

Historical Overview

PROGRESSIVE TRENDS IN THE NINETEENTH CENTURY

The Arts and Crafts Movement: 1860–1900
Currents Outside the Mainstream

ART NOUVEAU: 1890–1905

ELSIE DE WOLFE, AMERICA'S FIRST PROFESSIONAL DECORATOR

FRANK LLOYD WRIGHT

DESIGN FOR THE MACHINE AGE: 1900–1930

De Stijl: 1917–1931

The Bauhaus: 1919–1933

Miës van der Rohe

Le Corbusier

Art Deco: 1925–1940

MODERN DESIGN

Furnishings and Interiors

Domestic Architecture

POST-MODERN DESIGN AND THE PRESERVATION MOVEMENT

The appearance of today's homes reflects an evolution in architecture and design that began in the late nineteenth century, reached a critical turning point in the early twentieth, and has been refined and elaborated on since.

During these two centuries, Western civilization underwent a transformation more rapid and comprehensive than any that had occurred in its previous history. Scientific discoveries and the theories of evolution and relativity challenged fundamental concepts of humanity and the universe. Conflicts between classes, nations, and ideologies culminated in the Russian Revolution and two world wars. Perhaps the most important factor was the Industrial Revolution which, in creating vast new sources of wealth and power, destroyed the old order of society, shifted international relations, and profoundly affected the lives of people everywhere. Transportation by railroad, steamship, automobile, and airplane, as well as communication by telegraph, telephone, radio, and the visual media brought individuals throughout the world into closer contact with each other, important events, commercial products. In prosperous nations, improved material conditions changed living patterns and social structure, and the middle class became the preeminent consumers of the products of industry.

The arts of the home naturally reflected these fundamental changes in culture and society. The domestic styles of the late nineteenth and twentieth centuries exhibit a broad variety of aims and achievements that cannot easily be summarized. In general, however, both architecture and furnishings gradually abandoned the imitation of past styles. Along with this development, both areas of design evolved a new formal language that took full advantage of the materials and methods introduced by industry. The aesthetic principle that the form of any object should express its function, materials, and process of construction became predominant, but this did not prevent architects and designers from creating distinct personal styles.

Perhaps the single most important innovation in house design during this period was the rejection of the enclosed box in favor of the fluid interpenetration of spaces expressed in the open plan. The strength of new materials, such as iron, steel, and concrete, facilitated the distinction between structural support and the devices used to separate interior spaces, while allowing an ever-increasing expanse of glass. The development of electric lighting dispelled darkness indoors and central heating eliminated the need to contain heat in closed-off rooms in the last half of the twentieth century. Increased awareness of finite energy sources and our fragile environment have further altered interior design.

PROGRESSIVE TRENDS IN THE NINETEENTH CENTURY

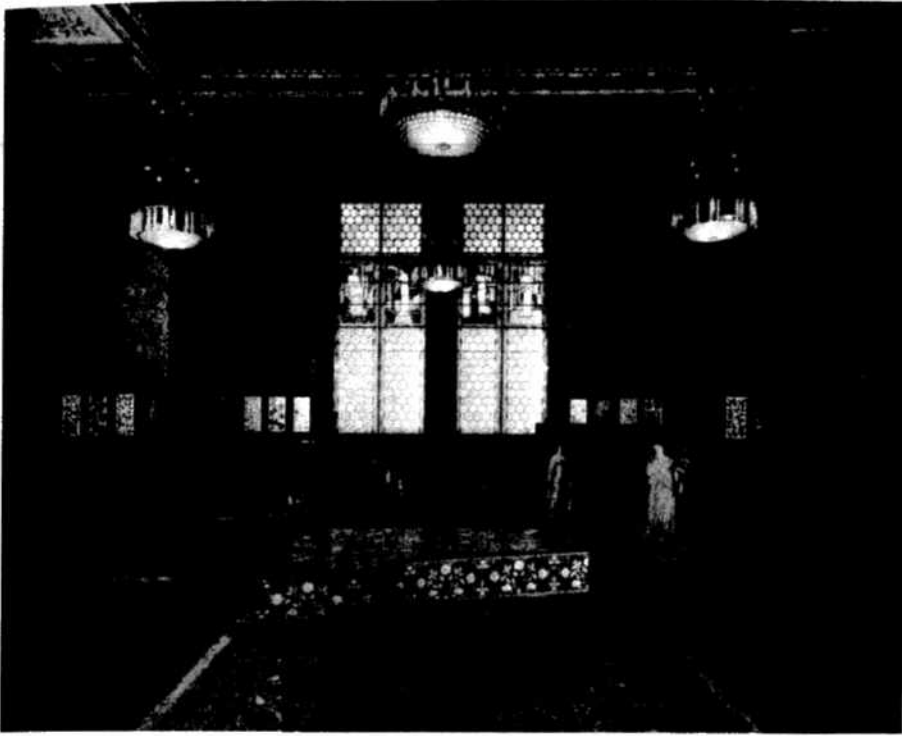
The beginning stages of the Modern movement took the form of a conscious revolt against popular taste, as expressed in the poor quality and stylistic confusion found in household objects mass produced for commercial distribution. This reaction began in England, where early and rapid industrial progress had affected the crafts sooner than elsewhere. As early as the 1840s John Ruskin (1819–1900), popularizer of the Middle Ages and the undisputed arbiter of Victorian taste, condemned machine-made ornaments and the use of one material to simulate another as immoral “deceits.” Similar sentiments were expressed by A. W. N. Pugin (1812–1852), who wrote in *Contrasts* (1836) that “the great test of beauty is the fitness of the design for the purpose for which it was intended.”

THE ARTS AND CRAFTS MOVEMENT: 1860–1900

Like Ruskin and Pugin, **William Morris** (1834–1896) identified art with morality, rejected modern civilization, and looked to the Middle Ages as a model for society and art. Ruskin and Morris both held that machine production destroyed the “joy in work” that had led medieval craftsmen to create objects of true beauty. Condemning both industry and the capitalistic system, Morris advocated a thorough reform of both art and society on a Utopian medieval model. Household furnishings, he argued, should offer honesty of construction and genuineness of materials rather than stylistic imitation, applied details, and illusionistic effects.

Morris went beyond his predecessors, however, by putting his theories to the test of reality. In 1861 he established a firm, later renamed Morris & Co., that produced textiles, wallpaper, and furnishings. Morris was aided by a number of artists and craftsmen in the design and execution of the firm’s products.

The results of this collaboration appear in a room created in 1867. Architect Philip Webb designed the walls and ceiling with their painted and molded-plas-



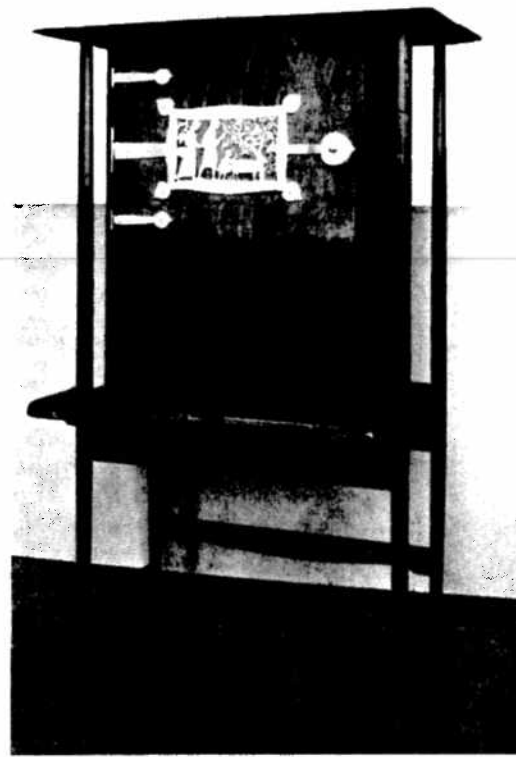
2.1 William Morris and Philip Webb designed the Green Room in 1867 as a refreshment area for the South Kensington (now Victoria & Albert) Museum in London. The interior contains furnishings designed and decorated by Morris, Webb, and others. (Victoria & Albert Museum, London. Crown Copyright)

er decorations, while painter Edward Burne-Jones provided stained-glass windows and the small painted panels in the wainscoting. Morris himself designed the carpet and, with his wife, painted the folding screen with figures from a tale by Chaucer. Morris & Co. produced all the furnishings, including a grand piano and several massively proportioned cabinets whose sturdy construction and hand-painted, elegantly stylized decorations clearly identify each piece as the unique product of individual craftsmanship.

Morris dedicated much of his later life to the promulgation of his ideas in books and lectures, as well as through the example of his own pattern designs and the production of his firm. Unfortunately, the firm's handcrafted wares were inevitably more expensive than the debased products of industry and therefore failed to effect the broad reform on all levels of society that Morris had hoped to achieve. Nevertheless, he attracted a wide following among artists, architects, and critics, including Charles Locke Eastlake (1836–1906), whose *Hints on Household Taste* (1868) was especially influential in America. A number of guilds and associations were formed in the 1880s to consolidate the efforts of like-minded designers and attract public interest in their work. The Arts and Crafts Exhibition Society, founded in London in 1888, gave its name to the entire reform movement.

The general trend during the later nineteenth century, however, brought furnishings and interiors away from the heavy, rather medieval forms of Morris's circle toward lighter, simpler shapes with fewer historic references. A major factor in this development was the liberating influence of Japanese art, which became widely known, especially in the 1880s, through illustrated travel books and imported prints, scrolls, and pottery. Japanese homes typically contained no furniture as we know it, but their uncluttered spaciousness and refined detailing seemed like a breath of fresh air next to the dense clutter of the Victorian drawing room. The elegant linear patterns of Japanese prints contributed to the flatter, more stylized decorations applied to the later examples of Arts and Crafts furniture.

2.2 An oak writing desk with a pierced copper hinge (1896) illustrates the work of Charles F. A. Voysey, whose simple, light designs were widely copied by commercial firms of the day. (Victoria & Albert Museum, London. Crown Copyright)



Charles F. A. Voysey (1857–1941) claims distinction as the most important of Morris's immediate successors. The houses he designed in the 1890s featured bright, uncluttered interiors, and his designs for wallpaper and textiles were the best of the day. Japanese influence contributed to the fresh, airy quality of Voysey's furniture. Voysey disliked ostentation, but the elegant flat patterns of his hinges and plaques revealed a unique talent for linear design.

In Vienna, **Josef Hoffmann** (1870–1956) and **Koloman Moser** (1868–1918) founded the *Wiener Werkstätte*, joining the reform movement in the production of handcrafted functional objects as total works of art. Although the theories and achievements of the Arts and Crafts movement had a profound effect on the Continent by the turn of the century, their earliest and most fruitful influence was in the United States.

Henry Hobson Richardson (1838–1886) developed a personal style of architecture using rough blocks of stone in thick courses, round arches, and towers

2.3 The staircase from the R. T. Paine house in Waltham, Massachusetts, was built between 1884 and 1886 by H. H. Richardson. (Photograph: Wayne Andrews)



recalling the Romanesque churches of medieval Europe. His houses featured exteriors of local stone or weathered wooden shingles that harmonized with the natural setting. The size and placement of windows accommodated internal need rather than external regularity, and interiors followed an asymmetrical plan with a free flow of space around the entrance hall and stairway. His interiors reveal an emphasis on the warm attraction of expertly crafted woodwork. His interpenetration of spaces, as well as built-in furniture, anticipates the work of Frank Lloyd Wright.

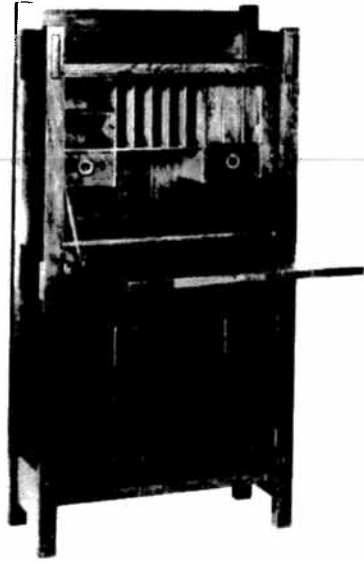
The reform movement in America gained widespread popularity among the middle classes through the designs and publications of **Gustav Stickley** (1848–1942). After a trip to the European Continent and England, where he met Voysey, Stickley returned to New York and introduced a line of “Craftsman” furniture whose severely rectilinear construction of thick pieces of wood, usually oak, emphasized honest joinery, simplicity, and massive solidity. This popular type of furniture, called **Mission Style**, was very compatible with Frank Lloyd Wright’s Prairie houses and the furnishings he designed for them (see pp. 29–31). From 1901 until 1916, Stickley published *The Craftsman*, a magazine that served as the forum of progressive design and gave its name to the American reform movement.

