

2020-01-29 - Lecture 10

4.2 Greek City-States; Classical Architecture - Temples - Orders - The Acropolis

- 1) • **Classicism** — A system of architecture that is a logical, tectonic, and symbolic representation of the craft of architecture and its construction method.

The goal of classical architecture is to achieve physical, geometric, and optical perfection through the arrangement of this system and its parts. The classical system of parts may be thought of as a language and its geometrical arrangement its syntax.

- *Classical Architecture* began in the ancient Greek period and was continued by the Romans, although it changed over time as it was reinterpreted.

- 2) **Greek Colonies** - all across Greece, Peloponnesia, the Aegean Sea, and Ionia

- By **700 BCE** the Greeks added a *normative grid* to its colonies

Earlier cultures had used grids, but not as part of a system of **public** and **private** zones

The grid was arranged in a wide band - the wide band grid called **per striga**

Then... public spaces for buildings such as: temple, theater, tholos, bouleterion, prytaneion would be integrated into the grid. The grid responded to topography.

- **Paestum** - (pie-EST-um) pronunciation changed to (pay-EST-um) along the way. this colony on the southwest coast of Italy is arranged **per striga** grid pattern. Paestum's early name was **Poseidonia** (*poss-eh-DON-ia*) - named for Poseidon.

Paestum has three Greek temples, which are *relatively old*, therefore known as **archaic**. The **archaic doric order** is identified as shorter, fatter, more exaggerated entasis, capital appears to be more squashed

Southernmost: **Temple of Hera I** (c. 550 BCE) (9 bays x 18 bays)

Middle: **Temple of Hera II** (a.k.a. **Temple of Poseidon**) (c. 460 BCE) (6 bays x 14 bays)

Northernmost: **Temple of Athena** (c. 500 BCE) (6 bays x 13 bays)

Paestum ruins saved by the mosquito

- Colony of **Miletus** in Ionia, rebuilt in 470 BCE
- Colony of **Priene** in Ionia, rebuilt in 350 BCE

- 3) **Oikos** - the *Greek house*, home or family unit

- The **oikos** would fit into the *per striga* grid
- The Greek head of household was the male. Men were citizens, women were not. Men conducted business, went to war, and did things outside home. Women stayed home.
- Public part of house included a court :: Private part was for women and children. The two sides of the house were connected and regulated by a semi-public colonnade called the **pastas**

- 4) **The Greek Orders** (*study diagrams and images carefully*)

- **Doric** (*simplest* - with no base, shortest, thickest proportion, capital squashed round pad)
- **Ionic** (*fancier* - has a base, more slender, capital is ornate with volutes)
- **Corinthian** (really *fancy* - has a base, even more slender, capital very ornate with volutes and acanthus leaves)
- Parts of the orders (*study diagrams and images carefully*)

stylobate - the plinth that the columns rest on

base - moulding at the bottom of the column (Doric doesn't have one)

shaft - shaft has slight bulging called **entasis** to simulate or suggest that the column is bearing a heavy load. Bottom 1/3 vertical - **entasis** occurs in the top 2/3. **Entasis** is an optical adjustment (correction) to achieve perfection. Shaft can be fluted or unfluted. (EN-ta-sis)

entablature - The columns with their capitals hold up an entablature which is **three parts**

- 1) **architrave** - the lowest part of entablature, this is actually the large beam or girder
- 2) **frieze** - The middle part of entablature, represents the next level of beams crossing the other way
 - **triglyph** - Where the next level of beams crossing the girder is represented, the beam ends as represented are called triglyphs
 - **metope** - Where the next level of beams crossing the girder is represented, in between each beam end is a void - the voids are called metopes and sometimes filled with decorative carvings as they (the voids) are not structural
- 3) **cornice** - The top level of the entablature. Cornice means *crow*. A fancy projecting series of carved mouldings that caps the whole entablature

pediment - The triangular gable piece representing the roof slopes that rests on the supportive structure of the entablature and columns. Pediment is capped with projecting mouldings that match the entablature's mouldings

- **tympanum** - the inset triangular portion of the pediment (inset from the projecting mouldings). In some cases, the tympanum (like the metope) since it's not technically *structure*, it can be filled with sculpture. (TYMP-uh-num).
- **anthemion** - A decorative ornament of a radiating cluster of palmetto leaves at the apex of the pediment. Typical of many Greek temples.

optical refinements - In an effort to achieve visual perfection, certain optical refinements of the parts of the temple were employed. The ideal viewing distance was six-times the height of the columns. (1) The stylobate was very slightly curved upward in both directions so that when viewed, it would appear flat (otherwise it would appear to be concave or sinking in the center); (2) the end columns have less inter-columnation as they are farther from center; (3) the entablature is tilted outward ever so slightly to counteract the perspective of its height; and so on...

5) **Classical Greece - Athens // Agora // Acropolis — c. 500 - 400 BCE** (study images)

- Athens emerged as greatest of the city-states by 500 BCE
- Athens sacked by Persians in 480 BCE, then were driven out. Acropolis had been a smaller set of temples.
- Leader **Pericles** (460-429 BCE) convinced Athens to rebuild the Acropolis.
- Lead designers of Acropolis: **Phidias** (sculptor), **Kallikrates** (architect), **Iktinos** (architect), **Mnesikles** (architect) (m'knee-see-KLEESE)
- **Acropolis** means *High City* (*acro* meaning high and *polis* meaning city) The compound as laid-out by the Pericles and the designers, consisted of: the **Propylea** (gateway), **Temple of Athena Nike** (Goddess of Victory), a giant bronze statue of Athena sculpted by Phidias, the **Erechtheion (aka Erechtheum)**, and the **Parthenon**.

Erechtheion (Erechtheum) was a combo of four shrines, a temple, and a sacred olive tree. Three levels. The south portico facing the Parthenon is made of caryatid columns - literally women clad in the traditional **peplos** costume. This is known as the Porch of Maidens sometimes.

Parthenon entered on the east (side farthest away from Propylea). (447-432 BCE) Doric temple to Athena which also contained the treasury in a separate cella. Contained a **forty-foot statue of Athena** inside a double-tiered cella. Designed with **optical correction refinements** to make it appear perfect. Detailed entablature and tympanums carved in relief and painted to depict stories of Greek history and ascendancy. Proportions of Parthenon are (8 cols x 17 cols). 8 columns means 7 spaces between columns. 17 columns means

16 spaces between columns. With two metopes per space, that adds up to **92 metopes total** that were sculpted and painted to tell the stories.

Lord Elgin bought most of these sculptures in 1803 from the occupying forces, the Ottoman Turks. The sculptures are now in the British Museum and are called the **Elgin Marbles**. Greece wants them back. (ELL-gin)

- Temple of **Hephaestus**, also part of Pericles' building program at the Agora (449 BCE). (huh-PHAY-stuss) (6 bays x 13 bays) Hephaestus was god of fire.

6) **Vocabulary**

- **peripteral** - when the columns of the Greek Temple go all around the perimeter
- **inter-columnation** - the distance and/or module between columns
- **relief** or **bas relief** - sculpture carved into a flat slab of stone to make an illusion of 3D.
Bas relief means *low relief*, that is, shallowly carved. **Alto relief**, or *deep relief*, means sculpture carved very deeply into a flat surface to make an illusion of 3D.