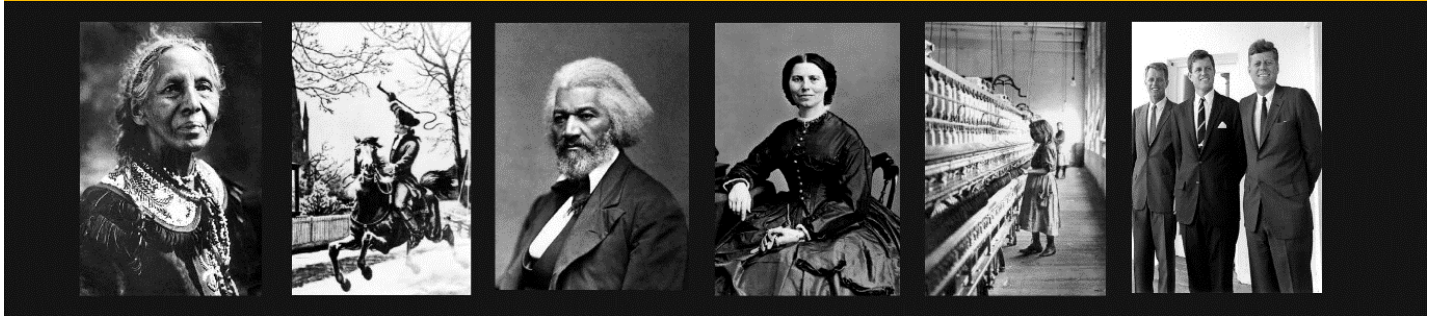


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**Boston University Law Tower (Sert, Jackson & Gourley, 1963)**

Sert, Jackson & Gourley also designed the Mugar Library and George Sherman Union on campus, all in the Brutalist style. Photo by the author.

PHOTO ESSAY

# Yankee Brutalism: Concrete Architecture in New England, 1957–1977

BRIAN M. SIRMAN



**Abstract:** *During the 1960s and early 1970s, New England departed from architectural traditions and was in the vanguard of the most current (and controversial) style of these decades: Brutalism. While on its surface this style seems inimical to New England architecture, a confluence of economic, political, and social forces rendered it aptly suited to the region at this pivotal time. Concrete buildings served not only functional purposes but also as monuments that both reflected and shaped public perceptions of New England. Moreover, Brutalism's fluctuating esteem during the past half-century resulted as much from changes in social and political culture in the region as from the evolution of architectural tastes.<sup>1</sup>*

\* \* \* \* \*

The 1960s brought about an architectural revolution in New England. During this decade, conventional styles, forms, and materials were challenged by an avant-garde aesthetic that could be unsettling within the context of time-honored streetscapes. New concrete megastructures began appearing beside

iconic white clapboard churches and brownstone townhouses. Hardscape plazas eclipsed centuries-old town greens as gathering places. Picturesque buildings, representing centuries of history and tradition, increasingly made room for symbols of modernity. From vast urban-renewal complexes to rural single-family dwellings, concrete buildings of varying sizes and functions began to dot the landscape from Connecticut to Maine.

In some ways, these changes seem inimical to the New England ethos. After all, this is a region that has long celebrated its rich history and conscientiously preserved its historic structures and spaces.<sup>2</sup> Yet during the 1960s and early 1970s, New England became the nation's leading center of Brutalism—an architectural style that was both aesthetically and philosophically rooted in the modern movement.

Notwithstanding its sharp contrasts with the region's traditional historic buildings, Brutalism was inherently well suited to New England during this epoch. The introduction and proliferation of the style accompanied a host of other changes—economic, demographic, and political—taking place at the time. Modern concrete buildings not only reflected these changes but also catalyzed further transformations. Thus, while on the surface Brutalism appears at odds with New England's cultural identity, careful analysis reveals a direct connection between the political, economic, and social circumstances in the 1960s and 1970s New England and the material, aesthetic, and symbolic qualities of concrete architecture. While Brutalist buildings were designed to serve functional purposes, they also became prominent symbols and agents of change, simultaneously reflecting and shaping public perceptions of New England.

