

“To Build a Better Mousetrap”: Design in Chicago, 1920-1970

Pauline Saliga

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As the British design historian Penny Sparke wrote in the April 1982 issue of *Design* magazine, “What chance has design got in Chicago, a city overwhelmed by the architectural profession?”¹ Her remark seems appropriate, given the city’s long and distinguished history of architectural innovation, but Chicago’s design tradition is, in fact, equally distinguished, although it has been less well documented. As early as the 1920s, Chicago was a major center of design, particularly in the fields of graphic and advertising design (see essay by Margolin). Some types of Chicago design, such as furniture development and manufacture, have always had a national impact, and the city dominated that industry from the late nineteenth century to the 1950s. Chicago-area manufacturers and distributors of products for homes and businesses, such as Sunbeam, Playskool, Bell and Howell, Motorola, Sears, Roebuck and Company, Montgomery Ward, and dozens of others, were without equal in size or influence in the United States. In the 1930s and subsequent decades, large industrial design offices, like those of Jean Reinecke, Dave Chapman, and Joseph Palma, opened in Chicago, producing everything from Sunbeam toasters to school furniture for the postwar baby boomers.

Although some aspects of Chicago design changed quite dramatically after World War II, the city’s impact as a national and, later, an international force in the field of design continued to strengthen. The exception was the home furnishings industry, which weakened after the war and abandoned Chicago to move south. The postwar era heralded other changes, however, because in the 1950s leading Chicago designers such as Richard Latham and Jay Doblin began to concentrate on product planning, rather than styling and manufacturing. Later, in the 1960s, large Chicago design firms, like Unimark, and design schools, such as the Institute of Design, focused on global markets and commissions for large international clients.

As in architecture, designers often relied on historical and European precedents for inspiration,

and this reliance on past design concepts is evident throughout the history of Chicago design, from the early tubular steel furniture produced in Chicago in the 1930s, which was inspired by Bauhaus examples, to the invention of world-famous toys from the 1970s like Masterpiece, a board game based on some of the best-loved paintings in the collection of The Art Institute of Chicago. This essay considers the history of various aspects of design in Chicago and identifies trends in the field from the 1920s to the 1970s, after which time it becomes increasingly difficult to identify the particular characteristics of Chicago design.

Europe Shapes Chicago Design of the 1920s

In the 1920s the two primary influences on design in Chicago and the world at large were the modern skyscraper and the great industrial design exhibition held in Paris in 1925, *L’Exposition Internationale des Arts Décoratifs et Industriels Modernes*. It was there that the streamlined Art Deco style so closely associated with the look of the 1920s and 1930s was introduced. The impact of the exposition on decorative arts, architecture, graphics, and industrial design around the world, and in Chicago as well, was tremendous. According to historian Sharon Darling, after the 1925 exposition, furniture manufactured in Chicago took on a distinctly modern appearance.² The W. H. Howell Company, which was established in 1924, became the first Chicago company to mass-produce tubular metal furniture, beginning in 1929. The company’s furniture line provided an important impetus for the production of tubular steel furniture in America, which had previously been manufactured only in Europe. Architects of the 1920s, including Abel Faigy, Hal Pereira, John Wellborn Root, Jr., Robert Switzer, and Philip B. Maher, designed furniture and interior details, often in the French moderne style, and leading interior designers such as Rue Winterbotham Carpenter, Lucy Blair Linn, and Marianne

Fig. 1 Motorola Incorporated, Advertisement for the walkie-talkie, 1943.

when

Motorola
Radio

comes home from war...



Willisch produced novel and luxurious modern interiors heavily influenced by modern French decorative arts.³

Furniture production for the nation was an important industry in Chicago in the 1920s. For example, 250 furniture factories in Chicago produced 20 percent of the furniture made in the U.S. in 1920.⁴ During the early 1920s wholesalers and retailers, who were dispersed on Michigan and Wabash avenues in fourteen different buildings, instituted Chicago's biannual furniture shows, and the American Furniture Mart, designed by Henry Reader Associates with George C. Nimmons and N. Max Dunning, was opened in 1924 to consolidate the wholesalers into one convenient location. The success of the American Furniture Mart established Chicago as the undisputed center of the country's wholesale furniture trade.⁵

Modern decorative arts also found a home in Chicago at Secession Ltd., the first shop in Chicago to sell modern decorative arts exclusively. Founded in 1927 by two young Chicago architects, Robert Switzer and Harry O. Warner, the shop carried furniture, fabrics, pottery, metalwork, and glass that the architects brought back from Europe. Later, Switzer sold his own modern furniture designs in the shop, whose display cases and interior appointments displayed an inventive setback skyscraper influence.⁶ In 1928 Marianne Willisch began bringing annual exhibitions of the Austrian Werkbund, that country's leading artists' guild, to Chicago with the help of interior designer Rue Winterbotham Carpenter. Willisch also formed Chicago Workshops, modeled after the Werkbund, and sold furniture and crafts designed by its members, including Paul Schweikher (fig. 2), in a shop in Diana Court in the Michigan Square Building at 540 North Michigan Avenue (see Harris, fig. 7). Willisch became a respected interior designer and advocate of modern design (fig. 4).

Development of the Chicago Design Profession in the 1930s

Although New York dominated the birth of the industrial design profession in the 1930s, Chicago also was an important design center in that decade, during which Dave Chapman, Jack Little, and Peter Muller-Munk developed extensive and important practices.⁷ At that time, industrial design was closely associated with architecture since most designers had been trained in architectural programs. Yet, schools specializing in industrial design like the New Bauhaus (later

the Institute of Design) would not be established until later in the decade. Among the milestones in design in the 1930s was the establishment of related design "institutions," namely, the bureaus of design at Montgomery Ward; Sears, Roebuck and Company; and Container Corporation of America. Two factors were of key importance to the development of the design profession in Chicago in the 1930s: the Depression and the Century of Progress Exposition.

The Great Depression and the Century of Progress

The economic hardship of the Depression era forced a great many architects to shift in practice from architecture to industrial design. Some architectural firms, in fact, survived by designing furniture. The Bowman Brothers designed metal furniture that was manufactured under the trade name "Metalunc"; Lloyd Morgan Yost designed Gothic and Art Deco-style radio cabinets and a wide variety of period and contemporary furniture; and Abel Faigy, a Swiss architect, designed elegant bent metal chairs (fig. 3). Bertrand Goldberg began designing experimental molded plywood furniture in 1937. Following the Arts and Crafts traditions that held sway throughout the Depression, Yost, Paul Schweikher, and others continued to design custom furniture, particularly built-ins, even after architectural commissions began to increase later in the 1940s and 1950s.

The 1933-34 Century of Progress Exposition, held along Chicago's lakefront just south of the Loop, was a provocative fantasy of modern buildings that had enormous impact on the fields of architecture and design in Chicago. The exposition celebrated the city's achievements since its founding one hundred years before with a theme based on scientific advancements. Exhibits focused on transportation, science, commerce, electricity, agriculture, and international cultures. Among the many innovations introduced at the fair were R. Buckminster Fuller's streamlined Dymaxion Car (fig. 5; pls. 11, 12). The teardrop-shaped vehicle had three wheels and proved to be too extreme for the American automotive industry, even though the American public had a great capacity to accept innovation.⁸ In fact, the entire fair provided the opportunity for the average person to be immersed in innovative modern design and architecture in exhibits like George Fred Keck and William Keck's Crystal House (fig. 6), with tubular steel furniture designed by Leland T. Atwood and produced by the W. H.

