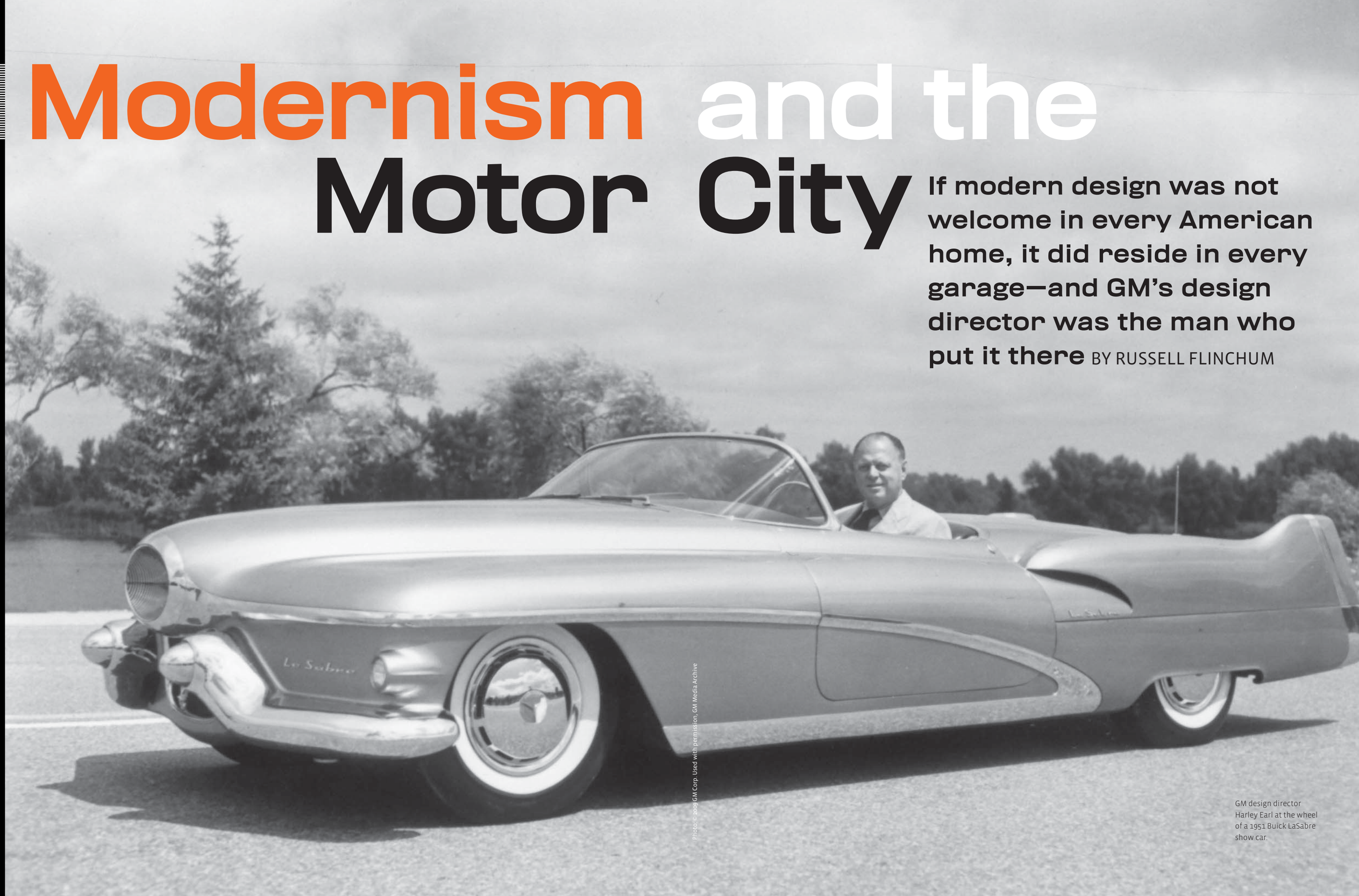
Modernism and the Motor City

If modern design was not welcome in every American home, it did reside in every garage—and GM's design director was the man who put it there BY RUSSELL FLINCHUM



GM design director Harley Earl at the wheel of a 1951 Buick LaSabre show car.

