

## Chapter 12: 1600–1700

### I. ISLAMIC REALMS IN CENTRAL ASIA: THE DOME OF POWER, THE GARDEN OF PARADISE

Beginning in the 15th century, descendants of Turkic and Mongolian cavalries distinguished themselves as patrons of grand domes and exquisite gardens. Relying on the architectural traditions established several centuries earlier in Persia, they created new monumental settings in the thinly populated regions ranging from western Iran to Uzbekistan and northern India.

- A. The Persian Renaissance: From the Timurids to the Safavids
1. Most of the territories between the Mesopotamian Delta, the Central Asian Steppes traversed by the Silk Road, and the Indus Valley came under Muslim rule during the first two centuries of Islam.
  2. From the 10th to 13th centuries, the Ghaznavids and the Seljuks, Turkish warrior dynasties from the Steppes, established a pattern of nomadic outsiders taking control and converting to Islam.
    - a. Without a built tradition of their own, they sponsored monuments based on long-standing Persian traditions.
  3. During the 13th century, Genghis Khan and his Mongolian hordes swept through the entire region of Central Asia, destroying much of the architectural patrimony of cities such as Baghdad and Samarkand.
    - a. After three generations, however, most of the Khanate ruling class became Muslim.
    - b. Once settled and committed to Islam, the dynasties, such as the Timurids, the Safavids, and the Mughals, sponsored large cities with magnificent gateways, palaces, formal gardens, and funerary cupolas of colossal dimensions.
  4. After the decline of the Khanate descendants of Genghis, Timur, often referred to as Tamerlane (Timur the Lame), a general of Mongolian-Turkic origin, succeeded in conquering most of Central Asia.
    - a. Assembled an empire that stretched from Baghdad to Delhi.
    - b. A gruesome and intimidating leader.
    - c. The ancient city of Samarkand became his showcase capital.
      - i. During the first years of the 15th century, Timur commissioned the Great Mosque of Bibi Khanum.
        1. Indian elephants dragged hundreds of marble columns across Afghanistan for use in the mosque's hypostyle prayer hall.
      - ii. At the other end of the city, Timur planned his mausoleum.
      - iii. Most of the significant 15th-century projects in Samarkand, including the completion of Timur's tomb, were planned by Ulugh Beg, the founder's grandson, who served as governor of the city for thirty years before assuming his brief tenure as emperor in 1447.
        1. Sponsored the Great Observatory on the outskirts of the city.
        2. Monumental collection of *madrasas*.
  5. The Safavid dynasty in Iran, which claimed genuine Persian origins, tried to keep pace with the monumental achievements of the invaders from the north. At the end of the 16th century, Shah Abbas I relocated the Safavid capital from Qazvin in northwestern Iran to the more central Isfahan.
    - a. Shah Abbas's projects fit into a highly original urban plan coordinated by the Lebanese philosopher, architect, and poet, Shaykh Baha' ad-Din.
      - i. More than doubled the size of the city, treating it as a single immense garden.
      - ii. Included the new imperial palace, a vast *maydan*, at the end of which were the Shah's mosque, two new covered bridges, and a garden district for the palaces of the aristocracy.
    - b. Reformed the center of Isfahan, enlarging the Old *Maydan* next to the Masjid-e-Jami, or Great Friday Mosque.