## DEFINING BRUTALISM

First, what is Brutalism? While the term is both complex and controversial, the style can best be thought of as architecture in the raw.<sup>3</sup> Buildings are stripped of applied ornament. Muscular forms and crude textures are emphasized. Structural elements and construction processes are exposed—even accentuated—rather than hidden. While Brutalist architecture was not exclusively concrete, this material was better suited to the style than brick, metal, or glass since it could reveal itself as a building's structure and simultaneously show the process of formation, with the grain of wooden molds often permanently embedded in the cured concrete. Concrete also is an eminently plastic material, which can be molded into daring geometric forms. In so doing, it would stand in contrast to the cubic abstraction of many other strands of modern architecture, which concealed structural elements

behind sleek glass skins and suppressed creativity within plain boxes.

As an intensely philosophical movement (not just an aesthetic one), Brutalism could be disturbing to those unused to its formal aggressiveness. Randall Ott, Dean of Architecture at Catholic University of America, quipped that Brutalism “was not about making buildings that looked like stuffed teddy bears that appealed to all.” Instead, “It was a fairly austere, fairly confrontational style.”<sup>4</sup> Brutalist architects sought first of all to celebrate authenticity by exposing the raw materials and structural elements of their buildings. Perhaps more importantly, they strove to create an architectural expression of the imperfectability of man, the human condition, and the postwar reality. As architect Gerhard Kallmann wrote, this architecture embraced “violence, anti-rationality, and non-direction systematically pursued”—concepts that were championed by younger architects who obstreperously opposed the rationalism of the previous generation of modernism.<sup>5</sup> As the early Brutalist architect Peter Smithson put it, they sought to create an environment that would “give form to our generation’s idea of order.”<sup>6</sup> Thus, the principal characteristics of Brutalist architecture were durability and strength (inherent in the use of concrete as a primary building material), innovation and boldness (exemplified in often unconventional geometric forms), and honesty and authenticity (implicit in the straightforward revelation of structure and construction).

Getting its start in Britain in the 1950s, Brutalism made its way to North America by the early 1960s, where it established its firmest foothold on this continent in New England. As home of some of the world’s most prestigious architectural training grounds (chief among them the design schools at M.I.T., Harvard, and Yale), the region was accustomed to embracing new architectural ideas. A host of architects working in the Brutalist style were affiliated with these schools as faculty members (such as Paul Rudolph, Pietro Belluschi, and José Luis Sert) or as students or recent graduates (including Araldo Cossutta, I.M. Pei, and Walter Netsch).

New England’s strength as a center of education is not merely coincidental to the development of Brutalism in the region. The education sector accounted for the majority of Brutalist buildings commissioned during the 1960s and 1970s. The presence of so many colleges and universities, paired with increasing student enrollments, compelled the region’s postsecondary institutions to embark on unprecedented building programs.<sup>7</sup> Brutalism was well suited to these conditions. First, concrete was an economical choice, costing less than steel throughout the 1960s.<sup>8</sup> Secondly, the style was regarded as durable, and thus able to withstand decades of use (and abuse) by college students—a population not renowned for its gentle touch. Thirdly, it

displayed an avant-garde aesthetic. This visual expression of innovation, then as now, was welcomed by institutions seeking to situate themselves in the intellectual vanguard.

Finally, the presence of high-profile Brutalists (or Brutalist sympathizers) in top positions at architecture schools and, often, at the head of building committees, predisposed these institutions to concrete buildings. For instance, Paul Rudolph designed Yale's Art & Architecture Building (1963) while serving as Dean of Architecture. Similarly, José Luis Sert designed Harvard's Holyoke Center (1958–65), Peabody Terrace (1963–64), and Science Center (1973) while leading the Graduate School of Design. Other New England schools were quick to follow this stylistic lead (see table below). Not only colleges but also K–12 institutions embraced Brutalist architecture. From the rhythmic concrete lintels of Providence's Classical High School facade (Harkness & Geddes, with Walter Gropius, 1963–70) to the gaping circular voids inside the Phillips Exeter Academy Library (Louis I. Kahn, 1967–72), Brutalist school buildings stood as durable and arresting monuments to the enduring importance of education in New England—a region that could

