MID-CENTURY COMMERCIAL MODERNISM: DESIGN AND MATERIALS

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Abstract

During the mid-20th century unparalleled and dramatic changes in the design of commercial buildings transpired across the United States. Much of the current analysis and attention given to recent past resources has focused on larger scale high-rise buildings, high-style single family examples or signature architect designed institutional buildings. Often, however, it was the more humble mid-20th century bank, clothing shop, cinema or automobile dealership that was the first architectural expeditor of modernism to reach a town or city. Advances in materials manufacturing, product design and marketing all had a decisive impact on the mid-century commercial setting.

Many of these modern commercial designs were created by some of the more talented architects and designers practicing across the country, many of whom wrote publications on store design that widely influenced commercial construction. Meanwhile, the companies that produced many modern materials, such as glass and aluminum, also heavily promoted commercial building renovations. Glass brochures showing sophisticated shopfronts coerced store owners into updating their stores in order to match the newest styles of goods and fashion.

Newly constructed, Exaggerated Modern massing and experimental structures captured the interest of the modern consumer. Savings and loans displayed folded plate roofs, while restaurants contrasted rustic wood with large areas of glazing. Owners of older downtown buildings covered unused upper story windows with porcelain enamel, gold-anodized aluminum, Vitrolux glass or plastic slipcovered facades. Channel-set and reverse-set neon, internally illuminated backlit signs and cusive or sans serif stainless steel letters all broadcast a new modernity to a fast-moving, auto-driving public.

Asymmetrical and angled storefronts reduced glare while their diagonal plans drew the shopper into the store. Picture-framed, cantilevered, projecting or inset display cases were crafted out of tempered glass and extruded aluminum framing. Tempered glass storefronts turned store interiors into a new form of window display. Vertically stacked textured brick, tile or structural glass contrasted with sleek white or gold metals. Glassy store-fronts spilled new lighting methods onto busy sidewalks for evening shoppers. The results were striking, celebrating up-to-date looks worthy of an optimistic post-war age. In short, main street became modern.

This paper addresses smaller scale commercial and downtown resources such as specialty shops, restaurants and banks. A discussion of these resources within their mid-century design and commercial context will be augmented by analysis and illustration of their commonly used modern materials and design vocabulary.

Mid-Century Commercial Modernism: Design and Materials

In the mid-20th century, countless owners of shops, banks, restaurants and other commercial businesses built new buildings or were inspired to update and modernize their existing ones. At the same time, whole new categories of mid-century building types and automobile-oriented businesses multiplied, including gas stations, car dealerships, drive-in banks, fast-food restaurants, shopping plazas and shopping centers. Often, these buildings were the first architectural expression of modernism to reach a community. These new and modern, or newly modernized commercial buildings fully utilized a variety of new materials in their quest for an up-to-date image.

New materials fostering new design is not an unknown phenomenon for commercial buildings. In the mid-19th century, architectural cast iron columns and lintels replaced husker storefronts of brick and stone, allowing for larger plate glass display windows. Near the end of the 19th century, the introduction of the steel beam allowed for full storefront expanses of glazing to replace the 8-foot spacing of cast iron columns, increasing the front display area and allowing more daylight inside the store. Also at the end of the 19th Century, prism glass transoms above store doors came into use and bounced light a reputed 30 feet inside the building. Now the need for front store windows was reduced, and commercial buildings with prism glass transoms could...
have shorter floor-to-ceiling heights. In the 1930s, commercial buildings benefited from new pre-fabricated storefront systems that incorporated plate glass windows with structural glass or porcelain enamel panels, mounted within extruded aluminum or stainless steel framing in strikingly modern designs. Business owners, attuned to new styles and trends, recognized new materials as a means of proclaiming their modernity. Storefronts reflected updated styles, while banks displayed modern efficiency. Commercial business owners were encouraged in their quest for modernity by construction product marketing, professional journals and even the federal government. New Deal programs aimed at strengthening commerce during the Great Depression led to the Libbey-Owens-Ford Company (LOF) sponsoring the “Modernize Main Street” competition in 1935. This competition, and resultant publication, showcased elegant modern facades utilizing Vitrolite, LOF’s colorful opaque structural glass. Competition entries combined intense structural and plate glass with white metals into two-dimensional Art Moderne and Art Deco parts. Most designs were colorful, planar and glossy. However, some merchandise display boxes and stainless steel or aluminum projecting canopies hinted at the three-dimensional revolution that was to become common in the next decades.

