Reading Response 3

In preparation for Tuesday's class discussion and presentation by Daniel Abramson, author of *Obsolescence*, you are to prepare a short reading response to the chapter from his book. This should be typed and printed, with your name, date, and Reading Response 3 indicated.

Carefully read, underline, and review the chapter prior to beginning the response.

Prepare a multi-sentence question that illustrates both your knowledge of the article and an opening up of questions about the author's intent or position. For instance, build up to the question as exemplified here (this is a sample of a type of question):

> "Abramson writes X, which equates obsolescence to Y. However, he earlier states Z. How do we reconcile these two divergent positions and what do they mean for X?"

Focus your question on the text itself, avoid more general questions like, "what does this mean for us today?" Stay close to his subject matter.

PLEASE BE PREPARED FOR SUBSTANTIVE DISCUSSION AND HAVE A SERIES OF QUESTIONS/COMMENTS/THOUGHTS YOU MIGHT BRING UP WITH THE AUTHOR.

by traditions of craft joinery; British empiricism and consumerism, deeply engaged both in research and expendability. Britain gave perhaps the fullest welcome to obsolescence, using architectural obsolescence to imagine release from hidebound, crumbling tradition. In England, birthplace of the Industrial Revolution, the infrastructure was also the first to fall to ruin in the postwar period, creating an opportunity for the poetry of Price. Yet it was precisely and paradoxically in this fullest embrace of obsolescence that limits began to be sensed. Cook's Plug-In University exposed an unresolved contradiction between the tangible fix and an intangible event. And Price revealed the obsolete remnant.

As efficiency progresses, so do mountains of waste. Garbage is modernity's "shadow world," writes the sociologist John Scanlan, the leftover of innovation and consumption, novelty and fashion.[45] Price's engagement explored rather than condemned this contradiction. His love of obsolescence uncovered its remnant, and for this, too, there is affection—the crane, the mounds, the derelict shed. Yet the beholder remains estranged from the desolate landscape of the Hanley Housing Area, distanced by the bridge, with little to grasp onto in the thinly drawn future. The imagined prospect appears no closer than the obsolete past. "The future is but the obsolete in reverse," Vladimir Nabokov wrote in his 1952 science-fiction short story "Lance." This time-twisting phrase names the future as distant and as ungraspable, as "'out of date'" as is the past, Nabokov insists. No matter in how much detail we try to envision what comes next, as in the Plug-In City and the Potteries Thinkbelt, the future's reality remains ungraspable. The future is as alien to the present as is the obsolete past, "a strangeness no amount of research can foresee," as Nabokov writes.[46] Temporal estrangement is the condition of Price's Hanley Housing Area image, too, its full consciousness of the consequences of obsolescence. The past is a wasteland, the future the same. Architecture's embrace of obsolescence touches a limit. Struggling with obsolescence was not Price's burden alone. At the same time in the 1960s that much of architecture operated under the paradigm's sway, believing in obsolescence's inevitability, others without and within architecture were openly critiquing obsolescence's logic and exploring ways to engineer its reversal. Architects and others soon became keenly aware of the problems of obsolescence and responded to these limits through design and other means.

5

Reversing Obsolescence

At the same time in the 1960s that many architects accepted obsolescence and even embraced its promise, others recoiled from obsolescence's consequences and implications. They rejected its apparent inevitability, its fast-changing world of megastructures, factory sheds, and indeterminacy. Yet both groups, or rather tendencies, whether they accepted or rejected it, believed that obsolescence had become the dominant paradigm of change in the built environment. The tension between these two impulses was present from the beginning of the decade. In January 1960 the leading American journal *Architectural Forum* declared, "Much of the urban product of the earlier industrial revolution is hopelessly obsolete and not worth saving." Yet there was unease, too. The same editorial called for "restoring harmonious continuity" and "subtle renewal programs."[1] In the 1960s skeptics of the obsolescence paradigm sought alternate means of conceptualizing and managing change: not transience but permanence, not expendability but adaptability, not supersession but continuity—in other words, the reversal of obsolescence. This chapter asks: What critiques of obsolescence were offered during this period? What alternatives pursued? What were the contest's results?

Critiquing Obsolescence

Americans, who since the 1920s had lived longest with the idea of obsolescence, began to openly question its verities around 1960. In 1959 the economist W. Paul Strassman published an article in the *Journal of Economic History* disputing the veracity of Joseph Schumpeter's "legend of Creative Destruction," as Strassman deemed it. Strassman argued that creative destruction was "not an apt description of the way dominant production methods succeeded

one another in the U.S. from 1850 to 1914," as Schumpeter had claimed in his famous 1942 analysis of capitalism. Rather, the contrarian Strassman insisted, "the old and new, or two competing innovations, grew side by side for decades."[2] If, as the evidence suggested, creative destruction was historically false, then, implicitly, obsolescence, as a governing paradigm for conceptualizing and managing change into the future, ought to be reconsidered. In the event, Strassman failed to dent Schumpeter's reputation; creative destruction remains a ubiquitous trope, a convenient simplification of capitalism's complexities. But Strassman's critique does bespeak a moment when obsolescence began to lose its grip.

In 1959, again, *Harvard Business Review* surveyed corporate executives regarding "a barrage of criticism about one of [business's] characteristic processes, planned obsolescence." Perhaps surprisingly, the Harvard poll found, a majority of American business leaders agreed that "too large a part of our present economy is based upon superficial product obsolescence, inducing people to buy new models before their old models are worn out." Engineering and construction executives were especially troubled, perhaps reflecting values of solidity and permanence for their product.[3] In the heart of American capitalism, obsolescence was not the virtue it had once been perceived to be.

Cultural critiques of obsolescence also swelled in the early 1960s. The journalist Vance Packard's best-selling book *The Waste Makers* (1960) skewered the "throwaway spirit" of American consumer life. Packard satirized a "Cornucopia City" of the future, as he called it, where "all buildings will be made of special papier-mâche [. . .] houses can be torn down and rebuilt every spring and fall at housecleaning time."[4] Other popular writers, such as John Kenneth Galbraith, David Riesman, C. Wright Mills, and William H. Whyte, excoriated the passivity and waste of a society based upon "Progress through Planned Obsolescence" (a Packard chapter title). People were seen to be at the mercy of manipulative marketing methods, discarding still-useful objects, wasting their resources and the earth's. Skepticism of the obsolescence paradigm transcended the American setting and was found as well in postwar Europe's technocratic consumer societies. In literature, the Swiss architect-turned-writer Max Frisch twisted the objectivist certainties of the obsolescence paradigm into a horrific tragedy in his famed 1957 novel *Homo Faber*. The hyperrationalist protagonist declares, "As a technologist I am used to reckoning with the formulas of probability," before contingent chance and accident, his worldview's opposites, lead him inadvertently into a deadly love affair with his own daughter.[5] In science fiction, the Englishman J. G. Ballard envisioned dystopian, obsolescing world-cities, every cubic foot commoditized, the whole mess rotting from the inside out.[6]

Attacks upon the logic of obsolescence also resonated with the decade's antiestablishment leanings. Students for a Democratic Society's Port Huron Statement of 1962 explicitly disparaged "'planned obsolescence' as a permanent feature of business strategy."[7] The iconic Volkswagen Beetle was marketed in the United States as immune to superficial styling: "We do not believe in planned obsolescence. We don't change a car for the sake of change."[8] Expendable, mass-produced objects and environments, the essence of Fordist material culture, embodied a crisis of authenticity. Postwar life seemed to lack core values. Modern suburbs epitomized this apparent emptiness: cookie-cutter housing, overconsumption, alienation. In contrast, older urban centers once deemed obsolete came to be revalued.

In circles of professional expertise, American social scientists began to critique the paradigm of urban obsolescence. The sociologist Herbert Gans argued, for example, that Boston's West End was "not really a slum," that "obsolescence per se is not harmful: the judgment merely a reflection of middle-class standards."[9] The psychologists Marc Fried and Peggy Gleicher documented both the traumas of relocation for those displaced by urban renewal projects and the positive experiences those people had had in the so-called obsolete neighborhoods. Vivid street life and kinship networks trumped bureaucrats' measurements of architectural and environmental performance. Eschewing obsolescence's "loose, shifting temporary world," the MIT urban planner Kevin Lynch in 1958 called for a "happy place for human existence [. . .] emotional and perceptual continuity in the midst of flux."[10] The critique of urban obsolescence received its widest amplification in the author and activist Jane Jacobs's famed book *The Death and Life of Great American Cities* (1961). An architectural journalist, Jacobs, who lived in New York's Greenwich Village, became a fierce public antagonist to the city planner Robert Moses's grand urban renewal schemes, favoring instead the "organized complexity" and "common, ordinary things" of her neighborhood's street and social lives, as she wrote in a plain yet passionate style.[11] Studying the city deductively rather than through orthodox planning theory, Jacobs observed "ingenious adaptations of old quarters to new uses" and concluded that "lively, diverse, intense cities contain the seeds of their own regeneration."[12] Adaptation, in other words, was the key to successful urbanity, rather than obsolescence. "There is nothing economically or socially inevitable about [. . .] the decay of old cities," Jacobs declared. "Cities need old buildings." Furthermore, "Time makes certain structures obsolete for some enterprises, and they become available for others."[13] Jacobs's commonsensical approach and rhetoric, along with her public activism, lent her persona an air of saintliness, as many have noted, while her ideas, translated into numerous languages worldwide, in-

spired a generation's critique of top-down planning in favor of populist feeling for the prewar city's environs and communities.[14]

Some in the architectural community echoed these sentiments. The American architectural historian William Jordy, in a 1960 essay entitled "Humanism in Contemporary Thought," derided the "worship of obsolescence" that produced "slickness, shininess, thinness in our buildings."[15] The *Architectural Forum* editor Peter Blake's *God's Own Junkyard: The Planned Deterioration of American Landscape* (1964) blamed the "uglification" of America on the 1954 tax code's accelerated depreciation rate (introduced not because property was deteriorating or obsolescing faster, but to encourage development with quicker write-offs): "All of a sudden an owner was rewarded for selling out fast!"[16] Blake also attacked obsolescence's presumption of expendability, citing above all the infamous demolition of New York's monumental Pennsylvania Station, built in the first decade of the twentieth century and deemed already in 1950 an "economic waste" by its railroad company owner.[17] Penn Station's destruction, begun in 1963, inspired the American poet George Zabriskie's general lament: "We live in a time of planning our obsolescence, or tearing down / the walls about our ears: the manufacture of ruins which look / bombed-out is profitable and quick."[18] Zabriskie's poem was published in an important 1966 volume, *With Heritage So Rich*, sponsored by the United States Conference of Mayors, which argued for stronger preservationist policies. Many cities around the world had their own Penn Stations at this time. In Britain, a 1955 special issue of *Architectural Review* entitled "Outrage" had fulminated against heritage loss. But this didn't stop the demolition in 1961–62 of London's famed nineteenth-century Euston Station and its renowned gateway portico, which thereafter became a British preservationist touchstone. The late 1950s and 1960s seem internationally to have been an age of "historicide." "We eat the past," observed the poet Hans Magnus Enzensberger about the erasure of German memory, including the recent Nazi past.[19] The obsolescence paradigm in the 1960s was coming under attack on numerous fronts, from the American business community on economic and scholarly grounds to the culture at large in a critique of Western consumer society and its historical amnesias.

Preservationism

Alongside the multiple protests against obsolescence arose a series of positive strategies for its reversal. Historic preservation, which revalues the obsolete, advanced intensively in the 1960s. Before the mid-twentieth century, preservationism and obsolescence had coexisted more or less peaceably. It is

hardly coincidental that the first great theorist of architectural obsolescence, Reginald P. Bolton, was also an active preservationist in his Upper Manhattan neighborhood. The industrialist Henry Ford abandoned successive obsolescent factories in 1910s Detroit, then painstakingly collected youthful architectural memories for his "Greenfield Village." John D. Rockefeller, Jr., sponsored Colonial Williamsburg. As the historian David Lowenthal has noted, "The world's greatest technocrats married genius for annihilation with instincts to preserve."[20] Preservationism and obsolescence were in fact two sides of the same modernizing coin. Both rationalized change in elite interests. Preservation provided built ideals of elite resilience in the midst of wholesale change. Protecting isolated urban treasures, like New York's City Hall, reinforced elite collective memory by ensuring "stability and continuity with a noble past," explains the historian Randall Mason.[21] Likewise, in Charleston, South Carolina, which pioneered whole-district preservation zoning in the 1930s, the professional middle-class women who led the crusade did so in their own privileged white interests, "protecting places with strong ancestral associations," the historian Robert Weyeneth writes.[22] Historians recognize that early preservationism was not opposed to but rather functioned as "an integral *part* of modernity," Mason asserts.[23] Salvaging an ancient cathedral, castle, manse, or civic monument—preservationism's purview since its mid-nineteenth-century origins—saves "a piece of our national life," explained a German art historian in 1905, securing top-down values.[24] The rest was made available for redevelopment. The Charleston preservationists let the poor and black rest of the city succumb to modernization and wholesale slum clearance.

