

# Making Modern Homes in Mid-Century Ann Arbor

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**“The line of beauty is the line of perfect economy”**

—Ralph Waldo Emerson

Writing in 1916, American architect Harrie T. Lindeberg lauded the “widespread revival of interest in home making in America,” which was “all the result of people thinking about their homes, wanting them absolutely suited to their lives, insisting upon being comfortable.”<sup>1</sup> Lindeberg, designing for a primarily upper-class clientele and writing at a moment where American domestic architecture featured an eclectic mix of Beaux Arts, vernacular, and colonial syntaxes, recognized the dawning of a new spirit in residential design: “...we are putting into our architecture, the free, wholesome, enlightened spirit that should belong to a free, wholesome, enlightened democracy.”<sup>2</sup> The desire to craft homes that represented the modern zeitgeist, progress, and new social norms, would only intensify as the century unfolded.

## Mid-Century Design in Michigan

Lindeberg’s rosy outlook aside, the early twentieth century was a period of both stagnation and exploration in architecture. The tendrils of nineteenth century design wound their way into the first few decades alongside the emergent modern influences of the European avant-garde. Overlaid onto debates regarding

style and aesthetics, these years also saw a seismic shift in manufacturing processes that promised a new and brighter future. In Michigan, the early 1900s launched the automotive industry in Detroit and an expanding industrial sector which, in the decades ahead, would spawn countless experiments in innovative materials, construction techniques, and a growing interest in science-supported, human-centered design, as well as an unprecedented human mobility. The mid-century, following pioneering pivots to the war efforts, would see the fruits of these labors realized most intensely.

The term “mid-century modernism,” coined by Cara Greenberg in 1984, applies to design created from 1940 to 1970 in the United States.<sup>3</sup> Building on the entrepreneurial foundations of the automotive industry, with its emphasis on efficiency and material economy, and also exploring civilian applications of the radical innovations in building science advancements gained during the World War II, Michigan designers in this period offered revolutionary new visions for modern life that resonated at all scales of design, particularly in residential architecture. Steel frames, large areas of glass, and open, flowing floorplans are hallmarks of these houses. And, unlike

previous generations where an architect-designed home was a privilege available to a rarefied few, the mid-century home was, by design and intention, more modest and financially accessible to a broader audience. The challenge was in how to make the home functional and affordable for modern life.

## Mid-Century Design in Ann Arbor

Ann Arbor, the home of the University of Michigan (UM) and within fifty miles of the Cranbrook Academy of Art (CAA), is notable for its concentration of compelling, mid-century homes. Why is this the case? The answer is multifold and includes, of course, the larger Michigan-wide story of entrepreneurship and invention that has been mythologized around the Motor City. To be more precise, the city of Ann Arbor became a testing ground for domestic design because of its proximity to academic design incubators, especially UM and CAA. These schools, places of innovation and dissemination, were also important in terms of patronage. This patronage came from an enlightened, middle-class clientele—faculty, local business leaders, and entrepreneurs—looking for a progressive architecture to shape and support modern ways of living. In some cases, as seen in several of the projects featured in this issue, the architects were their own clients, which allowed for an increased freedom to create and experiment.

In addition, mid-century Ann Arbor was fertile ground for creative housing projects due to its booming population. Between April 1940 and April 1950, Ann Arbor’s population increased from 29,815 to 47,279 inhabitants, an increase of 58.6%. In fact, Washtenaw County grew by an astonishing 64.6% in this decade.<sup>4</sup> The housing need was great and, with tracts of affordable land available, the conditions were ripe for residential construction and innovation. The city was now firmly “mid-sized”<sup>5</sup> and, with the richness of cultural and educational offerings provided by UM and the mix of light industry and retail, Ann Arbor

presented an ideal location for families to settle and participate fully in modern life.

Creativity and demand fueled the “Ann Arbor School” housing boom and the city’s unique topography contributed in compelling ways to the massing and orientation of these mid-century designs. While the earlier residential quarters in the city were allocated to flatter parcels where traditional, compact, and orthogonal house forms were easily built, the population increase after WWII necessitated that further expansion engage with the hills and ridges that are characteristic of the steeper terrain along the Huron River.<sup>6</sup> With the new mid-century attitude embracing a contextual specificity that rejected “pure form,” it follows that the architects would adjust to and celebrate the opportunities of the rolling landscape through strategic asymmetries and facades that opened or closed themselves to their natural surroundings in unique ways. Formal orientation thus gave way to more casual placements with some homes embedded into the hills to maximize the potential of the sloping grades for multiple levels of egress. The plats on the east side of the city were often challenging and called on the architects to practice the experimental approaches being expounded and explored in the classroom.

