

The Odd-Job Alleyway of Building: Modernization, Marketing, and Architectural Practice in the 1930s

This article examines the emergence of “modernization”—the remodeling of existing buildings—as a significant part of architectural practice in the United States in the 1930s. It shows how the Great Depression spurred interest in modernization among architects and building material manufacturers. It reveals how architects reconsidered the scale, scope, and substance of professional practice. It investigates how manufacturers developed products and construction methods specifically for modernization, and it analyzes their strategies for promoting these products to architects and architectural clients. The article argues that modernization embodied a nexus of social, economic, and technological factors that transformed the interaction of architects, manufacturers, and clients, as well as the buildings they produced. It further contends that this transformation had important consequences, bringing about a reevaluation of the nature and definition of architecture and a questioning of the relationship between architecture and the marketplace—issues that are still being debated today.

In an advertisement in *Architectural Forum* in June 1935, the Republic Steel Corporation proclaimed that it offered “a real service to architects” by providing a range of building products described as versatile, practical, economical, and attractive. (Figure 1.) Among the materials mentioned were several relatively new products that gave color and sheen to the decade’s characteristic modern architecture, including Enduro stainless steel, Toncan enameling iron, and Glasiron Macotta, a concrete block faced in Toncan and edged in Enduro. Though the company noted that these materials were well adapted for use in new buildings, the headline made it clear that the advertisement was directed toward another segment of the construction market: “Modernize Main Street with New Faces for Old Buildings.” As much as the advertisement was intended to interest architects in Republic Steel products, it was also intended to interest them in the practice of building modernization.

It was at this time in the mid-1930s, when the renovation of existing buildings, as opposed to new construction, became an increasingly important segment of building activity during the Great Depression, that the term “modernization” came into

regular usage in U.S. architecture and building practice. While generally synonymous with the building activities categorized as repair, remodeling, and improvement, modernization was the decade’s preferred buzzword. Within this historical context, the term had less a precise meaning than it had a precise connotation. While referring to exterior and interior alterations, both stylistic and spatial, as well as to mechanical and equipment improvements, modernization implied notions of progress, optimism, and a deliberate embrace of modernity in character and appearance, in form and material. These implications, generated in no small measure by the imperatives of the decade’s social and economic crisis, directly informed what was understood as building modernization in the 1930s, shaping the practice in general, and determining its most prevalent strategies, especially commercial façade redesign.¹

The photographs accompanying Republic Steel’s advertisement reflected all of these issues by showing the Block and Kuhl Department Store in Decatur, Illinois, before and after it was modernized. As redesigned by the firm of Aschauer & Waggoner, in a scheme typical of exterior remodeling, the cor-

ner bays of a late nineteenth-century Romanesque Revival commercial block were completely transformed with a streamlined cladding of orange Glasiron Macotta, steel-trimmed plate glass windows, and a simple cornice of Enduro-fabricated speed lines. While the contrast between old and new was jarring, that was precisely the point: to make the modernized building stand out as visually distinct from all surrounding structures. Here, according to the advertisement copy, was “a new metallic face that draws business like a magnet.”²

The Depression and the Building Industry

This advertisement, and others Republic Steel ran throughout the summer in U.S. architecture and retail trade journals, was timed to coincide with the launch of a New Deal program to promote the modernization of commercial buildings to alleviate the effects of the depression by getting money into circulation. Republic Steel, along with 4,600 other major and minor manufacturers, was an industrial partner in this “Modernize Main Street” program, operated by the Federal Housing Administration (FHA) under Title I of the 1934 National Housing

MODERNIZE MAIN STREET WITH

new faces



FOR OLD BUILDINGS



BLOCK & KUHL BUILDING • DECATUR, ILL.
Above—Before remodeling. At right—After remodeling with orange, brown and black Glasiron Macotta edged with ENDURO. • Architects: Archauer & Wagner. General Contractor: B. M. Neeld.

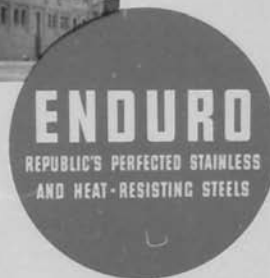


There's a lot of plastic surgery going on all over the country today. Old buildings are having their faces lifted. Weather-beaten, dilapidated old store fronts are being hidden behind a protective mask of scaffolding, and emerging again in a few days with a new metallic face that draws business like a magnet.

One of the most popular methods is the use of Glasiron Macotta. These blocks are made with a face of Republic Enameling Iron over a special concrete, and edged with Republic ENDURO Stainless Steel. A wide range of colors and shapes adapts them to a variety of uses. They are ornamental—economical—permanent—easy to erect—easy to

clean—distinctive—and they attract business. They are equally adaptable to new and old structures.

Republic offers a real service to architects through its many products that find their way into buildings—sheet metal, pipe, reinforcing bars, boiler tubes, electrical conduit, nails, wire, bolts, nuts and rivets. Sweet's Architectural Catalog will give you full information on Toncan Iron and on Republic ENDURO Stainless Steel.



Licensed under Chemical Foundation
Patents Nos. 1310817 and 1339378.



Republic Steel

CORPORATION

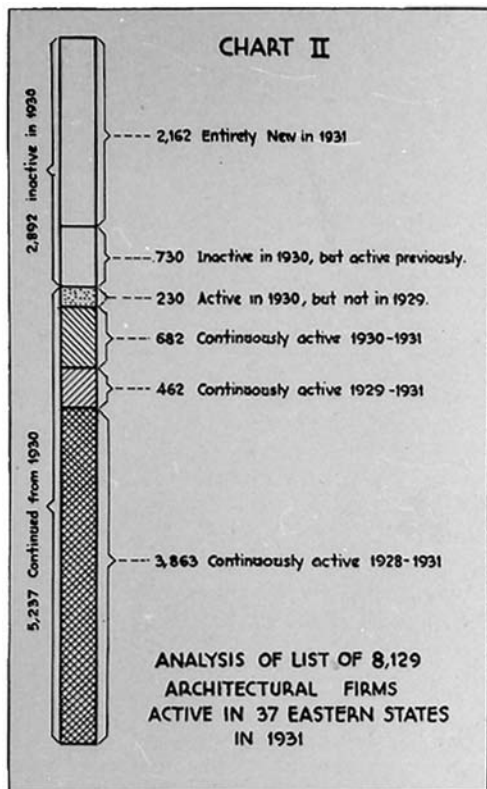
GENERAL OFFICES . . . YOUNGSTOWN, OHIO
CENTRAL ALLOY DIVISION . . . MASSILLON, OHIO

1. "Modernize Main Street with New Faces for Old Buildings," Republic Steel advertisement. Source: *Architectural Forum* 62 (June 1935): 45.

Act. Title I, known as the Modernization Credit Plan, authorized the federal government to insure low-interest credit of up to \$50,000 extended by private lenders for building renovations and improvements.³ The purpose of the credit plan was economic stimulus, especially for the building industry, a major segment of the U.S. economy, which the depression hit harder than any other economic sector. Residential and commercial building activity, including new construction and additions, alterations, and repairs, declined gradually from a high of \$4 billion in 1925 to \$1.5 billion in 1930. As the depression worsened, building activity continued its downward trajectory, reaching a nadir of \$400 million in 1933 and 1934.⁴

Accompanying this decline in activity was an increase in unemployment that, in the building trades and allied professions, was higher than in any other American industry. While the exact number of the industry's unemployed was difficult to determine, in 1934 Labor Secretary Frances Perkins estimated it to be approximately 2 million people, some 80 percent of all workers attached to the building industry, or nearly 30 percent of all unemployed Americans.⁵ Among the jobless were such highly skilled workers as carpenters, electricians, and plumbers. This group also included architects, whose situation had become so dire that they had begun organizing themselves locally to deal with severe unemployment in their ranks. In New York City, as in many other cities, they formed the Architect's Emergency Relief Committee, which, in its first few months of existence in 1932, registered over 2,100 applicants seeking direct relief, employment, or cash awards from committee-sponsored competitions.⁶ In some ways, the unemployment situation of architects was unique in the building industry. In 1932, though building activity had declined nearly 62 percent, the number of individuals in architectural practice declined negligibly, by only 11 percent. However, of the 8,100 architecture firms active in 1932 (in states east of the Rocky Mountains), over 2,000 were newly established since 1929, with over half established in the first quarter

2. Chart showing changes in architectural practice since 1929, according to firms active in eastern states. Source: *Architectural Record* 71 (May 1932): 293.



of 1932 alone. This translated into an almost 25 percent increase in the total number of firms, an expansion that likely reflected downsizing in the nation's largest offices: as architects were laid off, they set up their own practices or partnerships, hoping to secure a slim share of the shrinking volume of work. (Figure 2.) In 1932, in other words, there were more architectural firms vying for fewer architectural commissions.⁷ Because the building industry was one of the basic components of the national economy, this depressed state had a far-ranging effect. Industries

directly related to building or supplying building needs, such as manufacturers of steel, glass, cement, lumber, and electrical parts, suffered a proportional decline in production and rise in unemployment. Between 1929 and 1933, employment in these manufacturing areas fell over 50 percent, leaving approximately 2.5 million workers jobless. By mid-1934, according to the most conservative estimates, nearly 4 million workers in the building trades and related industries stood idle.⁸