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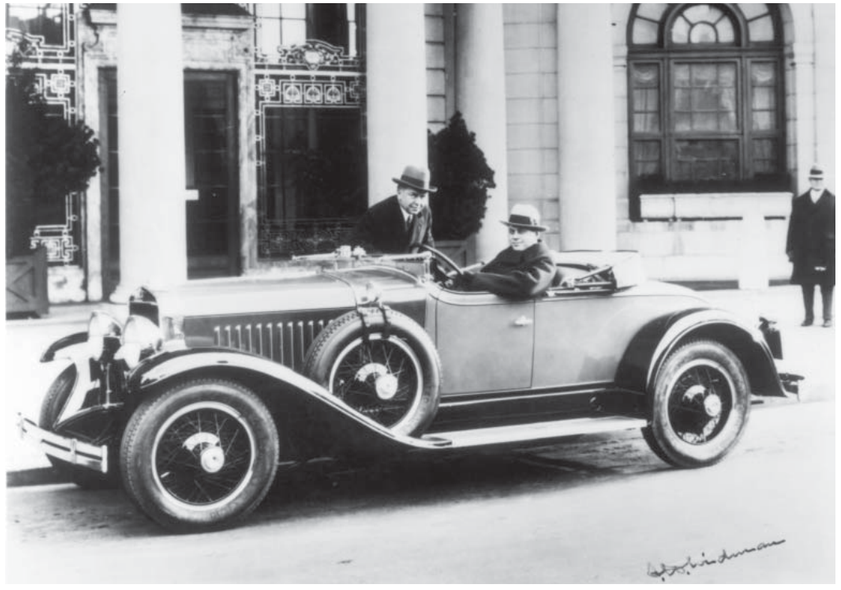

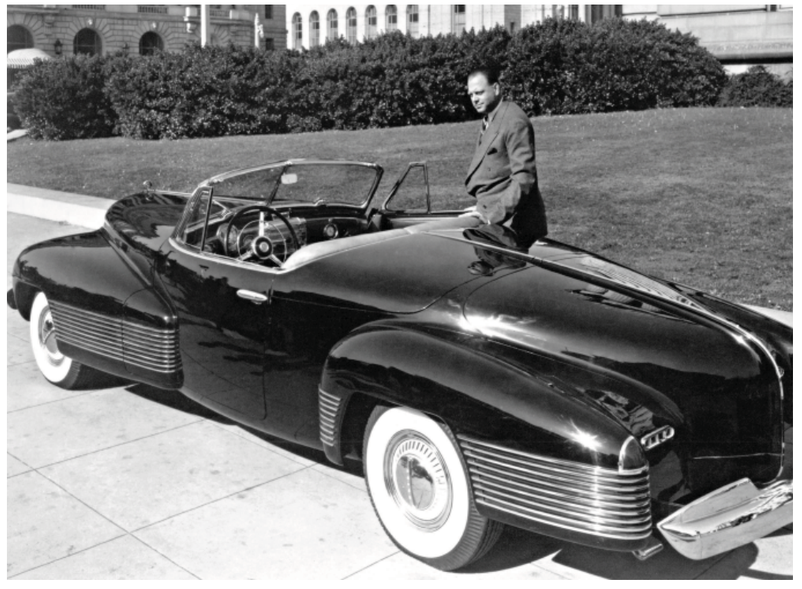

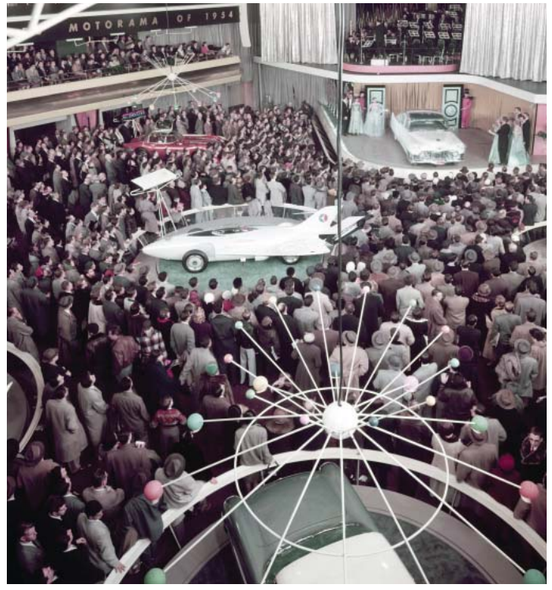

LEFT: Harley Earl seated in the 1927 LaSalle with Larry Fisher of Fisher Body. **CENTER:** The Y-Job (1938). Note the elimination of the running boards and "speed lines" running horizontally across the "suitcase" fenders. **RIGHT:** The 1954 GM Motorama at the Waldorf Astoria in New York. The Firebird I gas turbine experimental vehicle is visible near the center of the photograph.

Harley Earl

Maker of American Dream Machines

There are many ways to look at cars, but it is difficult to get people to really *look* at them as an amalgam of design decisions and stylistic tools that deal with what is an essentially awkward form. While he might have considered analysis by amateurs annoying and best left to professionals like himself, Harley Earl (1893–1969) certainly made people look. Beginning in the 1930s, Earl established a system for designing automobiles at General Motors that was akin to Thomas Edison's "invention of a process of invention." Before Earl, mass-produced automobiles were created in a haphazard process that varied widely from manufacturer to manufacturer, their aesthetics, such as they were, largely determined by engineers. By 1946, most American manufacturers (at least those that survived) had created design departments along the lines that Earl had initiated more than a decade before. It is entirely appropriate to speak of automotive design as "B.E." and "A.E." (Before and After Earl). He was the transitional figure between the world of nineteenth-century coach building (the creation of custom bodies) and twentieth-century design for mass production, and probably the most influential designer of the last century.

