Title: East and West Pediment of The Temple of Aphaia, Aegina

Artist: Greeks

Date: 470–460 BCE

Museum: Surviving fragments as assembled in the Staatliche Antikensammlungen, Munich (early restorations removed)

Medium: marble

Size: width about 49’ (15 m)

Note: we’ll look at two dying warriors upper left and lower right, and the archer lower left.
TEMPLE OF APHAIA, AEGINA

Title: Dying Warrior, from the west pediment of the Temple of Aphaia, Crete
Artist: Greeks
Date: circa 500-490 BCE
Museum: Staatliche Antikensammlungen und Glyptothek, Munich
Medium: marble
Size: length 5' 2 1/2" / 1.59 m

Title: Dying Warrior, from the east pediment of the Temple of Aphaia, Crete
Artist: Greeks
Date: circa 480 BCE
Museum: Staatliche Antikensammlungen und Glyptothek, Munich
Medium: marble
Size: length 6' / 1.83 m
**Title:** Archer, from the west pediment of the Temple of Aphaia

**Artist:** color reconstruction by Vinzenz Brinkman

**Date:** circa 500-490 BCE, color reconstruction 1980's

**Museum:** Staatliche Antikensammlungen und Glyptothek, Munich

**Medium:** marble

**Size:** length 5'2 1/2" (1.59 m)
architrave: the beam that spans a pair of columns
gable: the area where the wall meets the overhangs of a pitched or otherwise inclined roof; the often triangular upper portion of the end wall of a house or other building
order: the system of decoration of a Greek column and entablature, the three main Greek orders, and two later Roman ones.

Note: The orders “serve to categorize nearly all classical buildings.” “On all three orders the triangular pediments were made the occasion for figure sculpture.” (Sutton)
The orders are named by Vitruvius. (Stokstad)
Note: Marcus Vitruvius Pollio, c. 80–70 BC – after c. 15 BC, commonly known as Vitruvius, was a Roman author, architect, civil engineer and military engineer during the 1st century BC, known for his multi-volume work entitled *De architectura*. His discussion of perfect proportion in architecture and the human body led to the famous Renaissance drawing by Leonardo da Vinci of Vitruvian Man. He was also the one who, in 40 BCE, invented the idea that all buildings should have three attributes: *firmitas, utilitas, and venustas*, meaning: strength, utility, and beauty. These principles were later adopted by the Romans. (wikipedia)
Title: Doric Order: Temple of Apollo at Corinth, Greece: Capitals

Architect: Doric culture  
Date: ca 540 BCE

Capital: comes from caput, meaning head, in Latin! the word for head in Greek is kranion
Shaft: the main vertical part of a column, between the base and the capital. early 6th cent.
Columns are monolithic as this one is. Later ones are made up of drums.

Note: n/a

Source: photograph by Alexander Pappas, Athens
Medium: stuccoed limestone
Size: height: column shafts 11.5 feet (3.506 meters) originally 6 X 15 columns: seven columns / stylobate 53.82 X 21.48 m
Doric Order

Title: Doric Order

Architect: Greek Doric culture, Greek mainland and western colonies.

Date: 5th century BCE  
Source: OUP

Medium: detail of order  
Size: n/a

**flutes/ fluting:** shallow vertical concave grooves cut into a column shaft or pilaster

**frieze:** in a classical order, the middle horizontal division of an entablature, often has sculpture.

**order:** the system of decoration of a Greek column and entablature, the three main Greek orders, and two later Roman ones.

**pediment:** the triangular gable end of an ancient Greek or Roman temple.

**shaft:** the main vertical part of a column, between the base and the capital

**triglyph:** a panel in a Doric frieze with three vertical grooves; the panel is set between metope panels.

**tympanum/ tympanon:** a triangular space set within a pediment and placed above the columns of a classical building or above a pair of columns at a door or window.