## From Classroom to Practice

How were CAA and UM so influential? Again, the answer has many facets but, at its core, the key is the confluence of ideas and a shared spirit bent on discovery. The UM’s architecture program was established in 1906 with the hiring of architect Emil Lorch who would serve as the department’s chair and dean until 1937. While working at the Art Institute of Chicago at the end of the nineteenth century, Lorch had developed a close association with the Prairie School architects. Their search for a new form of architectural education that would allow students more freedom of invention influenced Lorch to institute a new and innovative



#### BREUER HOUSE II, NEW CANAAN, CONNECTICUT

Photo by Paul Warchol, © Paul Warchol Photography. Cropped from original.

architecture education program based on the “Theory of Pure Design,”<sup>7</sup> renouncing the traditional Beaux Arts model that emulated historical styles. From these beginnings, the individual faculty hires in the subsequent decades would prove critical to the development of Michigan as a design powerhouse.

In 1923, Lorch invited Finnish architect Eliel Saarinen to teach at UM. Saarinen had attracted acclaim for his modernist Chicago Tribune Tower design and promised a novel pedagogical approach. A fortuitous meeting of Saarinen and Cranbrook founder George Gough Booth resulted in Saarinen’s subsequent engagement as Cranbrook’s resident architect where he designed much of the campus. His leadership of the CAA attracted many of midcentury modernism’s finest designers including Harry Bertoia, Charles and Ray Eames, Florence Schust Knoll, and Ralph Rapson.

Lorch’s emphasis on creative exploration was furthered by the UM program’s second chair, Wells Ira Bennett, who established an architectural research laboratory, modeled on the trial-and-error, iterative processes of scientific inquiry, and launched a decade-long series of Ann Arbor Conferences attended by such luminaries as Ludwig Mies van der Rohe, Walter Gropius, László Moholy-Nagy, and Albert Kahn. The first Ann Arbor Conference, held in 1940, “Coordination in Design with Regard to Education in Architecture and Allied Design,”<sup>8</sup> was organized by Bennett and his colleagues Joseph Hudnut, dean of Harvard’s Graduate School of Design, and Walter Baermann, Director of the California Graduate School of Design at Caltech.

The Michigan-Harvard-Caltech connections are critical components that fostered mid-century residential design in Ann Arbor. At Harvard, European architects including the Bauhaus’



#### LOVELL HOUSE, LOS ANGELES, CALIFORNIA

"Lovell House (Health House)", by Los Angeles available at Wikimedia Commons ([https://commons.wikimedia.org/wiki/File:Lovell\\_House,\\_Los\\_Angeles,\\_California.JPG](https://commons.wikimedia.org/wiki/File:Lovell_House,_Los_Angeles,_California.JPG)), licensed under CC BY-SA 3.0 (<https://creativecommons.org/licenses/by-sa/3.0/deed.en>)

Walter Gropius, who served as chair of Harvard’s Department of Architecture from 1937 to 1952, and Josep Luis Sert, the last president of CIAM (International Congresses of Modern Architecture) and dean of the Harvard University Graduate School of Design (GSD) from 1953 to 1969, were pivotal figures in disseminating modern design theories. In the 1940s, the “Harvard 5,” which included GSD faculty member Marcel Breuer and students John M. Johansen, Landis Gores, Philip Johnson, and Eliot Noyes, used New Canaan, Connecticut, as their canvas for a modern housing experiment between 1939 and 1978.<sup>9</sup> With loose zoning regulations and large parcels of affordable land, each of the five men and their inspired colleagues were able to reimagine the post-war American home.<sup>10</sup>

In the person of George Brigham, the Caltech link was to prove even more

important for Ann Arbor. Though he was trained in the Beaux Arts tradition at MIT, Brigham embraced modern design sensibilities while serving on the faculty at Caltech and experiencing modern homes firsthand, including Richard Neutra’s Lovell House (1929). Brigham moved to Ann Arbor in 1930 to join the UM architecture faculty and would go on to build and collaborate on more than three dozen modern homes in the area. It was in Ann Arbor that Brigham permanently left behind the eclectic styles of his earlier practice and embraced the tenets of modern architecture. As an educator at UM, Brigham’s research and practice would prove hugely influential. His courses were consistently experimental in approach; he championed student prototyping through hands-on clinics and the school’s exploratory design/research laboratory, the first of its kind in the country. Supported by government grants



and private contracts, Brigham tested and developed several prefabricated building systems, including “The Brigham Building System” for an insulated, prefabricated wall panel in 1943 and, later in the decade, a partnership with the Unistrut company. (UM faculty member Theodore Larson would eventually use the Unistrut system in the construction of his own home, discussed in this issue.) At the 1945 Ann Arbor Conference, Brigham presented his research in a talk entitled “Prefabrication.”<sup>11</sup> Included among the students Brigham taught and mentored was Robert Metcalf, who went on to serve as dean of UM’s architecture school in the 1960s. According to Metcalf, “every [Brigham] house was an experiment.”<sup>12</sup> (Homes by Brigham and Metcalf are also discussed in this issue.)

