Chapter 8

I. SOUTHEAST ASIA AND SOUTHERN INDIA: LIVED-IN MODELS OF COSMIC ORDER

Premodern societies in Asia considered the political order a reflection of a greater hierarchy in the cosmos. The creators of the immense temples constructed between the 9th and 12th centuries in Indonesia, Cambodia, and India regularly turned to the geometric order of a mandala to generate landscapes that mirrored their royal power as a religious necessity.

- A. Borobudur: The Mandala Effect
 - 1. In India both Buddhists and Hindus used the mandala, a layered series of geometric patterns, to create images and forms for religious devotions.
 - a. Temple designers based their plans and elevations on them.
 - As Indian culture spread throughout Southeast Asia, it inspired ever grander structures in places such as Cambodia and the island of Java in Indonesia.
 - 2. During the 9th century on Java, the Sailendra dynasty (770–862) created a remarkable series of monuments, including one of the largest temples of all times, the Buddhist shrine of Borobudur.
 - a. A consummate realization of a mandala in three dimensions, it presented a concentric succession of geometric figures leading from the redented squares of the five outer platforms to the three oval rings of stupas on the upper terraces, terminating in a giant stupa at the summit.
 - b. The base covered about the same area as the small pyramid at Giza.
 - c. The designers showed little concern for structural invention other than finding a way to brace the mass of the outer terraces from sliding outward.
 - d. Borobudur's designers used a mandala plan based on *padas* (squares in a grid) composed in rows of either 8 by 8 or 9 by 9. They also included a radial pattern of 8 segments with 24 subdivisions.
 - e. The number eight, which in Buddhist doctrine refers to the eightfold path for reaching enlightenment, recurs throughout the Borobudur complex, from the number of its levels to the multiples of its details.
 - 3. Few records remain of the Sailendra patrons who produced this colossal vision. Their control over central Java lasted less than a century.
 - 4. By the end of the 9th century, the rival Sanjaya dynasty based on the eastern tip of the island had intermarried with them and eventually supplanted them, imposing Hinduism as the principal religion.
 - a. The Sanjaya constructed their major temple of Prambanan in 910, achieving nearly as grand a setting as Borobudur.
 - b. Four concentric rings of 224 small candis surrounded a central precinct with three pyramids dedicated to Brahma, Shiva, and Vishnu, and five smaller altars.
 - 5. The splendid redundancy of the stupas of Borobudur and *candis* of Prambanan presented stunning visions of a hieratic society that sacrificed an enormous quantity of man-hours in labor to produce a habitable image of the perfect order of a mandala.
- B. Angkor: Living in a Microcosm
 - 1. The Khmer dynasty in Cambodia went even further toward designing representations of the cosmos so engrossing they could almost replace the real world.
 - a. The Khmer looked to both the architectural and religious traditions of India and China.