In the mid-1950s, when General Motors' products captured nearly 50 percent of the American market, Earl's designs were ubiquitous; he determined the final appearance of 50 million cars. Despite this, he was never accepted by the "Good Design" community centered around the Museum of Modern Art in New York. "Good Design" eschewed the decorative and the flamboyant, especially in product design. Their suspicion of Earl was grounded in his popular appeal and his gift for playing upon the public's fascination with speed and its visual analogue, streamlining. Nowhere was Earl's gift for tapping into the postwar American zeitgeist more apparent than in those showcases of swank—the Motorama displays of the 1950s. Clear plastic bubble canopies, gold-plated details, and experimental gas turbine engines were a few representative elements of Earl's "Dream Cars" displayed next to GM's production models. If Augustus found Rome made of brick and left it of marble, Earl found the American automobile made of wood and lacquer and left it of brightly painted steel and chrome. His influence on Americans' acceptance of modern design was commensurate with his six-foot-four former athlete's frame—outsized, impressive, and a bit intimidating.

In 1927, Earl forever changed the aesthetics of the American automobile with his design for GM's LaSalle, the first mass-produced automobile to be purposely (and successfully) styled. By then Henry Ford's dominance of the domestic market was over. General Motors was moving ahead with chief executive Alfred P. Sloan's strategy of creating "a car for every purse and purpose." Earl and his growing stable of designers became absolutely essential to the GM system of broadly related product lines (Cadillac, Buick, Oldsmobile, Pontiac, and so forth), which were designed to appeal to people at different income levels. The goal was to encourage consumers to reach for the next level—to move up from a Chevrolet to a Buick, and then on to the pinnacle, a Cadillac. Appropriate and innovative styling by Earl and his staff was the great signifier that differentiated each brand.

Earl might never have played the role he did in Detroit had he not been sidelined by a rugby injury while attending Stanford University. After recuperating, he went to work for his father, J.W. Earl, who had established the Earl Carriage Works in Los Angeles, rechristening it the Earl Automobile Works in 1908. Coach building was moving from the shaping of horse-drawn vehicles to the creation of custom bodies for automotive chassis. By the second decade of the century there was a tremendous demand for unique or highly individualized car bodies from the Hollywood elite. Don Lee, who owned the distribution and sales rights to Cadillac automobiles in six California cities, bought out J. W. Earl in 1919. He was eager for access to both Earl's clientele and his remarkably talented son, who seemed to understand these patrons. During this period, the younger Earl schooled himself in the kind of showmanship that would stand him in good stead in the coming decades. For the rest of his life he would boast a tan, hundreds of tailored suits, and some of the most remarkable custom automobiles of all time—including the "Y-Job" and the LeSabre—as his "daily drivers."

The asymmetry of the emerging biomorphism in design in the late 1930s was almost entirely inappropriate for cars, but its often large and rounded contours (found, for example, in Russel Wright's American Modern dinnerware) are related to Earl's aesthetic.

Earl would eventually create a modern vernacular of forms derived from flight and auto racing with a priority on "longer, lower, and wider" automobiles. The year Earl's '27 LaSalle scored a huge hit was also the year of Lindbergh's flight over the Atlantic. The public was fascinated by streamlining—a smoothing of forms into flowing shapes, initially based on the teardrop. Earl's achievement at this point was to free GM's products from the rectilinear, sheet-metal aesthetic so pronounced in the early enclosed versions of the Model T. In addition, DuPont had introduced Duco paints in the mid-1920s, opening up a world of color for mass-produced cars. Earl had arrived in Detroit at just the right time.

In the rapidly evolving and highly competitive world of auto design in the 1930s, Earl began to think ahead—and to put his thinking into three dimensions. He invented the "concept car" with the Cadillac V-16 Aero-Dynamic Coupe, created for the Century of Progress International Exposition in Chicago in 1933–34. But his greatest creation prior to World War II was the 1938 Y-Job, a one-off and fully functioning vehicle that pushed the borders of what was possible in manufacturing with its concealed headlights, aerodynamic envelope, and convertible top, which could be raised and lowered electrically and fully stowed in a compartment behind the driver. Its contours and grille treatment would reach the public years later in the postwar Buicks, known for their massive "dollar grins."

