Artists and Materials

Artists in the Classical Period of Indian Art

Artists were born into their craft and trained in family guilds under the supervision of a master craftsman. They followed detailed instructions, outlined in texts and given by monks and priests, describing the appropriate proportions, poses, and expressions for each deity. Artistic talent and imagination were not entirely curbed, however, because styles did change slowly over time. This is clear when comparing works of art from different periods. The most talented artists were employed by temples, monasteries, members of royal courts, and wealthy merchants. Carvers, painters, and sculptors often congregated in regional workshops and were employed whenever a local temple was being constructed. Whether the temple was Hindu, Buddhist, or Jain did not seem to matter. Presumably, the same artists were also employed to create secular buildings, few of which survive.

image 7

Little is known about these carvers and metalworkers. Artists rarely signed their works (image 7). It is not known whether this anonymity was purposeful (perhaps for religious reasons) or related to the craftsman's rather low position in the social hierarchy. It was believed that erecting a sacred structure accrued merit (good karma) for the patron in this life and in future lives, so that his name is often the one inscribed on the building.

Artists in Southeast Asia

It would seem from written records in temple and court accounts that artists were viewed as merely craftsmen and artisans not worthy of mention. Sculptors, painters, and metalworkers probably congregated in court workshops or regional centers. Although iconography was based on Indian models, artistic talent and imagination were not entirely curbed. Regional styles emerged and developed—a fact that is clear when one looks at the works of art in the slides.

Artists after the Muslim Invasions

The Muslim rulers brought to India a new worldview in which the individual's role in history was more important and the creation of history and religious books was a central part of the culture. At the same time, the Hindu Rajput courts began producing unbound manuscripts. These Muslim and Rajput rulers attracted the finest craftsmen, both Hindu and Muslim, and the prestige attached to their manuscript commissions occasionally afforded great honor to the artist.

The Mughal emperor Akbar's father brought two outstanding artists from the Persian court to direct his atelier. At Akbar's court and that of his son Jahangir and grandson Shah Jahan, painters of illustrated books and album leaves became famous and were given impressive titles. However, although we may know their names, scant biographical information about most of the artists has been uncovered. During the seventeenth and early eighteenth

century, in periods when the Mughal atelier was less vital, artists moved to the Hindu courts and created cross-fertilization between the indigenous Indian and Mughal styles.

Materials

Stone and Wood

Because the first Indian stone sculptures (3rd century B.C. in South Asia) were so skillfully conceived and finished, it is assumed that there must have been an earlier, well-developed tradition of carving in wood sculpture. Early stone architecture such as stupa railings also follows wooden construction techniques. However, wood is perishable in tropical climates and few examples of this early tradition survive. A similar assumption can be made about the early stone sculpture of Southeast Asia, where fragments of early wood sculpture have been found. The tools and techniques used in carving stone and wood are the same as those of today: massive hammers and chisels are used to rough out the basic sculptural forms, then smaller ones to refine the work.

Because of its durability, stone became the preferred material for temples and temple sculpture. Probably all stone and wood sculpture (and architecture) was originally painted, although the available pigments, derived from natural sources, would not have been as strident as the artificially manufactured ones so popular in India today. Some figures were further embellished with gold and silver leaf.

During the period of Muslim rule in India, stoneworkers did not produce figural sculpture because of the traditional Islamic aversion to the depiction of the human form. Instead, they excelled in creating architectural embellishments such as openwork screens, windows, inlaid stone, and brickwork.

The Central Asian origins of the Mughals are reflected in a fondness for carved jade objects that could be handled and admired. Jade is such a hard stone that shaping it requires immense skill. It cannot be carved with traditional tools. Rather, the jade worker covers the surface with pastes of ground stone and then gradually shapes the object by abrading it with stone and metal tools. Once the desired form has been created, the artist brings the surface to a high polish with further abrasion.

Metals

Metal sculpture was cast in the lost-wax technique and was made of bronze or brass alloyed with various mixtures of zinc, tin, and lead. Except for small figures, most Buddhist and almost all Southeast Asian metal sculptures were hollow cast in the lost-wax technique and had clay cores.