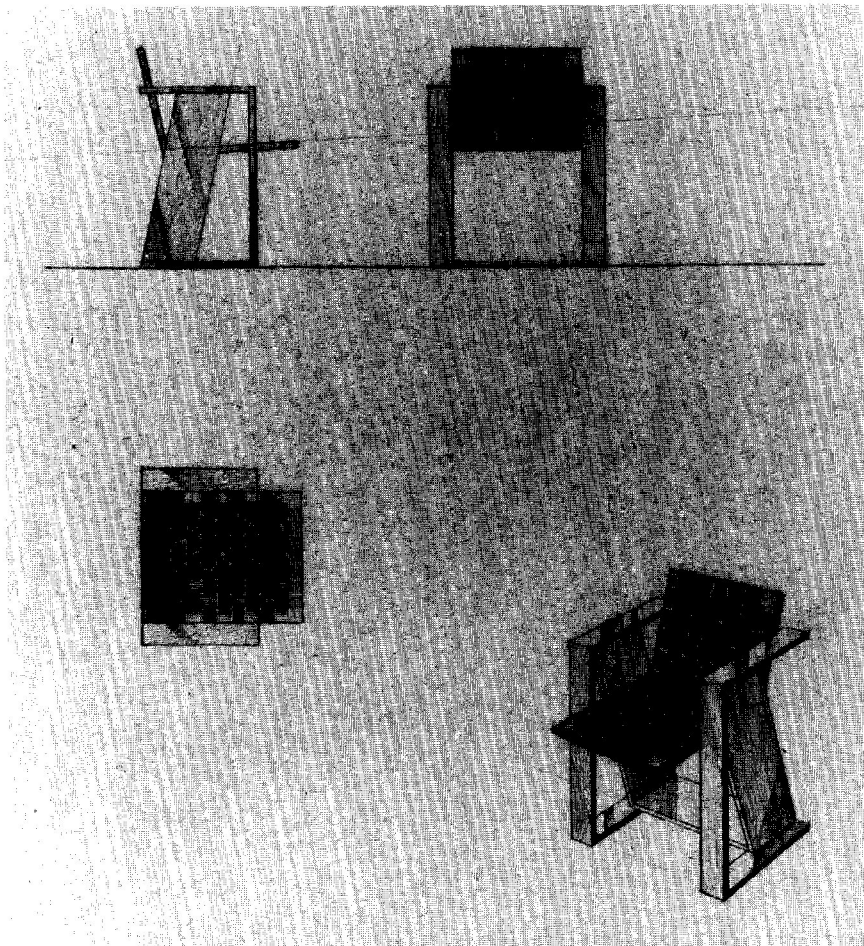


Fig. 2 Paul Schweikher, Studies for armchair with webbing for Chicago Workshops, c. 1930-35 (cat. no. 438).

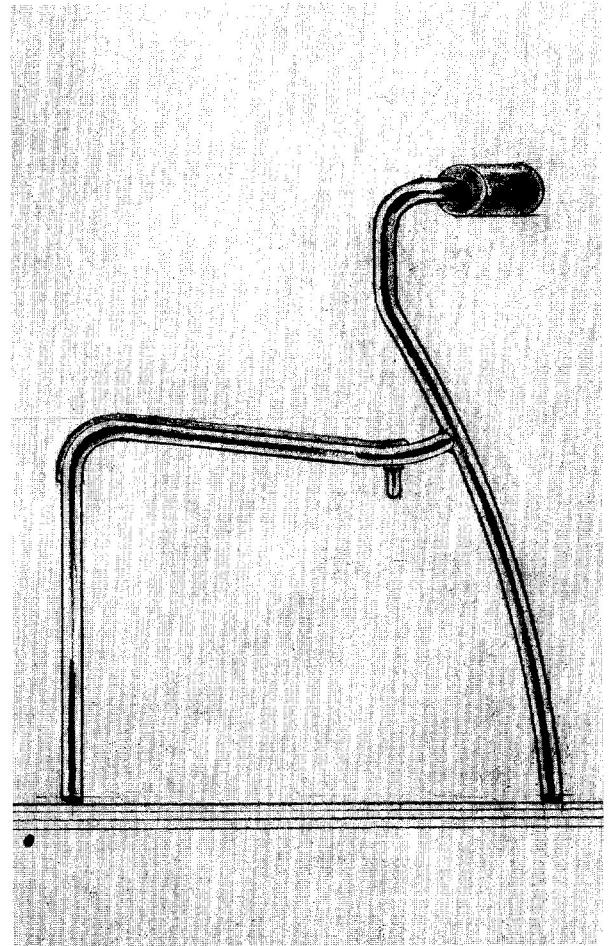
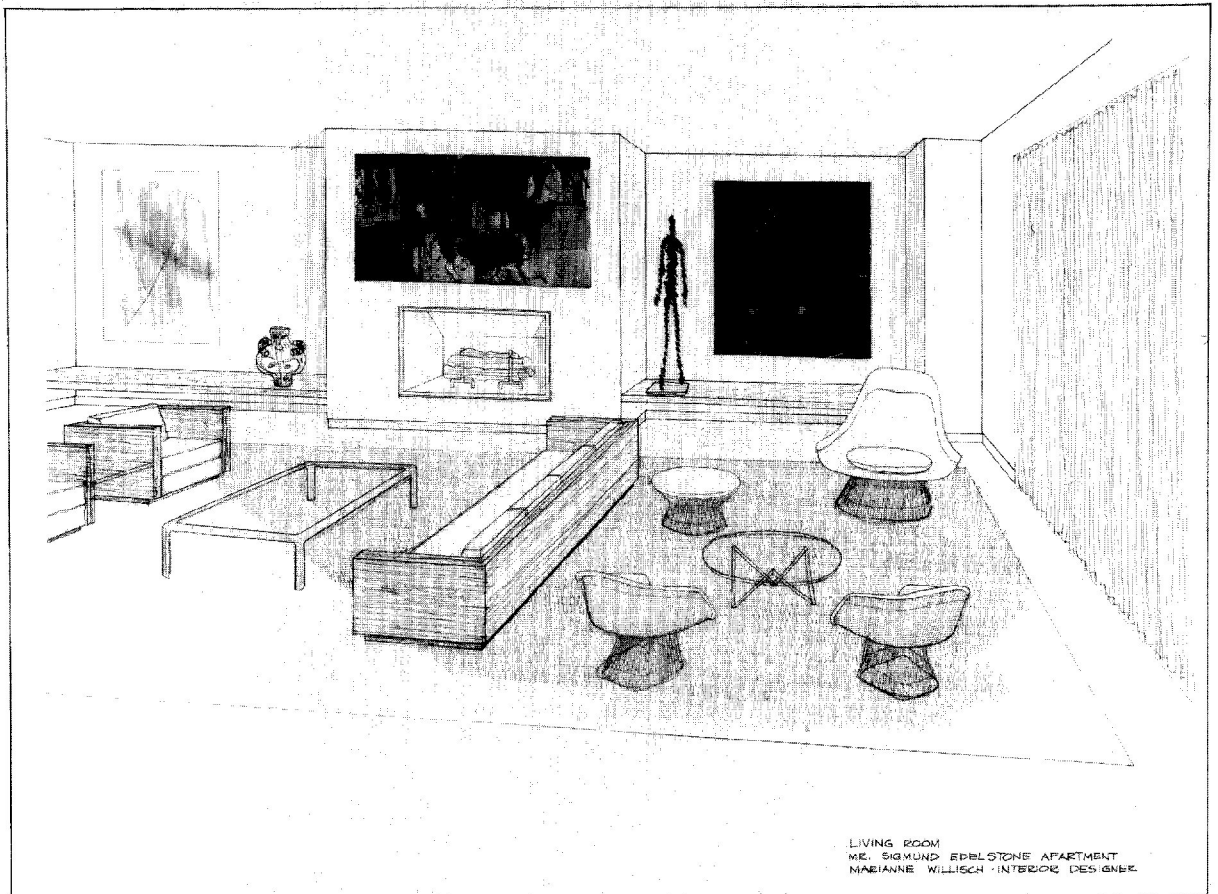


Fig. 3 Abel Faigy, Side elevation of a tubular steel side chair, 1934 (cat. no. 313).

Fig. 4 Marianne Willisch, Perspective study of the proposed living room of the Sigmund Edelstone apartment, c. 1965 (cat. no. 507).



