Chapter 6

Our Roots are Deep:
Greek and Roman Art
What influence did Ancient Greeks have on Modern society?

- The Greeks introduced our cherished concepts of citizens' rights, democracy, and freedoms of speech and religion.
- They passed down knowledge of science, medicine, engineering and the foundation of philosophy.
- They excelled in mathematics, physics and astronomy. In the fifth century B.C., Greeks came up with theories about the planets and their movements.
- According to historical records, the first ancient Olympic Games can be traced back to 776 BC. They were dedicated to the Olympian gods and were staged on the ancient plains of Olympia.
- Greek style of architecture has been the model that Governments, Banks, Museums, Corporate Head Offices and Sports Stadiums have used most often.
Origins of Greek Art:
The Minoans and Mycenaeans

- In c. 2800 BC, when the first kingdoms were emerging in Egypt and Mesopotamia, the Greek mainland and its islands were invaded and settled by non-Greeks from Asia Minor.
- On Crete, Greece's biggest island, a civilization evolved that would rival the wealth and sophistication of Egypt and Babylon. They were named Minoan, after the legendary king, Minos.
- The Minoans lived a life of luxury. They achieved their wealth from being traders with the Near East. They were protected by their navy.
- Several palace structures, the remains of frescoes and their images, and fine pottery give us a glimpse of their society.
Ancient Greece
King Minos’ Palace at Knossos

- Contained many rooms
- Running water
- Sewage system
- Theatre
- Storerooms
- Terraces
- Elaborately decorated interiors for the king and family
Frescoes from The Palace of Minos at Knossos
The Bull Dance Fresco

- The fresco shows a ritual game in which the participants vault over a bull’s back.

- The lighter skin tones suggest that the Minoans were more Asian-Persian, than Mediterranean.

- The number of images that included bulls, suggests it had great importance in Minoan culture. The Bull would go on to be very important in Spanish culture.

Much of what we know of the Minoans’ culture and beliefs has been learned from the art and artifacts they left behind.
Numerous versions of The Snake Goddess figurine exist. She is believed to be a religious figure who perhaps warded off evil spirits.
The Harvester Vase

- Men with scythes and rakes celebrate the harvest festival.
- Figures sing in celebration.
The Octopus Jar

- Images from the sea and nature dominate the decoration of frescoes and vases.
- The octopus' curves arms follow the curved surface of the vase.
The Minoans had been protected by their island’s geography and their naval fleet.

Their art shows no fear of war or invasion.

The Minoan civilization came to a sudden halt.

Archeological and scientific evidence has shown that a nearby volcanic eruption on the island of Thira (Today Santorini), caused a Tsunami that totally devastated them.

A surviving civilization, the Mycenaeans, invaded from mainland Greece to control the island and enslave the survivors.
Mainland Warriors: 
The Mycenaeans

- Living on the Mainland of Greece, the Mycenaeans were constantly protecting against outside invasion.
- They were warriors not traders.
- They built fortresses, not palaces.
- Their hilltop fortresses were surrounded by walls of enormous stone blocks.
The Lion Gate

- Topped by a huge triangular-shaped slab showing two majestic lions flanking a Minoan style column.

- The stone was carefully cut to fit the massive lintel over the doorway.
Mycenaean Metal-Work

- Mycenaean buried their dead warriors in sunken bee-hive shaped tombs.
- Royal graves contained objects of gold and silver.
- The Funeral Mask (gold sheet metal) was placed over the face of a dead ruler at the time of their burial.

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The Vaphio Cups

- The cups were found in a sunken grave.
- Made of gold, it shows in minute detail, how the Mycenaeans captured bulls.
The Mycenaean civilization came to an abrupt end in 1100 BC, destroyed by southward invaders, The Dorians.

Archeological evidence for this period suggests extreme poverty and social insecurity.

For 400 years, art had little use.

After 650 BC, Greek cities emerged on the sites of old Mycenaean settlements.

Athens became the most important city.

Humans were at the centre of Greek culture. It represented the “idea” of pure beauty.

Ideal Beauty was in the form of the perfect human body. The human body was beautiful, balanced and harmonious. The human body was shown nude in all its glory.

Their gods were given human form and human weaknesses.

Perfection would be achieved through a balance of intellectual (mind) and physical (body) discipline.

Greek artists worked in a cultural environment that encouraged all forms of art so long as they worked toward the goal of beauty and balance.
The Measure of All Things

- The Ideal proportions of the human body was the perfect expression of beauty. It became the unit of measurement when they constructed their temples to their gods.

- Man had become “The Measure of all things”.