But from around 1960 preservationism evolved in the face of obsolescence's depredations, especially toward the recent past. Previously, baroque seventeenth-century architecture in Europe could seem too new to preserve; monuments valued for their age were expected to "reveal the passage of *a considerable period of time*" (emphasis added), wrote the German art theorist Alois Riegl in 1928.[25] But now, around 1960, a building could be just a few decades old to elicit preservationist sentiment. Britain's Victorian Society was founded in 1958, its American branch in 1966. Supporters rallied against the demolitions of London's Covent Garden, Gropius's Bauhaus in Dessau, Louis Sullivan's Garrick Theater in Chicago, and New York's Penn Station (fig. 5.1). Sympathy emerged, too, for the machine age's everyday environs, its colliers and cottages. The German artists Bernd and Hilla Becher photographed Europe's fading industrial infrastructure, made obsolescent by economic development and policies of the postwar common market (fig. 5.2). "I felt it more or less my duty," Bernd explained, "to capture the plants threatened by destruction before they disappeared completely."[26]

Beginning in the early 1960s preservation protocols evolved accordingly. The 1964 international Venice Charter encompassed "modest works" and "setting," following recent Dutch and French legislation.[27] In Europe, the "urban conservation movement" sought to preserve whole historic city centers, in part to spur tourism. In Britain, buildings just thirty years old qualified for historic listing in 1970. Penn Station's death throes helped birth New York's Landmark Preservation Commission in the mid-1960s. America's first academic program in preservation was established at Columbia University in 1964.

Preservationism also became more populist. Working-class communities in Japan and West Germany fused architectural and social agendas to resist gentrification. In the United Kingdom, membership in preservation groups soared to three hundred thousand by 1977. German activism numbered in the millions. In Italy, the Bolognese Communist Party rallied to the slogan "Preservation Is Revolution." Even in politically moderate America, citizens believed that half of the nation's listed buildings had already been demolished.[28] This was the "Heroic Period of Conservation," the British historian and activist Alan Powers has written.[29] The new preservationism posed a formidable

FIGURE 5.1. Demonstrators, including writer Jane Jacobs (*third from right, with glasses*) and architect Philip Johnson (*far right*), protest Pennsylvania Station's demolition, New York, 1962. Photo by Walter Daran/Hulton Archive/Getty Images

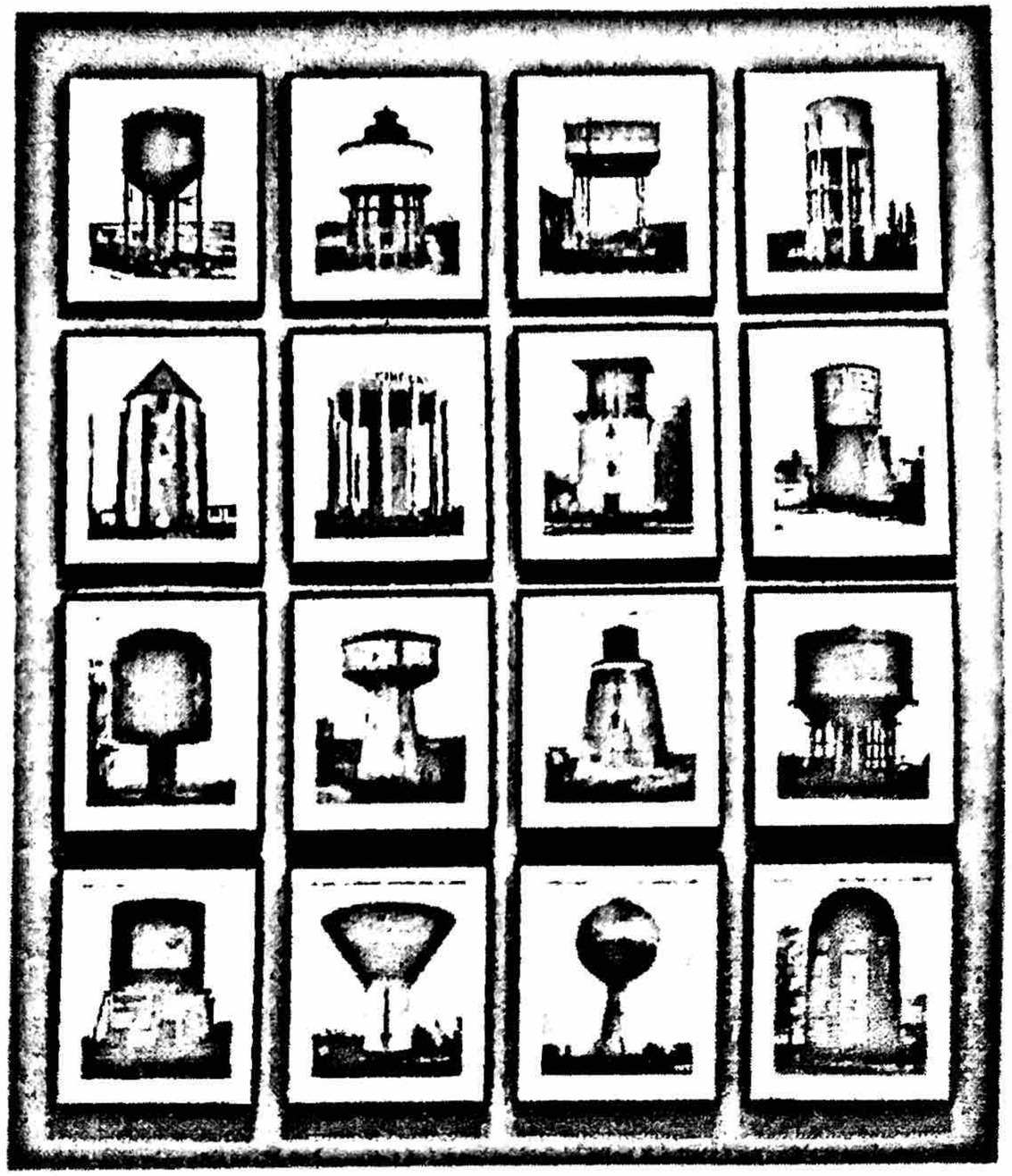

FIGURE 5.2. Water towers, Bernd and Hilla Becher, 1967–80. © Bernd and Hilla Becher; Image copyright © The Metropolitan Museum of Art. Image source: Art Resource, NY

challenge to obsolescence. It reacted to what it perceived as obsolescence's extremes and pressed at its weak points. If an individual monument was worth saving, then why not its setting? Was architecture's worth entirely quantifiable by expert measurement? What about the intangible values of emotion and memory? If ancient, elite objects increased in value over time, then why not more recent and popular ones?

Vernacularism

Just as preservationism was engaging with the recent and the popular, so, too, were discourses on the vernacular finding varied outlets. Bernard Rudofsky's well known 1964 Museum of Modern Art exhibit on vernacular architecture, "Architecture without Architects," presented for reevaluation a broad range of

seemingly obsolete environs, from hill towns to grass huts, which, Rudofsky argued, existed outside the economy of obsolescence, "the pursuit of profit and progress."[30] By contrast, "vernacular architecture does not go through fashion cycles. It is nearly immutable, indeed, unimprovable."[31] The structures Rudofsky featured were not, in his mind, outmoded and archaic, as the obsolescence paradigm would have them, superseded by progress. Rather, the vernacular represented the timeless virtues of good architecture and provided lessons for the contemporary world. Advocates of vernacular architecture promoted "a system of form-making which is a direct reflection of the process of life," the architecture professors William Zuk and Roger H. Clark wrote in 1970.[32] Nomads' tents, for example, seemed to represent more authentic adaptation to a world of flux, closer to nature and need than obsolescence's commercialized transience. The *Whole Earth Catalog*, first published in 1968, invited readers to be their own carpenters. The "process of repair," not replacement, should be the ruling principle of change, preached the Berkeley-based architect Christopher Alexander; "it simply lies there stretched out in time."[33] The elasticity of vernacularism countered the brittle temporality of obsolescence.

Vernacularism put value back in the ostensibly obsolete. So, too, did salvage architecture, which became a fashionable if marginal tactic in the 1960s. Discarded wood, metal, glass bottles, and automobile parts were recycled by youthful builders of the Drop-City commune, Colorado (1965); the Heineken Summer House, Netherlands (1965); Prickly Mountain, Vermont (1966); and the early 1970s desert projects of the architect Michael Reynolds (fig. 5.3). Reuse of the expendable reversed the logic of obsolescence and protested the profligacy of consumer society, aiming "to integrate waste into the cycle of use," explained the urban planner Kevin Lynch in 1972.[34]

Adaptive Reuse

How did architects respond to these critiques of the logic of obsolescence? At the moment in the 1960s when many accepted and even embraced obsolescence, others adopted tactics of resistance. The design technique most widely employed to revalue seemingly obsolete architecture was adaptive reuse. In the 1930s, to stem the "ravages of obsolescence," real estate experts had recommended updating appearances and equipment, an economical option during periods of financial crisis (the 1970s would be a similar moment).[35] Remodeling like this, however, had its limits. If an original function was no longer profitable, then only a new function would do. After World War II, accelerating urban deindustrialization left vast acres of empty factories, mills,

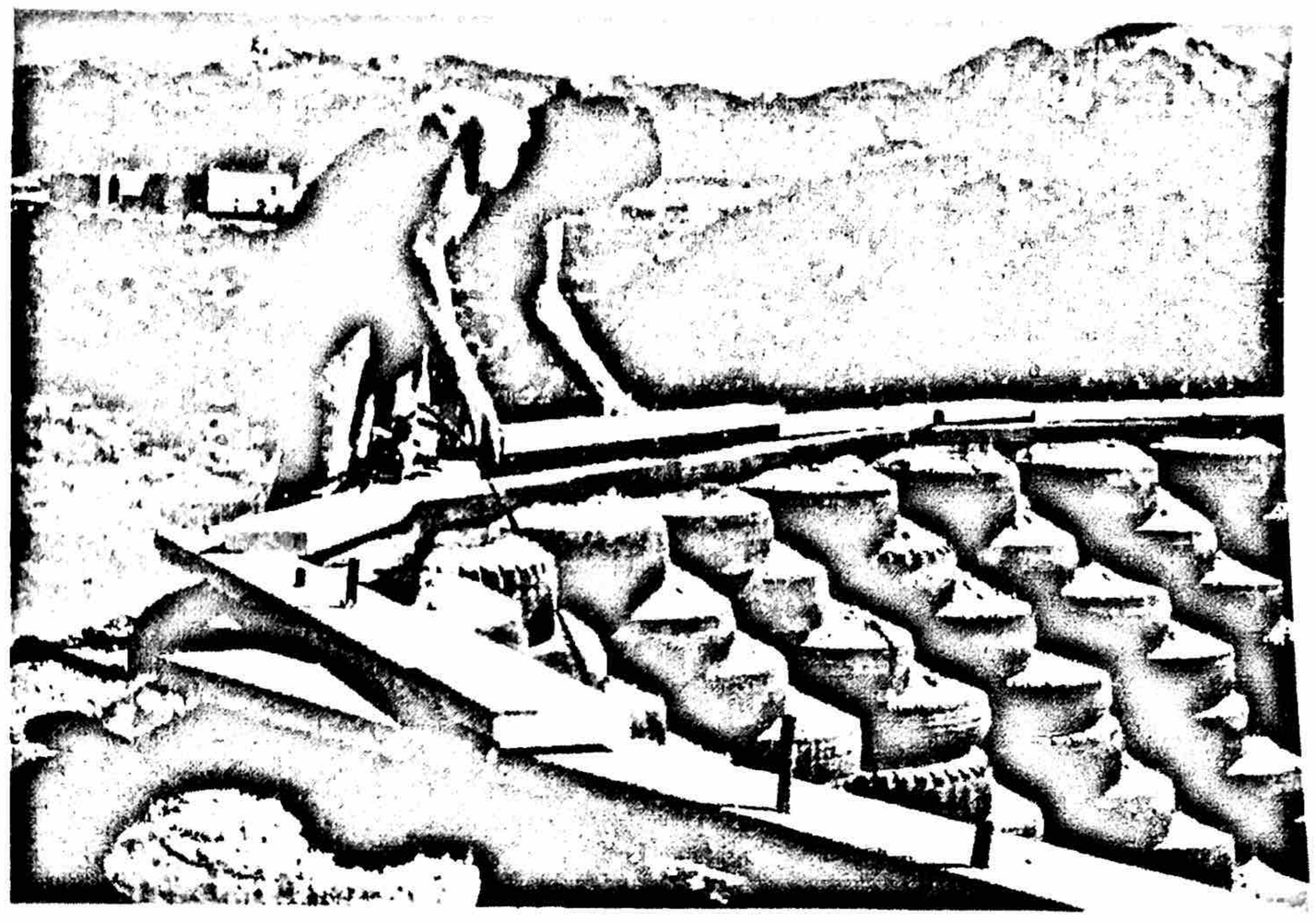

FIGURE 5.3. Salvage architecture, New Mexico, Mike Reynolds, 1979.