LIVING ROOM
MR. SIGMUND EDELSTONE APARTMENT
MARIANNE WILLISCH INTERIOR DESIGNER

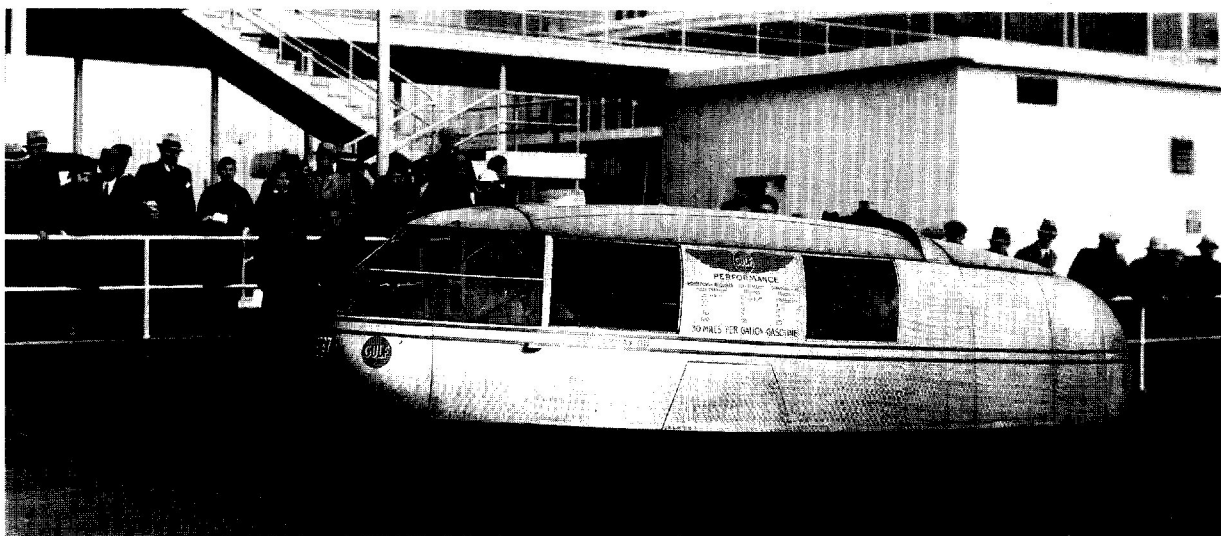
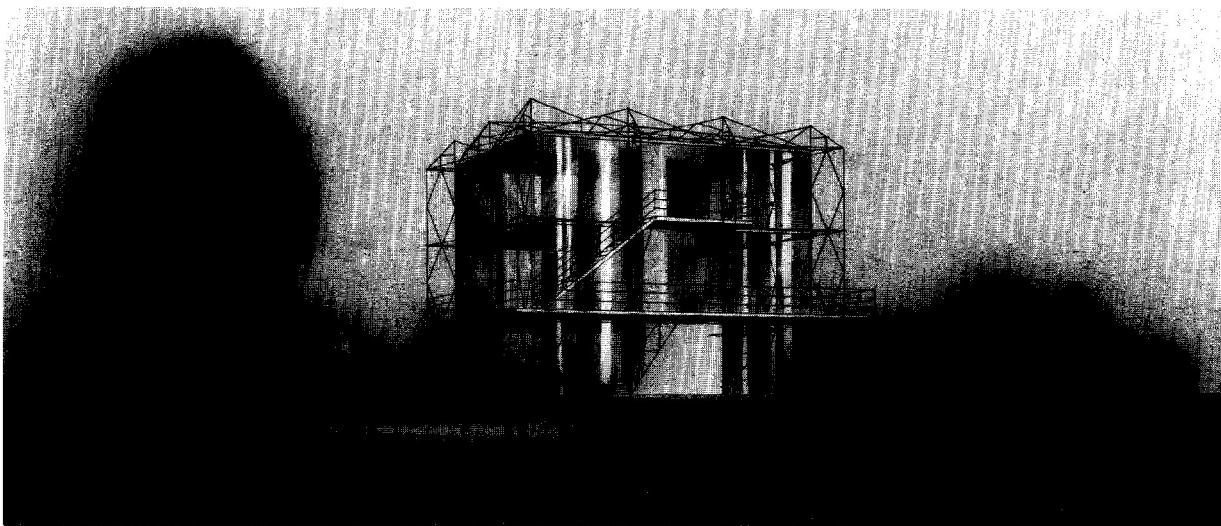


Fig. 5 R. Buckminster Fuller, Dymaxion Car, Century of Progress Exposition, 1933.

Fig. 6 George Fred Keck and William Keck, Perspective rendering of the Crystal House, showing an airplane and Dymaxion Car, Century of Progress Exposition, 1934 (cat. no. 435).

Fig. 7 Leland T. Atwood, Interior design and furniture of the House of Tomorrow (George Fred Keck and William Keck), Century of Progress Exposition, 1933.



Howell Company (fig. 7). Other dramatic new buildings were proposed for the second year of the fair, such as Henry Harringer's Ziegfield Fashion Theatre (fig. 8). If the 1925 Paris exposition introduced modern design, the 1933-34 Chicago exposition popularized it. Tubular steel furnishings were used in 87 percent of the buildings at the fair, while modern furniture materials such as chrome-plated tubular steel, glass, plastic, and bent aluminum were also used extensively.⁹

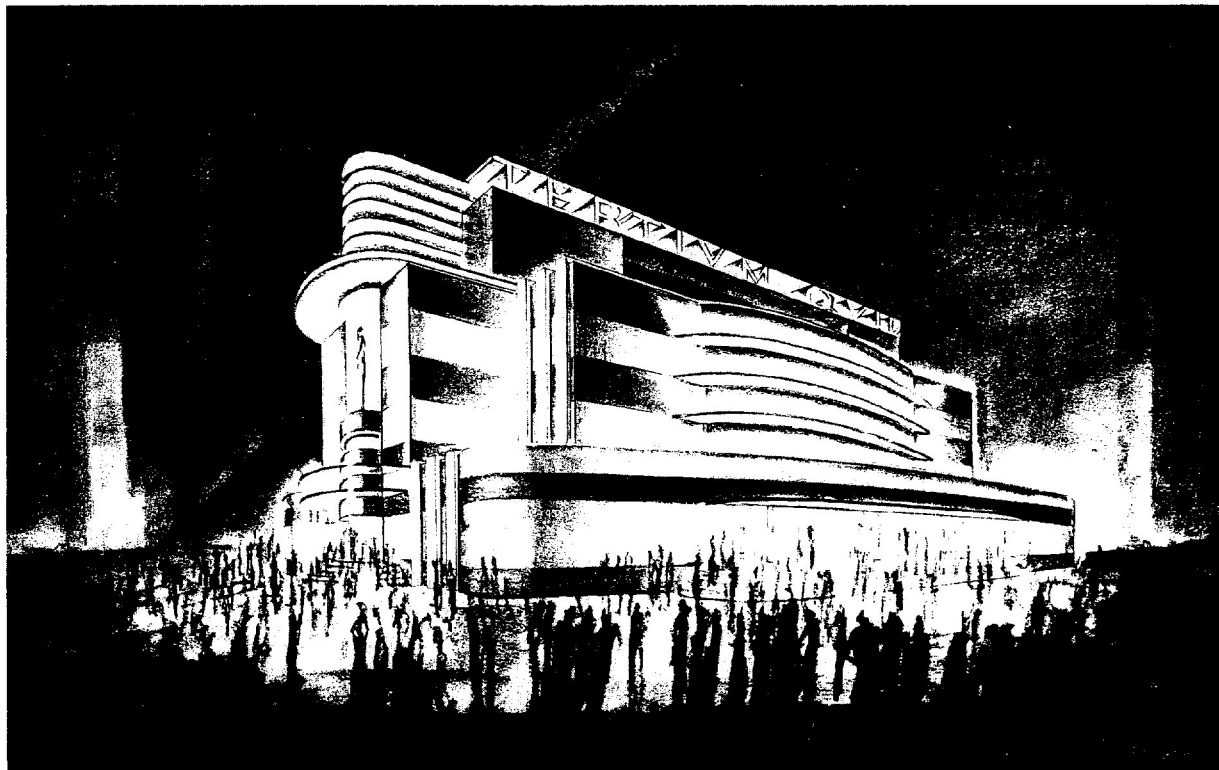
Among the more fantastic pavilions created for the fair was the Radio Flyer building, designed by Alfonso Iannelli, the Italian-born artist and industrial designer who taught at the Art Institute in the 1920s (pls. 75, 77). Iannelli also designed a number of products for consumers in the 1920s and 1930s, including toasters, coffee-makers, and hair dryers for Sunbeam, and pens for Eversharp and Parker Pen Company. Iannelli's Radio Flyer pavilion featured the products of the Radio Steel and Manufacturing Company, which was founded in the teens to produce children's coaster wagons, initially made of wood and, later, steel (see pl. 76). Located on the Enchanted Island, a separate amusement area for children visiting the fair, the pavilion consisted of a small building topped by a smiling boy riding in his wagon. This symbol of youth and joy was conceived by Antonio Pasin, the founder of the Radio Steel company, and executed by Iannelli. Miniature replicas of the boy and wagon were sold by the thousands at the fair.