### Notable Brutalist College Buildings in New England

Building	Architect(s)	Years Built
Countway Library, Harvard Medical School	Hugh Stubbins	1963–65
Boston Architectural Center	Ashley Myers & Associates	1963–66
Colea Tower Complex, Bowdoin College	Hugh Stubbins	1964
School of Law, George Sherman Union, Mugar Library, Boston University	Sert, Jackson & Gouley	1964
Campus master plan, UMass Dartmouth	Paul Rudolph	1964–77
Hillside Housing Complex, Colby College	Benjamin Thompson & Associates	1967
Goodland Library, Clark University	John M. Johnson	1969
List Art Building, Brown University	Philip Johnson	1969–71
Fine Arts Center, UMass Amherst	Reube & Dinkeloo	1969–75
Knight Campus, Community College of Rhode Island	Perkins & Will Partnership with Harkness & Geddes	1969–77
Thompson Arena, Dartmouth College	Pier Luigi Nervi	1974
Mudge Building, University of Vermont	Burlington Associates	1975



**Yale Art & Architecture Building, New Haven, CT (Paul Rudolph, 1963)**

Opening to wide acclaim in 1963 and reviled by the end of the decade, only to be meticulously restored and renovated in the early twenty-first century, this building reflects the wide swings in Brutalism's reputation during the past fifty years. Photo by Sage Ross.



**Philips Exeter Academy Library (Louis I. Kahn, 1967–72)**

Brutalist school buildings were arresting monuments to the importance of education in New England. Library of Congress, Prints & Photographs Division, photograph by Carol M. Highsmith.

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boast a long history of successes in the field, from establishing the first public school in North America to producing educational reformers such as Horace Mann and Elizabeth Palmer Peabody.<sup>9</sup>

The specific case of education mirrors much broader trends during the 1960s and 1970s, as New England experienced rapid population growth and shifted from an industrial to a service-based economy, which thrived on the research and brainpower being produced by the region's elite schools. Beginning as early as the 1920s, and accelerating after World War II, New England's traditional textile industries moved to the South, where labor



costs were cheaper. For instance, from 1947 to 1960, there was a nearly 16% decrease in manufacturing employment in Massachusetts. While this trend began before the Great Depression, New England, like the rest of the United States, experienced a wartime industrial boom.<sup>10</sup> As such, the widespread effects of deindustrialization would not become evident until the postwar years.

The region attempted to compensate for the loss of industrial jobs by developing new sources of employment. Service-sector companies (including banks, insurers, and transportation companies), which had deep ties to New England's economy and vested interests in the region's growth, were particularly supportive of these endeavors to shore up the regional job base. Perhaps the most conspicuous result of these efforts was the establishment of what today would be called high-tech startups. Whereas financial institutions in other areas of the country were comparatively loath to invest in the nascent electronics industry, New England's banks were eager to provide loans and financing to the region's small technology companies.<sup>11</sup>

The visual connotations of Brutalism, emphasizing durability and innovation, seemed appropriate to these economic circumstances. On the one hand, the conspicuous use of concrete—the man-made material nearest to solid rock—conveyed a message of strength and permanence, which was welcome during this economically troubled and uncertain epoch in the region's history. Moreover, these buildings' futuristic forms reflected the influx of innovation-economy companies and demonstrated that New England was, notwithstanding its celebrated history, a region that was innovative and committed to the future, rather than economically unadaptive and stuck in the past. Thus, even as New Englanders witnessed the shuttering of many brick mill buildings, their trepidation may have been mitigated, somewhat, by the construction of durable, modern structures that presciently symbolized the regional economy of the late-twentieth century and into the new millennium.

These consequential economic changes corresponded to demographic shifts as well. New England experienced substantial population spikes during the 1950s and 1960s. Such dramatic increases had not been seen since before the 1920s, and they were not seen again after the 1970s.<sup>12</sup> This influx of new residents necessitated the construction of all manner of buildings, including schools, bank branches, hospitals, shopping centers, and airports. The predominance of Brutalist designs in all of these areas, from the Eastern Airlines Terminal at Logan Airport (Minoru Yamasaki, 1971) to the Bank of New Hampshire in Manchester (Carter & Woodruff, 1971–72), reveals that



**Pirelli Tire Building, New Haven, CT (Marcel Breuer, 1968–70)**

Rising beside the intersection of Interstates 91 and 95, the building has become a prominent symbol of urban renewal in New Haven.

the style responded to and reflected these population changes as much as it signified economic transformations in the region.<sup>13</sup>

