also easily erased, making it very useful for underdrawing.

Charcoal is made from slips of wood fired in an airtight container so that they carbonise rather than burn to ash.

**Graphite** is a crystalline form of carbon, discovered in 1560, that has been in widespread use as a drawing material since the eighteenth century. The 'lead' in pencils today is a rod containing varying proportions of graphite and clay, mixed according to the hardness or blackness required.

The instrument used in **metalpoint** drawing is a stylus made from soft metal such as gold, silver, lead, or copper. The stylus leaves a trace of metal as it is drawn across a page of prepared paper. It was particularly suitable for small sketch books because it could be easily carried around. Metalpoint was overtaken by the widespread use of black and red chalks.

### **Chalk**

Naturally occurring forms of black and red **chalks** were discovered around 1500. Black chalk is a soft stone, a mixture of carbon and clay – it adheres strongly to paper and is indelible. Red chalk is a soft clay rock containing haematite – iron oxide.

Both red and black chalks had widespread use as drawing media for about two centuries. Red chalk became a favourite medium for nude studies in the academies of Florence and Bologna. Leonardo da Vinci is considered to be the great master of drawing with red chalk.

The use of red and black chalks declined towards the end of the eighteenth century as good quality supplies became scarce. Their place was eventually taken by synthetic chalks, crayons, and graphite.

### **Pen and ink**

Pen and ink have been basic to literate society for several thousand years. The reed pen was first in use. It produces a strong line with distinct patterns of broadening and narrowing. The quill pen succeeded it – quills make more flexible pens than reeds.

In Europe, quill pens were made from the feathers of large birds, such as the goose, swan, raven, and crow. Raven or crow feathers were chosen for the finest work, while goose quills made workaday pens. In the nineteenth century, mass production of metal pens began, and the use of these durable and precise instruments became predominant.

Iron-gall writing ink was the chief drawing medium in Italy from the fifteenth until the eighteenth century. With age, this ink's original black changes to various tones of brown and yellow – a distinctive feature of drawings surviving from then.

Indian ink, a type developed in both India and China, was commonly used in Germany during the same period. It retains its colour and can also be used to

produce beautiful grey washes. This ink became the ideal medium for the hard, precise lines of the metal pen in the nineteenth century.

### The painted drawing

Artists developed the technique of adding washes of dilute ink to their pen drawings. By the nineteenth century 'watercolour', as it was called, had evolved as a specialised art form, distinct from both drawing and painting.

Drawings and sketches can also be made with a medium of paint. Oil paint sketches became popular among seventeenth-century artists, who used the technique to develop effects of light and shade without having to attend to precise detail. A few artists have favoured oil paint applied with a brush as a drawing medium.

### Glossary

**Body colour**

See **gouache**.

**Fresco**

A mural made by painting watercolours on fresh plaster.

**Gouache**

Also referred to as 'body colour', a water-based paint with white pigment or chalk added and bound with an agent such as gum arabic. Gouache has a matt and opaque appearance.

**Gum arabic**

Hardened sap secreted by acacia trees, used as a binder for inks and watercolour.

**Metalpoint**

A technique where a **stylus** is used to draw on **prepared paper**. The stylus will leave a thin line of metal on the paper.

**Parchment**

A very durable surface for writing or drawing, prepared from sheep, goat, or (for higher quality **vellum**) calf skin.

**Prepared paper**

A sheet of paper either covered with textured ground for metalpoint drawing or prepared with a coloured wash.

**Stylus**

A drawing instrument with a pointed rod made of a relatively soft metal such as silver, gold, lead, or copper.

**Stylus underdrawing**

A technique used by Renaissance draftsmen of drawing with a stylus on unprepared paper. The faint mark left provides the basic outline (underdrawing) for a picture.

**Vellum**

A very durable and high quality surface for writing or drawing, prepared from calf skin.

**Wash over**

A technique using ink, usually diluted with water, applied with a brush.

**White heightening**

A common technique, also known as highlighting, which emphasises an object's mass.