To try to combat the competing effect of the depression, architectural journals, as well as glass, aluminum and steel storefront advertising, aggressively promoted designs similar to the Modernize Main Street design competition. Structural glass was praised not only as a glamorous, sleek and colorful new material, but also because it could be easily fastened with mastic to both new construction and existing masonry walls. Porcelain steel manufacturers also published examples of similar re-cladings utilizing colorful modular porcelain enamelled panels. Even less durable laminated veneer panels such as the Formica Insulation Company’s were promoted as solutions to updating facades in the 1930s. The marketing combined with federal incentives was effective; a surprising number of storefronts, theaters and gas stations were re-clad. However, by the end of the 1930s, US commercial design began to move beyond two-dimensional Modernist designs to a new aesthetic.

During the Second World War, the architectural journal New Pencil Points published another competition, entitled “Store Fronts of Tomorrow,” while the Modernist customization of production that benefited construction. At the end of the war, as a post-war economy burst into action, modern commercial designs utilizing new materials filled architectural journals, design books and product advertising. Dramatic commercial building designs by signature designers such as Raymond Loewy, Maris Lapidus, Victor Gruen and Mott Ketchum Jr., were widely published and promoted to architects and building owners.

Another influential publication came out immediately after the war. Machines for Selling was published by the storefront company Kawneer in 1946. The publication explained how in the 20th century, a “new generation of
store designers" was incorporating new machine-age research into commercial building design. These designers gained insight by talking to business owners and observing consumer preferences. "They studied materials and construction—worked with cabinet workers, store-front manufacturers....They found that success depended on machine-like coordination of every working part of a store....From service to service alley, stores should be "Machines for Selling." The machine-age aesthetic of modernism was coming to main street.

The result of the competitions, advertisements, new technology, post-war material availability and a vibrant growing economy was that the front facades of commercial buildings moved from stream-lined Moderne to exciting new designs. The commercial facade was no longer two-dimensional; rather, it combined an open glazed front with dynamic three-dimensional features to create a deconstructed front facade. With steel lintels now easily spanning across an entire facade, transparent "open" fronts replaced earlier opaque-backed display windows, and the well-lit store, theater lobby or restaurant seating area itself became the display. Perfectly fat and clear plate glass, now easily produced and transported in sheets as large as 10 by 25 feet, allowed direct visual connection between the building interior and the sidewalk. The terms "open front" and "vertical front" were utilized by glass and storefront manufacturing companies to describe this dramatic new look.

Large windows allowing a view inside the business now appeared in a variety of commercial structures, including theaters, gas stations, restaurants and shops. Many of the most evocative new designs were found in retail because of the emphasis on consumer tastes and current styles. Furthermore, new mid-century retail methods directly linked consumers and products. Customers no longer waited at a counter for a clerk to bring them an item; they could browse through the shop to look at items, and the shop was designed to draw them in. Glass facades were entered through entry doors of heat-toughened tempered glass, completely clear with only minimal hinges and stylish handles. Butted-glass door corners and slim metal framework further opened the facades. After World War II, anodized aluminum in transparent or colored shades of champagne and gold joined the earlier clear-coat and mill-finished aluminum framing. Interiors were originally light with affordable fluorescent lighting to further show the interior business to the passersby.

Post-war designers further experimented with the front plane of commercial buildings beyond the open front. Another design component that occurred parallel with, and often as part of, open front design was the asymmetrical angled front. Glass front walls were dramatically angled—either pitched inward from top to bottom to reduce glare, or angled back on a horizontal plane towards the entrance in plan. Simple asymmetrical open fronts, angled back in plan towards a tempered glass door, were repeated widely all across the country. Some walls curved instead of angled, but still led the custom-ers into the store. Facades were nearly always asymmetrical. The symmetrical plans of recessed, arched, exterior lobby fronts of the 1920s reappeared, but by now had become strongly asymmetrical. Angles were everywhere. Stone pylons walls projected out at jaunty angles from front facades. Large angular signage or angled rooftops appear and reinforce the dynamics.

Not all modern storefronts were completely open. Dramatic post-war designs showed front facades further deconstructed into three dimensions. Picture box display cases were embedded into solid side walls that flanked an open front or projected proudly from glazed or solid planes. Some glazed front windows were etched with heavier fumed aluminum trim, turning the front into a picture frame for interior displays. Freestanding "table" display cases, or projecting display boxes, appeared outside within asymmetrical exterior lobbies. Further deconstructing the front plane, steel or aluminum cano-pies jutted out horizontally, or sliced at an angle through the glass front wall.

