Located on busy Main Street of Toms River, New Jersey, Ocean County Library wanted site-specific art that would draw attention at events such as the car show, *here.* Mikyoung Kim's sculptural lanterns wrapped in barcode-cut screening were the answer. *Opposite,* a close-up look shows the intricacy of the barcode pattern.

ILLUMINATING KNOWLEDGE

BAR CODES GROW BIG IN A LIBRARY'S SCULPTURAL LANTERNS.

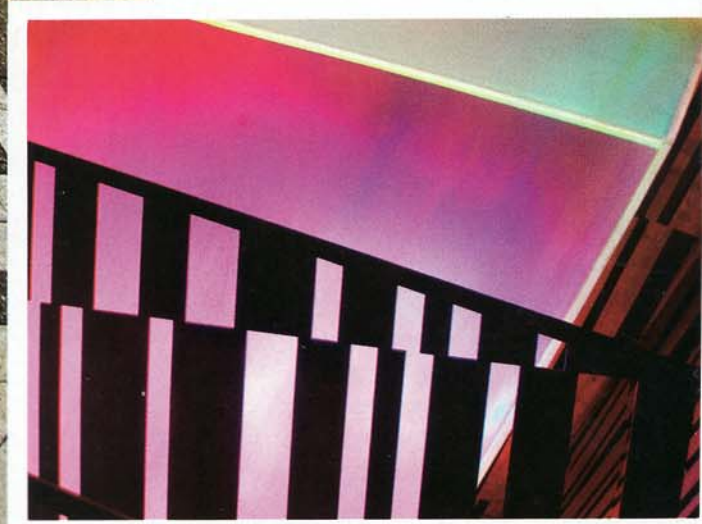
By Marty Carlock

MARK LA ROSA. SPREAD: COURTESY MIKYOUNG KIM DESIGN, BELOW

THE CLIENT, A LIBRARY, wanted site-specific, landscape-based sculpture near the entrance of its expanded building. What it got from Mikyoung Kim, ASLA, of Boston was *Barcode Luminescence,* six custom-made, state-of-the-art lanterns that reference both the function and the technology of today's libraries.

Kim, who has a background in sculpture as well as landscape architecture, was recommended to the Ocean County Library by New Jersey's arts commissioner, Thomas Moran. He was familiar with her work because he had served with Kim on a committee to draw up an arts master plan for the General Services Administration.

The library, which sits on the main street of Toms River, New Jersey, had finished the shell of a major addition, but when she visited, Kim found "a mound of dirt" outside it. The library staff told Kim that a number of events—parades and old car meets, for instance—take place on Main Street, and they would like something that would draw the attention of passersby.



As she usually does when mulling a new project, Kim began to muse about the function of the place. "Why do we come to the library? To gain knowledge. We have an intention." Then "light" as an obvious analogy to "knowledge" occurred to her. She focused on the idea of lighted sculptures that would have a practical as well as a referential function.

Kim envisioned putting the light inside a wrapped skin. "The way you get to knowledge is by unwrapping or unfurling information," she explains. "You learn by being curious, by walking around a subject."

Lanterns made of clear acetate were Kim's first thought. She considered filling each one with items related to library use—eyeglasses, for example. "It was a real struggle to get away from the Plexiglas," Kim says. "We decided that in the long term, it was not a viable material. It scratches; it's hard to maintain."

Even when working with the idea of Plexiglas, Kim and her as-

THEN "LIGHT" AS AN OBVIOUS ANALOGY TO "KNOWLEDGE" OCCURRED TO KIM.

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Asymmetrical lanterns, *here*, are positioned in ways that, the designer says, make them seem to converse with one another. A diagram, *opposite*, shows the double wrapping around an inner-lighted prismatic core.

sociates saw that they "needed something to hold the lantern together." They came up with a darkened steel ribbon that also functions as a structural element. "I could easily have put it around the middle," she adds, "but this way it leads you into the core, into the concept of unwrapping." On various faces, the ribbon leads the eye diagonally bottom to top and top to bottom.

Brainstorming among the team evolved the idea of wrapping the light with a metal mesh instead of Plexiglas; for a time, before they hit upon the aptness of bar codes, they considered expanded metal with a diamond-patterned screening.

