

## Chapter 19

### I. THE INTERNATIONAL STYLE AND THE ADVENT OF THE WELFARE STATE

World War II brought catastrophe to almost every continent. The International Style, which before the war belonged mostly to avant-garde projects for flat-roofed white boxes, with pure planes, and long windows, became the canonical solution for reconstruction.

- A. The Postwar Culture of Planning and the Mandate for Neutrality
  - 1. The United States remained the only major industrial power still standing.
    - a. Leadership in architecture drifted across the Atlantic—European modernists moved there before, during, and after the war.
  - 2. The notion of a coherent International Style was anathema to most modern architects.
    - a. Formalization of the International Style came from two American art historians, Henry-Russell Hitchcock, and Philip Johnson, who in 1932 mounted an exhibition on modern architecture at the Museum of Modern Art in New York.
    - b. A stylistic orthodoxy: undecorated volumes, flat roofs, banded fenestration, and asymmetrically ordered white planes.
      - i. Suited the needs of reconstruction Europe.
      - ii. Likewise fit the new pragmatism of American corporations.
  - 3. Postwar architects resumed activity with a reverence for planning.
    - a. Large corporations began working for the government to produce munitions, aircraft plants, food, and temporary housing.
    - b. The Manhattan Project to build the atomic bomb.
    - c. In 1942, Le Corbusier published a manual for planning, the *Charter of Athens*.
    - d. The founding of the United Nations in 1945 represented one of the major acts of postwar planning.
      - i. Wallace K. Harrison supervised the design team.
      - ii. Despite the ideal of teamwork espoused by the United Nations, Le Corbusier dominated the committee.
  - 4. The culture of planning in the United States culminated in the urban renewal program.
    - a. Led to slum clearance for downtown highway construction—the Golden Triangle project in Pittsburgh served as the prototype.
    - b. The United States gained the equivalent of the bombed-out sites of European and Japanese reconstruction.
      - i. Only a tiny portion of the nearly half million poor families displaced by urban renewal obtained public housing options.
  - 5. From 1950 to 1966, entire sections of American downtowns were bulldozed, usually at the expense of poor and ethnic neighborhoods, resulting in new business and government enclaves.
    - a. While urban renewal promised to revive city centers, it had the reverse effect, creating cloistered office environments occupied only during business hours.
    - b. Jane Jacobs in 1961 launched a successful campaign against urban renewal: “This is not the rebuilding of cities. This is the sacking of cities.”
  - 6. Only a fraction of America’s housing stock came through direct government subsidies.
    - a. One of the distinguished examples, Allen Parkway Village in Houston, was built for the war effort.



2. Rotterdam was the first to respond with a reconstruction plan.
  - a. The head of planning proposed to wipe out old property lines and rebuild the center from a 55 percent building-to-space ratio to 35 percent.
  - b. A fairly even mix of uses in the center: apartments, shops, offices, and small artisans, while zoning out heavy industries
  - c. Pedestrian shopping street
3. Dutch social housing culminated in the construction of Bijlmermeer in 1962–1971.
  - a. The largest housing estate in Europe
  - b. Suffered from many of the same problems as Pruitt-Igoe: lack of services, poor transportation connections, no maintenance, and racial discrimination.
4. Postwar Britain enacted the New Town Act of 1946 for reconstruction.
  - a. The United Kingdom built twenty-eight new towns, housing a combined population of 2.2 million.
  - b. In postwar London, municipal or “Council” housing adopted the high-rise models of Le Corbusier for projects like the Churchill Gardens Estate (1955) by Powell and Moya.
  - c. After critiques of blandness, city planners attempted to give their centers a strong architectural character.
    - i. Civic Center of Cumbernauld: the center stood as a dominant hooded figure over the city center.
    - ii. The Barbican Center: the forty-acre site in central London became a megastructure.
5. France produced the widest variety of formal solutions for postwar public housing.
  - a. Auguste Perret pursued a conservative plan for Le Havre in 1948.
  - b. Le Corbusier advocated large isolated structures set in open plazas in the 1946 plan for St. Dié in the east of France, but his plan was not adopted.
  - c. Le Corbusier’s theories of urbanism and mass-produced housing dominated planning procedures.
    - i. Since the bureaucratic restrictions on the housing units were inflexible, architects put most of their design energy into the composition of the whole.
    - ii. The anonymity of the large slab projects led many French architects toward what they called *recherche combinatoire*.
    - iii. The 1969 star-shaped project at Ivry
  - d. In 1965, France enacted the *Schéma Directeur* master plan for five new towns near Paris, hoping to siphon off the growth of the central city.
    - i. The new towns accompanied the construction of La Défense.
6. The architecture of the welfare state attempted both to assist urban recovery and stimulate the economy of postwar Europe.
  - i. Sometimes good intentions fell flat and degenerated into anomalous urban conditions requiring major redesign or even demolitions, but in general, as at La Défense, the welfare state established the outline of Europe’s urban future.

