# architecture + waier 

VAIInternational Exhibit Opens
Lewis.Tsurumaki:Lewis Taik
25 Signs of Life for NYC Design
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20th Century Insights

# van alen INSTITUTE 

When Van Alen Institute approached Lewis.Tsurumaki.Lewis about an exhibit on the new architecture of the waterfront, we explained that we had a problem. Many designers had waterfront fatigue, across the disciplines of the built environment. The studios, competitions, forums, and studies had been worthwhile, but when and where would they see inspiring design go forward on the waterfront? They had a point. In seminars and forums about the waterfront, we found that we had to hedge about the design merits of most projects, and focus on their success as planning.

We asked LTL to curate and design an exhibition that would renew confidence in the waterfront as a site for design that
matters - design that sustains its integrity as it reckons with our contemporary social and physical ecology. They have responded ambitiously and successfully, first by identifying the issue at its most elemental as Architecture + Water, and second by identifying projects of the highest design caliber, from lakes, rivers, and harbors on three continents.

Architecture + Water is designed to provoke debate and inspire action. It makes the case loud and clear that even as New York lays down planning strategies for Brooklyn Bridge Park and, soon, Governors Island, and as other cities throughout North America do the same, the new architecture of the waterfront deserves the time, resources, and talents of serious design, not only in the planning stages, but as it is designed and built. raymond w. gastit

Architecture + Water, currently on exhibition at the Van Alen Institute through September 28, 2001 presents five thought-provoking examples of architecture from around the world. These buildings radically rethink the possible interrelations between architecture and water and portray a diverse range of architectural types that are situated at different water conditions, including marshland, the ocean and a river. They illustrate that the dynamics of water can invoke compelling architecture that reinvents conventional typologies.

The curators, Paul Lewis, David Lewis, and Marc Tsurumaki of Lewis. Tsurumaki.Lewis, describe the buildings as "exceptional examples of architectural invention that illustrate how the relationship between two apparently opposite properties can produce something extraordinary that rethinks architectural conventions." Recent accolades for LTL include participating in the year 2000 National Design Triennial at the Cooper-Hewitt Museum, and being selected by Architectural Record (December 2000) as one of ten vanguard firms.
columns 40 ft wide, enough to hold the four villas' infrastructural services and serve as entry, elevator shaft, and structure. The first level of the villas is 12 meters above the marsh and accommodates living areas, bedrooms, bathrooms and the kitchen. The upper level has a sun deck and patio. At water level a wooden deck is big enough to park cars and serves as a public or semi-public area for recreation.

MVRDV aim for "three-dimensional city planning [to] replace two-dimensional planning in order to generate a real densification [to] safeguard the rustic landscape from total, continuous urbanization."

## BLaGKfriaris bildge station, LONDON, EMGLAND

Historically the South Bank was the underbeily of London. More recently it was a Victorian relic characterized by a slew of abandoned 19th century warehouses and grimy docklands. Not anymore! The old buildings are being dusted off and resurrected into cultural institutions such as the Tate Modern, the Globe Theatre and the London Eye Ferris Wheel. This is in large part thanks to funds from the National Lottery set up in 1994, which allocates a quarter of its revenue for the arts and education.

In conjunction with redevelopment along the Thames, Railtrack, the national train company has responded with Thameslink 2000. The $£ 800$ million scheme aims to transform services across the South East of England, with completion in 2006. Integral to this proposal is the redesign of the existing Blackfriars Bridge Station, designed by London-based Alsop Architects.

The firm, previously Alsop \& Störmer Architects, started in 1979. In 2000, the firm won the Stirling Prize, the UK's most prestigious architectural competition, for the design of a new

## IWTERVIEW WITH LEWIS.TSURUMAKI.LEWIS>

VAR Editor Zoë Ryan grabbed some time with Lewis.Tsurumaki.Lewis on the eve of the installation of their exhibition and asked them about the five projects and their design philosophy.

ZOË RYAN > In your written work, for example, Situation Normal, you clearly challenge contemporary architectural practice for its endless search for new styles and argue instead that the greatest potential for architecture is the imagination.
PAUL LEWIS> Exactly, what got us particularly interested in the relationships between architecture and water were the ways in which water could act as a catalyst for architectural invention. We wanted to shift away from water as a feature, an aesthetic benefit for architecture, and rethink the dynamics of the intersection of architecture and water.
ZR $>$ Although you talk about the interrelationship between architecture and water the title of the show suggests that architecture and water are in opposition.
MARC TSURUMAKI>Although the title appears to imply an opposition, what we are precisely interested in is the mutual interaction between architecture and water. These two terms are normally conceived as opposites - architecture is seen as fixed and stable versus water, which is seen as fluid and dynamic. We are interested in how these ostensibly contradictory properties might engage and inflect one another.
PL> One of the criteria we used to select the projects was that if they could be removed from the water and placed into another environment such as a meadow or a landlocked city then water was determined to not have an intrinsic role. All five projects chosen are based on a funda-

Media Centre and Library in Peckham, London. In November, they were announced as the design architect to renew and design new facilities for The Ontario College of Art \& Design in Toronto. Past waterfront projects include the Hamburg Ferry Terminal and Cardiff Bay Visitors Centre.