Meanwhile, Mikyoung Kim Design had also been hired to create the building's landscape—a fiscally separate project—and developed it before the lantern plans were settled. For the entry courtyard the landscape team specified black-and-white pavers creating irregular stripes like a bar code. "That's how library information is organized now," Kim points out.

COURTESY MIKYOUNG KIM DESIGN

Inspired by the pavement to use bar codes in more complicated patterns as screening, Kim had the fabricator, Amuneal Manufacturing, laser cut a sample sheet of stainless steel. "They said, 'We think this could work.'" Kim says she had not worked with Amuneal before; she hears about fabricators via word of mouth, from other sculptors.

"Ultimately," she adds, "we realized bar code language was a nice abstraction of this information. The ones and zeros were more powerful" than diamond screening.

"There's a modular quality, a set of rules," she said. "Because we didn't want kids to get heads or fingers stuck in the openings," the spaces in the bar code were no greater than four inches and no less than half an inch.

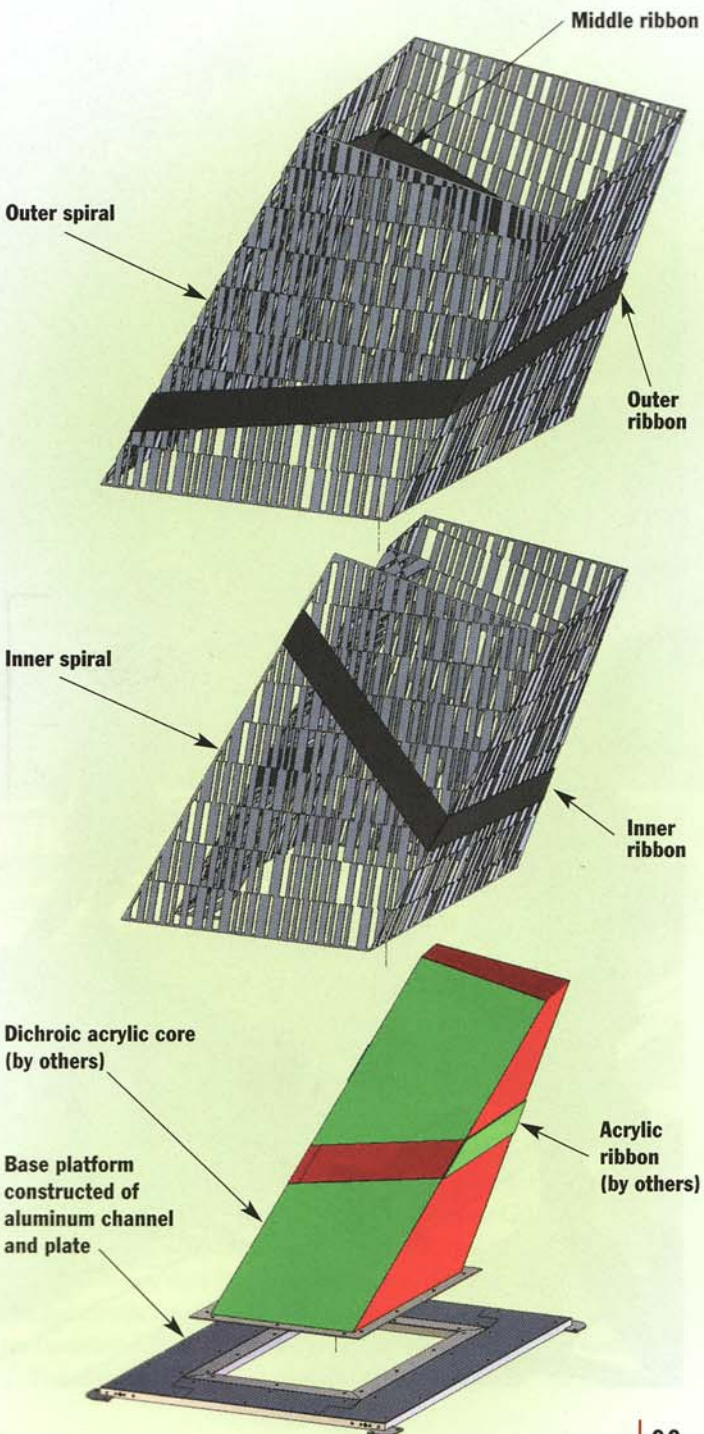
"We worried about wrapping the core too much," Kim says. "The challenge was to make the screen transparent but so you would still see the bar code pattern." They tried a triple layer, but the light was obscured. In the final version, the perforated steel wraps around twice, with the bar code spaces offset and a prismatic acrylic lantern inside. "We wondered how it would look if the bar code (on each layer) matched up," she recalls. "But then it didn't look like it was wrapped. This way there's a moiré effect that changes as you move around it."