and warehouses. New uses began trickling in around 1960. St. Louis's Gaslight Square and San Francisco's Ghirardelli Square were pioneer developments, converted to shops and restaurants. New York artists, like Andy Warhol in 1964, colonized industrial loft districts for cheap studio space, relishing the patina and grit of the obsolescing environment as they found it. Retail, small business, and residential use followed. The pace of "adaptive reuse" accelerated in the 1970s; the term was coined early in the decade when the first books were published on the subject. By 1978 a third of American architects' income, it was estimated, came from rehab work.[36] Adaptive reuse offered the satisfactions of salvage, discovering treasures and finding ways to reuse them. "Obsolete buildings are fun to convert," enthused the *Whole Earth Catalogue* founder Stewart Brand.[37]

Recent modern architecture's lack of texture and history spurred the revaluation of urban shells and neighborhoods that wore their age visibly. Adaptive reuse brought the past's castoffs into a present made more temporally varied. The obsolete was made protean. An aesthetics of adaptive reuse emerged. Cavernous volumes were stripped down to bare brick, wood, and iron. Bright new modern partitions, glass enclosures, and ductwork were inserted (fig. 5.4). Adaptive reuse's emblematic motif, the exposed brick wall,

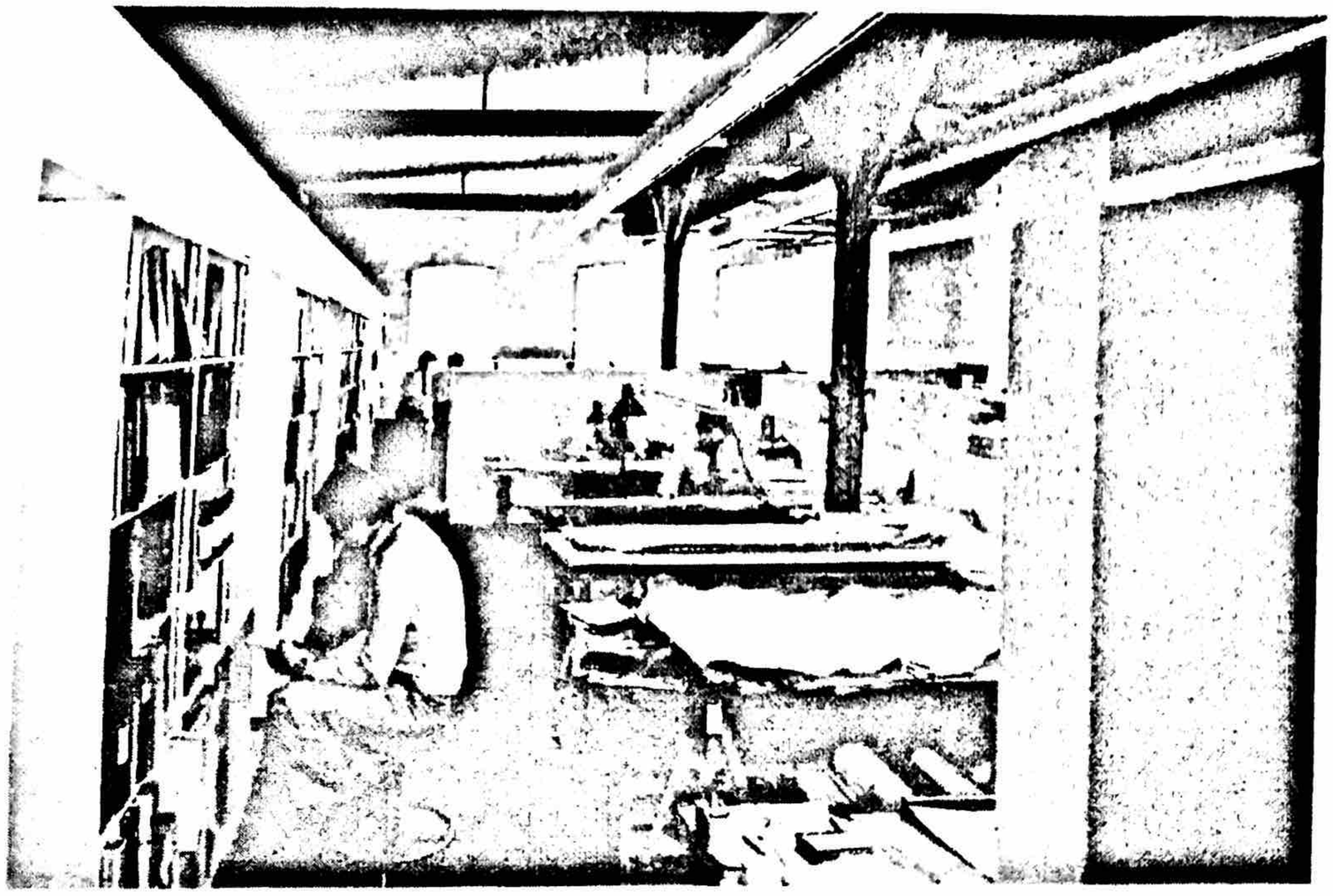

FIGURE 5.4. Detroit Cornice and Slate Building rehabilitation, Detroit, William Kessler, 1974.

offers an alternate temporality to obsolescence. The surface of Boston's 1970s rehabilitated Quincy Market, for example, is a malleable palimpsest, an incomplete erasure of the past, still susceptible to change (fig. 5.5). Old repairs, pipes, and fills index incremental evolution. This is soft change versus the traumas of sudden obsolescence.

On an urban scale, adaptive reuse largely meant gentrification, an elevation in an area's socioeconomic status, with older uses and residents replaced even as the buildings remained. Preservation and rehabilitation in Philadelphia's Society Hill area from the late 1950s pioneered the process. A London sociologist, Ruth Glass, coined the term "gentrification" in 1964. In a dynamic repeated across the developed world, thousands of West German poor and elderly lost their turn-of-the-century flats in the 1970s to a gentrifying middle class seeking "new spatial referents in its search for history and identity," writes the historian Rudy Koshar.[38] Revitalized inner urban areas offered mobile middle-class agents of change, generally seeking individualized achievement, an opportunity to inhabit what was perceived to be a more authentic, rooted site of social community and material tradition, than, for example, the modern suburb. "The scent of a single weathered threshold or the touch of a single tile": the architectural historian Mark Crinson quotes the philosopher

Walter Benjamin to characterize this desire for urban memory.[39] Moreover, gentrification was not purely a capitalist phenomenon. In late-1960s East Berlin, the state abandoned the mass demolition of prewar tenements in favor of rehabilitation in order to husband its resources and respond to preservationism. No longer was demolition the knee-jerk response to older urban fabrics, as it had been, in practice and in theory, for some decades. "Obsolescence became obsolete," writes the architectural historian Florian Urban about the situation in Germany and Eastern Europe generally.[40]

It should be noted that adaptive reuse reversed obsolescence's architectural logic, but not its social effects. Governments after the mid-1960s spent less on urban redevelopment because of straitened economies and political resistance. Now private capital took the lead. Mortgage and development finance flowed in, and capitalism generated profits in new ways. The Western

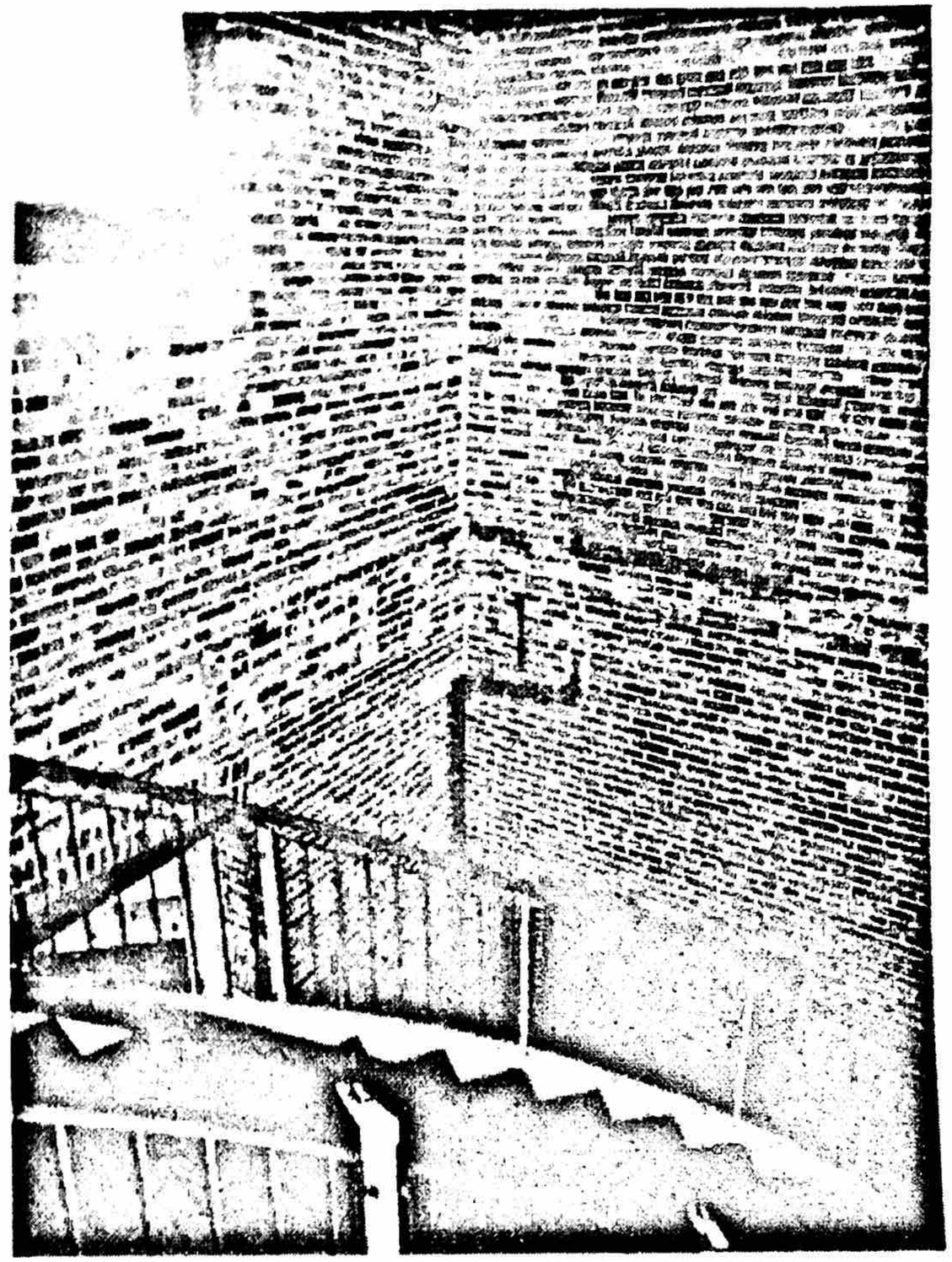

FIGURE 5.5. Quincy Market rehabilitation, Boston, Benjamin Thompson, 1976.

gentrified city reopens for investment, following the urban renewal agenda, but now with preservationism coopted. Under adaptive reuse, past investments no longer needed to be destroyed "in order to open up fresh room for accumulation," as the geographer David Harvey would have it.[41] The existing environment could be salvaged and reused, society and architects discovered. Meanwhile, working-class renters, industry, and small landlords disappeared. In the gentrified city, the fabric remains but the community is cleared out. Gentrification renders, in effect, the previous inhabitants obsolete, devalued in their worth to the contemporary city, to be replaced by higher-value settlers. The desire, even the fetish, for a seemingly more authentic habitation came at the cost of just those people and uses that had made the place seem "real." Gentrification is in effect the neutron bomb of urban renewal: buildings intact, people gone.

