The Historically Indicative Nature of Byzantine Architecture

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The stylistic differences between Saint Mark's Cathedral in Venice, Italy, and Hagia Sophia in Istanbul, Turkey, are indicative of aesthetic variances as they relate to time, cultural influence, and architects. A great deal may be observed about the societies surrounding these places of worship at the time of their construction through the examination of the substance of these architectural marvels. Pierre Auguste Renoir declares in his notebook, "Don't be afraid to look at the great masters of the best periods. They created irregularity within regularity. Saint Mark's Cathedral in Venice: symmetrical, as a whole, but not one detail is like another!" This quote suggests that the design of the Cathedral is demonstrative of a broader ideology, not just in art, but within a time period, culture, and individual artistic style. Both Saint Mark's Cathedral and Hagia Sophia are Byzantine structures, making their comparison and contrast indicative of these tenors. The most similar element of the aesthetic variances between the two architectural works is, perhaps, time.

The evolution of architectural intention over time is of primary importance in determining why these two Byzantine, originally Christian, structures are artistically dissimilar in some respects, yet similar in others. Hagia Sophia was completed under Justinian's rule in Constantinople circa 537 AD, while Saint Mark's Cathedral was erected circa 1050 in Venice, Italy. In order to thoroughly examine the historical attributes that account for the visual variations between the architectural works, this lapse in time must be considered. Hagia Sophia was constructed in a time of
architectural innovation, fortitude, and trial and error in architecture. Byzantine architects had not previously built domes on pendentives and had previously supported their domes with drums. The mathematical prowess required to support a dome with pendentives surpasses that which is required to support a dome with a circular wall or drum. The notion that the pendentive-supported dome was a relatively new concept is suggested in the following excerpt by Cyril Mango, author of *Byzantine Architecture*, "The main problem of St. Sophia, lay, however, in its scale. Byzantine architects had long experience in building domes, but a dome 100 feet in diameter that was not resting on solid walls but was “hanging in the air”- this was something that had not been done before" (Mango, 1985). This passage suggests the dome supported by pendentives, which appears to be “hanging in the air,” was more desired at the time but was not widely constructed because of the difficulties that arise in erecting such a structure. The aptitude required to create such a dome is denoted in the following passage, "It is also fair to say that no architect at the time could have calculated, even approximately the thrusts that would be generated by a masonry dome of that size" (Mango, 1985). The historical significance of this methodology of dome-support is immeasurable. In a time shortly after the fall of Rome, Christian Byzantium was striving to achieve its own architectural form independent from that of Imperial Rome. The barrel vaults and pendentives are unique to this period and are demonstrative of the transitional stage of Christendom at this time. This conception is indicated in the following excerpt by Patrick Kinross, author of *Hagia Sophia*, "Over the centuries, the dome set on a circular building such as the Pantheon in Rome had evolved into the dome set on a square, reduced to an octagon and supported by a circle of arches. In Constantinople, it evolved into its
final stage, the true dome, which rested on the summits of four arches...undreamed of by the earlier architects of imperial Rome." (Mango, 1985)

The time that St. Mark’s Cathedral was constructed in its current basilica form, 1094, is also a great determinant of its architectural style; however, the origins of the Cathedral predate the eleventh century. The Cathedral was initially a much lesser architectural feat and was primarily intended to house the remains and relics of St. Mark (circa 828). These relics were relocated from Alexandria, Egypt, in the early ninth century. It is important to note that Venice had just recently become part of Byzantium. Prior to this time, Venice was a loosely associated people but had served as a vital trading area for the Byzantine Empire. Author of *Italian Architecture*, Jean Castex, supports this notion with the following excerpt, “Originally, Venice was a community spread over a group of isolated islands; they coalesced in the ninth century into a single political entity. Because of its location on the eastern coast of Italy, Venice became a trading center and had established strong relations with the Byzantine Empire” (Castex, 2008). These events at this time in history explain why the Cathedral exhibits characteristics of both Italian and (primarily) Byzantine architecture. It was not until 1063 that the structure was to be restored, as Castex submits when writing, “Domenico Contarini decided to rebuild and enlarge the chapel in 1063... (Castex)” Byzantine architecture, specifically the structures which are in Constantinople or built under Justinian’s rule, were particularly revered. Castex demonstrates the Venetian inspiration for building in such a style in the following excerpt, “…and he looked to Byzantium for a prestigious design, to the Apostoleion, which is universally considered to be the inspiration for his new basilica” (Castex). The Venetian motivation for constructing a
Byzantine-style cathedral is broader than simply an admiration of the Apostoleion, which was constructed under Constantine and remodeled under Justinian. The Venetians had a desire to hold themselves to as high a standard as the rest of the Byzantine world. The desire to build such a magnificent structure is described as follows: “To build a church that would rival such a magnificent and culturally significant building challenged the pride and abilities of the Venetians” (Castex). The time that the Church was constructed explains many of the similarities to Byzantine churches in Constantinople.