**Notes:**

- all of this vocabulary is important, as well as distinguishing the three main Greek orders. Doric is distinguished by plain capitals, heavy fluted columns, triglyphs and metopes. The tympanum on the triangular pediment carried sculptural decoration, as did the metopes.

- The Doric people were from Central Asia and brought their chariot use with them, invading Greece around 1200 BCE. From the chariot we get the image of Apollo driving his chariot across the skies daily, carrying the sun with him.

- The Doric order starts after the 7th cent. Dorian contact with Egypt. (Wiley)
column: a cylindrical vertical support, often tapering upward and made either in one piece or of drums. In classical architecture a column consists of a base (though not in Doric), a shaft, and a capital.

Doric order: the stoutest and least decorated of the three main classical Greek orders. Doric has a plain capital, a fluted shaft and no bases. The entablature is decorated with alternating squares filled with triglyphs and metopes.

drum: one of the cylindrical blocks of stone that forms a column; held together by metal spikes.

entablature: The horizontal spanning element of a classical order divided into the architrave, frieze and cornice.

metope/ metopai: the square space, often decorated with sculpture, between the triglyphs in a Doric frieze.

triglyph/ triglyphoi: a panel in a Doric frieze with three vertical grooves; the panel is set between metope panels.

Notes:
• The flutes meet at a precise edge called an arris.
• The orders are like sentences… which are constructed according to rules. Placing a Doric frieze above an Ionic entablature would be comparable to using a plural verb with a singular subject.  (Gardner)
Title: Lapith and Centaur, metope from the south side of the Parthenon

Artist: Phidias

Date: circa 440 BCE

Museum: The British Museum, London

Medium: limestone

Size: height 56" (142.2 cm)

Lapith: a mythical pre-Hellenic people

Relief: carved or embossed decoration raised above or carved below the surface of a wall.

Note: the Doric frieze on the exterior of the Parthenon has 92 metope reliefs depicting legendary battles, each showing a representative figure from each side. (Stokstad)
Title: Erechtheion, North Porch, Athens

Architect: Greek Ionic culture

Date: 700-200 BCE

Source: OUP

Medium: stone

Size: n/a

Notes: Here the ratio of the diameter of the column to the height is 1:9
Title: Ionic Order: Capital: Erechtheion, Acropolis of Athens, Greece

Architect: attributed to Mnesikles, Athenian architect: active mid-5th century BCE (the age of Pericles)

Date: circa 421-406 BCE

Source: photograph by David Lewis, Bridgeport CT

Medium: marble

Size: height: column shafts 11.5 feet (3.506 meters) originally 6 X 15 columns: seven columns / stylobate 53.82 X 21.48 m

Ionic order: the middle size of the three main classical Greek orders, with column capitals decorated with volutes/scroll motifs.
Title: Ionic Order

Architect: Greek Ionia/ Ionic culture, of the west Anatolian coast and nearby Aegean islands.

Date: 700-200 BCE  
Source: OUP

Medium: detail  
Size: n/a

base: the lowest supporting part of a column, pier or wall.  
capital: the upper element of a column or pilaster, above the shaft

Notes: all of this vocabulary is important, as well as distinguishing the three main Greek orders.

Ionic is distinguished by capitals, with volutes, a horizontal frieze on the entablature, often with egg and dart decoration, columns with bases, and dentil decoration above the frieze.

Ionic temples used marble, which is superior to the Doric limestone, and could be used with a more slender profile and still support the roof.

Asia Minor is the true home of the Ionic, but the Athenians also used it. (Fletcher)
volute: a spiral or scroll motif.