Concrete Brutalism

But what of new design? How did architects propose to counter obsolescence's omnipresence? Already during the war years leading modernists, like the historian Sigfried Giedion, appealed for "monuments [. . .] intended to outlive the period which originated them."[42] The impulse was a response both to the upheavals of the conflict and the desire for an architecture not just about technology but community and its endurance. This call for renewed permanence in architecture seemed answered by the archaic monumentality of Le Corbusier's famed *béton brut* (bare concrete) masterpiece, the Unité d'Habitation housing block in Marseilles of 1947–52 (fig. 5.6). Here an open frame invited flexibly configured apartment units. Yet these were held permanently in place, embodying Le Corbusier's deep preference for certitude and fixity in architecture, his appeals for "a sure and permanent home." As early as the 1930s Le Corbusier had been retreating from a streamlined, evanescent-looking machine aesthetic in favor of a vernacular palette of weathered brick and masonry. His feelings for eternity, always present in his idealization of geometry and order, now found visible expression in roughened architectural materiality. The postwar Unité's richly textured surface in Marseilles compared to "the well-weathered Doric columns" of Greek antiquity, wrote Reyner Banham; "few buildings in the world had such a hold on the imagination of younger architects."[43] The Unité spawned iterations worldwide, a veritable concrete brutalist vernacular from the 1950s through the 1970s, from the work of Denys Lasdun in Britain to that of Lina Bo Bardi in Brazil. Ponderous poured-in-place concrete monoliths scorned flexibility and expendability, daring obsolescence to do its worst. The commentator Sibyl Moholy-Nagy

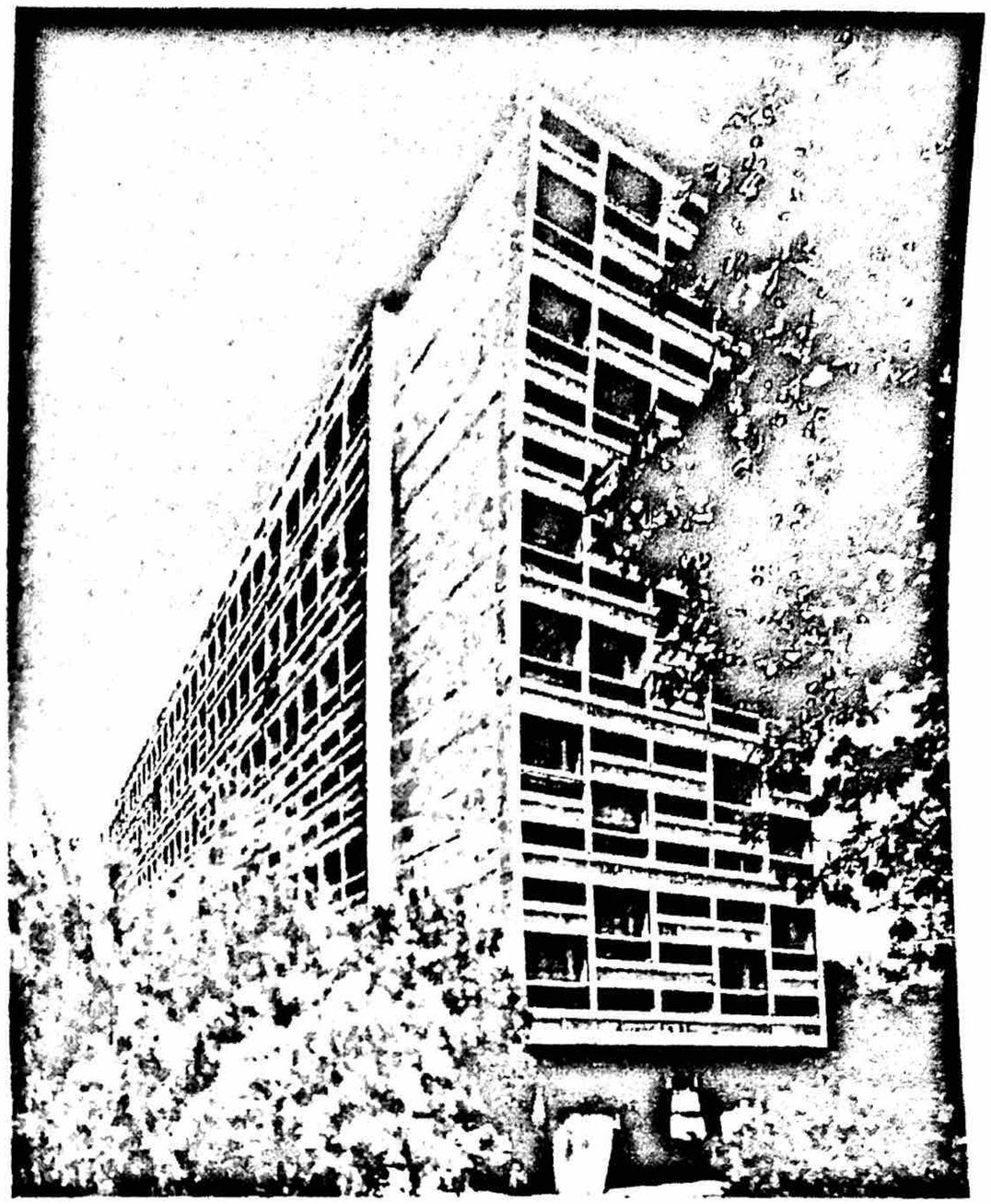

FIGURE 5.6. Unité d'Habitation, Marseilles, Le Corbusier, 1947–52.

baldly declared one typical and well-known brutalist monument, Paul Rudolph's Temple Street parking garage in New Haven, Connecticut (1959–63), to be "Rudolph's refutation of the artificial-obsolescence theory held by planners of disposable cities" (fig. 5.7).[44]

More complexly, Rudolph's Art and Architecture Building at Yale University (1958–64) reflects the period's tension between accepting and resisting obsolescence (fig. 5.8). Working with obsolescence, the broadly glazed, open loft interiors were designed to be "manipulated in such a way as to change the spaces as desired,"[45] explained Rudolph, and the geometrically irregular plan was meant to "grow logically, i.e. the building is open ended,"[46] extendable toward the north (as eventually occurred in the 2000s)—a reasoned acceptance of obsolescence's deformations. On the other hand, the major tone of Yale's Art and Architecture Building is permanence and fixity, expressed by the rugged towers in Rudolph's distinctive corduroy-concrete ribbing,

revealing the chance variety of exposed aggregate. Entering between these shadowed projections into cavelike stair halls embedded with old architectural fragments is an architectural experience of deep, archaic mystery. The concrete brutalism of the Art and Architecture Building thus reverses obsolescence in several ways. It privileges permanence over transience, cocooning the open loft spaces within immutable concrete. It salvages the past. And while displaying precise rationality in its glazed boxes and grooved walls, it also revalues contingency and emotion in its textures and chiaroscuro. In its complexity, Rudolph's Art and Architecture Building replies to what lies across the street: the industrial loft box of Louis Kahn's Yale University Art Gallery (1951–53), embodying the conventional factory-shed solution to obsolescence of open floor plates and movable partitions. Almost immediately upon completion, Rudolph's Art and Architecture Building fell prey to criticism of its overbearing scale and abrasive surfaces, and it may even have been purposely set ablaze in 1969 as a protest against its perceived authoritarianism.

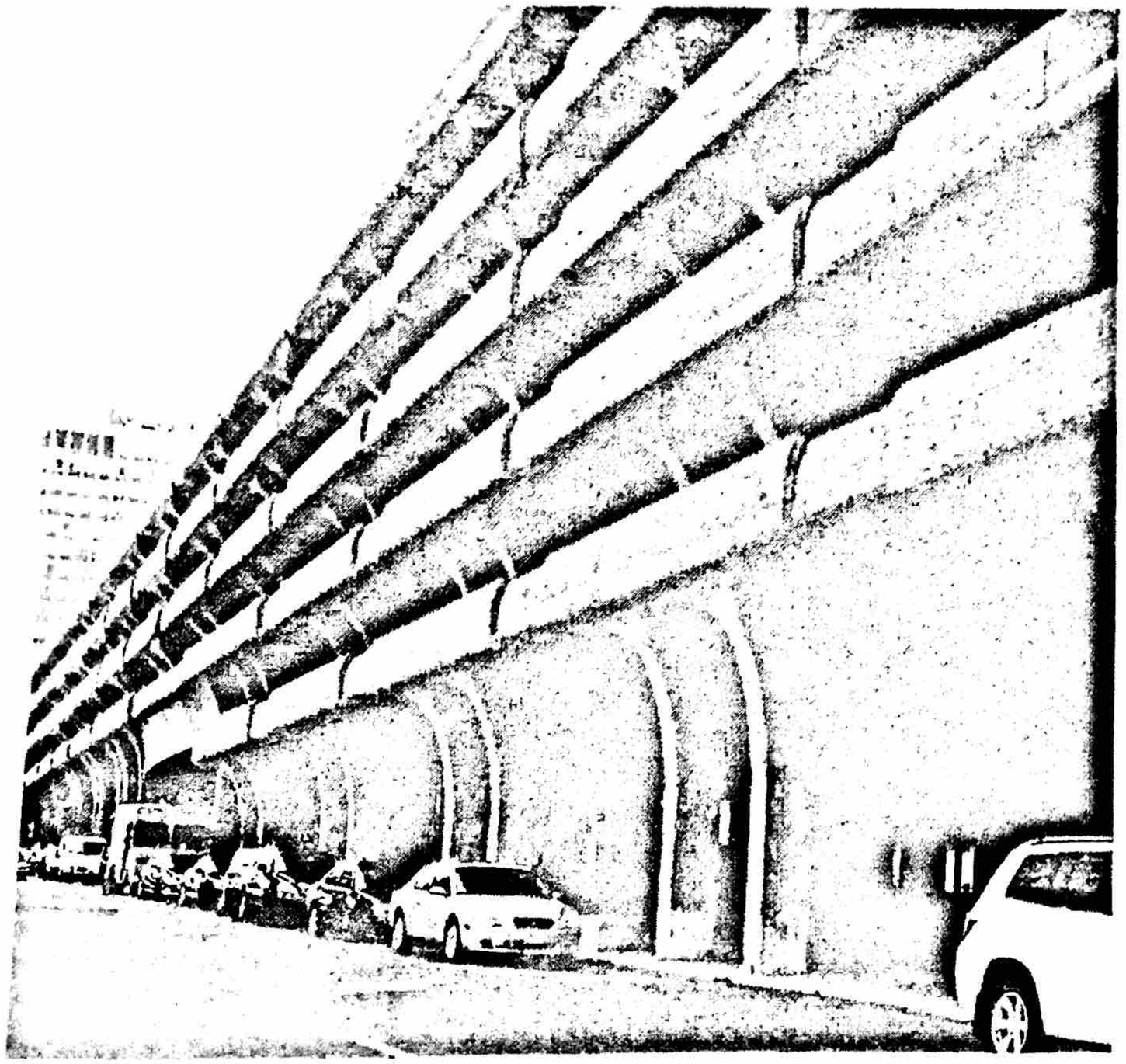

FIGURE 5.7. Temple Street Garage, New Haven, Paul Rudolph, 1959–63.