D. The East Bloc: From Socialist Realism to the *Plattenbau*

1. Stalin’s regime promoted the policy of Socialist Realism, insisting in 1934 that art must be (1) “proletarian” and accessible to the workers; (2) typical, showing scenes of everyday life; (3) realistic and representational; (4) supportive of the aims of the Soviet state and the Communist Party.

- a. Paintings and sculptures depicted heroic workers, angelic uniformed children, and happy farmers living in the perpetual glow of the rising sun.
- b. Led to a decorative neo-Renaissance style in Soviet architecture.
  - i. Classically trained architect's Ivan Zholtovsky's 1934 apartment house on Mokhovaya Street presented a row of colossal engaged Corinthian columns.
  - ii. Zholtovsky's turn to the Italian Renaissance inspired the rebuilding of Gorky Street: Italianate facades coordinated by Arkady Mordvinov lined the new boulevard.
  - iii. A star-shaped plan for the Theater of the Soviet Army—the shape proved highly impractical for a theater.
2. The bulk of Socialist Realist architectural projects were built after the war.
  - a. For Stalingrad, Karo Alabyan designed a new monumental core.
  - b. The center of Kiev likewise gained a new monumental core of classical pergolas.
3. Socialist Realism came to a climax with Stalin's proposal of a ring of skyscrapers, the *vysoltki*, for Moscow.
  - a. The style of the towers came from early 20th-century works in Liverpool and New York.
  - b. Moscow State University, completed in 1953 and built by the inmates of a gulag camp for political prisoners.
    - i. Reigned as the tallest building in Europe for over three decades.
4. As the USSR extended its control over the East Bloc countries, they exported the towering complexes as signs of colonial influence.
  - a. The Palace of Culture and Science in Warsaw
  - b. The new town of Nowa Huta. Comprised of a classical plan, with a trident converging on a grand esplanade, with no church.
  - c. The most ambitious application of Socialist Realist architecture appeared in East Berlin with Stalinallee.
5. Nikita Krushchev, as chief party official of Moscow in the early 1950s, attempted to compensate for Stalin's misplaced priorities.
  - a. He released a policy statement, "On the Liquidation of Architectural Excess," effectively putting an end to Socialist Realist decoration, while endorsing the *Krushchovka*, the Russian prefab concrete panel blocks.
6. In China, at the outset of the 1949 Revolution led by Mao Zedong, the USSR exerted a strong influence.
  - a. Early architectural transformations of Beijing responded to Stalin's Socialist Realism.
    - i. Tore down the Ming walls surrounding the center city to build ring roads.
    - ii. In front of Tiananmen Gate, an immense forty-hectare plaza
    - iii. The Great Hall of the People and the National Museum of China
  - b. In 1976, a grand mausoleum was placed opposite Tiananmen gate.
    - i. Indicated a return to Chinese sensibilities.
    - ii. Over 700,000 people participated in its construction as a testament to Chinese autonomy from both its capitalist and communist rivals.

## II. The Birth of the Third World: Experiments in Postcolonial Architecture

After World War II, the Third World emerged as a new political category. Third World countries often imported a technically advanced architecture to display their commitment to a new standard of development and progress as a choice rather than an imposition.