It was to put these workers back into full-time private sector jobs as quickly as possible that New Dealers turned to the promotion of building modernization. That they regarded the practice as having such potential indicated a distinct shift in how it was understood. Prior to the depression, modernization was regarded almost exclusively as a real estate strategy in which the modernized building was more important than the act of modernization. According to Randolph Williams Sexton's 1928 book, *American Commercial Buildings of Today*, building owners changed façades, renovated interiors, or updated mechanical plants to generate increased property values, rents, and profits, and this occurred only after the renovations were complete.⁹ It matters little if this realty-biased position disconnected modernization from those who produced it because architects, engineers, contractors, tradesmen, and manufacturers were all sharing in the profits, channeled into the building industry through the construction boom of the 1920s. Perhaps because of this, the industry as a whole minimized the importance of modernization practice. Worth a mere \$300 million versus \$3 billion of new construction during most of the 1920s, modernization was regarded as "the odd-job alleyway of building."¹⁰

The onset of the depression reversed this situation and by the early 1930s modernization was repositioned as a crucial building industry activity, one that would produce jobs, increase demand for materials, and generate economic revival. The advantage of modernization over waiting for the

uncertain revival of new construction was that it could accomplish these goals in the short term because modernization projects typically required less capital, planning, and preparation than new construction—both on the drafting boards and at the building site. As a result, modernization's pump-priming effects would be immediate and consequential, with commercial modernization alone potentially generating as much as \$1 billion of annual building activity.¹¹ With much of this work to be distributed across small storefront construction jobs, costing between \$2,000 and \$5,000, its advocates believed that the modernization of Main Street would serve as "bread and butter business," for architects in particular.¹²

While it was described as an activity that would "prove of immeasurable value" to the profession "from a long time point of view," at first architects were reluctant to believe in building modernization's efficacy and possibilities.¹³ In 1932, Arthur Holmes, director of the New Jersey Chapter of the American Institute of Architects (AIA), described his own "small consulting practice" dedicated to remodeling and repair as "a profitable and mutually worthwhile field of endeavor." He complained, however, that too many of his fellow designers were acting like "surgeons" when they "scorned work which dealt in small figures." Architects would do better, Holmes argued, to follow his lead and act instead like small-town doctors who sustained comfortable livings by treating poison ivy and stomach aches. In exasperation, Holmes asked those assembled for the AIA's Sixty-Fifth Annual Meeting why they were ignoring the architectural equivalent: "have we not a parallel practice within our grasp which we are completely ignoring in our eagerness to realize on commissions of greater magnitude?"¹⁴ In 1934 the editors of *Architectural Forum* concurred with the assessment that architects were ignoring the practice of building modernization when they noted that most architects, "with noses tilted in the general direction of the Empire State's mooring mast [were] oblivious

to the word ‘remodeling’ and its professional possibilities.”¹⁵

New Professional Realities

The snobbery to which the *Architectural Forum’s* editors alluded was bound up with professional debates related to building modernization, but predicated on the changing nature of architectural practice itself due to the exigencies of the Great Depression. Though the effects of the depression would pass, according to the F.W. Dodge Corporation, it had already effected “fundamental changes” in the profession.¹⁶ It was through their gradual acceptance of these changes — due largely to the institutional pressure exerted upon the profession by its lobbying, trade, and promotional organizations and by government agencies and manufacturing interests — that architects overcame their initial resistance to modernization practice and accepted it wholeheartedly. This began in the aftermath of the stock market crash as building activity began its gradual, almost decade-long decline. By 1936, when *American Architect* described “an almost jobless profession,” the journal observed that the depression had already had a profound impact, changing architecture’s status, realigning its relationships, enlarging its “professional interest,” and turning its practice “to new channels.”¹⁷ The latter was thought to be the most consequential, not only during the depression itself, but as a fundamental part of practice after the economic crisis had ended.

In essence, architects searching for gainful employment at present, and hoping to avoid similar straits in the future, were encouraged to “broaden the scope of their service” and look beyond their traditional spheres of activity for work that would utilize their professional skills as designers, draftsmen, and technicians.¹⁸ These new fields included theatrical and motion picture set design, industrial and product design, merchandising and retail display, park and playground design, statistical analysis and real estate appraisal. Even an established architect like George Howe thought it prudent to partner with

industrial designer Norman Bel Geddes to offer services across multiple “categories of design,” including consumer research and merchandising, exterior and interior illumination, decoration and furniture, as well as architecture.¹⁹ Not only were architects’ distinct visual and spatial perspectives well suited to these endeavors, but, it was argued, architects would also make positive contributions to these fields by improving design in the long run. Even without such an outcome, architects would have still been counseled to seek out these new types of service lest they be “forced to abandon the ‘mistress of the arts’” or “desert their calling.”²⁰

A similar case was made for work that encompassed aspects of traditional architecture but was outside the purview of many architectural practices. Chief among these was so-called commercial modernization, encompassing both the renovation of retail space and the design of new retail space in existing buildings. As a category of legitimate design, the profession largely ignored such work until the 1930s.²¹ Prior to then, as Mies van der Rohe, Morris Ketchum, and others observed in the early 1940s while serving as jurors for a retail design competition, stores were generally regarded as “an afterthought and a nuisance to be finished off by some contractor.” But this had changed recently, they noted, as “the architectural profession in America has devoted intelligent thought and attention to the store problem.”²² That the profession overlooked store design and modernization for so long and embraced it only in the 1930s was directly related to the scale, scope, and substance of this type of architectural work.

The question of scale was mostly economic. During the 1920s with new construction dominating building activity, few architects found it necessary to contemplate the relatively small commissions modernization and remodeling jobs typically represented. As noted earlier, however, with the onset of the depression in the early 1930s, the acceptance of small jobs became essential for professional survival. FHA official James Dusenberry reiterated this reality to

readers of the AIA’s *Octagon* in 1935. While he conceded that the commissions architects received from modernization projects were not always large, “in the aggregate they were worthwhile and much better than nothing,” especially when so many architects had “dust on their drawing boards.” Unless architects accepted that “Main Street was lined with potential projects,” they would find that the modernization movement amounted to little more than “a missed opportunity.”²³

This reference to Main Street, while borrowing the promotional language of the federal modernization campaign, touches upon the complicated issue of the proper scope of architectural practice. In the 1930s, this involved a perception that the commercial landscape was somehow unworthy of architectural consideration. Bound up as it was with the practices of selling and shopping, of advertising and marketing, of profit margins and retail trends, the commercial realm occupied a lowly position in the unwritten cultural hierarchy that dominated the architectural profession, and the spaces of commerce ranked well below those of government, art, education, and big business in terms of status and prestige. Taken together, these overlooked spaces constituted a landscape regarded as a “heterogeneous hodgepodge” whether it was a compact Main Street or a sprawling commercial strip.²⁴ In either case, the perception was of a landscape brought into being by such a fiercely chaotic free market of real estate speculation and retail competition that it appeared immune to either overall planning or individual design. According to a range of commentators, however, this was precisely the reason the commercial landscape so urgently needed architectural attention. Critics Catherine Bauer and Clarence Stein suggested that architects could successfully combat existing commercial conditions by designing “modern shopping centers” as cohesive assemblages with stylistic unity, regulated signage, covered pedestrian walkways, off-street parking, and planned traffic patterns. Arthur C. Holden of the AIA and S.R. DeBoer of the American Planning and Civic Association

both advocated improving Main Street through the architectural control of coordinated building modernization.²⁵ The editors of *Architectural Forum* also recognized that Main Street, as a collective symbol of the commercial sphere, was simply too significant as “a real estate phenomenon, a customer of building, and as a design problem” for the profession to ignore.²⁶

In proposing that Main Street be taken seriously as a customer of building, *Architectural Forum* was not only demonstrating a short-term expediency, but was also trying to awaken the profession to the long-term possibilities of work on this scale. The editors reminded its readers that small-scale projects not only provided “a steadying backlog when times are bad,” but also represented “building’s only repeat business.” These repeat customers were also “more receptive to new ideas than any other market,” and would serve as “an appreciative clientele,” even for such new ideas as “modern architecture.” While the editors claimed that their research showed that Main Street was already “design conscious,” it seems likely that they also saw this type of work as an opportunity to educate a broad segment of the population — merchants and shoppers alike — on the social value of quality design.

The editors also stressed that architects would be providing a valuable community service by dedicating part of their practice to Main Street as they would help to raise the quality of its commercial architecture “from the bottom of the civic design scale to a place near the top.” This view was shared by the FHA, which argued that architectural involvement on Main Street, especially as organized intervention, could “lay the groundwork of civic aspiration . . . for the general beautification of the city.”²⁷ Had this architectural involvement continued in an organized fashion beyond the 1930s it might have had a lasting impact on the nation’s commercial corridors. While architects alone could not have forestalled Main Street’s postwar decline in the face of suburban competition (an eventuality *Architectural Forum’s* editors discounted), at the very least they

might have contributed to an acceptance of “quality” as a retail principle that applied not only to goods and services, but to the stores themselves — to the benefit of this sprawling sector of the built environment.

Ultimately, just as architects were counseled to expand the scope of architecture, accepting store remodeling commissions as a legitimate part of their practices, so members of an expanded constituency on Main Street were counseled to consider themselves as legitimate clients of architecture, and to consider their repair and remodeling jobs, no matter how minor, as something that required professional architectural input and expertise. Both the AIA and the FHA recommended the establishment of consultation bureaus and architect’s clinics to provide free advice to local property owners and renters whose leases permitted alterations. Ideally, such centers were located in storefronts renovated specifically for the purpose, supplied with modernization literature and displays, and staffed by architect volunteers (usually the unemployed or underemployed). In New York City, members of the Architectural League staffed a bureau in midtown Manhattan; in St. Louis, the local AIA chapter established a clinic staffed by its members to dispense free modernization design advice and to provide a schedule of fees for architectural consultations on a variety of improvement projects.²⁸ However much these were intended as consumer-friendly information centers, they had clearly defined goals, as pointedly described by the organizers of one such clinic in Brooklyn: “it is hoped that through the performance of the clinic, the public will be led to a sharper recognition of the architects’ indispensability in building planning, and, further, to a fuller utilization of the profession’s services.”²⁹ Essentially, then, this was a form of public outreach to raise awareness of architecture and architectural services among potential clients just as the scope of that service was expanded within the profession. Representing a new level of professional engagement with the public, this outreach was promoted by numerous other advocates of building

modernization in the 1930s who understood that the profession’s client base had changed, and that myriad small, even minuscule clients, rather than fewer large ones, would have to become the architect’s mainstay, at least temporarily. This gave a new status to commercial building owners and shopkeepers and transformed their projects — be they new façades, display cases, or layouts — into something worthy of consideration as architecture.

