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Architectural Origins of the Mosque of Cordoba

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Abstract: *The Mosque of Cordoba signifies the growth of Islamic Architecture in the Iberian Peninsula, due to the execution of new structural systems and large scale construction. However, the possibly of preoccupants of the Iberian Peninsula majorly influencing the construction of the structure seems to be neglected in research by academics. If a more in depth analysis of the site was done, information on past cultures could surface and provide more knowledge on their architectural techniques and practices. This inquiry arouse after reviewing numerous books and articles on the mosque of Cordoba and past societies of the Iberian Peninsula, leading to more extensive research over their cultural and architectural styles. The findings of that research has led to the conclusion that the Mosque of Cordoba's building structure is Pre-Islamic and should be reviewed to find out more about who built the original structure, how they did it, and for what purpose was it built.*

Introduction

The Great Mosque of Cordoba marks an influential point in the development of Islamic architecture. It also has a great deal of mystery behind its unique architectural features with no seemingly explainable origin, such as the double arch. This examination of mosque origin will focus on the site history and architectural elements of the Great Mosque of Cordoba up until the completion of the last Islamic addition to the building. It will question if the structure referred to as the Mosque of Cordoba is a product of Islamic architecture, or if the structure precedes the Muslim occupation of Spain. The following will include a presentation of previous cultures inhabiting the Iberian Peninsula prior to the arrival of Islam in Cordoba. Then, provide a summary over the Islamic control in Spain and identify the five stages of the mosque's construction. Lastly, perform an evaluation of research and compare various components of the mosque.

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Pre-Islamic Spain (Twelfth Century BCE – Seventh Century CE)

The Iberian Peninsula has a long history shared by numerous cultures such as the Celt-Iberians, Tartessians, Phoenicians, Carthaginians, Romans, and Visigoths. This historical overview will provide a summary of cultures that will be referenced to in the examination of the mosque's site. Tartessians were some of the earliest peoples to settle the Iberian Peninsula. Information on the Tartessian civilization is minimal, though Marvin Mills (2007) suggests that the Tartessos was an Atlantean outpost in Europe. In the late tenth to early ninth centuries BCE, Phoenicians colonized southern Spain, settling Gades (Cadiz) and other cities establishing trade with the Tartessians (Stearn 2001), though classical texts suggest that Gades was an established Phoenician colony by 1100 BCE (Gore 2004). As trade progressed through the Phoenicians, more settlers arrived to Spain such as the Carthaginians around 240 BCE. In 214 BCE Romans conqure the Carthanginians and inhabit Spain. By 206 BCE present day Cordova becomes a Roman encampment, later encircled by a stone wall in 169 BCE. Cordova then becomes the capital of Baetica in 29 BCE. Which in the fifth century BCE, Cordova fell to the Christian Visigoths leading to the Visigothic Interlude from 600 CE to 700 CE (Mills 2007: 33-39). This leads us to the Muslim Invasion in 711 CE (Creswell 1979).

Islamic Control in Spain (711 – 990 CE)

After conquering Spain in 711 CE, a succession of 22 governors ruled for the next 39 years under the Umayyad Khalifs of Damascus. The only public work completed in Cordoba during this period was in 719 CE. Governor as-Samh ordered the restoration of the bridge over the Guadalquivir River with stones taken from the town wall and completed in 721 CE (Creswell 1979). After the fall of the Umayyad Dynasty, Abd ar-Raham I established himself in Cordoba as Emir in 756 CE (Gedal 2002).

Stage I: Abd ar-Raham I (756-793 CE)

Up until this point the Muslims and Christians had shared the site of the St. Vincent church. Due to population growth, Abd ar-Raham I purchased the Christian half of the church in 784 CE (Gedal 2002). In 785 CE, demolition of the church begun, and the new mosque is claimed to have been completed by 786 CE, two years later Abd ar-

Raham I died. His successor Hisham, adds the mosque's first minaret and ablution well in 793 CE (Creswell 1979).

Stage II: Abd ar-Raham II (822-852 CE)

Abd ar-Raham II was aware of population pressure of the congregation. In 833 CE, he expanded the mosque south 8 aisles, and constructed a new quibla wall (Gedal 2002). By 848 CE, the extension was complete. Abd ar-Raham II then died in 852 CE (Creswell 1979).

Stage III: Abd ar-Raham III (912-961 CE)

Under the name al-Nasir li-Din Allah, Abd ar-Raham III took the title of 'caliph' in 929 CE (Gedal 2002). Although, the caliph moved court to Madinat al-Zahara (Gedal 2002), Abd ar-Raham III remained active in adding to the mosque. In 951 CE, he tore down the old minaret and constructed a new one nearly twice as tall (Creswell 1979).