More important than the pavilion itself, however, was the company that designed and produced the Radio Line of wagons. The company, whose plant was on West Grand Avenue, became the world's largest exclusive manufacturer of coaster wagons and scooters by the 1950s, and today is one of the few old Chicago companies that still produces its original line of goods, providing an important link with the city's design and manufacturing history from the early years of the century.

In addition to popularizing modern architecture and design, the Century of Progress Exposition also provided unique career opportunities: through the experience and contacts they gained at the exposition, many young exhibition and display designers, architects, and industrial designers moved into industrial design careers. In the 1930s and early 1940s Chicago was also a major center of manufacturing of consumer products such as Sunbeam appliances, Ekco kitchen utensils, and Rock-ola jukeboxes. As a result, leading designers like Chapman made the conscious decision to establish their offices in Chicago, rather than New York, so they could be near the area where their products were manufactured.

In the meantime, the impact of streamlining, which had become synonymous with American industrial design of the 1930s, was appearing on other fronts. The year the fair closed, 1934, the elegant Burlington Zephyr train was produced

Fig. 8 Henry Harringer, Perspective rendering of the proposed Ziegfield Fashion Theatre for the Century of Progress Exposition, 1930 (cat. no. 588).





by the Chicago Burlington and Quincy Railroad (fig. 9). It had an astonishing impact when unveiled in April of that year. John Heskett noted in *Industrial Design*:

The Zephyr received over half a million visitors during a six-week-long exhibition tour. It appeared at a time when hope was beginning to revive after the hardships of the Depression, and, as with the DC3 aircraft, its radically new form was a symbol of progress renewed, and of better times to come.¹⁰

The Founding of In-House Corporate Design Departments

Around 1934 the giant retailer Montgomery Ward and Company hired Ann Swainson, a designer at Revere Copper and Brass, to establish a corporate design department. Although little is known about Ann Swainson, it is believed that the design department she established at Ward's was the first such in-house department established by a retailer. She transferred Dave Chapman, an Armour Institute-trained architect then at Ward's, to the new department as head of product planning. Under Swainson and Chapman, the design department grew rapidly and by 1935 eighteen designers, most of them architects, were producing custom-designed products for Ward's. Some of the designers who got important career starts under Ann Swainson were Joseph Palma, Fred Preiss, and Richard Latham, all of whom went on to become influential industrial designers in their own right.¹¹ Among the prod-

ucts that this new team of corporate designers produced were moderne-style products of bent plywood, sheet metal, Bakelite, and tubular steel (see fig. 10).¹²

Rival Chicago retailer Sears, Roebuck and Company also established a Bureau of Design in the 1930s that was initially headed by John Morgan.¹³ One of the designers who worked in the Sears bureau was German-born architect Karl Schneider, who had studied under Walter

Fig. 9 The Burlington Zephyr of the Chicago Burlington and Quincy Railroad, shown here with a streamlined Olson Rug Company truck, 1935.

Fig. 10 Joseph Palma, Proposed design for a baby walker for Montgomery Ward, 1944.

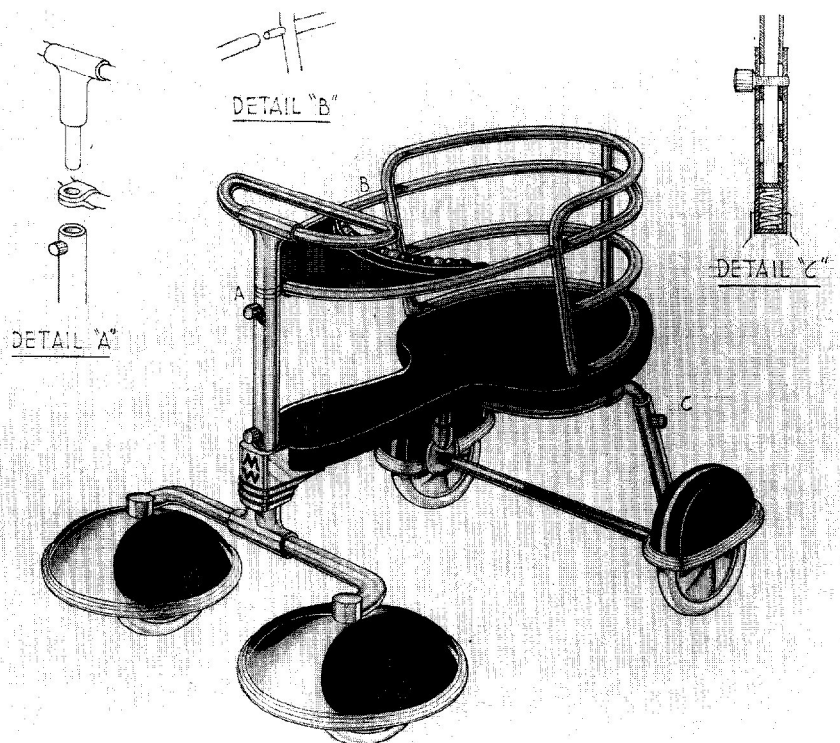


Fig. 11 Bertrand Goldberg, Stanfab bathroom, c. 1945-47.

Gropius and Peter Behrens in Berlin from 1912 to 1916. He established an architectural office in Hamburg in 1923, concentrating on residential work, factories, theaters, and furniture, but in 1935 he emigrated to the United States and settled in Chicago. He worked for Sears, Roebuck and Company from approximately 1938 until his death in 1945, designing a wide variety of streamlined household goods, including furniture (lawn chaise lounges), household goods (Sears food blenders), Craftsman tools, and toys. He also designed a number of International Style stores for Sears, including a "standard Sears store" in 1944. The two-story, flat-roofed building featured large ground-level display windows and prominent signage.¹⁴ Fellow German architect Ferdinand Kramer created similar product and store designs in the 1940s for Alden's department store in Kankakee, Illinois.¹⁵

In 1935 Walter Paepcke established a design department at Container Corporation of America, a packaging design firm, and he named as its director Egbert Jacobson, a leader in the emerging field of advertising design. Paepcke established his design department with the intention of modernizing every aspect of the company, from its logo to its factories, and under Jacobson's direction, the company made dramatic changes in its image. Whereas relatively little information survives about the design bureaus at Montgomery Ward and Sears, the design philosophy and work of Container Corporation is well documented and has had far-reaching consequences (see Margolin, figs. 14, 20).

Design for the War and Planning for Postwar Life

Between 1942 and 1945 virtually all Chicago firms, including Container Corporation, Motorola, Chicago Roller Skate Company, and Schwinn Bicycle Company, won large contracts for the production of goods that were used in the war effort, vital products like cartons, radios, bomber parts, antennae, and rifles. These efforts were critical to the allied victory. In 1943, for example, Motorola developed the first portable FM two-way radio, called the "walkie-talkie," which, together with the hand-held "handie-talkie," developed by Motorola in 1940, revolutionized battlefield communications in Europe and the South Pacific (see fig. 1). Likewise, both Zenith and Western Electric contributed to the development of radar and sonar technology, both of which were crucial advancements during the war.¹⁶



Materials shortages and lack of manufacturing facilities forced Chicago manufacturers to defer the production of consumer goods until the war's end. Metal and other shortages forced some design firms, like the toy designer Marvin Glass Associates, to produce plans for paper, cardboard, and wooden toys. Since there was little opportunity to develop new products during the war years, some enterprising Chicago manufacturers hired leading New York designers to assess their products and redesign them so that their companies would be ready to capitalize on the changes in taste and trends in the postwar era. One such farsighted company, Crane plumbing supply company, commissioned Henry Dreyfuss to study its entire line of plumbing fixtures.¹⁷ Dreyfuss set up an office in Chicago to do so, and by war's end, the company was ready to release a new line of fixtures, just in time to be installed in the thousands of homes that would be built or renovated after the war. Architects also experimented with new designs for plumbing fixtures in anticipation of a postwar building boom. Bertrand Goldberg, for instance, designed the Stanfab bathroom, which was a prefabricated unit that combined a bathtub, sink, toilet, medicine and towel cabinets, towel bar, and toilet-paper holder (fig. 11). The multi-functional unit took up a mere 7½-by-2½-foot space. By combining it with U. S. Gypsum's plasterboard walls, which were ubiquitous in postwar construction, a new bathroom could be outfitted in a single day.¹⁸



Fig. 12 Zenith Radio Corporation, Advertisement for the Stratosphere radio, 1935.