In California, the brothers **Greene and Greene** designed bungalow homes that reflected the Craftsman tradition. Like Voysey and Wright, who was their contemporary, they were also influenced by Japanese art and architecture.

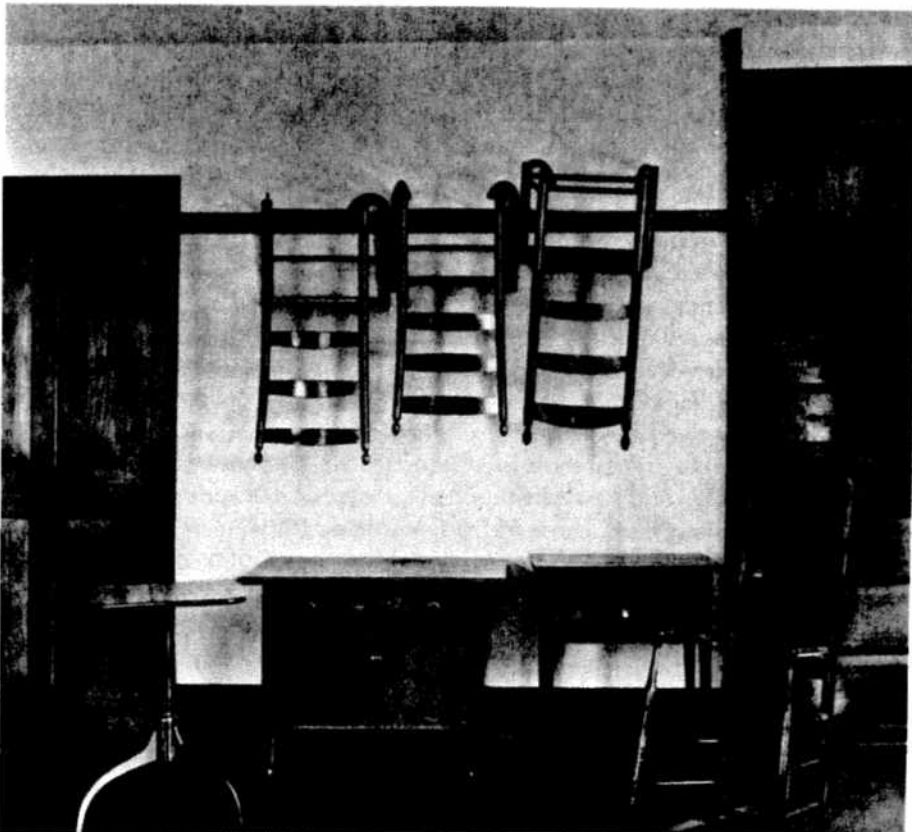
CURRENTS OUTSIDE THE MAINSTREAM

Even while Ruskin and Morris assailed the decline of quality in the household arts, at least two independent developments were taking place that in some degree fulfilled the ideals of the Arts and Crafts movement.

SHAKER HOMES The **Shakers**, a radical offshoot of the Quakers, came from England to the United States in the second half of the eighteenth century in order to pursue a communal, religious lifestyle. A strict but cheerful work ethic, a



2.4 A desk designed by Gustav Stickley circa 1901 shows the restraint and forthrightness he advocated. (*The Brooklyn Museum, H. Randolph Lever Fund*)



2.5 Austere simplicity and fine workmanship characterize a Shaker interior of the late 19th century in Hancock, Massachusetts. Ladderback rocking chairs recall the furniture of the early Colonial period. (*Shaker Museum, Old Chatham, N.Y. Photograph: William Winter*)

passion for cleanliness and order, and a compulsion for efficiency all contributed to an austere approach to design. Shaker homes were characteristically clean and uncluttered—especially through the use of built-in cabinets and strips of pegs, on which not only coats but also chairs and other pieces of furniture were hung when not in use. Shakers frowned on the luxury of superficial embellishments, preferring economy of means and fitness of purpose as the standards of design. Furniture designs were those of the eighteenth century, modified and pared down to their essentials to achieve maximum efficiency and lightness. Every piece was fabricated with utmost care by craftsmen who saw their task as a religious exercise.

The Shaker experience bears a surprising resemblance to Morris's Utopian vision of communal handicraft villages, and yet the results were very different—and in fact more modern in appearance than the solid furniture and densely patterned interiors created by Morris and Webb. The functional but personal quality of Shaker homes continues to inspire the design of contemporary interiors (Figure 2.6).

MICHAEL THONET In his zeal to correct the vulgarities of most furnishings produced by industry, Morris condemned the entire system. Yet during his lifetime the principles of honest construction and genuine materials (if not handicraftsmanship) had already been reconciled with mass production in the elegantly functional designs of **Michael Thonet** (1796–1871), the inventor of the bentwood chair. Born in a small town on the Rhine, Thonet moved to Vienna hoping to make cabinets for great palaces. Instead, in the 1830s he invented a process for steaming and bending solid lengths of beechwood into gently curved shapes. The result was a type of sturdy, lightweight, and inexpensive furniture whose unprecedented popularity brought it to cafes, ice-cream parlors, and homes of all social and economic levels throughout Europe and the United States. Thonet's bentwood chairs were lightweight, making them easy to transport, and designed for easy assembly with just a few screws, making them the first mass-produced, easily packaged products to be shipped “knocked-down” for assembly at their destination. Slightly modified versions are still in production and are used for both commercial and residential interiors the world over. Thonet's rockers (see Figure 3.8) fared less well with modern functionalists, who objected to the swirling arabesques that now seem wonderfully suited to the chair's swaying motion. Thonet's firm and others have produced numerous variations on all of the originals, but these nineteenth-century designs have stood up remarkably well and still grace many contemporary homes.

ART NOUVEAU: 1890–1905

The first truly original style since the French Rococo (1715–1774), **Art Nouveau** appeared almost simultaneously throughout Europe during the 1890s. Although it formed a transition between the nineteenth and twentieth centuries, the “Style 1900” bore little resemblance to the work that preceded or followed its brief popularity.

The explicit aim of Art Nouveau was to create a totally new formal language from which all traces of the past had been eliminated. The characteristic motif became the sinuous line, ending in a whiplash curve like the bud of a plant. Abstract but not geometric, the stylized forms expressed the process of natural growth without depending on literal representation.

All of these features appear in the *Tassel House* in Brussels, designed by the Belgian architect **Victor Horta** (1861–1947) and built between 1892 and 1893.



2.6 A contemporary bedroom reflects the pared down design of Shaker tradition. (Courtesy Ethan Allen Interiors)

Although probably influenced by Japanese prints and certain forward-looking English textile and book designs, Horta essentially created the style, in fully developed form, in a single building. In the stair hall, a slender iron column sprouting leaflikeendrils supports arched ceiling beams pierced by openwork. Sinuous, meandering ribbons in asymmetrical patterns appear everywhere: painted on walls, inlaid in floor mosaics, and molded in the iron handrail. Until now, iron had never been so frankly exposed except in bridges and engineering works. In Horta's hands, Art Nouveau combined industrial materials with handcrafted uniqueness, and functional expression with rampant decoration.

Art Nouveau was primarily a style of interior decoration that its leading practitioners extended to everything in the house, including furniture, fixtures, lamps, and doorknobs. **Hector Guimard** (1867–1942), the leading Art Nouveau architect of France, even designed special nailheads as part of a totally unified environment. Long, sinuous lines interrupted by bulbous knots flow over Guimard's furniture, creating a dynamic unity out of deliberately asymmetrical designs.

Unaware of developments in Brussels and Paris, **Antonio Gaudí** (1852–1926) independently evolved a similar style of greater power and individuality in Spain. Gaudí's style is more plastic and sculptural than the linear elegance of his French and Belgian contemporaries. The swelling masses of Gaudí's exteriors seem to be in constant motion, pulling interior spaces askew and leaving strange kidney-shaped, round-cornered windows that seem hollowed out by the wind. The same fluid shapes reappear in furnishings and fixtures, but not always for purely aesthetic reasons: the saddle-seated chairs of the *Casa Battlo* are molded for human comfort, and the "ears" projecting from the chairbacks provide convenient, if quite unnecessary, handles for moving them about.

The most prophetic exponent of Art Nouveau (and the only major one in Britain) was **Charles Rennie Macintosh** (1868–1928), a Scots architect whose early interiors in Glasgow in the 1890s paralleled the work of Horta. With Macintosh, however, the delicate swirls of linear pattern are held in place by a framework of slender verticals and a few tempering horizontals, resulting in light, airy



2.7 Michael Thonet first mass-produced this version of the "Vienna" Café Chair in 1876. A single section of bent wood forms the back and rear legs. With minor variations, it is still in production today. (Side chair; steam-bent solid beechwood, veneer seat, 33½ X 14½ X 15½"; seat height 18¼". Manufacturer: Gebrüder Thonet, Vienna, Austria. Collection, The Museum of Modern Art, New York. Purchase.)

2.8 (left) A profusion of dynamic curvilinear patterns overwhelms the stairhall of the Hôtel Tassel in Brussels, Belgium (1893), designed by Victor Horta. The earliest Art Nouveau building was also the first private residence to make use of iron, both as a structural material and as ornamentation. (*Tassel House, Stair Case. Photograph courtesy, The Museum of Modern Art, New York.*)

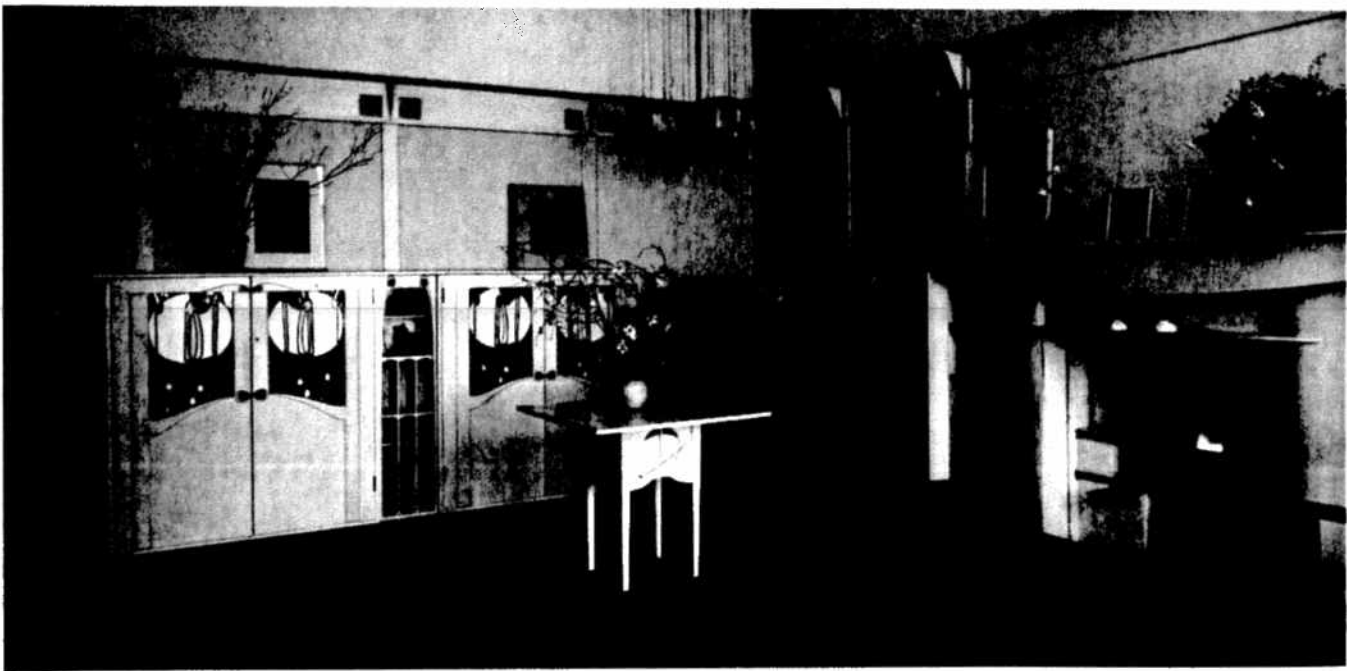


2.9 (right) An angled cupboard of triangular section (1904–1907) illustrates Hector Guimard's talent for asymmetrical designs united by flowing, continuous lines. The pearwood cupboard formed part of Guimard's total design of a house for Léon Nozal in Paris. (*Musée des Arts Decoratifs, Paris*)



2.10 Bulging, sinuous forms abound in the dining room and furnishings of the Casa Batlló, built in Barcelona from 1904 to 1906 by the Catalan architect Antoni Gaudí. (*Photograph: MAS*)





2.11 Charles Rennie Macintosh collaborated with his wife in designing the drawing room of their Glasgow apartment in 1900. The light, airy quality and rectilinear discipline of the interior recalls the work of Voysey (see Figure 2.2) and distinguishes Scottish Art Nouveau from the Continental movement. (Photograph: T & R Annan & Sons, Ltd.)



