column on columns

applying proportions and formulas of classical architecture to the home

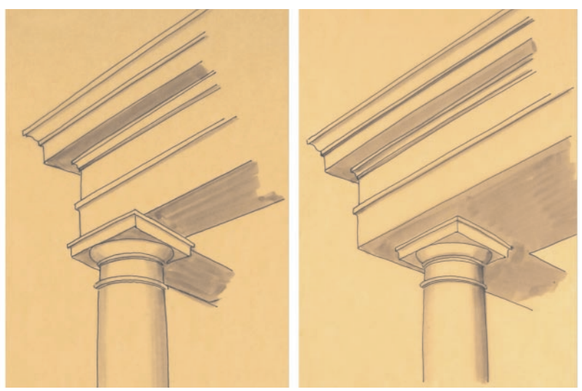
by stephen bezas

THIS PAST SUMMER ON A TRIP TO GREECE, I STOOD AT THE FOOT OF THE Parthenon in Athens and was awestruck by its enduring strength and beauty. The thought of standing before "the backbone of classical architecture", which has survived through the millenniums, gave me an emotional jolt. This surge was spurred by the knowledge that this Doric order temple, with its ideal form and proportions, has had a tremendous impact on Western architecture and the perception of beauty.

It was the practice of the ancient Greek architects to write a commentary about each of their temples and public buildings. None of these commentaries exist today, except for "The Ten Books of Architecture," the documentation of Marcus Vitruvius Pollio, an architect who worked for Julius Caesar. Thanks to Vitruvius, this detailed information of ancient Greek and Roman styles is available today.

Classical architecture has a system of orders: Doric, Tuscan, Ionic, Corinthian, and Composite. (see sidebar, right.). The term "classical orders" refers to the different column styles (their design elements and proportions) and the accompanying entablature, or beam above. The columns' elements are chosen and placed in relation both to one another and to the overall structure. These relationships in their proper proportion and location create a sense of harmony and balance.

Correct (left) and incorrect (right) placement of column under entablature.

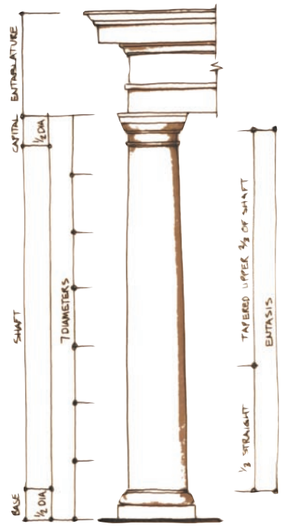


Each column consists of three primary elements: a base, a shaft, and a capital. To correct optical distortion, an element called *entasis*, dictates that the upper two-thirds of the shaft gradually tapers inward. Another crucial proportion, which varies from order to order, is the height-to-diameter ratio of the shaft. Shaft ratios vary from order to order, but must always be relative to the ratios of the entablature they support.

Placement of a column relating to the entablature above is another important factor that should not be ignored. As a general rule, the column shaft should line up with the outer edge of the frieze portion of the entablature it supports. This will result in a small section of the capital extending beyond the entablature. (left)

The Ancients' precise design calculations created a harmonious and balanced ideal. Take note of the five orders of classical architecture in your everyday life: museums like New York's Metropolitan Museum of Art; office buildings, colleges, banks and prominent buildings in other cities, like Washington, D.C. Observe the details and bring to mind

Tuscan column and entablature showing entasis and height-to-diameter proportions.



what aspects appeal to you most.

One pleasing characteristic is a building's symmetry—the sense of proportion, detailing, and rhythm captured through the repetition of design elements. On a smaller scale, these elements can be replicated in your home.

The five classical orders of columns (including pilasters— columns attached to the walls) are often used in our homes. Note their abundance throughout porticos and entrances, porches, loggias, open passages and walkways, in visual dividers and as decorative elements.

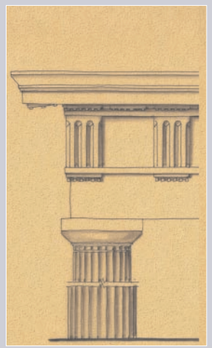
Tuscan columns (see Illus. 3) are commonly found in homes. Note their placement and how the upper two-thirds of shaft

Each column consists of three primary elements: a base, a shaft, and a capital.

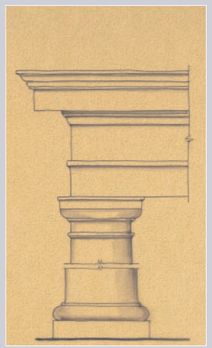
tapers inward while the bottom one-third remains straight. As stated before, entasis is important because it eliminates distortion and it helps create a column, which is aesthetically pleasing. When possible, use authentic replications of the five orders.

This trip to Greece reinforced my commitment to the ideals of classical aesthetics I've been using in my work for years. Future articles will deal with a renewed interest, and application of these time-honored classical elements to the home. ■

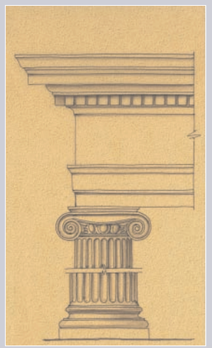
The Five Orders of Classical Architecture



Doric: The Parthenon is a prime example. It is the oldest and simplest of the five orders, and it is characterized by a fluted shaft and no base. It's the most masculine of the orders because of its wider diameter-to-height ratio.

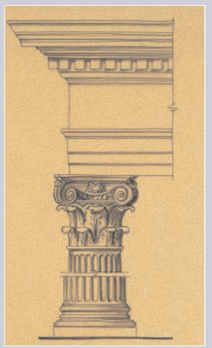


Tuscan: The Romans created this order, which is characterized by its unfluted shaft and plain base. The height of the Tuscan column is usually seven times that of the diameter at its base.



Ionic: Named after the Ionians. This order is characterized by the scrolls of its capital, fluted shaft, and Attic base. The height of this tall and slender column is eight to nine times that of the diameter at its base; Vitruvius associates it with the feminine.

Corinthian: The most ornate of the classical orders. Legend has it that Kallimachus, an ancient Greek architect, modeled the capital for this column after taking notice of an acanthus plant growing under and out the sides of a basket at a young girl's gravesite.



Composite: Invented by the Romans, this order is a combination of the Ionic and Corinthian orders. It's characterized by four Ionic scrolls. Its height is usually ten and a half times the diameter at its base.