A simplified explanation of the lost-wax hollow-casting technique is as follows. The form of the work was modeled in clay. The surface was covered entirely with melted wax. After the wax was hardened, the details were created in the wax and the surfaces were then covered with several layers of fine clay and a coarser clay coating. When fired, the clay mold and core were transformed into terracotta and the wax melted out. Molten metal was

poured into this mold. After it cooled, the terracotta mold was broken away to reveal the image. For that reason, only one statue could be cast from a mold. The metal figure was then burnished and a few details may have been intensified with chasing tools.

image 18, 22, 25

Small metal figures and most South Asian Hindu sculpture (image 18, 22, and 25) were solid cast with no clay core. In this casting method, the sculpture with all its precise detail was first created in wax stiffened with the addition of resin. The wax model was then covered with layers of fine and then coarser clay. When fired, the wax melted, leaving a clay negative mold of terracotta. The molten metal was then poured into the mold. As in the lost-wax technique, the terracotta mold had to be broken to free the metal figure, allowing for only a single statue to be cast.

image 50

Metal sculptures were often gilded, inlaid with copper and silver (image 50), and adorned with semiprecious stones or glass paste. The metal was incised or hollowed out to accommodate these inlays, which mimicked actual jewelry or emphasized eyes, mouths, and other features (image 12, 42, and 44). Some small sculptures were cast directly out of gold and silver.

image 12, 42, 44

Metalworkers in Muslim and Hindu courts channeled their skills into making elaborately decorated armor, weapons, and containers for personal effects. They enriched the metal surfaces with inlays of gold, silver, and sometimes gemstones. In the inlaying process, gold and silver were worked into designs cut into the surface. If desired, gems could be set into gold-lined cavities; the soft gold edges were then turned over the edges of the jewels to secure them.

Gold

The Indian love of gold had been gratified from early times by Indian rulers' insistence that they be paid in gold for trade goods. So great was the demand for Indian cotton in Kushan times that it almost bankrupted Rome's supply of the precious metal. Gold was used extensively for jewelry and for gilding precious statues. Frequently, small-scale metal images were gilded in the mercury gilding technique, in which a paste of gold and mercury was applied to the surface and heated. Because mercury burns at a lower temperature than gold, the mercury burns off, leaving the gold bonded to the underlying metal (image 12).

image 12

Very little ancient or medieval gold jewelry from South Asia survives because it was melted down again and again to make more up-to-date adornment. It was usually made of hammered gold. Because gold is soft, it can easily be hammered into thin sheets and cut into the required shapes for a finished piece. Designs can be pressed into a gold sheet placed on a yielding surface such as pitch or wax. When the gold sheet is turned over, the designs protrude from the surface. This technique is called repoussé.

image 3

The gold earring illustrated in image 3 is constructed of several pieces of hammered gold sheets cut into the required shapes and soldered together. The surface designs are created by innumerable tiny gold balls adhered to the surface in a technique called granulation, which requires extraordinary skill (see Glossary for description).

Much larger quantities of ancient gold have been found in Southeast Asia. In Java and Vietnam, gold was usually cast solid in the lost-wax method. Fine details were added afterward with chasing tools (image 52).

image 52

Gemstones

Details on classical Indian sculpture and in Muslim and Hindu miniatures provide evidence that rulers through the ages had plentiful supplies of diamonds, balas rubies, and pearls. From the sixteenth century onward, the supply of emeralds was augmented by gems brought from South American mines.

Painting Materials

Miniature paintings, as book illustrations and album leaves are often called, involved the collaboration of many artists and apprentices in the court workshops. The process began with discussions between patron and artist to determine subject matter. After creating a sketch and then a finished drawing for approval, the artist would "pounce" (trace) the lines of the drawing. This was done by putting a transparent material, often gazelle skin, over the drawing and pricking the outlines. The tracing was placed on the paper to be painted and black pigment was pushed into the tiny pricked holes creating dotted lines. Then the tracing material was removed and the dotted lines were connected with brushwork.

