

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

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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

(photo caption) "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 220 feet by 243 feet, surmounted by a great dome 107 feet in diameter and reaching upwards from the floor of the church to a height of 182 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 pillars.

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 windows, 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, according to Statham, that the dome was erected 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 adhered 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 appearance." 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 Cyzican 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 Trindhem, France its Notre Dame; England has its Westminster, Spain its Seville. None of these cathedrals are more closely associated with the history of their countries than the majestic mosque of Sancta Sophia.