

Chapter 6

Looking at art

The physical properties of artworks have an important influence on how we understand them as objects. I want here to outline some examples of the different media and techniques of producing art, to show how an awareness of these factors can help our understanding of art history. Each example acts as a kind of vignette to show how the physical properties of an artwork can add another layer of meaning to its history. The discussion of the technical aspects of each technique is backed up by the glossary of terms at the end of the book. This should also be a useful guide for looking at works in galleries or museums.

Sketches and drawings

We often find the preparatory processes behind a work of art as enigmatic as the work itself. One such example is Leonardo da Vinci's *The Virgin and Child with St Anne and St John the Baptist* ([Fig. 15](#)), which dates from around 1500. This large drawing or cartoon executed in charcoal and black and white chalk on tinted paper is a full-size preparatory study for a painting. It has, however, never been used to transfer a design onto a panel and this is why it survives. In order to transfer the composition onto the picture surface, the outlines would either have been pricked with a pin and then the drawing covered in soot to leave a dotted outline, or the outlines would be scored through, leaving incisions on the surface to be painted as a guide to the artist. Both these techniques entailed the destruction of the preparatory drawing. It is possible that Leonardo's cartoon was preserved as a work of art in its own right, although some areas are deliberately left inconclusive or in rough outline. The pretext for the drawing is likely to have been a commission for a painting given to Leonardo by King Louis XII of France. Leonardo started work on this painting in about 1508. It was unfinished at his

death and is now in the Louvre in Paris. The composition is different from the cartoon, so perhaps Leonardo changed his mind at the last moment.

During the Renaissance period, paper became more readily available and as a result some preparatory drawings have survived (previously artists used re-usable surfaces for these). Coloured papers were often used as a middle tone for drawing by early artists. The papers used could be brown, grey, green, or pink, but blue was the most common. These colours easily made their way onto canvas, where they served the same purpose in designing the values of an image. The experiments with tonal values that drawing with chalk, charcoal, and coloured paper facilitated influenced the work of many artists. For instance, in the executed version of *The Virgin and Child with St Anne and St John the Baptist*, Leonardo painted in fine, translucent glazes with the underdrawing showing through in some areas; it represents a culmination of his research into aerial perspective, which Leonardo codified in his notes for the *Treatise on Painting* (1490–5).

Although we now accept drawings as works of art in their own right, up until very recently they remained merely preparatory processes – no matter how detailed and complex they might be. The striking line drawings of Matisse or Picasso are among their most popular works, whereas the sketches of earlier artists are far less well known. The fragility of drawings does mean, however, that few are on permanent display (the Leonardo cartoon is a notable exception), and they require subdued lighting and controlled conditions to ensure no damage occurs. So it is also partly the nature of the materials and technique that has led to the lack of prominence of drawings in art historical writing and exhibitions.

Tempera painting

One of the oldest mediums of painting is egg tempera. It was used by the ancient Egyptians and Greeks and the icon painters of the Byzantine Empire – indeed the Orthodox Church never broke with the tradition and still uses egg tempera today. The paint is made from finely ground dry pigments, and the standard medium is pure egg yolk, free from white, which would cause the paint to dry more rapidly and to drag on application. Water can be used to dilute the mixture. Once the paint has been made it cannot be stored, so it was important for artists to make only enough for a particular

painting session – especially if they were using expensive pigments. When completely dry, tempera paint is relatively water-resistant.

The support is usually a soft wood such as poplar or basswood. Tempera paint requires a slightly absorbent ground, or base, because of the relatively weak binding strength of the egg. The usual chalk gesso ground that gives the smooth surface on which to apply the paint is relatively inflexible and requires a rigid support.

