



The Constructed Landscape: Arthur Erickson's Concrete

I first heard Arthur Erickson speak of the importance of concrete to his designs in the late 1970s. As the student charged with organizing lectures at my architecture school in Calgary, a first talk there by Canada's most prominent modern architect was my top priority. I called his office, but Erickson's personal secretary informed me he no longer gave lectures to universities, only to "bankers and chambers of commerce." I persisted, and arranged to have the Vancouver-based designer speak to a luncheon gathering of downtown businessmen.

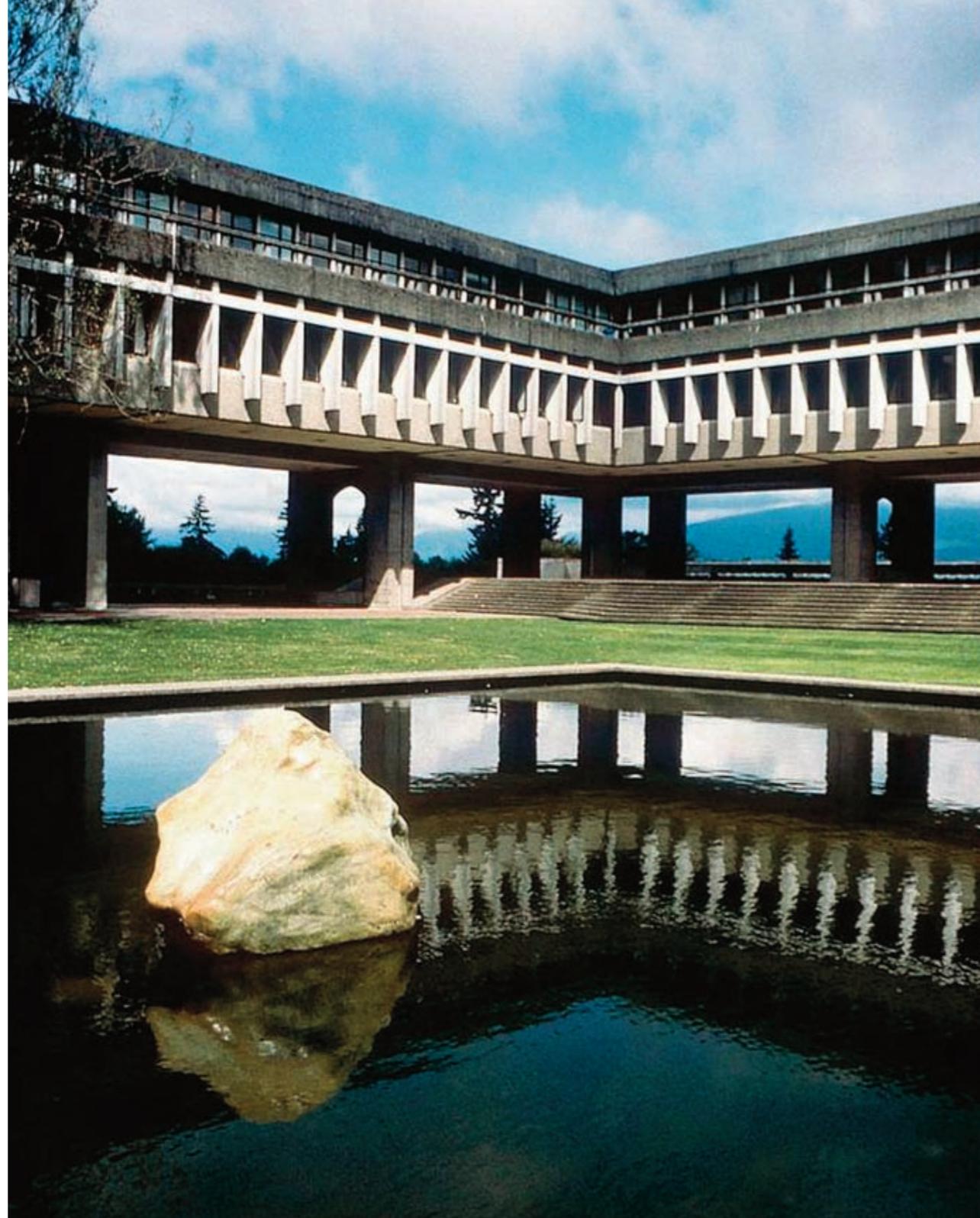
One of Erickson's phrases in his talk that day cycled around my student brain long after he got on the airplane back to Vancouver, and the Calgary businessmen got back to pumping oil. While I did not recognize it as being so at the time, he voiced a widely-quoted shibboleth as an aside: "Concrete is the marble of the 20th century." The use of concrete validated through comparison with a now-expensive traditional material? The reference seemed archaic to me, in part because my architectural history studies had just taught me that the ancient shores of the Mediterranean were the last home to marble used as both structure and finish for public buildings. Or was Erickson inferring something more complex with this, as in late Roman and post-Renaissance uses of marble—a veneer finish, while bricks or cheaper stones did the structural work behind, a composite in the same way steel reinforcing rods make large span and thin shell concrete structures possible?