Apprentices would grind costly minerals such as malachite (green) and lapis lazuli (blue). Other pigments came from colored earths, the lac secreted by a beetle (shades of red), indigo (blue) from the plant, and brilliant yellow made of urine from cows fed on mango leaves. These colors were mixed with a binding medium of gum arabic or glue to make an opaque watercolor paint.

Apprentices were often the younger members of a family of craftsmen in a workshop. The youngest made the paintbrushes by inserting very fine animal hairs into quill handles. Older assistants painted the less important details. Often the artist applied several layers of paint to create particularly bright or strong colors. The unfinished painting was laid on a smooth surface and its back was typically burnished with a smooth agate to create a hard and permanent paint surface. Details were added after this process.

Paintings on Cloth from the Himalayan Kingdoms

image 10

The majority of *thankas* (from Tibet; image 10) and *paubhas* (from Nepal) were painted on primed cotton whose weave varied from the very fine to quite coarse. The first step was to stretch the cloth on a rectangular wood support. The fabric was then sized on one side with animal glue and mixed with kaolin, a white earth powder, to create a painting surface. The artist could then begin to lay out the painting's composition, frequently using a grid system following strict rules of representation, scale, and arrangement. Most of the pigments were mineral, for instance, lapis lazuli and azurite for blue, malachite for green, and cinnabar and other red and yellow earth colors. Black was derived from soot and white from kaolin. Organic colors such as lac (red) and indigo (blue) were also used. The colors, mixed with warm animal glue (distemper) and water, had to be applied quickly before the glue

cooled and became too difficult to apply evenly. The finished painting was removed from its wood supports and mounted in silk borders.

Textiles

South and Southeast Asian textile makers have been known for their skill in creating cottons and silks since ancient times. However, due to the damp climate, the earliest surviving textiles date from the late fifteenth century. A close look at the costumes depicted on earlier sculptures reveals something of their sumptuousness.

As trade with Europe increased, finely woven Indian cottons came to be known as "muslins." Another famous fabric of India is "chintz." To create chintz cloth, textile designers used the resist-dye technique, or reserve work as it is sometimes called. The entire cloth is first covered with wax except for the areas that are to receive a particular color. When the cloth is dipped in a colored dye, the unwaxed area takes the dye and the waxed surfaces resist it. The cloth is then boiled to wash away the wax. This labor-intensive and highly skilled process is repeated for each color in the design (image 35).

image 35

Both flat-woven (*dhurrie*) and pile carpets were made in India. Many craftsmen contributed to the production of intricate pile carpets from the Mughal workshops. A master designer, usually in consultation with the patron, created a full-scale colored drawing (called a cartoon) of the carpet for the weavers to follow. Sitting at a vertical loom the width of the carpet, they would begin by weaving several rows of cotton threads, called weft, across the vertical warp threads. Next, they would tie a row of colored wool or silk yarn to each warp thread from one side to the other. Then came another row of cotton weft threads woven across the width of the loom, followed by another row of knots, and so on. When carefully clipped, the ends of the knots form the soft surface or pile of the carpet.

Terracotta

image 15

The terracotta (fired clay) relief illustrated in image 15 is from a Hindu temple made of wood and brick with terracotta embellishments. Before the fourth century A.D., when stone began to be used for building freestanding Hindu temples, wood and brick were the traditional materials. Terracotta reliefs were modeled by hand and with hand tools. Then they were fired and probably painted with bright colors that no longer exist.

image 2

The terracotta plaque illustrated in image 2 was made from a terracotta mold in a technique called press molding. The images on such plaques were first formed on the surface of a master model made of clay. When the clay hardened, the surface was greased and a thin slab of fine moist clay was pressed firmly onto the surface of the master model. As soon as this clay layer was firm enough, it was carefully removed and some additional details worked into its surface. Then it was fired to make a negative mold for producing multiple positive images like the Museum's plaque in the slide.