- c. Made additions to the Great Mosque, begun in the 11th century under the Seljuks
  - d. Within the old city, the Shah's planners created an orderly 3.5 km (2 miles) covered *suk*, known as the *Qaisariya*.
  - e. The new palace, Naqsh-i Jahan (The Map of the World).
    - i. Series of geometric gardens in a walled compound nearly as large as the existing city
  - f. To the west of the palace, Shah Abbas and Shaykh Baha' ad-Din inserted their most innovative urban feature, the park-like axial boulevard of Chahar Bagh Avenue.
  - g. Construction began on the Masjid-i Shah Mosque, attributable to Shaykh Baha' ad-Din, in 1611.
    - i. The dome's oblique orientation allowed its gracefully swelling form to be viewed in full profile as the glimmering emblem of Safavid power and the city's greatness.
- B. The Mughal Empire: Islam Tinged with Indian Diversity
1. The Mughal dynasty in India experienced a parallel history to the Safavids in Iran, between the early 16th and the mid-18th centuries.
    - a. The governments of the two empires had frequent, usually friendly, exchanges; the Persian influence remained so strong that Farsi prevailed as the official language of the Mughal court.
  2. As rulers of one of the most populous and ethnically diverse regions of the world, the Mughals relied on the power of monuments to transmit their goals of authority.
    - a. In their capitals of Lahore, Delhi, and Agra, they erected impressive fortresses, mosques, palaces, gardens, and some of the grandest funerary complexes on earth.
    - b. The shimmering domes and minarets of their mausoleums, set in luxuriant gardens lined with reflecting pools, geometric hedges, fruit trees, and flower beds offered a wondrous vision of paradise.
  3. The grand Mughal projects commenced under Akbar (the Great, r. 1556–1605).
    - a. The Tomb for Humayun (in Delhi, built between 1562 and 1571), established a new scale and order for Indian architecture.
      - i. Political goals clearly motivated the large scale of the mausoleum, showing that Babur's line overshadowed other dynastic claims to India.
      - ii. The Tomb of Humayun commands a *vastchahar bagh*, a walled paradise garden, 300 by 300 m (984 by 984 ft).
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    - c. To defend the Mughal regime against internal and external threats, Akbar constructed a series of fortress-palaces.
      - i. The Red Fort in Agra, begun in 1566, spread as large as a city.
    - d. Akbar established a religious memorial, a *khanāqa*, devoted to Shaik Salim, a holy man of the Chishti cult.
      - i. It was expanded into a new capital city and renamed Fatehpur Sikri.
      - ii. The white marble dome of the Mausoleum of Shaik Salim sat at the religious core of Fatehpur Sikri, in the court of the Great Mosque.
      - iii. The palace complex followed the same orientation as the mosque and implied many religious uses.
      - iv. There were also several unique structures, like *ajharoka*, for putting Akbar on display.
      - v. In the western zone of Akbar's palace rose a five-level pyramidal structure, the Panch Mahal.
  - e. The wife of his heir Jahangir, Nur Jahan (1577–1645), took command of the government. As a patron of architecture she had no equal at this time.

- i. Her most inspired project remains the beautifully proportioned tomb and gardens of Itimur ud-Daulat.
- f. The greatest Mughal builder, Shah Jahan (r. 1628–1659) took an active interest in all aspects of design.
  - i. Rebuilt most of the internal structures of the Red Fort at Agra in white marble, and in Delhi founded an analogous Red Fort, known as Shahjahanabad.
- g. His wife Mumtaz Mahal inspired the Taj Mahal, or “illuminated tomb.”
  - i. Probable architect was Ustad Ahmad Lahouri, a Persian born in Lahore.
  - ii. Soaring white profile overlooked the Jamuna River in the southeastern suburbs of Agra, downstream from the Red Fort.
  - iii. The plan of the mausoleum repeated the *hasht bihisht* scheme, achieving the kind of central plan that Bramante desired for new St. Peter’s but with considerably more mass.

## II. CATHOLIC EUROPE: THE SETTINGS OF ABSOLUTISM

The Roman Catholic Church remained central to the culture of France, Italy, and Spain, launching the Counter Reformation in 1563. Catholicism promoted a theatrical strategy for religion to stimulate the enthusiasm of the faithful, which encouraged the great urban set pieces designed in Rome by Bernini and his colleagues.

### A. Habsburg Spain: The Catholic Mandate for Classical Rigor

1. In an age characterized by theatricality and decorative excess, the aesthetics of the Habsburg dynasty in Spain during the late 16th and early 17th centuries offered an austere counterpoint.
2. Charles V (r. 1519–1556), the Holy Roman Emperor and the first Habsburg King of Spain, brought the region to its apex of power.
3. Philip II (r. 1556–1598), moved the capital from Valladolid to the relatively small town of Madrid, where he could remain free of the feudal politics of the past.
  - a. Like his father, the new king favored the classical style of early 16th-century Rome and ordered a Spanish translation of Serlio’s treatise.
  - b. He developed his greatest architectural project, the monastery of San Lorenzo at Escorial.
    - i. He clearly intended the severe and well-balanced design of the Escorial to serve as an antidote to the Alhambra and a manifesto of his ideological goals.
    - ii. Juan Bautista de Toledo (1515–1567), who had worked with Michelangelo on the plans for the dome of St. Peter’s, was the architect; after his death Juan de Herrera continued the project.
    - iii. The most decorative aspect of the exterior was for the roofs above the corner towers: steeply pitched slate-covered pyramids topped with pointed spires, built by Flemish carpenters in the style of Burgundian castles.
    - iv. This roof type became the signature element of the Habsburg dynasty’s projects in Spain and a vestige of their ill-fated claims to northern Europe.
  - c. He proposed the *estilo desornamentado* (the undecorated style).
  - d. He believed that the use of correct classicism in architecture encouraged correct attitudes in both religion and government.
4. Juan de Herrera, and after him Francisco de Mora and his nephew Juan Gomez de Mora, brought a similar sense of order and minimal decoration to numerous royal and municipal projects.
  - a. Philip II initiated his most significant public project, the Plaza Mayor in Madrid, in 1590.