Arthur Erickson's concrete buildings demonstrate both of these tendencies—an extension of building logic of the material itself, and a classicizing sensibility, especially in their spatial logic and recurring use of the trabeated frame. Erickson had extensive exposure to the buildings of the Mediterranean, extending his modest post-graduate travelling scholarship from McGill University into nearly two years of looking and sketching there, starting with Egypt and the Levantine, then returning through Turkey, Greece and Italy.

Trevor Boddy



Evergreen Building Conservation Plan, Vancouver 2006.



Teaching at Oregon then the University of British Columbia, the first decade of Arthur Erickson's architectural practice was almost entirely post-and-beam houses made out of ever-cheap and always-plentiful BC fir and cedar, beginning with a modest 1953 studio-house for painter Thomas Gordon Smith. A second studio-house for Smith a decade later is one of the definitive works of Pacific Northwest modernism, the rhetoric of large timber post-and-beam extended heroically.

About the same time, Erickson and then-partner Geoff Massey won the architectural competition for Simon Fraser University, an all-new institution on a mountaintop bench in a Vancouver suburb. Concrete was the material of choice for the series of academic pavilions and site-works there, but each building was achieved by other architectural firms in association with Erickson-Massey, for the usual political reasons of spreading the bounty of commissions around, and because their young firm had never done a public building in concrete, or a public building of any kind, for that matter. Oversight of a dozen large structures using a wide variety of concrete finishes and structures was Erickson's best possible post-graduate course of study in the use of the material, and he demonstrated a remarkable maturity when his own practice shifted almost entirely to the use of concrete.

While there was an association of record with another architectural firm for it, too, Erickson's concrete innovations are first declared in one of the most remarkable concrete office towers built anywhere during the 1970s—the MacMillan-Bloedel Tower on Georgia Street, in downtown Vancouver. Dominated by an extraordinarily deep egg-crate frame, this is a slab tower in two slightly displaced wings, the elevator core at centre. Vancouver is in the same seismic zone as San Francisco or Los Angeles, but the structural overkill of this massive frame has more to do with classical memory than earthquake resistance. The frame of MacMillan-Bloedel's floor-to-floor egg-crates are trabeated—horizontals flush with verticals. The classical sensibility of this squaring-off of the frame is amplified in Erickson's use of entasis, with the depth

of these rough-textured concrete frames gradually diminishing by a half meter as they rise from grade to penthouse, the glass line held constant. Of course, there is less need for structure as the building gets higher, but any rational engineer would have repeated the same detailing and depth of frame all the way up, an approximation that would of course saved on customized design and formwork costs. But the intentions of this construction detail are entirely architectural, and the result is a lightness of form and presence of a tower with so vast a cubage of cast concrete.

A large concrete office block with a comparable quality of heaviness made light is Clorindo Testa's Lloyd's Bank building in Buenos Aires. Neither Testa nor Erickson are Brutalists in the British mode of, say, Denys Lasdun. While all three architects clearly share an admiration for the late works Le Corbusier—and Testa worked briefly at the rue de Sevres—Erickson's classicizing impulses drew him away from heavily textured concrete treatments in subsequent works. The egg crate elevation of MacMillan-Bloedel are not, as some have suggested, a mere multiplication of the monk's cell elevations of La Tourette.

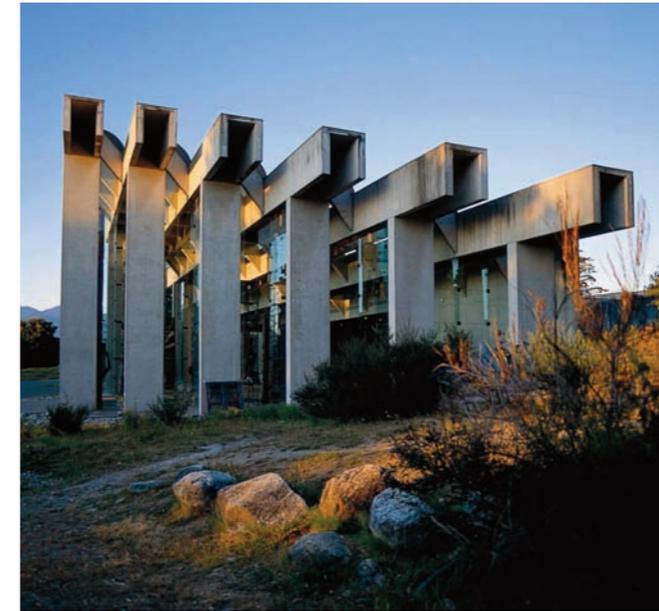
Allusions to vernacular traditions embedded subtly in concrete frames are central to Arthur Erickson's masterpiece, the 1976 Museum of Anthropology at the University of British Columbia. The institution houses one of the world's most important collections of Pacific Northwest native art, and Erickson cued off the monumental hewed cedar dwellings of British Columbia's Haida and Kwakiutl indigenous peoples. This is particularly evident in the concrete frame of the great hall there, sized to accommodate even the largest of conserved totem poles oriented to face the ocean, as was their traditional siting. Because of the constant availability of large dimension timber from the surrounding temperate rain forests, native peoples in this region used wood extravagantly, often extending beams far past columns, or setting up large ceremonial portals and carved entrances.

