

Chapter 7

I. THE SPREAD of ISLAM: HYPOSTYLE MOSQUES AND SOARING MINARETS

Islam, the religion that developed around the teachings of the Prophet Muhammad, began in the semi-nomadic setting of the southern edge of the great Arabian Desert. Within a century of the Prophet's death, Islamic rulers amassed an empire through military conquest and conversion that included most of the southern half of the Roman Empire plus all of the Persian Empire.

- A. Mecca and Medina: The Cities of Muhammad and His Followers
1. During the 7th century Islam spread rapidly, uprooting various pagan cults while seeking to convert Jews and Christians through intellectual persuasion, economic incentives, and military force.
 2. Mecca had long been a major cult site for the nomadic tribes of Arabia, attracting religious pilgrims to the Kaaba, a cubical granite house containing many idols.
 - a. After many battles, Muhammad conquered Mecca and stripped the Kaaba of its pagan iconography.
 - b. He taught that the angel Gabriel had given the sacred black stone to Abraham and that both Abraham and Ishmael participated in building the original structure.
 - c. As the focus of Muslim prayers, the Kaaba represents the unity of the faithful.
 3. Muhammad directly influenced the transformation of his own house in Medina into the new religion's first congregational mosque, literally the "place of prostration."
 - a. Muhammad encouraged ascetic attitudes in architecture, using vernacular methods for mud-brick walls and a palm-trunk roof.
 - b. He insisted that he and his immediate successors be buried without monuments under the floor of the house.
 - c. His initial prayer hall faced Jerusalem, which, previous to the conquest of Mecca, was favored by the Prophet as the *qibla*, or direction of prayers.
 - d. After his conquest of Mecca, however, he redirected the qibla to the Kaaba.
 4. The Mosque of the Prophet in Medina probably resembled a small trader's caravansary.
 - a. The first Muslims rejected the form of pagan temples, preferring to base their cult buildings on secular structures.
 - b. The first mosques provided simple architectural settings without apses, side chapels, ambulatories, crypts, baptisteries, or choirs.
 5. The first two generations of Islam requisitioned diverse structures to be transformed into mosques. The three most common plans:
 - a. The basilica with longitudinal aisles directed to the qibla
 - b. The transverse basilica with lateral exposure to the qibla wall
 - c. The isotropic hypostyle hall
 6. The Arab domination of Sassanian Persia and the southern Mediterranean relied upon the ideology of *jihad*.
 - a. After the victory against the Persians, the Arabs founded Kufah in 638 on a site not far from ancient Babylon.
 - i. The architect, Abu al-Haiyaj, followed Greco-Roman precedents, learned through the Byzantine towns that had been founded in the region. He structured the new city on a grid with two broad cross streets.
 - ii. At the principal intersection he placed the Friday mosque and the governor's palace back to back.

- iii. While the cities of this region later took on gnarled, informal patterns, the initial Arab foundations were almost as rigorously orthogonal as those of the Romans.

B. The Umayyad Period: Jerusalem and Damascus

1. Following the assassination of Ali, Muhammad's cousin and son-in-law, the rival Umayyad clan established a hereditary dynasty, attempting to bring stability to the new empire.
2. Husayn, one of the sons of Ali, however, continued to demand his family's right until his assassination at Karbala, Iraq, in 680, which spawned the Shiite faction of Islam. Shiites maintain that only the blood relatives of the Prophet should serve as caliph.
3. The Umayyads settled in the Greco-Roman city of Damascus, Syria, where they sponsored a brilliant urban culture, partly based on the example of the Byzantines in Constantinople.
 - a. Through the production of fine architecture and grand ceremonies, they attempted to create a charismatic setting to smooth over the succession disputes.
 - b. The Umayyads borrowed architectural forms from Roman, Byzantine, and Persian precedents.
4. The Umayyad project for the Dome of the Rock in Jerusalem came with clear political motivations: since a rival clan controlled Mecca at that time, they sought to propose Jerusalem as an alternative pilgrimage site.
 - a. The Dome of the Rock differed from most central-plan Christian churches in its use of two concentric ambulatories, which accommodated the pilgrims' ritual of circling the rock under the dome.
 - b. Inside the Dome of the Rock a frieze of interlacing kufic script encircled the base, distinguishing it as Islamic.
 - c. Abd al-Malik (r. 685–705) was the patron of this first great Umayyad monument.
5. Mecca fell to the Umayyads a year after the completion of the Dome of the Rock, and the realm of Islam regained a sense of unity.
6. Abd al-Malik's son, al-Walid I (r. 705–715), built three impressive mosques to celebrate the consolidation of the empire.
 - a. The first entailed enlarging the Mosque of the Prophet in Medina.
 - b. The second, the al-Aqsa Mosque, begun in 705, provided a congregational hypostyle hall on the Temple Mount in Jerusalem.
 - c. The third was the Great Mosque of Damascus, which fused the mosque and the palace compound. After the demolition of a church dedicated to St. John the Baptist to make way for the mosque, the Umayyads conserved the prized relic of St. John's head in a side chamber as a benevolent gesture to the city's Christians, who still outnumbered Muslims.
7. Although nothing remains of the Umayyad palaces in Damascus, the ruins of the so-called desert palaces provide evidence of great splendor.
 - a. The remote palaces served numerous functions. They included trading caravansaries, administrative centers of agricultural estates, hunting lodges, and pleasure grounds.
 - b. Among the finest examples one finds the Qasr Mshatta, near Amman, Jordan, built in the 740s.