- A. Latin American Modernism: New Rhythms and a Culture of Resistance
1. Latin America attained some of the most inspired architectural compositions of the mid-20th century.
    - a. Sustained by a conservative military, the elites imported architecture and technology from England, the United States, and France, resulting in cultural and political sluggishness.
    - b. A genuine discourse of post colonialism did not arise until the Mexican Revolution of 1910–1920.
    - c. The last Mexican dictator, Porfirio Diaz, relied on France for culture and the United States for technology.
      - i. Commissioned such architectural novelties as the Palacio de Bellas Artes
      - ii. The muralists Diego Rivera (1886–1957), David Alfaro Siqueiros (1896–1974), and José Clemente Orozco (1883–1949) decorated the interior with revolutionary iconography.
  2. The drive for a postcolonial culture of resistance began with Mexico’s revolutionary muralists, a movement that sought to be both modern and regenerative of local traditions.
    - a. José Vasconcelos, minister of education from 1921 to 1924, introduced a key transformative concept, *mexicanidad*, or Mexican-ness.
  3. Mexican architects attempted to convert the models of European modernism into distinctly Mexican expressions.
    - a. Juan O’Gorman, an architect who worked as a muralist, designed the Rivera-Kahlo Studios.
    - b. The new Ciudad Universitaria involved over 150 architects and engineers in a grand modernist project.
      - i. It was a large project that most people recognized as both Modernist and Mexican.
      - ii. Synthesis of Modernist architecture with revolutionary decoration.
      - iii. Served as the testing ground for most of the important modernist artists and architects of Mexico.
    - c. Luis Barragán was the most famous Mexican modernist.
      - i. Unlike the other Mexican modernists he felt no sympathy for the Left.
      - ii. Worked as both architect and developer of wealthy suburbs.
        1. The Barragán House
        2. The Tlalpan Chapel at the convent of the Cappuchinas
      - iii. Barragán preferred wood to iron, and brick to reinforced concrete.
        - What made his work Modern was its formal abstraction, the juxtaposition of colored planes, and the creation of interpenetrating spaces.
  4. Populist dictators in Argentina, Venezuela, and Brazil attempted to create the atmosphere of patriotic enthusiasm, corporate partnership between government and industries, and a nationalist vision of the social state.
    - Architecture served as propaganda.
  5. Until the Great Depression of 1929, Argentina possessed the strongest economy in Latin America.
    - a. The center of Buenos Aires followed Beaux-Arts models, like the twenty-nine-story Kavanaugh Building.
    - b. During the 1920s, the advent of French planners introduced new standards of modernity to urbanization.
    - c. They were followed by Le Corbusier in 1929, whose first trip to South America attained mythical status in the history of Latin American Modernism.
  6. In 1935, Lúcio Costa won the competition for the Ministry of Education and Health.

- a. The MES building, constructed between 1937 and 1943, became the incubator of Brazilian Modernism.
    - 7. In the postwar period, Affonso Reidy became director of public housing, designing the serpentine Pedregulho project in Rio de Janeiro.
    - 8. During the 1940s, Oscar Niemeyer and Roberto Burle Marx remained active at Pampulha.
      - a. Niemeyer, perhaps influenced by the bold flowing forms of Burle Marx's gardens, abandoned the rigidity of the International Style to create sensuous curves.
        - i. Church of São Francisco
      - b. In 1956, Juscelino Kubitschek won the presidential election of Brazil.
        - i. He called on Niemeyer to collaborate on the design of a new capital city, Brasilia.
        - ii. The austere remoteness of the monumental core of Brasilia fit perfectly the representational needs of the military dictatorship that ruled from 1964 to 1985.
        - iii. Brazil became the first Third World country to turn the tables and take the lead in architecture.
- B. Indian Independence and the Absorption of Modernism
1. The public buildings of colonial India surpassed the scale of those in the mother country.
    - a. After independence was granted, the new government felt no immediate need for new architectural expression.
  2. The question of postcolonial architecture did not arise until India split into five states.
    - a. The new capital, Chandigarh, became the most famous of nearly 300 new towns built in India.
    - b. The government of Jawaharlal Nehru intended it as a commitment to modernity and a means of stimulating Indian architectural talent through contact with accomplished foreign professionals.
    - c. Le Corbusier and others were hired in 1950 to design Chandigarh.
    - d. The plan followed a loose grid of seventy superblocks.
  3. During his first trips to India Le Corbusier encountered the wealthy industrialists of Ahmedabad, who commissioned five buildings.
    - a. Of all Le Corbusier's works, the Sarabhai House, completed in 1956, remained the most comfortable, while the Mill Owner's Association proved the least habitable.
    - b. Le Corbusier exerted an immense impact on the emerging architectural profession in India.
  4. Ahmedabad, because of its progressive patronage, became the matrix of modern Indian architecture.
    - a. One of India's most important practitioners, Charles Correa, who trained at MIT, got his breakthrough commissions here.
      - i. The Smarak Sangrahalaya memorial to Gandhi.
      - ii. The 1973 project for squatters in Bombay.
      - iii. The twenty-seven-story Kanchanjunga Tower for luxury housing in the center of Bombay.
    - b. Correa made no secret of his dependence on ancient Hindu geometry.
  5. Raj Rewal demonstrated a similar interest in ancient geometry.
    - a. First gained recognition for a radical structure, a series of reinforced concrete space frames for the Exhibition Complex of New Delhi begun in 1972.
  6. In India, more than in other Third World countries, modern architecture has conserved its connection with historical traditions.
- C. Postcolonial Africa and the False Promises of Modernism

