

The 'Iconic' and 'Everyday' Mid-century Modern: Shifting Attitudes Towards Repair and Preservation

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This paper engages in a critical analysis of how mid-century modern buildings deal with issues of repair, maintenance and preservation. Recent Conservation Master Plans (CMP) prepared for two modern institutional buildings are used to illustrate the differences in approach. One, an iconic structure by Paul Rudolph had a larger burden of care than another building of middling distinction designed by a local Canadian architect. Consequently, greater liberties were exercised in decisions regarding day-to-day repair and eventual replacement of materials in one than the other. An analysis of architectural trade catalogues from roughly the 1940s to the 1970s provides a backdrop to this discussion and to the larger issue of the acknowledgement (or lack thereof) of the fallibility of modern materials.

Mid-century modern buildings around the world are no longer regarded as a strange choice for historic preservation efforts. Once referred to as the 'recent past', they are increasingly viewed in a more historical perspective. The passage of time and the ensuing emergence of other architectural styles has afforded the ability to view these works at a more critical distance, and the desire to save them as a reminder of a radical time in architecture and society. Yet, their preservation presents some unique challenges. Clad with materials of the once new technological era, these buildings with their shiny metal panels and expansive glass curtain walls have a much harder time dealing with age than the durable stone and brick edifices of centuries past. Expressly designed to look fresh and appear eternally new, these buildings seem to age ungracefully, owing partly to our expectations of them and partly to the innovative, or in other words, untested nature of their materials and construction. Their repair, maintenance and conservation thus raises important questions about preservation theory and practice. This paper will engage in a critical analysis of how two modern-era buildings signifying different levels of repute, function, size and perceived worth, were cared for and changed in the process. The author will use recent Conservation Master Plans (CMP) prepared for two modern institutional buildings, to illustrate differences in how they were maintained. One, an iconic structure by Paul Rudolph had a larger burden of care than another building of middling distinction designed by a local Canadian architect. Consequently, greater liberties were exercised in decisions regarding day-to-day repair and eventual replacement of materials in one than the other. An analysis of architectural trade catalogues from roughly the 1940s to the 1970s will provide a backdrop to this discussion and to the larger issue of the acknowledgement (or lack thereof) of the fallibility of modern materials.

INTRODUCTION

The so-called 'preservation' architects usually spend a larger share of their time tracking the deterioration of built form, rather than designing new structures. This invariably makes them take deeper note of how buildings fare over years of use, wear and change. Yet, despite this appreciation of the impact of time, the field of historic preservation is constantly torn between establishing significance arising from the 'initial act of creation' and the subsequent 'developmental history of use'. This dialectic has consistently persisted in the various renovation and restoration campaigns of both famous and lesser-known buildings. Which original features and materials to preserve and reinstate vs. which ones to ignore and discard, become contested decisions in the pages of various Historic Structures Reports (HSR) and Conservation Master Plans (CMP) that precede major renovation projects. At their root, these debates attempt to ascribe value to the architect's original intent, the client's original vision and as-built construction on one hand, and the ensuing reality of the architect's disengagement, the client's changing needs and the inevitable fallibility of physical materials, on the other.

A surging interest in preservation of the 'recent past' has made the analysis of original vs acquired worth trickier than ever before. Where subsequent additions and modifications could themselves qualify as 'historic' in the case of older buildings, younger buildings have a much harder time establishing their 'age' value, let alone that of preceding changes. Patina and wear are less readily tolerated in buildings that are only a few decades old, than those that have survived through longer periods (preferably centuries) of use. This tension is most palpable in modern buildings of the post-war era in the United States, not only because many of them are now being actively preserved, but also because of the special onus that modernism placed on newness and machine-like precision. Le Corbusier famously said- "the house is a machine for living in."¹ Betsky has extended this proclamation to the modern house as the domestic embodiment of "the world of technology & science -the house should be mass produced and be as efficient as possible. It should look, if not like a machine, like something that a machine could produce."² Since machines only produce perfection, the modern building needed to be just that- there was no room for variations, the kind that had traditionally stemmed from hand tools and individual craftsmanship. And yet, as time has shown, modern buildings deteriorate and lose their sheen,



Figure 1: Jewett Arts Center from southwest, ca. 1958, Wellesley College Archives.

just like if not more so, than their traditional counterparts. Contrary to popular opinion, modern building materials are neither “maintenance free” nor are they more durable than traditional materials. Similar to handmade materials, they fall prey to environmental deterioration and the impacts of human use.³ How then did modernism address this impending fate- did it plan for, or completely ignore the burden of repair to keep its products from looking eternally new? And how did those tasked with maintaining and preserving these buildings address issues of repair?

