SCULPTURE

Although the Greeks were exhausted and their cities battered at the close of the first Persian War in 479 B.C. because of the sustained effort mustered to defeat a vastly more powerful Persian Empire, they emerged from the ordeal with self-pride and confidence. This spirit, together with their political maturity, provided the impetus for the beginning of the Golden Age.

The most obvious evidence of the change can be found in the sculpture of the Classical, or Golden, Age. Although there had been some significant movement toward the forms which would flower during this period in the late Archaic period, the work of the period from 479 to around 450 B.C. shows that the sculptor had developed an extraordinary command of the complicated nature of the human figure. While the examples from the late Archaic period had displayed some feeling of realism and an understanding of muscle structure, they were still essentially static. The Classical sculptor began to develop toward a careful balance of naturalism and idealism in the representation of movement, action, and emotions in formal arrangement.

The bronze of the *Charioteer of Delphi* (c. 475 B.C.) is perhaps the earliest outstanding example of life-sized sculpture in the round. The charioteer is all that remains of a group, which once included horses, erected as a commemorative offering after a race. This fact probably accounts for the charioteer's standing at rest (as opposed to being in a state of action) to receive his prize. The *Charioteer* is an example of one of two main classifications of Greek sculpture and relief--the secular, which commemorated their heroes, athletes, and warriors; and the religious, which depicted the myths, gods, and goddesses.

The tendency to rely on the intellect rather than on magic to explain everything in the visible world made the Greeks of this period curious observors of the phenomenon of life and of people's relationship to their physical environment. Their sophistication, by comparison with earlier people, made them logical and inclined to trust what they could see and explain. A high regard for the dignity of the human being as the temple of the mind inevitably led to the desire to depict this noble, rational creature as he appeared, even if that appearance was idealized. The Golden Age sculptor was primarily concerned with the visual surface of the human body, idealized to imply nobility and greatness rather than shaped to reflect the psychological overtones common to the Near East with its much more occult and vital religions. The Greeks were not necessarily irreligious, but religion did not dominate their lives as it did that of the Egyptians, for example.

The style of the early part of the period is most admirably expressed in the surviving examples from the Temple of Zeus at Olympia (465-457 B.C.) and by Roman copies of original sculptures of the temple. Some of the generalized and monumental character of the late Archaic period have been retained in such pieces as the *Apollo* from the west pediment.

Although the figure is not shown in a pose of action and the anatomy is still more stylized than examples of twenty-five years later, there is an alertness suggested by the turning of the head and by the humanizing of the features into a more naturalistic appearance. The impression that the figure is directing himself to something specific is augmented by the fact that he is holding his arm outstretched in the direction in which he is looking. The Olympia Apollo is an idealized man in the form of a god as much as he is a god in the form of a natural man. Other sculptures of the period, such as Aristogeiton (476 B.C.) and the magnificent, larger-than-life bronze casting of Poseidon (470 B.C.), are still somewhat stylized, but they are presented in very convincing poses of action, with the proper muscles in states of tension. Because the Greek sculptor understood the mechanism of the human body in a state of action, he was able to adjust the human form to fit the compositional restrictions of the triangular formats required by the shape of the temple pediments. The older static forms would not have functioned in anything except a vertical rectangular space.

In the figures of women, which in the early part of the period were still shown clothed however diaphanous the garment, the feeling of movement was very skillfully accomplished by the way in which the folds and pleats molded to the form beneath them. In earlier times folds were arranged schematically, or ornamentally, without any significant regard for the movement of the body underneath.

Relief carving advanced both in its technical aspects and in terms of making maximum use of the element of light falling on the surface in order to create a more naturalistic form. Relief sculpture was used for grave stele, for the metopes of Doric temples, and for the continuous friezes of the Ionic temples late in the Golden Age. (Please refer to the glossary of terms at the end of this section.) The Birth of Aphrodite, known as the Ludovisi Throne, is one of the outstanding reliefs of the early fifth century B.C.

Other important sculptors of the early Golden Age were Myron, Kalamis, and Pythagoras. Of the three, Myron is the most famous for his Discus Thrower (c. 460 B.C.). Other than from a multitude of literary descriptions, our only clue to his work is from Roman copies. It was one of the most admired statues of its time. Although it has since disappeared, it still existed in the time of the Roman Empire because an enterprising Roman trader had thousands of small copies made to be sold as souvenirs. It was originally made of cast bronze, which at some point was undoubtedly melted down (the fate of most bronze sculpture), but the Roman copies are in marble. Myron must have been the greatest anatomist of his time. The Discus Thrower and Marsyas, another athlete statue by him, are brilliant examples of the body in axial torsion. They are true sculptures in the round, for from any point around them, the action and mass distribution in terms of volume, space, and light can be observed. Few sculptors dared to develop as daring poses of action with the anatomical perfection to support that action. In spite of this realism and natural movement, the typical fifth century concern for balancing the natural and the ideal was still in force.