The Architect-Salesman

Implicit in the determination to bring the public to a fuller utilization of architects’ services was the recognition that architects themselves would have to take a more active role in cultivating public interest in the profession. Royal Barry Wills, an astute observer of the depression’s changing professional realities, accurately identified the situation the individual architect faced in his 1932 article, “How to Find a Job during a Depression”: the increased presence of new start-up firms caused increased competition for work; this, in turn, necessitated accepting small jobs to “tide one over,” which, in turn, created the need to “sell architectural service.”³⁰ Wills’ advice for competing in this architecture marketplace was unequivocal: “The architect who is looking for work is a salesman” and “the ‘product’ he is selling is his service.” Thus, the architect had no choice but to actively become a salesman, applying to architecture “the same principles of salesmanship that bring success in other business.” The problem, he concluded, was that “a professional man usually knows too little about business methods and selling.” Wills therefore advised architects opening their own offices to educate themselves on modern sales techniques by studying books on salesmanship, such as William L. Fletcher’s *How to Get the Job You Want*.³¹ Eventually, Wills wrote his own book on architecture and salesmanship called *This Business of Architecture*. The purpose of the book was to “infuse” the architect with the “technic of a businessman,” thus diminishing the perception that he was “a priest of arty mysteries and a defender of traditional dogma,”

rather than someone who embraced “progressiveness and the cult of common sense.”³²

The professional image Wills described emerged in the late nineteenth century under the growing influence of the Ecole des Beaux-Arts when the promotion of architecture as a fine art served to elevate the architect to some ideal plane of professionalization, removed from the laboring of the building trades and from the commercial crassness of the marketplace. This architect-artist, epitomized by Richard Morris Hunt or Stanford White, could thus imagine himself as an arbiter of taste, providing much needed aesthetic guidance for the parvenu businessman and his dollar-driven values.³³ By 1900, though the business imperatives of the expansionist era could not be ignored, the romanticized image of the architect-artist apparently retained a tenacious hold on the popular perception of the profession. During World War I, American architects came to feel that this artistic image had cost them many war-related commissions that went instead to civil engineers.³⁴ After the war, this image seemed to become a nonissue as architects fully participated in what critic Herbert Croly identified as the “orgy of building” stimulated by Coolidge prosperity, and during the 1920s, with the ascendancy of the American businessman, many architects seemed to have accepted business values as their guiding principles.³⁵ But the profession never really lost its artistic aura, especially outside the country’s metropolitan centers. In Main Street towns, architects were even viewed with vague suspicion, only a shade more respectable than poets or musicians.³⁶

By the time the depression hit, numerous commentators on the state of the profession increasingly viewed this artistic image as a liability. In a paper delivered at the sixty-sixth AIA convention in 1934, Electus Litchfield, a New York-based designer of apartment buildings, called for “the development in the architect of many of the characteristics of the so-called ‘hard-headed’ business man.” Unless a “business sense [was] grafted upon the artistic stock,” American architects would continue to

struggle “helplessly and fruitlessly for work.”³⁷ *Architectural Forum*, part of Henry Luce’s business-oriented magazine empire, was characteristically more blunt, telling architects in August of 1934 that the time had come for “the practitioner [to] doff his smock and more appropriately assume gladiatorial garb” consisting, one supposes, of gray flannels and a fedora or some other appropriate business attire.³⁸ For Wills, it was likewise essential that practitioners “spread an aura of business acumen” that would dispel the perception among clients and potential clients that architects were “arty and temperamental.” Wills offered his own twenty-three-point sales plan to help the architect accomplish this, including in it such counsel as attending regular religious services, joining fraternal organizations, and “never avoiding a friendly conversation with an apparently solvent person, even though he be a stranger.”³⁹

Such a plan, however cynical it might seem, reflected a significant change in how architects were expected to market themselves — one that appears to have been put into widespread practice, nowhere more explicitly and effectively than in the realm of store remodeling. Architect Joseph Weiss, for example, observed in *New Pencil Points*, that those who were successful in “store construction and modernization” — whom he identified as “equipment companies” and “industrial designers” — were “masters of publicity and salesmanship” who spoke to merchants in a way they could understand: “they talk *his* language, know *his* point of view, and tackle the job of selling him from that angle. They do not talk architecture, design, or layout.” His own profession, Weiss concluded, “could learn a great deal from their success and business organization” and begin to cultivate merchant clients rather than waiting for them to “make a beaten path to their offices.” If architects took the time to fill in their missing knowledge, which included merchandising, financing, credit arrangements, current store design, and retail trends, they might easily dominate “this large and lucrative field of practice.” But, Weiss observed, despite his profession’s numerous advantages over its

competitors, including a comprehensive knowledge of design and construction, ample creativity, and supervisory skills, unless a practitioner had mastered the “tools of salesmanship” he could “scarcely call himself an architect.”⁴⁰ Such an extreme statement about the importance of promotion and marketing in architecture demonstrates the degree to which the profession had absorbed the lessons of the depression decade.

Marketing Building Materials

Architects need not have looked far for demonstrations of the skills required for marketing and selling themselves and their services. Indeed, by the mid-1930s the profession as a whole was already trailing in the wake of those manufacturers of building materials (Weiss’s “equipment companies”) who had pioneered the promotion of commercial modernization as a means of increasing demand for their own products and services during the depression. Companies such as General Electric, U.S. Steel, and Weyerhaeuser, which had watched demand for their products shrink with the contraction of building activity after 1929, were willing to do whatever was necessary to “bring about a re-birth of sales and production activity in the building and building materials industries” that the federal government promised modernization would stimulate. The first step was “rallying publicity into more effective channels,” but the government was not asking building material manufacturers merely to “revive [predepression] selling efforts,” it was asking them to *expand* those efforts until the companies were engaged in a range of promotional activities far more extensive than any previously undertaken.⁴¹ By 1937, these activities had expanded significantly enough for *Architectural Forum* to remark that the “building industry was becoming aware of major advertising trends [and] promotion methods customarily used to bolster sales of cigarettes, cosmetics, and breakfast foods.”⁴²

This involved much more than the specialized product literature for architects that had long been

the industry's standard sales technique, and manufacturers' promotions took on an aura of consumerist hoopla. They sponsored cross-country motor caravans with exhibitions of building products celebrated as commercial and civic pageants whenever they rolled onto Main Street. They established credit finance subsidiaries to offer installment buying and easy payment plans that allowed customers to finance building materials at the time of sale. They hired Madison Avenue's leading firms to create splashy color advertisements that ran in niche-market publications like *Baker's Weekly* and *Motor Monthly*.⁴³ Through these promotional methods manufacturers deliberately cultivated brand recognition in those contemplating modernization. This signaled an important shift in the marketing of building materials. Prior to the 1930s those materials reached the market by what a building industry analyst described as "a devious route"—via architects' specifications.⁴⁴ It was necessary to sell the architect in order to sell the product, a practice manufacturers continued throughout the decade. But manufacturers also found it increasingly necessary to develop more direct routes to the merchant-tenants and building owners they now understood as their primary customers.

Many in the industry viewed this as a healthy development. According to a speaker at the 1936 Building Industry Forum, manufacturers had relied for too long on "self-generating demand" for building materials. Because the depression had effectively ended this, manufacturers were now forced to stimulate demand by engaging in what was called "creative merchandising."⁴⁵ Expanded promotional activities were a part of this, but far more important were the new uses and applications that manufacturers sought for building materials already in production and currently on the market. Essentially, the goal was to develop new products without developing new materials, thus minimizing the expense of technical research. Across the building industry the extent of such development varied widely, from creative efforts to give a building material a new brand

identity to thoughtful research to probe a building material's marketing potential. In either case, the new applications were, ideally, compatible with the aesthetic and technical requirements of building modernization.

In 1935 the Johns-Manville Corporation (J-M), the country's leading manufacturer of asbestos and asphalt building materials, was credited with "modernizing the building industry" for its efforts to realign its products to meet changing market demand. These efforts are evident in an advertisement of the same year that appeared in the retail trade journal *Chain Store Age* to demonstrate how "Johns-Manville modernizes a Main Street Shop."⁴⁶ (Figure 3.) The old shop is depicted with a pressed-tin ceiling, plaster walls, a jumbled arrangement of overstuffed furniture, and a checkerboard linoleum floor. The new shop features an integrated scheme with a drop ceiling, resurfaced walls, continuous decorative bands, streamlined combination display case and seats, and a lustrous striped floor—all fabricated with J-M asbestos and asphalt. Here J-M *modernized* its product line for store installations, modifying the way it merchandised certain products to make them more appealing to retailers. J-M's Asbestos Wainscoting, a wall cladding, was repositioned as Asbestos Flexboard, a product with "amazing potentialities because it solves one of today's major building problems . . . the wall re-surfacing of existing structures that must be modernized on limited budgets."⁴⁷ In transforming Wainscoting into Flexboard, the product shed any negative associations with old-fashioned buildings and heavily paneled interiors. Now, the brand associations evoked by the name were more appropriate to the fight-the-depression ethic of the mid-1930s: flexibility, adaptability, and responsiveness to change.