Architect Hilary Sample posits that modern art and architecture not only acknowledged maintenance, but went to great lengths to design and mechanize it - from elaborate window washing rigs, and centralized vacuum systems to the modest yet effective squeegee.⁴ Her 2016 book ‘Maintenance Architecture’ chronicles a selection of modern-era projects where some architects either consciously or sub-consciously addressed repair and maintenance. While Sample’s work focuses on the icons of modern art and architecture, typically large projects commissioned by important clients and designed by famous architects, there is a larger stock of modest, everyday modern buildings that were often built without architects, formal drawings and specifications. In both kinds of buildings, maintenance needs were often downplayed, even though mechanized at times, as in the examples in Sample’s book. Modern materials were projected to be free from the onerous upkeep required of traditional materials owing to their technological ingenuity. Such assertions run rampant in the trade literature from the time. From plastic, vinyl, asphalt and rubber tiles, to glass-block, aluminum, prefinished wood panels, and newfangled laminates of every conceivable chemical composition, richly illustrated architectural trade catalogues chronicle the promise of twentieth century modern materials. A mainstay of the consumerist, marketing-obsessed post-war era, these catalogues in their inclusion (or omission) of repair regimens, speak volumes about how patina and wear were viewed from a modernist lens.

CONSERVATION MASTER PLANS: JEWETT ARTS CENTER, WELLESLEY COLLEGE, MA AND SASKATCHEWAN POWER CORPORATION, REGINA, CANADA

The Jewett Arts Center, completed in 1958 was built as an integrated art, music and theatre facility for the academic programs of Wellesley College. One of the earliest large projects designed by Paul Rudolph (with Anderson, Beckwith and Haible), the building is notable both for its innovative educational program and as an important example of modern architecture. Its rather contextual design, use of exposed brick and concrete, and trellis-like metal screens are a marked departure from Rudolph’s later more brutalist work. In 2015, the building won a grant from the Getty Foundation as part of its ‘Keeping It Modern’ initiative to prepare a Conservation Plan that would enable “more historically and technically informed maintenance of the facility.”⁵ An exhaustive analysis of the building’s original drawings and specifications did not reveal that the architect(s) paid any special attention to ensure that maintenance and repair would be carried out in a certain way. Yet, as can be expected, almost immediately after it was turned over to the client, both subtle and more dramatic changes needed to be made- some to accommodate program changes, others to correct technical flaws in the original design, and yet others of a more mundane upkeep category. These changes were carried out with more latitude in the years immediately following the building’s construction and extending right up to the 1990s. In the last twenty years though, the architectural significance of Jewett has been more formally recognized and the pace and nature of renovations has been markedly more researched and conservative.

Maintained by staff at Wellesley’s Department of Buildings and Grounds, many of the initial decisions regarding repair and replacement of building features and materials were taken internally without involving Rudolph or any external architects. Within five years of the building’s opening, its tall opaque wood main entry doors were rather ruthlessly cut short and outer leaves were fixed in place to solve a maintenance nightmare. Within another twenty years, the doors were altogether removed and replaced with a run-of-the-mill storefront system that was markedly different



Figure 2: Saskatchewan Power Corporation Head Office Building, c.2000 after being re-clad in aluminum metal panels, SaskPower Archives.

from Rudolph's original vision. However, as time went on and more substantial changes were needed to the original layout, the supervising architect from the 1958 construction was engaged to maintain continuity with the existing design/material vocabulary. Right up to the early 1990's some fairly substantial modifications were made to the building, like the insertion of mechanical ductwork, replacement of wood flooring and fabric panels in the entry corridors, removal of some interior partitions, finishes etc.; however, the overall look and feel of the building did not change markedly from when it was built. The 1990's saw a growing awareness of the significance of the building from a preservation perspective and in fact some original features, like the gallery skylights were reinstated after having been replaced with metal panels in 1977. The period from 2000 – 2017 has seen a slew of more carefully designed restoration and maintenance campaigns, material studies and treatment mock-ups, all designed with an eye towards protecting the architectural significance of the building in a very traditional historic preservation sense.

In some ways, the Jewett Arts Center has been rather fortunate in the way it has been maintained, cared for and even modified. The protected setting of an affluent New England college campus afforded the luxury of means and time to maintain the building more lovingly, if not in the years immediately following construction, definitely in the latter half of its life thus far. Its cultured patronage has been particularly attuned to the architectural significance of the building, drawing a sharp contrast to the following project example.