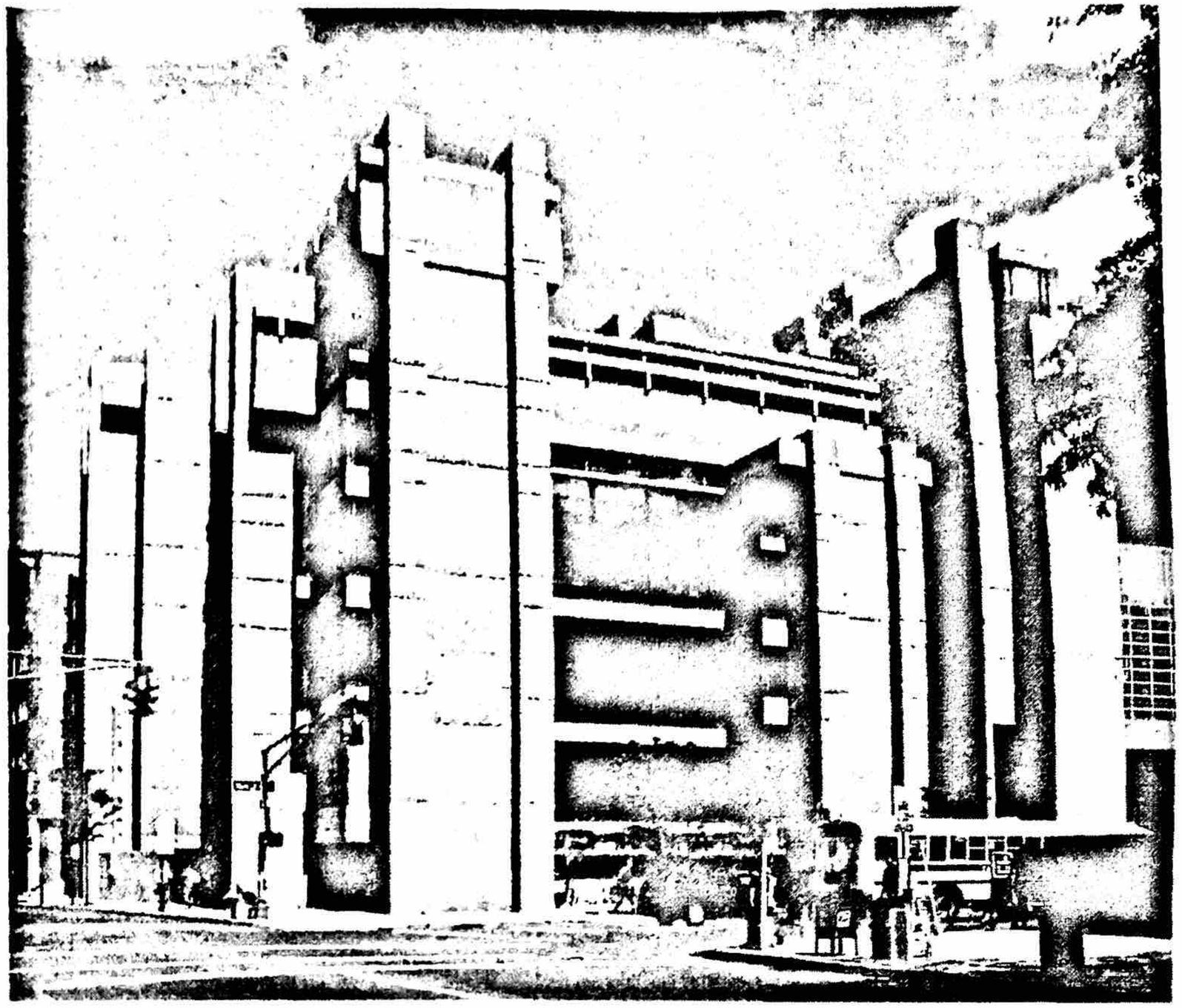

FIGURE 5.8. Yale University Art and Architecture Building, New Haven, Paul Rudolph, 1958–64.

More recently, however, the building has been lovingly restored; it is now a revered landmark. This historical trajectory of Rudolph's Art and Architecture Building subverts yet another of obsolescence's logics: that architectural value inevitably decreases over time.

Postmodernism

Among architects in the early 1960s seeking a return to permanent forms and values in the face of obsolescence was the Italian Aldo Rossi. Born in 1931 in Milan, Rossi, typically for his generation, reacted against the simplistic functionalism of established postwar modernism, with its focus on the fast-changing present, its evanescent needs and technologies. Instead of seeking inspiration for design in an analysis of function, Rossi came to believe that architectural creation was best inspired by past forms. In 1966 he published

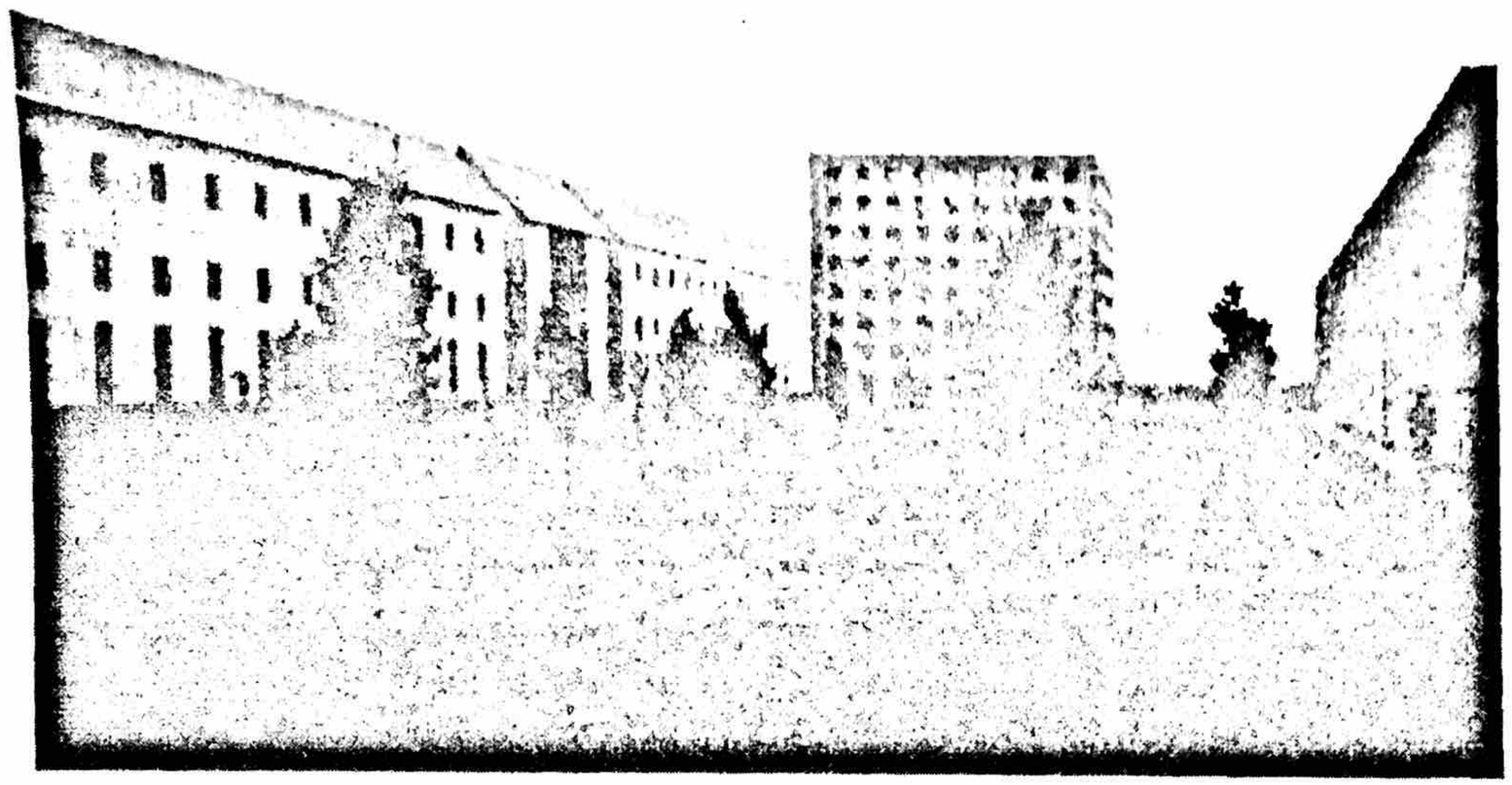

FIGURE 5.9. San Cataldo Cemetery, Modena (Italy), Aldo Rossi, begun 1971.

his landmark theoretical book, *The Architecture of the City*, which recognized in Europe's ancient cities the persistence of counterexamples to modern transience and obsolescence, what Rossi called "primary elements." He cited, for example, the medieval Palazzo della Ragione, which had endured in Padua for the centuries, filled in with new uses, adapted, rebuilt, and subdivided, but still maintaining a coherent architectural image.[47] Rossi strove to generate in his own new architectural designs comparable "urban artifacts" of "meaningful permanences."[48] A 1964 Parma theater project offers an accretion of spaces in an iconic half-circle shape. Similarly, Rossi's San Cataldo cemetery in Modena (begun in 1971) displays an ethereal ensemble of urban palace forms, stripped of ornament and seemingly vacant, like a ruin (fig. 5.9). The architect explains, "I've always thought of architecture primarily as a monument and relatively indifferent to secondary functions."[49] In our context, architecture indifferent to function, as Rossi proposes, is architecture immune to obsolescence. It can neither be deformed nor devalued by changeful use; the Parma theater's strong shape persists regardless, and the Modena cemetery's ghostly ruins embody eternity, heedless of obsolescence.

As with Rossi, the trope of the ruin became the American Louis Kahn's retort to obsolescence. Kahn had been trained in the classical tradition at

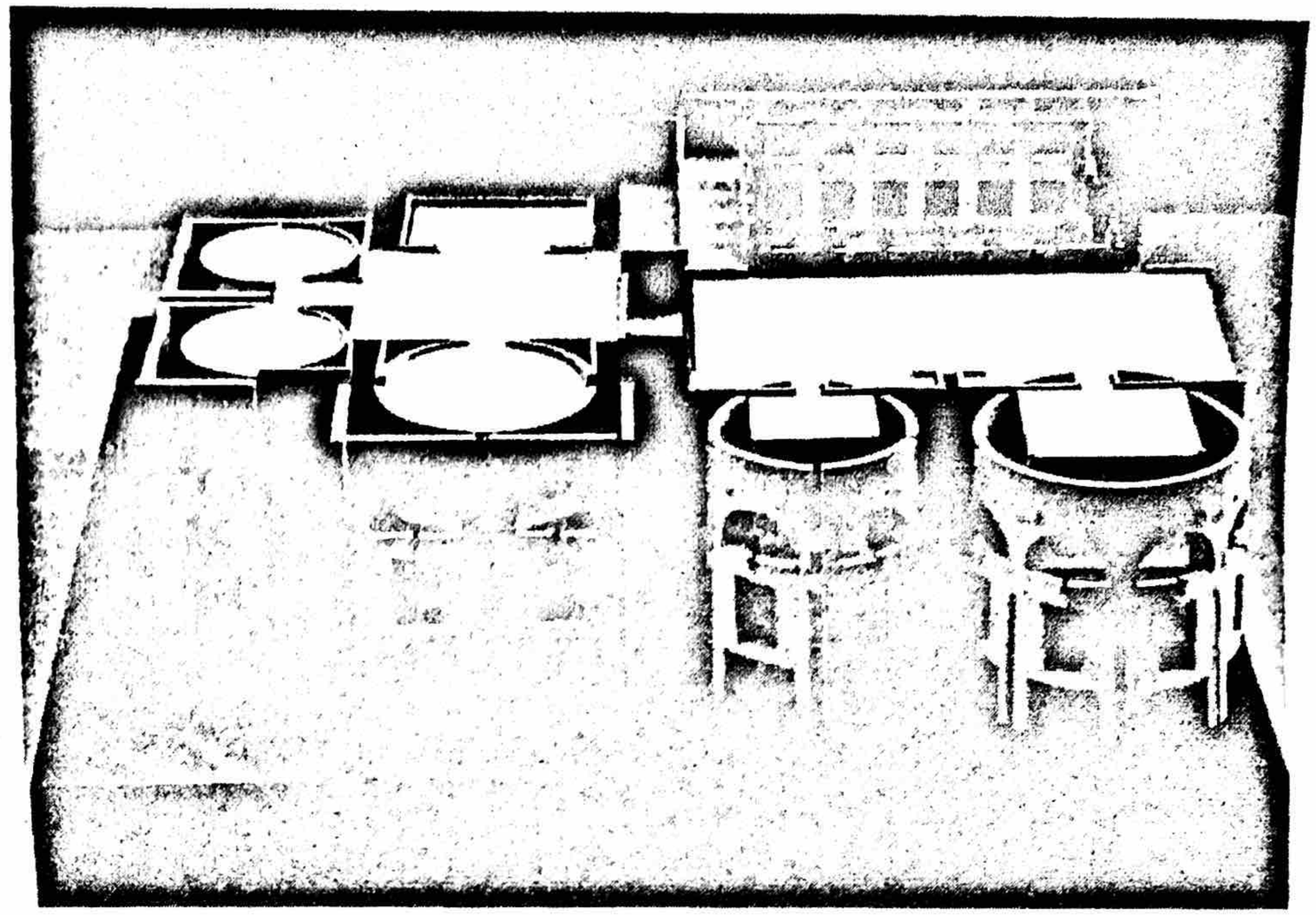

FIGURE 5.10. Salk Institute, Meeting House project, La Jolla (California), Louis Kahn, 1960–62.

