

TEXT Trevor Boddy

For over a century, 'architectural zoos' have been permanent collections of architectural animals—one example each from the leading species of designers. The most famous of these is the Weissenhofsiedlung, which in 1927 collected a range of modernist housing by Le Corbusier, Mies, Gropius, Hans Scharoun, Bruno Taut and others on a Stuttgart hillside. For Fukuoka's Nexus World Housing in 1991, Arata Isozaki served as zookeeper, contributing a housing block of his own and coordinating constructions by Steven Holl, Rem Koolhaas, Mark Mack and more. Such collections are unequalled opportunities to see how differing design thinking can be realized within the same topography and building brief.

Vancouver's Alberni Street is emerging as the continent's leading zoological park for creative luxury high-rises. There is no single organizing mind behind choosing the designers for the various species of residential towers rising there. Rather, the concentration results from the converging dynamics of urban design controls, land economics, a mandated 6,500-square-foot limit on residential floor sizes, view cone restrictions on building heights, and the feng shui of mountain and harbour views—all propelled by a rare-in-Canada spirit of architectural ambition.

Alberni Street seems an unlikely locale for architectural experiments, with its ten blocks capped on its eastern edge by the copper château roof of the Hotel Vancouver, and on its western end by Stanley Park. Running parallel to it on one side is the extra-wide ceremonial axis of Georgia Street, home to office towers and hotels; on the other is Robson Street, a somewhat fading retail area that is now seeing many of its high-end boutiques migrate to Alberni.

The template for Alberni as an allée of design innovation was first set by Peter Cardew's 1978 Crown Life block (now 1500 West Georgia)



between Cardero and Nicola Streets—one of the most lauded Canadian towers of its era. The six blocks from here towards Burrard Street are dominated by a trio of major works by James Cheng for Westbank: the twin-tower Palisades of 1996 represented a new spirit of high-quality public spaces and public art; across the street, the 1998 Residences on Georgia became the definitive expression of Vancouverist towers-on-podiums; the 2009 Shangri-La hotel/condo tower took tectonic and public space notions from both designs even further. Heading west from Nicola, as Alberni descends towards Stanley Park, the next wave of innovation is about to arrive. Later this year, a tower by Tokyo's Kengo Kuma is set to open, followed by new residential high-rises by Ole Scheeren of Berlin, Thomas Heatherwick of London, and Venelin Kokalov of Bing Thom's successor firm, Revery.

This article tours these latest additions to Vancouver's accidental architectural zoo, as Alberni Street continues to be transformed with new ideas. Like Weissenhofsiedlung and Nexus World, the wildly expressive line of towers along Alberni is sure to become a permanent pilgrimage path for architects seeking ideas for high-density housing. Moreover, this first look at four diverse designs shows how the street is taking the forms and principles of Vancouverism in new directions.

1700 Alberni by Thomas Heatherwick Architects

Bosa Properties is a rising presence amongst Vancouver developers and is starting to challenge North America's largest privately held firm, Westbank, for some of the city's most prestigious and expensive building sites. It's currently developing two projects on Alberni. In consort with Kingswood Properties president Lorne Segal, Bosa Properties

PREVIOUS PAGE Kengo Kuma's Alberni, currently under construction, sits opposite the rounded-corner triangular tower of Peter Cardew's classic 1500 West Georgia (formerly Crown Life Block), completed in 1978.

LEFT AND BELOW Thomas Heatherwick's design for a pair of towers at 1700 Alberni introduces playfully bulbous forms that frame generous outdoor terraces for residents.











L31-37 TYPICAL PLAN

L32-38 TYPICAL PLAN

LEFT AND ABOVE Designed by Venelin Kokalov of Revery Architects, 1684 Alberni includes double-height outdoor spaces on two corners of each floorplate. The balconies alternate positions floor-by-floor, all the way up the building's 40 storeys.

head Colin Bosa decided to invest heavily in a search for the right architects and designs for these projects. This took the developers on a tour of residential projects in Europe and the United States, followed in 2019 by that rarest of designer selection processes for their double tower site at 1700 Alberni—a developer-funded design competition. With Kasian's Michael MacDonald engaged as professional advisor, Bosa brought three international teams to Vancouver to prepare their designs: MAD Architects from China (best known in Canada for their Marilyn Monroe towers in Mississauga), UN Studio from Amsterdam, and Thomas Heatherwick from London, UK.