Ionic:

- Raking sima
- Raking geison
- Cornice
- Frieze
- Entablature
- Architrave
- Capital
- Shaft
- Base
- Stylobate
- Stereobate
- Leveling course (or euthynteria)
Title: Corinthian capital, found in the vicinity of tholos at Epidaurus, Greece

Architect: Attributed at times to be the model of the capitals of the inner colonnade of the Tholos, designed by Polykleitos the Younger (The design of the Corinthian order has been credited to the Athenian 4th century BCE sculptor Kallimachos)

Date: circa 350 BCE or later

Museum: Epidaurus Archaeological Museum, Epidavros, Greece (discovered by Panagiotis Karvadias/Cavvadias (1850-1928) in 1870, after the original excavations in a fill between the Tholos and the Temple of Asklepios, buried in antiquity

Medium: marble

Size: n/a

Note: this is a rare surviving Greek Corinthian capital.
Title: Corinthian style in elevation

Source: Pearson

**Corinthian order**: the most attenuated and richly decorated of the three main classical Greek orders. Acanthus leaves (caucoli) emerge from its capital are topped by small volutes.

**Corinthian column**: fillet: flutes are separated by a narrow flat band – often on Ionic as well.
Title: Parthenon, left
Architect: Iktinos and Kallikrates  
Date: circa 420 BCE  
Note: Greek temples were painted in bright colors.

Source: OUP
Medium: reconstruction of painted stone frieze
Size: n/a
Title: Section of Parthenon entablature and column (reconstruction)

Artist: A. Gatternicht (German)

Date: 19th century


Medium: color lithograph

Size: 28.5 x 20.5 cm
Greek “refinements”: Top: Entasis: Curvature and other refinements in a Greek temple, in exaggerated rendering | Bottom: Platform of the Parthenon with curvature on flanks and façades

Artist: Top: After Coulton | Bottom: Drawing after Orlandos 1976-77 based on measurements by F. C. Penrose

Date of drawings: Top: 1977 | Bottom: 1851


entasis: the slight convex bulge in a column to offset the illusion that it is thinner in the middle.
refinements: distortions built into Greek temples to compensate for the curvatures of visual perception.

Note: Greek temples attained a new degree of artistic sophistication during the 5th century BCE, when architects introduced visual correctives known as “refinements.” While some of the distortions can be easily detected, most of the refinements remained barely perceptible, creating the illusion of the equality of its members.
Tales of the Legion of Super Heroes, Adventure comics

Artist: Jerry Siegel and John Forte

Date: 1950’s +/-

Source: https://www.cbr.com/legion-superheroes-bouncing-boy-origin/

Note: n/a
Title: Curvature and structural consequences, as demonstrated in the middle part of the Parthenon’s north flank, in exaggerated rendering

Artist: Drawing after Nikolaos Balanos, civil engineer and architect (Greek 1869-1943)  
Date: 1940

Note: The Parthenon “employs the same optical subtleties as the Paestum temple, but in a more refined form”. (Sutton)

Title: Common Greek ornamental motifs
Source: Pearson
Note: many motifs are taken from the “east” (Richter)
Ancient Greek Colonies

Note: not all of these shown are Greek – Phoenicians in purple. Greek colonies became powerful independent commercial and cultural centers, but remained tied to the homeland by language, heritage, religion and art. (Stokstad)
Title: Ephesus, Ionian Coast, Anatolia
Architect: Greeks
Date: 6th to 4th cent. BCE
Source: wikipedia, from Meyers Konversationslexikon
Medium: map of 1888
Size: see scale
Note: We still see several gymnasia, a Forum, Agora, etc. Not clear where library was. Also note we see Turkish as well on this much later map.
THE COLONIES - EPHESUS

Title: Ephesus, Ionian Coast, Anatolia
Architect: Greeks  Date: 6th to 4th cent. BCE
Source: http://asmrb.pbworks.com/w/page/9958948/Pulp%20Ephesus
Medium: tourist map  Size: n/a
Note: Ignore the Christian additions.

Temple of Artemis
Library of Celsus
Title: Temple of Artemis, Ephesus, Ionian Coast, Anatolia

Architect: Greeks  
Date: 560 BCE  
Source:  

Medium: plans, etc.  
Size: see scale, col. 65’ high  
Note: life size figures on the column bases.
Title: Library of Celsus, Ephesus, Anatolia

Architect: Roman

Date: early 2nd cent. CE, façade was re-erected by archaeologists 1970-1978.

