Chapter 14

I. THE PICTURESQUE: LANDSCAPES OF THE INFORMAL, THE EXOTIC, AND THE SUBLIME

The European transition to modernity exhibited contradictory attitudes toward nature, made tangible in the English gardens of the 18th century. The English garden developed as a technically sophisticated artifact designed to look like a product of nature.

- A. The English Garden and Empirical Thinking
 - 1. By the end of the 18th century, the picturesque acquired a precise meaning related to the attitudes found in the English garden.
 - a. Pastoral landscapes that exalted irregularity, asymmetry, surprise, rare species of plants, artificial ruins, and references to exotic cultures.
 - 2. Italy produced some notable precedents.
 - a. Bomarzo near Orvieto
 - b. Medici villa of Pratolino outside of Florence
 - 3. English theorists of the picturesque looked to the paintings of Claude Lorraine (1604–1682).
 - a. He depicted dramatic landscapes with stark contrasts, composed on sinuous lines, using evocative ruins as points of interest.
 - 4. Picturesque taste delighted in exotic cultures.
 - a. Pavilions as Greek, Roman, Gothic, and Persian "follies"
 - b. Chinese follies began to appear in the English gardens during the mid-18th century.
 - 5. Picturesque aspired to the sublime, a concept that the philosopher George "Bishop" Berkeley called "an agreeable kind of horror."
 - 6. The contrived informality of the English garden accompanied the ideological turn to the basic formality of Palladian architecture. The gardens at Stowe House in Buckingham became a laboratory for picturesque experimentation.
 - a. Begun in 1718 under Vanbrugh, the gardens received additions from many famous architects, including William Kent and James Gibbs.
 - b. The gardener of Blenheim, Charles Bridgeman, introduced the ha-ha.
 - c. Kent developed a method of borrowing landscapes from the surroundings and incorporating them into the views (*shakkei*).
 - d. The final gardener at Stowe, Lancelot "Capability" Brown, arrived in
 - 7. Stowe appealed to exponents of the French Enlightenment. The philosopher Jean-Jacques Rousseau enshrined the English garden in his theory of the liberty of natural man.
 - a. The German prince, Leopold III Friedrich Franz of Anhalt-Dessau, had such enthusiasm for Rousseau and the English garden that he was inspired to quote from other gardens as if they were literary texts.
 - b. Rousseau's polemical texts, which celebrated the superior freedom of the noble savage and natural man, reached the highest levels of French society.
 - i. Inspired Queen Marie-Antoinette to transform a remote corner of the park of Versailles into a peasant village, or *hamea*.
- B. The Picturesque in Architecture and Urbanism
 - 1. By the mid-18th century, picturesque infiltrated the practice of architecture and urbanism.
 - a. Picturesque design integrated buildings with a natural setting as elements of the landscape.
 - Horace Walpole created a villa, Strawberry Hill, with picturesque criteria.

- i. His "little Gothick castle" appeared like an overgrown folly, with towers, crenellations, lancet windows, and spires.
- Walpole's castle inspired an even grander Gothic fantasy,
 William Beckford's Fonthill Abbey, designed by James Wyatt in 1795.
- c. Richard Payne Knight's Downton Castle near Ludlow in 1774 appeared like a Gothic castle with crenellated towers.
- d. His mentor, Uvedale Price, pursued the theory of the picturesque in his own gardens and, in 1795, commissioned Castle House at Aberystwyth, Cardiganshire, from John Nash.
- e. A year later Nash formed a partnership with Humphrey Repton, who succeeded Capability Brown as the most prestigious landscape designer in the picturesque mode.
 - i. Luscombe Castle, Devon (1800)
 - ii. Cronkhill, Shropshire (1802)
- 2. At the resort town of Bath, picturesque began to influence urbanism.
 - a. At Queen's Square, the planner, John Wood the Elder, imitated the Palladian urban squares of London.
 - b. At Bath Circus he arranged thirty-three row houses around a planted circular plaza.
 - i. Like a Roman arena turned inside out, the three stories of its colonnaded facades look on to a broad public garden.
 - ii. John Wood the Younger attached the Royal Crescent to one of the three radiating streets of the Circus.
 - The thirty row houses formed a semi-ellipse open to a grassy landscape that swept down to the Avon River.
- 3. The picturesque planning in Bath influenced the greatest urban project of early 19th century London: Regent Street.
 - a. Starting at the steps of Carlton House Terrace, the new street pushed axially to Piccadilly Circus. Here it followed the curving "quadrants," colonnades that John Nash designed and financed.
 - b. The next stretch gave an axial focus on Nash's All Soul's Church with its round tempietto porch and obelisk spire.