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Dwight Eisenhower (left) stands in one of the first production 1953 Cadillac Eldorados at his January inauguration. BMW's GINA Light Visionary Concept vehicle (2008). An elastic skin is stretched over a frame with movable components to create a transformable appearance. GINA is the epitome of the concept car—the showcase vehicle pioneered by Harley Earl.

designs attempted to merge and even reconcile new elements from aviation and auto racing with forms derived from the natural world. These cars were disdained by critics for their supposedly superficial, "tacked-on" elements—their fins, applied fenders, and grille treatments. But in fact those swelling, nongeometric forms, coming together and sometimes colliding in complex ways, created a subtle interplay of form and light that was one major goal of Earl and his designers. On the 1953 Buick Skylark, for instance, they used an elegant and attenuated "side spear" to reinforce the complex sculptural body line without mirroring it exactly. This rolled form makes a graceful transition from front to rear fender possible and can hardly be described as tacked on.

Earl's 1951 LeSabre was the epitome of what curators and design critics found suspect. Inspired by the first combat-worthy jet aircraft fielded by the United States, it featured a body crafted from cast magnesium and sheet aluminum and the first wraparound windshield (or "panoramic windscreen" as it was called), an innovation that Earl demanded in spite of the tremendous challenges of fabricating it. What was apparent in the Y-Job became blatant in the LeSabre—it was three-dimensional fantasy made flesh, with 360 degrees of appeal.

Among Earl's triumphs was to elevate design to the boardroom as the vice president of General Motors.

Even the bright postwar color schemes made popular by Ray Eames and Alexander Girard were eventually incorporated into the interiors of GM's cars of the 1950s through the efforts of women designers like the largely Pratt Institute-educated "Damsels of Design"—surrogates for the woman consumer. These women also brought a new concern for ergonomics to the cars' interiors. It was Earl who encouraged and supported them.

Although he never sketched while instructing his designers and was notoriously inarticulate, few of his staff questioned Earl's ability to inspire them to create what he wanted. The solution he was reaching for always seemed inevitable once it had taken shape. Among his other triumphs was to elevate design to the boardroom as a vice president of General Motors. While today's consumers complain about dull copycat designs, the spirit of Earl lives on in figures like Chris Bangle, chief of design at BMW group. Bangle's departure from BMW in February 2009 has been regarded as a seismic event in the world of automotive styling. The influence he wielded over BMW's designs was at least partially determined by the system Earl established at GM's Art and Colour Section more than eighty years ago. Bangle left behind *his* greatest concept car—the GINA Light Visionary Model—as a roadmap of where he saw BMW's design ethos headed. Like Earl's greatest creations, it is a stunning fusion of the mechanical and the seemingly organic—causing it to be dubbed "the Seven of Nine Car," a reference to the liberated cyborg character in *Star Trek Voyager* with her skintight uniform. I think Harley Earl would have loved it.

Russell Flinchum is author of *Henry Dreyfuss, Industrial Designer: The Man in the Brown Suit* (1997), and *American Design* (2008).

Driving Force

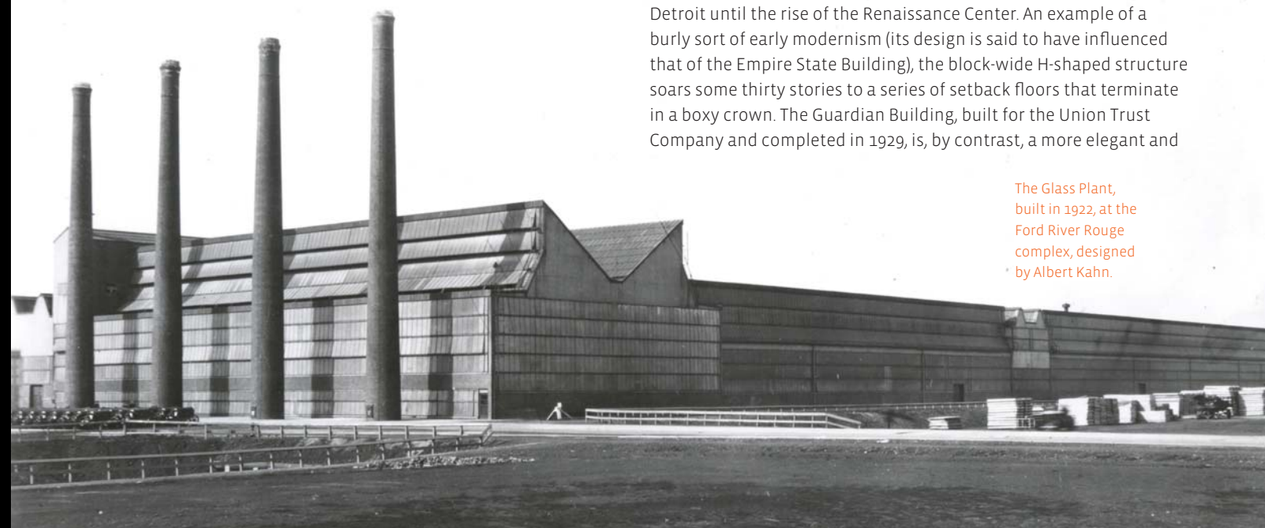
In Detroit, architecture and art developed in concert with the fortunes of the auto industry

If one word could capture the essence of Detroit—or, at least, the Detroit that was—it is "power." Built in the service of the automotive industry, modern Detroit is a monument to the power of the machine, the power of labor, and the power of capital. In no way is this better reflected than in the city's architecture and public art. Though the contemporary Detroit skyline is dominated by the towers of the now dated and even somewhat bland Renaissance Center, which opened in 1977, the city's downtown and its outlying areas feature a number of modernist and proto-modernist structures. Built mostly between 1910 and 1930, the heyday of the rise of the automakers, they convey a sense of progress, optimism, and efficiency. But most of all, they celebrate strength.

