“St. Sophia at Constantinople
The Interior an Epoch in Domed Surfaces and Lighting”

In *Through the Ages*, Vol. I, No. 1
May 1923, pp. 38-40

This article, which begins on the next page, is presented on the Stone Quarries and Beyond web site.

http://quarriesandbeyond.org/

Peggy B. Perazzo
Email: pbperazzo@comcast.net
November 2013
"Interior of St. Sophia. This famous mosque is believed to be in danger of collapsing. As far as can be learned this is from the only photograph ever taken of the interior of this famous mosque. Editor’s Note. Underwood & Underwood, N.Y."
ST. SOPHIA AT CONSTANTINOPLE
The Interior an Epoch in Domed Surfaces and Lighting

For five centuries the Greek Orthodox Christians have aspired to set the cross above the dome of St. Sophia, which holds for them all the memories of an early united Christendom. Yet today, in front of the mosque the pious Moslem may be seen in the act of washing his face, hands and feet, according to the prescribed ritual of his faith, ere going to his prayers.

The Hagia Sophia was built by Anthemius of Tralles for Justinian about 537 A.D. The exterior presents a massive pile of rather poor architectural lines, considered even ugly by some authorities. The interior, on the contrary, represents a distinct epoch in architecture, and gives to the structure the predominating position it holds among the buildings of the world. H. H. Statham, in his "A Short Critical History of Architecture," says that the interior stands forth as "the perfect and unadulterated expression of domical structure, as it never has been so completely expressed before or since."

While Rome was languishing under a corruption of architectural styles, a new era was beginning to dawn for ancient Byzantium. Constantine had transferred the seat of the empire to Constantinople in the fourth century and the new capital, situated as it was in the key position upon the highway of commerce between the east and the west, quickly became a city of great importance.

The art of decoration by mosaics and marble as well as some of the principles of construction were adopted from Rome. Many columns, capitals and other architectural ornaments were brought from the chief Roman buildings, although the workmen and quite a number of the architects were of Greek descent, coming from Asia Minor and the East. Naturally the traffic with the merchants of the Oriental countries brought them into touch with the Far East, and the taste for brilliance and rich decoration was directly due to this contact.

The Hagia Sophia represents indeed a distinct divergence from the Roman style of church. The simple, rectangular three-aisled basilica was almost unknown in Byzantium. Approaching the Sophia, one is at once attracted by the broken skyline formed by a series of roof-domes, entirely different from the straight lines of the old basilica roof. The four arches which enclose the square, form triangular spaces with the dome and these spaces are filled with pendentives upon which the dome really rests. Each course of masonry forming these is kept in position by reason of its convexity so that the dome rests securely upon the upper course at the level of the crown of the arches.

Owing to the difficulty experienced in gaining access to the church, and the strict censorship over photographs of the interior, there has been a paucity of knowledge founded on fact concerning the Sophia. Its real beauty and spacious proportions have been registered by the camera only within recent times.

St. Sophia externally is a parallelogram 237 by 284 feet, covering about 67,000 square feet. The narthex consists of two beautiful halls, one over the other, 202 feet long internally by about 26 feet wide. (The dimensions used in this article are taken from Ferguson's "History of Architecture.") The
church itself is 240 feet by 243 feet, sur-
mounted by a great dome 107 feet in diam-
eter and reaching upwards from the floor
of the church to a height of 181 feet.

East and west are two semi-domes of
equal diameter to the central dome. These
are again cut into each by three smaller
semi-domes supported by two tiers of pil-
lars.

Narthexes, gallery and apse are lighted
by two ranges of windows extending all
around the church. The central nave is
lighted by one large and a number of smaller
windows pierced in all the domes just above
the springing. The great dome has forty win-
dows, the others five each. This is the first
example of lighting by this method in a
dome. It excited great admiration and few
Byzantine domes were afterwards built
without this feature.

The plan shows an unusually large domed
central space. The two end compartments,
as explained above, being domed also, the
roof, seen from within, is a collection of
domed surfaces. Procopius says "the sight
causes the spectator constantly to change
his point of view." It seems probable, ac-
cording to Statham, that the dome was erect-
ed without centering. It was built at first
of a much flatter section than at present, but
fell in before completion. Some writers
think this accident to have been due to an
earthquake: others claim it was caused by
construction defects, resulting in lack of
stability. The present proportions are better
perhaps than if the first design had been ad-
hered to.

The walling was brickwork to which was
added, both inside and out, originally, a
veneering of wonderfully colored marbles.
The exterior marble has disappeared, due to
sabotage, thefts, weather and other causes.
The inside marble remains. Mosaics were
freely employed on the concave surfaces of
the domes. The columns are monoliths of
colored marble.

There are 107 gigantic pillars of beautiful
green marble and red porphyry supporting
the four main arches. The capitals are in the
Byzantine style, the convex or straight-lined
form, much better suited to carry an arcade.

Silentiarius, in describing the marbles of
St. Sophia, says: "But what man is there
filled with the ringing poetry of Homer to
celebrate fitly the fields of marble collected
around the huge walls of the lofty Temple
and the broad pavement? Where the steel
of the lapidary's graver has carved the green
surfaces of Carystian and has incised the
blue of the Phrygian variegated marble . . .
the latter glows softly with a lustre at once
purple and silvery." The Phrygian marble
came from the quarries at Synnada. This
marble, says William Hamilton in "Asia
Minor," is "highly crystalline, and occurs in
white, bluish white, white with yellow veins,
white with blue veins, and white with blue
spots, having almost a brecciated appear-
ance." Silentiarius, in another place in his
same work, says: "And there are all those
that are rolled down the Lydian mountain
gorge, glowing with pale white and red."
The Lydian marble has a ground of dark
rich red, and is brecciated with white and
veined almost imperceptibly with black.
There are several columns of Cyzic or
Proconnesium marble in the mosque, which
are the spoils of the Temple of Cybele and
this same marble was used to pave the whole
floor of the interior.

Rome has its St. Peter, Norway its Trind-
jem, France its Notre Dame; England has
its Westminster, Spain its Seville. None
of these cathedrals are more closely asso-
ciated with the history of their countries
than the majestic mosque of Sancta Sophia.