Similarly, Donald Deskey was contracted by the Brunswick, Balke and Collender Company to conduct research into new types of products for postwar years. He was commissioned to develop new uses for billiard tables, but instead he devised a national program for postwar recreation. From this program came the concept of family-oriented bowling centers. Proposals developed by Deskey and Edgar Lynch, Brunswick's in-house architect, "set the type-form for the hundreds of bowling centers that were built in the postwar era."¹⁹ Crane, Brunswick, and other companies, however, were the exceptions to the rule. Most companies did not take immediate advantage of the materials and production techniques that were developed during the war, so many products were still conservative and fashioned in pre-war styling. Those companies that did invest in planning during the war were wildly successful.

Furnishing the Postwar Home

In the furniture industry of the 1940s innovative production processes and materials were combined with conservative designs. When the war ended in 1945 Chicago manufacturers faced a great demand for furniture, as well as shifts in population (to the suburbs) and new materials (Formica, vinyl plastic, foam rubber, chrome-plated steel). As a result of the new economic factors that included the higher cost of labor, energy, transportation/trucking costs, and higher taxes in Chicago in the decade following the

war, many old Chicago furniture firms went out of business, and by 1956 North Carolina had become the premiere state for the production of home furnishings. Some Chicago furniture manufacturers survived because they planned unusual products, decentralized their facilities, and/or simplified designs in order to utilize assembly-line techniques. In addition, Chicago furniture manufacturers found it necessary to focus on only two types of market after the war—namely, mass-produced and custom-designed furniture.²⁰

Among the most outstanding successes in postwar, mass-produced furniture were bent steel dinette sets like those designed by Wolfgang Hoffman before the war. These sets became W. H. Howell Company's major product.²¹ Douglas Furniture also capitalized on the postwar, mass-produced furniture market by modifying the traditional Duncan Phyfe style of dinette set and giving it a Formica top and curved chrome-plated legs.²² The dinettes were a success because they combined the form of a "traditional" dining room set and all its familial associations with new postwar materials. By retaining the values of family and home while using popular new materials, the dinettes presented an optimistic image that the American public consumed by the thousands. Other highly successful furnishings that were mass-produced in Chicago included the Stratalounger (1952), the Barcalounger (1954), and Zenith and Motorola radios and television sets (see figs. 12, 13). These new furniture types were enormously successful because they provided comfort and preserved the image of the home as a refuge, where relaxation and recreation were valued. In 1959 Motorola produced its first all-transistor radio, a miniaturized product that provided consumers with portable entertainment (fig. 14).

After World War II local manufacturers developed not only metal furniture, but also plastic products in earnest, creating everything from plastic and plywood refrigerators to plastic sewing machines.²³ Radios also became an indispensable feature of the American home. The war had made radios a necessity, and by 1947 they were in 93 percent of American homes. Unlike the radios of the thirties, which were encased in elaborate wooden cabinets like one designed by L. Morgan Yost, postwar radios, such as the Hallicrafters radio designed by Richard Latham for Loewy Associates, were intended to look like military equipment. Likewise, other industrial designers adopted a military look for their products. Renor Faigy (son of architect Abel Faigy)



Fig. 13 Zenith Radio Corporation, Advertisement for the Viceroy television set, 1952.

Fig. 14 Motorola Incorporated, Advertisement for Motorola's first all-transistor radio, 1959.

New from Motorola
ALL-TRANSISTOR

Shirt-pocket radio

with powerful built-in speaker

Slips into your pocket... plays with the sound of a set twice its size

New transistor transmits radio key you enjoy. A single low cost battery gives more hours of listening. Power transistor amplifier gives you more volume. Double eye-to-look, three eye-to-look, and more than 100 built-in systems.

Powerful built-in speaker

Perfect gift for you or someone extra special!

ONLY \$29.95

More to enjoy **MOTOROLA**

designed the dials and backplash of a 1954 General Electric range to resemble the controls in the cockpit of an airplane (fig. 15). Faidy worked for noted designer Arthur B. Var in the Appearance Design Department at General Electric from 1946 to 1964.

Although W. H. Howell Company, Douglas Furniture, and other manufacturers were selling mass-produced modern glass-and-steel and Formica furniture to the general population after the war, a market still existed for high-style

modern furniture. Baldwin Kingrey was founded in the 1940s to sell American and Scandinavian modern furniture designed by leading architects. The company imported Alvar Aalto's furnishings and sold Eero Saarinen, Ray and Charles Eames, Harry Bertoia, and other high-style modern furnishings manufactured by Knoll and Herman Miller. Harry Weese also custom-designed furniture for the company, and local craftsmen constructed it. Baldwin Kingrey was the only such furniture outlet in Chicago, and it

Fig. 15 Renor Faidy, Proposed design for a General Electric range, 1954.



played a key role in popularizing fine modern design nationwide, often holding exhibitions of the work of Institute of Design faculty members. Like Marianne Willisch's Werkbund shop, Baldwin Kingrey was located in the venerable, but now demolished, Art Deco Michigan Square Building, a mecca for designers in Chicago.

"Good Design" Exhibitions

In the 1940s and into the 1950s virtually every museum, gallery, and university in the U.S. held an exhibition of art in everyday living to promote modern design. Notable and influential examples included The Museum of Modern Art's "Useful Objects" exhibitions, the Walker Art Center's Everyday Art Gallery, and an exhibition of seven modern rooms designed by the country's leading designers held in 1949 at the Detroit Institute of Arts. All the exhibitions showed the renaissance of American design sensibility. Chicago also played a role in promoting modern design through exhibitions. The Art Institute of Chicago organized a pioneering exhibition of Italian crafts entitled "Italy at Work: Her Renaissance in Design Today" in 1950 (fig. 16). As Walter Dorwin Teague wrote in the exhibition catalogue, the aim was to present the "upsurge of Italian vitality that [had] stored itself up during the long, grey Fascist interim."²⁴ The exhibition was organized by Meyric Rogers, curator of industrial and decorative arts at the Art Institute; Charles Nagel, director of the Brooklyn Museum; designer Walter Dorwin

Teague; and Ramy Alexander, vice-president of the Italian artists' guild, Comagna Nazionale Artigina. The organizers toured Italy for three months to find the best that postwar Italy had to offer in crafts, furniture, lighting fixtures, and mass-produced products like office machines by Olivetti and Lambretta motor scooters. Even before the exhibition was organized, eleven U.S. museums had committed to host the exhibition on its three-year tour.

The Art Institute of Chicago made other attempts to educate the public about good design. In 1954 the museum announced plans to form a new department of design and industry, which would organize a series of special design-related exhibitions, host conferences aimed at manufacturers, designers, and consumers, and publish catalogues and books, "which would spread the new concepts of design through the libraries of the entire world."²⁵ William Friedman, who pioneered a similar program at the Walker Arts Center in Minneapolis, was to head the department, and designer Russell Wright delivered an impassioned paper about why The Art Institute of Chicago needed such a department. The three-year program was never implemented, presumably because the \$130,000 needed to fund it were not raised.

In 1950 Chicago was also the site of a series of other important "Good Design" exhibitions, which were held in the Merchandise Mart. The Merchandise Mart asked Edgar Kaufmann, Jr., curator of industrial design at The Museum of Modern Art (MoMA), to create a series of exhibi-



Fig. 16 "Italy at Work: Her Renaissance in Design Today," The Art Institute of Chicago, 1950.