Appropriately, the first truly modern building in Detroit was a factory. It was designed by Albert Kahn, who, though often called "the man who built Detroit," is frequently overlooked in the history of American architecture. Born in Westphalia in 1869, Kahn was the son of an itinerant rabbi and hapless businessman, who took his family to Detroit in 1880. Rather than go to school, young Albert worked odd jobs to help support the household. He harbored dreams of becoming an artist until he discovered he was color-blind. Kahn could draw, however, and he won a post as an apprentice draftsman at a Detroit architecture firm. Impressed by his diligence and orderly mind—qualities that would serve Kahn well throughout his career—a partner took the immigrant under his wing and tutored him in architectural practice. In 1891, Kahn won a grant to take a year's architectural tour of Europe. He returned to Detroit, worked as a chief designer, and opened his own firm in 1902 (it still exists). An early factory commission for Packard—which Kahn finished on time and on budget—brought him to the attention of Henry Ford. From 1909 to 1914, Kahn worked on a multistory assembly-line plant for the Model T, and in 1918 Ford asked him to help realize his dream of a factory where all aspects of manufacture took place on one floor under one roof. The result, built over a period of ten years, was the Ford River Rouge complex, Kahn's masterpiece: a 16-million-square-foot powerhouse that was, at the time, the world's largest integrated factory. The structures Kahn devised—completely without exterior ornament—incorporated steel frames, widely spaced interior support columns, windowed walls, and roofs covered in a sawtooth arrangement of louvered windows that provided both light and ventilation. The River Rouge project drew plaudits from Le Corbusier and members of the Bauhaus, who saw the buildings as a perfect manifestation of the modernist call for spaces that were pure in form, flexible in layout, and completely subordinated to function.

Kahn, though, was a sort of accidental modernist. He had no programmatic agenda. His chief attributes as an architect were his organizational skills, an ability to collaborate with engineers and other designers, boundless energy, and a talent for precisely meeting the needs of his clients. But when commissions brought him from factory sites to the office towers of downtown Detroit, Kahn evinced a further gift for designing buildings that projected the public image sought by the corporations that hired him. His 1923 General Motors Building—now called Cadillac Place—is composed of four fifteen-story rectangular volumes connected by a central spine and has an air of solidity, trustworthiness, and permanence. The Fisher Building, completed in 1928 for the more flamboyant auto body makers, is a Moderne masterwork, with strong vertical lines rising in steps to a gilded spire.

All across downtown Detroit in the late 1920s, developers built towers that spoke of the city's self-assurance. Two of the greatest were designed by architect Wirt C. Rowland. The Penobscot Building, finished in 1928, was, at forty-seven stories, the tallest building in Detroit until the rise of the Renaissance Center. An example of a burly sort of early modernism (its design is said to have influenced that of the Empire State Building), the block-wide H-shaped structure soars some thirty stories to a series of setback floors that terminate in a boxy crown. The Guardian Building, built for the Union Trust Company and completed in 1929, is, by contrast, a more elegant and



The Glass Plant, built in 1922, at the Ford River Rouge complex, designed by Albert Kahn.

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Photos: by Wayne Andres, courtesy of GM Corporation © 1978 (left); courtesy of the Walter P. Reuther Library, Wayne State University (right); by Yves Marchand (opposite top); courtesy of Detroit Institute of Arts, Gift of Edsel B. Ford (opposite bottom)

elaborate office tower. Slender in comparison to the Penobscot, the Guardian rises forty floors and is decorated with bands of shimmering tiles, made by the local firm Pewabic Pottery, arrayed in stylized Native American motifs. The chief aesthetic joys of the Guardian Building are its Moderne lobby and former main banking floor: The walls and vaulted ceiling feature a wondrous, rainbow-hued composition of Pewabic and Rookwood tiles, as well as allegorical mosaics and an ornate steel gate that separates the elevator lobby from the bank room.