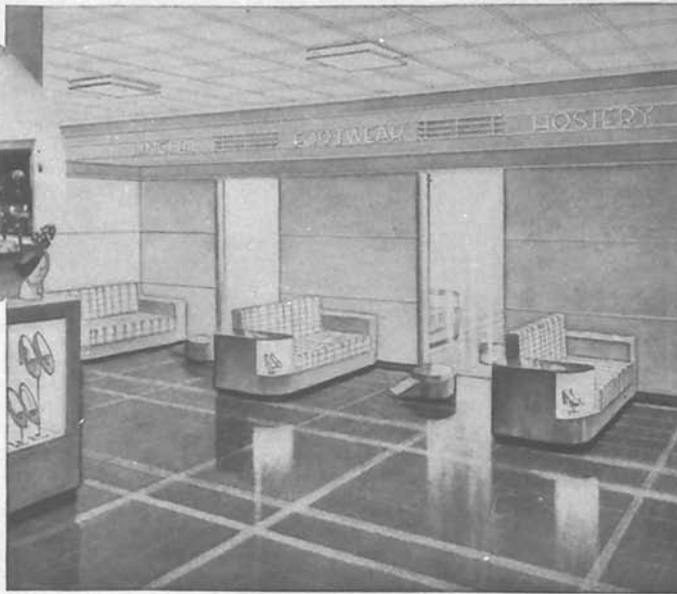
Unlike J-M's creative merchandising, most product repositioning associated with the modernization movement concentrated on the storefront. Not only was this the most visible part of a typical commercial modernization, it was the site of the most prevalent modernization strategy: exterior

refacing. Materials promoted specifically for this type of storefront use included plastic laminates such as Formica and Micarta, extruded metals such as Zouri and Brasco, and porcelain enamels such as Veribrite and Porceliron. Even as traditional a material as marble was adapted for new use as a modernizing product when the Vermont Marble Company introduced Lumar, a glamorous trademarked name combining "luminous" and "marble." A thin marble facing in thicknesses from 1/4 inch to 3/4 inch, Lumar was available in six shades with varying degrees of veining and translucency that made it ideal for installations with rear-illumination. Vermont Marble promoted Lumar as especially well suited for the contemporary moment "when the trend is away from ornamentation and in favor of color."⁴⁸ This statement reflected an important parallel desire of building material manufacturers to capitalize on modernism even as they capitalized on modernization. Of all of the building materials that could satisfy the stylistic demands of modernism, none was more successfully adapted to the practical demands of modernization than structural glass.

Introduced around 1900 as opaque, pigmented, highly polished vitreous slabs, structural glass had a hard finish that made it impervious to dirt and stains, and until the 1930s it was used mainly for sanitary interiors such as hospitals, lavatories, and cafeterias. As a building material it was regarded as "modern, efficient, [and] economical," precisely the characteristics that led the Pittsburgh Plate Glass Company (PPG) to consider the possibilities of its Carrara brand structural glass for exterior use.⁴⁹ The material itself had not changed: it was still nonstructural and was to be used primarily as a veneer or cladding to cover existing walls. In the early 1930s, such exterior use of black structural glass trimmed in chrome had become something of "a vogue" in urban centers, due to the influence of modernistic or art deco design.⁵⁰ Perhaps sensing a trend, but certainly hoping to resuscitate sales, PPG announced in 1934 that Carrara was "ideal for modern store fronts." In its portfolio in the *Sweet's Catalogue File* that year, and

Johns-Manville modernizes a Main Street Shop

AS IT WAS AS IT WILL BE



And here are the materials whose low cost enabled the owner to modernize . . .



CEILING

J-M Decorative Ceiling Tile

...Design C-3, natural light cream color. J-M Decorative Insulating Board is available in three pleasing Ceiling Tile patterns. Applied quickly, easily, over old ceilings at approximately half the cost of replastering.



WALLS

J-M Asbestos Flexboard

...in buff, with two narrow strips of green. Flexboard is asbestos, but it works like wood. Its attractive colors go all the way through. It is permanent, durable, fireproof. And installed cost is as little as 30 to 35 cents per sq. ft.



SEATS AND DISPLAY CASES

J-M Hard Board

...in a rich shade of brown. Hard Board is available in four attractive styles, and in various pleasing tones of brown. It can be used in natural colors, or varnished to duplicate the appearance of the most expensive woods.



FLOOR

J-M Asphalt Tile Flooring

...in mahogany with buff stripe. J-M Asphalt Tile Flooring is resilient; comfortable to walk on. Extremely durable, it thrives on heavy store traffic. It is easily kept clean. It is resistant to burns. In fact, virtually abuse-proof.



THE Main Street owner wants to modernize . . . but so often he thinks he can't afford it . . . a mistaken idea, as you can prove to him in five minutes . . . the low cost of J-M materials, their economy of application, make modernization possible to almost any shop owner . . . let us tell you the full story . . . write for our new catalog . . . and details of our deferred payment plan for store owners (Government rates). Johns-Manville, 22 E. 40th St., New York City.



3. "Johns-Manville Modernizes a Main Street Shop," Johns-Manville advertisement. Source: *Chain Store Age*, Nov. 1935, 96.

its listings in the Construction and Equipment Directory of *Chain Store Age*, PPG launched "Carrara for Store Fronts," presenting its old material as a virtually new product, "developed to meet the requirements of outdoor uses."⁵¹ In repositioning Carrara, PPG had a larger merchandising strategy in mind, one that clearly reflects the way storefront materials were reconceived for modernization practice.

The Modern Storefront

The 1934 edition of the *Sweet's Catalogue File* was the first to place materials for storefronts together in a single section. This was a convenience for architects investigating building products, but it also indicated the shift taking place in building practice, as the storefront was increasingly perceived as an integrated architectural unit. Within *Sweet's* new storefront section manufacturers marketed their products individually, typically offering single-purpose lines of facings, trims, or window glass. As PPG explained it, "you bought your facing material from one source, your glass from another, your metal sash and paint and incidental materials from still others."⁵² Before PPG repositioned Carrara as a material for exterior facing, the only storefront material the company manufactured was plate glass, the least expensive element of the standard tripartite façade of frame, facing, and window. From the company's point of view, it was losing out on two-thirds of the sales of these standard elements just as a national movement was creating demand for complete storefronts modernized as a unit. Thus, in the fall of 1934, a few months after it repositioned Carrara, PPG laid claim to the rest of the storefront when it began manufacturing an extruded metal it had formerly distributed for the Kawneer Company for use as glass setting and framing. (Figure 4.) PPG could now boast that its product line included all three components of the standard storefront — Polished Plate Glass for windows, Carrara Structural Glass for facing, and Store Front Metal for sashes and trim — marketed under a single brand name as the "Pittco Store Front." (Figure 5.) Though all three products were previously on



4. Pittco Store Front Metal, introduced March 1935. Extruded sash with cushion grip setting and contoured profile. Source: *Architectural Forum* 62 (March 1935): 49.

the market, PPG claimed they were the “first complete line ever to be designed deliberately, all at one time, with a pleasing harmony and relationship of appearance, a real *unity* of design.”⁵³

Here, PPG virtually created the idea of the “storefront” as a single physical unit — and a single marketing unit in which signage, bulkheads, display windows, and entrances — each previously understood as individual or periodic purchases — were now part of a consciously coordinated, unified whole to be designed and purchased all at once. Thus, PPG emphasized that, in conjunction with its time payment plan, the company wanted to “make it easy for merchant or property owner to finance the purchase of a new Pittco Store Front.” For their convenience this Pittco Store Front was available as a prefabricated, ready-to-install unit that could be delivered in a matter of weeks via PPG’s nationwide distribution system. PPG was ready to provide “instant and efficient service,” whether the customer was a single Main Street merchant or a corporate retailer seeking “identical store fronts for a chain all over the country at the same time!”⁵⁴ These units were also available in standard designs, including nearly three dozen prepared by industrial designer Walter Dorwin Teague, whom PPG retained as a research and design consultant in 1935.⁵⁵ Merchants could also choose to customize these standard designs with assistance from PPG’s “special staff of store front experts” who were available for field consultations. To architects, PPG claimed these standard storefronts were merely design suggestions intended to demon-

strate the use of Pittco products in “the modern store front.” The goal, PPG carefully stated, was “never to supplant the services of the local architect but rather to cooperate with him” — since, of course, the architect was still needed to produce the drawings that would secure the building permits.⁵⁶ For PPG, this careful cultivation would insure that architects selected Pittco for their modernizing projects. Apparently it worked. By the middle of 1935, PPG reported a sales record of 10,000 modernized storefronts fully specified with Pittco products. By the end of 1935, production of structural glass rebounded from its depression lows to reach nearly 2 million square feet, double what it was in 1934.⁵⁷