The Saskatchewan Power Corporation Head Office building (hereafter referred to as the SaskPower building), is a 13-story government office tower located in downtown Regina in Saskatchewan, Canada. It was built in 1963 and was designed by a local architect Joseph Pettick. Since the building is part of a historic district, the owners were forced to commission a Conservation Plan in 2015 to assess the impact of planned renovations to the building.⁶ Research into the original construction of the structure, revealed a rather innovative material and design palette, in many ways much more experimental, avant-garde and quintessentially 'modern' than that used by Rudolph at Jewett. Aided by his wife and interior designer, Margaret Pettick, the architect Joseph Pettick created a distinctive building with various custom designed features and used both modern and traditional materials in unconventional ways. In his use of colorful glass mosaic tiles both on the exterior and interior of the building, Pettick was inspired by his recent travels to South America and his desire to bring an international modernism to Regina. That he boldly used this material on the exterior façade in the cold winters of Canada, however, would not prove to be a very sensible decision in hindsight. In fact, within twenty years of construction, the maintenance staff reported to have failed miserably in their efforts to maintain the delaminating vitreous tiles and started re-cladding the upper floors with ribbed aluminum panels. By the 1990s, it was decided to re-clad all mosaic tile areas with insulated aluminum panels. While the tile delamination was only roughly 20% of the total façade area, this drastic change to the building's appearance was seen as an opportunity to update its public image and also improve the operating energy efficiency. The extent to which utilitarian, maintenance-driven decisions were at the fore in this project is underscored by the fact that even Pettick, now in his seventies, was convinced of the lack of any heritage value of the mosaic tile façade, and in fact, helped design the new metal panel system. This dramatic change to the building's appearance would have been rather unthinkable in the case of a more recognized building like the Jewett Arts Center.

On the interior, all major public areas of the Saskpower building featured similar colored mosaics and a unique 'luminous' ceiling, made of panels of translucent plastic that had been formed over custom hand-crafted molds. Referred to as 'Prairie Ice' in all project literature, this illuminated ceiling created pendant cones that suggested young stalactites, evoking the natural beauty of the Saskatchewan region. Unfortunately, these too were all removed. While the reasons for this are not well documented, it is presumed that custom replacement of damaged units was deemed so onerous and expensive by the facilities department, that replacement by standard 2x2 acoustic tiles was seen as the simplest, albeit historically inappropriate substitution.

The SaskPower building represents what Fixler has coined 'Ordinary Everyday Modernism' or OEMs- modern buildings



Figure 3: Saskpower Building, interior view of entrance lobby showing original mosaic finishes and illuminated ceiling. Undated, Saskpower Archives

of mainstream value.⁷ These buildings, that comprise the bulk of modern-era buildings, have been and are more susceptible to being unsympathetically maintained and altered, particularly in the face of more demanding energy mandates.⁸ Saskpower, unlike Jewett, was owned and operated by a government agency with tighter budget constraints. Located on a prominent urban square, it faced greater political pressure to maintain a shining public image, even if that meant sacrificing the building's rather unacknowledged heritage value. Unlike Jewett, the Saskpower building never enjoyed the benefits of more researched maintenance. Its Conservation Plan reflected a more practical approach towards re-interpreting the building rather than reinstating a lost vision.

MODERN MATERIALS – LOOKING THROUGH THE LENS OF MID-CENTURY TRADE CATALOGUES

Architectural drawings and project specifications, while fairly detailed in terms of technical data, installation and testing procedures, rarely address long-term maintenance protocols and repair. This was as true in the mid-century modern era as it is today. An invaluable resource where many preservation professionals working on modern buildings have turned to, are the prolific and richly illustrated trade catalogs that were published during this time. In the absence of anything more project-specific, these trade catalogs provide the primary

source of information about recommended cleaning, repair and maintenance regimens, if any, that were prescribed for modern materials and systems. For research undertaken on the two CMPs and for this paper, the author analyzed hundreds of these catalogues, many of which are archived online as the 'Building Technology Heritage Library' and hosted by the Association of Preservation Technology.⁹