Heatherwick and his colleagues ultimately won, convincing the developers that they had the most playful design ideas coupled with the deepest knowledge of the specificities of the context. (They gained the latter largely by riding rented bicycles around Coal Harbour and the West End for three days.) Their original competition scheme suggested a radical revision of the concept of anchoring podium, shifting from the Vancouverist template of a ring of townhouses to instead propose a clear-span, arch-ribbed, multi-storey community space—home to a changing range of retail, events, market, concerts and exhibitions. Instead of design continuity between this reconceived public base and the residences above, there was a sharp break in massing, with two round towers tapering down to touch the community halls below solely

at their circulation cores. But when presented publicly, planners and media felt that this design had passed from the playful into the jocular—there were numerous references to the towers as enormous carrots or turnips.

Nonetheless, Bosa and Segal stuck behind Heatherwick, commissioning a revised second design early in the pandemic. The new version exhibits a complete rethink of the idea of balconies: they are much increased in size and wrap around both towers and podium, with an eye to post-pandemic space needs coupled with a renewed turn towards West Coast indoor-outdoor living. Colin Bosa says the design-development team analyzed the potential of the balconies from every possible perspective: "In the end, these are no longer balconies, but something more appropriate for our changed times—terraces." Enforcing Heatherwick's organic ethos and extending the mono-chromia of his copper Vessel at Hudson Yards, the exterior walls will all be green, though it is not yet decided if this will be realized with tiles or metallic panels.

1684 Alberni by Venelin Kokalov of Revery Architects

Westbank continues its westward progress along Alberni Street with a highly efficient design by Venelin Kokalov of Bing Thom's successor firm, Revery. 1684 Alberni's design is a direct descendent of Thom and Revery's other recent project for Westbank, the conjoined double tower of The Butterfly on Burrard. The Butterfly opens next year, and Koka-







lov was its primary designer, ditto for the similarly curve-celebrating Xiqu Opera Centre in West Kowloon (*CA*, May 2019). Its near-square point tower floors are wrapped with ceaselessly curving white panels—stacked, they look like schools of dolphins cresting in a vertical sea. The wave motif is planned in two-storey sections, a welcome change from the single floor-by-floor elevation repetitions that make generic Vancouver condo towers so interchangeable and dull. Unusual for Vancouver, where conventional approaches to podia limit the extension of main tower design motifs right down to the ground plane, Kokalov's winged white elevation panels continue down to wrap the main entrance. Here, they become touchable when entering, and they frame a few flanking townhouses, set discretely away from the main design show.

Kokalov's floorplate solution for the tower is ingenious: extra-large balconies extend out at opposite corners floor-by-floor; this repeats on alternate floors all the way up the building's 40 storeys. This makes for double-height balconies at two corners on every second floor, then two on the other vertices one floor above, and so on. Revery's innovation makes for highly usable, large decks with rare airy ceiling heights beneath the deck above, down-look privacy ensured by a ring of horizontal fins that also limit solar loads and shear winds. For the higher, more exclusive suites, all have the extended balconies; on lower levels where there are four units per floor, half get the extra space. This approach to tower elevations also makes for lots of variably angled surfaces to reflect and temper light entering units: a means of meeting

ABOVE Buro Ole Scheeren's design for 1515 Alberni includes nine multistorey glass boxes that project out from the façade, creating privileged views of water and mountains from shared amenity and private living spaces.

Vancouver's 60 percent limit on envelope glazing, and a celebration of vistas to mountains and harbour through ovoid frames.

Conspicuously absent from Vancouver's luxury residential scene are pencil towers, such as Toronto's 85 storey The One. This is because of the City's View Cone Policy, a set of urban design controls protecting views to the tops of North Shore mountains from a handful of obscure places south of False Creek. This awkward policy has succeeded in its deeper intent—putting a limit on building heights downtown. Not only does Kokalov's 1684 Alberni max out its height, but shading limits on a Coal Harbour park required the notching back of its top floor.

What is especially thrilling about near-neighbours 1700 and 1684 Alberni is that both demonstrate fresh thinking about the most underachieving feature of Vancouver towers: those hibachi and bicycle storage zones of tiny, seldom-used balconies.