Largely as a result of PPG’s achievement, other manufacturers began selling product lines of coordinated building materials, none more so than PPG’s main competitor, the Libbey-Owens-Ford Company (LOF). LOF established a New Uses Department in 1935, charged with the task of “creating glass business.” Neither a research nor a sales department, New Uses was a merchandising department with a clear business-creating agenda: “to develop new uses of glass, to offer new designs of glass products, to stimulate glass in architecture,” especially by creating a modernizing ensemble to compete with the Pittco Store Front.⁵⁸ LOF’s first step was to add a structural glass to its lines of plate, window, and safety glass, which it accomplished in 1935 by acquiring the company that produced Vitrolite, the only structural glass on the market with brand recognition comparable to PPG’s Carrara.⁵⁹ Next, LOF cul-

tivated in architects an awareness of Vitrolite for storefronts by sponsoring a competition, officially sanctioned by the FHA and run by *Architectural Record*, to promote its use in commercial modernization. With LOF offering \$11,000 in cash prizes, over three thousand architects entered the Modernize Main Street competition. This was nearly one-third of all architects registered in the United States in 1935, an indication of either the profession’s dire straits or its new commercial interests. LOF promoted the winning entries as potential storefront designs, eventually publishing them in full color with elevations, details and specifications in *52 Designs for Modernizing Main Street with Glass*. The company distributed *52 Designs* to all “logical prospects for modernizing” as a guide to effective storefront designs approved by retail and architectural authorities (the competition jury).⁶⁰

LOF also used the competition results as a guide to determining how to further expand its existing product line. Since so many entries specified curved bulkheads, LOF established a Glass Bending Department. By early 1936 bent plate, structural, and ribbed glass were all on the market.⁶¹ To accommodate the diverse illumination schemes suggested by the entries — and to compete with Owens-Illinois’s recently introduced Insulux glass blocks — LOF developed a new range of colored fused-ceramic coatings for a tinted tempered plate glass it already manufactured. These new coatings created a translucent glass offering “luminous color as an integral part of the structure itself.” To market it as a material

IT PAYS TO
"Modernize Main Street"
 with a New PITTCO Store Front



HERE IS A typical Chain Store Front in Cleveland, Ohio, constructed with Pittco Store Front Products. Notice how clean, fresh and inviting it looks, catching the eye of potential customers and welcoming them in the modern manner. Jule, White and Black Carrara Structural Glass have transformed an outmoded space into a money-making chain store site.

THE movement to "Modernize Main Street" is gaining momentum every day. And chain stores which have joined the trend by remodeling with a new Pittco Store Front, have found that it pays! For a modern Pittco Front makes an outmoded store new and attractive again . . . it impresses potential customers with the store's impressiveness . . . it lures them inside . . . it results in jumping sales volume and boosting profits. And a Pittco Front can often turn a run-down property in a fine business location

into an ideal chain store site!

The organization of the Pittsburgh Plate Glass Company . . . with fully stocked warehouses in most principal cities . . . makes Pittco Store Front Products readily available for chain store service. If so desired, this company is perfectly equipped to install identical store fronts for a chain all over the country at the same time!

The National Housing Act makes it possible for many of your independent competitors, as well as yourself, to obtain money easily for store im-

provements. That's why now is the time to remodel your stores with Pittco Store Fronts . . . to keep pace with the increased competition which the benefits of the NHA will create in your markets. We suggest that you send for our booklet "How Modern Store Fronts Work Profit Magic" to get the full story on Pittco Fronts. This book contains numerous "before" and "after" photographs of Pittco-remodeled stores of many types and sizes, together with construction costs, resulting business increases, etc. Clip coupon for your free copy.

Carrara Structural Glass
Pittco Store Front Metal
Pittsburgh Mirrors

PITTCO
STORE FRONTS
glass...metal...paint
PRODUCTS OF
PITTSBURGH
PLATE GLASS COMPANY

Pittsburgh Paint Products
Polished Plate Glass
Tapestry Glass

Pittsburgh Plate Glass Company,
 2199 Grant Building, Pittsburgh, Pa.

Please send me, without obligation, your new book entitled "How Modern Store Fronts Work Profit Magic".

Name _____

Street _____

City _____ State _____

5. "It Pays to Modernize Main Street," Pittsburgh Plate Glass advertisement featuring Pittco Store Fronts. Source: *Chain Store Age*, June 1935, 73.

coordinated with opaque Vitrolite, LOF called the new product Vitrolux.⁶² Though originally developed for storefront use in the 1930s as part of LOF's depression-era merchandizing efforts, Vitrolux would itself be repackaged after World War II when it was marketed as a spandrel glass for use in curtain wall construction as popularized in the 1950s with the rise of International Style skyscrapers.⁶³ LOF's postwar redeployment of Vitrolux demonstrates that the marketing strategies developed during the 1930s to deal with the decade's shrinking markets did, as many predicted they would, have an impact that extended beyond the depression era.

With the addition of Vitrolux, only one missing element prevented LOF from marketing itself as a full-service supplier of modern storefronts. In 1936 the company determined that it needed a metal trim to "tie its store-front package together." By April 1937 LOF designers perfected and patented a pressure-controlled, shock-absorbing extruded aluminum sash that the company heralded as "revolutionary" in terms of construction (in its advanced mounting mechanism) and design (in its streamlined profiles). It was also "revolutionary" in terms of pricing: responding to the economic realities of the depression, LOF offered the trim in three price ranges, so that "even the most modest store front may now include the distinction of extruded metal." With the introduction of Extrudalite, LOF now manufactured "EVERY material required in the construction of the modern storefront." Bringing Vitrolite, Vitrolux, Extrudalite, and Polished Plate together "in ensemble," LOF had produced "the Complete Storefront."⁶⁴

The company was now in a position to promote storefronts fabricated entirely of LOF products,



6. Libbey-Owens-Ford, Modern Shopping Center, 7:8 scale model of retail units, 1937. Source: *Architectural Forum* 67 (December 1937): 27.

which it did through designs prepared in-house (and based on prizewinning competition entries) by its Architectural Service and Art Departments. While these designs were used for advertising purposes to showcase LOF's products and demonstrate their optimal use, they were also distributed to the company's jobbers as finished designs ready to be ordered by the public. Since specifications and working drawings could be completed at the factory by LOF's own "competent draftsmen and designers," this "sales service" to jobbers effectively eliminated the architect.⁶⁵ The local benefits of the store remodeling thus accrued to the jobber, usually a building contractor or an authorized dealer of the company's products who was responsible for the installation of the storefront. And this installation, as LOF repeatedly assured jobbers and merchants, was increasingly simplified by its coordinated product line of metal and glass.

That a new storefront could be installed rapidly without highly skilled labor was a fact not lost on either manufacturers or merchants. Indeed, structural glass, along with porcelain enamel and other materials commonly used in storefront remodeling, was lauded for precisely this reason — one of several factors, along with durability and low maintenance, that contributed to its status as the most economical of modernizing building products. While these modern facing materials were more expensive to purchase than traditional facing materials like brick and terra cotta, the latter were more expensive to install, requiring skilled masons and extended labor hours. By contrast, storefronts of structural glass or porcelain enamel could be glued or screwed to an existing façade almost in a matter of hours, with a significant

reduction in labor costs.⁶⁶ While such savings were undoubtedly appealing to those paying for new storefronts, they hardly served the modernization movement's stated goals of generating gainful employment for building tradesmen. This is, perhaps, not surprising given that much of the New Deal, despite its stated populism, was intended to shore up big business and industrial capitalism, especially during the regulatory retreat that followed the failure of the National Recovery Act in 1934.⁶⁷ In such a context, the ease with which the modernized storefront moved from manufacturer to Main Street with as little intervention as possible from tradesmen seems to portend the decline of building as a craft and the rise of building as an industry.

Intentionally or not, LOF underscored this connection when it unveiled the Complete Storefront at the annual New York and Chicago automobile shows in November 1937. Here, LOF partnered with General Motors (GM) to produce an exhibition of model storefronts that served as a backdrop for GM's newest Chevrolets. This was a nearly full-scale (7:8) installation of five contiguous store units forming a Modern Shopping Center made entirely of LOF products.⁶⁸ (Figure 6.) LOF's placing new model storefronts alongside new model automobiles, accompanied by a promotional blitz, revealed uncanny, though not unexpected, parallels between the two. Like cars, storefronts were sophisticated, mass-produced fabrications of advanced industrial materials; like cars, storefronts were designed as much for eye appeal as for performance; like cars, storefronts were easy to purchase through low-interest credit financing available from the manufacturer. The LOF Complete Storefront clearly demonstrated the de-

gree to which the depression and modernization blurred the traditional distinctions that existed between producer goods and consumer goods — between building materials and durables and consumables.

That blurring also reflected a situation that had existed in the building industry since the dawn of the machine age — the increasingly close relationship between architecture and mass production. In Europe in the 1920s, Le Corbusier and Walter Gropius envisioned a romantic collaboration between architects and industrialists that might produce prefabricated modern buildings possessing the efficiency and beauty of the automobile, and perhaps even its affordability. In the United States in the 1920s, Lewis Mumford believed such a scenario was imminent, and suggested that it was only a slight exaggeration "to say that today a building is one kind of manufactured product on a counter of manufactured products."⁶⁹ In the 1930s, the modernized storefront brought the modernist dream of a mass-produced architecture even closer to fulfillment, as the editors of *Architectural Forum* acknowledged: "if the streamlined storefronts are not precisely what the purist expected, let him closely check his arguments: extruded aluminum is clearly more a machine age product than the handicraft which went into most of his much beloved Central European models."⁷⁰ What the *Architectural Forum's* editors did not acknowledge were the broader implications for architectural practice. The FHA's Dusenberry had touched upon these at the start of the modernization movement when he observed how difficult it was for architects to compete with "the mass producers" to deliver "a product which calls for small payment [and] financ-

ing all arranged in one package.” Though Dusenberry was referring to the prefabricated house that might be available sometime in the future, he could just as easily have been describing the prefabricated storefront that was already available. After all, the mass producers of storefront materials *did* “have the advantage of national advertising to educate while repeated orders iron[ed] out construction and arrangement details.” Their depression-era efforts to promote building modernization through the vehicle of the storefront made this abundantly clear. What was equally clear in the 1930s was that architects also recognized the significance of building modernization. Rather than competing with manufacturers, they opted for cooperation, having finally accepted that “selling architectural service and modernization” was a depression-era necessity.⁷¹

Modernization as Architecture

That architects increasingly turned their attention to modernizing Main Street during the depression is fully evident in the major U.S. architectural journals, and the coverage it received demonstrates the degree to which modernization practice penetrated the profession during the 1930s.⁷² As publications dedicated to architecture, *American Architect*, *Architectural Forum*, *Architectural Record*, and *Pencil Points* each had an editorial mission to report the latest developments in the discipline and in the building industry. As the depression deepened, this meant reporting on building modernization. Significantly, however, coverage of modernization did not follow the chronological approach typical of architecture journalism in which, with the passing of time, a newsworthy event developed into a design trend, recurrent among a limited number of practitioners, and then into a practical architectural standard, applicable to the majority of the profession.⁷³ So thoroughly did modernization preoccupy practice in the 1930s that it burst onto the pages of the architecture journals as event, trend, and standard simultaneously.

