

Karen Bausman (AR'82)

Reimagining **Cities**

RISE + SHINE: Performance Theater rises from the urban landscape like a flower, its “techno-metallic” petals unfolding toward the sun. The hybrid performance venue replaces a parking lot on Warner Bros.’ Burbank campus.



Based on estimates that New York City's population will surpass nine million in less than three decades, Mayor Michael Bloomberg's PlaNYC, a long-term vision for a greener city, calls for the construction of 265,000 sustainable housing units by the year 2030. One prototype being developed to meet this need is Flower Tower in Long Island City, NY, a loft condominium sheathed in an undulating pattern of glass and steel. As its name suggests, Flower Tower's façade is designed to operate like a wall of morning glories—adjusting to sunlight throughout the day, both regulating light and gathering solar energy. The goal of its designer, architect Karen Bausman (AR'82), is a building that will produce more energy than it consumes, ideally creating an energy surplus that can be sold back to the power grid.

Flower Tower is one of the innovative designs that keep emerging from the New York City office of Karen Bausman + Associates. At the root of each is a keen interest in biological and natural systems, especially in their ability to perform multiple functions simultaneously. From an award-winning flower-inspired theater in California to a bird's-nest-inspired chapel and library in Pennsylvania, Bausman's designs are on the leading edge of architectural thought, combining pioneering research and technological solutions with attention to client needs and environmental concerns.

Born in Allentown, PA, and raised in the nearby agricultural community of Macungie, Bausman first came to New York City in 1976 to study architecture at The Cooper Union. She had known that she wanted to become an architect at the age of seven, but it was at Cooper Union that her precocious interests in form and structure were given names and context and began to take shape. At 18, she was suddenly surrounded by urban form and structure, by arguably the most notable practitioners in the field and by mentors like Dean John Hejduk, who she still considers the most significant influence on her work. "The greatest gift that John gave us was the space to work independently and across the disciplines of architecture, art, science, literature and mathematics," says Bausman. "He encouraged us to pursue our individual visions, not his or anyone else's vision. This was revolutionary in American architectural education."

After completing Cooper Union's five-year bachelor of architecture program—and interning with I.M. Pei & Partners for a year—Bausman opened a practice with Cooper Union classmate Leslie Gill (AR'82). Over the next decade, Bausman Gill Associates worked mainly on residential commissions. In 1990, Bausman joined the faculty at Columbia University's Advanced Architectural Design Studio (a position she would hold for 15 years), focusing her research on biological and natural systems. During that time Bausman also taught at Harvard and Yale Universities—to date she is the only woman to have held both the Eero Saarinen Visiting Professorship (1994) at the Yale University School of Art and Architecture and the Eliot Noyes Visiting Design Critic in Architecture (2001) at the Harvard University Graduate School of Design.

In 1994, Bausman's professional career began to take on a new shape. That year, she was awarded the prestigious Rome Prize, which affords recipients a year of study at the American Academy in Rome. Bausman took the opportunity to study Renaissance theaters, especially the Farnese Theater in Parma. Upon returning to New York City, she founded the firm that she operates today, along with a staff of eight, out of a former printing factory in SoHo. The firm's first commission was to design a new performance theater for Warner Bros., presenting Bausman with the opportunity to comprehensively pull together all of her research, study and ideas.



FLOWER POWER: Flower Tower's undulating glass and steel façade is designed to operate like a wall of morning glories, adjusting to sunlight, both regulating light and gathering solar energy. The residential tower will produce more energy than it consumes, returning the surplus to the power grid.

Photograph by Jock Pottle/Esto



The Warner Bros. lot in Burbank, CA, is a diverse community of television, film and recording studios. “They had a fractured campus with an under-utilized parking lot in the center, and decided that an entertainment venue would be the best use of the site,” says Bausman. Drawing on her study of natural structures, Bausman set out to “cultivate the surface” by designing a venue that literally appears to grow out of the asphalt in the form of a giant flower. Its three petals were initially developed by tracing projected images of flowers on paper. Two of the “techno-metallic” petals seat 1,500 in the interior, while the third holds an exterior amphitheater—inspired by Bausman’s study of Renaissance theaters—facing a large projection screen to broadcast to a large audience and create an active social space. Skylights infuse the interior with natural light, but their transparency can be manually controlled through LCD technology. A three-level underground parking lot increased capacity and removed cars from the street.