As the 1950s and 1960s moved forward, more evidence of modernism appeared in commercial buildings. Buildings were clad in steel or aluminum curtain wall systems, combining plate glass with colored sandwich glass or porcelain enamel panels. The use of porcelain enamel continued throughout the 1950s in curtain walls and facade recladdings, but it now included stamped patterns or rougher textures.

Sleek international style buildings utilized both metal storefront and curtain wall systems on main steel. One noteworthy example was the highly publicized 1953
Manufactures Hanover Trust Branch Bank in New York City. Designed by Skidmore, Owings and Merrill, the bank was nationally influential in bank design.38 This building incorporated immense 10-by-24 foot plate glass vertical sheets in its curtain wall design. Following the concept of the open front, the bank showcased its modern efficiency by placing the Henry Dreyfuss newly designed bank vault door right behind the “storefront” window of the glass.39 This type of symbolic proclamation of a bank’s functional modernity to attract progressive-minded customers was taken up by other bank designers of the period such as the University Bank of Carbondale in Illinois.40

In the post-war period, curtain wall systems combined with other materials into boxy, basic designs found their way to downtowns across the country. Many of these designs incorporated rectilinear blocks of brick or stone faced together with curtain-walled entrance lobbies or partially glazed facades. The University Bank of Carbondale, discussed above, is just one example.

Other mid-century commercial buildings utilized progressive new structural forms by the 1960s. Some buildings might be simple masonry or curtain wall boxes but dramatically topped with experimental roof forms, such as metal faced plates, or thin-shelled concrete vaults. In other examples the unusual structure became more integral to the entire design. Theaters, restaurants, savings and loans and bowling alleys were among the common representatives of this style. Dramatic pylons, soaring rooflines and expressive structural and sculptural massing all contributed to a style called “Ultra-Modern” at the time, or defined by Chester Liebs in Main Street to Miracle Mile as “Exaggerated Modern.” These buildings sometimes combined atomic and space-age imagery in signs, pylons and structure.

Figure 10: A vigorous public campaign saved the St. Louis Soucer from demolition. The fully renovated building now hosts a coffee shop and restaurant. It was originally built as a Phillips 66 gas station in 1948. Left photo by David Carson dcarsen@post-dispatch.com. Right photo from: http://blogs.rivertonetimes.com/guildHECK/11/phil66grande50.jpg

Structural Expressionism, Neo-Formalism and Brutalism all brought concrete to main street. Brutalist concrete structures appeared primarily in the 1960s and their brash qualities were more often accepted for large or institutional buildings like parking structures, hotels, banks or service offices than for retail buildings. Formwork was often designed to create rough textures deliberately left on the concrete surface. Some smaller scale Brutalist style buildings were brick but had similar blocky massing and geometric cutouts. More refined examples of concrete included Neo-Formalist banks or offices lined with smooth precast concrete columns in the style of Mies van der Rohe or Edward Durrell Stone in the 1960s to 1980s.40 Concrete screen block panels also faced more elegant commercial outcings as well.

Beginning in the 1960s, changing downtown economics created vacant or underutilized upper floors. New upper floor windows could be covered, and whole facades could be “slipcovered” with glass curtain walls, porcelain enamel panels or aluminum spandrels during modernizations. When daylight was still desirable on upper floors, open weave metal, usually lightweight aluminum, or plastic grills could be used.

Installing these metal or rigid synthetic material grills or opaque panels over the upper floors not only created a new modern image but also a backdrop for giant signage, clearly legible to a driving public. Often, earlier canopies or window hoods were sheared off to simplify the installation. Some of these building enclosures were elegantly designed and representative of an important time in commercial history. When they still exist today as part of an overall facade design, complete with a contemporary modern shopfront below, they deserve serious evaluation by preservationists.41

Not all mid-century commercial building materials were new in the mid-20th century. Older materials were retooled to create newer modern effects. Starting in the

Figure 9: Left, Block & Kuh’s “California style” remodeling by Raymond Lawer Associates in Danville, Illinois. From the National Magazine of the Home Furnishings, August 1948, 43. Right, the Kantakee Title and Trust in Kantakee, IL, also combines wood, stone and asymmetry in its elegant facade. Photo: IHBA archives.

Figure 12: For additional photographs and information about mid-century modern storefront components and materials, along with examples of design solutions, (such as the design for Moxie in Springfield, Illinois, by IHBA designer Anna Margaret Rams, shown right), go to: How to work with Storefronts of the Mid-Twentieth Century: A Mid-Twentieth Century Storefronts Components Guide by Carol J. Dysom, posted on the Illinois Historic Preservation Agency’s website: www.illinois.gov/hpo/Preserve/mid-century/Documents/modern-storefront-ghostory.pdf
Endnotes


2 Mike Jackson’s “Streetfronts of Tomorrow” paper, a thorough history of American Streetfront Design from 1940 to 1970, shows the importance of the mid-century style. Jackson demonstrates that the popularity of new materials and design trends in the 1950s and 1960s led to a decline in traditional materials and design elements. This decline is reflected in the decline of traditional storefronts and the adoption of new materials and design trends, such as glass, aluminum, and plastic, in the 1950s and 1960s.