In sculpture, the Age of Pericles (second half of the fifth century B.C.) is dominated by Phidias, or at least by him and the sculptors under his direction on the Parthenon, and by Polyclitus. The Greek city-states had recovered from the dislocations of the Persians Wars, and Athens had reached its supremacy. Elected head of the Delian League, Athens administered the treasury of the city-state members. During the administration of Pericles, former war hero and brilliant leader, an extremely ambitious building program was undertaken. The Acropolis had had a significant symbolic importance for centuries. It was the only Mycenaean citadel to survive the waves of Doric invasions. The Acropolis had long been a sacred mountain, but the old temples and citadel were now in ruins. When new buildings were planned for the old solid rock foundations, Phidias was appointed to oversee all of the art and to work in partnership with the architects of the Acropolis, Callicrates and Ictinus.

The surviving Parthenon sculptures make up a collection known as the Elgin Marbles in the British Museum. Elements of the collections are on loan to other museums, including the Acropolis Museum in Athens. Other sculptures were destroyed when the building, being used as a gunpowder magazine, was blown up during the Turkish-Venetian War in 1684. Drawings made previously show us the location of the extant sculptures as well as provide us with a complete knowledge of the composition. The subject of the west pediment was the battle between Athena and Poseidon for control of Athens, and that of the east pediment, the birth of Athena. The metopes were carved with scenes of combat between Greeks and Centaurs (symbolic of the victory over the Persians), Greeks and Amazons, gods and giants--a gallery of favorite Greek heroes. The continuous frieze is a running narrative of stories of gods, maiden suppliants, horsemen, and warrior-athletes. The Parthenon reliefs are cut very deep so as to take advantage of light playing on the surface. Although, as always, balance in space is considered, the feeling of symmetry present in Egyptian and Assyrian narrative bands is not especially dominating.

Writings testify that the imprint of Phidias was on all of the Parthenon sculpture, giving it a remarkable consistency whether actually carved by him or by his assistants. The surviving examples bear this out: All of the work has a majesty and refinement as well as fine craftsmanship. In these works the extremely precarious balance between the real and the idealized is beautifully maintained. The balance begins to tip very shortly thereafter as the trend of breathing life into stone destroys that balance.

The other dominating figure of the Periclean Age is Polyclitus. In addition to statuary of deities, he is noted for his athletes. He was a philosopher as well as an artist and according to the literature of antiquity developed a canon of proportions for the human figure. The concept of the proportion of the parts to each other and of each to the whole was applied to the fusion of all the elements of the figure, and the figure was then made to fit into the "idea" of encompassing space. The Canon of Polyclitus was very novel for its time, and in its way was a major endeavor of scholarship. It therefore followed, according to Plato, that "only the composite can be beautiful." This is really

another way of defining a word much in use by modern criticism and esthetics--plastic. Unfortunately, some Renaissance and Neo-Classical artists assumed it to be a formula without realizing that Polyclitus undoubtedly implied the use of artistic intuition and taste--a thing often overlooked about Greek art generally.

Also of great interest are the caryatids of the Erechtheum on the Acropolis (c. 420-413 B.C.). Six draped maidens, no two of which are exactly alike, function as columns on the porch of the asymmetrical little temple. (Please refer to the section of the commentary on architecture.) The figures have an elegant grace, with the folds of their garments revealing both the form of the body and the character of the pose.

By the close of the fifth century B.C. the decline of sculpture was in progress and the Classical period on the wane. Many historians attribute the decline to the sufferings and debilitations of the Peloponnesian War, which began in 431 B.C. and lasted for twenty-seven years. The war, primarily between Athens and Sparta, had caused terrible slaughter and had drained Athens of both her treasure and the cream of her youth. The era of heroic self-confidence faltered in the period between the civil wars and the formation of the Greek Hellenistic Empire under Alexander the Great (c. 325 B.C.). A greater interest in the individual, stimulated by such philosophers as Socrates, determined that the more idealized and impersonal styles of former years would give way to a more individualized and softened human quality. The sculptures of warriors and athletes, as well as gods, took on a kind of "feminine" character and the many heads and busts of the period became highly personalized and specific portraits. The period between the end of the Peloponnesian War and the Empire is known as Pre-Hellenistic.