2.12 Louis Comfort Tiffany designed his own interpretation of Art Nouveau in stained glass windows such as "View of Oyster Bay" for the William Skinner House in New York. (From the Charles Hosmer Morse Museum of American Art Collection, Winter Park, Fla. Courtesy Charles Hosmer Morse Foundation. The Metropolitan Museum of Art.)

interiors with surfaces enlivened by evocative accents. His furniture was often built-in, but even his free-standing chairs defined spatial volumes through their tall, straight backs and lean, rectilinear shapes.

Art Nouveau had only two major practitioners in the United States. One was **Louis Sullivan** (1856–1924), the pioneer Chicago architect who developed a lush, florid brand of stylized naturalism in the ornament he applied to commercial structures. The other was **Louis Comfort Tiffany** (1848–1933). A leading designer and manufacturer of decorative art in metal and glass, Tiffany combined vibrant colors and asymmetrical decorative patterns in the lush trees and flowers of his lampshades and stained-glass windows, but he is equally well known for his exquisite Favrite glassware whose graceful, tapering shapes, translucent colors, and swirling forms seemed to arise naturally from the glass-blowing process.

ELSIE DE WOLFE, AMERICA'S FIRST PROFESSIONAL DECORATOR

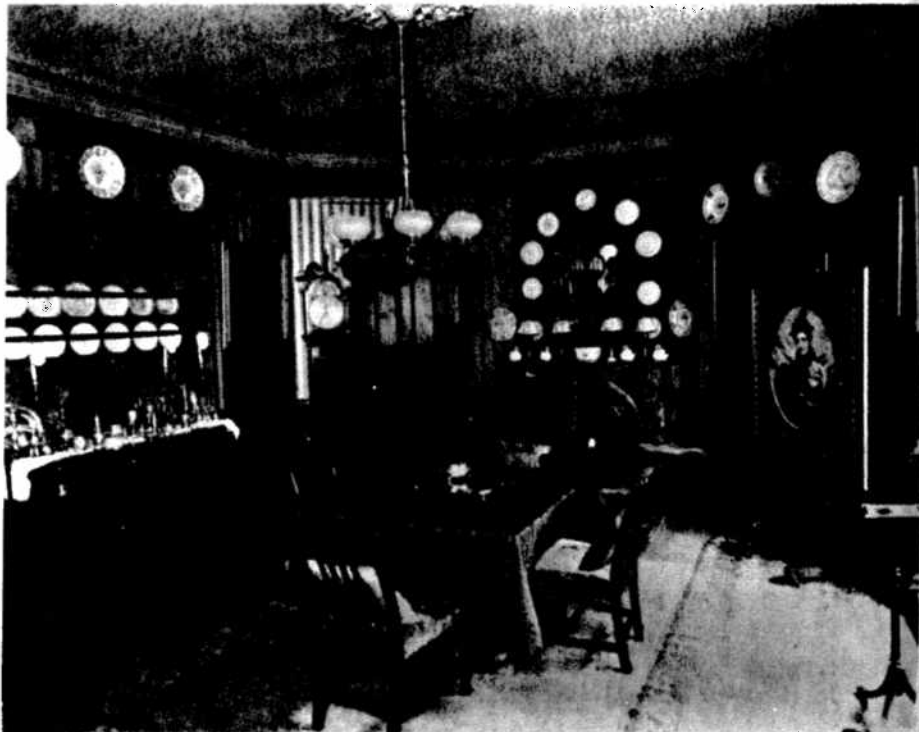
In 1890, the publication of an article entitled "Interior Decoration as a Profession for Women," by Candace Wheeler, helped establish the career now known as interior design. **Elsie de Wolfe** (1865–1950) declared herself the first professional decorator in America at the turn of the century. Neither a craftsman nor a tradesman/supplier, de Wolfe was a supervising designer who made aesthetic and intellectual judgments independent of the artist, fabricator, or collector. Hence, she established herself as a professional in the practice of interior design.

Beginning with her own home in New York City in 1898, de Wolfe transformed typical Victorian interiors of American homes—dark and heavy and chaotic with clutter—into simple, elegant, light and airy rooms with eighteenth-century French Neoclassic furnishings and comfortable English country chintzes. She removed the confusion of pattern upon pattern and objects avidly collected and displayed as well as the oppressive dark colors, replacing them with simple plain surfaces and unified patterns, light colors (white, ivory, and beige), mirrors, and glass.

De Wolfe established her authority on decorating, broadened her influence, and publicized the light, comfortable Neoclassic style that was her trademark through a series of lectures in 1910, published articles during the next two years, and, finally, a book in 1913, *The House in Good Taste*. Thus the foundation of the interior design profession was laid.

American schools began offering courses in interior decoration early in the twentieth century and the profession began to expand. In 1913, Nancy McClelland (1876–1959) opened the first decorating department in Wanamaker's de-

2.13a In 1896 Elsie de Wolfe designed a dining room in New York in the prevailing dark and somber style of that decade. (Photograph: Byron, from the Byron Collection, Museum of the City of New York)





2.13b Two years later, in 1898, she redecorated the same room in the lighter and brighter style that she espoused, and started interior design on a new pathway. (Photograph: Byron, from the Byron Collection, Museum of the City of New York)

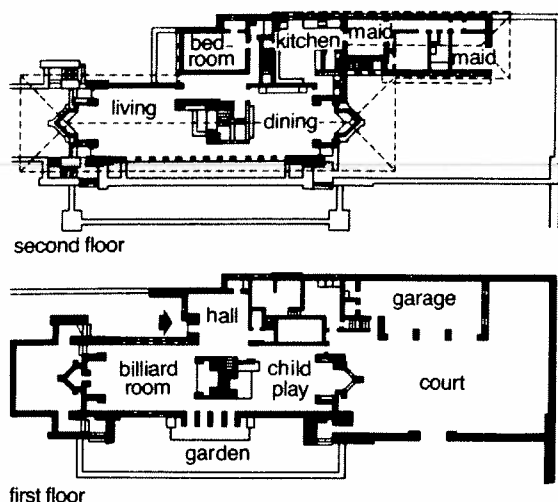
partment store in New York. Eleanor McMillen advanced the profession further when she opened McMillen Inc. in 1924, the first professional interior decorating firm in America. She first attended business and secretarial school to enable her to manage her business professionally. Using a company name, McMillen Inc., rather than her personal name, was a first.

Although each had his or her own personal stylistic preferences, in the tradition of Elsie de Wolfe, most American decorators espoused the re-creation of period rooms, first of European origin, then Colonial American and eclectic mixes. This academic Beaux-Arts formula of historicism continued in residential decorating for the first half of the century, long after the Modern design movement had reached the United States in architecture and industrial design, and has since been rediscovered in reaction to Modern design.

FRANK LLOYD WRIGHT

The series of houses built by **Frank Lloyd Wright** (1867–1959) during the first decade of the twentieth century represents the culmination of the Craftsman movement as well as the beginning of modern home design. Wright's *Prairie houses*, as he called them, incorporated many features of Richardson's and contemporary craftsman-style homes—opening one room off another, for example, and the use of unpretentious materials, as well as covered verandas placed around the house—but he expanded, refined, and integrated these elements into a coherent, powerful style. Interior and exterior formed a single entity in the Prairie house, with which Wright hoped to express the freedom of movement and wide open spaces of the American Midwest.

Trained in Chicago under Louis Sullivan, Wright developed the theory that architecture should be *organic*, that a building should “grow” from the inside out, as determined by function, materials, and site. Thus the fireplace, traditionally the focus of family life, became the central feature around which interior spaces were



2.14 (left) The plan of the Robie house, Chicago, built by Frank Lloyd Wright in 1909, seems to grow outward from the centrally placed fireplace.

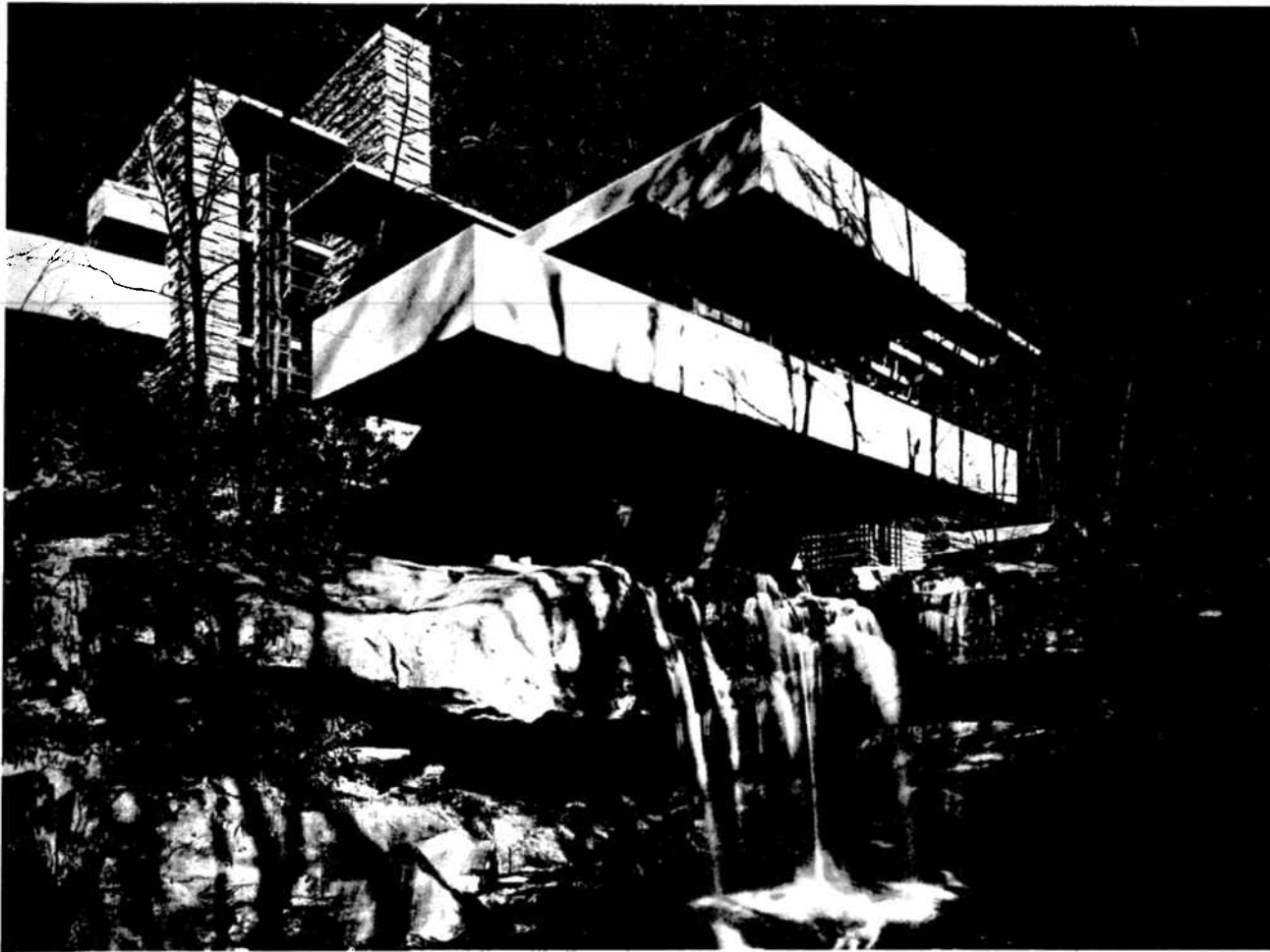
2.15 (right) The exterior of the Robie house expresses the centrality of the hearth inside. The broad, sweeping horizontals and interlocking masses and voids epitomize the "Prairie" style of Wright's early career. (Photograph: Hedrich-Blessing. Courtesy Chicago Historical Society)

planned informally to allow free circulation within the house and between the interior and the outdoors. Unexpected light sources and variations in ceiling height—reaching two stories at least once in most of Wright's houses—gave each area a distinct atmosphere without interrupting the continuous flow of space. Voids and solid elements interacted to create a dynamic sense of movement throughout the interior. In addition to skylights and clerestories (often partially concealed), windows appeared in continuous horizontal bands held firmly in place between the ceiling and a common sill. Contrasting materials, the accentuation of structural features, and geometric detailing provided a decorative scheme fully integrated with the architecture. Much of the furniture was built-in, but Wright specially designed even the free-standing pieces of each house.