Yet even as the regional population increased, cities were in decline. Between 1950 and 1980, most of the region's major urban centers recorded double-digit population decreases: Providence, Rhode Island, 37%; Boston, 30%; New Haven, Connecticut, 24%; and Portland, Maine, 21%.<sup>14</sup> While the suburbs flourished with the influx of middle- and upper-class residents, cities came to be regarded by many as unsafe and anachronistic—vestiges of a pre-automobile past. As cities tried to reinvent themselves through urban renewal, the symbolism of innovation and durability inherent in Brutalist architecture understandably appealed to city officials and redevelopment agencies. Indeed, the style nearly became synonymous with urban renewal, as Brutalist buildings dominated projects ranging from Boston's Government Center (including concrete structures for federal, state, and local agencies)

to New Haven's Long Wharf (prominently featuring Marcel Breuer's Pirelli Building, which Docomomo, the nonprofit dedicated to documenting and preserving buildings in the modern style, dubbed "a billboard for Renewal-period New Haven").<sup>15</sup>

Urban transportation projects, in particular, profited from the symbolism of Brutalist architecture. Cities that had been built before the advent of the automobile were eager to proclaim their continued significance in the age of mass motorization by upgrading their transportation infrastructures. Perhaps the most prominent symbols of these efforts are the parking garages that grew out of the rubble of bulldozed, "blighted" neighborhoods in cities from Hartford to Bangor. As in many other urban-renewal projects, Brutalism's aesthetic connotations of durability and modernity were not lost on designers of these structures. Moreover, concrete was economically and functionally well suited to parking garages as an inexpensive, rugged, and low-maintenance material. In Providence, for instance, the Outlet Company constructed a multistory concrete parking garage in 1963, with a sky bridge connecting it to the department store across the street. The structure revitalized an ailing downtown shopping center by visually symbolizing modernity and providing convenient, safe access to the store for suburbanites who might otherwise be drawn to shopping malls closer to home.<sup>16</sup>

## SYMBOLIC STATEMENTS IN A PERIOD OF CHANGE

Brutalism's modern aesthetic appealed not only to construction projects catering to cars but also to older forms of transportation, notably railroads. Perhaps the most high-profile Brutalist building to bridge, literally, in this case, older (i.e., railway) and newer (i.e., automobile) modes of transportation is the train station in Bridgeport, Connecticut. The city's 1905 Romanesque-revival station was replaced in the early 1970s with a new concrete structure designed by local firm Antinozzi Associates. The building comprises two rounded towers, between which a rectangular slab containing the waiting room is suspended above a six-lane roadway. This atypical placement maximizes the conspicuousness of the station, and proclaims the enduring relevance of rail travel to motorists passing underneath. Moreover, the austere geometries and gray, striated concrete—so starkly different from the complex silhouette and structural polychromy of its predecessor—confer an image of modernity and stability on a form of transportation largely regarded in the 1970s as obsolete and foundering.<sup>17</sup>

By the close of the 1960s, New England was immersed, like the rest of the country, in waves of social unrest. And here, too, Brutalism was



**Massachusetts State Health, Education, and Welfare Services Center,  
Boston (Paul Rudolph, coordinating architect, 1963-70)**

Photo by the author.



**Boston City Hall (Kallmann, McKinnell & Knowles, 1962–68)**

The building took its cues from the local and national political climate in the early 1960s, emphasizing the ideals of a strong, progressive government. Photo by the author.

appropriate to the social phenomena. In the wake of the 1968 riots, the deterioration of the war in Vietnam, and the assassinations of Martin Luther King Jr. and Robert Kennedy, the style's noble symbolism (strong, bold, durable, innovative) underwent cynical reinterpretations (arrogant, aloof, megalomaniacal, fortress-like). As a case in point, Yale's Art & Architecture Building, which opened to wide acclaim in 1964, was generally reviled by 1969, when a fire—allegedly deliberately set by disaffected students—spread through the building. As Mark Alden Branch explained in the *Yale Alumni Magazine*, "Some argue that as the spirit of the protests over Vietnam and civil rights spread among college students, Rudolph's inflexible design came to stand for institutional rigidity and authoritarianism."<sup>18</sup>

Some Brutalist designs in the latter part of the decade, and into the 1970s, capitalized on these latter associations, embracing an aesthetic of security. To that end, the hulking concrete Worcester Police Department headquarters may well have been designed with the 1968 riots of Baltimore and Chicago in mind. As such, we see in terms of Brutalist symbolism both thesis and antithesis emerge in the same decade: what was in the early 1960s regarded as honest, confident, and innovative, by the 1970s became secretive, paranoiac, and passé.