By the mid-1930s “portfolios” and “case stud-

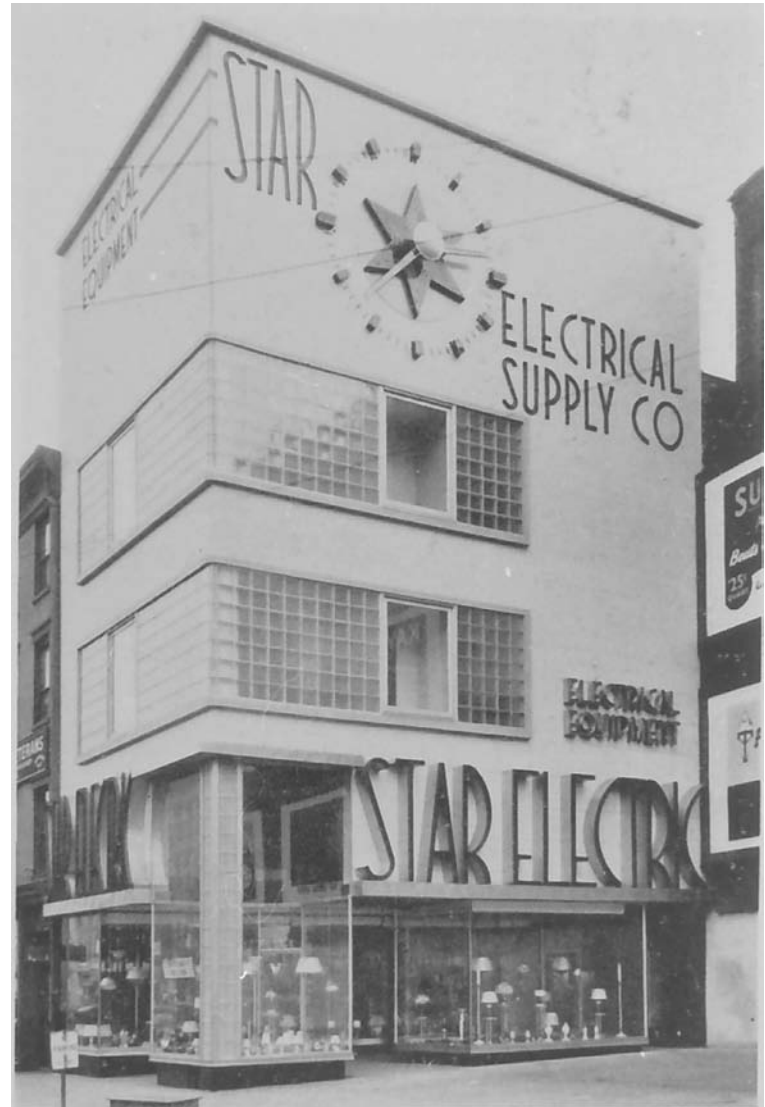
ies” of modernization work became regular features of the journals. Published with before and after photographs, specifications, plans, elevations, and project costs, modernized stores were afforded the prominence that an earlier decade reserved for skyscrapers and cultural institutions.⁷⁴ Supplementing the publication of new work were reference “checklists” and articles for dealing with all aspects of modernization practice, including policy and finance, technique and practice, building-type analyses, and retail merchandising.⁷⁵ *Architectural Forum* inaugurated a periodic series, “Remodeling for Profit,” that presented modernizing solutions deemed economically and architecturally sound by the magazine’s editors. Their introductory comments, written when the modernization movement was at its height, reflected the state of practice during a tumultuous decade: if by 1936 modernization had “lost some of its front page news value,” it had become, instead, “a staple product of the current building industry.”⁷⁶

While it is clear that store modernization was gradually accepted as legitimate architectural practice, the architectural dimensions of store modernization must still be explored. As noted previously, many modernization projects consisted principally of exterior work, the replacement or renovation of storefronts and building façades. In architectural terms, this type of modernization privileged two-dimensional graphic composition over spatial and structural concerns. Was this architecture in a conventional sense or did the prevalence of modernization in practice require a redefinition of architecture itself—require, in other words, a modernized definition of architecture? To some in the profession, modernization represented only a subcategory of design or a minor architecture at best. Looking back on his commercial work of the 1930s from the vantage point of the 1970s, Morris Lapidus expressed this position unequivocally: “I thought that my stores were not architecture; I was embarrassed to be known as an architect.”⁷⁷ This embarrassment stemmed, in part, from the fact that the work did not represent “total building,” that is, foundation-

to-roof, freestanding, tabula rasa design. Instead, these were mostly new stores occupying existing buildings, small spaces dependent on larger structures. (Figure 7.) While this may have disqualified them as architecture in Lapidus’s view—at least in hindsight—it had little bearing on what the profession’s institutions and journals had already willingly accepted as architecture by the early 1930s. This was, namely, work that was more visual than spatial in its impact, more ephemeral than permanent in its intentions, and more in tune with the marketplace than the canons of tradition—work that, in accepting it as architecture, represented a clear shift in what was considered architecture and its proper social and cultural aspirations.

This shift can be understood by following the logic put forth by William Lescaze in a 1942 memoir and professional handbook based on his experiences of the 1930s. In this book Lescaze described the working procedure of the “modern architect” as follows: “he begins with the beginning, progressing from the people who are going to use that building to the arrangement of the space inside of it and then to its outside forms.”⁷⁸ However reasonable this explication of how the architect resolves program and function into plan and elevation, it does not fully translate into the practice of store design and modernization. Indeed, according to a wide range of store planning experts of the 1930s, if the architect properly considered the people who would use the building—namely the customers—then the design must, perforce, begin with the outside forms rather than the arrangement of space inside. The reason for this was simple: as the Department of Commerce observed, “the purpose of any retail business is to sell merchandise.”⁷⁹ Hence, the “architectural problem” of the retail store began with “merchandising principles,” most importantly the principle of “attraction.” According to this principle, the merchant’s first problem was “to attract the attention of potential customers” as they passed through the “trading area”—the street or district in which the store was located.⁸⁰

7. Mangel's Clothing Store, designed by Morris Lapidus circa 1935. Source: Morris Lapidus, *Too Much Is Never Enough* (New York: Rizzoli, 1996), 106.



Rendered architecturally, this problem required a design that privileged the outside of a store since it was the exterior that represented the earliest opportunity to attract the attention of potential customers. This was precisely the advice architectural writer and editor Kenneth Stowell gave to readers of his 1935 book, *Modernizing Buildings for Profit*: “exterior design and decorative changes that make the newness of the old building apparent” were those that would produce “the design that attracts the people that pay.” This fact alone, Stowell believed, made exterior restyling of the façade the most important type of modernization.⁸¹ As it was most frequently practiced, then, modernization became, in

essence, “façadism,” a term used in the 1930s, and anticipating by some four decades Robert Venturi’s famous formulation of architecture as “shelter with symbols on it.”⁸² Similar to Venturi’s postmodernism, 1930s commercial modernization produced a scenographic architecture defined literally by “advertising fronts” and “billboard” types. (Figure 8.) These terms obviously referred to architectural intentions that were primarily visual, in which the signage, display, and building façade were treated as an integrated whole, often as a two-dimensional field for a graphic composition (one frequently derived from the two-dimensional design precedents of de Stijl and the Bauhaus). Indeed, Lapidus went so far as to

describe such storefronts as having “the same principles as a poster,” with displayed merchandise and sign letters instead of an image and text.⁸³

Whether its emphasis was spatial or visual, the storefront had been codified by the end of the decade as a commercial typology presenting distinct architectural challenges. In 1935 *American Architect* discussed the myriad “architectural factors” involved in storefront design, including display planning, window lighting, signage, and mechanical equipment. Proper consideration of each factor was, ideally, derived from merchandising techniques which, the article stressed, always served as the “basis” for the architect’s work.⁸⁴ As described in an article accom-

panying time-saver standards for storefront planning published in the same journal two years later, the storefront was well defined both formally and programmatically. With a three-part composition consisting of windows, signage, and entrance, it satisfied a three-part objective to “sell the product, sell the name and to afford access to the interior.” However small-scale, this was architecture that required “the full force of a designers’ knowledge of sales psychology, construction technique and architectural composition.”⁸⁵ It was also architecture that, however innovative in the 1930s, quickly became standard in the 1940s, to such an extent that it was possible to refer to “current design formulae and clichés.” The most prominent of these was the so-called closed billboard, a storefront that combined wall, display, entrance, and signage into a graphically oriented, largely two-dimensional composition, described in 1943 as a “fixed architectural scheme.”⁸⁶