Source: wikipedia

Medium: photo of façade

Size: see people for scale.

Note: The Library of Celsus is an ancient Roman building... commissioned in the 110’s C.E. by consul, Gaius Julius Aquila, as a funerary monument for his father, former proconsul of Asia Tiberius Julius Celsus Polemaeanus, and completed during the reign of Hadrian, sometime after Aquila's death. The library is considered an architectural marvel, and is one of the only remaining examples of a library from the Roman Empire, the third-largest library in the Roman world behind Alexandria and Pergamum, believed to have held around twelve thousand scrolls.

Celsius is buried in a crypt beneath the library in a decorated marble sarcophagus. The interior of the library and its contents were destroyed in a fire that resulted either from an earthquake or a Gothic invasion in 262 C.E. and the façade by an earthquake in the 10th or 11th century.
Title: Greco-Persian Wars, map
Date: 499-449 BCE

Note: The first serious reverses suffered by the Achaemenian empire were in its efforts to conquer Greece which met with final failure under Xerxes at the battles of Salamis and Plataea (480 BCE). After the rise of Macedon under Philip and his subjugation of the Greek cities, the way lay open to his son Alexander the Great to carry the war into Asia. (336-323 BCE). Alexander crushed Darius III the last king of the Achaemenian dynasty: the empire founded by Cyrus the Great and extended by Cambyses II and Darius I thus fell into Alexander’s hands. After his death, Persia passed successively under the Seleucid (312-247 BCE), Parthian (247 BCE-226 CE), and Sassanian (226-641) dynasties, finally being conquered by the Arab armies bringing Islam. (Fletcher)
THE ACROPOLIS – PERIKLEAN ATHENS

Title: the Acropolis, Athens
Architect: Phidias  Date: 459-420 BCE
Source: Georg Gerster/ Photo Researchers, Inc.
Medium: aerial view  Size: n/a

Note: Pericles; c. 495-429 BCE, Greek statesman, orator and general of Athens during its golden age – specifically the time between the Persian and Peloponnesian wars. Pericles had such a profound influence on Athenian society that Thucydides, a contemporary historian, acclaimed him as "the first citizen of Athens". Pericles turned the Delian League into an Athenian empire, and led his countrymen during the first two years of the Peloponnesian War.

The period during which he led Athens, roughly from 461-429 BC, is sometimes known as the "Age of Pericles", though the period thus denoted can include times as early as the Persian Wars, or as late as the next century. Pericles promoted the arts and literature; it is principally through his efforts that Athens acquired the reputation of being the educational and cultural center of the ancient Greek world. He started an ambitious project that generated most of the surviving structures on the Acropolis (including the Parthenon). (wikipedia)
Title: Athens The Dawn of Democracy: The Parthenon film clip
Artist: Bettany Hughes, historian and narrator
Date: Release of film 2007

Source: Lion Television Production, London United Kingdom/ Distributed in the USA by PBS
Size: Film clip of 46 seconds
The Acropolis, Athens

Architect: Pericles commissions the reconstruction to commemorate Athens’ defeat of the Persians. Phidias, the sculptor, organized the plan.

Date: 459-420 BCE, replanned at the time of Pericles

Source: OUP

Medium: plan

Size: see scale

**Note:** The reconstruction of the temples included major architectural projects, the repositioning of the Propylaia gate; the new Ionic temple of victory.

It was a procession: after one passed through the Propylaia, Phidias’s colossal bronze statue of Athena Promachos came into view.
Title: Akropolis at Athens

Date: see legend

Note: some buildings are later than Periclean Athens. The Odeum was a performance space.