Stage IV: al-Hakam II (961-976 CE)

The second enlargement of the mosque was by al-Hakam II, again southward 12 aisles including a new double quibla wall in 961 CE (Gedal 2002). In 965 CE, the mirhab dome is completed and gold mosaic decoration began (Creswell 1979).

Stage V: al-Mansur (987-990 CE)

The last enlargement of the mosque by the Muslims was by al-Mansur in 987 CE (Gedal 2002). The purpose behind this enlargement was because of population increase of the migration of Berber tribes. Al-Mansur extended the mosque east 8 aisles, and also built a cistern under the court of the mosque (Creswell 1979).

Discontinuities in Written History

When reviewing resources on the mosque's history writer's context raises questions on credibility. The earliest reference to the mosque's construction was by Ahmad ibn Muhammad ar-Razi who was born a century later in 887 CE. According to Creswell (1979), ar-Razi is only known through the account of Ibn Adhari and Al-Maqqari. This may be due to the fact that ar-Razi's works are lost. Creswell (1979) seemingly discredits those scholars' quotations of ar-Razi because they were written in the thirteenth century. At this time, a

corrupt Portuguese translation of ar-Razi was in circulation after the original Arabic text was lost (Creswell 1979).

Numerous scholars question the story of the Mosque's site. Henri Terrasse (1932), Keppel Creswell (1979), Marvin Mills (2007), Pascual de Gayangos (1852) corrobosate the story of the purchase of St. Vincent from the Christians as false. Gayangos also points out that there is no mention of a church dedicated to St. Vincent existing in Cordoba before the conquest of Spain (Creswell 1979). Mills (2007) states that there is no mention of any construction or additions made in any documents in eighth century CE and doubts the existence of a church preoccupying the site before the mosque.

Moving on to the claimed construction of the Mosque, Ibn Adhari quotes al-Maqqari in Creswell (2007) stating that Abd ar-Rahman I begun building the mosque in 785 CE, and finished the new mosque in 786 CE. He then goes on to say, 'in a single year the building was finished, the naves completed and the outer walls erected' (Creswell 1958:139). At this time the prayer hall was largest of any of its kind built in the western hemisphere (Mills 2007). The successor to Adb ar-Rahman I, Adb ar-Rahman II, who is reported to have had more expert builders, took 15 years to simply enlarge the prayer hall with a smaller depth in Stage II of the mosque (Lambert 1957). It seems likely that Stage I of the mosque was the remodeling of an existing building which had been executed within a year or two, as pointed out by Mills (2007).

Construction: Orientation and Form

The resources required to construct large-scale architecture does not seem evident during the time of construction. During the period of 756-788 CE in Cordoba, early Umayyad reign faced repeated uprisings and violent intrigues (Mills 2007). The availability of time, labor, and finances needed to build the mosque seems unlikely. Mills (2007) states, no precedent for a mosque of that scale existed in Islamic Spain. According to Creswell (1979), the only previous public work to be executed was the restoration of the Guadalquivir Bridge. Mills (2007) points out, Arab and Berber invaders were nomadic people from Syria, Arabia, and Maghreb unaccustomed to large scale urban construction. Though the development of Arabic calligraphy by these people reached notable achievement, their knowledge of the development of architecture was minimal. This is evident by the fact that the conquest into Spain was led by the incentive of exploiting the existing natural resources of metals and stones – not on the hopes of developing a great civilization (Mills 2007). Even if Abd ar-Raham I

did bring the precedent knowledge for building the mosque, the spread and education of construction methods to builders and laborers would have taken time. However, previous civilizations of Cordoba were capable of large scale construction, such as the Romans and Phoenicians. Phoenician massive construction of monumental building is illustrated at Tel Dor. The monument is one of the largest of the early Iron Age Mediterranean Basin (Shahack-Gross et al. 2005).

The mosque of Cordoba strays from Islamic mosque tradition in many ways, most predominantly is that it does not face Mecca. The only regulation on mosque construction is that it must have the mihrab orient to Mecca as ordered by the prophet Mohammad (Mills 1991). What made Adb ar-Rahman I abandon one of the few requirements of a mosque implemented by Mohammad? Some scholars argue that the building faces south instead of southeast because the mosque is meant to replicate the mosque of Damascus's orientation to Mecca (Creswell 1979), or to be on axis with the Ka'ba (Gedal 2002).

The location of the mosque also is unlike typical mosque tradition. It resides along the Guadalquivir River on the outskirts of the city. The nature of mosques is to suit growing communities and is the site of many communal activities. The traditional centralized location of mosques meets these needs and signifies the heart of the city (Mills 1991).