The three principal sculptors of the Pre-Hellenistic period were Praxiteles, Scopas, and Lysippus. The last became chief sculptor to Alexander the Great and thus becomes a transitional figure into the Hellenistic Age. Allowing for important differences between the three, they have some basic things in common. Poses are sinuous, even casual, with occational examples of excessive torsion. A lengthened torso with smoothed muscles bent in the classic "S" pose (so much admired by the Roman and Renaissance sculptors) became a convention. Finally, expressions are rather dreamy and gentle; the facial proportions lack the squared, resolute jaw and pronounced cheekbones of the Classical period.

Praxiteles seems to have been the earliest sculptor to depict the female figure completely nude. The Aphrodite of Cnidos (c. 340 B.C.) stands in a very coy pose, a somewhat restrained version of the "S" but with forward motion suggested by the balance with the weight on the right leg. By contrast, the Aphrodite of Arles, done about the same time in the standard "S" pose, is balanced so that the effect is that of a stationary figure. Praxiteles' best known piece is the statue of Hermes with the infant Dionysus, and it is one of the few authentic Greek sculptures extant from the period. It had been preserved by a fluke. The Temple of Heraion at Olympia, an example of inferior workmanship, had been constructed with a cella of adobe block. When the roof collapsed, the cella was crushed beneath the weight of the beams and tiles. The adobe packed around the

statue and protected it through the centuries. It was uncovered in 1877 and is a major find in Greek archeology. Hermes illustrates the tendency toward exaggerated poses and a slick treatment of the anatomy, which gives the figure an effeminate quality—a characteristic found in much of the work of both Praxiteles and Lysippus especially. The work of Scopas is, for the most part, more masculine, but both poses and antomy are often exaggerated, destroying the form in the process.

All of the Pre-Hellenistic sculptors, but particularly Praxiteles, were much admired by both their contemporaries and by the Romans. Their work contains the seeds of the flamboyant Hellenistic style. The relief of this period also becomes the major source of the Roman style. By now it was cut so deep that it violated the integrity of the flat surface upon which it was carved. Compositionally, it was more cluttered and restless than previously--characteristics reflected in both Roman and Renaissance-Baroque styles centuries later.

ARCHITECTURE

The essential purpose of the Greek temple was to house a sculptured deity. The Greek religion was not congregational and, therefore, did not require a temple in which large groups of celebrants could gather. The Greek temple became the essence of simplicity with no deviations from its function. There is no doubt that Greek architects had experimented for centuries with proportions of a type of building based on the floor plan of the old Mycenaean megarons with their side galleries, great hall, and adjacent treasuries. The final solution—of complete logic and clarity—was reached in the Doric order and specifically in the Parthenon on the Athenian Acropolis. The classic Doric temple, despite its size in many instances, expresses a calm, horizontal feeling with the main emphasis on the structural, or weight-bearing, elements, to which all else is subordinated. There is no feeling of mysticism intended or suggested. Intellectual balance and order are its objectives.

In terms of function the basic floor plan evolved around the eighth century B.C. and continued to be used until the Greco-Roman period in the middle of the first century B.C. Nearly 140 temple ruins, large and small, have been excavated, and virtually all were built in the basic plan, using either of the two Classical Greek orders, Doric and Ionic. The third Greek order is called Corinthian, a bastardization of several foreign styles, and came later than the Classical period.

The first Greek temples were small and were made of wood. The cedar columns were probably adaptations of the Minoan cushion column (also made from cedar), and the fluting undoubtedly came from Persian or Egyptian columns. The later stone-drum column engineering most likely came from Egypt. Although the Greeks knew the use of the arch and used it in other smaller public buildings, it did not fit their concept of the temple style. For one thing, they had no interest in great heights, preferring the

horizontal rectangle form instead. Beams supporting the tile roofs were always of wood. The lighter weight of wood made it possible to span larger space without cluttering up the floor space with columns, and, again, really large interior areas were not needed.

Thus the engineering-architecture principle of the column and beam (post and lintel) became an essential element of the Greek orders. The great limestone or marble blocks were turned into drums using the water-grinding principle, with donkey power used to turn the stone lathes. The drums were fastened together with clamps and dowels; the Greeks did not know the use of mortar or concrete. This meant that blocks and drum used in the construction had to be cut and fitted with great skill. The marble plates, or facing, used to cover the rough stone was also flawlessly cut and fitted together.

As has been pointed out previously, the truly classic example of the final refinement of the Doric style is the Parthenon. It is one of the first to add fluting to the Doric column. The size of the column must have concerned the designer and in order to make the columns appear lighter, fluting was added to establish a slimmer vertical emphasis. Fluting also catches the light and gives the column a stronger place in the overall structure by making the connection between the stylobate and the architrave. Perhaps to suggest muscle-bearing tension (from an interest in human anatomy), columns are given entasis to create the feeling of grace without loss of weight-bearing strength.