Getting the scale right was a long process. The design group did full-scale mock-ups of the lanterns, put them in the window of Kim's office, and viewed them from across the street. The final version is eight feet tall, with the bar code punched somewhat smaller than it was in their early experiments.

The team initially considered a fiber-optic core, programmed to change color. But Kim began to ponder "how the body engages the piece. You move about to discover things in a library." The designers began to think about a sculpture that was interactive, containing a light whose color would change as the viewer walks around the sculpture.

A salesperson had left them a sample of a Dichrolam acrylic dichroic resin, translucent but iridescent. "We had thought about using it two years ago in a courthouse in West Virginia," Kim recalls. "But we were also using fiber optics, and Dichrolam fought with the fiber optics. It will even invert the color, red to green, for instance."

From the first, Kim says, she had drawn the lanterns askew rather than vertical. Her natural aesthetic, she says, tends toward asymmetry. Besides, "I thought it was more interesting. You see



many lanterns that are conical or vertical; they are not very interesting. This way, every face is different and it forces the viewer to walk around it. Ever since Rodin, who made the back of his sculptures as interesting as the front, sculpture has asked that viewers do that."

For a time she considered making the lanterns in three different sizes. "We did mock-ups of them on the site with two-by-fours and plywood, but we found the little ones got lost in the landscape. When we got rid of the little ones, it didn't make visual sense to have just two sizes." In the final result all six are identical but placed in such a way that they look distinct, like so many small icebergs floating randomly across the plaza. "We like the way they seem to be speaking to each other, depending on the angle from which you look at them, because of the canting of the pieces." There were also cost efficiencies in making the six identical.

A steel band, a structural element, leads people to walk around the sculptures; a Dichrolam acrylic core changes hue as viewers move about. Lighted all the time, lantern colors are subtle, almost invisible, in daylight, *below.* At night, *opposite,* colors glow like an aura.

The pieces are each bolted to a foundation plate whose edges are covered by paving. "We didn't want the bolts to show," she says. "We wanted the sculpture to spring right from the ground."

