

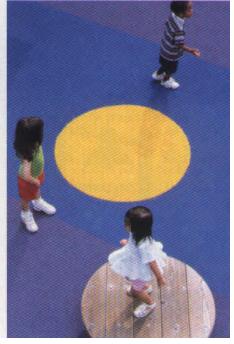
he New York Hall of Science has evolved since the eighties into a child-oriented institution. Although it lacks some of the accourrements of science museums in other cities, such as the ubiqui-

known for its smart and engaging exhibits. Kids love the museum, as any visit through its thronged confines on a weekday confirms—one's ears literally ringing from all the commotion.

In 1996, a large foyer designed by Beyer Blinder Belle was affixed to the front of the Hall of Science. At the same time, the museum embarked on the design and construction of an interactive playground adThe other-worldly architecture of New York's Flushing Meadows Park, *left*, provides a backdrop an aesthetic context for a new scient playground. Designers eschewed prefabricated equipment in order create a unique place where kids learn while they play, *below*.

a place where kids could burn a little en gy, as well as a true component of the n seum, which means that it would mak stab at continuing the educational missi. To effect both these ends, museum direct Alan Friedman hired landscape archit Leland Weintraub, ASLA, and archit Joan Krevlin.

"These are all nightmare projects," s Krevlin as she walks beneath the exub ant, jungle-gym-inspired structure tl dominates the new playground. Her co ment is directed toward the fact that t landscape bridges two stories of the mu um's exterior-conjoining the cafeteria the ground and a rooftop terrace on the s ond floor. The designers constructed a m tilevel apparatus that hovers, at tim twenty feet above the ground-an oste tatious move considering the context. today's litigious climate, safety has becor the overwhelming theme in playgrou design. "We've gone back to the 1950s, I fore Friedberg," laments Weintraub, ref ring to landscape architect Paul Friedbe FASLA, who questioned the boring, indi trial forms that ruled playground design



after the playground opened, Krevlin observed that the most common use of this exhibit was to crank the blocks as hard and fast as possible and then let them crash to the ground, resulting in undue stress that was taking its toll. She surmised that no amount of retrofitting was going to remedy the situation, so the exhibit was removed. In its stead, artists Bill and Mary Buchen, designers of an ingenious acoustic exhibit on-site called the Whisper Dish, have been commissioned to create a sound garden.

Connection with context is key to understanding Weintraub and

Krevlin's work here. Although an iconoclastic Flushing Meadows Park remnant of the World's Fair dominates the view from the ground, one can see the looming Transportation Pavilion through the trees. The Hall of Science itself responds to this in kind, being its own strange architectural statement. And, in a way, the playground follows suit, with its eye-catching attributes and what Allen Ginsburg might have called its "grooking" character. Knit-





Spinning pink balls, part of an energy wave exhibit, *bottom*, heighten the spine's vertiginous effect. A swing apparatus, *top*, retrofitted with mesh wire in order to prevent children from climbing on top of it, is one rare example of the safety review board sacrficing playground integrity to safety concerns.

ting the playground into Flushing Meadows park was paramount, considering Weintraub's strong opinions of the impoverishment of contemporary playground design. As designers resort to prefabricated materials, the very real threat

arises that every playground will look the same. At the Hall of Science, in contrast, the designers wanted to break from the mold and create a place that responds to the unique context of the surrounding park.

But as much as the playground matches the eccentricity of the World's Fair architecture, it is also its own place and offers a more subdued and less dictatorial presence. Indeed, the loud pinks, yellows, and blues seem to scream, especially from a distance. But the majority of the design has been executed in grays and whites, and to this point the rubber matting has faded to a very undemonstrative baby blue. This restraint was calculated, say Krevlin and Weintraub. Instead of confronting children with some overweening structure, the idea was to simply intrigue them. Just enough color was used-but not too much. An obtuse form was employed—but not throughout the entire design. One gets the feeling that a certain amount of the playground is actually a tableau meant to be written upon, much as children transform most of the spaces they inhabit. Freedom is the underlying idea, and a radical one at that: to create a land-scape that the children could make into whatever they like.

As Weintraub says matter-of-factly: "Children are simply allowed to play here."

## PROJECT CREDITS

Landscape architecture: Leland Weintraub, ASLA, Staten Island, New York.

Architecture: BKS/S Architects, New York, New York (Joan Krevlin, principal, Betty Liu, and Anita Ayerbe).

**Exhibit design:** Jane Clarke Chermayeff, New York, New York.

**Environmental graphics:** Chermayeff and Geismer, Inc., New York, New York (Ivan Chermayeff, Michael Mensh, and Keith Helmetag).