3 The storefronts of the post-war era were characterized by a focus on function and efficiency, with a focus on cost savings and rapid construction. The use of glass and aluminum in storefronts allowed for easier and more rapid construction, while the use of mass-produced materials reduced costs. This focus on efficiency and cost savings led to a decline in traditional materials and design elements, such as brick and stone, which were more expensive to use and required more labor-intensive construction methods.

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LOW, LIGHT AND LIVABLE: FROM MODERN TO RANCH IN ARKANSAS 1945-1970

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Abstract
This paper examines the advent of mid-century modernism and how it resulted in the Ranch/Ranch form in Arkansas during the period from 1945 to 1970. It outlines the convergence of modernism and the popular Ranch form by examining the bioclimatic, social, cultural and economic factors that contributed to significant transformations in domestic architecture. The context looks at the historical and national architectural foundations of mid-century styles and sociopolitical realities such as the Progressive movement. For the widespread acceptance of a dramatically altered house form, I use a mix of biog, government documents and mid-century newspaper and magazine articles and advertisements to analyze the human forces behind Modernism and the Ranch, in particular. I follow the contributions of women to the design of the mid-century home through gradual changes in family dynamics and popular culture. Evidence of the impact of women on the house form is gathered from their participation in movements like Better Homes, Inc., Women’s Congress and Congress on Better Living. Such movements threw light on the fact that women were influential in house design without actually drawing up plans or being given credit until the 1950s. The solicitation of ideas from the sector of society who spent the most time in the home was key to groundbreaking mid-century architectural and neighborhood planning transformations.

Compatible Styles
The home is where the heart is—and the rumpus room, the carport for the Pontiac Stolpo Streak, the garden court, the work center and the maigril bath. Amenities like these marked a mid-century transition in residential design, family dynamics and neighborhood planning. Mid-Century Homes were more than just a Malibu reflesh of the tried and true; they were the telltale statement of the post-World War II family.

The metamorphosis from Modern and Ranch-type homes from Craftsman Bungalows (disregard bungalow capitalization) or Revival styles was groundbreaking. Beginning with the Modernist movement, the style dramatically impacted architecture from the period just before World War I and up to three decades after World War II. Several factors influenced the increasing use of modern as a residential style by the mid-1940s. Women entering the workforce, the rising standards of householders with fewer children changed the family structure. Other developments such as wartime shortages of building materials (which subsequently led to the invention of innovative construction materials), new building techniques, open interior arrangements and popular culture added to the growing acceptance of Modern homes.

Ranch architecture was established as the home of choice in 1950s subdivisions as suburbanization became more frequent for young families. Modern and Ranch co-existed but large-scale developers could see that the Ranch form lent itself more readily to prefabrication and quick construction in large numbers. Government agencies were hesitant to finance Modern houses in the beginning because they were outside the norm. As a result, the Ranch became a prevalent style that was reproduced in many sizes and forms in subdivisions across the state of Arkansas for decades. The Ranch shared architectural characteristics as well as the attitude of Modern architecture and should not be evaluated from that style as it quickly overshadowed it. (disregard)

Progressive Space
Precedence for the minimalistic trends of mid-century Modern and Ranch surfaced at the close of the 19th century. The fussiness of the Victorian era was abandoned for simplicity and balance in interior and exterior treatments of homes. Central to this was the comfort of the middle-class family. Previously, the familiar domestic unit adhered to prescribed behavior. The stay-at-home mother under the authority of a hands-off father would serve as supervisor of the children and the house. By 1910, technology and economic growth allowed for a shift in women’s roles. Women were exploring new life purposes outside the home. This trend led to the popularity of straightforward architecture with less furniture, few decorative treatments and reduced maintenance.

Fresh interior arrangements deleted warrens of rooms with traditional uses and opened the house by eliminating walls. This was progressive space that could be enjoyed by every member of the family without worrying about brick-a-brac and solid furniture. Simplification of
PROCEEDINGS OF THE
MID-CENTURY
MODERN
STRUCTURES:
MATERIALS AND PRESERVATION SYMPOSIUM
NATIONAL PARK SERVICE CENTENNIAL SYMPOSIUM SERIES
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