Will Alsop was interested in the Blackfriars Bridge project because "it is a rare example of infrastructure following changes in perception of the existing city fabric." The Thames is the raison d'être for London becoming the central hub of industry for the UK in the 19th century. The design proposes a new platform bridge structure on the redundant sections of the existing Blackfriars Bridge piers.

The positioning of a station on a bridge in the middle of the Thames presents technical and planning challenges, but works. Visitors "will know where they are and the station will act as a symbolic representation of the heart of a vastly expanded city," explains Alsop.

Alsop takes reference from the great train sheds of stations such as Victoria and Paddington. The design incorporates an intricate roof of twisted aluminum and carbon fiber panels with glazed openings that stretch the entire length of the bridge. Alsop asserts that, "The North Bank of the Thames is the center of finance, pin-striped suits and bowler hats, although those of course are no longer here. In the late 20th century the south side of the River has absorbed and promoted a range of cultural facilities. These have been a catalyst for change. Our project is a response to this change."

## THE ARCHITECTURE + WATER EXHIBIT WILL BE ON VIEW FROM MARCH 28 TO SEPTEMBER 28, 2001 AT VAN ALEN INSTITUTE.

mental, dynamic and complex intersection with water.
$Z R>$ Each project is an exceptional example of public or public/private patronage. Given that, however, how do you think they will inspire less uniquely funded projects?
DAVID LEWIS>Our hope is that the exhibition argues for a more active role of water, that water can be more than a benign and passive feature in architecture, but can indeed produce fantastic architectural inventions. It shouldn't be a rare occurrence to have amazing architecture on the waterfront. The five projects together are compelling evidence of different creative engagements.
ZR > Two of the five projects exhibited, the Blur Building and the Yokohama Ferry Terminal, were chosen through a competition. Is this a way to get projects that are progressive and inventive?
PL>Certainly the competition process can serve to foreground the role of speculative ideas. But other processes can be instrumental in advancing invention. For example in the Lake Whitney Water Treatment Plant the architect Steven Holl and landscape architect Michael Van Valkenburgh were engaged at the beginning of the process, not just to provide an aesthetic veil to a pre-existing engineering solution. Their design was in fact accepted before and became a generative challenge to the building's infrastructural engineering. So whether the projects were chosen through a competition, or by other means, the question of architecture was given relevance within the way the projects were framed.
ZR $>$ The exhibition focuses on the five projects in detail. How are you going to place them within a contemporary and historical setting?
DL> We have researched the history of inventive intersections between architecture and water.


The findings of this research are composed as part of the exhibition, forming a visual line of photographs and drawings. However, this research will not be organized according to traditional categories of architectural history - time, date, location, function, use, or architect. Rather, the collected body of work will be arranged according to a sequence of associations and values derived from a series of conceptual lines forming an interpretive matrix. In particular, each project will be identified according to three axes: 1) a pole that moves from earth to water; 2) a pole that moves from solid (ice) to liquid (water) and into gas (steam); 3) a pole that moves from water in architecture to architecture in water. The combination of these three conceptual poles will help identify and elucidate the diverse body of architectural works that explicitly couple architecture and water. The intention of this research is to extend the implications of the five projects beyond simply a recent preoccupation of a select number of well-known architects.
ZR $>$ How does the exhibition design reflect the different properties of architecture and water?
MT $>$ We are interested in the paradoxical nature of water in relation to architecture. For example, a pure horizontal in buildings is often established using water or liquid as a leveling device. This ability of water to invert its apparent property as unstable and become the very source of stability is integrated into the exhibit in the form of a continuous horizontal datum line that splits the gallery in half. Each component of the show from drawings, to models, to projections is then organized relative to this datum, which acts as a water level for the exhibition.
$\mathbf{Z R}>$ What makes the Blur Building so extraordinary? Why is it interesting for people to see a building that disappears?
$\mathrm{PL}>$ It is fantastic that this building will exist as a cloud. In this exhibition pavilion, what is being exhibited is the dematerialization of a building. Distinctions between the exhibition and the architecture, water and architecture and between the visible and invisible and the stable and unstable are blurred. The building is the media event. The "(b)raincoats" that visitors will wear are digitally coded with personal preferences. Proximity in the cloud to like-minded raincoats will produce blush-like responses in the coats. This is one of a number of means by which the architects are experimenting with oscillations between the haptic, the optic and the digital.
MT>This is the first building to operate in this manner. In the 18 th century notion of the sublime there was always the juxtaposition of the geometric precision of the building and the atmospheric surrounds. In the 20th century renderings of Hugh Ferris, the precise forms of the architecture were eroded by the atmospherics of the drawing itself. What is interesting here is that this idea is taken to an extreme so that the building itself dissolves or dematerializes as a recognizable physical form.