Such office towers topped out at an inauspicious moment. The Great Depression hit the auto industry hard, and brought the city's architectural boom to a halt. World War II revived Detroit's economy, as manufacturers converted their plants to build military equipment, earning the city the sobriquet "the Arsenal of Democracy." Hundreds of thousands of workers were drawn to the city in search of defense industry jobs. In this, however, the seeds of the city's sociological decline were being sown. Many of the arriving workers—thanks to the Roosevelt Administration's fair-employment acts—were African Americans. In 1943, a three-day race riot broke out, and was quelled only with the help of federal troops. Detroit's population peaked at 1.8 million in 1950, after which the ugly phenomenon of "white flight" to the suburbs—aided by cars and the highways built to accommodate them—began, eventually halving the city's residential population. Most significant, commercial building began to take place outside the city limits in townships north of the city such as Southfield, where a complex reputed to be America's first suburban shopping mall opened in 1954, followed in later years by an array of corporate office parks.

The Great Depression hit the auto industry hard, and brought the city's architectural boom to a halt.

Because of these trends, unlike other American cities, postwar Detroit proper did not see the creation of notable examples of buildings in the "high modernist" (or "International" style). But there are two key exceptions. One, located just east of downtown, is Lafayette Park, a seventy-eight-acre complex of five apartment towers (all fewer than thirty stories in height) surrounding parkland, laid out by Ludwig Mies van der Rohe. Apartment buildings, it should be noted, are an anomaly in Detroit, which was always a city of single-family houses—a reflection of the middle-class prosperity created by the auto industry. Built between 1956 and 1963, Lafayette Park was intended to provide junior executives an alternative to the suburbs. The complex, now listed on the National Register of Historic Places, is a model of modernist theory realized: simple rectangular structures, clad in tinted glass and aluminum, surround a landscaped communal greensward. There is a peaceful air to the site, yet it also feels a bit like Brasília—a strangely separate world.

The other is the General Motors Technical Center, the location of the firm's R&D and design departments and perhaps the most striking, and even glamorous, corporate campus ever built in the modernist style. Built from 1949 to 1955, the center was designed by Eero Saarinen. Though the architect sacrificed nothing to operating efficiency, it is the aesthetic flourishes he brought to the center

CLOCKWISE FROM LEFT:
The 1923 General Motors Building designed by Albert Kahn. The Penobscot Building designed by Wirt C. Rowland, 1928. The lobby of the 1929 Guardian Building, also designed by Rowland, features stunningly-patterned tiles made by Pewabic Pottery and Rookwood. One panel of Diego Rivera's mural, *Detroit Industry* (north wall), painted from 1932–33 for the Detroit Institute of Arts.

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The lobby of the Design Center at the GM Technical Center (top), features a staircase designed by Kevin Roche. An aerial view of the Technical Center designed by Eero Saarinen, 1949–1955. Robert Graham's 1986 sculpture, *Joe Louis's Fist* (below), sited in downtown Detroit.

that make it so memorable. The core of the complex is a rectangular twenty-two-acre man-made lake, dotted with islands, equipped with a fountain whose jetting patterns were choreographed by Alexander Calder, and a glistening metal water tower with a bulb-shaped top that sprouts from the lake to a height of some ten stories. Near one corner of the lake sits a flying-saucer-like auditorium and exhibition space. The short sides of the lake are fronted at one end by the Research & Development Center at one end and the Design Center at the other. Saarinen lavished particular care on the lobbies of these buildings. The R&D Center features a spiral staircase and plywood ceiling panels, steam-bent to produce a circular protrusion. Visitors to the Design Center—where famed GM auto designer Harley Earl's office is preserved as a museum—are greeted at an amusing white teacup-shaped reception desk. Across the floor is a magnificent staircase, designed by Kevin Roche, composed of three-quarter-ton marble treads that are suspended from the ceiling on steel rods.

But Saarinen's most sublime work came in the treatment of the engineering buildings that line one long side of the lake (the other side is landscaped). The architect clad each building in glazed ceramic bricks in a different hue. As a GM document explains: "Saarinen said he wanted the Tech Center to resemble autumn leaves reflecting the late afternoon sun, so he selected brick colors of crimson, orange, yellow, blue, and neutrals of olive, slate and black." In a commission for an industrial behemoth, it is an almost shockingly poetic stroke.

Design in Detroit has conveyed the city's sense of strength and resilience not only in private buildings but also in its public spaces and public art. The raw steel girder columns of lamented old Tiger Stadium had a kind of brutal beauty and served as a perfect frame for the feats of legendary Tigers sluggers like Hank Greenberg and Al Kaline. In 1932, Edsel Ford commissioned Diego Rivera to paint murals for the Detroit Institute of Arts, the centerpieces of which are rich and complex narrative depictions of workers at their machines in the River Rouge plant. More recent years saw the installation, in 1978, of an Isamu Noguchi fountain in the riverfront Hart Plaza. If not Noguchi's finest work, the fountain—composed of a circular form supported by two thick legs—evinces a spirit of indomitability. But the most affecting public artwork in Detroit is a tribute to a son of the city: Joe Louis, the greatest prizefighter in history. Commissioned by Time Inc., sculpted by Robert Graham, and installed in downtown Detroit in 1986, the bronze sculpture, supported by a pyramidal frame, is a twenty-four-foot-long depiction of Louis's right arm in the act of throwing a punch. The statue is a monument to raw power, but also to the ability to fight back—as Louis did in 1938, when, after losing his title to Max Schmeling, he battered the German fighter in a rematch lasting just over two minutes. In today's Detroit, it is such a spirit that the city must summon once again.