Erickson's UBC Museum of Anthropology great hall uses a series of portal frames in cast concrete, each larger than the last stepping up to a structural glass wall looking out to sea. The extravagant extension of the inverted U-shaped beams past the column line is, of course, more rhetorical than structural, an allusion to similar details in the aboriginal house-fronts much more than mere exploitation of a structurally 'free' cantilever. The architectural effect of these cast-in-place concrete frames, however, may read better as propylaea than communal Haida dwelling. The past few years have also seen a revealing debate about the cleaning of the somewhat stained exterior surfaces of the great hall portals. Some would wish these brought back to the gleaming original condition of fresh-poured concrete. For some of us, including the architect, the stain patterns and mild moss growth there are a welcome patina of age, the re-assertion of the power of nature and the logic of the site on even so bold an act of architectural imagination.

A similar argument could be made about Erickson's continuing interest in Asian architecture. Erickson saw wartime service with British Intelligence in India, spent a year after the war in Southeast Asia, and made some career-shaping visits to Japan in the early 1960's. The architect suggests the Torii Gates and the extensive throw of temple eaves he saw then were influential to his design thinking for the museum and the other projects which followed. While the building was constructed with glulam beams and mirrored glass, Erickson's Canadian Pavilion at EXPO 70 in Osaka was awarded the top pavilion prize and widely admired by fellow architects—Tadao Ando told Erickson and I that this building was a key influence on his new architectural practice in that city. Since the UBC Museum of Anthropology has a collection that includes all key world cultures, this balance of European with Asian with Native North American allusions is apt, its architectural delineation clean, its definition of spaces—both enclosed and implied—very powerful. With architectural successes in North America, Europe, the Middle East and Asia all underway before 1980, Arthur Erickson's was



Macmillan Bloedel Office Tower 1969, Cast concrete framed 'double' towers.



Museum of Anthropology, UBC 1976, Housing the NW First Nation material collection.

amongst the first of the truly global architectural practices.

The informing idea of the Simon Fraser University design—that of a huge concrete building that aspires to the scale and conditions of landscape itself—re-asserts itself in another landmark Erickson design of the 1970s. The Meso-American ceremonial city of Monte Alban, near Oaxaca, Mexico, had served as Erickson's historical precedent for an axial university on a mountaintop. For his second academic campus commission at the University of Lethbridge, a 3 km-long early 20th century timber railway trestle across a wide river valley served as point of departure for an entire university conceived as monolithic mega-structure. From student residences through labs to classrooms and faculty offices, all university functions were combined in this single bridge-building. Early schemes extended the Brutalist detailing and heavy concrete frame of MacMillan Bloedel, but with the concrete surfaces flattened and smoothed out, in part because Erickson came to understand the much brighter and harsher Alberta light, which renders even fine textures and reveals crisply, amplifying their architectural effects, meaning there was no need for the textured concrete heroics of the British Columbia projects.

Arthur Erickson's notions of building-as-landscape are condensed in a second, equally remarkable downtown Vancouver building, one which both resonates with the MacMillan-Bloedel tower, but shows a tempering influence from the architecture-as-landscape thesis he developed during the fifteen years after Simon Fraser University, but applied here for the first time for a densely-developed urban core situation. Vancouver lawyer John Laxton assembled a site on the Stanley Park side of downtown Vancouver very near Coal Harbour, and asked Erickson to develop a scheme that would be adaptable to either office or residential uses. The lawyer's own firm would be accommodated, but it was unclear whether the long-term market at this view location would be for professional offices or urban apartments.



The Waterfall Building 2002. Flexible live-or-work units around a court based on Corbusian cross-section.

For what came to be known as the Evergreen Building, Erickson accordingly developed a literally two-sided approach. For the elevation along Pender—a key downtown commercial street—Erickson crafted a fairly conventional cast-in-place mid-rise concrete office tower. On the harbour sides, something remarkably different is devised by the architect, with the full plastic potential of concrete exploited by hiving off the elevation as a stepped series of faceted trays, each potential housing unit have a sea-view deck. The building is thus something of an icon of Vancouver itself, with hard office building elevations on the city side, but a softer, more organic treatment on the elevations facing park, harbour and mountains, an encapsulation of the city's unique combination of high density housing with close-in near-wilderness.