the University of Pennsylvania in the 1920s by Paul Cret, designer of the classical Federal Reserve Bank building, but, like many of his generation, Kahn turned to a relatively functionalist modernism that seemed more relevant in the 1930s and 1940s. In the 1950s Kahn designed open-plan, flexible, factory shed–type buildings that looked like abstract modernist boxes, in the dominant style of the time. But around 1960, reacting like Rossi to simplistic functionalism, and having digested his own formative experience in Italy as a scholar-in-residence in Rome a decade previously, which resonated with his earlier classical education, Kahn began conceiving his buildings differently and more monumentally, as wrapped ruins. Thin screen walls punctured by large openings encircle interior volumes, like an early iteration of his famed Salk Institute complex in La Jolla, California (fig. 5.10). Kahn designed in this manner for the rest of his career—for example, the monumental public buildings in Dhaka, Bangladesh. Here between the exterior walls and interior structures lie open galleries of no specific purpose, what Kahn called "an offering, and [does] not designate what it is to be used for" (fig. 5.11).[50] Unlike Mies's open space, embodying the factory shed's endless accommodation to changing function, Kahn's "offering" is superfluous to programmed purpose, representing what Kahn believes to be architecture's essence *beyond* use:

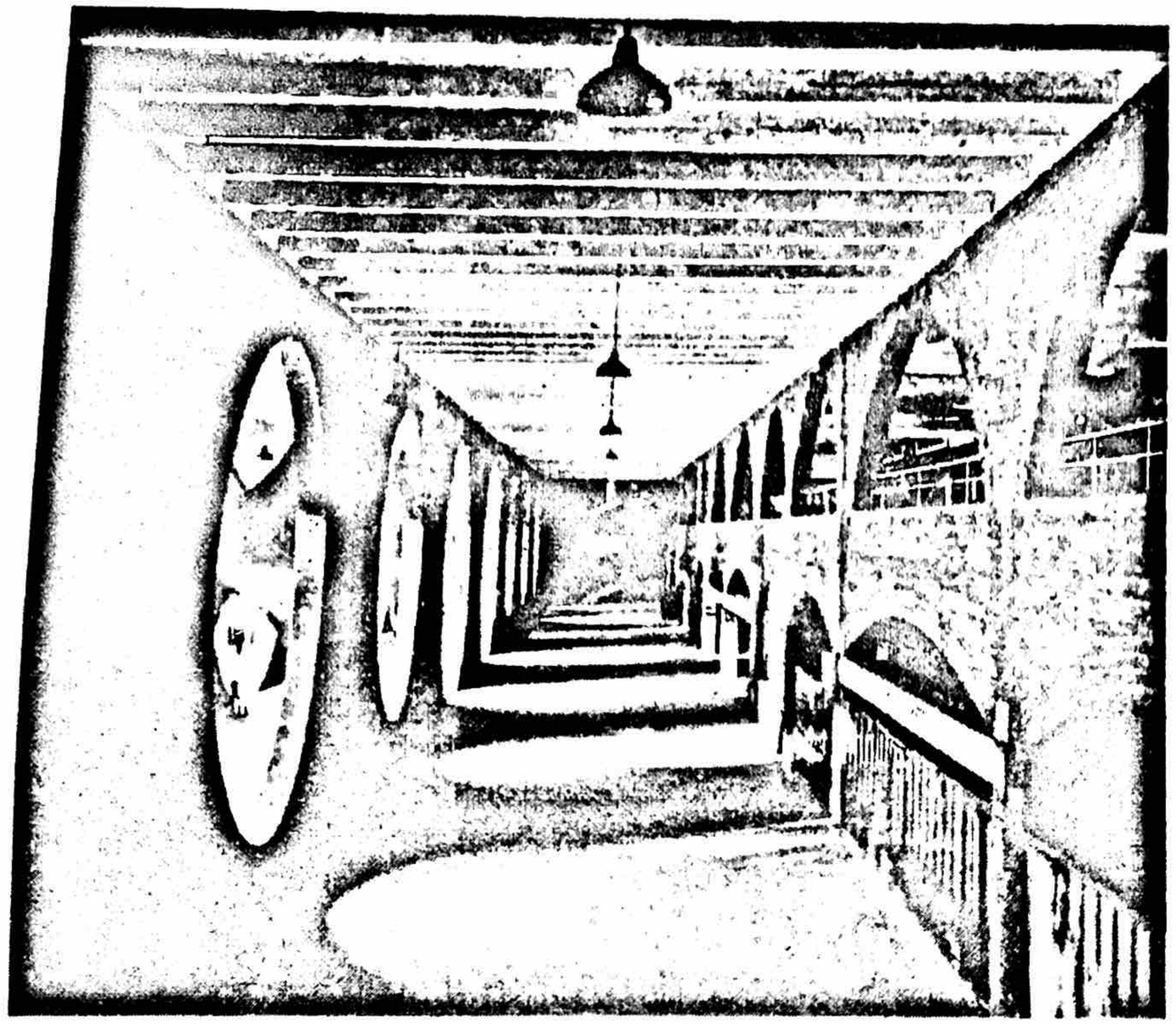

FIGURE 5.11. Suhrawardy Hospital, Dhaka (Bangladesh), Louis Kahn, 1962–83.

brick arches, central plans, and Roman permanence. Kahn explained about his wrapped ruins, "As time passes, when it is [a] ruin, the spirit of its making comes back."[51] Or again, "A building that has become a ruin is again free of the bondage of use."[52] Kahn's "wrapped ruins" appear to have achieved this transcendence. The "offering" space between ruin screen and core passes beyond present use, thus embodying, for Kahn, architecture's essence as pure symbolic form. With Kahn, what we get is the consolation of obsolescence, the pledge that loss of functionality will not devalue but rather redeem architecture. This is obsolescence's metaphysical reversal.

Kahn and Rossi are two of the founding figures of architectural postmodernism. Both rejected modernism's negation of history to bring back the imagery and character of traditional architecture, separating form from function to recuperate the past's imagery and transcend obsolescence. Each wrapped his buildings in archetypal, symbolic imagery structurally detached from interior, programmatic space. Similarly revaluing the past in a postmodernist vein, other younger American architects drew from the different

wellspring of American vernacular architecture, rather than from Kahn and Rossi's deep Mediterranean history. One of these was Charles Moore, who had been a student of Kahn's. Moore focused upon a more homespun, domestic modernism, working on the West Coast in the early 1960s and adapting the sloping shapes, raw wood, and picturesque layout of early northern California barns, sheds, and settlements for the composition of his iconic Sea Ranch condominiums (1964–65) overlooking the Pacific Ocean. "We arranged them by taking hints from the huts and industrial architecture of the last century that can be seen all over California," Moore explained.[53] This vein of postmodernism revalued the common, everyday vernacular architecture of the generation or two previous, which was otherwise considered obsolete, outdated, and old-fashioned, practically and symbolically, in modern postwar consumer society.

Robert Venturi and Denise Scott Brown also revalued the American vernacular, but with more of an emphasis on the commercial strip. Unlike the usual vernacular champions, who favored the premodern or at least precontemporary, Venturi and Scott Brown discovered richness, authenticity, and inspiration in the present world's newest creations. "Honky-tonk elements [. . .] are here to stay," Venturi declared in his 1966 book, *Complexity and Contradiction in Architecture*.[54] In his own work, Venturi plastered a large billboard sign and television antenna onto the Philadelphia Guild House apartment house for the elderly of 1960–63 and deployed vernacular brown brick and double-hung windows to create a familiar-looking urban apartment block "to house elderly people who want to remain in their old neighborhood."[55] This was an implicit rebuke of radical urban renewal, like Boston's West End, which was taking place at the same time and both destroyed buildings and displaced communities. Venturi rejected the obsolescence paradigm's rapid expendability: "architecture's rate of change, typically and naturally, should be more evolutionary than revolutionary."[56] Out of Venturi and Scott Brown's revaluation of what exists, especially the commercial vernacular, which seemed transient, vulgar, and obsolescent to others, they derived their influential late-1960s postmodernist theory of "architecture as shelter with symbols on it"—the "decorated shed" idea.[57] In this formulation, programmatic function (the generic shed) and messaging form (symbolic facade) are separate. This is analogous to Kahn's wrapped-ruin archetype and Rossi's rehabilitation of classical imagery, but less monumental and serious. Not only is obsolescent vernacular symbolism revalued, but obsolescence seems neutered as an existential threat. If a building outlives its present use, just stick in a new function and put up a new sign—it's not that big a deal. The perils of obsolescence are much less dramatic than in the factory-shed, megastructure, expendable, or

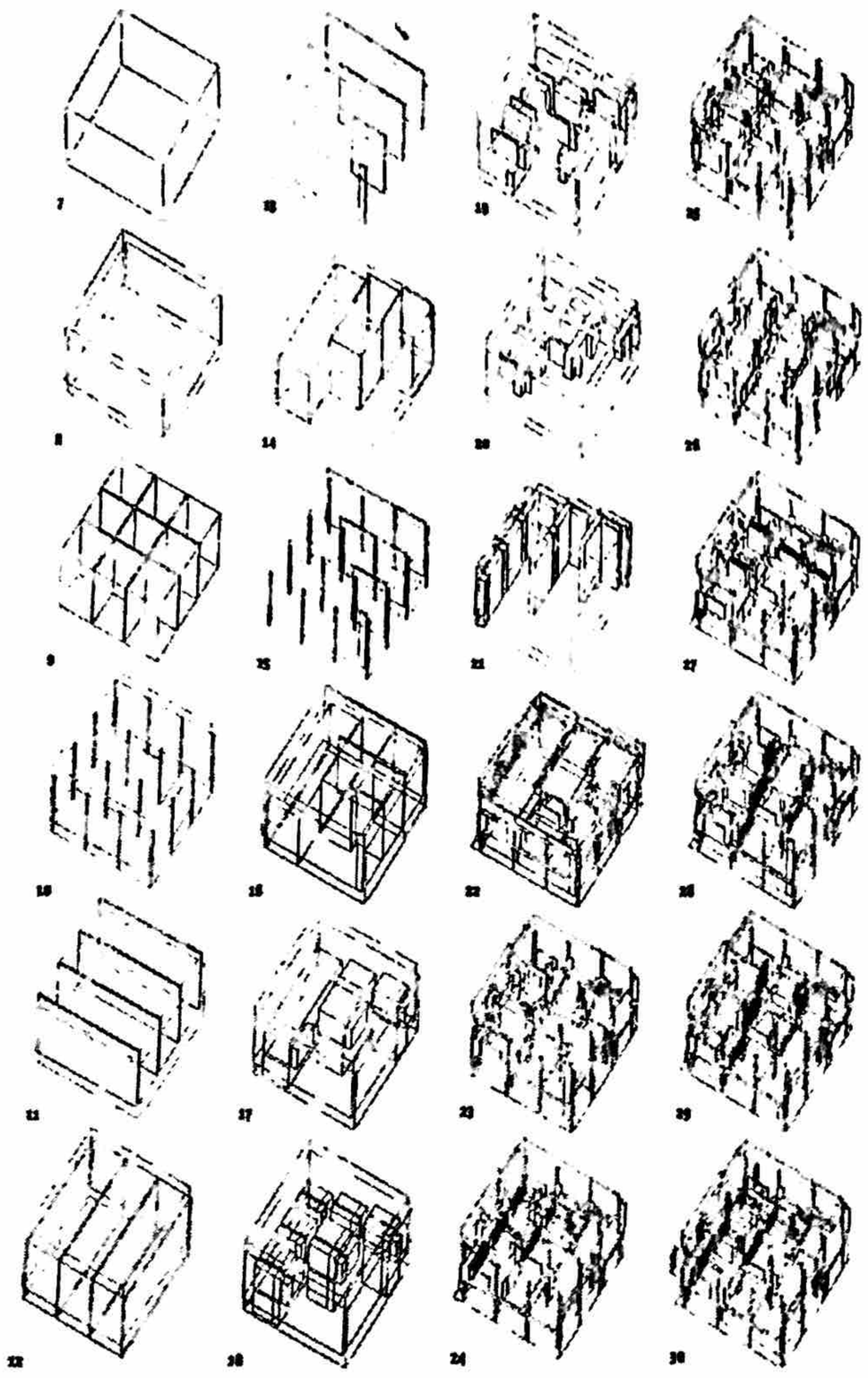

FIGURE 5.12. House II, transformational drawings, Hardwick (Vermont), Peter Eisenman, 1969–70.

indeterminate design responses, where only a radical rethinking of architectural form seemed capable of absorbing obsolescence's menace or promise.