One of the particularly Byzantine elements of the structure is the Greek cross shape, which supports the dome. The intersections of the halls that make up the interior of the eastern cross fall directly under the largest dome. These characteristics, as well as the horseshoe-shaped narthex and the four piers in the intersection are all inspired by Apostoleion, the Church of the Holy Apostles. While the two differing time periods of each Church’s construction account for many of the similarities in their architectural elements, the cultural differences evident in the surrounding areas play a unique role in their stylistic variations.

Recognition of the cultural differences between the early Byzantine Empire under which Hagia Sophia was constructed and the later expansionist Byzantine world under which St. Mark’s Cathedral was erected are important to understand the differences and similarities between the structures. An immediately noticeable difference between the structures is the nearly perfect regularity of Hagia Sophia and the immense irregularity of St. Mark’s Cathedral. To determine the causes of the uniformity of Hagia Sophia, it is necessary to understand the cultural implications of such a design in early Byzantium. The Byzantine Empire emerged after the fall of the Roman Empire, which bred a largely
polytheistic culture. This changed as the Byzantine Empire developed. Early Byzantines were devoutly Christian and strongly objected to any paganism and polytheism, which preceded their empire. The Byzantines needed to dispel these religions in any way they could. Kinross supports this idea in his book *Hagia Sophia* when writing, “Rooted in the classical traditions of Greece and Rome, the Byzantine Greeks rejected the dying pagan gods of those cultures and evolved a living Christian Civilization” (Kinross, 1972).

The Church was designed to succeed and surpass the Pantheon, to serve as the official place of worship in Constantinople, and most importantly, to be “a symbol of Christ’s wisdom; a masterpiece of volume, scale, and architectural style; and embodiment of the power, grandeur, and the spirit of a mighty empire” (Kinross). Although this cultural background of early Byzantium is important in its own right, it is necessary to identify which architectural elements embody this social philosophy. The dome of Hagia Sophia speaks a great volume of the ideological purpose of early Byzantine culture. The dome is centrally located and detracts attention from other parts of the building. This symbolizes the monotheistic culture, which advocates centrally focused faith. The dome’s pendentive support allows it to appear as if it is “hanging in air”, thereby representing heaven. As abstract as the concept of a ‘heavenly’ dome may seem, the notion was widely supported. For example, Paul the Silentiary, a Byzantine poet writes specifically about this aspect of the building: “Whoever raises his eyes to the beauteous firmament of the roof, scarce dares to gaze on its rounded expanse sprinkled with the stars of heaven, but turns to the fresh green marble below, seeing as it were to see the flower-bordered streams of Thessaly, and budding corn, and woods thick with trees” (Kinross). Paul the Silentiary suggests that the overwhelming dome, which is seemingly
unsupported, differs so much from the earthy green marble that one cannot help but to think of heaven. Furthermore, the triple doors represent the Holy Trinity, as Kinross poses when writing, “Within its triple doors, symbolizing the Holy Trinity the building lies open forming an immense space, having a hollowness so capacious…” (Kinross). It is clear that the early Byzantine culture played a significant role in the architectural elements present in the magnificent Hagia Sophia.

