

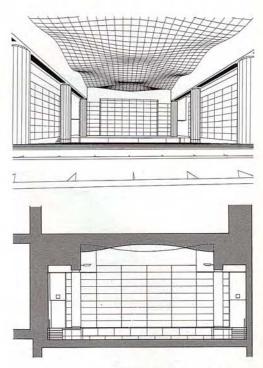


he Iris and B. Gerald Cantor Auditorium at the Brooklyn Museum, a 460-seat, 10,000-square-foot lecture, film, and concert hall, is the first public product of an ongoing collaboration there between the offices of James Stewart Polshek and Arata Isozaki. The team won a 1986 competition for a new master plan for the museum, an imposing but unfinished Neoclassical building designed by McKim, Mead & White in 1893. The team designed the auditorium after renovating 10,000 square feet of existing gallery space for art storage, and is currently working on the West Wing Galleries, 44,000 square feet of new exhibit and service space. According to members of both firms, the two principals' differing conceptual approaches meshed smoothly. "There are always residues of unspoken conflict," says Jim Polshek. "But those residues are what make things interesting." What's more, frequent consultation between Polshek in New York and Isozaki in Tokyo forestalled discord, recalls David Gauld, who manages the office Isozaki set up in New York to coordinate work on the project: "There were no independent decisions."

The auditorium itself occupies a concrete-and-steel shell on the third floor of a 1970s expansion wing designed by Prentice & Chan, Olhausen; originally intended as exhibition space, it was caught in the city's fiscal crunch and never finished. (In 1934, a 1,200-seat hall behind McKim, Mead & White's grand stair entrance was converted into the current lobby after the stair was removed.)

The new auditorium's one monumental gesture is Isozaki's undulating ceiling, a motif he has used in Japan. A plaster-on-wire-lath expression of intersecting sine waves, the ceiling is intended to create a sense that one is "beneath the surface of the sea," says Isozaki. The ceiling was designed mainly as an acoustically "neutral" visual element; its configuration was studied by acousticians here and in Japan to make sure it would neither focus nor trap sound in its curves. (Because the room was designed for amplified sound to serve its primary function as a lecture and film hall, acoustic measures—the rake of the floor, canting one wall slightly, absorptive seating and carpeting—were taken case-by-case.) To build the ceiling, the contractor employed a ship-hull construction technique. A drawing called a lofting plan was computer-generated; each point of the resulting grid was assigned a number showing its distance from a level plane (drawing, top right).

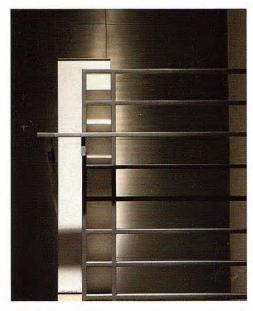
Polshek's hand shows up in the seamless integration of materials, such as the shot-peened stainless-steel stair and balcony railings and in the curving, 40-foot grille that covers the front of the stage. Across the rear of the hall, standing rows of perforated stainlesssteel panels, lined with sound-absorbing fabric, echo the grille. The cool metal contrasts with 6,000 square feet of vertically slip-matched oak paneling, cut from a single tree, that clads the rear of the stage and the walls. The rhythm of the panels is reinforced by the stainless-steel reveals of the supporting grid. The paneling is further set off by a Portuguese marble base, which also appears in the stage steps and trim. Center-stage panels slide back to reveal a projection screen; wing panels on huge, custom-designed piano hinges fold forward as sound reflectors during musical performances (section, bottom right). The maple stage floor rests on a neoprene pad for resilience, and dark neoprene reveals divide the stage and its marble trim. Lighting, sound, and projection controls are concealed on stage in a bird's-eye maple podium. Stage-floor panels give access to wiring below, which, in turn, is linked to a glassed-in control room behind the balcony. "We were looking for something at once totally practical and stunningly beautiful," says museum director Robert T. Buck. "The architects delivered on both counts." Peter D. Slatin

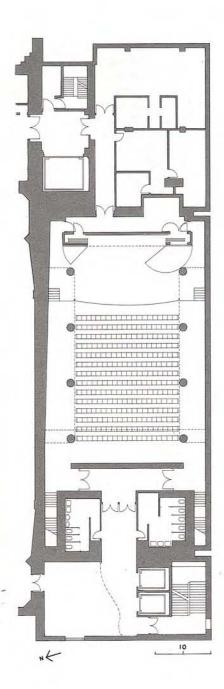


The architects increased the rake of the floor to improve sight lines, and canted one wall slightly toward the stage. Perforated stainless-steel panels clad the rear of the auditorium. Air-conditioning ducts are concealed in soffits atop the columns.









Stainless-steel railings, trim, and grille were blasted with superfine glass beads for a shotpeen finish (photo bottom left). Isozaki designed the reflecting sconces that line the walls (top). Existing columns mandated wide aisles and an undivided field of seats.

Credits

The Iris and B. Gerald Cantor Auditorium, The Brooklyn Museum, Brooklyn, New York Owner: The City of New York Architect: Arata Isozaki & Associates and James Stewart Polshek and Partners: Arata Isozaki and James Stewart Polshek, design partners; Joseph L. Fleischer, Duncan Hazard, Mark Fisher, David Kurt Carlson, Janet Waterhouse, Don Weinreich (Polshek project team); Shin Watanabe, David Gauld, John O'Reilly (Isozaki project team). **Engineers:** Robert Silman Associates (structural); Goldman, Copeland, Batlan, P. C. (mechanical/electrical/ plumbing and fire protection) Consultants: Fisher-Marantz (lighting); Peter George Associates (acoustical/audiovisual); Donaldson Associates (plaster); Tracy Turner Design (graphics); Robert Schwartz & Associates (specifications) General Contractor: HRHConstruction Corporation