The social circumstances of the late 1960s speak to yet another area in which Brutalism reflected and influenced changes in New England: politics. Scores of concrete government buildings were constructed throughout New England. From the Government Center in Fall River, Massachusetts (Continental Engineering, 1969–76), to the Norris Cotton Federal Building in Manchester, New Hampshire (Isaak & Isaak, 1974), Brutalism became identified with the politics of this era as much as Beaux-Arts neoclassicism had characterized a previous generation of government architecture.<sup>19</sup> The bold, confident, forward-looking aesthetic was well suited to the region's political mood. New England politics were largely progressive during the decade, with the ascendancy of liberal luminaries such as Edward Kennedy, Edmund Muskie, Claiborne Pell, and Abraham Ribicoff. Even the region's Republicans tended to be of the moderate "Rockefeller" variety rather than the arch-conservative Goldwater stripe. Indeed, Massachusetts Senator Edward Brooke and Vermont Congressman Robert Stafford—both Republicans—were often staunch advocates of progressive government policies.<sup>20</sup>

Of course, the most visible politician from New England during the late 1950s and early 1960s was John F. Kennedy. The optimism, progressivism, and belief in strong government that characterized the Kennedy era found an apt architectural expression in Brutalism. Perhaps the most conspicuous and consequential example is Boston City Hall (Kallmann, McKinnell &

Knowles, 1962–68). Several scholars, as well as the architects themselves, have ascribed the boldness of the building’s design to the optimistic view of government that characterized the Kennedy years—the building’s monumentality symbolizing a renewed faith in government. Architect Michael McKinnell later explained, “We always thought that our design for the City Hall should make a ‘political statement’—it should be overtly testifying to our beliefs or thoughts about democracy.”<sup>21</sup> As such, McKinnell said, the use of concrete—a serious material—was spurred, in part, by the “euphoria with Kennedy as a heroic figure.”<sup>22</sup> Similarly, McKinnell’s partner, Gerhard Kallmann, recollected in 1991, “It was the Kennedy era, and we thought of government as more open, which is why we incorporated four entrances into the design.”<sup>23</sup> While eventually concrete government buildings would come to be associated with fortress-like arrogance, throughout much of the 1960s, they projected an image of hope and confidence. As Boston Mayor Kevin White mused, “Perhaps a progressive architecture can prompt a more progressive politics.”<sup>24</sup>

## BRUTALISM’S RELATION TO TRADITION

Despite these associations with innovative industries and progressive politics, Brutalism also can be seen in relation to New England’s timeless historical qualities. Indeed, the innate characteristics of New England that are embodied in Brutalist designs—chief among them fortitude and innovation—are as much a part of the region’s spirit today as they were in the 1960s, or even the 1770s. When terrorists detonated two homemade bombs at the finish line of the Boston Marathon in 2013, the city (and the region) rallied with the slogan “Boston Strong.” Such a sentiment would not have seemed out of place during the mid-twentieth-century economic crisis, nor the British blockade of Boston Harbor 200 years earlier. What better expression of “Boston Strong”—the city’s, and the region’s, unbreakable resolve in the face of adversity—than the brawny concrete forms of its Brutalist public buildings?

New England also has a long history of innovation. From the Puritan settlers who sought to establish a novel, exemplary society in the New World to the Sons of Liberty who fought for the revolutionary idea of creating a nation founded on democratic and egalitarian principles, and from the industrialists who devised the Waltham-Lowell system of production to the abolitionists, New England has a storied history of fearless trailblazing. The region’s defining boldness, strength, and innovation are the qualities so conspicuously and appropriately embodied in its concrete architecture.



**Boston University Law Library (Sert, Jackson & Gourley, 1963)**

As Brutalist buildings enter their second half century, issues of reputation and preservation become more pressing. Photo by the author.