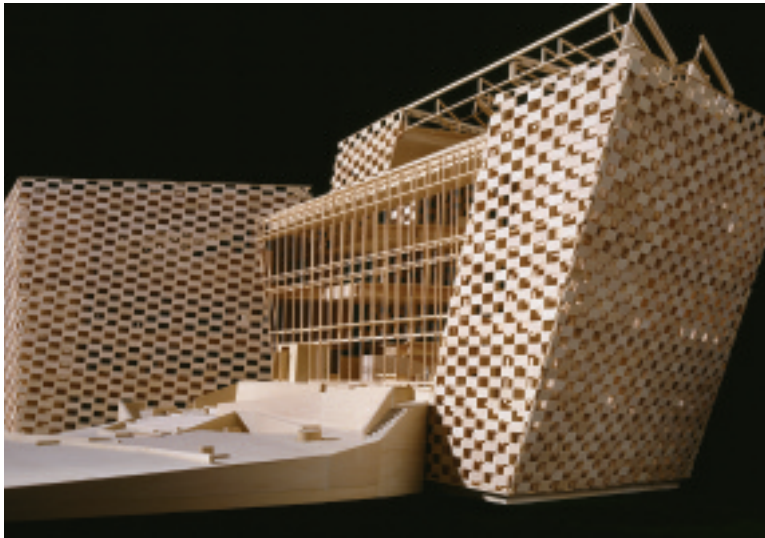
“I wanted to design a structure that would perform many functions simultaneously,” says Bausman. “That concept is at the core of my Cooper Union education and underscores much of my work.” In 1998, Bausman’s design for the performance theater was recognized with a Progressive Architecture Award, marking the first time a female architect leading a design firm received the award.

The concept for the Hamlin Chapel and Library in Hamlin, PA, began with sketches of birds’ nests—again bringing to bear Bausman’s analyses of the efficiencies of natural systems and structures. “A bird nest’s material-to-weight ratio is incredibly efficient as a structure,” says Bausman. “A nest withstands wind loads and wind shear and simultaneously enables light and air to move through it. It’s a fully sustainable environment. In that sense, it’s very important to me as a model.” The design features two canted v-shaped volumes that will bring together two distinct and independent institutions in an effort to create a sense of community. After testing different levels of porosity, Bausman enveloped the structure with an open-weave pattern of solids and voids that will be realized by limestone panels on a steel frame fronting a glass curtain wall. She also paid careful attention to how the form fits its surroundings. “I wanted the building and the landscape to be unified, making the whole stronger than its parts,” says Bausman. “The building is carefully stitched into the landscape, which flows from the point of entry, through the building, through a meditation garden and down to the stream below.”

In all of her work, Bausman notes that the experience of the end user is central to the thought process. “When I first work with a client,” she says, “I let them know that we are going on a journey together—that I am not going to be pulling a design out of my past-projects file, but that the design will be the result of my deep understanding of what architecture can accomplish against the specific requirements that the client has expressed. I also push the client to consider other programmatic needs and opportunities for the project, ones they may not have been thinking about. Given this rich exchange of ideas, the structure is going to fit the needs it is meant to serve.”

This approach is evident in the design of “Untitled,” a private museum for a large art collection ranging from large-scale installations to small-scale photographs and drawings. The three-sided plan is composed of nine viewing pavilions to accommodate different aspects of the collection; six outer spaces opening up on a bucolic landscape surround three hexagonal canted volumes topped with a skylight system to diffuse and direct natural light. “Baffling the natural light will create shadows and liveliness,” says Bausman. “I don’t want it to have the flatness that is prevalent in some contemporary museum interiors. I also don’t want the spaces to overwhelm the artwork. The array of pavilions provides a new choreography for viewing contemporary art.”

“At Cooper Union,” continues Bausman, again returning to the influence of Dean Hejduk, “we were trained in the nine-square grid—understanding the basic components of architecture: beam, column, grid, a line becoming a wall becoming a volume.



Jock Pottle/Esto

LIGHT WEAVE: Hamlin Chapel and Library features two canted V-shaped volumes that bring together two distinct and independent institutions to create a contemplative, technology-rich community hub for the 21st century. The building is enveloped in an open weave pattern of solids and voids, enhancing the experience of light and sight.

It's not always easy to break free of that training. It was one of the challenges in the back of my mind—I took that square and turned it into a triangle.”

Having been awarded a design excellence contract by the Bloomberg administration, Bausman is currently in the initial stages of designing a nature center for Soundview Park in the Bronx, one of eight regional parks to be developed as part of PlaNYC. Bausman's goal is to have the nature center, like Flower Tower, produce more energy than it consumes. In an architectural age when any responsible design must take environmental concerns into account, both designs demonstrate a propensity to think both locally and globally.

“All of us, as members of the human race, have to be concerned about the state of the environment,” says Bausman. “Like many architects of my generation, I'm committed to designing environmentally sound buildings and landscapes. It is vitally important to us that we be included in defining New York as the most sustainable city in the world.

“In response to the Bloomberg administration's vision for the future of New York City, many successful public and private projects underway today are designed by Cooper Union alumni. This is John Hejduk's legacy—we are re-imagining the New York City of the future.”

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UNTITLED provides a new choreography for viewing contemporary art. The three-sided plan is composed of nine viewing pavilions to accommodate different aspects of the client's private collection. A skylight system will diffuse and direct natural light throughout the complex.