Fig. 17 Palma Knapp
Design, Sunbeam
electric drill, 1962.



tions that would bring good design to the attention of the public and to present the best examples of modern design for the home. The objects were selected from among the products available at the Mart and stressed eye appeal, function, construction, and price.²⁶ Two exhibitions were juried each year from 1950 to 1955, by Edgar Kaufmann, a designer, and a retailer. Over the years, the jury included such noted advocates of modern design as Meyric Rogers, designer Serge Chermayeff, William Friedman, director of the Walker Art Center, architect Harry Weese, and designers Russell Wright and Edward Wormley. The Good Design exhibitions at the Mart, which included anywhere from 250 to 500 sleek and functional objects, were designed by an equally distinguished list of architects, including Ray and Charles Eames, who designed the first exhibition in 1950, Danish architect and designer Finn Juhl, architect Paul Rudolph, Alexander Girard, and the Chicago architectural team of Daniel Brenner and A. James Speyer. The exhibition program came into existence because manufacturers and consumers needed information about the merits of modern design. The shows were initially very popular and were displayed at the Mart and MoMA, where they helped popularize modern design by showing the functional beauty of the products in the postwar home.

Prosperity and Growth in the 1950s

In the postwar period, "industrial design expanded rapidly into a glamorous professional career for those who saw in it opportunities for the future in creating furnishings and products for the home."²⁷ In order to educate all the returning veterans and prospective new designers, the program at the Institute of Design took on new importance. As a result, numerous design firms began and established firms prospered, including Morton Goldsholl, Barnes and Reinecke, and Palma Knapp (see fig. 17). The trend in design was clearly toward product planning, not just the styling of a product. Some Chicago designers, most notably Richard Latham and Jay Doblin, were leaders in this area. Latham, who became a product planner for General Electric, characterized designers of the 1950s who crossed the line from design to product planning, a functionalist approach in which products are overhauled and improved through design. In an article in a 1957 issue of *Industrial Design* magazine Latham summed it up succinctly: "Most designers today concentrate on styling, merchandising, and selling. These are the tail of the dog; the body is planning."²⁸ Product planning at General Electric led to the invention of portable appliances like electric skillets and can openers.²⁹

Other leading designers in Chicago took the same approach to developing products. Dave Chapman's industrial design firm established a separate entity named Design Research, Inc., "in order to analyze factors affecting buyer motivation for the benefit of companies facing the need to invest in new or expanded plant facilities."³⁰ Like Latham, Chapman became one of this new breed of designer, one who planned products rather than merely designed them. As part of the product planning program, by the 1950s package design was becoming a major concern in the marketing of American products. Independent package design firms were established in New York, San Francisco, and Chicago, where Sid Dickens, Container Corporation of America, and other companies developed package designs for a long list of clients. In the postwar era, the package itself, along with the image projected by the name of the product, became an important marketing tool, designed to attract the purchaser's attention long enough to convey a message, sometimes a subliminal one. Product packages and names projected images of royalty, adventure, or romance. During this period, packages were also given new shapes to convey certain messages and promote the products contained within.³¹

Institutions and Government in the 1950s

As institutions and governments reshaped themselves after the war, they too had new design needs. Changes in the postwar classroom, for example, were dramatic. From the late nineteenth century to the late 1930s, school furnishings consisted of heavy cast-iron and wood desks and seats that were bolted to the floor to prevent any chance of distraction in the rigid environment. In 1938, however, the revolutionary Crow Island School opened in suburban Winnetka. The building, designed by Eliel Saarinen and Lawrence Perkins, was planned to accommodate the progressive educational theories of Carleton Washburne, the superintendent of Winnetka's schools. His plan called for flexible classroom spaces and modular, movable furnishings (fig. 18). The furniture, molded plywood on birch legs, was produced by the Illinois Crafts Project, under the auspices of the Works Progress Administration. When the need for new schools to house the children born after the war became apparent in the 1950s, the open classroom of Crow Island School was the model that inspired school planners. The era of the flexible classroom had arrived.

The market for new school furnishings was so great that many companies, such as the Brunswick, Balke and Collender Company, that previously had not manufactured school furniture

now hired designers to develop prototypes for innovative furniture. In 1952 the Brunswick company, which formerly developed sports equipment and bowling centers, hired Dave Chapman's firm to design a new line of school furnishings.³² Based on the Crow Island philosophy, all the desks, chairs, tables, and bookcases (eleven basic units in all) were modular and interchangeable. The desks and chairs had tapered steel legs, with laminated wood and plastic surfaces. The beauty of the furnishings was in their flexibility—they could be grouped or separated to suit the activity in the classroom. In an effort to publicize its line of furniture, the Brunswick company in 1959 engineered a dramatic weekend makeover for a first-grade classroom in St. Gabriel School, a parochial school on Chicago's South Side that is best known for its adjoining Richardsonian Romanesque church designed by Burnham and Root (1887). In the classroom makeover, which was described in *Life* magazine in October 1959, the children were introduced to their Victorian-style classroom on the first day of school (fig. 19). Then, over the weekend, workers transformed the space by removing the stationary cast-iron desks, combining two classrooms, installing new lighting fixtures and drapes, and arranging the Brunswick flexible furnishings (which included drumlike bookcases, round tables, and modular, child-sized desks and chairs) into a series of arcs (fig. 20).³³ The flexible



Fig. 18 Perkins and Will with Eliel Saarinen, Crow Island School, Winnetka, Illinois, 1938.

furnishings and, by extension, the flexible approach to education, made attending school more enjoyable for the children, and the widespread use of flexible furnishings in classrooms across the country would prove to be a great leap forward in education.

The 1960s: Chicago Takes a Global Focus

In the 1950s and 1960s a trend toward international exchanges of design ideas began to develop, and it has evolved into the globalization of

design that continues into the 1990s. As early as 1959 Chapman and Doblin went to Japan to advise leaders in Japanese industry on postwar design, production, and marketing of new products. Along with other leading designers, including Raymond Loewy, Russell Wright, George Nelson, and Jean Reinecke, they essentially set up the systems that have led to Japan's enormous success today.³⁴ Herbert Zeller was the director of industrial design at Motorola and later for Matsushita of Japan. He claimed that America brought design to Japan, and that product design eventually enabled the Japanese to dominate the consumer electronics industry.³⁵ Also in the late 1950s Dave Chapman's Design Research group studied the crafts of Pakistan and Afghanistan and the Caribbean to set up institutes to train the company's craftsmen to produce high-quality products for export. These early efforts to make design an international endeavor multiplied a thousandfold in the decades that followed.³⁶

Perhaps the one Chicago design firm of the 1960s that most clearly typifies the trend toward globalization is Unimark. Founded in 1964 by Jay Doblin, Massimo Vignelli, and others, Unimark soon attracted the talents of other major designers, including Ralph Eckerstrom. Unimark quickly grew to be one of the largest design firms in the world, with branch offices in Chicago, New York, Aspen, Milan, Melbourne, and many other locations. At its largest, the firm



Figs. 19, 20 St. Gabriel School, before and after the remodeling of a typical classroom, 1959; from *Life* (Oct. 1959), p. 64.





employed more than 400 designers in a variety of fields including graphic, interior, package, and product design. Clients included Alcoa, Gillette, Fieldcrest Mills, P. Lorillard, Standard Oil of Indiana, Olivetti, Tupperware of Australia, Rank Xerox, American Airlines, General Electric, and J. C. Penney.³⁷ Among Unimark's best-known projects are the signage for the Washington Metro (designed by Harry Weese and Associates, 1977) and a user-friendly, color-coded New York subway map of 1972. According to Ralph Eckerstrom, Unimark strove "to synthesize fine design and sophisticated marketing procedures for the benefit of the international business community."³⁸ When Unimark closed in the early 1970s, more than forty-eight design firms were spawned from the giant, thereby continuing its considerable influence around the world.