Wright's position as the bridge between the nineteenth-century reform movement and the twentieth-century acceptance of industrial technology was best expressed by the architect himself in the title of a lecture he delivered in 1901: "The Art and Craft of the Machine." "The machine is here to stay," Wright told his audience. "There is no more important work before the architect now than to use this normal tool of civilization to the best advantage." Unlike the Bauhaus leaders

2.16 In Taliesin East (1925) in Spring Green, Wisconsin, designed by Frank Lloyd Wright, each surface that encloses the living room is clearly defined by its material, shape, and direction, but all are interwoven into a complex flow of space. (Photograph: Ken Hedrich, Hedrich-Blessing. Courtesy Chicago Historical Society.)





of the 1920s and 1930s (see pp. 32–34), however, Wright never *celebrated* the machine. Throughout his long career, which continued with great vitality and new innovations until his death in 1959, Wright maintained a romantic love of nature. Even when responding to the Bauhaus-born International Style, he continued to exploit the varied colors and textures of natural materials and to integrate his houses with the contours of their natural settings. His *Falling Water*, built on the banks of a rushing stream, admirably fits his definition of a good building as “one that makes the landscape more beautiful than it was before.”

Wright was too individualistic to become a teacher in the usual sense, but he trained many capable assistants who continued his principles in careers of their own, particularly in California and the Midwest. Followers and imitators spread the master’s influence far and wide—and sometimes rather thin, as in the “ranch-style” homes built by developers in the 1950s and 1960s. Many aspects of the Prairie houses passed into general currency during this period.

2.17 *Falling Water*, the home built for Edgar J. Kaufmann in Bear Run, Pennsylvania, was designed by Frank Lloyd Wright in 1936. Cantilevered concrete balconies and thick, rough walls in local stone paraphrase the landscape below and around the house. (Photograph: Bill Hedrich, Hedrich-Blessing. Courtesy Chicago Historical Society.)

DESIGN FOR THE MACHINE AGE: 1900–1930

The maturity of modern architecture in the 1920s grew directly from the functionalist trend that emerged in Europe, partly in reaction to Art Nouveau, during the early years of the twentieth century. This trend began in 1907 in Dresden with the formation of the *Deutscher Werkbund* which combined modern materials and machine production with the Arts and Crafts standards of workmanship, a major step toward the **Modern** movement. In Austria, Viennese architect Adolph Loos (1870–1933) succinctly expressed his attitude toward decoration in the title of his

essay “Ornament and Crime” (1908). Other architects in France and Germany pioneered in the structural and expressive use of reinforced concrete, steel, and glass, creating several exteriors free of historic reminiscences.

DE STIJL: 1917–1931

A decisive contribution to Modern design issued from a group of Dutch artists and architects associated with the magazine *De Stijl* (Style), founded in 1917. Promising a “radical renewal of art,” the painters of the group, which included Piet Mondrian, developed a totally nonrepresentational mode, restricting the elements of painting to an abstract arrangement of lines and geometric shapes on a flat surface, using only black, white, and the primary colors of red, blue, and yellow.

Gerrit Rietveld (1888–1964), a furniture designer turned architect, translated these principles into three-dimensional form as early as 1917 in his *Red-Blue Chair*. The chair’s rectilinear structure, flat planes of wood, and simple joinery recall the furniture of Macintosh and Wright, but the emphasis here is very different. Paint and varnish conceal the natural grain of the wooden members, whose sharp edges suggest a machine aesthetic rather than the individual craftsmanship that actually produced the chair. Intersecting elements almost always continue beyond the point of intersection, as if they could be extended infinitely into the surrounding space. The slanting planes of the seat and back seem to be the only concession to human comfort. Yet for all its freshness and absolute renunciation of past modes, the Red-Blue Chair remains an overinvolved exercise—a rigid demonstration of an aesthetic doctrine. It was left to the Bauhaus to create a modern mode of design flexible enough to meet the needs of a complex technological society.

THE BAUHAUS: 1919–1933

Certainly the single most influential force in shaping all of Modern architecture was the **Bauhaus**, the German state school of design. **Walter Gropius** (1883–1969) founded the school in Weimar in 1919 and later moved it to a new building complex of his own design in Dessau.

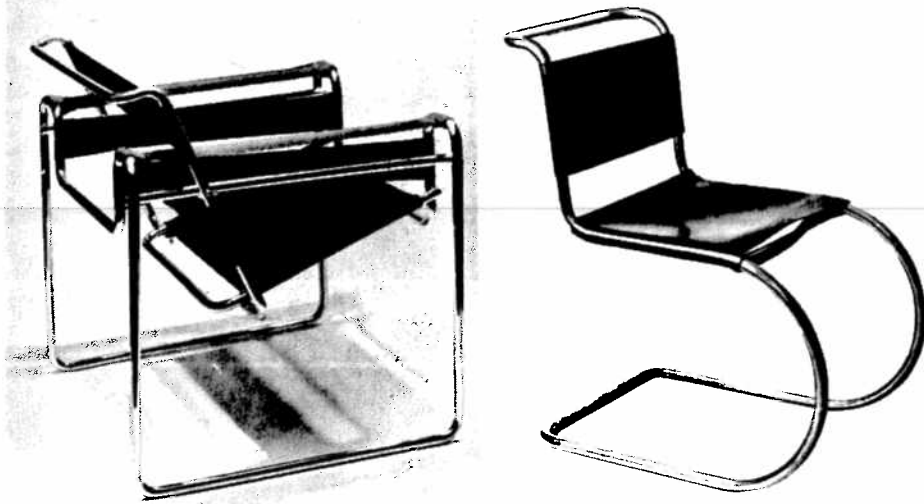
Initially devoted to arts and crafts in the tradition of the English reform movement, the Bauhaus curriculum was soon revised to place an emphasis on working with the machine in the design of buildings, furniture, textiles, and household articles. The chief aesthetic principle was to simplify the design of any object, so that no unnecessary elements would distract from the pure statement of function, material, and the process of industrial fabrication. For more than half a century the Bauhaus education influenced design.

Attracting to its faculty artists, architects, craftsmen, industrial designers, and leaders of industry, the Bauhaus remained the center of European innovation until the Nazi regime forced its closing in 1933. After two generations of reform and debate, “Arts and Crafts” at last gave way to the “new unity” of art and technology. The Modern movement spread to America and gained wide acceptance in business and industry through the 1950s.

One of the earliest expressions of design for industry appeared in the invention of chairs made of tubular steel by the Hungarian architect-designer **Marcel Breuer** (1902–1981). Breuer’s tubular armchair of 1927–1928 reflects its inspiration in the handlebars of a bicycle as much as in the formal precedents of De Stijl, but its wholehearted exploitation of resilient, lightweight steel marks a pivotal moment in the history of design. Canvas or leather straps stretched across the metal tubes provide seat, back, and armrests; the wide stance of the chair ensures a stability surprising in a piece so easy to move. Chromium plating creates a gleaming, smooth surface that celebrates the precision of industrial production.



2.18 Gerrit Rietveld, of the De Stijl group in Holland, created the Red-Blue Chair in 1917 as a deliberate break with traditional furniture design. (Stedelijk Museum, Amsterdam.)



2.19 (left) The first tubular steel chair was designed in late 1927 or early 1928 by Marcel Breuer, then the 23-year-old master of the Bauhaus furniture workshop. Breuer's tubular armchair remains one of the most popular furnishings of contemporary homes. (Armchair, Model B3. Chrome-plated tubular steel, canvas, 28 $\frac{1}{8}$ X 30 $\frac{1}{4}$ X 27 $\frac{3}{4}$ ". Manufacturer: Standard-Möbel, Germany. Collection, The Museum of Modern Art, New York. Gift of Herbert Bayer.)

2.20 (right) Slow, graceful curves and wide proportions characterize the earliest cantilever chair, designed by Ludwig Miës van der Rohe in 1927. The forthright clarity and refined elegance of the design are paralleled in Miës's buildings. (Side chair. Chrome-plated tubular steel and leather, 31 $\frac{1}{2}$ X 19 $\frac{1}{2}$ X 25 $\frac{1}{2}$ "; seat height 17 $\frac{3}{4}$ ". Manufacturer: Berliner Metallgewerbe Joseph Muller, Germany. Collection, The Museum of Modern Art, New York. Gift of Edgar Kaufmann, Jr.)

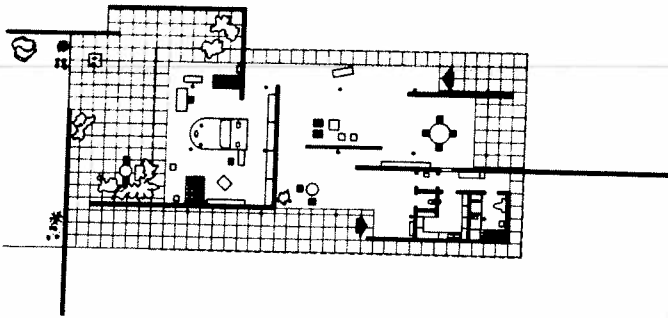
Breuer also designed a much simpler Machine-Age stool—an inverted **U** in tubular steel surmounted by stretched canvas or a block of wood—which was mass-produced in 1926 for Gropius's new Bauhaus buildings in Dessau. In the next year, another Bauhaus member, **Ludwig Miës van der Rohe** (see below) adopted Breuer's use of tubular steel in the first "cantilever chair," in which a single, continuous length of steel was arched upward from the floor to provide resilient support in a simple, graceful design. The excessive springiness of Miës's chair had to be corrected in later versions, however, and the leather or woven-cane seat and back could not be attached by machine. Breuer's more practical version of the cantilever chair, the *Cesca*, appeared in 1928 (see Figure 3.12). The rectilinear **S** shape of the tubular support offered less bounce and did not encumber the sitter's legs, while the separate attachment of seat and back allowed efficient mass production and clearly expressed a distinction between the parts. The lightness, clarity, and comfort of Breuer's chairs have ensured their continuing popularity.

MIËS VAN DER ROHE

The most innovative German architect of the 1920s was Ludwig Miës van der Rohe (1886–1969), who served as director of the Bauhaus from 1930 to 1933. More than any other individual, Miës crystallized the machine-oriented aesthetic of the Bauhaus and spread its ideals throughout Europe and America in what came to be recognized as the **International Style**. As early as 1919, Miës designed a project for a thirty-story skyscraper with floors cantilevered from a central core and enclosed entirely in glass—a scheme boldly forecasting buildings of the 1950s.