Looking for data on repair and maintenance in trade catalogs is an interesting exercise- by their express function as a sales document and consequent rhetorical language, the catalogues walked a tight rope between touting the supreme benefits of these newfangled materials and yet admitting some of their fallibilities. In the post-war period, the American economy glorified consumption. To ensure continuous profits, businesses focused on inundating American homes with a continuous stream of innovative gadgets.¹⁰ While durability was still a prized attribute, the quality that seemed most marketable was the 'maintenance-free' nature of these new materials. The illustrations routinely featured the modern American housewife leisurely seated in an uncluttered home, flipping through a magazine or spending time with her family—liberated from the tedious chores of maintaining an ornate traditional home. The continuous, smooth surfaces possible with these new materials were marketed as superior than traditional options that had various 'dirt-catching' crevices and moldings. Their engineered chemical composition ensured superior resistance to acids, oils and grease, again enhancing

Gold Seal FLOOR MACHINES



LIGHT WEIGHT—No. T02

POWER: $\frac{1}{4}$ h.p. universal motor (AC-DC), manufactured especially for this machine; power transmitted to brush spindles by worm gears; motor mounted on zinc alloy castings; 22-ft. rubber covered cable with molded attachment plug; fully enclosed safety switch.

BRUSHES: Best quality Tampico and Palmetto fibres; brush diameter 6"; brush spread 12". Standard equipment includes 1 pair combination brushes for waxing or scrubbing, 1 pair Tampico polishing brushes, 1 pair felt buffing pads. No tools required for changing brushes or buffing pads.

Height: 6 $\frac{1}{2}$ "; Weight: 20 lbs.;

Packing: Individual. 3 per shipping carton.

MEDIUM WEIGHT—No. T04

POWER: $\frac{1}{2}$ h.p. universal motor (AC-DC), designed especially for this machine; power transmitted to brush spindles by worm gears; motor mounted on zinc alloy castings; 30-ft. rubber covered cable with molded attachment plug; fully-enclosed, safety trigger switch.

BRUSHES: Best quality Tampico and Palmetto fibres; brush diameter 8"; brush spread 16". Standard equipment includes 1 pair union mix brushes; 1 pair Bassine brushes for scrubbing; 1 pair felt buffing pads.

Height: 8 $\frac{1}{2}$ "; Weight: 40 lbs.;

Packing: Individual. 2 per shipping carton.

HEAVY WEIGHT—No. T06

POWER: $\frac{1}{2}$ h.p. induction wound, capacitor start motor, 1725 RPM; sealed lubrication; 115-230 volts A.C. 60 cycle, single phase; power transmitted to brush spindles by precision cut helical gears; 50-ft. oil resistant rubber covered 2-wire cable, with twist lock connector at handle.

BRUSHES: Twin brushes, interchangeable to prolong life; brush diameter 10"; brush spread 21". Standard equipment includes one set polishing or scrubbing brushes.

Height: 9 $\frac{3}{4}$ "; Weight: 95 lbs.; Packing: Individual.

SANDING AND STEEL WOOL KIT

To adapt floor machines for limited floor refinishing, as well as finishing shelves, counters and similar surfaces.

Kits consist of:

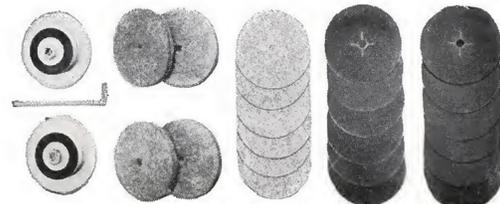
2 mounting discs with wrench

2 pairs special steel wool pads (T037, T057)

6 sheets each of fine, medium and coarse sandpaper (T034, 35, 36, T054, 55, 56)

For Light Weight Machine—No. T03

For Medium Weight Machine—No. T05



the virtually maintenance-free nature of the products. As one pamphlet for a wall tile professed - “No more wall cracks, no more painting or refinishing. And because the decorator color and beauty is sealed forever beneath the rugged, crystal clear plastic, it’s a cleaning dream!”¹¹ Another brochure for vinyl plastic flooring made the material seem almost magical- “Take a cupful of coal dust and a splash of water and a sprinkle of chemicals. Add a dash of ingenuity and the sparkle of starlight. Now tilt the test tube, and pour out the floor of the future—a plastic floor that’s sprightly as a spring day, durable as a doorknob, and easy to clean as an icicle.”¹²

For most interior finish products – ceilings, floors, wall coverings, furniture and counter laminates, maintenance was downplayed as being non-existent or minimal “needing only an occasional wipe with a damp cloth.” Yet, despite the stress-free image being advertised in the front pages of the catalogs, the back pages often unceremoniously featured a bunch of proprietary cleaning and maintenance products grouped together as ‘sundries’, or in other words, various items not important enough to be mentioned individually. At times these were accompanied by instructions for the correct cleaning regimen, custom brushes and applicators and cautionary remarks about which products and methods to avoid. Overall, while the catalogs did address the care of certain modern materials to a limited extent, their dominant role was to underplay the need for maintenance.