Alienating form from function also undergirds the very different-looking but contemporaneous experiments of the architects John Hejduk and Peter Eisenman (which set the stage for the later movement called deconstructivism). In their schemes, point, line, plane, and volume would "generate principles of form and space," advancing "the evolution of form itself" (fig. 5.12).[58] Little consideration is given to use. Architecture here aims neither to fulfill

nor to represent functional purpose, but rather to play with its own abstract elements. Eisenman justified what he called "post-functionalism" as architecture's avant-garde calling, paralleling modern art's abandonment of figuration in favor of abstraction. To get beyond the dominant paradigm of obsolescence, Eisenman took to disregarding function altogether as a generator of form. Eisenman thus rejected Louis Sullivan's late-nineteenth-century modernist credo, "form ever follows function," which had implicitly subjected architectural form to the power of obsolescence. In an age in which function refuses to stand still, form is always threatened with destruction. Yet form that forsakes function as its vivifying force, from Rossi to Eisenman, cuts the knot. Obsolescence loses its power to destroy.

Turning the Tide

Preservationism, vernacularism, salvage architecture, adaptive reuse, concrete brutalism, postmodernism, even deconstructivism: these diverse countertactics to obsolescence emerged in the 1960s. All sought to reverse obsolescence's logic by revaluing the past and emotion, by revealing obsolescence's waste, by refusing obsolescence's inevitability, by questioning functionalism itself. On the other side were the multiple architectures of obsolescence, more accepting of its inevitability and gifts: factory-shed solutions, interstitialism, megastructures, indeterminate, and expendable architecture, as well as academic research, and pop-culture enthusiasm for the phenomenon. But both these blocs, for and against obsolescence, believed in it and implicitly recognized its dominance. All acknowledged obsolescence's ubiquity as the way change was happening in modern life and the built environment. Moreover, the two factions were more or less evenly matched across the decade. The contest might have gone either way, with or against obsolescence, accepting mutability or privileging permanence. Passion and imagination were equally intense in the 1960s.

But by the mid-1970s the tide had turned. The architectures of obsolescence went into abeyance, in part as a consequence of larger societal changes that were responding critically to modernization. Obsolescence had been a largely top-down paradigm, invented and practiced by industry leaders and professional experts. But its consequences were starting to be resisted from the bottom up, as embodied in the anguished responses to the demolition of Boston's West End and so many other large-scale renewal projects. The unhappy outcome of these initiatives, in social costs and often unloved modern architectural results, alienated the public trust in experts' management of change. Not just in the built environment, but in the natural environment

too, modernization was having unintended and frightful consequences. In the early 1960s Rachel Carson's environmental exposé, *Silent Spring*, inaugurated an era of doubt about the beneficence of industrial modernity, showing that efforts to improve the environment chemically had just the opposite effect, poisoning it. Even the unquestioned technological triumph of the U.S. space missions had the paradoxical effect, in the cultural milieu of the mid-1960s, of underscoring human precariousness as much as mastery. Newly pictured from orbit as a lonely "blue marble," the earth seemed fragile and finite—not a terrain for infinite consumption and expendability, as obsolescence would have it. Indeed, obsolescence's profligacy, its cavalier consumption and discarding of resources, offended a growing environmental sensibility percolating from below, first in the hippie counterculture, then throughout society. By 1972 a famous report by leading development scientists, *The Limits to Growth*, would call for slowing rates of industrial obsolescence as a key to "global equilibrium [. . .] the less resource depletion and pollution there will be."[59] In this context obsolescence lost its hold over the cultural imaginary, certainly as a process that should happen, and even as a process that would happen. So many people were calling into question its logic and ethics, trying to find alternate ways to conceive and manage change.

The undercutting of obsolescence in the cultural realm across the 1960s received a decisive politicoeconomic charge in the decade's last years and the early ones of the next. Capitalists in the developed West were struggling in the 1960s to maintain profits, constrained by workers' high pay demands, in the Fordist context, while at the same time having to compete with new, low-wage industrial competitors in Asia, notably from a revived postwar Japan, as well as Hong Kong and Taiwan. Meanwhile, Western business felt profits further squeezed by corporate taxes paying for welfare-state spending and social services, while at the same time being constrained, as they saw it, by government labor and financial regulations. Then came the oil shocks of 1973–74, which cast a pall over worldwide economic activity. Businesses already operating on low profit margins contracted, unemployment and inflation surged, and government tax revenues plummeted.

The economic crises of the early 1970s put paid to the obsolescence paradigm, which had depended upon visions of unlimited growth and consumption. The public and private investment that had sustained built-environment replacement collapsed. The developed world in the early 1970s slipped into recession. The open-ended future that obsolescence presumed seemed increasingly unrealistic. "Over the country depression lay like a fog," wrote the novelist Margaret Drabble about 1970s Britain.[60] "Mistrusted for its betrayals, the future became attenuated, eclipsed, forsaken," writes the historian

David Lowenthal.[61] Out of the ashes new economic paradigms materialized. Fordist mass production, with sales churned by workers' high wages, stylistic obsolescence, and fast expendability, no longer seemed tenable. Employers fought back, driving down wages to reestablish profits and inaugurating the decades-long stagnation in middle-class incomes that persists to this day. At the same time, Fordist standardized mass production, which had come to embody cultural conformity, consumerism, and inauthenticity, and so was not selling as well, came to be replaced by new visions of market segmentation and specialization—commodities made for *your* taste and aspirations. These could now be more profitably and flexibly produced offshore as globalized capital, increasingly freeing itself from state regulation, exploited manufacturing opportunities in Asia and other low-cost labor markets. Capitalism was evolving in response to crisis, ushering in what is now seen as a post-Fordist era of neoliberalism.

Also in the specifically architectural realm at this time, the tide could be seen explicitly turning against the proponents of obsolescence. Reyner Banham, a champion of architectural evanescence since the 1950s, in 1970 found himself under attack by youthful critics at a prominent design conference in Aspen, Colorado. "I could suddenly feel all these changes running together in a spasm of bad vibrations that shook the conference," Banham recalled. "We got ourselves together again, but an epoch had ended."[62] Banham soon pronounced the great megastructural solution to obsolescence to be itself obsolete: overly controlling, too long in construction, and "doomed, given the normal ten-year cycle of style and taste in the present century." Banham marked the end with Thamesmead New Town, outside London, begun in 1967—a monstrously monotonous run of concrete housing units, "the ultimate tombstone of the institutionalized and run-down concept of megastructure."[63] Few megastructures were ever realized, and fewer and fewer proposed: Paul Rudolph's 1970 Lower Manhattan Expressway project, a long A-frame of apartments above a multilane highway, was one of the last, unbuilt visions.

As a design response that accepted and even welcomed obsolescence, factory-shed solutions fared little better than the megastructure. This was evidenced in post-occupancy evaluation of Ezra Ehrenkrantz's famed California School Construction Systems Development buildings of the 1960s, when in 1972 evaluators went back to see how the buildings actually worked. Not well, it turned out. The demountable walls, designed to be movable, proved to be poor sound insulators in open classrooms. Just as damning, few occupants even knew that the walls moved or that the heating and air conditioning outlets shifted.[64] Aesthetically, the factory-shed design made all buildings look industrial, inciting user dismay. In other words, the factory-shed solution to

obsolescence expressed too bluntly its industrial origins, but did not make its adaptability legible enough to users. In the event, educators returned to structured learning in fixed spaces, making the design's signature flexibility itself obsolete.

Obsolescence's logic of discard lost its allure among even avowed modernists. Already in 1962, Philip Johnson, an early promoter of Mies and the European International Style, was picketing against Penn Station's demolition (see fig. 5.1). The British archmodernists Alison and Peter Smithson in 1968 memorialized the recent loss of London's great rail terminal as the "Euston Murder."[65] At the level of the architectural establishment in the early 1970s, the British profession adopted long life as a guiding principle. The president of the Royal Institute of British Architects, Alex Gordon, declared, "There is nothing more disturbing in visual, functional, and social terms, and nothing more disturbing to amenity, than an accelerating rate of functional obsolescence and the rebuilding that follows it."[66]

History and memory emerged as valued sources of invention in architectural theory. "Accept and delight in the past for its disruptive, its poetic, role in the present," urged the British editor Theo Crosby in 1973.[67] That same year the English theorist and historian Colin Rowe advocated "collage" urban design, "paying attention to the leftovers of the world."[68] The Italian novelist Italo Calvino's *Invisible Cities*, published in English in 1974, became a touchstone of the lyrical architectural imaginary, "a zodiac of the mind's phantasms" (22). A world of melting architectural forms, color, desire, and dreams is envisioned in the wonderful drawn fantasies of Raimund Abraham for Rem Koolhaas's *Delirious New York* (1978), on the cover of which two skyscrapers lie side by side in bed. Obsolescence's rationalism no longer held undisputed sway in the thinking of the Western architectural profession.

Preservation, too, was won winning more battles. Important new legislation in 1974–75 established preservation districts in Japan, controlled demolitions in Britain, and strengthened historic listings in East Germany.[69] The official European Architectural Heritage Year of 1975 was celebrated en masse in forty-five cities across the continent. In the United States, a highly symbolic moment came when the Tax Reform Act of 1976 provided for the first time "tax incentives to encourage the preservation of historic structures" and disallowed deductions for the demolition of such buildings.[70] In a country where social policy often runs through the tax code, this was a significant triumph of preservationist ideology. Sixty years after architectural obsolescence had first been recognized in the U.S. tax code, the Tax Reform Act of 1976 could be said to mark in America the end of the era of obsolescence's dominance.

At its inception, the invention of architectural obsolescence had solved

key contradictions of modernization. For early twentieth-century real estate businessmen, it overcame the problem of how to think systematically about properties that were visibly sound and young in years but were underperforming from a capitalist perspective. Obsolescence rationalized rapid demolition, reinvestment, and rebuilding, making sense of an otherwise senseless waste of resources. In mid-century, planners around the world turned the idea of obsolescence to social purposes. The concept's use justified urban renewal in economistic, seemingly apolitical terms, eliciting broad consent and neutering opposition. Culturally, obsolescence made sense of an unnervingly transient built environment, now made emblematic of beneficent progress. Yet there were internal contradictions to the paradigm. What to do with stubborn remnants and emotion, the desire for permanence, the intangible and the immeasurable, much less capitalism's penchant for ceaseless change, including its own? How would the logic of obsolescence account for these? The reversals of obsolescence exploited these contradictions, using them to transcend its outlook. But the outcome was not predetermined. Agency and contingency played their parts. The will of individuals, like the urban critic Jane Jacobs, and movements, like preservationism, were instrumental. Unanticipated crises that foreclosed obsolescence's limitless future—the Vietnam War, the oil embargo—were factors that helped tip the scales. The obsolescence paradigm's contradictions were always there to be cracked open, but it took historical circumstance and individual agency for these to be exploited, pushing the worldview beyond workability.

Sustainability

By the mid-1970s in architectural culture, the option of exuberant, liberating expendability had been largely eclipsed by careful conservation, the techniques of preservationism and vernacularism, postmodernism, and even concrete brutalism, all emerging across the 1960s. Collectively, we might gather all these plural countertactics to obsolescence under the heading of sustainability, to define a paradigm different from obsolescence for comprehending and managing architectural change, which seeks to maintain rather than expend existing resources, human-made and natural, thus reversing the logic of obsolescence.