C. The Abbasid Succession: New Capitals in Baghdad and Samarra

1. Rebellions led by the Shiites and others disaffected by Umayyad rule came to a climax under the leadership of Abu'l-Abbas, a descendent of the Prophet's

- youngest uncle. The Battle of Zab near Kufah transferred power in 750 to the Abbasid dynasty.
2. The second Abbasid caliph, al-Mansur (r. 754–775), created a round city in 762 on the Tigris River, which the locals called Baghdad. No trace remains, but the plan can be reconstructed from literary sources.
 - a. A perfect circle with four symmetrically placed gates 45° from the cardinal points so that the southwest gate pointed to Mecca.
 - b. Two major cross-axial streets; but instead of being lined with arcades, they were covered by vaults, creating a cool climate for the shops that lined them.
 - c. Forty secondary streets that led radially from the center.
 - d. An outer ring, an inner ring, and a vast central void for the palace and mosque.
 3. Al-Mansur's grandson, Harun al-Rashid (r. 785–805), transferred the capital to Ar-Raqqah (Syria) in the 780s, laying out the town on an octagon.
 4. Baghdad remained the administrative center until the 830s, when the caliph al-Mutasim (r. 833–842) took his 70,000 Turkish mercenaries north of Baghdad to the new capital at Samarra.
 - a. Samarra had large geometric enclaves of Abbasid palaces and mosques that formed a strip along the Tigris River.
 - b. To complete the city, al-Mutawakkil (r. 847–861) commissioned the largest mosque in the world, the Great Mosque of Samarra.
 - c. The grandson of al-Mutawakkil brought the Abbasids back to Baghdad, leaving the sprawling mud-and-brick enclosures of Samarra to slowly disintegrate.
 5. In Tunisia the Aghlabid dynasty took root around 800. They rebuilt the Great Mosque of Kairouan in 836.
 6. In Egypt Ahmed Ibn Tulun (r. 868–884) established an autonomous dynasty, the Tulunids.
 - a. He created a new palace district at al-Qatai and furnished it with courtyard gardens, an aqueduct, a hippodrome, and barracks.
 - b. the Mosque of Ibn Tulun remained intact.
 7. While the first two centuries of Islamic design pursued strict geometric order for cities, palaces, and mosques, the texture of Arab Islamic cities evolved into a dense snarl of covered markets and tightly packed courtyard houses occasionally interrupted by monumental religious complexes.

II. TANG CHINA AND EAST ASIA: GRIDDED CAPITALS AND LOFTY PAGODAS

- A. Tang Chang'an: The End of the Silk Road
 1. After several centuries of feudal division in China, the Sui dynasty (580–618) reunited the north and south of the empire.
 - a. The most radical innovation involved the redistribution of agricultural land.
 - b. The Sui created China's grandest work of infrastructure: the Grand Canal, which remains the world's longest artificial waterway.
 - c. They began to rebuild the capital city of Chang'an.
 2. The Tang dynasty continued the grand plan for Chang'an, creating the largest city in the world.
 3. They also pursued a more open policy regarding foreign trade and foreign religions.
 4. The legendary Silk Road to the west acquired new importance.
 - a. Chang'an (modern Xi'an) lay at the eastern terminus of the Silk Road, welcoming traders who came via the Himalayas from India.

- a. The necropolis would serve as her final resting place.
 - b. The Qianling tombs remain the most impressive and enduring of her many works.
4. She transferred her capital east to Luoyang, which sat strategically at the terminus of the Grand Canal.
 5. Wu Zetian exploited religion to reinforce her power, building numerous Buddhist temples, gaining the support of powerful monasteries, and instituting a tradition of prophecy regarding the propriety of her rule.
 - a. One of her lovers oversaw the construction of the towering five-story Heavenly Palace temple (Tien-t'ang), which housed a colossal bronze statue of Vairocana Buddha.
 - b. In the same area he also erected the new capital's Mingtang, Hall of Light.
 6. Under Wu Zetian women achieved more economic independence and could seek education in philosophy and the arts.
 - a. Women continued to wield influence in the Tang court for a decade after Wu Zetian's death.
 - b. The official suppression of Buddhism during the next century was partly motivated by its connection to feminine power at court.