1. The African colonies were the last to free themselves from European dominance during 1957–1964.
  - a. With few exceptions, however, the independent states of Africa degenerated into political turmoil.
2. The cities of North Africa were more settled than the rest of Africa, built on a strong Islamic basis for over a millennium.
  - a. In 1953, as the Algerian independence movement gained force, the new mayor of Algiers Jacques Chevallier attempted to appease colonial discontent with the construction of decent housing.
  - b. Architect Fernand Pouillon produced 1,600 units during his first year.
    - i. Although he used a modern style, he preferred to build in masonry and was a keen observer of local technique.
    - ii. 200 Colonges
3. The wave of independence struggles in sub-Saharan Africa began in the small West African country of Ghana.
  - a. Because of the lack of locally trained professionals, both independent Ghana and nearby Nigeria, independent in 1960, relied on the British.
  - b. James Cubitt became one of the most prolific and inventive of these “import” architects, working primarily in Ghana.
  - c. Maxwell Fry and Jane Drew returned in the mid-1950s to design several university campuses, including the University of Nigeria at Ibadan and the Cooperative Bank in Accra.
  - d. Kenneth Scott, another important British architect working in Africa, designed the library in Koforidua, Ghana.
4. France’s ex-colonies, such as Senegal, Côte d’Ivoire, and Cameroon, turned to French professionals for help.
  - a. The Palais du Grand Conseil d’Afrique built in Dakar, Senegal, remained a symbol of French colonial nearsightedness.
  - b. The most original designs came from the Moroccan-born architect Jean-Francois Zevaco, whose Ben Sliman Hospital in Casablanca, Morocco, exuded vibrant Expressionist qualities.
5. The Japanese architect Kenzo Tange produced plans for the last of the great International Style projects in postcolonial Africa: The new capital city of Abuja in Nigeria, begun in 1980.
6. After the great expectations of the 1960s, the prospects for architecture in most of Africa grew dim.

### III. THE EXPRESSIONIST RESURGENCE: HYBRIDS AMID MASS CULTURE

After World War II, at the moment when the International Style reached its widest diffusion, questions of artistic invention and monumentality began to pull at the edges of the functionalism.

- A. European Organic Architecture: Between Rationalism and Intuition
  1. The Expressionist trend in the arts descended from the organic forms of Art Nouveau, such as Gaudí’s Casa Mila.
    - a. After World War II, Expressionist architecture reappeared in Europe and America like an afterthought.
    - b. Expressionism’s pursuit of unfamiliar forms and sensual effects, however, provided a new monumentality.
  2. In Finland, the turn to organic forms occurred a decade earlier.
    - a. Alvar Aalto favored a picturesque approach to composition in his projects.
      - i. The Paimio Sanatorium
      - ii. The Villa Mairea
      - iii. The town hall of Säynätsalo

- b. His unorthodox approach resulted in a functionalist Expressionism, best seen in the three-lobe body of the Church of the Three Crosses at Imatra and the House of Culture.
- 3. The Danish architect Jørn Utzon emerged as one of Aalto's most talented assistants.
  - a. Utzon won the competition for the Sydney Opera House in 1957.
  - b. The suburban church in Bagsværd remained a more subtle example of Expressionism.
- 4. In Berlin, Hans Scharoun, one of the survivors of the Crystal Chain of 1919, acquired an important role in the reconstruction plan of the city.
  - a. The Philharmonie
  - b. The Staatsbibliothek
- 5. Scharoun's Expressionism responded to the call for an antitotalitarian monumentality. A similar reaction surfaced in post-Fascist Italy.
  - a. The picturesque Torre Velasca, completed in Milan in 1958
  - b. The smooth Pirelli Building
  - c. The prominent anti-Fascist critic Bruno Zevi promoted Expressionism through his Association of Organic Architecture.
    - i. San Giovanni dell'Autostrada
  - d. Carlo Scarpa best appropriated Wright's theory of organic architecture.
    - i. Castelvecchio Museum in Verona.
    - ii. Brion tomb in the country cemetery of San Vito d'Altivole near Treviso.