Mills (2007) notes that the walls of the mosque have astronomical correlations with the summer solstice, and could explain the reason behind the location's selection. He suggests the mosque is of Phoenician origin and asserts that they chose the mosque's site for some sacred reason, honored its existence and identified the Kaaba with the building. Phoenicians had an ancient world reputation as vigorous sailors (Gore 2004) and the most skilled shipbuilders and Navigators of their time (Phoenician 2009); they would have likely had an extensive knowledge of astronomy to implement within their architecture. Mills (2007) also refers to the astronomical aspects that were built into the Kaaba that are never acknowledged in Islamic scriptures. This suggests that the mosque and Kaaba astronomical and geometric similarities point to the possibility of the Pre-Islamic mosque structure. It is fact that Kaaba is Pre-Islamic.

Architectural Elements

Unique to the mosque of Cordoba's layout is the existence of a lower level located beneath the sanctuary, an unusual trait in mosque construction. The lower level rooms are paved with mosaics. The walls were "paved with dark red, black, and white tesserae in geometric

patterns in one section was depicted an amphora" in a description of a lower level room by Mills (2007:37), and states that the mosaics appear Roman. The described tiles seem to continue the color scheme from the ground level stone materials. The stone tiles possibly came from quarries not far from Cordoba that produced jasper of red, black, and white mixtures (Creswell 1979). The materials found in the lower level suggest continuity with the materials used in the upper level, therefore it is possible the lower level is part of the structure and not remaining foundations of past forms.

The decoration of wall mosaics also suggests importance of space, though the lower level is never mentioned in the mosques constructive history. Even though Mills (2007) asserts the mosaic to be Roman, they could have Phoenician roots as well. Phoenicians were skillful in making material goods, including glass working and as a result probably developed a mosaic tradition. Phoenicians established mines throughout Spain and traded its natural resources including silver, gold, copper, local timber, glass, and stone (Gore 2004; Beaujard 2010; Lewis and Moore 1999; Schatter 2010). Therefore, the mosaic origins could be Phoenician or Roman. Since the Muslims neglected to mention the space in any records, it will be assumed that they were unaware of it.

The exterior components of the mosque contain a defensive design, and fortified appearance. These fortifications include alternating headers and stretchers, heavy buttressing, and a crenellated roof (Mills 2007). The purpose for these features might have resulted from the previously mentioned uprisings and intrigues Umayyad rule faced in Cordoba, though the implementation on a mosque that size is slightly puzzling. The alternating headers and stretchers on the exterior walls, stated by Mills (2007) were a Roman construction method to strengthen walls.

The Mosque of Cordoba's mirhab design and location is another element that strays from traditional construction. Mills (2007) informs that typical mirhab construction is usually composed of a curved or seldom a rectangular niche in the quibla wall, to signify the direction facing Mecca. The mosque's mirhab is eight sided, subsequently creating a small space within the wall.

The horseshoe arch's implementation at the Mosque of Cordoba was not the first appearance of this interior structure, though it seems to serve as the basis that the two other arch variations in the mosque progressed from. Dewald (1922) and Creswell (1979) both agree that the origin of the horseshoe arch is of Syrian nature. Mills (2007) argues that the use of the horseshoe arch in both Spain and Syria could have developed from a common authority in the Phoenician Era.

As early as the third millennium BCE, Phoenician culture was flourishing in a coastal region in Lebanon, Syria, and Israel referred to as Phoenicia (Gore 2004; Vance 1994). Mills (2007) also refers to earlier used Phoenician murals of Cappadocia which illustrate the use of horseshoe arches, though there is no architecture displaying the horseshoe arch assigned to be Phoenician. The second type of arch used in the mosque is the structurally innovative double arch (Mills 2007; Creswell 1979). A double arch is composed of an upper arch which supported the roof was semicircular shaped, and a lower arch which supported the long vertical columns was horseshoe shaped (Terrasse 1932). The origin of the double arches is unknown; the only link to any origin is with the horseshoe arch. Mills (2007) refers to a third type of arch used in a variation of the double arch in front of the mirhab, which are called multifold archs.

The prayer hall's un-uniform column application is incredibly unique. Creswell (1979) notes the columns are made of every conceivable type of column, varying in style and height. Scholars question the purpose of application in the mosque. Balbas (1965) suggests that the columns and capitals are reused from previous structures. Mills (2007) disagrees and states that the Phoenician architecture does not apply uniformity to columns, and supports this with Renan's (1864) account of the Phoenician site Um-el-Amwid.

Conclusion

In conclusion, research suggests that the construction of the mosque in Cordoba by the Muslims is unlikely, although it is plausible that they renovated of an existing structure to create the Mosque of Cordoba. Due to the nature of how Islamic tradition continuously reuses buildings, preservation of structures is available for later analysis by historians. The mosque contains elements left within it of each culture that had adapted the site for its own use, and continued research should be implemented at the site to accumulate knowledge of previous cultures such as the Phoenicians.

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