- Angkor, with its dozens of temple complexes, oblong reservoirs, canals, and sculpture-lined causeways, comprised the largest monumental setting in the world.
- 2. Most of the monumental complexes of the Khmer involved impressive hydraulic manipulations related to the annual floods of the Great Lake.
- 3. As *chakravartin*, or "universal monarch," Jayavarman created a new capital at Hariharalaya between the Great Lake and sacred mountain of Phnom Kulen.
- 4. The first few generations of Khmer rulers at Hariharalaya sponsored three basic architectural programs:
 - a. To supply a grand water work
 - b. To build an ancestor temple
 - c. To create a pyramidal state temple as a mausoleum
- 5. The scale and complexity of Khmer hydrological engineering, which included great basins, paved roads, canals, and formidable dams and bridges, revealed the advanced organizational capacity of its highly centralized and hierarchical society.
 - a. During the 1st century of Khmer rule, the work that literally set the dynasty apart in the region involved the preparation at Hariharalaya of the huge rectangular Indratataka reservoir, known locally as a *baray*.
 - b. During the next century, the successors of Jayavarman II surpassed the scale of Hariharalaya at nearby Angkor.
 - c. The first pyramidal temples overlooked the East Baray of Angkor, a vast rectangular reservoir.
 - d. The Khmer regime built the even larger West Baray a century later.
 - e. They added a final reservoir, about half the size of the earlier two, around 1200 to the northwest of the East Baray.
 - f. These oblong bodies of water established a staggered geometric frame around the central monumental core of Angkor, reinforcing the reverential distinction of the sacred and political core.
- 6. The Khmer sponsored two basic temple types. Both followed a mandala pattern of concentric geometric enclosures, framing a core of symmetrically organized galleries, junctures, and pavilions mostly cruciform in plan.
 - a. The terrace temple. The Banteay Srei was also known as the "citidel of the women." It stood at the periphery of the capital and consisted of a succession of four parkaras.
 - The pyramid temple. Temple of Angkor Wat, built two centuries later, used a similar sequence of parkeras; is the only temple in Agnkor oriented to the west.
- 7. The grand spaces, perfect geometry, and infinitesimal sculptural detail of the monuments upstaged the dwelling spaces for the common people of Angkor.
 - a. Both the rich and the poor built domestic structures of expendable materials that have left no trace.
 - b. The typical dwellings resembled the vernacular houses one still finds in the region, raised on wooden stilts with an elevated living level enclosed by woven reed walls and covered with thatch or banana leaves.
- 8. Jayavarman VII (r. 1181–1219), refurbished the country's infrastructure while building a multitude of hospitals.
 - a. On top of the ruined city he established the new city of Angkor Thom.
 - b. The eccentricity of the Bayon, the principal temple in the center of Angkor Thom, may derive from Jayavarman VII's commitment to Buddhism.
 - i. In its original state, a total of 216 colossal faces smiled down serenely from the monument.

- These bizarre façades may have represented the Compassionate Buddha, or the king himself, or perhaps a community of gods.
- 9. The Khmer dynasty lost its power in the mid-14th century, and the new regime abandoned Angkor for a capital closer to the sea. The great hydrological works of the Khmer silted up, the agricultural fields no longer prospered, and the monuments quickly became enshrouded with luxuriant vegetation.
- C. Southern India: The Exalted Scale of Pyramid Temples
 - 1. While the models for Indonesian and Cambodian temple builders originated in India, Indian patrons did not achieve works of comparable scale and refinement until the 11th century.
 - 2. The Chola dynasty in southern India (the region of Tamil Nadu) sponsored huge religious enclosures outside their capital of Thanjavur (Tagore).
 - a. Like the Khmer in Cambodia, the Chola boosted their political authority through the distribution of land grants to hundreds of monastic communities. This engendered feudal bonds, a situation resembling European feudalism during the same period.
 - b. The principal Chola monument, the Temple of Brahmapurishvara dedicated in 1010, became known as the Rajarajesvara.
 - i. The largest temple in India for many centuries, it housed hundreds of monks, musicians, and dancing maidens to provide a complete religious spectacle.
 - ii. Like the temples of Angkor, the Rajarajesvara included a succession of grand prakaram enclosures isolated by a moat.
 - 3. By 1200 the Pandya kings gained control of the south of India. To celebrate their success, they built the Meenakshi Amann Temple on the outskirts of the ancient city of Madurai.
 - At the turn of the millennium, temple-building resumed in the north of India as well.
 - a. The Solanka kings in the northwestern region of Gujurat sponsored the temple to Surya, the sun god.
 - b. From the 9th to 12th century, the Chandella dynasty in the northeast created India's most extensive collection of temples at Khajuraho.
 - i. Rather than building *kundas* the Chandella exploited the natural pools of the area. The random position of the sacred ponds determined the irregular siting of the temples.
 - ii. The Lakshmana established a type that was repeated in many variations in the complex, unfolding in an axial sequence intersected by a double transept.
 - iii. The Kandariya Mahadeva, the largest and most artfully coordinated of the western cluster of temples at Khajuraho, was constructed around 1020.
 - 1. It repeated the double transept type of the Lakshmana temple but handled the transitions in the roof with greater dynamism.
 - 2. The north and south flanks carry the most explicitly erotic sculptures ever conceived for a religious building; supporting the theological narrative of the marriage of the gods Shiva and Parvati.
 - 5. The Muslim conquest of northern India at the end of the 12th century put an end to the construction of grand temple complexes such as Khajuraho, which probably survived vindictive demolitions because of its remote jungle location.