—Gregory Cerio

Photos: courtesy of GM Corporation ©1978 (top); photograph by Wayne Andrews, courtesy of GM Corporation ©1978 (middle); courtesy of Detroit Institute of Arts, Founders Society Purchase, with funds from Sports Illustrated (bottom)

A view of the Institute of Science at the Cranbrook Academy of Art.

American Bauhaus

Established by newspaper magnate George G. Booth, the Cranbrook Academy of Art helped to make Detroit the crucible of American modernist design

The ninetieth anniversary of the Bauhaus—the multidisciplinary design school founded in Weimar, Germany, in 1919—is being celebrated this year with an outpouring of retrospective exhibitions and publications more commonly associated with centennials. It will be interesting to see if all the hoopla will also provide a much-needed corrective to the myths and misrepresentations that have surrounded the Bauhaus almost since its inception, during the chaotic aftermath of Germany's defeat in World War I. For despite its having existed for a mere fourteen years, the Bauhaus (its name a neologism based on the German words for "build" and "house") has become synonymous with the modern movement as most people commonly understand the term.

Three decades ago, this name recognition was seized upon by revisionist critics and historians who launched a systematic campaign to turn "Bauhaus" into a pejorative, a development typified by Tom Wolfe's cartoonish 1981 polemic, *From Bauhaus to Our House*. However, during the preceding half-century, applying its name to other schools was considered a high compliment, as when the Cranbrook Academy of Art in Bloomfield Hills, Michigan (established nine years after its German counterpart), began to be described as America's Bauhaus (notwithstanding the short-lived New Bauhaus founded in Chicago in 1937, which eventually merged with the Illinois Institute of Technology).

There were, to be sure, several important parallels between the two institutions. Both were premised on a basic belief in the integration of all aspects of design, a tenet derived directly from the arts and crafts movement. Both fostered a communal ethos that stressed life and art as one and the same. And both developed a set of fundamental principles that gave a unified character to objects produced under their auspices.

Nevertheless, looking back with further perspective on the Bauhaus and Cranbrook considered side by side, one striking difference overshadows all those similarities. The Bauhaus is now most often remembered for its teachers rather than its students. With a faculty that at times included such undisputed twentieth-century masters as the architects Walter Gropius and Ludwig Mies van der Rohe (both served as director of the Bauhaus), the photographer László Moholy-Nagy, the painters Wassily Kandinsky and Paul Klee, and the artist and theatrical designer Oskar Schlemmer (to mention only the best-known instructors), that hotbed of creative innovation seemed guaranteed to produce the art stars of tomorrow.

Photo: © Balthazar Korab/Cranbrook Archives

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FROM LEFT:
The "Life Without Beauty" arch on the Cranbrook campus. Eliel Saarinen surrounded by students on the steps of the Peristyle, May 1941. Charles Eames and Eero Saarinen, January 1941. Jack Lenor Larsen in the weaving studio, 1954.

Photos © Cranbrook Archives

However, a variety of unanticipated factors—the rise of Hitler, the diaspora of European modernists, the cataclysm of World War II, and the disruption or destruction of countless careers just at their outset—prevented aspiring *Bauhäusler* from attaining the renown of their legendary instructors. In contrast, the Cranbrook Academy of Art brings to mind not so much its distinguished though relatively obscure faculty, but rather its students, a veritable who's who of twentieth-century American architecture and design.

The Cranbrook alumni roster shines with a host of stellar figures in their fields: the sculptor and furniture designer Harry Bertoia, the multidisciplinary geniuses Charles and Ray Eames, the furniture and interiors entrepreneur Florence Knoll, the textiles wizard Jack Lenor Larsen, the interior design Benjamin Baldwin, and the architects Ralph Rapson and Eero Saarinen, the urban planner Edmund Bacon, and a pantheon of art potters including Waylande Gregory, Leza McVey, and Toshiko Takaezu, as well as the ceramist-turned-glassmaker Harvey Littleton. It is no overstatement to assert that the applied arts in twentieth-century America would be unthinkable without Cranbrook's immense contribution.

Cranbrook stands apart as a rare heartland exemplar of cultural ferment in a nation where emergent talent has long tended to gravitate toward the two coasts. On the other hand, Cranbrook can also be seen as a latter-day manifestation of the utopian communities that arose in this country during the nineteenth century—the Shakers on the East Coast, New Harmony in Indiana—groups that emanated from a variety of religious and philosophical beliefs. But America was geared to commerce and industrialization, not to spiritual aspirations.