Even as late as 1955, according to a survey conducted by the New York State Department of Commerce, this was the most frequent type of modernization: a new storefront was added or an existing storefront was “redecorate[ed] to achieve the modern look.”⁸⁷ This is not to imply that the store design and modernization did not continue to evolve. Indeed, it is possible to think about the typical modern storefront of the depression decade as paving the way for the more fully realized, spatially conceived modernism characteristic of postwar commercial design. This is evident in the prevalence of what was very nearly the architectural opposite of the billboard-type storefront — the “open-faced” type. Characterized by broad expanses of plate glass, free-standing display cases, and dramatically revealed interiors, the open-faced type was described as “far more than a store front.” By serving as a sort of proscenium for the “display theatre” of the store interior, the open-faced exterior offered a new challenge to the architect engaged in retail work, that of “thinking in three-dimensions.” As this type of thinking had been less important — and even nonexistent — in the billboard-type storefront, the open-

faceted store represented “a real field” of practice to the designer.⁸⁸

This evolution of the storefront from the billboard to open-faced type parallels the acceptance of modernism in the United States from the prewar to the postwar periods. That the modernized storefront of the 1930s embodied those elements of modernism — asymmetrical and unornamented façades, planar and curving forms, ribbon-like windows and boldly simplified graphics — that were most easily identified as *modern* made complete sense in the competitive commercial landscape. However disconnected these elements were from modernism’s underlying architectural ideals of open planning and volumetric regularity, they still represented an embrace, albeit a conspicuous one, of modernism. As Stowell observed in *Modernizing Buildings for Profit*, American architects of the 1930s were “assimilating the philosophy of the early and radical modernists and interpreting it through their own individuality.” Because of this trend, Stowell noted, “this modern or international style is rapidly coming to the fore,” especially in “minor buildings” featuring what Stowell described as modernism’s characteristic “plain surfaces, geometric forms, and colorful simplicity.” Stowell was confident that “the present trend toward modernism in store design” would continue unabated as “public taste tends more and more to the new architecture.”⁸⁹ While architects may have initially accepted small-scale commercial modernization projects simply to mitigate the immediate impact of the depression, their work on U.S. Main Streets produced something far more consequential — a modernist architecture that, however superficial and ephemeral, was also widespread and accessible.

Notes

1. Throughout this article, the term “modernization” is used deliberately in this historical sense to underscore its period associations.
2. Republic Steel advertisement, “Modernize Main Street,” *Architectural Forum* 62 (June 1935): 45.
3. The emphasis was on commercial modernization to avoid discouraging the market for new residential construction, dealt with in Title II of the

- National Housing Act. See FHA, *Modernization Credit Plan*, Bulletin No. 1 (Washington, DC: GPO, Aug. 1934).
4. U.S. Department of Labor, Bureau of Labor Statistics, “Value of Building Construction as Indicated by Building Permits, 1925–1941,” reprinted in Broadus Mitchell, *Depression Decade*, vol. 9, *Economic History of the United States* (New York: Holt, Rinehart, and Winston, 1947), 447.
5. Cited in U.S. Senate, 73d Congress, 2d Session, *National Housing Act: Hearings before the Committee on Banking and Currency* (Washington, DC: GPO, 1934), 168.
6. “What Is Now Being Done in Emergency Relief Measures,” *Architectural Record* 71 (May 1932): 298.
7. F.W. Dodge Corporation statistics cited in Thomas S. Holden, “What Has Happened to Architects?” *Architectural Record* 71 (May 1932): 291–93.
8. Cited in U.S. Senate, 73d Congress, 2d Session, *National Housing Act: Hearings before the Committee on Banking and Currency*, 168–69.
9. Randolph Williams Sexton, *American Commercial Buildings of Today* (New York: Architectural Book Publishing, 1928), 154.
10. “Remodeling, Modernization, Repair,” *American Architect* 146 (April 1935): 10. Figures cited in Mitchell, 447.
11. Figure cited in “Store Repairs May Surpass Billion Mark,” FHA Modernization Clip Sheet 1 (no. 12), n.p. For the period 1934–1943 the federal government estimated that \$800 million was spent annually on commercial modernization. See FHA, *9th Annual Report* (Washington, DC: GPO, 1944), 1.
12. “Modernize Main Street,” *Architectural Forum* 63 (July 1935): 51.
13. “Alphabets and Architects,” *American Architect* 148 (Jan. 1936): 17.
14. Arthur Holmes, “Plan to Create New Business for the Architect,” *American Architect* 141 (June 1932): 14.
15. “Remodeling Primer,” *Architectural Forum* 61 (Sept. 1934): 153.
16. T.S. Holden, 293.
17. “Alphabets and Architects,” 17.
18. FHA, *Selling Better Housing* (Washington, DC: GPO, 1935), 23.
19. “A New and Significant Type of Partnership,” *Architectural Record* 78 (July 1935): 47.
20. “Alphabets and Architects,” 17.
21. As a term, commercial or store modernization was applied to the remodeling of existing buildings for retail use regardless of occupancy: even if a given retail client was occupying a particular space for the first time, the newly designed store was considered a modernization.
22. Morris Ketchum et al., “Store Fronts of Tomorrow: Jury Report, New Pencil Points-Kawneer Competition,” *New Pencil Points* 24 (Feb. 1943): 30.
23. James Dusenberry, “The Architect and Housing — Today,” *Octagon* 7 (May 1935): 3–4.
24. Earnest Elmo Calkins, “Give Your Town a Personality,” *Rotarian*, March 1935, 11. The article was reprinted in condensed form in *Reader’s Digest*, June 1935, 45–46.
25. S.R. DeBoer, *Shopping Districts* (Washington, DC: American Planning and Civic Association, 1937): 44–45; Arthur C. Holden, “Stabilized Modernization,” *American Architect* 147 (Sept. 1935): 38.
26. “Main Street, U.S.A.,” *Architectural Forum* 70 (Feb. 1939), 74.
27. *Ibid.*, 75, 86, 88; FHA, *Community Campaign* (Washington, DC: GPO, 1934), 20.