C. Variations on Tang Urban Types: Korea and Japan

1. Korean and Japanese architects developed Chinese models into new forms that represented their respective national identities.
 - a. During the late 7th century, the Silla dynasty in Korea relied on Chinese artistic ideas from Chang'an to produce its own capital cities.
 - i. The southern city of Kyongju and the northern capital of Pyongyang near the border with China both adopted a strict grid with great broad avenues, setting a walled palace and administrative sector in the north.
 - ii. The Silla aristocracy sponsored variations on Chinese temple courtyards, often using more permanent materials than their neighbors.
 1. Among the remaining structures of the Silla period, the Bulguk-sa Temple closely resembles a Tang prayer hall.
 2. The masonry structure included an exceptionally well-crafted series of stone stairways supported on structural vaults, rarely seen in Chinese precedents.
2. Tomb architecture was less dependent on China.
 - a. The Silla tombs in Korea rose as great stone cylinders capped with cup-shaped grassy knolls.
 - b. In Japan, the *kofun*, keyhole-shaped burial mounds, built during the 3rd to 6th centuries, likewise presented a completely different local design approach.
3. Japan, however, looked to the architecture and urbanism of the Chinese for inspiration.
 - a. Before the foundation of Nara in 710, the Japanese changed capitals at the death of each ruler.
 - b. In the efforts to reform the Japanese state along the lines of the Tang government, they planned the new capital at Nara to be permanent, directly inspired by Chang'an.
 - i. Like the wards in Chinese cities, Nara's wards extended a half-kilometer per side, divided into sixteen internal blocks.
 - ii. The city remained unwalled: Japanese cities, perhaps not as susceptible to international invasions, were regularly built without fortifications.

4. Buddhism became Japan's state religion in 604.
 - a. The Todaiji Temple complex in Nara became the religion's national focus.
 - i. It was foregrounded by twin lounge-type pagodas.
 - ii. The pagodas framed the Great Temple, the Daibutsuden, which housed a colossal bronze statue of the seated Vairocana Buddha.
 - iii. The great hall rose nearly 50 m, the largest timber-frame building in the world.
 - b. Feminine influence entered Japanese political life during the period of Empress Wu's rule of Tang China, and on four occasions during the Nara period, female sovereigns ruled the country.
 - i. In 766, after Empress Shotoku named a Buddhist monk as prime minister, the aristocratic faction demanded a ban on women taking the throne.
 - ii. In 784, the conflict of the state with religious institutions provoked the transfer to a new capital north at Kyoto, where the imperial family remained for the next ten centuries.
3. Kyoto's plan repeated that of Nara but eliminated prominent sites for temples.

III. THE MAYA OF CENTRAL AMERICA: REPRODUCING THE MOUNTAIN OF CREATION

While precontact cultures in the Americas relied on different technologies, they nonetheless executed monuments that in some cases surpassed those in the Eastern Hemisphere. The unique forms produced by Maya culture during the 7th through 9th centuries, such as cross-corbelled vaults, inscribed stairways, and fanciful roof-combs on the tops of pyramids, were symbolic expressions deeply rooted in the geographic context.

- A. Tikal: The Competitive Production of Monuments
 1. The Maya language group evolved in the semitropical zone shared by Guatemala, Belize, northern Honduras, and the Mexican regions of Chiapas and the Yucatán Peninsula.
 2. The fierce competition among the cities, combined with the region's limited agricultural productivity and difficult transportation connections, discouraged any single city from prevailing as the imperial ruler over the others.
 3. The urban pattern of Maya cities differed radically from those of other preindustrial cultures, closer in its low density to the scattered expanse of 12th-century sprawl.
 - a. At their core rose a monumental cluster of palaces, assembly halls (popol nahs), sweat baths, ball courts, and funerary temples.
 - b. A precinct wall bounded the urban core, which included great public plazas and elevated avenues paved with plaster, known as "white ways," or sak behs.
 - c. A large plaza on the edge of the monumental district served for a market. The rest of the residences cropped up randomly without connecting streets.
 - d. Extended families built thatched-roof longhouses on raised platforms that typically formed groupings of three or four around a farmyard court.
 - e. The hilly terrain of most Maya sites discouraged the use of the grid, leading to the apparently informal placement of buildings.
 - i. The individual compounds, however, were strictly orthogonal and usually composed according to a proportional grid.