1515 Alberni by Buro Ole Scheeren

Peter Cardew's design for Crown Life pushed all of the insurance company's office spaces into a triangular tower at the block's western edge, its crisp concrete structure and curtain wall detailing forming a learned

tribute to James Stirling. The rest of the block, also designed by Cardew, included a large reflecting pond, and at the corner of Alberni and Nicola Streets, a low triangular pavilion intended as a restaurant, but dogged with a spotty leasing history as a retail or office space. Because the complete block is now substantially below current density limits, Bosa Properties and Kingswood saw the potential of a new tower to inhabit that under-performing corner, so bought the entire property. Six years ago, they engaged Buro Ole Scheeren to take on the design for an ultra-luxury high-rise at the corner—no small task for a site having both the ghost of Cardew present, and the rising spectre of Kuma's extravaganza immediately adjacent. Like BIG's Bjarke Ingels, Scheeren is an alumnus of Rem Koolhaas' OMA studio, and best known as his project designer for the hulking and entirely unsubtle CCTV Headquarters in Beijing, followed by similarly assertive residential towers on his own all over Asia.

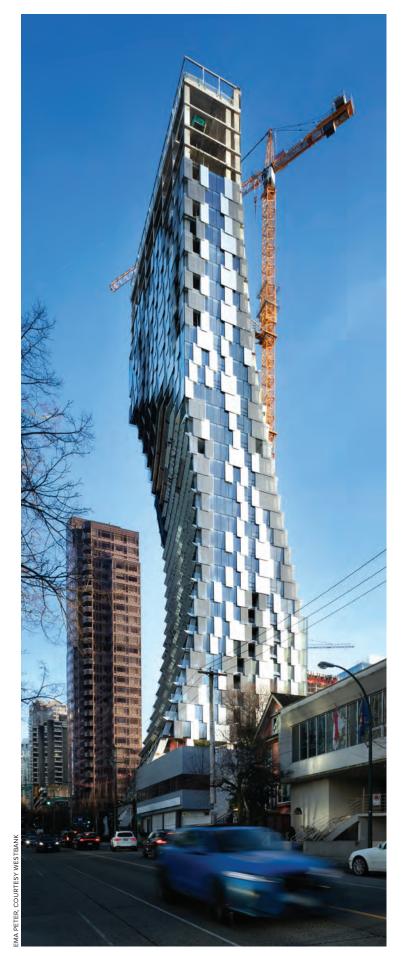
The developers encouraged a new approach to balconies and view spaces here, too. Advancing this exploration is Scheeren's key innovation at 1515 Alberni: nine extruded glassy multi-floor boxes that cantilever out from the west and north elevations, hovering over the midblock reflecting pond and park below. Searching for descriptors for this new kind of living space, Bosa calls the protruding glass volumes "observatories" in the same way Heatherwick's dancing balconies were renamed "terraces;" both terms seem calibrated to evoke the cliff-hugging volumes of the Los Angeles Case Study Houses, one of the revelations of the developers' study-tour. Each of the nine projecting observatory volumes has up to three levels of kitchen, living, and dining spaces set within their three entirely glazed walls, with bedrooms and bathrooms set back within the main volume of the boxy tower. One of the observatory boxes is dedicated as a triple-storey amenity space for all building residents-truly a hub for high-flyers, and doubtless a shooting location (in both senses) for future James Bond movies. Some of the most expensive condo apartments ever in an expensive city, the observatory units are clear profit centres for Bosa, with Scheeren's firm providing handsome interior designs for them in three sets of finishes.

What of the other two elevations, and the lowest ten floors of this 42-storey building, all bereft of the Jenga blocks of strutting and attention-seeking observatories? Here, the elevations are crisp if dull by comparison, slick and taut in their tight skins, more workaday and spandexconfined than any other tower in this zone. When the design was first presented to the public, there was wide comment on the aggressiveness of Scheeren's design, the boxes not so much perceived as connecting with harbour and North Shore mountain views, as hands extended out to possess them. Some of the best architectural criticism comes from people outside of the industry, so I asked a non-designer friend what she thought of 1515 Alberni. Her exquisitely simple reply was "Real grabby."

Alberni by Kengo Kuma

Scheeren's design ethos is made even more evident by the impossible-to-avoid comparison with Alberni by Kengo Kuma, just across the street. Neighbourly and deferential, the Tokyo architect's first-ever residential tower exhibits completely different sets of attitudes towards massing and detailing—and even the valuation of views. Being new to towers, Kuma started with an easy-to-construct rectangular box (the costs and complexities of BIG's structural heroics at Vancouver House had by then become clear to Westbank), then carved away floors to

OPPOSITE Alberni by Kengo Kuma curves towards views to Coal Harbour to the north and English Bay to the south. The resulting sculptural form is clad with shingle-like panels inspired by fish scales, set in an artfully variegated pattern that reflects the needs of the residential spaces behind.