- The Golden Ratio, 1:1.618 (Phi), found in human proportions would become the rule for all designs.

http://www.youtube.com/watch?v=0hvD5kLqjwu&feature=share&list=PLBDEC29C52BDEB88BB

The Kritios Boy, from the classical era
Archaic Greek Sculpture

- The standing male nude of the Archaic period is a symbol of democracy. Man is free, stands on his own two feet, and owned by no one.

- The nude male from the Archaic period is called a Kouros. It represents an ideal athlete or the god Apollo.

- The sculpture is nude to represent perfection and beauty.

The Kouros’ archaic smile is a characteristic feature of this era where the face has a slight smile or smirk.
The Kouros’ archaic smile is a characteristic feature of this era where the face has a slight smile or smirk.

The hair is braided and is in one blocky mass.

The body proportions - width of shoulders to waist - are exaggerated.

Both feet are flat on the ground even though one leg is in front of the other and no knee bent.

Its features suggest that the Greeks had been influenced by similar looking Egyptian monuments.
Classic Greek Sculpture

- The Charioteer of Delphi is one of only a few remaining bronze sculptures. Most have been lost or were melted down to make ammunition when resources were scarce.

- The cloth folds, muscles and facial features are natural and realistic.

- The archaic smile is replaced by calm and control, symbolizing the classic balance of emotion, personality and physical ability.

- The pose, however, is still a bit stiff and rigid.
Classic Greek Sculpture

- Athenians decorated the most important temple, the Parthenon, with sculptures that were larger than life, and with a continuous relief sculpture on the frieze (the top of the wall, under the roof), that ran for 525 feet.

- Lord Elgin, of England, in 1801, collected remaining sculptures and took them back to England for safe keeping.

- With only the depth of a few inches, the sculptors created convincing illusion of depth. The closest figures are carved the deepest.
The Getty Bronze

- Found beneath the Mediterranean Sea, is a victorious athlete crowning himself with a laurel wreath.

- Displays the contraposto pose - S-curve of the body, weight shift to one leg, knee bent, tilt in axis of hips and shoulders.

- The closest to natural human proportions.

- Classic natural, relaxed pose, and the facial expression of calm and control, was typical of sculpture during this Golden Age.
The Three Goddesses

- The sculptures were designed to fit exactly into the pediment, the flat triangular area, at each end of the Parthenon.

- The cloth drapery was carved to suggest the human body underneath the folds. The cloth looks as if it were wet and sticking to the flesh beneath. It is realistic and natural.
Parthenon Pediment Sculptures
Hellenistic Sculpture

- Sculptures from this period are typically characterized by action and emotion.
- The Dying Gaul, is a typical sculpture of this period.
- Shows a wounded warrior about to die.
- There is agony in the pose and in the face. Death seems very real and unheroic.
- The sculpture is meant to be viewed from all 360 degrees.
The Nike of Samothrace

• The greatest example of Hellenistic sculpture.

• She is the symbol of Winged Victory - her wings spread as she lands on the prow of a ship.

• The wind whips her drapery into animated folds.

• Because of this effect, the 360 degree space around her is meant to be viewed - not just from the front - a concept that would influence future sculptors.
The old woman drags her bent and worn body in contrast to the heroic quality of Classic sculptures of athletes and the forward energy of the Nike of Samothrace.
Greek Architecture

- Greek architecture focused on the construction of temples to honour their mythological gods.
- The focus of their design was on the exteriors because the general public was not permitted to enter the temple.
- The largest concentration of temples are found in Athens on the hilltop called the Acropolis.
Greek Architecture

- Like sculpture, Greek architecture evolved during the Archaic period, reached its peak in the Classic period, and ended being more decorative in the Hellenistic period.

- Temples built during the Archaic period are heavy in appearance. They have massive columns with limited height. The columns are close together to support the lintel (the stone beam the rests on top of the columns).

- Greek temples are an example of Post and Lintel construction.

- The columns taper from their base to the capital and bulge. This curvature in the columns is called entasis.

The Temple of Hera, “The Basilica”
The Orders of Construction

- Greek temples show that they were concerned with harmony and perfect proportions.

- They devised a system of construction for specific styles of temples called Orders that gave the buildings an organized arrangement of parts.

- They used the Human Body as the unit of measurement because it had divine proportions with the golden ratio.

- The Doric order developed on the mainland of Greece - mainly Athens.

- The Ionic order evolved in the islands and coast of Asia Minor.

- The Corinthian order was used in Hellenistic times and later favoured by the Romans.
The Doric style reached its maturity in the Parthenon during the Classic period.

It is the central temple on the Acropolis.

Columns are more slender than Archaic temples and are spaced further apart. Entasis is barely noticeable.

Originally brightly coloured, the Parthenon contained a 40 ft. Golden statue of Athena in its cella (inner room closed to the public).
The Ionic Temple - Athena Nike

- The Ionic order has a much lighter appearance and its columns are more slender than the Doric order.