**Structural engineering:** Weidlinger Associates, New York, New York (Mattys Levy and Tian Fang Jing).

**Client:** New York Hall of Science (Alan Friedman, director).

Rubber matting: Vitra Turf.

structure that would tie the playground visually to the entrance drive of the museum as well as unify the landscape in its own right. As the designers progressed in their brainstorming, the idea of "hanging" programmatic elements came into play, and at one point someone from the museum suggested creating an "energy wave," which Krevlin describes as a classic model from physics in which motion is transformed into energy. Working with Weintraub's idea of making the spine a "signature" structure, the designers finally came up with a series of pink balls that spin in concert as children crank on a handle.

The designers also worked with outside consultants to create individual programmatic elements, but their efforts were always guided by the overall architectural and landscape integrity of the site. "What tends to happen with exhibit design," says Krevlin, "is that one has a space, either inside or outside, and exhibit ideas get plunked into that space. What we wanted to do is have the playground hold together both experientially and as a place." While the spine achieves this by providing a signature to the landscape, Weintraub expanded the character of the linearity of this feature by composing what he calls a contrasting "wiggle." Running parallel to the spine and forming the boundary of the playground proper is an undulating step upon which Weintraub sited a series of water-based exhibits, so that the line not only contrasts geometrically with the spine, but programmatically as well, providing water while the spine contains harder, more solid exhibits.

"Just the notion of having kids in the air caused all sorts of safety concerns," says Krevlin, pointing out that a significant portion of the playground is located some ten feet above the ground. To mitigate these concerns, the ground level was coated in rubberized matting, colorized in engaging stripes of blue and purple and penetrated every so often by vivid yellow dots. Scattered beneath the structure are the less technologically based exhibits, such as a group seesaw and a climbing net, both of which are stock designs of Richter, but which were retrofitted by Weintraub and Krevlin to accommodate this specific situation. For instance, at the top of the net there was a



One way to create excitement in the landscape is by injecting a strong sense of vertical space. As it passes over an outdoor eating area, *above*, the spine is some twenty feet above the ground.

chance that children might climb up on the blue spine, so a plastic neck was affixed to prevent them from climbing over it—a design that faintly resembles the squirrel preventers on a bird feeder. Elsewhere padding was affixed to a set of stairs and the supports of the structure to guard against injury should a child happen to fall outside the net—an event that, by design, can only occur when the child is less than four feet off the ground.

"When you're designing for children you have to be reactive," says Weintraub, contrasting this term with the "reactionary" stance taken by so many designs for children. Reactive, instead, is a position that understands, as Krevlin quips, that "kids will do the thing you least expect." Weintraub and Krevlin understood that no

matter how much foresight they employed, children would inevitably find a new use for the playground-one that the designers had not anticipated. Not that they didn't spend a lot of time presupposing problems and heading them off from the beginning, but Weintraub emphasizes that this project could never have been successful had he and Krevlin simply submitted their design and then vanished once construction was complete. Instead, the designers remained on the project to review its success through the first year of the playground's existence, making slight alterations here and there. At one point this monitoring resulted in the removal of an entire piece of program: an exhibit of building blocks that were controlled by a remote system of cranks and pulleys. Soon



the 1960s and developed his own play equipment and playground landscapes in New York that, for Weintraub, epitomized a holistic and more imaginative approach to children's spaces.

Liability concerns changed all that, however; as a result, designers have become hesitant to design playgrounds and other landscapes for children. "We've become specifiers [of prefabricated playground equipment] rather than designers," complains Weintraub. He argues that safety, while paramount, should be treated like any other design requirement—such as Americans with Disabilities Act (ADA)-restrictions, for example, in which a well-entrenched bureaucracy assures that whatever

designs are proposed are reviewed accordingly. In the case of the Hall of Science, this paradigm prevailed and the museum's safety board, lawyers, and insurance company were all part of the design review process—not originating the design, but contributing to it.

he first object to catch one's eye is the extremely long (approximately four hundred feet) blue cylindrical spine that hangs from pilings along the length of the space (in fact, overhanging the surrounding fence at the front of the building and pushing out into the trees toward the back). In an urban area that is characterized by its eyecatching architecture—the Hall of Science is but one building in

Flushing Meadows Park left over from the 1964 World's Fair—the blue tube emphatically announces the playground.

The blue spine is also an excellent example of the collaboration that fueled this project and allowed seasoned designers from different specialty areas to imbue the playground with a distinct character. Both Krevlin and Weintraub were part of a larger team comprised of exhibit designers and museum directors who worked with the German play equipment manufacturer,

Richter, to produce customized equipment that was specifically oriented to the site and the mission of the museum. Krevlin describes the design workshop as an instance where each specialty designer exchanged roles and suddenly, almost uncannily, architects and landscape architects began proposing programmatic ideas, and exhibit designers began thinking about site organization. The spine, as mentioned, epitomized this process. Here, Weintraub originated the idea of a single, elongated

The blue spine provides an organizing principle for the playground and a linear form that contrasts with the curvilinear museum, *above*. Weintraub picked up the curvilinear form in a "wiggly" pathway that encompasses the playground, seen best in the perspective and plan views, *below*.