Still many people recognized that the industrial revolution had led to profound changes in the manufacture of goods of every kind. During the nineteenth century, this realization prompted design reform movements that were no less idealistic than contemporary utopian communities. Repelled by ugly and shoddy machine-made objects, reformers urged a return to the beauty and integrity of preindustrial craftsmanship, but had a rude awakening when confronted by economic reality.

In mid-Victorian England, medieval-inspired guilds and workshops hoped to provide affordable alternatives to factory-made junk, but these labor-intensive goods cost just as much to produce as luxury items. American enterprises with similar goals—particularly Roycroft, the design reform cooperative founded by Elbert Hubbard in East Aurora, New York, in 1895—gave new impetus to the arts and crafts movement in the United States, even as it faded in Britain and continental Europe. But by the time World War I rocked European civilization to its foundations, the idealism of such groups seemed to many a thing of the past. So whatever their disparities, the Bauhaus and Cranbrook seem especially heroic in their emergence in the aftermath of that cataclysm.

No industrial innovation affected the United States more than the automobile, which during the first two decades of the twentieth century transformed the nation in general and the nascent car capital of Detroit in particular. The Detroit newspaper magnate George G. Booth, a Canadian-born Anglophile who became passionately attached to Michigan, was an ardent proponent of the arts and crafts philosophy, and his vision for a world-class design school that would be both high-minded and pragmatic reflected that time and place to perfection. So did the house he built for himself and his wife in the Detroit suburb then called Bloomfield Township.

Completed in 1908, the arts and crafts style Booth mansion was designed by Albert Kahn, the architect best known for his mega-scale industrial structures. That crossover between the aesthetic and the functional now seems prophetic of George Booth's ensuing sponsorship of an enterprise that would surpass the Bauhaus in implementing a new alliance of art and industry.

In 1922, the *Chicago Tribune* held a much-publicized competition for the design of its new headquarters in the Loop. The coveted commission was given to Raymond Hood and John Mead Howells, but the proposal most widely praised was that of the contest's runner-up, the Finnish architect Eliel Saarinen. The lucky loser was so lionized that he relocated to the United States when he was offered a professorship at the University of Michigan. Among his pupils was Henry Booth, son of the newspaper owner. Through that connection, Saarinen began discussions with the publisher, and before long plans for the Cranbrook Academy began to take shape.

Booth offered Saarinen an opportunity staggering in its creative potential. The architect was asked not only to design the entire campus for the new institution but also to devise its curriculum, a dream like combination of practical and philosophical authority. Although Saarinen continued his private practice, after he moved to Bloomfield Hills in 1925, his role as president of the Cranbrook Academy (which in addition to the art school also comprised primary and secondary schools) turned out to be a godsend when the Great Depression left many other architects in desperate straits.

During the quarter century from 1925 until Saarinen's death in 1950, Cranbrook's architecture and the designs produced there bore the strong imprint of the architect's roots in National Romanticism, Finland's distinctively folkloric version of the arts and crafts movement. Few other American architectural ensembles rival Cranbrook in its comprehensive consistency and the almost obsessive attention lavished on every imaginable detail. That tour de force understandably dazzles most people, but I must confess that much of Saarinen's micro-designed masterpiece strikes me as claustrophobic and bourgeois, qualities that make Cranbrook's later redirection into high modernism seem all the more remarkable.

Eliel Saarinen's astoundingly precocious son, Eero, was schooled at Cranbrook and formally joined his father's office in 1936 at the age of twenty-six. However, he'd been designing elements of his father's projects since he was at least fourteen, and exerted more and more influence on their joint designs as the years passed. Looking at the Saarinen firm's output, one can see a gradual paring down of forms and progressive omission of decorative flourishes that finally led to a style much like that of the Bauhaus by the time Eliel died in 1950.

The legendary directors of the Bauhaus had reestablished themselves in America—Gropius at the Harvard Graduate School of Design and Mies van der Rohe at the Illinois Institute of Technology—but in a sense they were playing catch-up in contrast to the uninterrupted growth and constantly evolving aesthetic of Cranbrook. Eero Saarinen's General Motors Technical Center of 1949-1956 in Warren, Michigan, which was furnished with pieces manufactured by another postwar Michigan bastion of high-style design—the Herman Miller Company—might be seen as the apogee of Booth's vision for his home state as a new national center for the best in American design.

Now, at a time when leaders are searching for new strategies to revive the manufacturing base of our once thriving industrial heartland, it would be wise to reconsider the high place Michigan commanded just half a century ago in the international design world. It might do so once again, and an instructive template for how that might be accomplished still exists at the dream factory George Booth and Eliel Saarinen conjured up just a few miles outside of Detroit. ***—Martin Filler***

Martin Filler is a regular contributor to *The New York Review of Books* and *The Magazine* ANTIQUES.