- The Capital is decorated with a spiral-paper scroll motif.

- The sculptured frieze is one continuous carving - where as the Doric frieze was interrupted by triglyphs and metopes.
Porch of the Maidens

- As part of the Erchtheum temple, the 6 female figures on the porch - called Cayatids, replace traditional columns.
Greek columns

- All temples were constructed without mortar or cement. Stones were precisely cut and stacked.

- Typically, metal rods and dowels were used to hold one block in place above another.

- The flutes - the scalloped design on the columns - were carved after all the column drums were stacked.
Corinthian Temple - Olympian Zeus

- Corinthian temples have tall slender columns
- They are capped with decorative Acanthus leaf motif.
- This style was preferred by the Romans for their temples and monuments.
Greek Amphitheatres

- Built into the natural hillsides, many are still standing today.
- The natural slope provided perfect acoustics without the need of electric amplification.
- The design was in 2/3 of a circle.
- The round stage area is called the orchestra. The building structure behind formed a backdrop for scenery.
Black-Figure Vase Painting

- Made of red clay with coloured decorations was painted on,

- The term Black-figure refers to the technique where a character is painted as a silhouette. The details were then scratched into the black paint to create white lines.
In Red Figure vase painting, backgrounds were painted black.

Details of characters were painted with a brush using a variety of lines.

More natural perspective and poses were later achieved.
In the latter part of the Greek civilization, Greeks had learned how to represent figures and animals in correct perspective including foreshortening.

The Battle of Issus is a scene from the victory of Alexander the Great over Darius’ Persian army.

The shading creates rounded figures and adds to its realism.
The Grandeur that was Rome: Roman Art & Architecture

- The Roman Empire existed as long as it had because of its use of technology - technology that it did not invent, but learned from the people it had conquered as the Empire expanded.

- From its beginning as a Roman city-state in the 8th century B.C to its peak around 117 AD, the Romans dominated the Western world through conquest.
Roman achievements

- From laws and government to modern necessities like indoor plumbing, hot water, heat, public bathrooms, sewers, and stadium sports, Romans set the standard for civilization.

- Romans made their greatest achievements in architecture and its engineering.
Roman Technology

- The technology that allowed the Romans to build vast structures with open spaces was the perfection of: the Arch, the Vault and the Dome.

- These would not have been possible without the innovation of concrete. Concrete was an leap in engineering from cement - which the Etruscans had invented.
The Arch, Vault & Dome: Revolutionary Engineering

- A stone lintel atop two columns rarely spanned a distance as wide as 15 feet.

- An arch can span 150 feet and supports itself as well as immense loads on top.

- Combined with concrete which could be cast in molds of any shape and size, the arch allowed Roman engineers to design enormous open spaces - like the dome of the Pantheon.
The Arch, Vault & Dome: Revolutionary Engineering

- When an arch is extended in a straight line, it becomes a **Barrel Vault**.

- Vaults provide a curved ceiling over two walls.

- When two barrel vaults intersect at a right angle, a **Groin Vault** or **Cross Vault** is created.
The spectacles performed in the Colosseum kept many unemployed Romans happy and distracted from their miserable lives.

When the Colosseum first opened, over 150 days of “entertainment” were put on by the Emperor.

50,000 spectators watched gladiators fight each other or ferocious and exotic animals.
The name *arena* comes from the Latin word for sand, which was used on the ground to absorb the blood.

The interior could be flooded to perform mock naval battles.

The oval structure got its name from a gargantuan statue of Emperor Nero, called the *Colossus*, which once stood near by.

Sublevels of cages, counter-weight hoists (elevators), and ramps were used to take gladiators and animals up to the surface.

The structure was made up of 6 tiers of seats supported by a brick and concrete facade of 80 arches on 4 levels.

Between the exterior arches are columns. On the first level are Doric style, Ionic style on the second, Corinthian on the third, and Corinthian square pilasters on the fourth.

A protective awning, called a *Vellarium*, supported by 58 wooden masts shielded spectators from the blazing sun.

76 gates around the outside, efficiently allowed spectators in and out.
Concrete: The Supporting Cast

- Ancient cement, invented by the Etruscans (people of what is today the Tuscany region of Italy), was a mix of sand, lime, water. They used it to make roads and sidewalks.

- The Romans took cement and improved it. They added an aggregate to make concrete (crushed stone gives it its strength). A volcanic rock, called Pozzolana, could be added to make the concrete waterproof when used on aqueducts.