II. ISLAMIC SPAIN AND MOROCCO: INTERLACING FORMS IN AL-ANDALUS AND THE MAGHREB

During the 7th century, Islamic rule spread across the southern coasts of the Mediterranean and into Spain, or al-Andalus. Here the exiled branch of the Umayyad dynasty consolidated its rule over the Iberian Peninsula and Morocco and sponsored an exuberant style of architecture.

- A. Cordoba: The Sea of Arches of the Great Mosque
 - 1. At its height the Ummayad capital of Cordoba in southern Spain may have numbered 500,000, rivaling Constantinople as the greatest city of medieval Europe.
 - 2. The rule of Islam gained force when the only surviving member of the Umayyad dynasty, the 19-year-old Abd al-Rahman I (r. 756–788), moved to Spain in the 750s.
 - a. Reigning as the western emir, he gained control of all the Iberian Peninsula, known as al-Andalus, and much of Morocco, known as the Maghreb, the "western lands" of Islam.
 - He set up an autocratic but tolerant regime, which for three centuries fostered a brilliant cultural synthesis, combining ancient Greco-Roman knowledge, Byzantine style, and Islamic religious tenets amid a multiethnic base.
 - 3. Cordoba, a prominent city of Roman foundation, sited 150 km (90 miles) inland on the Guadalquivir River, remained a safe distance from coastal raids but still easy to access by boat. Its multilingual population included Christians, known as *Mozarabs*; Jews, known as *Sephards*; and North African Berbers, Muslim converts descended from the nomadic tribes of North Africa.
 - a. Few traces of Roman Cordoba survived aside from the magnificent sixteen-arched bridge and the ruins of an amphitheater.
 - b. A dense urban fabric enveloped the Umayyad capital with narrow, winding streets and closed *herats* structured on blind alleys, much like those in Damascus and Cairo.
 - c. The principal monument of the city, the Great Mosque, rose next to the *Alkazar*, the prince's urban palace, offering a unique patch of orthogonal order.
 - i. Begun in 785 during Abd al-Rahman I's final years, it sent a message that the western emir had made his break from the caliphate of the Abbasid Empire.
 - ii. The mosque was expanded over the course of two centuries as an ongoing architectural project in four or five campaigns.
 - iii. Its wondrous multitude of columns, capitals, arches, and ceiling decorations folded into the endless repetition of more than 500 arcuated bays, infusing the whole with a compelling sense of unity like the waves at sea.
 - 4. Abd al-Rahman III's most radical changes came in the form of a new ritual.
 - a. The caliph introduced an imperial procession through the mosque, a ceremony without precedent in Islam.
 - b. The ceremony involved the court following two porters who carried a revered copy of the Quran, which was then deposited in the mihrab
 - 5. Al-Mansur committed two egregious strategic errors that seemed beneficial in the short term but had disastrous consequences for the continuity of the Umayyad state.
 - a. In 997 he ordered the sack of the Christian pilgrimage city of Santiago de Compostela. The Christians in the north organized the *Reconquista*, a crusade against Islamic Spain, which endured for four centuries until the final purging of Islam from the Iberian Peninsula.
 - b. He welcomed Berber mercenaries into the caliph's armies. The Berbers turned on their ex-employers in 1013, completely destroying the city and the suburban palaces of al-Mansur and the Caliph.