Miës van der Rohe's famous statement that "less is more" epitomized the architect's working method of reducing an object to its essentials and then refining the design through fastidious attention to every detail. Thus the expression of structure became the focus of Miës's architecture, with steel columns, slablike roofs, and nonsupporting walls all clearly distinguished and arranged on a rectangular grid plan.

Miës's early masterpiece was the *German Pavilion* designed for an exhibition in Barcelona (1929), which he adapted as a model house shown in Berlin in 1931. Under a low, flat roof resting on thin steel columns, free-standing walls divide the interior space into loosely defined areas. Those walls, parallel and perpendicular to each other, extend onto the flat site in an abstract arrangement recalling the compositions of De Stijl. The open plan also recalls Wright, but Miës strove to



2.21 (left) Ludwig Miës van der Rohe summed up his architectural principle in a model home erected for the Berlin Building Exhibition held under his direction in 1931. The plan is extremely open but zoned for different activities. (Plan. Ink on illustration board, 30 X 40". Collection, Miës van der Rohe Archive, The Museum of Modern Art, New York. Gift of Ludwig Miës van der Rohe.)

2.22 (right) Inside the Exhibition House, living and dining areas are discreetly defined within the continuous flow of open space. The furniture, all designed by Miës, includes a *Barcelona* chair (1929), a low glass-top table, two *Tugendhat* chairs (1929) similar to the *Barcelona*, and four cantilever chairs (1926) grouped around a circular dining table. (Photograph courtesy, Miës van der Rohe Archive, The Museum of Modern Art, New York.)

give his interiors a sense of static, classical repose rather than dynamic contrasts. The structure was meant to recede from view, to act as the neutral enclosure of a strictly ordered volume. Steel construction allowed supporting posts to be widely separated so that interior spaces became broad, uncluttered, and infinitely adjustable. Wide, expansive windows, reaching to the logical boundaries of floor and ceiling, divided interior from exterior space with minimal emphasis. Living functions were sparsely defined by a single wall or a strategically placed carpet.

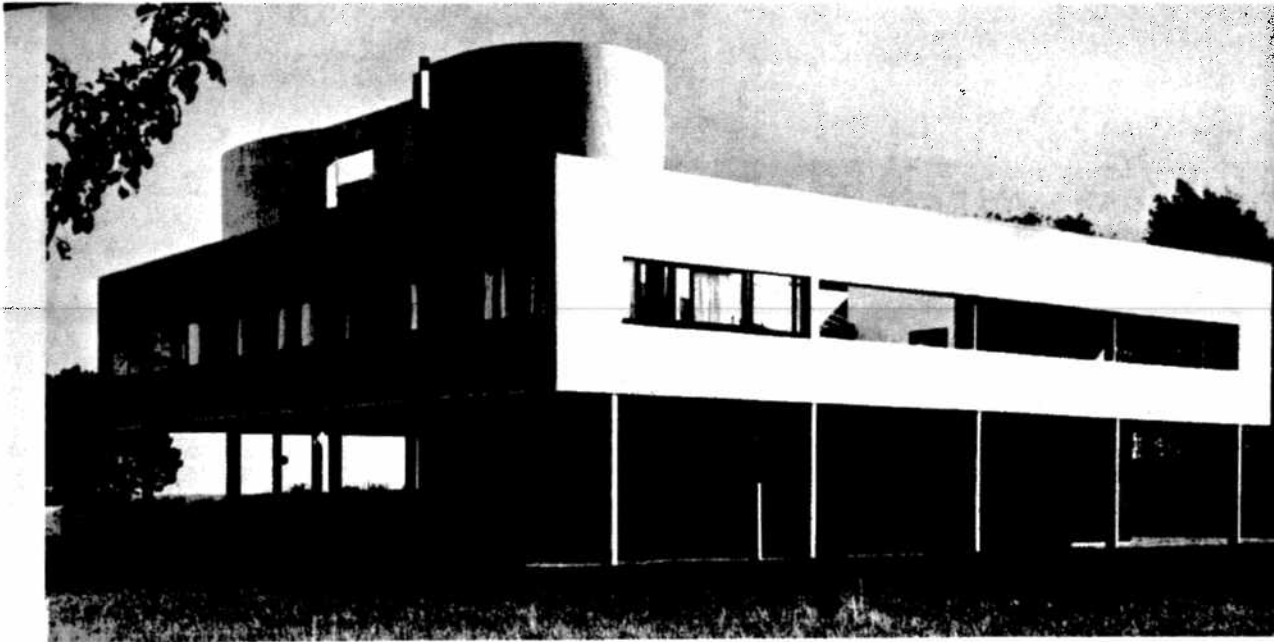
Miës designed every detail of his houses, including all the chairs and tables visible in Figure 2.22. In the foreground is his *Barcelona* chair, produced for the 1929 Barcelona pavilion. Perfectly square in plan, the chair's large scale reflects the ample proportions of Miës himself, but the gentle curves of its X-shaped supports are a perfect expression of luxurious comfort. No other chair designed since the Empire period of the 1800s rivals the *Barcelona*'s monumental dignity, and it continues to hold a place of honor in today's homes.

LE CORBUSIER

Charles Edouard Jeanneret-Gris (1888–1965), commonly known as **Le Corbusier** or by the nickname Corbu, had the benefit of broad exposure to the work of many early twentieth-century masters. Although never a member of the Bauhaus, Le Corbusier participated directly in the creation of the International Style during the 1920s through the **Art Moderne** movement in France which also endorsed **Machine-Age Modernism**. Corbu possessed Gropius's and Miës's vision of the architect as a designer for all of society, as well as their concern for incorporating industrial technology in a new architecture. Moreover, he brought a painter's sense of abstract visual form to the creation of a monumental style of building.

In 1919 and 1920, contemporary with Miës's projects for glass skyscrapers, Le Corbusier developed a program for domestic architecture in what he called the *Citrohan* house, a prototype single-family dwelling planned as part of an urban settlement. The prototype had several specifications, including a two-story living area, lit by a tall "window-wall" and backed by a lower room under a balcony. This use of vertical space has returned to prominence in many contemporary homes.

Except for this feature, the salient characteristics of the *Citrohan* prototype appeared in the masterpiece of Corbu's early career, the *Villa Savoye*, built between 1929 and 1930 in the Paris suburb of Poissy. Constructed of reinforced concrete, the house is raised off the ground on stilts or *pilotis*, freeing the ground for circu-



lation (Corbu explained) while a roof garden “recaptures” the open space covered by the structure. Frame construction frees the enclosing walls to be treated as geometric shapes dominated by long, horizontal “ribbon” windows. The wide spacing of concrete structural supports also allows for an open plan in the interior, here treated with living areas grouped around a sunken patio.

Le Corbusier called the modern house a “machine for living in.” Equally opposed to Wright’s romantic integration of house and landscape and Miës’s rationalist ideal of neutral, reticulated space, he saw architecture as a heroic statement—an assertion of human will on the indifference of nature.

Le Corbusier’s interiors were like hollow cubes, enclosed by geometric solids and sometimes enlivened by pastel colors and protruding sculptural shapes. He furnished several interiors with the aid of his brother, Pierre Jeanneret, and furniture designer cousin, Charlotte Perriand. Together they designed the elegant built-in storage walls and three very different chairs installed in a remodeled home (Figure 2.24). The *Basculant* armchair (right) and form-fitting chaise longue (left) both had tension springs to provide resiliency, while the *Grand Comfort* cube chair (rear) consisted entirely of stuffed leather pillows contained in a steel cage. Though less rational and more expensive than the chairs of Breuer and Miës (particularly

2.23 The *Villa Savoye* (1929–1930) in Poissy-sur-Seine, near Paris, France, illustrates Le Corbusier’s “heroic” approach to architecture. Raised by a dozen *pilotis* above the ground-level garage and foyer, the main part of the house is on one level, enclosed on three sides around an open patio. A ramp leads from the patio to a rooftop garden, which is partially protected by a curving wind-screen. (*Le Corbusier and Jeanneret, Pierre. Photograph courtesy, The Museum of Modern Art, New York.*)



2.24 The interior of the living room in an old home (Church House) in Ville d’Avray, France, was remodeled in 1928–1929 by Le Corbusier and Pierre Jeanneret. Le Courbusier and Charlotte Perriand together designed the chairs, glass-top table, and built-in storage wall. (*Photograph courtesy, The Museum of Modern Art, New York*)

2.25 Rough textures and vigorous sculptural forms energize the interior of the Maison Jaoul, designed by Le Corbusier in 1952 and built at Neuilly, outside Paris, between 1954 and 1957. Changing ceiling heights and vaults of unequal width dramatize the interior space; below, a long shelf is cantilevered from the wall and extended across the windows. (Photograph: Lucien Hervé)



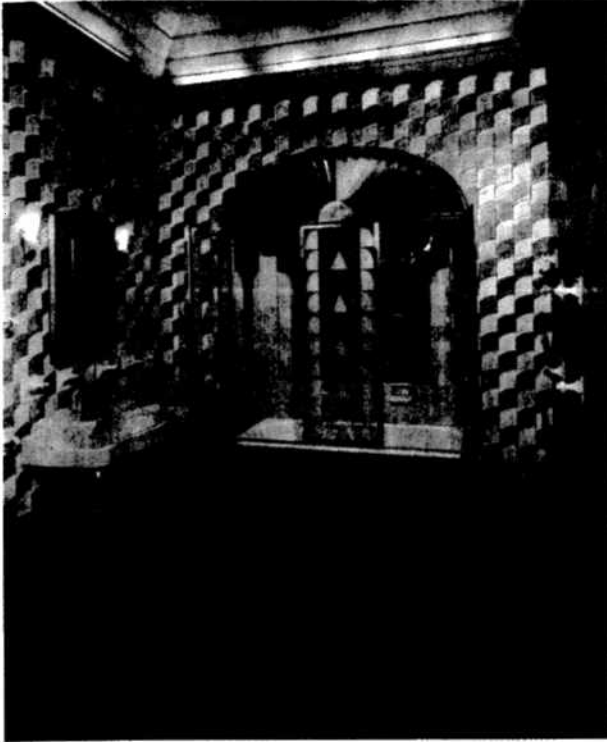
when upholstered in black and white ponyskin), this sophisticated Machine-Age furniture remains perfectly at home in the most contemporary surroundings (see Figure 1.10).

Beginning in the 1930s, Le Corbusier turned away from the taut, white, planar surfaces of the Villa Savoye toward a more sculptural conception of architectural form, with an increasing interest in the plastic moldability and rough textures of exposed reinforced concrete. Although primarily concerned with city planning and large-scale projects, Corbu built a few smaller houses, in which vigorously shaped spaces and masses were enlivened by contrasting surfaces of concrete, brick, tile, and stone. Yet he did not abandon his original "heroic" approach in favor of a Wrightian integration with nature. Le Corbusier's exteriors emphasized the weight and mass of concrete in thick, heavy rectangles, protruding geometric shapes, and a balanced contrast between solids and voids that turned buildings into giant abstract sculptures.

Le Corbusier's sculptural manipulation of reinforced concrete represented an essential departure from the International Style of his earlier years, and this new approach was soon taken up by other architects.

ART DECO: 1925–1940

The popularization of modern trends in design took the form of the **Art Deco** style of the later 1920s and 1930s. Named after the *Exposition Internationale des Arts Décoratifs*, held in Paris in 1925, Art Deco quickly reached the general public through the efforts of department stores in Europe and America. On the whole, this "modernistic" style applied new materials and geometric decorations to traditional classical forms more acceptable to popular taste than the austere designs of the Bauhaus. Shiny metals, exotic and glossy lacquered woods, polished stone, glass, and some of the newly invented plastics were used in various, usually contrasting combinations. Geometric shapes, especially the triangle, appeared in dynamic patterns, including zigzags, thunderbolts, electrical currents, and sunbursts. Essentially a symbolic style, Art Deco celebrated mechanistic progress in much the same



2.26 Ceramic tile, glass, and gold plate create a dazzling display of Art Deco modernism in an executive office suite bathroom, designed by Jacques Delamarre, in the Chanin Building, New York (1929). A sunburst appears above the shower doors, which present a dynamic pattern of triangles, quadrants, and semicircles. (Photograph: Angelo Hornak)

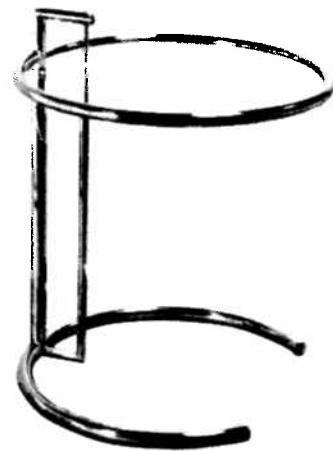
way that Art Nouveau had expressed organic growth. Although responsible for several stunning creations, the style lacked the theoretical foundation that allowed Bauhaus and later designers to integrate function, materials, and process in designs of more lasting value.