The rest of the landscape design is understated, with a small

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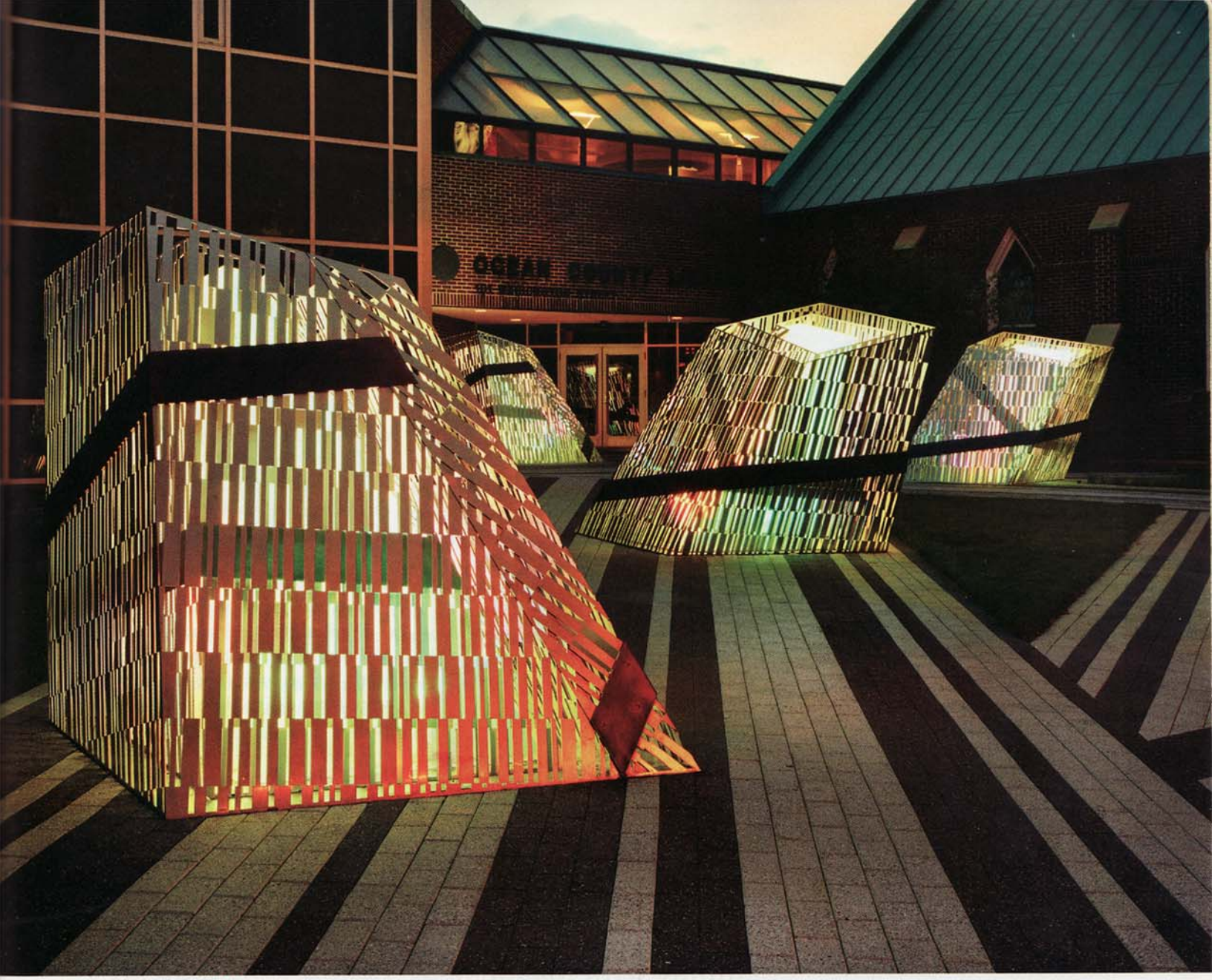

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THE LIGHTS ARE SUBTLE IN THE DAYTIME BUT DYNAMIC AT NIGHT.

grove of white-flowering shadbush *(Amelanchier canadensis,* maximum height 20 feet) inset among the striped walkways.

The $565,000 project drew on two separate budgets, a $265,000 Percent for Art grant and $300,000, part of the construction budget set aside for landscape planting. Because her firm did both, Kim says she was able to meld the two: "For instance, there had to be pavement anyway." So its cost could come from the landscape budget, even though it was designed as part of the art project.

The lights are on all the time, very subtle in the daytime but dynamic at night. The library got its wish: The director says she sees drivers slow down and go by very slowly, obviously trying to figure out what they're seeing. Kim admits that when the lanterns were installed last spring, they created some controversy. "People had never seen anything like this before. Some thought it was too industrial. Kids like it, though." As she planned, "The colors change as you walk around it. You don't just pass by."

Marty Carlock, a Boston-based freelance writer, contributes frequently to Landscape Architecture.

PROJECT CREDITS: Client: New Jersey State Council on the Arts, Ocean County Library, Toms River, New Jersey. **Landscape architect:** Mikyoung Kim Design, Brookline, Massachusetts (Mikyoung Kim, ASLA, design principal; Matthew Gillen, arts project manager; William Madden, landscape project manager; Elaine Delaney and Raphael Justewicz, office designers). **Fabrication and installation:** Amuneal Manufacturing, Philadelphia. **Acrylic core supplier:** John Blazy Designs, Cleveland. **Landscape contractor:** T. Fiotakis Construction, Edison, New Jersey.