Source: https://mapcollection.wordpress.com/2012/06/14/map-of-the-acropolis-of-athens-in-socrates-and-platos-time/

Medium: Plan
Title: Akropolis at Athens

Note: Promachos means the first in battle

Date: 400 BCE.

Source: Pearson

Medium: Plan (after A. W. Lawrence)

Size: see scale
Title: Acropolis, Athens
Date: circa 447–432 BCE
Source: Pearson
Medium: Reconstruction drawing
Title: Akropolis, Athens. The Propylaea, with the Temple of Athena Nike, Athens
Date: The Propylaea, 437-432 BCE; Temple of Athena Nike, 427-424 BCE
Note: both buildings are at the center left

Photograph source: Pearson
Medium: view from the west
Title: Acropolis in Athens  
Artist: Marcel Lambert, 1877  
Date: The Propylaea, 437-432 BCE; Temple of Athena Nike, 427-424 BCE  
Note: n/a  
Source: https://archimaps.tumblr.com/search/acropolis  
Medium: hypothetical reconstruction drawing  
Size: n/a
THE PROPYLEA

Title: Propylaia, Athens
Architect: Mnesicles
Date: 459-420 BCE
Source: OUP
Medium: section: Doric Order on the exterior, Ionic order on the inside

Note: built after the Parthenon, but we're going in the order we encounter the buildings.
Title: The Propylaea, (view from the west), Akropolis, Athens

Architect: Mnesicles  Date: circa 437-432 BCE

Source: right: wikimedia, from Fletcher; below: http://arthistoryresources.net/greek-art-archaeology-2016/propylaia.html

Medium: limestone  Size: see scale

Note: It would be wrong to think that Greek architects were unable to think beyond the inflexibility of the temple form. (Moffett)

The front and rear hexastyle porticoes are on different levels. Note Doric on the front, Ionic in the middle. The southern wing was not completed, perhaps not to encroach on the Temple of Nikë. (Fletcher)
Title: The Propylaea, (view from the west), Akropolis, Athens
Architect: Mnesicles
Date: circa 437-432 BCE
Source: Pearson
Medium: limestone
Size: n/a
TEMPLE OF ATHENA NIKE

Title: Temple of Athena Nike, Akropolis, Athens
Architect: Kallikrates
Date: 421-405 BCE
Photographic source: Pearson
Medium: view from the east
Size: 27’ x 19’
Note: used to have a decorated parapet
Title: Nike (Victory) Adjusting Her Sandal, fragment of relief decoration from the parapet (now destroyed). Temple of Athena Nike

Artist: Athenians

Date: Last quarter of the 5th century (perhaps 410–405) BCE

Museum: Akropolis Museum, Athens

Medium: marble

Size: height 42” (106.7 cm)
THE ERECHTHEION

we don’t see the engaged columns at center in the plan, as the horizontal cut is irregular, cut at three different levels.

The caryatids related (per Vitruvius) to the people of Caryae, who made the mistake of siding with the Persians. The women were taken into slavery, and here they carry their load of sin and punishment for posterity. (Moffett)
Title: Erechtheion, exterior porch with caryatids
Architect: Mnesicles
Date: 459-420 BCE, the last to be completed
Note: named for Erechtheus the mythical founder of Attica. It has no unifying peristyle.

Source: wikipedia
Medium: stone
Size: n/a
Title: Erechtheion, Porch of the maidens at left; north porch can be seen through the columns of the east wall, Acropolis, Athens

Architect: Mnesikles, architect (active mid 5th century BCE)

Date: circa 430-405 BCE

photographic source: Pearson

Medium: view from the east

Size: n/a
Title: Porch of the Maidens (Caryatid Porch), South Porch: Erechtheion, Acropolis, Athens

Architect: Mnæsicles

Date: Temple 430s–406 BCE; porch circa 420–410 BCE

Photographic source: Pearson

Medium: stone

Size: n/a

Title: Caryatids at the Acropolis Museum, Athens

Source: wikipedia