The building was dubbed “Evergreen” by architect and owner because the decks are all ringed by continuous planters. In Vancouver's wet climate, these are filled to the brim with ivy, which drapes over the side, sometimes all but obscuring the concrete structures themselves. A cascade of greenery amplifying the plan logic of the harbourside decks, this is one building where the 1970s fashion for drawing lush greenery exploding from every horizontal surface—in Wrightian fashion—is actually duplicated in reality.

Issues tied to the decks are crucial to the current conservation plan now being implemented for the Evergreen Building. As is often the case, imperfect seals on the planters has allowed water to accumulate on the insides of the concrete deck structures, both vertical and horizontal surfaces. For portions exposed to the weather on both sides, water accumulation combined with Vancouver's occasional but destructive freeze-thaw cycles have led to spalling of the concrete, exposing the rebar (most evident at the deck floor level), and thus enabling further moisture migration.

Conservation architect Marcus Leyland prepared the Evergreen Building's conservation plan while working for

Omicron Engineering in Vancouver. Leyland's plan sets a new standard for the conservation of a Modern concrete building in Canada, with thorough documentation of the issues, and a carefully-considered conservation strategy. Because of the complexity of the surfaces and slight variations in construction, Leyland's team built a three-dimensional digital model of all building components, an initially time-consuming investment that has paid off at all other stages of work. A precise survey and a reliable three dimensional visuals (sections and plans could be digitally cut at any place and scale) proved hugely helpful in both understanding the many conservation issues before the Evergreen, and in planning their remediation.

Propositions to enclose with glass or entirely re-surface outside walls of the decks were rejected, in part because they are much beloved by present and future tenants, a unique feature in a city which tends to nominal apartment balconies too small for active use. Nearly all planters are being re-lined, and many deck surfaces replaced as conservation works are carried out (conservation is still ongoing as this is written in fall of 2007.) Patches, splices and parging are proving sufficient to deal with cracks or missing concrete sections, and to date there has been no need to replace large sections. The building is being continuously occupied as conservation works are conducted, and updated mechanical services have been introduced. The conservation is also a welcome chance to undo an unfortunate 1980s lobby renewal, bringing back the spatial clarity of Erickson's original design.

Just as impressive as the technical strategies of conservation for the Evergreen Building is the public activism and imaginative heritage planning that saved the building from demolition. A public campaign was led by Vancouver Heritage Commission member and Erickson Conservancy founder Cheryl Cooper when demolition was repeatedly threatened, this 11 storey building having a substantially lower density than permitted by contemporary downtown Vancouver planning regulations. On another front, architect



David Thom of the firm I.B.I. used legal maneuvers tied to the unbreakable long-term lease his firm had signed for premises in the Evergreen Building to play for time, until a ground-breaking heritage planning proposition for its conservation had solidified.

The heritage planning agreement that saved the Evergreen Building is unique to Canada. Vancouver uses transfer of development rights as a conservation mechanism in the downtown core only. The Evergreen's owner was allowed to transfer one of the largest total of such rights to another site, where new construction will be higher and denser than permitted by prior land use controls. Just as important, the planning approvals agreement required the owner to do the survey of building conditions and prepare a conservation plan to the highest of contemporary standards, then implement it. The Evergreen Building is now permanently preserved by means of legal agreements obliging subsequent owners to conserve the building as-is, in perpetuity (it is important to note that Canada and British Columbia have the weakest heritage legislation in the OECD, with designations—the American “landmarking” or British “listing”—usually being owner-selected and reversible.) The now-protected building has since been sold to a large pension fund, assuring its permanent place as a marker of Erickson's approach to architecture-as-landscape.

Arthur Erickson's architectural interests in concrete tend neither to the voluptuous plasticity of Niemeyer and the Brazilians, nor the heavy textures and self-importance of Lasdun and the British Brutalists. Uniquely Canadian is his ongoing design engagement with concrete buildings that take on the character and tectonics of landscape itself—large buildings for a new and large nation that serve as both figure and ground. Erickson's innovations have done much to inspire similar notions in later generations of Canadian architects, notably fellow Vancouverites John and Patricia Patkau, but also designers as diverse as Douglas Cardinal, Shim and Sutcliffe, Pierre Thibault, Raymond Moriyama and

others. While the Evergreen Building has been preferred, the Graham House a key 1963 design was recently lost. It will be a bitter irony indeed if more works by this architect engaged with landscape are not maintained as part of Vancouver's architectural landscape.



Robson Square, Low Courts gardens and offices 1983