- 6. The Great Mosque survived the transition to Christian rule, reconsecrated as the city's cathedral in 1236.
- B. The Maghreb: The Courtyards of the Royal Cities
 - The Almoravid dynasty then took control of Morocco in the mid-11th century, adhering to a fundamentalist religious program.
 - a. Despite their distaste for the Umayyads, the new rulers adopted and elaborated many of the architectural elements of their precursors.
 - 2. Fez emerged as the major crossroads city of the Maghreb, midway between Marrakech and the tip of Spain.
 - A female patron founded the Qarawiyin Mosque, the city's principal mosque.
 - i. It received significant additions from the Almoravids in 1144, the decade before they lost power to the Almohads, including the pleated, green-tile roof, domes with star-shaped ribs, and a polygonal chapel-like *mihrab* chamber inspired by Cordoba.
 - ii. The designers included the novel device of the *muqarnas*, stalactite-like features that subdivided the curved surfaces of domes and pendentives into patterns of squinch-like compartments.
 - b. The Marinids, the dynasty that controlled Morocco from the 13th to the 15th century, built most of the *Herat* neighborhoods surrounding the Qarawiyin Mosque in Fez.
 - i. Blind alleys led to the entries of the most important houses.
 - ii. The intersections of the main streets contained the neighborhood's prime services.
 - iii. The Moroccan courtyard house, or *riad*, took form from the inside out, arranged around one or more geometrically perfect courts
 - 3. During the mid-12th century the Almohad dynasty seized power in Morocco and ruled for the next hundred years, seeking to correct the attitude toward Islam of their predecessors by using greater austerity.
 - a. They demolished the Almoravid palace and mosque in Marrakech as symbols of luxury and corruption, and in their place built the Koutoubia Mosque in 1147.
 - b. Ten years later the Almohads reconstructed the mosque, duplicating the original plan but adjusting the qibla axis by 5°.
 - 4. Ya'qub al-Mansur (r. 1184–1199), the most successful of the Almohad caliphs, transferred the capital to Rabat. His Hassan Mosque stood more than a kilometer from the fortified seaport town, overlooking an inlet that divided Rabat from the twin city of Salé.
 - a. The patron's death in 1199 halted construction, leaving the minaret as a prominent stub.
 - b. The vast platform, marked with partially erected stone columns for the hypostyle hall, was to measure 446 by 449 meters.
 - 5. The Almohads held power for another half century, but their architectural patronage slowed down as they struggled to hold on to conquered territories. The Marinid successors picked up the slack and during the next two centuries created dozens of religious institutions in Morocco's royal cities.
- C. From the Taifa States to the Gilded Confinement of the Nasrids at Alhambra
 - 1. Amid the invasive efforts of the Almoravids and the Almohads from Morocco, Spain broke into various *taifas*, or petty principates.

- a. The onslaught of the Moroccan competitors from the south and the pressure of the Christian *Reconquista* from the north regularly destabilized these tiny kingdoms.
- b. Only the Nasrid dynasty in Granada, which appeared at the end of the *taifa* period, succeeded in maintaining an independent Islamic principate until the late 15th century.
- 2. The southern city of Almeria was the first to break from Cordoba in 1011. The Alcazaba castle, begun for Umayyad caliph Abd al-Rahman III in 955 became the setting for the independent emir's court.
 - a. Largest of the Islamic fortresses in Spain.
 - b. A ship-shaped outline.
 - c. Culminated in a square castle keep that gave clear views over the port and to the northern valleys.
 - d. Al-Mutasim (r. 1037–1091) transformed it into a site for luxurious palaces with hanging gardens and fountains.
- 3. Zaragoza withstood as the northernmost Islamic stronghold for most of the 11th century.
 - a. The Aljaferia Castle built in 1049 for the *taifa* dynasty on the western outskirts of the city faintly recalled the Umayyad desert palaces of the early 8th century in Jordan and Syria.
 - b. The outer walls carried evenly spaced round towers, the central block stood symmetrically between two garden courts.
- 4. Toledo, the most centrally located city in Spain, withheld for 70 years as a *taifa*.
 - a. The rulers sponsored remarkable walls and gates, including the Puerta del Sol, decorated with interlacing arches.
 - A small mosque, the Bab al-Mardum, rose next to the southern gate with three cupolas structured on star-shaped ribs like those in Cordoba.
 - c. An impressive synagogue begun in the 13th century, now known as Santa Maria la Blanca, offered a superb example of the *mudéjar* style of lace-like cusped arches.
 - d. The success of the Christian *Reconquista* at the end of the 15th century led to the definitive expulsion of both Muslims and Jews in 1492 and the conversion of their buildings into churches.
- 5. Seville flourished during the ascendancy of the Almoravids and became the capital of the Almohads in Spain during the late 12th century.
 - a. It fell to the Christians at mid-13th century, who transformed the city's Great Mosque into the base of a new Gothic cathedral.
 - b. The Giralda tower features a parapet with interlacing lobed arches similar to those of the Koutoubia minarat in Marrakech.
- 6. Granada, the last independent Muslim state in Spain, survived until the 15th century by negotiating alliances with Christians against other Islamic principates.
 - a. The Nasrid dynasty developed the Alhambra, a fortress on a steep promontory, into a pleasure palace that remains the crowning achievement of Islamic architecture in al-Andalus.
 - b. The increasing magnificence of the Alhambra, during the 14th century, accompanied the dynasty's progressive isolation and entrapment in Christianized Spain.
 - c. The Alhambra grew into a dense palace-city of courts and gardens, about twice the area of the Acropolis in Athens.