LESSONS FOR PRACTICE

The clean, clutter-free image that modernism came to be associated with actually required a greater burden of care than what the architectural and trade literature from the era would have us believe. Sample notes that “the reality is that modern architecture requires constant maintenance, and the tools and techniques developed to reduce the time and effort necessary for maintenance in modern buildings actually created greater demands for care.”¹³ Modern-era buildings actually require more frequent monitoring and maintenance than traditional mass masonry buildings. Materials such as sealants and double-pane glass have shorter maintenance cycles than materials such as stone, brick etc.¹⁴ This is compounded by what some have contended is the inherent impermanence of modern materials and systems and that many buildings were designed with a service life of only 20-30 years.¹⁵ Others have debated the notion that modern materials do not age gracefully- “materials such as plastics, synthetic paints and concrete can deteriorate relatively quickly, and without appropriate maintenance regimes their appearance rapidly declines.”¹⁶

Betsky’s take on modernism can be extrapolated to posit that pioneering, innovative modern-era materials and systems are probably better off being replaced with newer contemporary systems and this would be more in keeping with the spirit of what it truly means to be modern- ‘to represent [something]

that is of the moment.’¹⁷ But possibly there is a middle ground – the deterioration that modern materials experience can rather be seen as patina; and users, maintenance staff and preservation professionals can conceivably resist their urge to make these buildings look eternally new. The ‘rugged’ modern can hopefully become the new accepted standard in the care and rehabilitation of modern era buildings. This would ensure a more sustainable and viable future for the vast stock of mid-century buildings that dot the American landscape and are now ripe for a new lease on life.

ENDNOTES

- 1 Le Corbusier, *Towards a New Architecture: Translated from the Thirteenth French Edition and with an Introduction by Frederick Etchells* (New York : Dover Publications, 1986), 14.
- 2 Aaron Betsky, *Making It Modern: The History of Modernism in Architecture and Design* (Actar, 2016), 133.
- 3 Thomas C. Jester, “Preface” in *Twentieth-Century Building Materials: History and Conservation*. ed. Thomas C. Jester (New York : McGraw-Hill, 1995), 9.
- 4 Hilary Sample, *Maintenance Architecture* (Cambridge, Massachusetts : MIT Press, 2016).
- 5 Alice Friedman et al., “Jewett Arts Center: A Conservation Plan,” (2017).
- 6 David N. Fixler, Priya Jain, and Christopher Tavener, “Saskatchewan Power Corporation: Heritage Conservation Plan,” (2015).
- 7 David N. Fixler, “Introduction to the Special Issue,” *Journal of Architectural Conservation* 23, no. 1-2 (2017), 3.
- 8 Mark Thompson Brandt, “Buildings and Stories: Mindset, Climate Change and Mid-Century Modern,” *Journal of Architectural Conservation* 23, no. 1-2 (2017).
- 9 “Building Technology Heritage Library”, Association for Preservation Technology, <https://archive.org/details/buildingtechnologyheritagelibrary>.
- 10 Daniel M. Abramson, *Obsolescence : An Architectural History*. Daniel M. Abramson (Chicago ; London : The University of Chicago Press, 2016), 53.
- 11 “Congoleum-Nairn Inc.: Fine Floors and Walls”, Congoleum-Nairn, (1960), Building Technology Heritage Library, <https://archive.org/details/Congoleum-nairnInc.FineFloorsAndWalls1960>.
- 12 “The Story of Floors,” Armstrong Cork Co. (1959). Building Technology Heritage Library, <https://archive.org/details/TheStoryOfFloors>.
- 13 Sample, *Maintenance Architecture*, 133.
- 14 Deborah Slaton, “Challenges of Modern Materials: Assessment and Repair,” *Journal of Architectural Conservation* 23, no. 1-2 (2017), 53.
- 15 Fixler, “Introduction to the Special Issue,” 1.
- 16 Geoff Rich, “Renewing Modernism: Emerging Principles for Practice,” *Journal of Architectural Conservation* 23, no. 1-2 (2017), 115.
- 17 Betsky, *Making It Modern*, 13.