28. FHA, *Community Campaign*, 11. See also "To Explain Housing Act," *New York Times*, Dec. 9, 1934, sec. XI and XII, 1. The New York City bureau was located at Forty-First Street and Madison Avenue. "Architects' Clinic," *Better Housing*, Nov. 30, 1934, 3. See also FHA, *Community Campaign*, 21.
29. "Architectural Clinic Gives Experience to Students, Business to Architects," *Architectural Record* 87 (April 1940): 8.
30. Royal Barry Wills, "How to Find a Job During a Depression," *Pencil Points* 13 (Jan. 1932): 14–15.
31. *Ibid.*, 13, 15. See also William L. Fletcher, *How to Get the Job You Want* (New York: Houghton-Mifflin, 1929).
32. Royal Barry Wills, *This Business of Architecture* (New York: Reinhold, 1941), i, 3.
33. See Andrew Saint, *The Image of the Architect* (New Haven, CT: Yale University Press, 1983), 72–95.
34. See Richard Michael Levy, "The Professionalization of American Architects and Civil Engineers, 1865–1917" (Ph.D. diss., University of California, Berkeley, 1980), esp. 227–89.
35. Herbert Croly, "A New Era of Building," *Architectural Record* 58 (1925): 290. Albert Kahn, for example, reorganized his office to reflect values of pragmatic efficiency, abandoning the beaux arts atelier in favor of systematized American business. Kahn's office operations, complete with detailed organizational charts, were published in "Portfolio of Industrial Buildings: Albert Kahn Inc.," *Architectural Forum* 69 (Aug. 1938): 87–142. For an analysis of Kahn and business see Terry Smith, *Making the Modern* (Chicago: University of Chicago Press, 1993), esp. 57–92. In Europe, Le Corbusier had similarly adopted the habits of the businessman in the 1920s, but his espousal of Taylorization and Fordism remained a modernist conceit—an attempt to replace artistic individualism with universalization and standardization. For Kahn these were practical facts, not theoretical ideas.
36. See Sinclair Lewis, *Main Street* (New York: Collier, 1920), 64–65. Though Lewis's heroine attempts to bring an architect to town to lecture on the need for beautification in Gopher Prairie, her efforts are rebuffed and her interest in architecture is censured as an outsider's pretension which "knocked" Gopher Prairie by pointing out the ugliness of its buildings. As late as 1945, Thomas Creighton described how the alien artist/architect, so influenced by "the subtle, emasculating charm of the Beaux-Arts," was "to the culture of the Midwest." See Thomas Creighton, *Planning to Build* (Garden City, NY: Doubleday, Doran, 1945), 70.
37. "The Case for the Architect, Address by Electus Litchfield before the AIA Convention in Washington," typescript, May 17, 1934, 2 (National Archives Record Group 207, Records of the HHFA, Records of the Central Housing Committee, General Records of the Executive Secretary, box 9).
38. "Recovery through Remodeling," *Architectural Forum* 61 (Aug. 1934): 81.
39. Wills, *This Business of Architecture*, 8–9, 33, 37–38.
40. Joseph Douglas Weiss, "Store Design Practice," *New Pencil Points* 24 (Feb. 1943): 42, 46–47.
41. FHA, *Second Annual Report* (Washington, DC: GPO, 1936), 3; FHA, *First Annual Report* (Washington, DC: GPO, 1935), 10. For a general discussion of the depression's impact on building material markets, see Michael A. Tomlan, "Building Modern America," in Thomas C. Jester, ed., *Twentieth Century Building Materials* (New York: McGraw Hill, 1995), 38–40.
42. "Forum of Events: Promotion Pieces," *Architectural Forum* 66 (June 1937): 98.
43. Johns-Manville and Pittsburgh Plate Glass sponsored the largest traveling exhibitions. General Electric, Johns-Manville, American Radiator, Pittsburgh Plate Glass, and Libbey-Owens-Ford all sold products on installment, using the insurance provision of the Modernization Credit Plan. Batten, Barton, Durstine & Osborne had the Pittsburgh Plate Glass account throughout the 1930s. See Libbey-Owens-Ford, *Advertising Yearbooks, 1930–1940*, for reprints of advertisements appearing in these magazines (LOF MSS-066, box 25, Ward M. Canaday Collection, University of Toledo, OH).
44. Metropolitan Life Insurance, Policy Holders Service Bureau, *Merchandising and Advertising Practices in the Building Material and Equipment Field* (New York: Met Life, 1931), 8.
45. "Speech by George Lapointe, President of National Retail Lumber Dealers Association, before Building Industry Forum," typescript, Jan. 13, 1936, 1 (National Archives Record Group 287, box y 748).
46. "Modernizing the Building Industry," *Atlantic Monthly*, Oct. 1935; Johns-Manville (hereafter J-M) advertisement, "Johns-Manville Modernizes a Main Street Shop," *Chain Store Age*, Nov. 1935, 96.
47. J-M advertisement, "Important Announcement," *Architectural Forum* 61 (Oct. 1934): 35.
48. "Lumar: A New Marble Product," *Architectural Record* 79 (March 1936): 234–36; Vermont Marble advertisement, "Lumar, Luminous Vermont Marble," *Architectural Forum* 66 (June 1937): 104.
49. J.W. Wiley, "Structural Glass Has Arrived," *Glass Industry* 13 (Sept. 1932): 148–49. For the history and preservation of structural glass, see Carol J. Dyson, "Structural Glass," in Thomas C. Jester, ed., *Twentieth Century Building Materials* (New York: McGraw Hill, 1995), 200–205. As a term identifying a specific building material, the "structural glass" so characteristic of storefront design in the 1930s is distinct from the "structural glass" products on the market today. In current building practice, structural glass is most often used in curtain wall construction, especially in frameless systems, where it sometimes plays a minor structural role. With respect to historical usage and contemporary historic preservation, throughout this article structural glass refers to the commonplace product of the 1930s.
50. John W. Harrington, "More Profit Store Fronts," *Building Modernization*, Dec. 1933, 10.
51. *Sweet's Catalogue File* (1934), C222–C223; "Equipment and Construction Directory," *Chain Store Age*, Nov. 1934, D3, D7.
52. Pittsburgh Plate Glass Company (hereafter PPG) advertisement, "Why Does a Pittco Store Front Make Your Chain Store Individual?" *Chain Store Age*, Nov. 1936, 121.
53. PPG advertisement, "Make the Store Fronts You Design Better Looking," *American Architect* 146 (April 1935): 102.
54. PPG advertisement, "A Modern Pittco Store Front Builds Up Business," *Chain Store Age*, Sept. 1935, 127; PPG advertisement, "10 New Detail Drawings of Pittco Store Front Metal Applications," *Architectural Record* 84 (Nov. 1938): 39.
55. *Sweet's Catalogue File* (1936), 17/19. For more on Teague and PPG, see Jeffrey Meikle, *Twentieth Century Limited* (Philadelphia: Temple University Press, 1979), 117–21.
56. *Sweet's Catalogue File* (1936), 17/19. "Store Front Designs in the Modern Mode," *Building and Modernization*, Nov. 1936, 12.
57. Figures cited in "Profits Report: Pittsburgh Plate Glass," *New York Times*, March 14, 1935, 33. See also U.S. Tariff Commission, *Flat Glass and Related Glass Products*, Report No. 123, 2d series (Washington, DC: GPO, 1937), 137.
58. Harold M. Alexander, "Creating Glass Business," *Batch*, March 1939, 2. *Batch* was Libbey-Owens-Ford's in-house newsletter.
59. Libbey-Owens-Ford (hereafter LOF), *19th Annual Report for Year Ending 31 December 1935* (Toledo, OH: LOF, 1936), 5.
60. LOF advertisement, "Glass Dominates Designs for Modernization," *Architectural Forum* 63 (Dec. 1935): 50. See also LOF, *52 Designs to Modernize Main Street with Glass* (Toledo, OH: LOF, 1935).
61. LOF, *20th Annual Report for the Year Ending 31 December 1936* (Toledo, OH: LOF, 1937), 7.
62. "Vitrolux Color Fused Tempered Plate Glass," *Sweet's Catalogue File* (1938), sec. 18, cat. 3, p. 9; see also Alexander, 2; "Products and Practice: Glass," *Architectural Forum* 67 (Dec. 1937): 24, 27.
63. See Robert W. McKinley, "Spandrel Glass," in Thomas C. Jester, ed., *Twentieth Century Building Materials* (New York: McGraw Hill, 1995), 206–13.
64. "Dean Lowry Ties Up a Package," *Batch*, July 1940, 3; "Libbey-Owens-Ford Announces Extrudalite," *Sweet's Catalogue File* (1938), sec. 19, cat. 8.
65. Walter Dieter, "Art and Engineering at Parkersburg," *Batch*, July/Aug. 1939, 13.
66. Structural glass cost between \$.50 and \$.70 per square foot; porcelain enamel cost between \$.85 and \$1.25 per square foot. On the economics of the purchase and installation of facing materials see U.S. Tariff Commission, 137–41. See also "Products and Practice: Architectural Porcelain Enamel," *Architectural Forum* 66 (May 1937): 457–58.
67. On the failures of the National Recovery Act and the New Deal's relationship to labor, see Colin Gordon, *New Deals: Business, Labor, and Politics in America, 1920–1935* (New York: Cambridge University Press, 1994).
68. LOF promotional pamphlet, "LOF Colorful Storefronts are an Invitation to Stop and Shop" (Toledo, OH: LOF, 1937) (LOF MSS-066, box 16, folder 32, Ward Canaday Collection, University of Toledo, OH); Bruce Miller, "Show 'Em . . . Sell 'Em," *Batch*, May 1941, 11.
69. Lewis Mumford, *Sticks and Stones* (1924; reprint, New York: Dover, 1955), 100–101.
70. "Where Is Modern Now?" *Architectural Forum* 68 (June 1938): 467.
71. Dusenberry, 5, 3.
72. Of course, modernization editorial coverage in the magazines attracted modernization advertisements from the manufacturers, and since those advertisements produced revenues, the profitability of modernization for the journals should not be underestimated.
73. "Journalism Is Catching Up with Architecture," *Architectural Record* 83 (Jan. 1938): 103.
74. See "Portfolio of Rescued Buildings," *Architectural Forum* 61 (Aug. 1934): 161–90; "Portfolio: Modernization of Small Shops," *Architectural Record* 76 (Sept. 1934): 155–82.
75. See "Remodeling Primer," 153–56; "Checklist for New Construction and Modernization," *Architectural Record* 76 (Dec. 1934): 435–43; "Planning Techniques No. 1: Service Stations," *Architectural Forum* 66 (Feb. 1937): 43–52; R.A. Fash, "Drugstore Planning," *Architectural Record* 83 (Feb. 1938): 109–11.

76. "Remodeling for Profit," *Architectural Forum* 64 (Jan. 1936): 69–74.
77. Lapidus quoted in John W. Cook and Heinrich Klotz, *Conversations with Architects* (New York: Praeger, 1973), 162–63.
78. William Lescaze, *On Being an Architect* (New York: Putnam, 1942), 9.
79. U.S. Department of Commerce, "Retail Store Problems," quoted in Frederic Arden Pawley, "Retail Store Planning," *Architectural Record* 78 (July 1935): 51.
80. Pawley, 50, 52.
81. Kenneth Stowell, *Modernizing Buildings for Profit* (New York: Prentice-Hall, 1935), 11. The fact that a commercial establishment could remain open for business while an exterior alteration was underway was probably of equal importance. Stowell urged architects to demonstrate for their potential clients the extent to which a building's appearance

could be modified without disturbing the structure, inhabitants, or business. Tables categorizing government-insured notes by type of modernization appear in every FHA *Annual Report* and provide statistical evidence of the frequency with which merchants modernized store exteriors rather than interiors. In 1939, the editors of *Architectural Forum* reached a similar conclusion. See FHA, *Second Annual Report*, 10–12, and "Main Street, U.S.A.," 83.
82. Robert Venturi, Denise Scott Brown, and Steven Izenour, *Learning from Las Vegas* (1972; reprint, Cambridge: The MIT Press, 1977), 8–9, 87–92. For usage of the term "façadism" in the 1930s see, for example, Russell Walcott, "Facadism," *Architectural Record* 80 (Nov. 1936): 385–89.
83. For discussion of advertising fronts and billboard-type façades, see

Shepard Vogelgesang, "Architecture and Trade Marks," *Architectural Forum* 50 (June 1929): 897. Morris Lapidus defined the "billboard" type of the 1930s in "Store Design," *Architectural Record* 89 (Feb. 1941): 124.
84. "Store Fronts and Show Windows," *American Architect* 147 (Dec. 1935): 60–67.
85. J.R. Von Sternberg, "Unit Planning No. VI: The Store," *American Architect* 150 (June 1937): 100. See also "Time-Saver Standards: Store Front Planning," *American Architect* 150 (June 1937): 107–109.
86. Ketchum et al., 32.
87. New York State Department of Commerce, *Small Store Modernization* (Albany: State of New York, 1955), 9.
88. Ketchum et al., 32.
89. Stowell, 12.

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