After the year 1000, a new sense of cultural and economic openness encouraged the journeys of Christian pilgrims. They traveled from England, Germany, and France either to Jerusalem, Rome, or Santiago de Compostela, Spain. The protection of pilgrims became a pretext for the military exploits of the Crusaders, who reclaimed Jerusalem as their "Holy Land."

- A. Charlemagne: The Revival of the Roman Empire and the Role of Monasteries
 - 1. During the long reign of Charlemagne (r. 768–814), the Franks patched together the territories of France, Germany, Switzerland, Czechoslovakia, and Austria.
 - 2. After the reign of Charlemagne's son, Louis the Pious, the empire dissolved into three kingdoms. Frequent Viking incursions from the north and Magyar and Saracen raids from the south left Charlemagne's legacy in tatters at the end of the 9th century. The political power dissipated to the scattered feudal system of a myriad of duchies and monasteries.
 - 3. Charlemagne's fleeting vision of *Renovatio Romanae Imperii*, the revival of the unity and greatness of the Roman Empire of Constantine, inspired a feverish few decades of architectural patronage.
 - a. Numerous imperial palaces built for his itinerant court
 - b. Sixteen cathedrals
 - c. Over 200 monasteries
 - 4. Charlemagne's palace and chapel at Aix-la-Chapelle, now called Aachen, remained a key project in his far-flung efforts to revive the Roman Empire.
 - a. The architect borrowed liberally from the Byzantine works in Ravenna.
 - b. The palace derived its organization from Theodoric's palace in Ravenna, which had been inspired by the imperial palace in Constantinople.
 - c. The Palatine Chapel is the only piece of the imperial complex in Aachen that remains intact.
 - i. The architect attempted to copy San Vitale in Ravenna for the emperor's mausoleum, producing a stiff approximation of the two-storied octagon supporting a dome on a drum.
 - ii. Above the main entry to the Aachen chapel rose the two towers of the *castellum*, or fortress.
 - During the next century the twin-towered facade became known as a westwork and lost its military associations.
 - The westwork at the abbey of Corvey in 873 in Westphalia, the only Carolingian example intact, anticipated the twin towers on the facades of most of the great cathedrals of northern Europe built during the 11th to 14th centuries.
 - 5. One of the Carolingian westworks that may have influenced the chapel at Aachen, the abbey church of Lorsch, received imperial patronage in 774.
 - a. The surviving gatehouse to its convent, built after 800, offered a rich example of the reinterpretation of ancient types. The gate suggested a triumphal arch to celebrate Charlemagne's return from his imperial coronation in Rome.
 - i. The triple archway with engaged columns capped by an attic story with pilasters draws on Roman precedents.
 - ii. The alternating red and white panels, shifting to a diamond pattern at the level of the column capitals, is a more unusual variant of the triumphal arch.
 - iii. The mix of Italian and Barbarian motifs both enriched and contradicted the classical Roman type, leading 19th-century historians to label the works of this period "Romanesque."
 - 6. Although none of the convents from the age of Charlemagne have survived, the extraordinary graphic document of the ideal plan of Saint Gall, described the form and social order of a Benedictine monastery.