During the 1930s, “airflow” patterns and “streamlining,” suggesting the speed and power of modern machines, covered not only automobiles but everything from skyscrapers to easy chairs. In America, the profession of **industrial design** had developed in the 1920s and, closely related to their work for the transportation industry (trains, ocean liners, airplanes, and automobiles), industrial designers are credited with developing the **Streamline Style**.

The spread of “modernistic or streamline styling” coincided with the introduction of planned obsolescence in the design of automobiles and home appliances. Art Deco has often been rediscovered, most recently during the 1960s and early 1970s when the influence of the past began to be recognized again and historicism was adapted to current design. Interest has been revived in designs by **Eileen Gray** (1879–1976), an Irish-born designer whose work reflected the exoticism of French Art Deco combined with the Machine Age Modernist trend of the 1930s. She was one of the first women to gain attention at a time when design was dominated by men.

MODERN DESIGN

The achievements of the early twentieth century were gradually refined, expanded, and popularized during the period after 1930. Despite the persistence of revivalistic modes, industrial materials, simple forms without applied ornament, and direct functional expression without reference to historicism became standard



2.27 Eileen Gray's tubular steel and glass table illustrates the adoption of Machine Age Modernism in its parallel lines and sleek modern materials. (Courtesy Images of America)

features of architecture and household furnishings. Nevertheless, as modern concepts of design gained wider currency, the Bauhaus approach was moderated and made more flexible. Thus, in both architecture and furnishings, less geometrical shapes and more traditional materials such as wood and brick became accepted alongside the polished chrome and machinelike severity of the 1920s. The development of plastics provided new materials whose potentials were at first slow to be exploited, then widely used, and are still being explored today.

FURNISHINGS AND INTERIORS

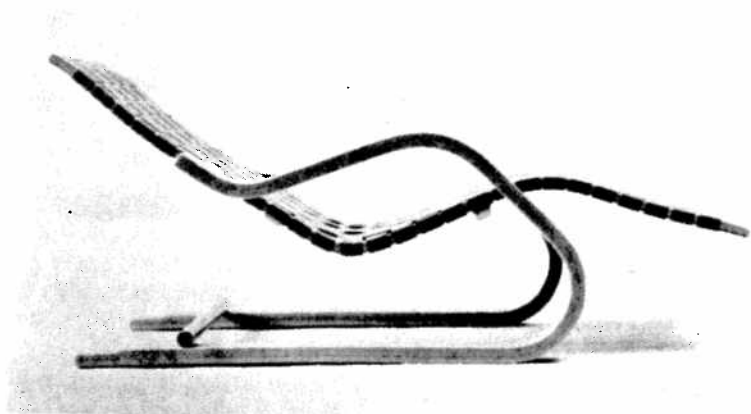
Renewed interest in wood and in less rectilinear shapes characterized furniture design after 1930. The persistence of strong craft traditions and the late arrival of industrialization contributed to the high quality of Scandinavian furniture, which became extremely popular throughout the world during the thirties, forties, and fifties. From the outset, first-rate designers collaborated with industry to create mass-produced **Scandinavian Modern** furniture of almost handcrafted quality. Finnish architect **Alvar Aalto** (1898–1976) combined simplicity and lightness with the natural grain and color of laminated birch in a series of chairs and stacking stools designed from 1933. Native design traditions inspired new variations by a number of other designers in Denmark and Sweden such as Finn Juhl, Hans Wegner, and Karl Bruno Mathsson.

The polished metal frames and geometric forms of the Bauhaus lost their supremacy in other countries, too. Even Marcel Breuer turned to form-fitting bent plywood in a chair he designed in 1935.

American furniture design rose to prominence through the work of **Charles Eames** (1907–1978) and **Eero Saarinen** (1910–1961), who collaborated on a prize-winning chair design of 1940 in which back, seat, and arms formed a single, multicurved shell of bent plywood. Though produced only in a modified version, this prototype formed the basis for the later work of each individual. Eames's side chair of 1946 combined the best qualities of industrial and natural materials. Metal rods provide a strong, lightweight support, while seat and back are molded for human comfort in walnut plywood. Rubber disks joining the two elements add resilience. A similar combination of materials, together with thick upholstery, appeared in Eames's 1956 lounge chair and ottoman (see Figure 22.15).

2.28 (left) Alvar Aalto's lounge chair of laminated birch and webbing possesses the lyric simplicity that characterized his designs. (Courtesy ICF Inc. Photograph: Peter Paige.)

2.29 (right) Many of the characteristics of wood—such as tensile strength, slight resilience, and ability to be shaped and molded—are superbly demonstrated in this chair designed by Charles Eames in 1946. (*Side Chair. Model DCM. Molded walnut plywood, steel rod, rubber shockmounts, 29½ X 20½ X 21½". Manufacturer: Herman Miller Furniture Company, Zeeland, Michigan. Collection, The Museum of Modern Art, New York. Gift of the manufacturer.*)



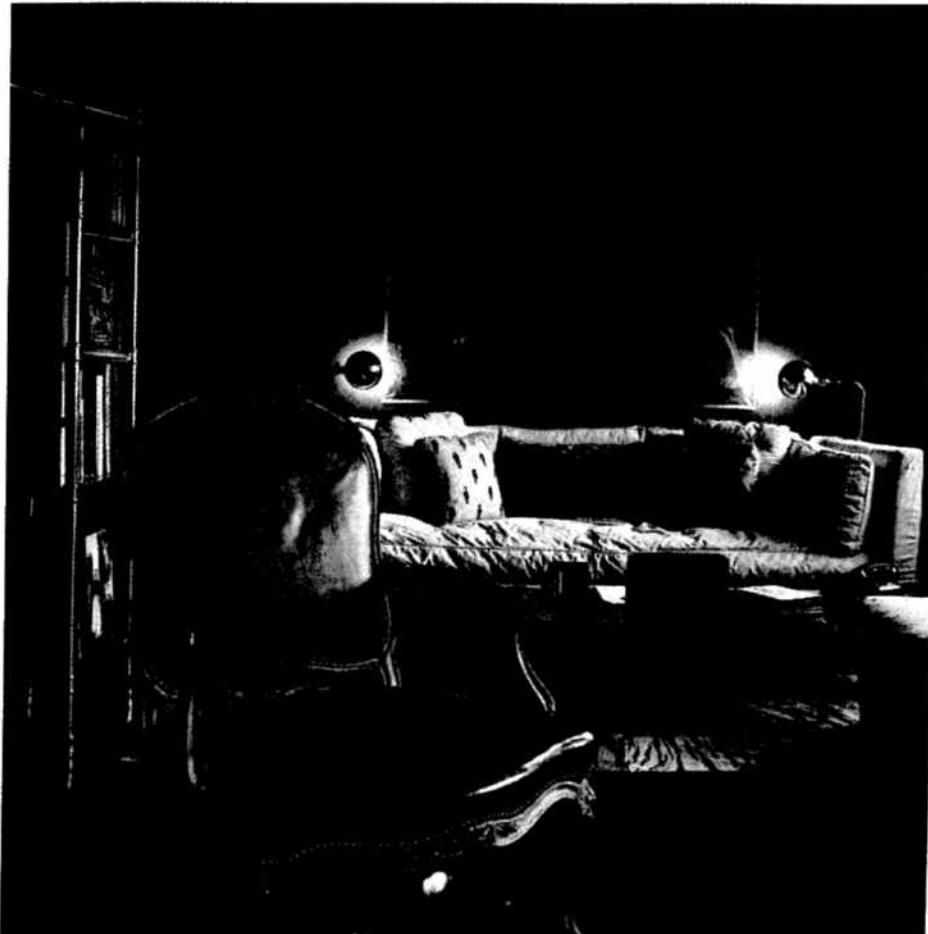
Saarinen developed his and Eames's original scheme into a set of single-pedestal tables and chairs, in which the seat, back, and arms all formed part of a unified, curving shape of molded plastic. As we have seen elsewhere, the almost infinite flexibility of plastic has made this material a major focus of contemporary design innovation. Plastic, fiberglass, and foam have been responsible for a number of new furniture designs since the late 1950s, ranging from Arne Jacobsen's *Egg* and *Swan* chairs, to Eero Aarnio's *Gyro* chair, to the *Sacco* or bean-bag chair by Gatti, Paolini, and Teodoro, and soft structural foam furniture without rigid frames.

During the 1940s, the Knoll Furniture Company and the Herman Miller Company were founded and began to produce Modern furniture. The Knoll Planning Unit, headed by Florence Knoll, teamed with the architectural firm of Skidmore, Owings & Merrill (SOM) in the new field of **corporate office design** which boomed in the 1950s and 1960s when development of a "corporate image" became important. This identity was reflected in functional interiors that came to be known as the corporate style. The Herman Miller Company produced Charles Eames's furniture designs as well as those of Isamu Noguchi and George Nelson while Knoll Associates, as it was renamed, produced designs by Eero Saarinen, Florence Knoll, Miës van der Rohe, Marcel Breuer, and Harry Bertoia, and, more recently, Richard Meier, Ettore Sottsass, and Robert Venturi.

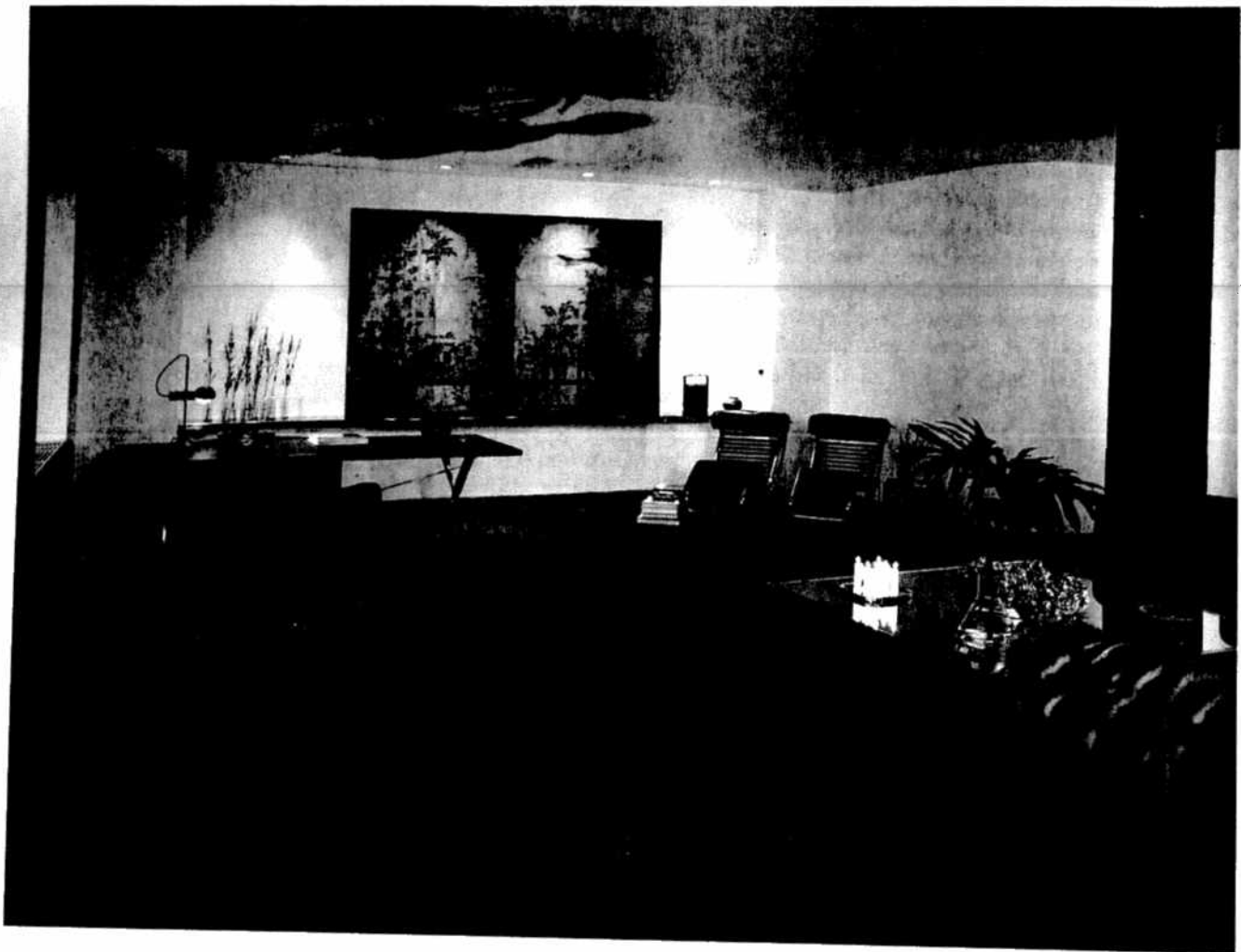
Through the 1950s and 1960s, many prominent designers, such as Billy Baldwin (1903–1984) and Angelo Donghia (1935–1985), continued to pursue a variety of romantic and nostalgic **revivals** and historical combinations in the decorator