- i. The proportions of 2:3 used for the plaza at Valladolid, its proportions were repeated at the Plaza Mayor in Madrid.
  - ii. Like the *sahn* of a mosque, Plaza Mayor appeared internally consistent, rationally placed on the cardinal axes but did not relate to the alignments of existing streets running into it.
  - iii. The squares at Valladolid and Madrid served as models for public spaces in Spanish colonial towns.
- 5. Philip II's "Christian classicism" fixed the image of Spain as a disciplined and orderly state.

#### B. The Paris of Henri IV: Pieces of Urban Order

- 1. During most of the second half of the 16th century, France was torn by civil wars between Protestants and Catholics. Finally in 1593, Henri IV, an avowed Protestant, converted to Catholicism in the interests of national unity.
  - During his reign, France became increasingly centralized and surpassed Spain in political and economic importance.
- 2. Henri IV's initiated a renewal program for Paris:
  - a. Rebuilt the Louvre
  - b. Enlarged the long gallery that ran to the Tuileries
  - c. Sponsored the Pont Neuf
  - d. Founded a major plague hospital
- 3. Henri IV privileged functionality over style: The Place Royale (now known as Place des Vosges), began as a commercial project associated with a silk-works factory in 1604.
  - It became the stage for royal ceremonials and tournaments, but presented itself as a secular space for residences without a monumental focus.
- 4. Henri IV's widow continued her own architectural agenda, commissioning the Luxembourg Palace on the western edge of the city.
- 5. Cardinal Richelieu (1585–1642), managing the state for Louis XIII, prevailed for two decades as the most powerful patron in France.
  - a. He built an immense palace for himself, now called the Palais Royal, next to the Louvre.
  - b. He promoted the Catholic Church as the state religion, which led to the founding of over seventy new religious institutions in Paris during the 17th century. Most of the new ecclesiastical buildings looked to the classical style of Renaissance Rome.
    - i. The late Gothic church of St. Étienne-du-Mont reflected the transition.
  - c. The rebuilding of the University of Paris, the Sorbonne, remained Cardinal Richelieu's principal architectural legacy.

#### C. Louis XIV and Versailles: The Mirror of Absolute Rule

- 1. During the long reign of Louis XIV (r. 1643–1715), the quintessential absolutist ruler, the intellectual and technical bases emerged for the modernization of Europe.
  - a. Rational organization, scientific principles, and, above all, coordinated bureaucracies supplied a new means for organizing society.
  - b. Perhaps the most modern aspect of Louis XIV's reign came with his use of various types of media to establish the mythical image of the Sun King, the radiant center of an omnipotent state.
- 2. Another cardinal-prime minister dominated the first two decades of Louis XIV's seventy-two-year reign: Cardinal Mazarin, an Italian diplomat trained in Rome.
  - a. He aspired to involve Gian Lorenzo Bernini in great works for France.
  - b. He commissioned one of the most ornate church facades in Rome, SS. Vincenzo ed Anastasio, by Martino Longhi the Younger.
  - c. Mazarin's Roman taste influenced many projects in Paris.
    - i. The convent church of Val-de-Grace.
  - d. Like Richelieu, Mazarin financed a major educational institution, the Collège des Quatre-Nations (now known as Institut de France), designed by Louis Le Vau.