- a. One third of the complex's space was devoted to monastic duties, one third devoted to agriculture and crafts performed by the serfs, and one third devoted to hospitality.
- b. The convent's organization illustrates the theoretical balance of the devotional life of prayer and study with the productive life to sustain the community.
- 7. From the 10th to the 12th centuries, monastic institutions, especially Gorze and Cluny, acquired exceptional power and authority in Western Europe.
 - a. Gorze, located in northern France near Metz, which related to the imperial court.
 - b. Cluny, in central France, which catered to the interests of the papacy in Rome.
- 8. By the end of the 11th century, Cluny commanded a monastic empire with jurisdiction over nearly 1,500 monasteries, half in France and the rest in Spain, Italy, England, and Germany.
 - a. The layout of its initial scheme repeated much of the program of Saint Gall.
 - b. Alterations to the abbey's plan revealed its political importance, now more like an imperial palace, set inside substantial walls.
 - The construction of Cluny III coincided with the election of a Cluniac as pope. Its final dimensions covered nearly twice the area of Saint Peter's in Rome.
- 9. The extravagance of Cluny, with its gilded pilasters, and painted chapels, attracted the disdain of the Cistercian Order, which advocated a return to the austerity of the initial Benedictine rules of poverty, chastity, and obedience.
 - a. From the Cistercian mother house in the marshes of Citeaux near Dijon, teams of twelve monks set out to establish other monasteries in out-of-the-way wilderness sites during the early 12th century.
 - b. Their architecture appeared severe and disciplined, governed by a rigorous building ordinance.
- 10. The austere program of the Cistercians shaped Le Thoronet Abbey, built in the south of France from 1157 to 1175.
 - a. The builders rejected decoration, relying on bare structure for their aesthetic pleasure.
 - Saint Augustine's "perfect" ratio of 1:2 controlled the elevations and ground plan.
 - Cistercians formulated an alternative aesthetic to Cluny, conceiving of beauty as the direct consequence of expedient structure without decoration.
- B. The Norman Invasions: An Architectural Cross-Fertilization
 - 1. Throughout the 9th century, Viking raiders from Scandinavia menaced the stability of much of Europe. To appease them, the King of France granted the Vikings the duchy of Normandy in 911, leading to their new identity as Normans; and they became enthusiastic sponsors for rebuilding monasteries.
 - 2. William the Conqueror (1027–1087), before launching the Norman invasion of England, established his capital at the coastal town of Caen in 1060, building a castle and the monastery of Saint Etienne.
 - 3. Among their first acts in the conquest of England, the Normans built more than eighty castles, at first using the motte-and-bailey system.
 - a. Their circular layout probably derived from Viking camps such as Trelleborg, built in 9th-century Denmark.
 - b. From these initial earth and wood fortresses the Normans moved on to build stone castle "keeps," known in Normandy as *donjons*.
 - c. The Normans shipped the limestone from Caen to execute the ashlar construction of Westminster Abbey and many other convent churches.