B. Abstract Expressionism: American Misfits

- 1. The inverted spiral of Frank Lloyd Wright's Solomon R. Guggenheim Museum in New York captured the new wave of Expressionist forms in American art and architecture.
- 2. By this time American corporations had become the dominant economic power, imposing rigid standardization in architecture that reflected the moral and political conformism of the postwar period.
  - a. In contrast, the New York art market promoted the enormous canvases of Abstract Expressionism.
- 3. Eero Saarinen absorbed influences from both directions.
  - a. He created some of the most hybrid forms of the 20th century.
    - i. Jefferson National Expansion Memorial in St. Louis
    - ii. Kresge Auditorium at MIT
    - iii. Ingalls Hockey Rink at Yale University
  - b. Saarinen created his most expressive works for airports.
    - i. TWA building at Kennedy Airport in New York
    - ii. Dulles Airport in Chantilly, VA (Washington, D.C.)
- 4. Only Marcel Breuer commanded a comparably fluid vocabulary of molded concrete forms and after Saarinen's demise gained some of the most interesting commissions.
  - a. St. John's University Church and the Alcuin Library, at Collegeville, Minnesota
  - b. Whitney Museum in New York City
- 5. Some of the leading architects of the Expressionist resurgence trained at Harvard's Graduate School of Design under Gropius and Breuer during the 1940s.
  - a. Paul Rudolph
    - i. 1963 Arts and Architecture Building at Yale University
  - b. I. M. Pei
    - i. 1973 Herbert F. Johnson Museum of Art at Cornell University
    - ii. The ill-fated Hancock Tower
    - iii. The East Building of the National Gallery in Washington

6. Many Expressionist works in America occurred in marginal situations.
  - a. Bruce Goff, an acolyte of Frank Lloyd Wright, was heavily influenced by Native American culture.
    - i. The Bavinger House in Norman, Oklahoma

#### C Louis I. Kahn: Servant and Served

1. The early work of Louis I. Kahn (1901–1974) gave no hint that he would emerge as the most significant architect of the mid-20th century.
  - a. Son of poor Jewish immigrants from Estonia, he grew up in Philadelphia.
  - b. During the Depression, Kahn designed low-income housing and neighborhood plans.
2. In 1951, he received his breakthrough commission for the Yale University Art Gallery.
  - a. From a designer mostly geared to solving social issues, he blossomed into a consummate form maker.
  - b. His mature works combined structural innovation and modern programs with a historically tinged language of monolithic form and deep shadows.
3. Kahn's most enduring lesson, that structures should be composed in terms of "servant and served spaces," appeared in his work of the mid-1950s.
  - a. The Bath House for the Jewish Community Center in Trenton, New Jersey.
  - b. The Richards Medical Research Laboratories at the University of Pennsylvania.
4. In 1959, Kahn met the creator of the polio vaccine, Jonas Salk, who desired a similar program for the Salk Institute in La Jolla, California.
  - a. Kahn proposed an ingenious system of loft-like laboratories.
  - b. The abstract, sculptural quality of Kahn's solids and voids corresponded to the Expressionist search for form without precedents, while the regularity of the plan adhered to traditions of classical order.
5. The residues of Kahn's Beaux-Arts background reappeared in the U-shaped plan of the Kimbell Art Museum built on the edge of Fort Worth, Texas, in 1972.
  - a. While using a relatively free plan, Kahn created the impression of enclosed room-like spaces by laying top-lit vaults over the galleries.
  - b. Without quoting historical sources, the Kimbell achieved resonance with classical traditions while attaining an uncommon synthesis of modernist structural and programmatic innovation.
6. Like Le Corbusier, Kahn obtained his dream commissions in postcolonial India. He indulged in monumental landscapes.
  - a. The campus for the Indian Institute of Management in Ahmedabad.
  - b. The Sher-e-Bangla Nagar (City of the Bengal tiger), the capital complex in Dhaka, Bangladesh.
    - . Anant Raje (b. 1930), who had been a student of Kahn's in Philadelphia, completed the majority of the campus buildings.
    - i. Kahn's National Assembly seems nothing short of a miracle, overcoming an incredible set of contradictions.