3. Le Vau pursued a new spatial freedom in the design of the chateau of Vaux-le-Vicomte.
  - a. Louis XIV co-opted Fouquet's team of designers to work on the largest project of 17th-century Europe, the transformation of the small hunting chateau of Versailles into a royal palace.
4. A new breed of court official, Jean-Baptiste Colbert, an assistant to Mazarin, guided France from an inefficient feudal economy into a dynamic international power by increasing state intervention and bureaucracies on all levels.
  - a. He founded the state-run Gobelins factory in 1667 for the production of tapestries and luxury furnishings.
  - b. In 1665, he invited Italy's most coveted artist, Gian Lorenzo Bernini to Paris to redesign the east façade of the Louvre.
5. Claude Perrault became a leading member of the Academy, and among other distinctions translated Vitruvius into French.
  - a. Collaborating with Le Vau and the painter Charles Le Brun, achieved a harmonious synthesis for the east façade of the Louvre.
6. Versailles: The program of the new royal palace, built 17 km west of Paris, became the young king's personal contribution to the Sun King myth.
  - a. In 1667, after the king's decision to transfer the entire court to Versailles, Le Vau wrapped the rear of the original brick building with a horizontal limestone-clad envelop, more than doubling its area.
  - b. Like Escorial, but without the religious premise, the palace became an immense social experiment.
  - c. Louis XIV believed the gardens of Versailles had greater importance than the architecture of the palace and personally composed a guidebook for visiting them.
7. Once settled at Versailles, Louis XIV rarely returned to Paris. Colbert, however, undertook some major urban improvements.
  - a. Places des Victoires, begun in 1685
  - b. Place Louis-le-Grand (now Place Vendôme)
8. Equestrian statues of Louis XIV occupied the center of the new Parisian squares as reminders of the military commitment of the regime.
  - a. The great military theorist Sébastien Le Prestre de Vauban (1633–1707), starting with the refortification of Lille in 1667, designed the fortifications of 130 cities on France's frontiers.
  - b. To reward his armies, Louis XIV founded in 1669 the first great military hospital in Europe, Les Invalides.

#### D. Bernini's Rome: Theatricality versus Complex Geometry

1. Although by the 17th-century Rome had lost its political relevance, it continued to influence the culture of Europe, especially in terms of the visual arts.
2. Gian Lorenzo Bernini dominated the scene as the greatest sculptor of the age and Rome's most sought-after architect.
  - a. His theatrical background showed clearly in the design of the Cornaro Chapel inside the church of Santa Maria della Vittoria in 1647.
  - b. One of Bernini's stage sets anticipated the construction of the twin churches at Piazza del Popolo.
  - c. For the design of the Piazza of Saint Peter's, Bernini returned to the most cherished theatrical structure of antiquity, the oval space of the Colosseum.
3. Francesco Borromini, Bernini's most talented and difficult colleague, worked on his earliest architectural project, the colossal bronze baldacchino over the high altar of St. Peter's.
  - a. The contrast between them became clear in projects for two churches set on the same street skirting the Quirinal Palace: Bernini built the church of Sant'Andrea al Quirinale. Borromini designed the monastery of San Carlo alle Quattro Fontane, known as San Carlino.
4. The Theatine monk Guarino Guarini demonstrated a similar mastery of Borromini's investigation into geometric complexity.

- a. In Turin, he attempted a similar crescendo of interpenetrating geometric figures in the domes added to the churches of San Lorenzo and the Chapel of the Holy Shroud.

### III. EDO JAPAN: ISOLATION FROM THE WORLD, INTEGRATION WITH NATURE

17th-century Japan developed in near total isolation. As a reef of islands off the Asian mainland, its geographic position left Japan naturally cut off.