One particular technique from that era has become so dominant as to now be synonymous with the general category of sustainability: ecological architecture. On the fringes of architecture in the 1960s and 1970s, rough-hewn, low-tech buildings, often of salvaged materials, were part of a countercultural, back-to-the-land movement. Environmental consciousness, however,

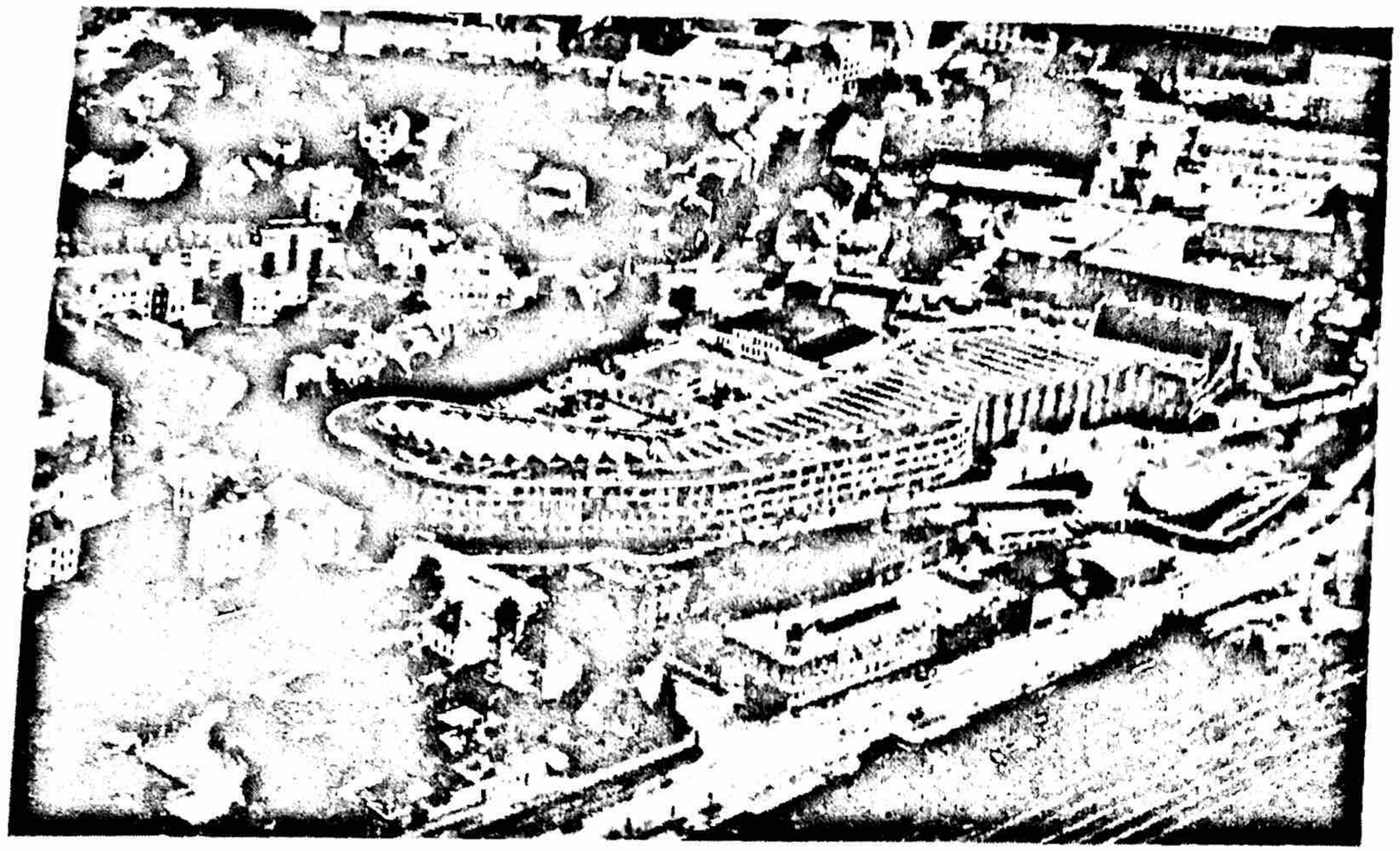

FIGURE 5.13. Federal Environment Agency, aerial view, Dessau (Germany), Sauerbruch Hutton, 1997–2005.

was more generally on the rise. The natural world was cast as frail, finite, and embattled. Earth Day was first marked in the 1970, closely followed by the U.S. Clean Air and Water Acts. The late-1960s Apollo mission photographs dramatized the fact that "from space, we see a small and fragile ball," as an oft-quoted United Nations environmental report later put it, a literal worldview that helped to internationalize environmentalism. This quotation is from the landmark 1987 document *Our Common Future*, which called for systemic economic, political, and administrative reforms to counter headlong resource depletion with a new "process of change [. . .] made consistent with future as well as present needs."[71]

In architecture, consciousness grew of the built environment's role in excessive energy consumption, carbon emissions, global warming, and material wastefulness. The term "sustainability" started to appear in architectural discourse in the mid-1980s, linked to landscape architecture and then urban planning before being connected to architectural design specifically. The term sustainability named an impulse that had been gathering force since the 1960s. The architect and theorist Sim Van der Ryn, for example, wrote about sustainable communities first in terms of overall economic, physical, and ecological development that minimized harm to the environment, and then in

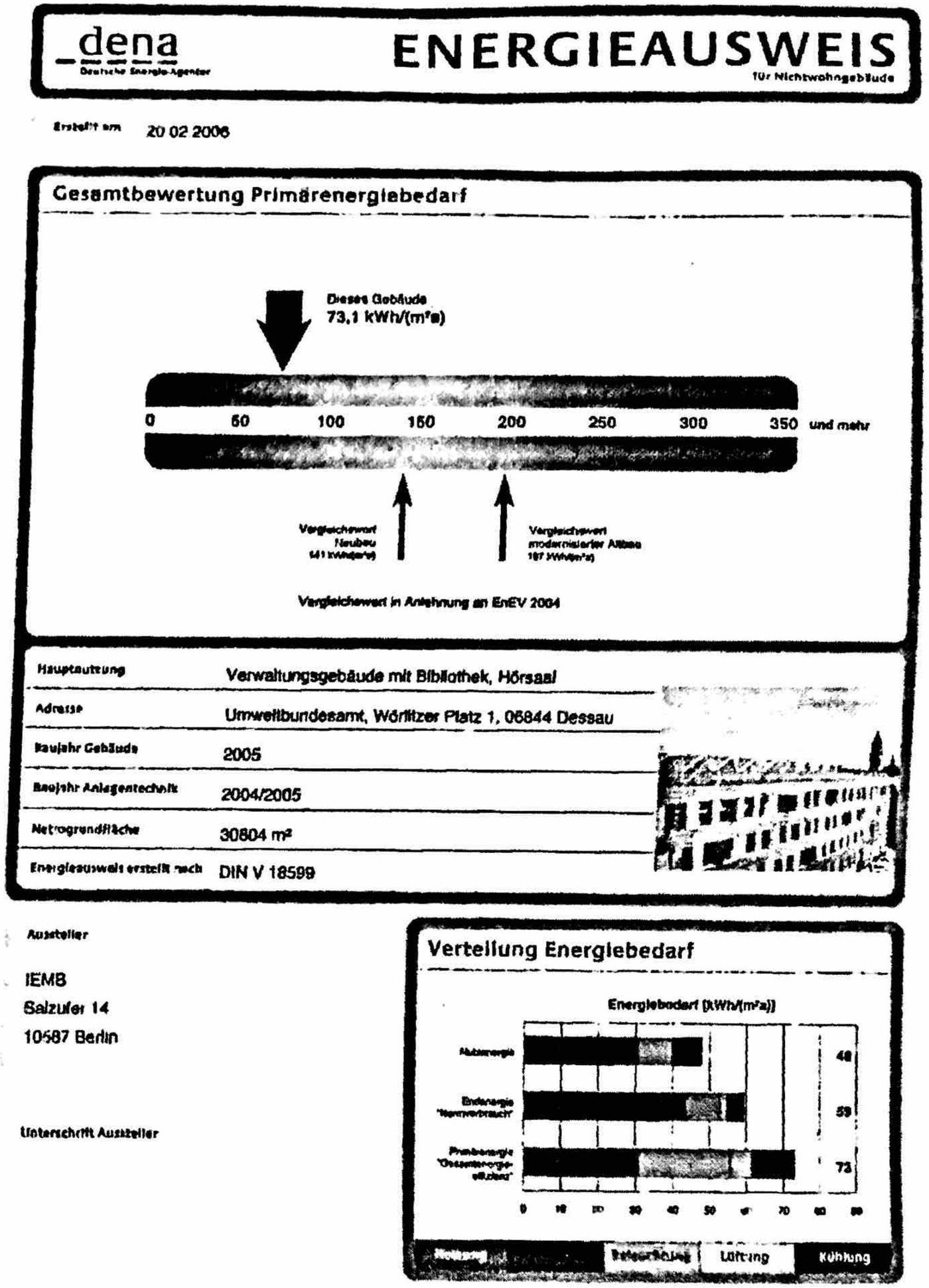

FIGURE 5.14. Federal Environment Agency, "Energy Performance."

terms of architecture itself, of how these objectives for resource conservation could be applied at the scale of individual buildings.[72] The U.S. Green Building Council, founded in 1993, widely markets its LEED (Leadership in Energy and Environmental Design) certifications for resource efficiency. Similar standards and checklists exist globally.

Demonstration green-design projects ensued in Europe and North America. Germany's Federal Environment Agency building in Dessau (Sauerbruch Hutton, 1997–2005) is a high-tech system of energy efficiency under glass, built of renewable materials on reclaimed industrial land (fig. 5.13). Alternative energy provide a fifth of the power, from rooftop photovoltaic systems and solar collectors to landfill methane gas and a subterranean geothermal heat exchanger. Charts and graphs quantify architecture's energy performance (fig. 5.14). In a general sustainable tone—valuing what exists—the Dessau design also rests lightly on the ground, incorporates an old train station, and is color coded in its facade's glass panels to its surroundings: green facing a park, red facing factory buildings, orange facing residential blocks.

Today, the age of obsolescence appears to have been superseded by that of sustainability. Disuse has been met by impulses for adaptation and revaluation, not demolition. Deference to what exists underwrites contextualist and postmodern design. Developed nations have ceased erasing their historic built environments wholesale, sustaining them with webs of laws. Preservationism is spreading globally under UNESCO's "World Heritage" rubric, established in 1972, now numbering nearly a thousand sites and growing. Monuments are being preserved by and for humanity as a whole under UNESCO's supranational aegis, transcending individual nation-states' identities and protocols that underwrote earlier preservationism. Likewise, green design takes on universal qualities, representing the architectural wing of what the scientist Freeman Dyson has called today's "worldwide secular religion" of environmentalism.[73] Respect for nature's autonomy, combined with strict sumptuary discipline and an intergenerational outlook, produces an ethics the reverse of obsolescence's quick supersession and expendability. Against obsolescence's accelerated temporality, sustainability promotes the long view. The 1987 U.N. report famously defined sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs."[74] In other words, what obsolescence was for the mid-twentieth-century architectural imagination—that is, the dominant worldview for comprehending and managing change—sustainability has become for the twenty-first. And yet there are still roles that obsolescence plays today, and lessons in obsolescence's architectural history for understanding the past and imagining the future.

6

Sustainability and Beyond

The age of obsolescence did not produce its imagined future. Obsolescence as a dominant worldview for comprehending architectural change now appears to have been an anomaly. In historical perspective, its faith in quick-change innovation and technology seems an interregnum between traditional views of longevity and duration, illustrated in Piranesi's ruin views (see fig. 1.1), and the current regime of sustainability, which is also rooted in continuity with history and nature (see fig. 5.13). Notwithstanding all those in mid-century who believed obsolescence to be eternal—architectural life spans forever shortening—in the developed world we now largely presume the opposite. Long life instead is the aspirational ideal. Anticipated ephemerality is limited to specific structures, such as Olympic venues or biodegradable building experiments. No one thinks, as so many did a half century ago, that nearly every structure in the built environment would or should fade within a generation. What, then, is to be learned from the history of obsolescence? What lessons does it have for our understandings of twentieth-century architecture and history? What meanings from the history of obsolescence can be applied to efforts at sustainability today?

Seen through the lens of obsolescence, disparate tendencies in twentieth-century architecture come into related focus, from the canonical modernisms of Mies, Le Corbusier, the Metabolists, and Cedric Price to the mainstream establishment productions of schools, offices, and hospitals. Importantly, the architectural history of obsolescence narrated here transcends these divides. It teaches the value of intradisciplinarity, relating ordinarily separated practices in architecture: avant-garde and establishment, historic preservation and real estate, urban planning and postmodernism. All engaged with obsolescence, producing multiple architectures of obsolescence, from factory-shed flexi-