II. ENLIGHTENMENT EUROPE: THEORY, REVOLUTION, AND ARCHITECTURE

In mid-18th century Europe, the role of theory began to diverge from practice. Throughout the cities of prerevolutionary Europe, the practical ideas of Diderot and d'Alembert's *Encyclopedia* stimulated proposals for social reform.

- A. Meta-Architecture: Theory before Practice.
 - 1. A debate emerged in European architecture in reaction to the flamboyant curves and loaded decoration of Baroque and rococo design, focusing on a return to the first principles of classical architecture.
 - a. Those who championed the Greeks became known as rigorists.
 - i. Carlo Lodoli
 - i. Insisted on the duty of form to function, applying the same sort of scientific principles used by Galileo in his study of physics.
 - Nothing should be visible that is not a working part of a building.
 - iii. Pioneered the use of the adjective "organic" in architecture to describe the sympathy between form and function.
 - ii. Abbé Marc-Antoine Laugier
 - i. "Never lose sight of the primitive hut."

- 2. Lodoli and Laugier inspired a generation of scholars to undertake archaeological expeditions of ancient ruins to document origins. Two camps emerged from this endeavor: pro-Greek and pro-Roman supporters.
 - a. Johann Joachim Wincklemann, who became chief curator of the Papal collection of antiquities in the 1760s, prevailed as the champion of the Greek way.
 - b. Giovanni Battista Piranesi, a Venetian-born architect, fervently advocated the superiority of Roman culture.
 - Represented a new category of professional, the metaarchitect, whose production remained primarily in the imaginary world of printed media.
 - Piranesi demonstrated with maniacal detail a propulsive kind of architecture that seemed to have grown from its site.
 - iii. Collaborated with Giambattista Nolli on the Nolli Map.
- B. The Encyclopedia, a Mandate for Progress
 - 1. Compiled in Paris between 1751 and 1765, it represented the central intellectual project of the European Enlightenment.
 - 2. It brought together a comprehensive, up-to-date knowledge base for the sciences and arts that grounded Europe's emerging modernity.
 - a. It imposed a rational criterion to transcend the received notions, taboos, and superstitions of the past.
 - b. The description of programs for social institutions and working environments greatly widened the scope of architecture as a public good.
 - 3. Jacques-Francois Blondel wrote most of the *Encyclopedia*'s entries on architecture.
 - a. He espoused a rational theory based on the good economic sense of fitting form to function.
 - b. As the founder of the first independent school of architecture, Blondel exerted enormous influence, teaching many of the same architects who visited Piranesi in Rome.
 - 4. Ange-Jacques Gabriel, the court architect of Louis XV, corresponded closely to Blondel's pitch for a return to classic purity.
 - a. Place de la Concorde
 - b. The Petit Trianon
 - 5. To the art critic and architect Jacques-Germain Soufflot went the most important commission of the age, the church of the patron saint of Paris, Sainte Geneviève.
 - a. Soufflot achieved the sort of synthesis that Piranesi advocated, taking the grace of Hellenistic decoration, the magic of Gothic structure, and the flow of Byzantine vaulted spaces, while discretely inserting modern industrial techniques.
 - 6. The École de Chirurgie (School of Surgery), begun in 1769 by Jacques Gondoin, captured the spirit of the *Encyclopedia*.
 - a. The building came to signify a modern, scientific commitment to medicine.
 - 7. The proliferation of grand public theaters indicated societal changes before the Revolution.
 - a. The Comédie Française (later called the Odéon)
 - Like Soufflot's Pantheon, the Odéon was conceived as a complete urban setting framed by a semicircular, cavea-shaped plaza.
 - b. The Grand Theatre
 - c. The Comédie Française for the northwest end of Palais Royal in Paris
- C. Citizen Architect: From Reform to Revolution
 - 1. The spirit of the *Encyclopedia* stimulated the demand for theaters, markets, schools, hospitals, and places of production.

- a. On the eve of the French Revolution, enlightened architects proposed radical projects as architecture in the public interest.
- 2. Claude-Nicolas Ledoux embodied the Enlightenment ideals of reform and justice advocated by Diderot and Voltaire.
 - a. The Salines de Chaux
 - b. The barriers.
 - c. The Theater of Besancon
- 3. Étienne-Louis Boullée.
 - a. He spent most of the 1780s drawing fantastic projects on a superhuman scale.
 - b. Like Piranesi, Boullée explored forms that went beyond style and conventions.
 - c. He rejected decoration to investigate the idea of "character," or the effects on the emotions of colossal scale and shadow-casting mass.
- 4. During the chaotic first years of the French Revolution, Paris witnessed more destruction than construction.
 - a. Most of the revolutionary projects served fictional competitions or ephemeral works of propaganda.
- 5. Napoleon Bonaparte swept to power using the rhetoric of the French Revolution to become the dictator of an empire.
 - a. He set his trusted architects Charles Percier and Pierre Francois Leonard Fontaine to construct the seemingly endless series of identical blocks of arcaded apartment houses on Rue de Rivoli.
 - b. His planners proposed a vast network of highways around Europe, including a tunnel cut through Mont Blanc. They proposed major revisions to the urban form of Paris, Milan, and Rome.

