Chinese art materials

Paper

Paper is considered one of ancient China’s 'Four Great Inventions' (si da faming 四大发明); alongside the compass, gunpowder and printing. Archaeological evidence indicates that paper was made from the 2nd century BC, although Cai Lun (c. AD 50-121), a Han dynasty Chinese court official, is traditionally credited with having invented modern papermaking in AD105. This led to a wider use of the new material for writing. Initially paper was not used for documents and religious texts, and was only regularly used for painting from the Song (AD 960-1279) and Yuan dynasties (AD 1279-1368). Many different types of paper were developed for the differing requirements of writing, painting and printing. The use of paper spread from China through the Islamic world, and reached Europe in the early 11th century AD.

Silk

Silk existed in China from Neolithic times (possibly as early as 6000 BC and definitely by 3000 BC). By the 5th century BC, documents began to be written on silk and intricately woven and dyed silk textiles have been found dating from the Eastern Zhou Dynasty, roughly 2,500 years ago. Although silk was an expensive material, a document written on a roll of silk was much easier to handle and store than other materials such as bamboo strips since it was more flexible and lighter. It was also used as a material for the first surviving paintings and funerary banners in the 2nd century BC. With the invention of paper, silk was gradually replaced by the new cheaper material but due to its texture and lustre, silk is still one of the most popular materials in Chinese culture.

Jade

Jade has been a revered hardstone in China for many millennia. Since jade is believed to offer strength and protection both in life and death, jade burial suits were thought to guard against evil spirits. Jade objects were also regarded as symbols of virtue, strength and superiority. Early distinctive jade objects, perhaps made for funerary rites, were found in cemeteries of the so-called Liangzhu culture (c. 3300-2200 BC) in the Yangtze delta region. Jade continued to be produced in various forms as ritual objects in court ceremonies and then as popular precious items for collectors. With better access to sources of jades in Western China in the Qing Dynasty (AD 1644-1911), jades made during this period tend to be heavier, more colourful and more ornate than earlier pieces.
**Bronze**
The use of bronze for making vessels, weapons and other objects began just before the Shang dynasty (c. 1600-1050 BC). During the Shang and the Zhou periods (c. 1050-221 BC) vessels and sets of bells were used in religious ceremonies honouring one’s ancestors and also deposited with the dead. Ancient bronze vessels were treasured and collected throughout Chinese history. From the Song dynasty (AD 960-1279) onward, catalogues of bronze vessels were produced and bronzes were also copied in ceramics and other materials both for use in rituals and as decorative objects.

**Lacquer**
The sap for lacquer is collected from a tree indigenous to China called *rhus vernicifera*. Lacquer was made as early as the Neolithic period (5000-2000 BC). Lacquer is applied in layers as an impermeable coating for objects made of materials such as bamboo and wood making them water and insect resistant. It also provides an ideal surface for decorating objects. Pigments, in particular iron oxides, can be added to make the lacquer red or black, and inlays of silver, gold and mother-of-pearl are also used. Carving techniques were also used to create detailed decorative scenes in deep relief on lacquered objects. During the Warring States period (475-221 BC) and the Han dynasty (206 BC- AD 220), lacquer became increasingly popular, and was used as a surface on coffins, cosmetic boxes, musical instruments and food vessels. It was increasingly exported to the West during the Qing dynasty (AD 1644-1911).

**Porcelain**
China has a long history of pottery-making from Neolithic times. In the context of Chinese ceramics the term porcelain lacks a universally accepted definition and the material commonly known as porcelain in the West was probably not discovered until c. AD 600. Porcelain has always been prized for its strength and beauty – it can be very white yet translucent when thin. It is made of a combination of kaolin, a fine white clay, and petuntse ('procelain stone'), a form of degraded granite. When fired in kilns at between 1250-1450 °C the kaolin hardens to hold the shape of the vessel and the petuntse vitrifies (becomes glass) to give the porcelain its beauty and translucence. From the Ming dynasty (AD 1368-1644) to the Qing dynasty (AD 1644-1911), porcelain styles such as blue and white and porcelains decorated with overglaze enamels, such as *famille rose* and *famille verte*, reached the height of perfection and were mass-produced for the Western export market.
Enamel
Enamel is a coloured glass, or a combination of vitreous glazes, fused on to a metallic surface. Enamelling is a technique of painting in enamel over a bronze, copper, or sometimes silver, body which is then coated with white enamel. The technique originated in Byzantine Europe in the 7th century AD and may have arrived in China with the Mongols of the Yuan dynasty (AD 1271-1368). The intricate application of enamel found on Chinese enamel ware (falang 琺琅 or jingtai蓝 景泰蓝) is known as cloisonné in the West. The cloisonné technique involves the application of different coloured enamels to a metal surface that has been divided by wires (either soldered or glued onto the metal base) into compartments known as cloisons. Pieces from the reign of the Qianlong emperor (AD 1736-1795) are of particularly high quality. By the Qing dynasty (AD 1644-1911), enamel pieces were much lighter as both the base and wires were made of copper rather than heavy bronze.