The culture surrounding St. Mark’s Cathedral in Venice most certainly influenced its construction and architectural features, but in different ways. St. Mark’s Cathedral has elements of both Byzantine and local Venetian inspiration in its structural form and iconic décor, respectively, which has resulted in a truly unique structure. The most notable, immediate difference that exemplifies Venetian cultural influence is the mosaic icons in St. Mark’s Cathedral. The precious mosaics in the Cathedral do not lend a central focus to the structure, as each is unique and laid principally in gold. Castex describes the irregular nature of having several unique icons in one cathedral when writing, “During the Renaissance, the famous Venetian painters Titian, Tintoretto, and Veronese furnished designs for the mosaics. The shimmering mosaics dematerialize the walls and unify the lower level with the smooth luminosity of the domes, overwhelming worshippers with celestial visions pictured in tiny pieces of glass and stone” (Castex). This suggests that each work is designed to cater to individual attention, demonstrating that the structure is made up of many unique parts. These works contradict the focus of Hagia Sophia, which is centrally fixated and has architectural elements that are very regular. In addition, because St. Mark’s cathedral served a disparate purpose in Venice than Hagia Sophia did in Constantinople, it had to be
designed very differently. Castex illustrates the differences in function and their corresponding differences in design in the following passage: “The Venetians had to adapt the Byzantine plan, intended for Orthodox services, to the ceremonies of western Catholic rite. Second-story galleries reserved for women were suppressed, and the equal-armed centralized plan with its five domes was subtly altered to resemble aspects of a western basilica. The arm of the nave is slightly longer than the transverse arms, and the pierced piers on either side of the nave suggest aisles that terminate in chapels” (Castex). Although both churches’ designs have their foundations in the same style, the cultural differences between early Byzantium and the later period account for the majority of the architectural and stylistic differences between the structures. In addition to evaluating architectural aspects as they relate to time and culture, it is necessary to understand who the architects responsible for each structure are and to determine their unique contributions. Differences in the styles of the architects account for many of the variances in each church.

Hagia Sophia was erected under Justinian rule, and Justinian appointed mathematician Anthemius of Tralles to design the structure. Anthemius was primarily chosen by Justinian because, as a mathematician, he had a broader background than simply architecture. Hagia Sophia was meant to be a revolutionary work of architecture, surpassing the bounds of what was previously thought possible. In order to complete such a structure, a unique combination of expertise was required. Anthemius’ unique skill set is described in the following passage: “Anthemius, though not in the strict sense a trained architect, possessed such qualities. But the theorist and, above all, the artist within him, were continually at odds with the practical engineer- and too often defeated
him” (Kinross). Although Anthemius is revered as an incredible architect, his “search as an artist for aesthetic perfection, often at the cost of distortion and dissimulation” showed in 558, after Anthemius had died, when much of the dome collapsed (Kinross). The dome was determined to be too short, thereby placing undue exertions on its outermost parts. A new dome was constructed, “steeper and twenty feet higher. (Kinross)” In addition, the piers were restored and the arches were broadened in order to provide supplementary support. Although the structure, as built by Anthemius, was not originally of sound foundation, later architects were able to reinforce the church, and its uniqueness was unfettered. Had a chief architect who was less experimental and theoretically motivated been appointed by Justinian, the Church may lack the truly innovative architectural elements that it has today. St. Mark’s Cathedral was built into its final form under Doge Domenico Contarini and was finished under Doge Vitale Falier (Mango). Contarini was not known for his architectural expertise, although he is credited for the design of several churches in the region. Contarini came from the family of nobility known as the House of Contarini. The actual architect of St. Mark’s Cathedral is unknown; this is not surprising given the fact that in terms of its foundation, the church was not very unique. Castex describes the resemblance to the Church of the Apostles in the following manner: “San Marco is often called a “copy” on a reduced scale of the Church of the Holy Apostles. Like its model, each of the four equal-length arms of San Marco carries a dome as does the crossing” (Castex). The aspects that truly make St. Mark’s Cathedral unique are its interior design and the icons that adorn the walls. These certainly may not be credited to Contarini. These works of art are the product of Venetian painters Titian, Tintoretto, and Veronese (Castex). Although both churches are
unique in their own respect, Hagia Sophia is generally regarded for its structural innovation and regularity, while St. Mark’s Cathedral is revered for its irregularity and its incredible iconography. As vital as the architect is to the understanding of the historical context of an architectural structure, there is a broader, more encompassing theme of art history prevalent in the analysis of stylistic determinants.

Every significant work of art demonstrates an ideology, not just in art, but in time, culture, and individual artistic style. Upon analyzing the effects of these stylistic determinants and comparing and contrasting them between two works of architecture, one may infer that this type of evaluation is an appropriate methodology when studying history. This is to say that a great deal of history is explained by art, and therefore, studying and examining history in the absence of art is incomplete. While it is clear that Renoir favors St. Mark’s Cathedral over many other works, his important statement is “Don’t be afraid to look at the great masters of the best periods” (Renoir). Regardless of one’s preference for regularity or irregularity, this method is appropriate for the study of history in a wider context. The aforementioned evaluation of similarities and disparities between the stylistic elements of two works has demonstrated various aspects of the time, culture, and artists in question. The value and contributions of art history to a more encompassing study of history cannot be overstated.
Works Cited