- d. Durham cathedral, the northernmost Norman outpost, rose as their most ambitious commission.
- 4. In 1061, the Normans took control of all southern Italy and Sicily, establishing a kingdom in the Muslim-dominated city of Palermo.
 - a. The impressive architectural output under the Norman rulers relied on local Muslim craftsmen and Byzantine artists for its vigor.
 - b. Normans transformed the North African Muslim's *alcazar* at the southern edge of Palermo into the "Norman" Palace in 1131, using a mixture of Arab and Byzantine styles.
 - c. The most compelling case of Norman stylistic fusion appeared at the abbey of Monreale located in the hills 7 km south of Palermo.
 - d. The Sicilian Normans showed their desire to emulate the models of luxury at North African courts in the design of La Ziza, a villa sponsored by William I in the 1160s on the outskirts of Palermo.
- C. The Pilgrim's Progress: Rome and Compostela
 - During the 11th and 12th centuries, the attempt to serve and attract pilgrims stimulated the exchange of design ideas, in particular between central France, northern Spain, and Italy. Three tombs became the principal goals for medieval pilgrims.
 - a. Christ's Holy Sepulcher in Jerusalem.
 - b. St. Peter's crypt in Rome
 - c. The tomb designed for the recently discovered body of St. James in Compostela, Spain.
 - 2. Jerusalem and Bethlehem, the sites of Christ's death and birth, remained the most prized but difficult sites to reach. Rome offered itself as the more common goal for international journeys; a city of saints, martyrs, and popes.
 - a. At the end of the 12th century, Rome stood in disrepair.
 - b. The Normans had led the last sack in 1084, resulting in a truce and the remodeling of major Roman churches and convents.
 - c. St. Peter's and most of the major pilgrim churches acquired slender towers around the year 1200 to help orient pilgrims searching the horizon for the next holy shrine.
 - 3. During the height of the influence of Cluny in the 11th and 12th centuries, Compostela rivaled Rome in religious significance.
 - a. The four official routes to Compostela encouraged the development of abbeys, inns, and hospices.
 - i. Via Turonensis
 - ii. Via Lemovicensis
 - iii. Via Podiensis
 - iv. Via Tolosana
 - b. In Compostela, pilgrims were welcomed at the Portico de la Gloria, the major west entrance, finished in 1180, which repeated the familiar icon that motivated their journey, Christ at the Last Judgment, accompanied by the twenty-four Elders of the Apocalypse arranged radially on the tympanum's edge like voussoirs.
- D. The Crusades: The Architectural Consequences of Christianity's Holy War
 - Under papal and royal supervision, bands of feudal lords, mostly of French or Norman origin, invaded Syria and Palestine to reclaim the land of Christ's birth and sacrifice.
 - a. For two centuries they sent troops and settled considerable territories between Antioch and the Dead Sea.

- b. This colonial adventure in the *Outremer* (overseas) had a galvanizing effect on Europe—culturally, architecturally, and, above all, ideologically.
 - i. A fragmented Europe began to adopt an international perspective geared to a conflict with non-Christians.
 - ii. Merchants speculated on the needs for transportation and services
 - iii. Peasants experienced a new sense of freedom with the opportunity to be a part of the colonizing process.
- 2. The technology of castle building improved through the encounter between East and West. European castles changed radically from having the tall, rectangular keeps such as the one at Loches (1040s) to the concentric layout with rounded battlements such as the 13th-century walls of Carcasonne.
- 3. Pope Urban II brought European leaders to Clermont in 1095 to discuss the "liberation" of Jerusalem.
 - a. When the Crusaders finally took Jerusalem in 1099, they massacred the entire population of Jews and Arabs.
 - b. The Kingdom of Jerusalem broke into four feudal states, and soon the new European overlords constructed over fifty castles to control the region. They hoisted a golden cross over the Dome of the Rock, now called the Temple of the Lord.
- 4. The last of the Norman kings of Sicily, Frederick II (r. 1220–1250), gained the title of Holy Roman Emperor, and through his second marriage became King of Jerusalem.
 - a. The geometric rigor of Frederick II's fortresses in Sicily and Puglia were without equal.
 - i. At Prato he commissioned an imperial palace/castle. The complex had a square footprint with towers at each corner and at the midpoint of each wall.
 - ii. Frederick II's synthesis of religious and secular forms at Castel del Monte (Puglia) resulted in the highest expression of the idealism that began with Charlemagne for the revival of the grandeur of imperial Rome.