## ZR $>$ What are the structural and mechanical engineering challenges?

$\mathrm{PL}>$ The technology used is well-known (mist machines, tensegrity structures, LEDs) but the assembly is unprecedented, resulting in a complex array of challenges, many of which could only be solved through empirical, on-site tests. In addition, unforeseeable logistical paradoxes resulted. For example fire sprinklers may, ironically, be necessary, as the mist would have to be turned off to allow for ease of evacuation.
MT > What is extraordinary is how the building adjusts to changing weather conditions. The building acts as a registration of the temperature, the direction and intensity of the wind, and other mete-
orological effects. All buildings respond to their environment, but this response is typically undesired and repressed. Here this essential aspect of architecture is productively amplified. ZR $>$ The Quattro Villa occupies land not traditionally inhabited. Is this a serious proposition? PL>Yes, this is a proposition for a re-naturalized polder on land once mechanically drained which is being brought back to water level. We chose this project because it was sufficiently small and dealt with housing which, in terms of quantity, is dominant in American construction.
MT > The normal strategy of elevating a habitable space on pilings to avoid the fluctuations of the water is taken to a productive excess. The villas are raised on their elevator cores to produce a double effect: the pleasures of elevated living and the liberation of the water level. This "ground" level then becomes a kind of synthetic marsh, where water and occupiable surface, cars and boats can commingle.
PL> The expectations of where parts of a house should be positioned are changed: for example the front door is under the building, the backyard is on the roof. The underside of the Villa is its façade. One can equally park in the "driveway" by boat or car.
$Z R>$ Why did you include the Lake Whitney Water Treatment Plant in the exhibition?
MT>As a programmatic type a water treatment plant is normally relegated to the realm of engineering. Here the project's catalyst is the architectural design. For example, the designers have integrated the public sequence of movement through the building with the movement of the water through the treatment process.
ZR $>$ How does this water treatment plant engage its surroundings?
PL> There is a connection between the six gardens or landscapes that have been developed and the six stages of the filtration process. Each of the landscapes correlates to a different stage

MVRDV: QUATTRO VILLA, PLAN

of water treatment. Characteristics of those landscapes become analogically representative of the water treatment processes.
MT>In addition, the flow of surface water through the various gardens is orchestrated through the manipulation of the ground in a way that parallels the flow of water through the facility below. This process becomes a recognizable component of the landscape - perceivable by the public accessing these spaces.

## ZR $>$ What makes Blackfriars Bridge Station particularly interesting?

$\mathrm{PL}>$ This bridge over the Thames is not the means to access the station, but is the actual station. This project reinvents the bridge as destination, terminus and point of departure.
DL> The station reuses an existing bridge, reformatting an existing piece of urban infrastructure. It cleverly exploits the proximity of the adjacent disused piers of the redundant London, Chatham and Dover railway to expand the width of the station platform. The west platform, therefore, actually extends over the edge of the bridge and is supported by a new line of steel arches built on the innermost line of the disused piers and echoing the structural system of the existing bridge.

## ZR > Isn't the main design feature of the station the roof?

DL> The station is enclosed by an undulating roof of aluminum monocoque panels with glazed openings and glazed platform edge screens. These transparent sections give access to views in both directions of the river - providing both orientation and the visual pleasures of an urban panorama.

## ZR > How does the Yokohama International Ferry Terminal rethink the idea of a port terminal?

MT>It is one of the most complex and challenging buildings of the turn of the century. Obviously

it is a reinvention of a typology, the pier as a building condition. The unique invention is how this single folding surface of steel plates can accommodate multiple programs without resorting to the architectural commonplace of compartmentalizing space.
ZR $>$ The enormity of the project brings up the question of scale. What does it mean to build such enormous buildings?
MT $>$ It has a profound effect on the way we conventionally understand how architecture functions. When a space becomes this large it is no longer comprehensible in the conventional terms of inside and outside, form and program. It really does exist at the scale of a landscape and resists the kinds of perceptual logics that we apply to a normative object building. One of the fascinating things that will emerge out of this is to begin to see how a proposition that works at this massive scale becomes articulated at the level of materiality and specificity of detail.

## ZR $>$ What do you expect a New York audience to get out of the exhibition?

PL>Part of the reason we intentionally excluded New York projects was that the messiness associated with projects in New York - from excessive bureaucracy to financial issues - often causes the architectural questions to be relegated to the background. We wanted to bring design back into the discussion not just on an aesthetic level but on a conceptual and social level as well.

## ZR $>$ What do you expect the audience to learn from the exhibition?

MT>One of the hopes is that through combining different media such as animations, graphics and models, people will be able to explore the projects in greater depth and apprehend the complexities of the design process.
PL>OUr desire is to produce an exhibition that inspires at many levels: content, design, conceptual basis, details. The exhibition should match the invention of the projects exhibited.

MARC TSURUMAKI, PAUL LEWIS AND ZOË RYAN DISCUSS PLANS OF THE EXHIBIT DESIGN. NATHANIEL H. BROOKS