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Brutalist buildings are now entering a critical point in their history. As they enter their second half century, the issues of reputation and preservation become ever more pressing. It is at fifty years that buildings become eligible for listing in the National Register of Historic Places. At the same time, fifty years is an age when most buildings require either significant investment in their upkeep, or else they fall victim to the wrecking ball, making way for newer buildings that are more in line with prevailing standards of aesthetics and functionality. In the case of Brutalism, the preservation campaign has often been stymied because the style's aesthetic reputation is at its lowest point. Moreover, the nature of concrete as a primary building material renders repairs, renovations, and repurposing much more difficult and costly than some other materials.



During the past few decades, several important New England Brutalist buildings have already disappeared, either in whole or in part. New Haven's Pirelli Building survived only partially after Ikea demolished most of the low-rise wing of Marcel Breuer's 1968 design to make way for a parking lot in 2003. The Micheels Residence in Westport, Connecticut (Paul Rudolph, 1972)—one of the few Brutalist private, single-family houses actually constructed—was demolished in 2007. In Providence, a city with comparatively little modernist architecture, the Outlet Parking Garage was demolished in 2011. That same year, a developer applied for a demolition permit for the city's Fogarty State Office Building (Castellucci, Galli & Planka, 1968), which has been in a state of preservation limbo ever since. And in Cambridge, Massachusetts, the Martin Luther King Jr. School (José Luis Sert, 1971) was razed in 2014.

At the same time, hopeful signs are emerging of a critical reevaluation of concrete architecture. Interest in the style among scholars, preservationists, and architects has been waxing in recent years. In 2007, concerned residents submitted a petition to the Boston Landmarks Commission to convey landmark status on Boston City Hall. Signatories included local architects,



**Micheels Residence, Westport, CT (Paul Rudolph, 1972)**

One of the few Brutalist single-family houses actually constructed, the Micheels residence was demolished in 2007. Library of Congress, Prints & Photographs Division, Historic American Buildings Survey.

historians, concerned citizens, and even Boston City Council President Maureen Feeney.<sup>25</sup> Two issues of *ArchitectureBoston*, the quarterly publication of the Boston Society of Architects, have addressed Brutalism. Moreover, in November 2015, Mark Pasnik, Chris Grimley, and Michael Kubo published the first book bringing deliberate, objective scholarly attention to the style in New England: *Heroic: Concrete Architecture and the New Boston*. This increased scholarly and professional attention has occurred alongside high-profile, and sometimes effective, preservation campaigns for several notable Brutalist buildings. The Falk House (dubbed “House II”) in Hardwick, Vermont (Peter Eisenmann, 1969–70), was resuscitated in 2002. Likewise, the Yale Art & Architecture Building underwent a meticulous restoration and renovation by Gwathmey Siegel in 2008. And while the Martin Luther King Jr. School was succumbing to the bulldozers, across the river, Boston University opted to save its iconic Sert-designed Law Tower, which underwent a renovation by Bruner/Cott in 2014.

Saving individual Brutalist buildings, and increasing appreciation among scholars and architects, is only part of the impending battle. There also needs to be a broader understanding of these structures and how they relate to the region’s history and identity. New Englanders are rightly proud of their many fine seventeenth-, eighteenth-, and nineteenth-century buildings and landscapes, for they symbolize important aspects of the region’s heritage and reveal much about its rich past. But New England’s history did not come to an end in the 1920s. Modernist buildings in general, and Brutalist structures in particular, both reflected and transformed New England when they were constructed, and today they serve as important yet underappreciated chapters in the historical narrative embodied in the region’s built environment.

HJM

## Notes

1. A version of this paper was presented at the 50th Anniversary Conference of the New England Historical Association in New Haven, Connecticut, October 24, 2015.
2. For a thorough history of the preservation movement in New England, see James Lindgren, *Preserving Historic New England: Preservation, Progressivism, and the Remaking of Memory* (Oxford: Oxford University Press, 1995).
3. Considerable debate surrounds the etymology of the term “Brutalism.” One of the earliest—if not the first—appearances of the term in print was Alison Smithson and Peter Smithson, “The New Brutalism,” *Architectural Design* 25, no. 1 (January 1955). Later that year, Reyner Banham elaborated on the movement in *Architectural Review*: Reyner Banham, “The New Brutalism,” *Architectural Review* (December 1955).