The mixture of pigment and yolk is diluted with water and applied thinly. Impasto, or textured, effects are not possible as the paint would crack and peel off. Instead, the paint surface is very flat and the tonal values of the pigments remain largely unmodulated in each application of paint. For this reason, it can be seen that the use of tempera in the representation of the *Virgin and Child* ([Fig. 20](#)) is in keeping with the purpose and aesthetics of Byzantine icons. The stiffness of the image is not due to lack of artistic ability or the limitations of technique – just a different set of priorities. However, underpaint could be used to achieve modelling and tone, for instance a green underpaint was used for flesh – this has often worn away with time, resulting, for example, in many faces painted in tempera having a greenish tinge that now looks very unnatural. White could be mixed with the colour and applied in successive or adjacent applications, so making it possible to achieve relatively naturalistic representations of drapery, with the darkest tone of the pigment providing the shadows.

Egg tempera was also a popular medium for the artists of the Early Renaissance in Italy. The technique was described in great detail by the Early Renaissance artist Cennino Cennini in his *Craftsman's Handbook* (1437). This was translated into English in 1899 by Christiana J. Herringham, which prompted a revival of interest in the technique, and tempera remains in use today.

Oil painting

Oil painting involves mixing pigment with drying oils – commonly linseed oil, which acts as a varnish to seal pictures and protect them from water. From as early as the 13th century, oil was used for painting details over tempera pictures. Cennino Cennini discusses the use of oil paint, indicating that it was known about in Italy but was not widely used at that time.

The perfection of oil painting is usually ascribed to the Flemish Van Eyck brothers who were working in the first half of the 15th century. The technique was then introduced by Antonella da Messina to Italy, where it received an enthusiastic reception. Whatever the truth in these stories, it does appear that oil painting began in northern Europe and was influential in the development of painting in the Italian Renaissance. This important influence of artists working north of the Alps on their southern counterparts prompts us to rethink the view of the Renaissance as being solely about Italy's rediscovery of its Classical past. It seems the interest in naturalism and the effects of light and shade, which preoccupied artists such as Leonardo, was enabled through the adoption of northern techniques of painting rather than by the art of antiquity.

By the 16th century, the new medium of oil painting had in fact succeeded tempera, as it offered far greater possibilities for artistic experimentation. Some artists continued to use oil and tempera in the same work, exploiting the different qualities of each technique for the best effect. Oil remained the dominant medium for painters up until the introduction of acrylic paints in the 20th century.

The main supports used for oil painting are wood and cloth, both prepared with a ground. A preparatory drawing, or cartoon, was then transferred onto the ground, or sometimes artists drew directly on this surface using black or red chalk. This preliminary design mapped out the principal elements of the composition. After this, an imprimatura base was applied to the entire picture surface, which affected the tonal value of the whole depending on the colour chosen. For example, a neutral tone such as light grey or brown could function as the mid-point in tonal values and could be used to create half-tones, shadows, or backgrounds. We can see this in the work of Vermeer who used mainly light grey to light brown grounds – these are evident in *Maid with a Milk Jug* ([Fig. 16](#)). By contrast, Velázquez preferred light grey and off-white layers; this helps create the interesting light and space of *Las Meninas* ([Fig. 6](#)).

The imprimatura was followed by the blocking out of basic colours, upon which finer and finer detail was added. The oil process enabled a softening and blending of colours. Paint was either blended to a polish, as in Van Eyck's works, or else it was painted freely, like Rembrandt's. Indeed, in the 17th century, spontaneity of brushwork ('painterliness') was much admired in the work of Velázquez, and we have already seen in [Chapter 1](#) how this technique appealed to the Impressionists. A final layer of varnish was added to protect the paint surface from dirt, abrasion, and water.

The preparatory processes of academic art – the oil sketch or *alla prima* painting, sometimes known as *esquisse* and *ébauche* – became standard techniques of Impressionist artists and their successors. Monet's painting of *Rouen Cathedral* ([Fig. 1](#)) is an excellent example even though it was produced quite late in the artist's career. The looser quality of the handling of the paint and the play on texture and light made art appear more visually accessible, despite there being more for the viewer to 'complete' in terms of recognizing what is being represented. In recognition of the quickness of this new technique, which enabled artists to capture light effects so much more effectively, Monet painted several images of the cathedral at different times of day – to show how objects change under various lighting and atmospheric conditions. The unfinished look of these works shocked the Academy at the time, but this development in technique and mode of representation was a cathartic moment in Western art.