As a matter of fact, there are no straight lines in the Parthenon. The architects designed the building with subtle curves and swellings either to prevent the optical illusion of sagging or to suggest strength. Columns tilt slightly inward to correct the illusion of an outward fall, and both the stylobate and entablature rise slightly at the center to correct slumping. Obviously a canon of proportional relationships was used with consistency. As a matter of fact, fragmentary writings attest to such a canon, and from it the concept of the Golden Mean was developed in the early Renaissance in Florence, mainly by the architect, artist, and mathematician Piero della Francesca. The Parthenon is one of the world's finest examples of a building conceived and carried out with a near-perfect harmony of proportion and, as such, most perfectly reflects the essential Greek character of the age. It is no less conventional than Egyptian architecture and much less daring in terms of engineering than either Egyptian or Persian architecture, but it illustrates the typically Greek idea of "neither too much nor too little" and saves an inordinate amount of frustration from experimental disappointments and compromises.

The two outstanding examples of the Ionic order are the Erechtheum with its famous Porch of the Maidens, and the small Temple of Athena Nike. Both are on the Acropolis and were constructed between about 421 and 406 B.C. The Ionic order had been in use for many years in the Ionian region of Greece and was distinctly Eastern in flavor. By the middle of the fifth century B.C. it became popular on the Greek peninsula. The Ionic order is much lighter in feeling than the Doric. Columns are

narrower in diameter and taller as well. The height is further enhanced by a change in the fluting on the column surface. The channels are narrower and deeper so that the effect of the light creates a deeper shadow; thus the vertical lines are stronger. Although the capital is broader, the heaviness of the Doric gives way to delicate scrolls which fall on either side of the capital. To balance the horizontal effect at the top of the column, a base of progressively narrowing disks creates a horizontal form at the stylobate. With the exception of the plan of the Erechtheum, the Ionic temple does not deviate from the basic plan used in the Doric building.

The Erechtheum is, by comparison with other Greek temples, non-symmetrical. Built on several different levels, it does not have the traditional colonnade. Two porches of different sizes extend to the north and south at right angles from the main building, and a courtyard, which is not parallel to the main building, extends from the west end. The south porch is supported by caryatid columns, which, though occasionally found in early Doric temples, were also used in Ionia. Except for the deviation from the standard temple floor plan, the elements of the building are Ionic.

Reached by a grand staircase, the Propylaea, the massive gateway to the Acropolis, is part building and part breastwork. Its columns and ornamentation are Doric. On the west parapet of the Propylaea stands the lovely little Temple of Athena Nike, Ionic in style and traditional in floor plan. Only the porches on either end have columns.

The Greeks built other public buildings such as gymnasia, baths, and theaters, which feature a variety of engineering and architectural systems, including the use of keystone arches. The simplicity of temple architecture is retained, but the codification of temple architecture did not apply to the various other structures.

The Corinthian order developed in the period between 350 and 300 B.C. but did not become popular until the Hellenistic period. By this period architecture had become somewhat eclectic. Doric, for example, was utilized in the Temple of Asklepios in the late part of the fourth century. The Athena Alea at Tegea is an example of a structure which combines all three of the Greek orders (an idea which had great appeal to the Romans).

POTTERY AND OTHER ARTS OF THE PERIOD

As has been mentioned previously, pottery decoration is our only clue to Greek painting. No other examples have survived. All Greek statuary, with the exception of bronzes, was painted (much to our horror). Mercifully, the paint on the marbles has worn off and there is little doubt that our assessment of Greek sculpture would be somewhat different if the painting had survived; it must have looked garish indeed. The traces of paint that remain on the interiors of cellas in several temples indicate

that painted murals once existed there too. We can make very few assumptions about the appearance of these murals and about other paintings except by assuming certain stylistic qualities from assessments of the pottery of the period. The fifth century Greek painters had become experts with contour line. By this time the figures and animals on red-figured pots had evolved from the Archaic period into a state of extremely elegant refinement. They are supple and very convincing. All are narrative and relate much the same subject matter as the reliefs of the period. Variations of the basic Archaic forms of the pottery appeared, but the same basic elements of the forms are never really lost. Painters of Attic vases, who signed their work, include Epictetus, Euphronios, Euthymides, Brygos, and Douris. Because of the extensive use of pottery in Greek civilization, these artists were well-known and attracted a large following. All of the major Greek potters had large workshops with apprentices and other skilled men working in the particular style of the master. A great deal of pottery has been salvaged from sunken ships, indicating that Attic ware was a major export in Greek commerce.

Greek jewelry was also in great demand in the Mediterranean area. The fifth century Greeks fell heir to the high development of the arts of metalwork in Mycenaean times. Ownership of Greek jewelry was a status symbol among the Roman nobility.

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