2.30 A graceful continuity of line enhances the single-pedestal chair designed in 1958 by Eero Saarinen, an American born in Finland. Seat, back, and arms, made of molded plastic reinforced with fiberglass, rest on a base of cast aluminum. (Courtesy The Knoll Group)

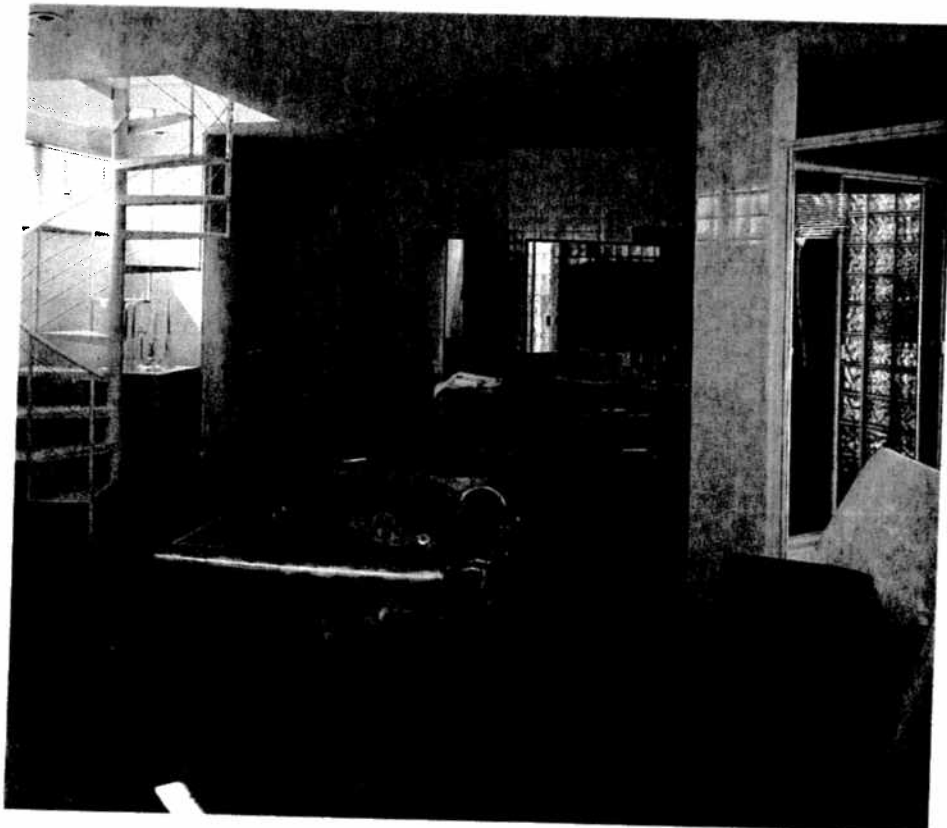


2.31 The late Billy Baldwin designed this eclectic apartment interior for himself, combining his signature dark walls with white upholstery, a tubular brass bookcase, Chinese table, and traditional French provincial chair. (Photograph: Horst)



2.32 (above) Interior designer Ward Bennett has placed furnishings sparingly in this apartment, each carefully juxtaposed in space like objects in a museum. The smooth geometric forms of Machine Age furnishings and plain surfaces contrast with the natural textures of plants and animal hide. (Photograph: © Norman McGrath)

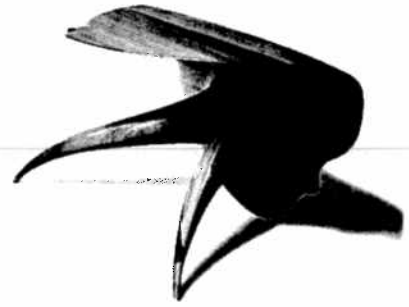
2.33 (right) An example of the industrial utilitarian aesthetic, this Los Angeles home employs exposed concrete and steel in a spacious bathroom. The stainless steel bath was custom built by Simon Maltaby. Brian Murphy, architect/designer. (Photograph: Tim Street-Porter)



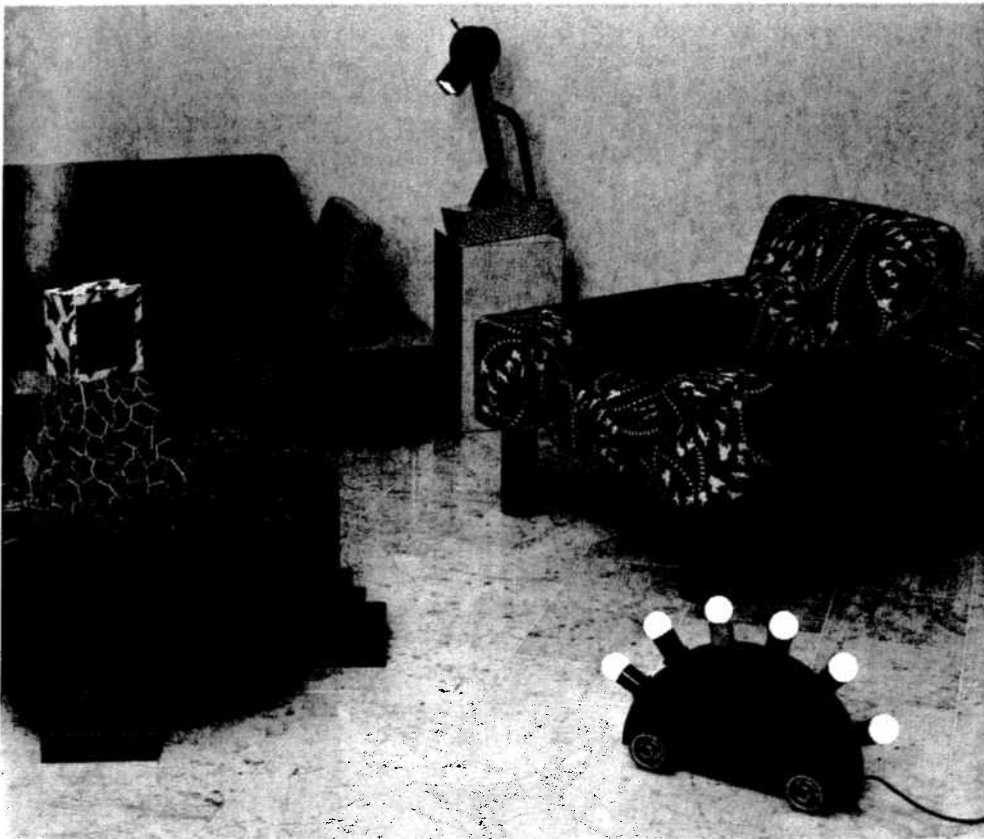
tradition of the early Elsie de Wolfe style. In California some designers worked toward a regional **vernacular style** featuring an informal lifestyle, natural textures, and eclecticism. Other designers, including Edward Wormley who designed for the Dunbar Furniture Company, were transitional, producing **Contemporary** furniture which mixed traditional forms with Modern design to appeal to the public taste. Still others, such as Joseph Paul D'Urso (b. 1943) and Ward Bennett (b. 1917), were leading a trend toward the simple sparseness of **Minimalism** which became popular in the mid-1960s and 1970s as a refinement of the International Style.

With the advent of the home office and the **High-Tech** electronic influence, anthropometrically designed office and industrial furnishings found their way into the home in the 1970s industrial utilitarian aesthetic. A **craft revival** also came about in the 1970s as a reaction to technology and industrialism. The new artist-craftsman explored original forms in both new and traditional materials. Highly original Italian designers influenced furniture design from the 1950s through the 1970s with sophisticated new materials and technology, continuing into the 1980s with the uninhibited color and pattern of **Memphis** furniture. And finally, designers began to think about conservation of natural resources and environmental quality after the energy crisis of the early 1970s. Social responsibility also began to emerge in design through increased awareness and sensitivity regarding people with physical disabilities.

This diversity of directions led to a new design pluralism in the 1970s and 1980s and on into the 1990s. John Saladino (b. 1939) has exemplified pluralism and eclecticism in design with refined interiors that orchestrate a mix of colors, textures, materials, and periods, ranging from Machine Age Modern, historical and country vernacular, to his own upholstered furniture designs.



2.34 Wendell Castle designed and crafted this innovative "drop leaf" table from mahogany. His work often emphasizes the beauty and grain of different woods. (Photograph: Michael Galatis)



2.35 Memphis designers Ettore Sottsass (table and lamp on pedestal), George J. Sowden (chair and clock), Marco Zanini (sofa), and Martin Bedin (lamp on floor) give their ideas free rein, joyously exploiting the decorative possibilities of color and pattern. (Photograph: Brian Coats)



2.36 A highrise duplex apartment in Manhattan, New York, remodeled by John Saladino combines an 18th century Italian walnut writing table, a Thai ceremonial bronze drum, 19th century iron urns, sleekly modern brass bedside lamps, a heavy satin bed covering, and alternating bands of matte and reflective gloss paint with his own soft furniture designs for a richly sensuous, yet refined, effect. His interiors successfully merge modern, traditional, and country vernacular furnishings with an air of elegant simplicity. (Photograph: Peter Aaron, © ESTO)

Another new area of emphasis, “*green*” or *environmentally safe design*, has recently evolved from the continued depletion of natural resources and the discovery of numerous health threats emanating from “sick buildings” filled with toxic indoor air pollution from building materials or situations within them. (This topic will be discussed further in Chapter 13.)

DOMESTIC ARCHITECTURE

The closing of the Bauhaus in 1933 marked the end of the “classic” or definitive phase of the International Style. Of its creators, Corbu developed along different lines, while the former leaders of the Bauhaus were dispersed and temporarily cut off from major commissions. In the late 1930s, Miës, Gropius, and Breuer came to the United States where they assumed academic positions and resumed their active careers. This artistic emigration from Germany accelerated the diffusion of the International Style throughout the world and contributed to the shift in architectural leadership from Europe to the New World after World War II. By the 1950s, transparent cubes of lightweight steel and glass could be found everywhere from Tokyo to Rio de Janeiro.

At the same time, the adoption of the new mode by increasing numbers of architects naturally led to greater diversity. The almost dogmatic unity of the 1920s gave way increasingly to personal and regional variations. And just as Wright and his followers responded to the European achievement, the International Style came to admit textured surfaces, natural materials, and greater variety in planning. This trend can be seen in the work of **Richard Neutra** (1892–1970), a Vienna-born architect who had worked briefly with Wright before establishing a practice in California. Neutra’s houses of the 1940s exhibit the lean steel-frame construction, glass walls, and geometric composition of the International Style, but they also

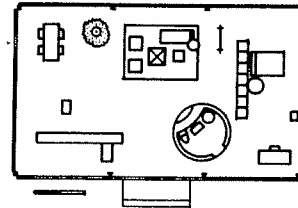
feature the warm textures of wood and brick and an open, informal integration with the immediate landscape. Similar combinations appeared in the buildings of Alvar Aalto and Marcel Breuer.