Sculpture: modelling, carving, and casting

Sculpture is the art of producing in three dimensions representations of natural or imagined forms. It includes sculpture in the round, which can be viewed from any direction, as well as incised relief, in which lines are cut into a flat surface. Sculpture has been a means by which ideas could be expressed since prehistoric times. We know little about prehistoric artefacts, but we are certain that the ancient cultures of Egypt and Mesopotamia produced large numbers of sculptures, which were often monolithic. These works were used in religious rituals as well as admired for their aesthetic beauty. Similarly, in the ancient Americas and in Asia, sophisticated techniques and styles were used to produce symbolic sculptures.

The beginnings of the tradition of European sculpture is found in the freestanding and relief work of the ancient Greeks, which may well have been influenced by Egyptian art. By the time of the Classical and Hellenistic periods, the representation of the intellectual idealization of its principal subject, the human form, was a predominant concern. The concept was so magnificently realized by means of naturalistic handling that it became the inspiration for centuries of European art. We have seen this, for instance, in the *Apollo Belvedere* ([Fig. 7](#)), a Roman copy of a Greek original that exemplifies the artistic preoccupations of the time and the influence the Greeks had on subsequent traditions. Sculpture encompasses a range of techniques, including modelling, carving, and casting. Each of these helps give the finished work a distinct character or aesthetic. For instance, modelling in a medium such as clay or wax permits the addition as well as subtraction of material and is highly flexible. The ancient

technique of firing of clay from simple terracotta to elaborately glazed ceramics has produced some striking works that are geographically and temporally dispersed. By contrast, carving, from such varied materials as stone, wood, bone, and, more recently, plastics, is strictly limited by the original block from which material must be subtracted. It is not unusual for sculptors to add separate pieces of the same or different material that are mechanically joined to the main block. Rodin's *The Hand of God* ([Fig. 19](#)) shows how the subtractive process of carving works to gradually 'reveal' the figure. The marks of the chisel and claw hammer can still be seen on the marble, showing how the carving process was one of gradual refinement to the smooth polished finish of the hand.

Casting is a reproduction technique that duplicates the form of an original whether modelled, carved, or constructed, but it also makes possible certain effects that are impractical with the other techniques. Top-heavy works that would require external support in clay or stone can stand alone in the lighter-weight medium of hollow cast metal.

The tensile strength of bronze allows for a great deal of freedom in the composition of works. The Greeks excelled in bronze sculpture, as seen in the few surviving examples of their work, for instance *The Zeus of Artemisium* in the National Museum in Athens and *The Delphic Charioteer* in the Museum at Delphi. Returning to the *Apollo Belvedere*, we can see how copying a bronze work in another material – in this case marble – demonstrates the different qualities of the materials. This is not just in terms of the composition but the overall effect: the serene white of the marble (in which medium most ancient Greek sculptures are now known) would have contrasted with the Greek original in shiny bronze, perhaps partially draped with real cloth and garlands of flowers. The Greeks, and the Chinese, mastered the *cire perdue* ('lost wax') process of bronze casting. Italian Renaissance sculptors revived bronze casting skills, as seen in Lorenzo Ghiberti's doors to the Baptistery of San Giovanni in Florence, known as the *Gates of Paradise*. The classic description of Renaissance bronze casting is given in Benvenuto Cellini's *Autobiography* (1558–62).

How technical knowledge informs art history

This very brief survey of some of the techniques used in the production of artworks shows that artists are not always confined by the medium in which they work. Important

choices are made that stand outside the constraints of the materials and techniques. It is necessary that we understand the techniques and processes used by artists, and the glossary develops this further. But it is also essential that the interface between the qualities of medium and technique and the aesthetic decisions made by the artist is clearly understood. By achieving this understanding, the ways of thinking about, writing about, presenting, and reading art history remain engaged with the work rather than operating at a distance from it.

References

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