- Poured into a form or mold, it would hardened and take its shape.
The Pantheon: Supreme Roman Engineering

- Built by Emperor Hadrian between 118-125 AD.
- Built to honour all the Roman gods, the Pantheon remains unchanged today after almost 1900 years.
- Its concrete dome was the widest until the 19th century.
- Its dome exerts 5,000 tons of pressure on 20 foot thick walls.
- The building’s blend of enormous interior space, concrete construction, and classical entrance makes it the most imitated of Roman buildings.
Its huge dome (an exact hemisphere) rests on a mammoth drum (20 ft. thick walls) creating an interior space that is 144 ft in diameter.

Its concrete dome is thickest (20 ft.) where it rests on the drum, and gets thinner toward the eye-like opening at its centre, called the oculus (only source of light was 30 ft in diameter). This thinning removes an enormous amount of weight from the dome.

The dome was coffered (series of recessed rectangular panels). They get smaller as they approach the oculus, making it seem further away. They also remove more weight from the dome.

The type of aggregate (crushed stone) in the concrete varied to lighten the load as it ascended.

The interior’s floor has an elaborate drainage system to carry away any rain that enters the oculus.
Bathing to relax was a daily ritual for Romans. The Baths of Caracalla were a combination health club, school, recreational facility.

- They accommodated thousands of people and covered acres of land.
- They divided hot and cold bathing into separate rooms.
Hadrian’s Villa

- 500 acres of gardens, pavilions, palaces, theatres, temples, and baths in complete luxury.

- Emperor Hadrian combined architecture and landscape. Water in pool, fountains, waterfalls, and canals added movement and sound to architecture.

- Underground was a network of service roads so maintenance would not be seen, and food and drinks kept cool.
The Roman Basilica

- The Roman basilica was a place of public assembly and commerce, as well as a hall of justice.
- Rectangular shaped (length twice the width).
- Aisles dividing the nave from side galleries.
- A semi-circular apse at the end opposite the entrance.
- Lit by clerestory windows (above the nave)
- Flat wooden roof. Marble floors.
- Ceiling were coffered and covered with gilded bronze.
- Later when the Empire became Christian, basilicas were converted to churches and used the plan for future cathedrals.
Roman Aqueducts

- There were over 1 million Romans in the city of Rome; 952 public baths in Rome alone; fountains for drinking water and cooking; and decorative fountains that consumed water.

- The city of Rome consumed 350 million gallons of water per day.

- Fresh water was brought from the mountains many miles away by aqueducts to the cities where it was needed. Rome had 11 aqueducts.

- The concrete used to construct them needed to be water-proof, so a volcanic rock, pozzolana, was used as the aggregate gravel.
Triumphal Arches

- Emperors built large triumphal arches to commemorate their greatest achievement and to show their power.

- They were built on a main road as you would enter a city.

- The large structures usually have three arches through it.

- They are covered in relief sculptures showing important events and battles that the Emperor won.

The Arch of Constantine, 312-315 AD., Rome
Roman theatres were different slightly from those of the Greeks. The Romans partially cut the orchestra (stage area) and built a raised stage area behind it. Important people were seated on the orchestra.

- The structure was semi-circular rather than 2/3 circle of the Greeks.
- They were free-standing, not built into the hillside.
Roman Sculpture

- Roman sculptors made their greatest contribution to sculpture through portrait busts (head and upper torso).

- Portrait sculpture were done to honour their emperors and the noble class.

- Their accuracy and realism helped preserve the features of the emperors and emphasized their greatness.
Roman Relief Sculpture

- Relief sculptures were used to record important events in the lives of Roman Emperors.

- The *Column of Trajan*, is a marble cylinder 130 feet tall. It was topped with a bronze statue of Trajan (now has one of St. Peter)

- The relief sculpture spirals 700 ft. long illustrating Trajan’s conquests.

- The column is hollow and originally contained the ashes of the emperor.
- Romans greatly admired Greek and Etruscan artwork. Very little Greek and Etruscan art has survived. What we have are Roman copies of their work.

- Romans used wall murals - frescoes - to decorate the interiors of their homes.

- They preferred still life, portraits, landscapes, and mythological subjects.

- The best examples of Roman painting were uncovered in Pompeii and Herculaneum. Both were buried under volcanic ash from Mt. Vesuvius in 79 AD.
- All Roman paintings were done in fresco.

- Often landscapes and architectural scenes were painted to “open windows” to provide a feeling of more space in window-less rooms.

- Portraits were painted on walls of family members.
Roman Mosaics

- Mosaics are created using small coloured stones or pieces of glass usually less than a centimeter in size. The stones or glass were polished to a high shine.

- They were made to decorate floors and walls in Roman villas.
The Battle of Issus. Roman mosaic of a Greek fresco. Only uses 4 colours - red, yellow, white and black. The subject is the victory of Alexander the Great over Darius and the Persian army. The anatomy of soldiers and horses is remarkably accurate. Forms are made real with shading.