ABOVE The cladding of Alberni by Kengo Kuma breaks the usual 1.5-metre construction module, creating an elegant, original expression that avoids visual seams and zipper-like mid-wall patterns.

permit oblique views from neighbouring towers towards the harbour, adding bulges where less impactful. Scheeren's observatories point solely to Coal Harbour and the North Shore mountains; after his first visit to a nearby tower, Kuma realized that views south to English Bay and the Gulf Islands were every bit as good. In the urban dance of building massing, Vancouver House does The Twist, 1515 The Stomp, and Kuma's a vivacious waltz.

To underscore this gliding form, Kuma's Tokyo team developed a different approach to elevations, using metal cladding panels inspired by shiny fish scales. Hung in overlapping rows like vertical shingles, the panels create an artfully variegated elevation on the two short endwalls, driven by the specific window needs of the spaces behind them, mainly kitchens and bedrooms. Crucial to their success, their arrangement breaks the usual 1.5-metre construction module, thus avoiding visual seams and mid-wall 'zippers.' The side elevation treatments also made it possible to conform to planning requirements limiting glazed areas to 60 percent of elevations. These are the most spectacular new tower elevations on the continent: a tour-de-force of texture, pattern, shadow and sparkling highlight. On the long elevations, the concave and convex modifications to the rectangular box template ensure a surprising variety of residential unit layouts, while still conforming to the efficiencies of a double-loaded corridor building.

Kengo Kuma has had a career-long interest in the notion of engawa, or the space between public and private. He explained its importance

in an early interview at his studio: "In our overall building massing, the carving away of form yields the zone for balconies—they are a form of engawa within the tower, as the park and garden at base is one for surrounding streets. Our built form seems more complex than it really is—there is a high degree of balance." While massive columns curve and swoop out to set their feet right along Alberni, the glass line is set back for the first five storeys, forming a sheltered semi-public engawa space which will feature a moss and bamboo garden, along with the first North American outpost of a Michelin-starred kaiseki restaurant, Waketokuyama.

Kuma had planned one of his trademark mass-timber interlocking matrix structures—or kigumi—to hang from the soffit above the park, with another set above the lap pool along Cardero. But Canadian design codes did not permit this much combustible material in key occupied zones, so Kuma worked with long-time engineer Jum Saito to produce the same forms and connectors in metal with wood-like surfaces. Both architect and developer are sanguine about the change. Westbank owner Ian Gillespie says: "Authenticity is achieved in multiple ways, not just through materiality—we always sought together the most constructable solution that maintains the integrity of Kuma's key idea of layering."

Some of the most progressive elements of the tower are not visible. It will help complete Vancouver's district heating system, and the community amenity contributions and other fees from Westbank and fellow Alberni developers have generated tens of millions of dollars for affordable and public housing elsewhere in the city. Extending the lessons of 30 years of innovation, the street is developing its own virtues of walkability, with a string of small flanking public spaces. But above all, creative design that stems from respect of the city and its citizens is the finest gift that architects like Kuma can provide.

A Future Legacy

James Cheng's early Alberni constructions defined his career and earned him status as the godfather of the street. He sees this legacy living on and is convinced that Kuma's tower in particular will join the key works of Arthur Erickson, Ron Thom and Peter Cardew as icons of Vancouver city-building. "What is most amazing is that this is the most Japanese building ever built here, while in its forms, textures and ethos, it is utterly knowledgeable and sensitive to Vancouver—a much-nuanced gem for our city," says Cheng. Former co-director of planning Larry Beasley oversaw the first of Cheng's constructions on Alberni. Of the street's recent projects and proposals he says they represent "a positive pivot: from generally good urbanism to also now generally good architecture."

Certainly, the thrilling architectural zoo that will open over the next few years along Alberni Street could never have been achieved through the clumsy tools of public policy—you cannot legislate an innovative street into being, any more than you can impose a proclamation for fine paintings or novels. Other forces are at work here, including the sense of competition amongst Vancouver developers, and the personalities of the architects who design here. To Cheng, the various towers reflect the traits and ambitions of their designers: "Kuma is the wise respected gentleman; Heatherwick is the playful young experimenter; Kokalov the brilliant exponent of curves; Scheeren the advocate of solitary force." In speaking of their own designs, architects often hide behind cloaking technical, bureaucratic or theoretical language. But while never denying their public dimension, architecture and city-building are deeply personal and human acts. Alberni Street is proving to be the perpetually renewing tribute to this dynamic legacy. ••

Architecture critic and urban designer Trevor Boddy FRAIC curated the exhibition Vancouverism: Architecture Builds the City, which toured London, Paris and Vancouver from 2009 to 2010.