The sleek technological emphasis of the 1920s by no means disappeared, however. From 1940 until his death in 1969, Miës van der Rohe simplified and refined his basic concern with the metal frame and neutral, reticulated volumes. Perhaps the ultimate expression of his principles in domestic architecture was the "Glass House" designed in 1949 by Miës's foremost disciple, **Philip Johnson** (b. 1906). Except for an enclosed circular bathroom, the house is entirely surrounded by glass walls that all but eliminate the distinction between interior space and the carefully landscaped setting. Reduced to bare essentials, the structure has an obvious, self-evident quality that belies its originality.

The functionalism of the 1920s was also evident in exposed structural systems such as HVAC (heating, ventilation, and air conditioning) ducts, sprinkler conduits, lighting cables, pipes, and so forth, often painted for decorative as well as informative purposes. Perhaps the ultimate in frank expression of such functional elements is the Centre Georges Pompidou in Paris by Renzo Piano and Richard Rogers (see Figure 2.40). Materials and equipment originally intended for industrial or commercial uses were applied to High-Tech residences by the 1970s Minimalist designers (see Figure 2.32).



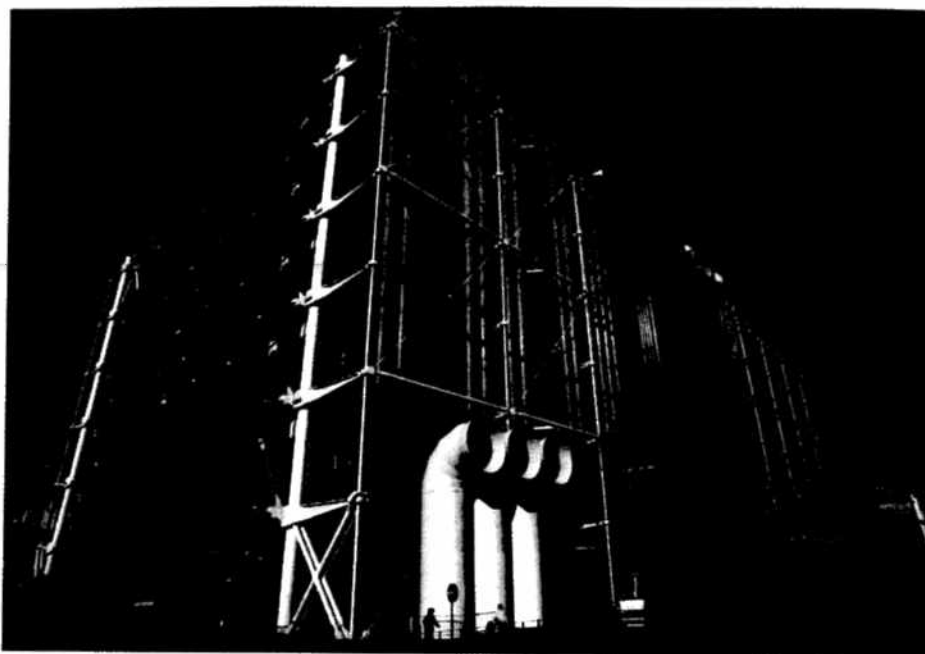
2.37 (left) The J. B. Nesbitt house, built in 1942 in Brentwood, California, illustrates the mature work of the Austrian-American architect Richard Neutra. A wall of plate glass slides open to unite the living area with a paved outdoor terrace. (Photograph: Julius Shulman)



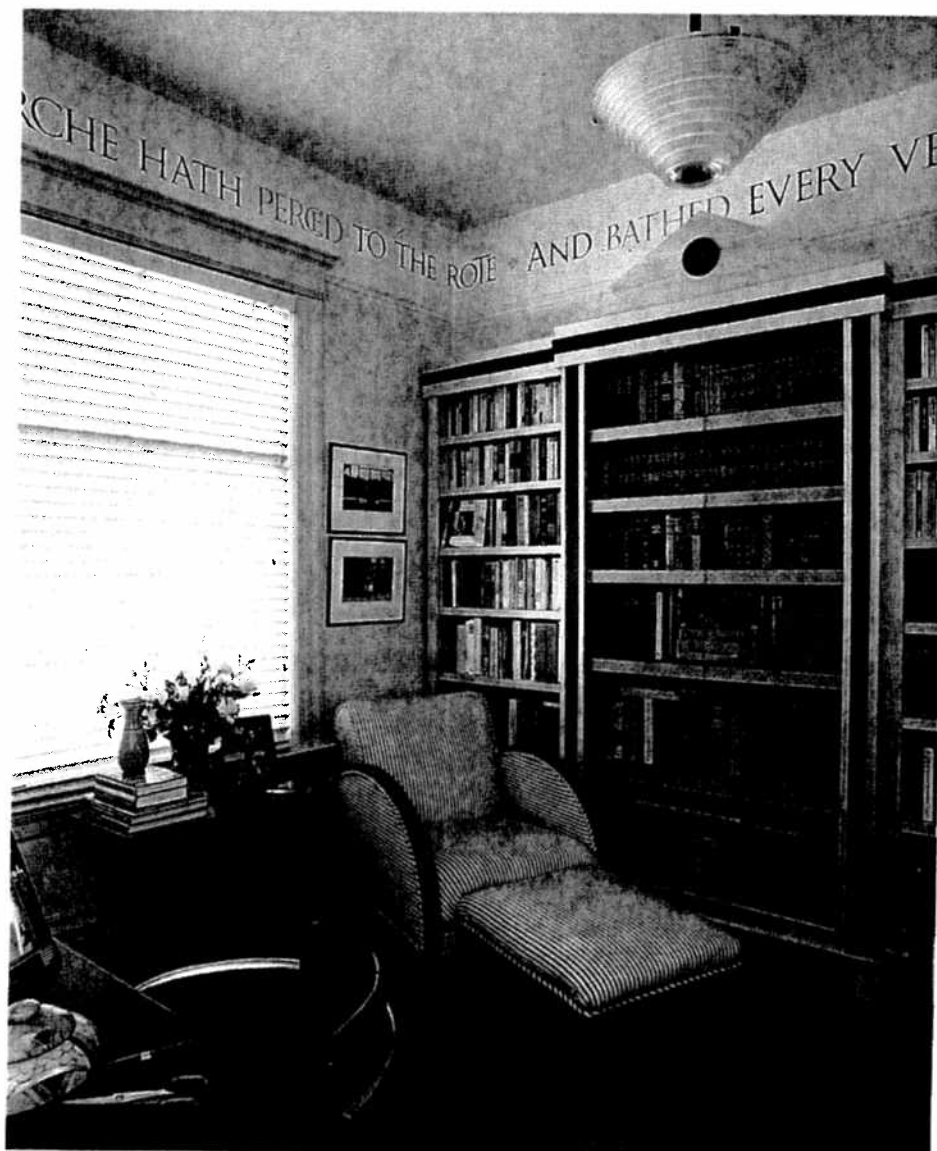
2.38 (above) Philip Johnson's "Glass House" of 1949 represents the epitome of his preferences for strict regularity and openness.

2.39 (left bottom) In living area of the "Glass House", precision of placement and detail contrast with the natural forms seen through glass walls on all four sides. (Photograph: Ezra Stoller, © ESTO)

2.40 The Georges Pompidou National Center for Art and Culture in Paris (1977) exposes ductwork, escalators, and elevators outside its glass walls supported by structural steel in an inside-out emphasis on functional technology. Bright color lends a decorative quality. Renzo Piano and Richard Rogers, architects. (Photograph: Hidalgo/TIB)



2.41 Post-Modernism brought a return of Graeco-Roman classical elements, adding color, ornament, and irreverent humor to humanize the environment. The opening lines of Chaucer's *Canterbury Tales* form a hand-lettered border around this home library/study in San Francisco which features a pedimented bird's eye maple bookcase with a center unit encased in industrial wire glass and a 1920's French chair. Designed by Arnette Kase for Barbara Scavullo Design. (Photograph: David Livingston)



POST-MODERN DESIGN AND THE PRESERVATION MOVEMENT

A reaction to the Modern movement in architecture and interior design became apparent in the 1960s, continuing and gathering momentum into the 1970s when it's irreverent eclecticism was named **Post-Modernism**. It sought to re-establish ornament and historic tradition in contemporary design, to reflect the rich heritage of the past in creative new forms and colors that would evoke a more intimate response and reflect users' needs and involvement in a more humanized environment. Leading proponents included **Robert Venturi**, **Charles Moore**, **Philip Johnson**, **Robert A. M. Stern**, and **Michael Graves**. Historical references were primarily classical in derivation: pediments, columns, and moldings used to ornament both exteriors and interiors. **Richard Meier** and **Charles Gwathmey** were historically inspired by Le Corbusier and the white architecture of the 1920s. There is an ironic humor in Post-Modern design in contrast to the seriousness of functional Modern design and the blandness of corporate design.

Related to Post-Modernism, regional vernacular styles have also evolved, resulting in more eclectic interpretations of traditional styles, materials, and building types. The new traditional houses, like their antecedents, are usually designed in response to site and climate, but they stand out from rather than blend organically into the contextual landscape.



2.42 Chairs reminiscent of the Queen Anne style but in a modern idiom suited to industrial processes were designed by Robert Venturi in the early 1980s. (Courtesy The Knoll Group)

Historic interest was also revived in the **preservation movement** which grew during the 1960s in response to urban renewal efforts to eliminate slums and demolish old sections of American cities. The preservationists revived interest in old buildings, advocating their restoration and adaptive reuse as well as the recycling of various components. A historical restoration of the White House was partially completed by Mrs. Henry "Sister" Parish II in the early 1960s. Many historic buildings, and even whole neighborhoods, have been restored and given new life as "old town" shopping centers and urban residential units. Preservation, recycling, and conservation of energy and natural resources will remain among the foremost concerns for designers through the next decades.

In 1950 the history of modern architecture and design was seen in terms of a unitary progression, beginning with the reforming struggle of William Morris and culminating in the final mastery of technology in the machine style of the Bauhaus—whose enlightened gospel, the International Style, gradually reached to the farthest corners of the earth. Today's perspective is less doctrinaire. In a sense, we live in a new age of eclecticism, but the sources are not only the historic modes of a remote past; inspiration lies also in the immediate heritage of the postindustrial era.

Thus we find that the various phases of the Modern period are all accessible to contemporary restatement, without the need for pointlessly literal imitation. The Arts and Crafts tradition lives on in the individual workmanship of hand-crafted furniture and many accessories and in the general emphasis on personality in the home environment. Distant echoes of Art Nouveau and Art Deco rever-

2.43 In their own home, a house built in 1922, architects Denise Scott Brown and Robert Venturi retained much of the original Arts and Crafts interior, adding eclectic furnishings and design features, such as the stenciled walls. (Photograph: © Paul Warchol)





2.44 Mrs. Henry Parish II envisioned the White House exhibiting fine late-eighteenth- and early-nineteenth-century American furnishings and interiors, indicative of the period when the mansion was built. The Red Room contains American Empire furnishings. (Photograph: William Warnecke/CBS)

rate in some of the more imaginative furniture designs. The International Style maintains its universal adaptability, economy, and elegance. The lesson of Frank Lloyd Wright is particularly relevant today, when ecological arguments bolster the use of aesthetics for an integration of house and landscape. Both the smooth, white surfaces of Le Corbusier's early work and the sculptural plasticity of his later work reappear in contemporary homes.

The current period thus provides not a single development of quickly outdated fashions but rather a rich and varied range of choices. Interiors as well as architecture may be wholly traditional or modern, or a personal integration of old and new. No one approach can be accepted without question or without rethinking its suitability to the present day. Yet an awareness of the modern heritage enhances our experience and enables us to respond more effectively to contemporary life.

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