The California influence is also found in the humanistic, modern design ideas of Charles Eames who participated in the 1948 Ann Arbor Conference and who, as an instructor in industrial design at CAA collaborated extensively with Eero Saarinen.<sup>13</sup> Working with Saarinen on a 1945 design for a “house for modern living,” Charles and his wife, Ray, would ultimately build Case Study House #8 in 1949 in Pacific Palisades, California, as a part of John Entenza’s Case Study House Program. In the program announcement published in *Arts & Architecture Magazine* in January 1945, Entenza challenged each selected architect to create a home “capable of duplication.” Repeatability and standardization were promoted, as were quality materials, practicality, and affordability:

“It is important that the best materials available be used in the best possible way in order to arrive at a good solution of each problem, which in the overall program will be general enough to be of practical assistance to the average American in search of a home in which he can afford to live in.”<sup>14</sup>

Another prolific architect who participated in Ann Arbor’s mid-century residential building boom was Alden B. Dow, a son of Herbert Henry Dow, the

founder of the Dow Chemical Company. A Michigan native from Midland, Dow pursued his design training at Columbia University before becoming a charter member of Frank Lloyd Wright’s Taliesin Fellowship. Innovative with materials and design, Dow created his own signature style of organic architecture which included the testing of novel industrial products. In addition to Dow’s patented “Unit Block” Building System, these new materials included plastics and resins engineered by his family’s chemical company. Testing and prototyping were key ingredients of Dow’s process: “If a great development is to come in architecture, it is going to be concerned basically with new ideas, ideas that will stimulate the growth of the individual.”<sup>15</sup> The mix of synthesis and originality is seen in many of the “Ann Arbor School” homes, as the architects assessed materials and absorbed myriad influences.

East coast modernism exemplified in the work of the “Harvard 5” was brought to Ann Arbor most directly in the work of William Muschenheim, an influential instructor at UM who was an original member of CIAM’s American Chapter and a founding editor of *PLUS: Orientations of Contemporary Architecture*.<sup>16</sup>

“His is not an architecture for the timid. Muschenheim’s home displays his taste for raw, exposed materials. Concrete block, for example, forms the foundation—painted but clearly visible, both outside and in. Much of the exterior features gray concrete-and-asbestos sheeting.”

“Each material has its possibilities,” he [Muschenheim] says. “It depends on the location and what’s the most effective use.”<sup>17</sup>

After training at MIT and with Peter Behrens in Vienna, William Muschenheim practiced on the east coast before coming to teach at the UM in 1950. He built his family home a few years later, in 1954. (The house is discussed in this issue.) The steel structure with its open bays, allowing for flexible interior partitions, expresses its materials honestly with no intent to conceal.



**CASE STUDY HOUSE #8, PACIFIC PALISADES, CALIFORNIA**

“Eames House”, by Gunnar Klack, available at Wikimedia Commons (<https://commons.wikimedia.org/wiki/File:Eames-House-Case-Study-House-No-8-Pacific-Palisades-California-04-2014d.jpg>), licensed under CC BY-SA 4.0 (<https://creativecommons.org/licenses/by-sa/4.0/deed.en>)

The welcoming carport speaks to an interest in the automobile and expresses a machine aesthetic. A large wall of windows opens onto the garden and the resulting light-filled floor plan supports modern family living with generous, open spaces.

Though the Muschenheim House is closer to the pure modernist end of the spectrum, the homes featured in this issue exhibit some common characteristics while expressing the individual intentions of the designer. The shared traits include an interest in modularity and prefabrication (“kit of parts”), long open spans (often achieved through a steel structure), exposed natural materials including wood and aluminum, clean lines, expansive glazing systems, and, critically, affordability. The new homes also accommodated the automobile and, by inference, a new

human mobility. In all cases, as expressed in the Lindeberg quote above, the home needed to work and be suited to the lives of the owners. Lindeberg added:

“...all architecture that matters must rise or fall by the spirit that fashions it.”<sup>18</sup>

Through the Ann Arbor Conferences and the other exploratory initiatives sponsored by UM and CAA, the sharing of ideas from local and international sources was made possible and, as is seen in the astonishing collection of mid-century residences, richly informed the homes built in and around Ann Arbor. The Case Study House Program in California, the works of the “The Harvard 5” in New Canaan, Connecticut, and the “Ann Arbor School” in Michigan each present different riffs on how architects could contribute to resolving postwar housing

issues using modern approaches. The Michigan-based architects involved in these projects shared techniques and strategies at the Conferences, through office mentoring, and in the outlets of national professional publications like *Arts & Architecture* magazine.

There was a collective energy around the problem of postwar housing that caught the imagination and creativity of this generation of architects. The mid-century homes presented in this issue bring together threads of various influences—the rigid purity of the International Style coming from the east coast, the humanistic modernism and spirit of experimentation of Cranbrook, the spatial fluidity and organic materiality of the

Prairie Style, and the warm tones and clear lines of California modernism with its commitment to site specificity. Most importantly, these designs are dedicated to a new way of living. Moving away from an interest in pure form, the homes embrace the unique terrain of the Huron River Valley and exhibit “the modern materials, new social realities, and new technologies of the Modern age.”<sup>19</sup> As homeowner Mrs. H.R. Crane shared about her home, “We’d been looking for a *warm-feeling, modern-acting* house for 10 years...” and their 1954 Robert Metcalf home, with its separate spaces for children, work, and play, delivered on the promise of a spacious, family home.<sup>20</sup> ■

## NOTES

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