National Design Center

At the same time that Chicago's influence was expanding globally, firms outside the city increasingly took an interest in the markets that had been developed there. One such venture was the National Design Center, a 40,000-square-foot, consumer-oriented products and furniture showroom that opened in Marina City in 1965 (fig. 21). Founded by New York furniture retailer Norman Ginsberg and designed by Chicago architect Daniel Brenner, the National Design Center in Chicago was actually a branch of a showroom that Ginsberg had begun in New York in 1958. Like the New York showroom, the Na-

tional Design Center in Chicago was open to the general public, as well as to design professionals, but no selling was conducted there. Instead, it was conceived of as an information clearinghouse for design professionals and the public, with an information center that provided details about the exhibitors' products. The public also could obtain impartial information on how to engage the services of an interior designer. Both the Design Center and the information center within it were modeled after two successful European design showrooms: the Design Center in London and Den Permanente in Copenhagen. Like its New York and European predecessors, the Design Center in Chicago also had an auditorium for lectures, a design bookstore, and areas for changing exhibitions like the International Design Awards exhibition, which featured the best in contemporary home furnishings from around the world. These exhibitions were a continuation of the Good Design exhibitions that were staged in museums, the Merchandise Mart, and elsewhere in the 1950s.³⁹

When the National Design Centers in New York and Chicago were founded, Norman Ginsberg had high hopes of raising the standards of the home furnishings industry, which he felt remained at the same low level as after World War II, when furniture design was overshadowed by the need to provide housing for thousands of new families. Given such an idealistic philosophy, it is unfortunate that this European-style design center closed just a few years after it opened. The primary reason is that rather than

Fig. 21 Daniel Brenner, National Design Center, Marina City, 1965.

use the center, architects and interior designers preferred to rely on the larger and more established Merchandise Mart and on Sweets Catalog, the multi-volume reference book of products and hardware, while the public seemed largely unaware of the services the Design Center offered.

Even after competition had reduced Chicago's role as a major furniture manufacturer, the city assumed a new position as the center of the contract furnishings industry, with the Merchandise Mart at its center. Instead of providing furniture primarily for homeowners, the Chicago furniture markets focused on furnishing the millions of square feet of new office space built between the 1950s and 1990s, as well as all the new schools, hospitals, and airports. Since the 1960s, the Merchandise Mart has had a tight hold on the furniture market in Chicago, and in 1969 the Mart began its annual contract furnishings convention, called NEOCON, to market furnishings to the architects and designers who specify con-

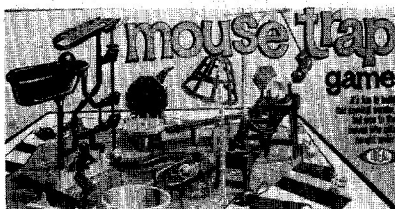
tract furnishings internationally. The convention was founded to feed the commercial furniture market and to help Chicago maintain its leadership in the industry. Showrooms at the Mart have been able to gain attention for their product lines by hiring leading designers and architects to develop original images for their spaces. Such innovative interiors included the postmodern Hauserman showroom designed by Japanese architect Arata Isozaki in 1982 and the Dupont Resource Center executed by Eva Maddox Associates in 1991. The American Furniture Mart was unable to compete, and it closed in 1979 as other major furniture showrooms opened in Dallas, Los Angeles, and High Point, North Carolina, further dividing the furniture market and pulling interest away from Chicago.

Fig. 22 Marvin Glass and Associates, Advertisement for Mouse Trap board game, 1963.

mouse trap game



Here's the comic classic of the century. Is it an insane inventor's zany nightmare? No it's a hilarious three dimensional game. The object of the game is to trap the other fellow's mouse. First, players, directed by the die, take turns constructing the rickety mechanical wonder, piece by unlikely piece. When completed it is a most curious sight and the trap is set. When a player's mouse lands on the right square, a crank of a handle starts a clanking wheezing chain reaction of moving parts, rolling ball, shuttling levers, swinging "boards," until ZING! Mousetrap!



The Toy Industry in Chicago

In *Industrial Design* John Heskett described the toy industry in the following terms:

The history of toys is a microcosm of the evolution of industrial design, with a continuous flow of innovations, new technology, and materials constantly being introduced, yet never entirely replacing old forms, so that traditional craft-forms of wooden toys from Eastern Europe and Asia can still be found alongside the most sophisticated electronic playthings.⁴⁰

Generally speaking, the manufacture of toys gradually had evolved from a cottage industry to a factory-based industry in Europe by 1900. In America, toys were mass-produced in tin, cast iron, and wood in the 1880s and the following decades. By the early twentieth century, many countries had well-established toy industries, with products ranging from miniatures of objects in the adult world (baby dolls, stoves, trains, houses) to building blocks and games that allowed a child to learn and experiment while playing.

The 1960s and 1970s were the high point of toy design in Chicago, primarily due to one inventive designer, Marvin Glass. Although the firm produced toy designs during the war, Marvin Glass applied for its first toy patent in 1950 for a children's utensil set. The work of the firm expanded tremendously in the postwar years to provide toys for the enormous baby-boom generation, and the company created board games, dolls, trains, and other toys. Many of its designs were innovative novelties such as oversized sunglasses (Super Specs, 1960), plastic robots (Mr. Machine, 1960), and battery-operated board games (Operation, 1965). As a testament to the success of the company's creations, many

games designed by the Marvin Glass firm in the 1960s and 1970s are still in production today, including Lite-Brite (1967), a game in which transparent, colored pegs are pushed into a pegboard that is lit from behind. The pegs light up like miniature light bulbs so that a child can "create pictures with light." Another successful board game that is still manufactured is Masterpiece (1971), a variation on Monopoly, but instead of buying real estate, the players participate in an international art auction. The postcard-size paintings in the game are well-known works by Rembrandt, Picasso, Grant Wood, and others from the collection of The Art Institute of Chicago. Probably one of the most well-loved Marvin Glass board games is Mouse Trap (1963), which is based on a Rube Goldberg cartoon titled "To Build a Better Mousetrap," in which an unlikely jury-rigged contraption connects a whole series of unlikely events ending with the capture of a mouse (fig. 22). These and other inventive toys gave Marvin Glass Associates an international reputation that continued long after the founder's death in 1974. When the firm broke up in the early 1980s as a consequence of royalty disputes, it spawned a whole industry of toy designers in Chicago, including Meyer Glass Design, IDEA, and B & D Design Associates, to name only three. As a result, Chicago remains an international leader in toy design, and designs by Chicago firms are licensed in Japan, Germany, and elsewhere.

Conclusion

As the Chicago design world began expanding into global markets in the 1960s, it has become increasingly difficult to define what constitutes Chicago design. As Patrick Whitney, director of the Institute of Design, noted in a conversation in 1990, the definitions of design associated with Chicago, or with any particular place for that matter, are now blurred and much harder to identify. Product development is no longer localized, as it is often done by teams, not by individuals, and sometimes the members of the team are from different countries. Also, products are often no longer built in one place. In many cases elements are fabricated in different cities (or countries) and then assembled somewhere else. But all this is not to say that many talented designers do not still have offices in the Chicago area. On the contrary, a glance through the local directory reveals dozens of firms, some of which—KDA Industrial Design Consultants, Goldsmith, Yamasaki, Specht, and Henry P. Glass