- ii. A hidden structuring principle based on triangles, however, seems to have governed the organization of Tikal, suggesting planned alignments.
- 2. The dynasties ruling Maya cities carefully documented their power in stone inscriptions, and their lineages often endured for centuries.
 - a. Toh-Chok-Ich'ak' descendants preserved his palace as a sacred monument on the western edge of the Central Acropolis.
 - i. Steep corbelled vaults, unknown to other Mesoamerican cultures, covered each of the narrow rooms and established a spatial module that endured throughout Maya history.
 - ii. The bank of kitchens overlooked one of six reservoirs—the monumental core of Tikal served as both a ritual center for dynastic propaganda and the nodal point for Tikal's hydraulic infrastructure.
- 3. Hasaw-Kan-K'awil (r. 682–734) rebuilt Tikal with new monuments.
 - a. A new ball court and a radial temple adjacent to it.
 - i. Above the sloping sides of the ball court, the upper galleries had six rounded columns, a novelty for Tikal but a motif frequently used in the recently conquered Calakmul.
 - ii. The radial temple recalled the style of Teotihuacán, using the talud-tablero motif, which alluded to the legendary place of origins.
 - b. He also built Tikal's first tall pyramid, Temple 33, as his father's tomb, initiating the formation of the Great Plaza.
 - i. To either side of this massive pile, Hasaw-Kan-K'awil added even taller structures as tombs for himself and his wife.
 - ii. The tomb of the king lay below the foundations of the structure, at the summit of the pyramid, a single chambered sanctuary provided space for priests and royal relatives to make sacrifices to his memory.
- 4. Hasaw-Kan-K'awil's son and grandson continued to add staged pyramids to the core of Tikal.
- 5. The *ajaws* of Tikal left more than 3,000 inscribed monuments as testament to their cycles of power, the last dating from 869.

B. The Royal Pyramids of Palenque

- 1. Located about 250 km (155 miles) from Tikal, Palenque once served as the refuge for that city's exiled king in the mid-7th century.
- 2. The *ajaw* of Palenque, Hanab Pakal (r. 615–683) built a palace complex and a pyramid for his own tomb, now called the Temple of the Inscriptions, forming the eastern and southern edges of the great plaza.
- 3. In 675 Hanab Pakal constructed the Temple of the Inscriptions, a massive stepped pyramid adjacent to the palace.
 - a. It had a large burial chamber at the pyramid's core that could be reached by an internal stairway covered by corbelled vaults.
 - b. Three cross-vaults intersected the corbelled vault of the burial chamber.
- 4. Ironically, the success of Palenque and many other small Maya cities during the 7th and 8th centuries, including Bonampak, Piedras Negras, and Seibal, may have contributed to the overall decline of the region around 900.
 - a. The fragmentation of the political centers of Tikal and Calakmul and the general overpopulation of the region led to constant strife in the struggle for resources.

C. Spaces of Assembly in the Yucatán: Uxmal and Chichén Itza

1. The cities in the Petén area declined during the 9th century, exhausted by warfare and no longer able to agriculturally sustain large populations. The elite apparently migrated to the lowlands of the Yucatán Peninsula.
 - a. Here, they founded the last great Maya cities of Uxmal and Chichén Itzá.
2. The monumental core of Uxmal sat inside an oval mound of walls.
 - a. The tallest structure in Uxmal, retroactively called the Pyramid of the Magician, equaled Temple I at Tikal in height.
 - b. It overlooked one of the best- preserved and most fancifully decorated Maya courtyard complexes, now called the "Nunnery,"
3. King Chan-Chak-K'ak'nal-Ahaw also commissioned the ball court of Uxmal and the Governor's Palace.
4. Maya concrete was not as strong as the pozzolana-based concrete of Rome but nonetheless a sign of highly advanced construction methods.
 - a. The masons at Uxmal worked the limestone with such accuracy of detail and plasticity it is hard to believe they used only obsidian blades.
5. The 18 km (11 mile) interurban road constructed between Uxmal and Kabah indicated the strong union of the territory.
6. Chichén Itzá, about 150 km (93 miles) east of Uxmal, became the dominant power in the region and produced a brilliant collection of monuments, signs of great wealth from both tribute and trade.
 - a. Chichén Itzá was located near two sinkhole reservoirs, or *cenote*.
 - b. The central core of Chichén Itzá had two walled precincts.
 - c. The most intriguing complex, however, remains a unique round structure known as the Caracol, or "snail," its cylindrical tower rising three stories.
 - d. The radial pyramid known as the Castillo, or "castle," dominates the northern precinct of Chichén Itzá.
 - e. The novel use of columns signified the presence of non-Mayan artisans at Chichén Itzá.
 - i. The impressive collection of colonnaded structures around the Court of the Thousand Columns seems to have accommodated an alternative political order based on assemblies.
 - f. The Great Ball Court of Chichén Itzá, the largest and most ornate in Mesoamerica, was dedicated between 849 and 869.
 - g. Despite its apparent power, Chichén Itzá was abandoned in the middle of the 10th century.
 - i. Its decline may be explained in part by its alternative political structure, and/or economic difficulties that brought on drought and famine.