Banham would later offer further elucidation in his 1966 book *The New Brutalism: Ethic or Aesthetic?* More recently, Elain Harwood produced the first comprehensive history of the style in Britain: Elain Harwood, *Space, Hope, and Brutalism: English Architecture, 1945–1975* (New Haven and London: Yale University Press, 2015).

4. Barbara Bradley Hagerty, “Future of Brutalist-Designed Church Not Concrete,” National Public Radio, accessed July 23, 2013, <http://www.npr.org/templates/story/story.php?storyId=93844919>.

5. Gerhard Kallmann, “The Action Architecture of a New Generation,” *The Architectural Forum* 111 (October 1959): 135.

6. William J. R. Curtis, *Modern Architecture since 1900* (Englewood Cliffs, NJ: Prentice-Hall, 1983), 289.

7. For a comprehensive account of the changes taking place on college campuses during this decade, see Paul Venable Turner, *Campus: An American Planning Tradition* (Cambridge, MA: The MIT Press, 1984).

8. Although the cost of raw materials for steel had been declining in the early 1960s, U.S. Steel and other companies raised prices by \$6 a ton in 1962, in what President John F. Kennedy called “wholly unjustifiable and irresponsible defiance of the public interest” (John F. Kennedy, “Statement on the Steel Crisis,” April 11, 1962, <http://www.networker.www3.50megs.com/jfk14.html>, accessed October 5, 2013). Meanwhile, advancements in reinforced concrete—such as the development in the 1940s and 1950s of plastic Insulating Concrete Forms (ICFs)—lowered the cost of concrete construction. See Reese Palley, *Concrete: A Seven-Thousand-Year History* (New York: Quantuck Lane Press, 2010). Also see Robert Courland, *Concrete Planet: The Strange and Fascinating Story of the World’s Most Common Man-Made Material* (New York: Prometheus Books, 2011).

9. Other Brutalist school buildings include Martin Luther King Jr. School, Cambridge, MA (Sert, Jackson & Associates, 1968–71); Love Gym, Phillips Exeter Academy, Exeter, NH (Kallmann & McKinnell, 1970–71); O’Bryant High School, Boston (Marcel Breuer, 1971–77); Madison Park High School, Roxbury, MA (Marcel Breuer and Tician Papachristou, 1974–78); and the Josiah Quincy School, Boston (The Architects Collaborative, 1976).

10. Massachusetts Department of Labor and Industries, Census of Manufactures in Massachusetts, 1953, 1960. Also David Koistinen, *Confronting Decline: The Political Economy of Deindustrialization in Twentieth-Century New England* (Gainesville, FL: University Press of Florida, 2013), 207.

11. *Ibid.*

12. The census in 1960 showed a 12.8% increase in population over 1950, and the 1970 census showed a 12.7% increase over 1960. Compare that with only 4.3% increase in 1980, 7.0% increase in 1990, 5.4% increase in 2000 and 3.8% increase in 2010. Likewise, in 1950 there was a 10.4% increase, 1940 showed a 3.3% increase, and 1930 a 10.3% increase. New England also bucked the national trends in migration in the 1960s. Vermont and New Hampshire, for instance, had rates of population growth below the national average from 1810 to 1960. In the

1960s, though, the growth rates of these states was greater than the national average. Between 1950 and 1960, only four of the forty counties in the three northern New England states gained net migrants, whereas in the 1960s, twenty-two counties increased by migration. See Paul D. Simkins, "Characteristics of Population in the United States and Canada," in Glenn T. Trewartha, ed., *The More Developed Realm: A Geography of Its Population* (Elmsford, NY: Pergamon Press, 1978), 209. Also see Trudy A. Suchan, et al., *Census Atlas of the United States* (Washington, DC: U.S. Census Bureau, 2007), 113.