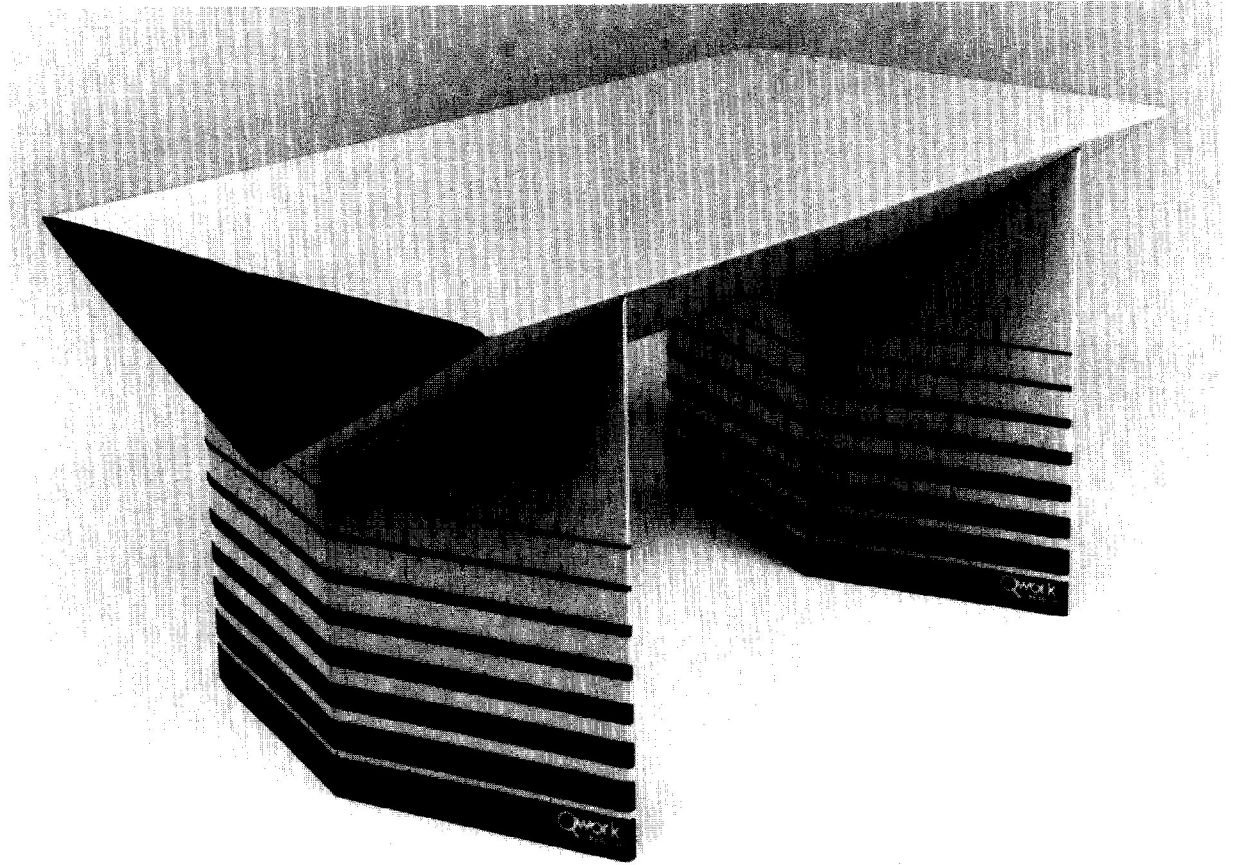
Associates, for example—can trace their roots to firms begun in the 1930s and 1940s.

Indeed, it seems we have entered a new age with regard to design and its history. Design offices tend to be either small and very focused or large and capital intensive, because the needs of global clients can better be served that way. Large offices with branches around the world seem to thrive today in advertising and many other design fields. At the same time, the recent deaths of some of the most important figures of the postwar years—namely, Jay Doblin in 1990 and Richard Latham in 1991—have opened the way for the emergence of new leaders. Yet their legacy lives on in first-rate educational institutions, specifically the Institute of Design, which still bears the influence of Doblin's philosophy of design education, and in the products of their notable clients, companies like Land's End, Bang and Olufsen, and Rosenthal China, which still carry the mark of Latham's revolutionary product-planning philosophy. Their legacy also lives on in the new trend in Chicago toward documenting design history. In the early 1980s, for example, the University of Illinois at Chicago began offering courses in design history, established a design archive in the university library, and began publishing the scholarly journal *Design Issues*. In 1988 The Art Institute of Chicago received a grant from the Design Arts Division of the National Endowment for the Arts to study the design collections of other museums and to hold two day-long symposia with international design historians to develop a plan for integrating the history of design into its programs and exhibitions.

For Chicago institutions the time has come to consider seriously the history of twentieth-century industrial, graphic, and product design, as Britain, Holland, and the Scandinavian countries are already doing. There are many good European models to follow. Early in 1992, in fact, the Dutch government established the European Design Centre, a new industrial design archive in Eindhoven, and The Design Museum at Butler's Wharf in London has been posing intriguing questions about design since it opened in 1989.

Increasingly, design is a concern of business people, environmentalists, cultural historians, and others who believe that it must be responsive to the needs of the disabled and other special populations. Designers themselves have recognized that they must, by necessity, address those questions and issues that go beyond styling to enter the realm of design with a conscience. The

Fig. 23 KDA Industrial Design Consultants, Inc., Qwork Bench, 1991; this product is made entirely of recycled and recyclable materials.



ability to develop ecologically sound packaging, to employ manufacturing techniques that reduce the emission of chemical pollutants, and increase the use of recycled and recyclable materials are but a few of the challenges that today's designers face (see fig. 23). Just as they welcomed the utopian ideals that were attached to architecture of the 1920s, more people today are looking to design as a means of relieving some of the problems of society. Jay Doblin succinctly

characterized the trend in a 1982 interview with Penny Sparke:

The heroes of styling and marketing in the old sense are a thing of the past. What's coming through is more scientific and corporate design . . . American designers have yet to learn that it's no longer about aesthetics and styling. When they do (as they have in Silicon Valley), and begin to work with abstract, scientific disciplines, like psychology and anthropology, to build up a solid base of information beneath product planning, something new will emerge.⁴¹

NOTES

1. Penny Sparke, "Chicago: On the Incline Again," *Design 400* (April 1982), p. 7.
2. Sharon Darling, *Chicago Furniture: Art, Craft, and Industry, 1833-1983* (New York and London, 1983), p. 270.
3. *Ibid.*, p. 272.
4. *Ibid.*, p. 292.
5. *Ibid.*, p. 294.
6. *Ibid.*, p. 274.
7. John Heskett, *Industrial Design* (New York and Toronto, 1980), p. 109.
8. *Ibid.*, p. 122.
9. Darling (note 2), p. 314.
10. Heskett (note 7), p. 130.
11. Arthur J. Pulos, *The American Design Adventure, 1940-1975* (Cambridge and London, 1988), p. 23.
12. "The Origin and History of KDA Industrial Design Consultants," 1987.
13. *Ibid.*
14. Robert Koch and Eberhard Pook, eds., *Karl Schneider: Leben und Werk (1892-1945)* (Hamburg, 1992), pp. 207-24.
15. Claude Lichtenstein, ed., *Ferdinand Kramer: Der Charme des Systematischen* (Giessen, 1991), pp. 194-233.
16. Perry R. Duis and Scott La France, *We've Got a Job to Do: Chicagoans and World War II* (Chicago, 1992), p. 67ff.
17. Pulos (note 11), p. 46.
18. "Gadgets: Two Years of Peace Produce Some Strange and Wonderful Inventions," *Life* (Dec. 15, 1947), p. 84.
19. Pulos (note 11), p. 47.
20. Darling (note 2), p. 321.
21. *Ibid.*, p. 316.
22. *Ibid.*, pp. 324-25.
23. Pulos (note 11), p. 45.
24. The Art Institute of Chicago, *Italy at Work: Her Renaissance in Design Today* (Chicago, 1950).
25. "Daniel Catton Rich and Russel Wright Discuss Formation of Institute's New Department," news release from The Art Institute of Chicago, June 17, 1954.
26. Pulos (note 11), p. 110.
27. *Ibid.*, p. 59.
28. *Ibid.*, p. 270.
29. *Ibid.*, p. 143.
30. *Ibid.*, p. 270.
31. *Ibid.*, p. 283.
32. *Ibid.*, pp. 328-29.
33. "Weekend Face-lifting for Classroom," *Life* (Oct. 19, 1959) p. 64.
34. Pulos (note 11), pp. 192-93.
35. *Ibid.*, p. 302.
36. *Ibid.*, p. 237ff.
37. J. Roger Guilfoyle, "Unimark International," *Industrial Design* 13, no. 6 (June 13, 1966), p. 87.
38. *Ibid.*
39. See "The Design Center for Interiors," *Interiors* 117, no. 8 (March 1958), p. 106ff; "National Design Center Expands to Chicago," *Interiors* 122, no. 3 (Oct. 1962), p. 58; and Ghita Cary, "A Center with Designs on the City: New Showcase for Furnishings," *Chicago Sun-Times Family Magazine* (April 25, 1963).
40. Heskett (note 7), p. 157.
41. Sparke (note 1), p. 7.