#### A. The Shogunate and the Proliferation of Feudal Castles

1. At the end of the 16th century, after several centuries of recurring civil wars, Japan achieved national unity under a succession of powerful military leaders, or *shoguns*.
  - a. During the second half of the 16th century, the shoguns turned away from tents and the ephemeral wooden structures that characterized Japanese dwellings to build permanent symbols of their authority, castles with rustic stone bases and multilevel towers, known as *tenshu*.
    - i. These imposing towers, pitched on prominent topographic outcroppings, appeared quite unlike the compact medieval castles of Europe.
    - ii. Their form recalled the tiered structure of pagodas, with a tapering series of wide eaves stacked six or seven levels above a battered masonry foundation.
    - iii. The raised masonry base and the plastered walls proved less susceptible to catching fire and offered better protection from gunfire.
  - b. Nobunaga built the first great *tenshu* in 1576 at Azuchi, on Lake Biwa, east of the imperial capital of Heian, now called Kyoto.
    - i. The stone base still remains and the design can be tenuously reconstructed from literary sources.
2. Hideyoshi, the military strongman who succeeded Nobunaga in 1582, staged military and architectural projects on a grand scale.
  - a. Organized the invasion of Korea.
  - b. Built two castles similar in style to Nobunaga's Azuchi:
    - i. The largest in Osaka
    - ii. Fushimi, on the Momoyama Hill at the edge of Kyoto
  - c. Commissioned a luxurious dwelling, the Jurakudai Palace in Kyoto.
3. The final *shogun* to complete the unification of Japan, Tokugawa Ieyasu, transformed the small fishing village of Edo, now known as Tokyo, into a capital city.
  - a. He created a formidable fortified enclave.
  - b. His *tenshu* rose 60 m (196 ft).
  - c. Its likeness can only be reconstructed from the drawings made by the architect Kora Munehiro in 1638 and the beautiful twelve-part screen painting panorama of Edo, the *Edo-kyo byōbu*.
4. Himeji castle west of Kobe, offers the largest and best preserved of the *tenshu* type.

#### B. The Japanese Exception: To Privilege Asymmetrical Order

1. Aside from the strikingly original formal solution of the *tenshu* towers built during the 16th and 17th centuries, the Japanese ruling class cultivated a unique palace type.
  - a. The *shoin* broke definitively from Chinese precedents.
  - b. A "flock of wild geese" plan, a staggered series of pavilions on an oblique axis.
  - c. The Ninomaru Palace in Kyoto, built for Ieyasu in 1610, and enlarged in 1626 by his grandson Iemitsu, remains the most influential and best preserved of the *shoin* type.

- i. All of the constituent parts related to a geometric module, but its composition remained asymmetrical, with pavilions staggered on a diagonal.
    - ii. The *shoin* type takes its name from the built-in writing desk placed in a niche in the principal rooms.
    - iii. The shogun reserved the most important hall, the *Ohiroma*, for the reception of the emperor.
    - iv. One could read the modular order of the Ninomaru Palace pavilions in the number of its *tatami* floor mats.
      - 1. One perceived the order and proportion of rooms in terms of the number of mats.
- 2. Designers during the Edo period also resorted to decorative excess. The burial sites of the *shoguns* attracted the most elaborate structures.
  - a. The regent Yododono, one of the few female protagonists in Japanese history, sponsored the Toyokuni shrine on the outskirts of Kyoto.
    - i. Designers loaded the gateways with gilded decoration and eaves that supported a complex series of multiple brackets.
  - b. Ieyasu planned for his spirit to be worshipped at the Toshogu shrine at Nikko.
    - i. Despite the charged decoration of the complex, with multiple brackets, ornate sculptures, cusped eaves, and delicate metalwork, the relation of the buildings to the landscape recalled the Shinto reverence for the divinity of nature.

### C. Dry Gardens and Borrowed Landscapes

- 1. While André Le Nôtre in 17th-century France “forced” natural ingredients into abstract patterns on perspectival axes, the designers of Japanese gardens reached a more acute level of artificiality in their recreations of nature.
  - a. Two major types of gardens: the “stroll” garden and the enclosed “dry” garden. Designers molded natural ingredients into miniature representations of nature.
  - b. The most famous byproduct of this trend is the dwarfed *bonsai* tree.
- 2. The great gardens of Edo Period Japan either served as settings for the aristocratic palaces or as places of contemplation in Buddhist monasteries.
  - a. The Nanzenji monastery became the most influential Zen center in Japan.
    - i. Kobori Enshu designed the most famous gardens at Nanzenji.
  - b. The Zen garden often appeared as a prelude to entering a teahouse and served as a form of poetic discipline confined to an enclosed site, suitable for meditation.
    - i. The enigmatic *karesansui* “dry gardens,” made of raked white pebbles and stones, represented the waves of bodies of water.
  - c. Katsura Rikyu, a villa on the southwest of Kyoto, built from 1620 to 1660, displayed the austerity and ingenuity of the teahouses of Rikyu and Enshu.
    - i. Around Katsura Rikyu’s lake, the visitor encountered four teahouses that further demonstrated the Zen sensibility.
  - d. The gardens of Katsura Rikyu, executed with extraordinary restraint and modesty, provided an elite clientele the artful reenactment of the natural world, developed amid Japan’s willful seclusion from the rest of the world.