III. INDUSTRY AND PUNISHMENT: FACTORIES AND WAREHOUSES; PRISONS AND WORKHOUSES

During the rapid social transformations of industrialized England, two new building types took hold: the factory and the prison.

- A. Manchester, Machines, and the Factory System
 - 1. The effects of the factory system of production accompanied by the development of monopoly capitalism instilled profound and irreversible changes to the social, urban, and environmental order in the rest of the world.
 - 2. Manchester welcomed the extremes of the new industrialized society: at one end a growing class of clever entrepreneurs and inventors, and at the other the unlettered mass of workers.
 - a. Burgeoned into a major trading center with factories and warehouses.
 - b. Workers left to fend for themselves, leading to the first industrial slums.
 - 3. None of the constituent ingredients of the Industrial Revolution originated in Manchester.
 - a. James Watt patented the steam engine with pistons, in Glasgow in 1765.
 - b. Abraham Darby perfected mass-produced cast iron in Coalbrookdale.
 - 4. Thomas Telford emerged as the first great bridge builder of the age.
 - a. The Menai Suspension Bridge of 1819 connected Angelsy Island to the Welsh mainland.
 - b. Telford combined pragmatism and grace to reveal the superb tensile capacity of iron.
 - 5. Industrialization exploited the new materials of advanced engineering and yielded a new building type: the factory, a multistory rectangular box with abundant fenestration.

- a. Outside of England, the patronage for industry usually remained the exclusive right of a sovereign, which partly explains why their factories resembled palaces.
- b. In England, a new class of industrial entrepreneurs built the factories, often resulting in severe, utilitarian buildings.
 - i. Boulton & Watt's Soho Manufactury in Birmingham.
 - John Lombes introduced the first box-type factory in 1721 in Derby.
- c. Based on Lombes's model, Richard Arkwright, inventor of the "water frame" technique for driving cotton looms, built several large mills in the Derby area.
- d. Arkwright's ex-partner Jedediah Strutt built several cotton mills in the town of Belper.
 - i. They built the first "fireproof" mill a year later.
- e. The final improvement to the design of the factory type came with the Ditherington flax mill.
- 6. Arkwright built the first of the big cotton mills of Manchester in 1782.
 - a. During the next twenty years, nearly 100 mills competed with his.
 - b. The imposing bulk of the new factory structures, along with their homeliness, caused a disturbing rupture from earlier urban prospects.
- 7. Severe crowding, unfair labor conditions, lack of sanitary infrastructure, and air pollution were among the many urban pathologies that plagued Manchester as the vanguard of modernity.
- B. Building Character: The Birth of the Penitentiary
 - 1. Moving to the cities in search of work, the poor often turned to crime or welfare. As industry expanded, places of incarceration, prisons, and workhouses, appeared in the effort to contain the growing numbers of indigents and social misfits.
 - 2. Previous to the late-18th century, the judicial officials of Europe improvised their prisons in the foundations and attics of castles.
 - a. The Venetian republic sponsored the first structure designed specifically as a prison, the Prigioni Nuove, built in 1589, next to the Ducal Palace.
 - b. The Netherlands founded "houses of correction" at the end of the 16th century.
 - c. The English adopted the workhouse concept at the Bridewell prison.
 - 3. The devoted prison reformer John Howard documented the deplorable conditions of European prisons at the time of the Enlightenment.
 - a. Empress Maria Teresa of Austria sponsored the Ghent prison in her program of reform.
 - b. George Dance the Younger designed the Newgate Prison in London as the major English prison built during Howard's time.
 - c. Jeremy Bentham became Howard's most influential follower. He published a treatise in which he described the ideal prison, the Panopticon.
 - i. Introduced a new psychological dimension into architectural theory, which the late-20th-century philosopher Michel Foucault considered an insidious proposal for social control.
 - ii. Bentham believed his invention suitable for innumerable disciplinary situations, such as schools, hospitals, asylums, workhouses, and factories.
 - 4. The British government bypassed Bentham's idea of surveillance in favor of structures for solitary confinement. The models came from the United States.
 - a. The Quaker-inspired "Philadelphia system."

Bentham's philosophy demonstrated the contradictions of modernity: He proposed at once to liberate and to repress.