

Hadid makes her New York stage debut



Zaha Hadid made her New York City stage debut in July at Lincoln Center's performing arts festival, which presented the North American premiere of Ballet National de Marseille's *Metapolis II*. The work was conceived by Hadid—who also designed the sets and costumes—with choreographer Frédéric Flamand, the company's director. It belongs to a trilogy examining the relationship between the body and the city that Flamand created with leading architects, including Thom Mayne and Dominique Perrault.

Metapolis II envisions a futuristic place "beyond the city" evoking the complexities of 21st-century urban life, in which virtual reality collapses the distinction between actual and simulated while towns encroach

George Yu dies at 43

George Yu, a pioneer in digital architecture, died July 7 of a type of lung cancer that afflicts nonsmokers. He was 43 years old. As both a designer and teacher, Yu helped shape the way that architects envision and use new technologies such as digital imaging and fabrication. But his work always kept the human user in the foreground, never turning technology into an ideology or fetish. He did this by developing a keen sense for materials, light, and space.

"George was able to see the parameters of a digital world earlier than almost anyone else," says Neil

on countryside, confusing the character of both. It is a place where, as Flamand says, "you're everywhere, but at the same time you're nowhere."

To shape this "deterritorialized" world, he and Hadid conceived a mobile, multimedia scenography, creating an effect less architectural than pictorial. Three aluminum-and-fiber-glass arches, representing both the city and the forces that drive it, form the set's main elements. The stage serves as a canvas for light shows that bathe it in washes of lush color or abstract designs. With blue-screen technology, live video images of the dancers projected onto the back wall merge with prerecorded footage of city scenes, incorporated into the blank outlines of costumes and props as the performers move. These films then coalesce like puddles and dissolve when dancers leave the stage.

Although the work envisions people in a city not made to their measure, it ends on a hopeful note: A girl encircles her body with a spiral-shaped aluminum sculpture, designed by Hadid. It is a symbol of urban renaissance—perhaps anticipating Hadid's Dancing Towers, now being "choreographed" in Dubai. (Visit architecturalrecord.com for a video of *Metapolis II*.) *Leslie Yudell*

Denari, AIA, principal of NMDA, who taught with Yu at SCI-Arc. "When he started his own firm [in 1992] he was shocking in his ability to imagine how these technologies would change architectural practice."

On his own, and in partnership with Jason King, Yu completed more than 65 projects, many of them for companies involved in new media and innovative design technologies. This pairing of clients and architect meant that each could learn from and teach the other. For example, in the Honda Advanced Design Studio in Pasadena, California (see page 118), Yu borrowed an innovative fabrication technology from the automotive

Water walls shore up digital creativity

Virtual architecture is leaping from the computer screen into real life. Engineers and architects from the Massachusetts Institute of Technology (MIT) have designed a building made of water: a Digital Water Pavilion to be erected next summer at the 2008 World Expo in Zaragoza, Spain. Sponsored by the City of Zaragoza, the 5,000-square-foot, rectangular building will contain displays about the future of Zaragoza and its new Digital Mile district.



Architects are increasingly experimenting with computers to create interactive structures that respond to human needs in real time. But until the advent of new software—the pavilion's designers used standard CAD applications, a proprietary java-based program, and the open-source site processing.org—as well as new sensors and water solenoids, this malleable architecture existed on a conceptual plane. "Now we can put the physical and digital together," says Carlo Ratti, head of

MIT's SENSEable City Laboratory. "This is a way to have responsive architecture—a way to have bits and atoms seamlessly merge."

The pavilion walls will be produced by a water pipe suspended 16½ feet in the air, punctuated by closely spaced solenoids. These computer-controlled valves will be opened and closed to create gaps in the water so that people can walk into the pavilion without getting wet, and to create parabolic shapes and pat-

terns. Hydraulic pistons will raise and lower the stainless-steel roof, allowing the entire structure to disappear.

A water-walled building is appropriate for Zaragoza and other places with a hot and dry climate, Ratti says, because it is chilled naturally by evaporative cooling, avoiding the need for artificial air conditioning. The technology can also be used as a purely sculptural element. "The point that we want to make is that digital architecture should be able to totally appear and totally disappear." *Alex Ulam*



industry and used it to create a sensuously curved interior wall.

Yu was born in Hong Kong but grew up in Vancouver and Victoria, British Columbia. He received a Master of Architecture from the University of California at Los Angeles, in 1988. He worked at Morphosis in Santa Monica, from 1988 until 1992, when he started his own firm in Los

Angeles. Between 1997 and 2001, he worked in partnership with King as Design Office, which had offices in Los Angeles and Vancouver; the pair was honored by RECORD in its first Design Vanguard issue in 2000. Yu also taught throughout his career, first at the University of British Columbia's School of Architecture, then at SCI-Arc.

True to his Canadian roots, Yu was an avid ice hockey player and kept skating with his teammates until just months before he died. He is survived by his wife, Carole, and daughters Dara and Elena. *Clifford A. Pearson*