13. Other Brutalist commercial buildings include the State Street Bank Building, Boston (Pearl Street Associates, 1966); Pirelli Tire Building, New Haven, CT (Marcel Breuer, 1968–70); Design Research Center, Cambridge, MA (Benjamin Thompson & Associates, 1969); Boston Five Cents Savings Bank, Boston (Kallmann & McKinnell, 1972); Dover Federal Savings & Loan, Dover, NH (Kenneth Parry, 1974); Chestnut Hill Mall, Newton, MA (Architectural Resources Cambridge, 1974); and Newport Daily News Building, Newport, RI. Brutalist religious and cultural buildings include First United Methodist Church, Gilford, NH (Daniel Tully, 1968); Christian Science Church Center, Boston (I.M. Pei & Associates/Cossutta, 1968–73); First Church in Boston, rebuilding, Boston, MA (Paul Rudolph, 1969–72); New England Aquarium, Boston (Cambridge Seven, 1969); Charlestown Branch Library, Charlestown, MA (Eduardo Catalano, 1970); Nashua Public Library, Nashua, NH (Carter & Woodruff, 1970–71); and Central Square Public Library, Cambridge, MA (Monacelli Associates, 1973–75). Brutalist designs for healthcare include Boston Children's Hospital expansion, Boston (The Architects Collaborative, 1968); Lakes Region General Hospital, Laconia, NH (Bruce Porter Arneill, 1971); and Brigham & Women's Hospital expansion, Boston (Bertrand Goldberg, 1975–83).

14. U.S. Bureau of Census Bureau, *U.S. Census of Population: 1950*, vol. 1, *Number of Inhabitants* (Washington, DC: U.S. Government Printing Office, 1952); U.S. Census Bureau, *1980 Census of Population*, vol. 1, *Characteristics of Population* (Washington, DC: U.S. Government Printing Office, 1984).

15. Lindsey Schweinberg, "Pirelli Tire Building," Docomomo-US ([www.docomomo-us.org/register/fiche/pirelli\\_tire\\_building](http://www.docomomo-us.org/register/fiche/pirelli_tire_building)), accessed September 27, 2015.

16. Brutalist parking garages are legion throughout New England and, indeed, the world. In addition to the Outlet Garage, other notable examples include Temple Street Garage in New Haven (Paul Rudolph, 1959–63); the I-91 Viaduct Garages in Springfield, MA (ca. 1960); the Government Center Garage in Boston (Kallmann & McKinnell, 1970); and the Marketplace Garage in Burlington, VT (ca. 1975).

17. The deterioration of passenger rail service in the United States reached its climax with the bankruptcy of Penn Central in 1970, at the time the largest corporate bankruptcy in the country's history. The number of intercity passenger rail miles traveled, which had peaked at 67 billion per year in the early 1940s, had plummeted to 4.4 billion per year in 1971. See: Congress of the United States, Congressional Budget Office, "The Past and Future of U.S. Passenger Rail Service," September 2003.

18. Mark Alden Branch, “The Building That Won’t Go Away,” *Yale Alumni Magazine*, February 1998.
19. Other notable Brutalist government buildings include the State Health, Education, and Welfare Building, Boston (Paul Rudolph, coordinating architect, 1963–70); Saltonstall Building, Boston (Emery Roth & Sons, 1965); and Fogarty Building, Providence, RI (Castellicci, Galli & Planka, 1968).
20. Any generalization such as this necessarily overlooks important distinctions, and while politics in the region were generally progressive, they were not universally so. In the 1960 presidential election, for instance, Republican Richard Nixon won Maine, New Hampshire, and Vermont. In 1968, he won New Hampshire and Vermont. But this did not belie generally liberal trends: while Maine went for Nixon in 1960, it also sent Edmund Muskie to the Senate in 1958. Likewise, while New Hampshire Senator Norris Cotton voted against the 1964 Voting Rights Act, he was an exception—the only member of the New England congressional delegation to do so. And while New Hampshire continued to send Cotton to the Senate, he was joined by Democrat Thomas McIntyre.
21. N. Michael McKinnell, interview by Brian M. Sirman, June 7, 2011, digital recording, Boston. McKinnell explained that Kallmann was somewhat less politically motivated than McKinnell was.
22. N. Michael McKinnell, interview by Mark Pasnik, September 2009, transcript, <http://www.overcommaunder.com/heroic/essays/an-interview-with-michael-mckinnell/>.
23. Jack Thomas, “Boston City Hall: A Beautiful Disaster,” *The Boston Globe*, February 27, 1991.
24. “You Can Fight City Hall,” *Newsweek*, July 7, 1969, 93.
25. “Landmark Petition Form: Boston City Hall,” Boston Landmarks Commission, City of Boston, April 2007. Also: “The Rabble, Roused: Excerpts from letters to the Boston Landmarks Commission,” *ArchitectureBoston* (September/October 2007), 21.