

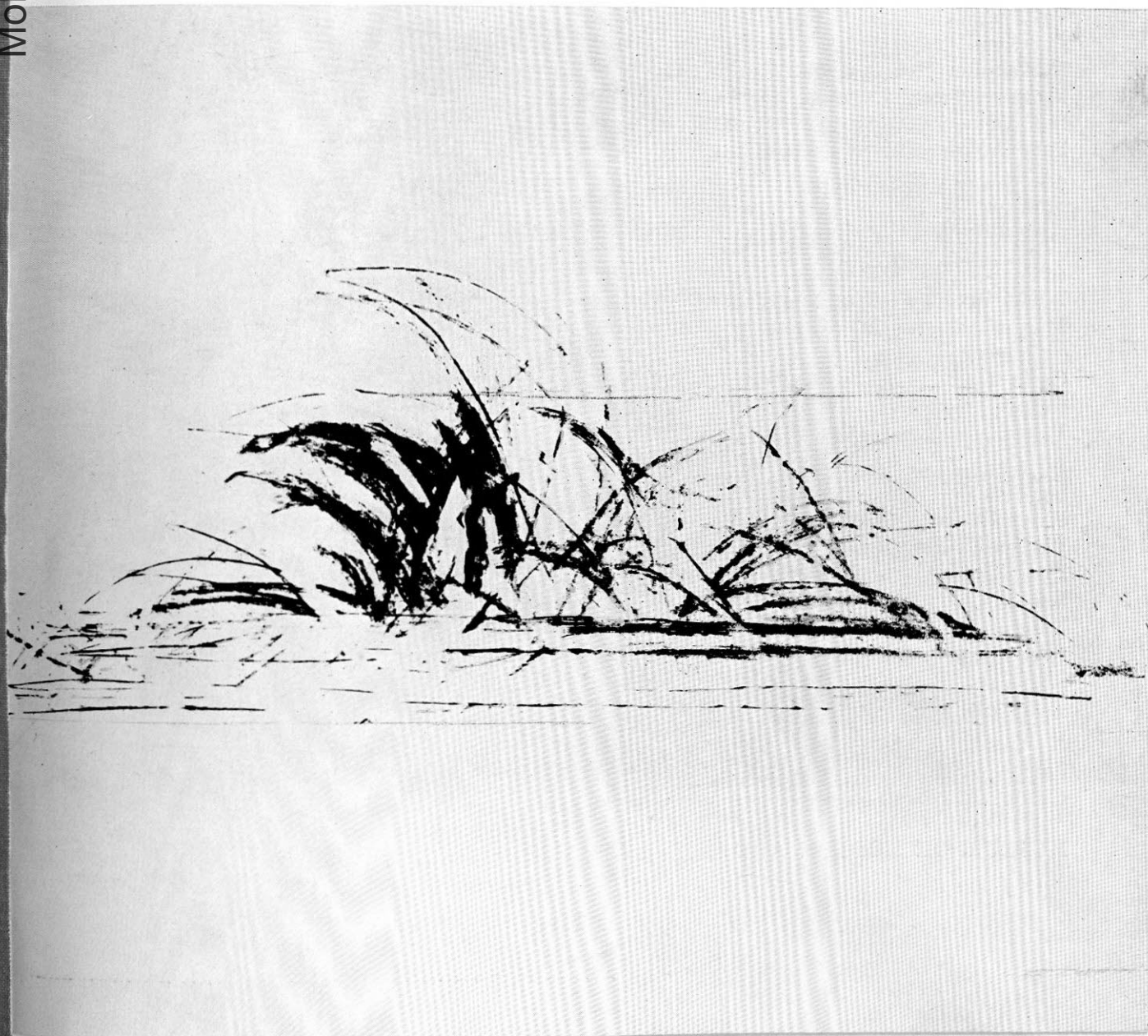
Office

EXHIBITION 640

museum of modern art, new york

FOUR NEW BUILDINGS

ARCHITECTURE AND IMAGERY



model: view from harbor

58.584

NATIONAL OPERA HOUSE SYDNEY, AUSTRALIA

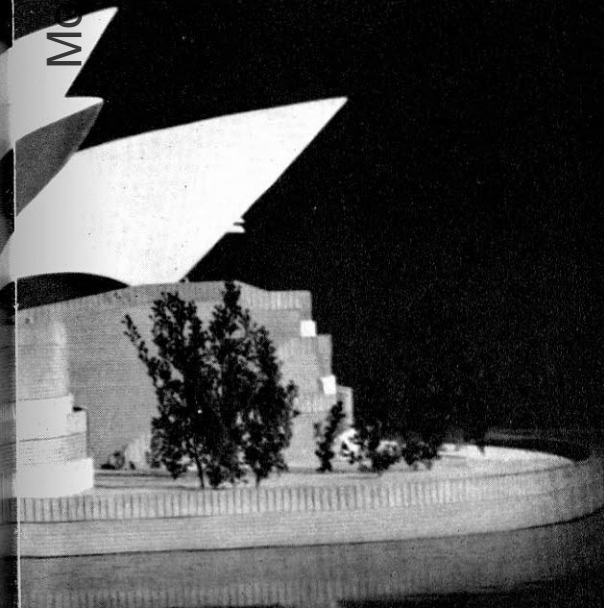
Jorn Utzon, Architect

Ove Arup, Engineer

This project by Jorn Utzon for a National Opera House in Sydney, Australia was awarded first prize in an international competition, and construction drawings are now being prepared. The building is to occupy Bennelong Point, a promontory in Sydney's harbor clearly visible from both land and water.

The architect has converted this promontory into a gigantic masonry plateau ascending in broad terraces and flights of steps. On these terraces and straddling the steps, he has placed clusters of interlocking concrete shell vaults to house two separate auditoriums and a restaurant. Auditorium seats are concentric semicircles of steps scooped out of the podium. Ceiling and wall panels under the concrete vaults can be opened during intermissions, so that the uninterrupted vault forms can frame views of the harbor. Workshops, rehearsal rooms, and other services are contained within the masonry podium, along with an entrance for automobiles.

By treating the entire surface of the podium as a stepped circulation area, the architect has eliminated altogether the need for separate emergency exits and has produced a kind of abstract landscape. The shell vaults, apart from their justification as masks for such awkward service elements as stage houses, provide an extraordinarily festive, even lyric, image. In the words of the awarding jury "The white sail-like forms of the shell vaults relate as naturally to the harbor as the sails of its yachts. . . . The dynamic form of this vaulted shape contrasts with the buildings which form its background, and give a special significance to the project in the total landscape of the harbor."



Model: 58.587)

" 59.3 (facade)

NOTRE DAME DE ROYAN
ROYAN, FRANCE

Guillaume Gillet, Architect

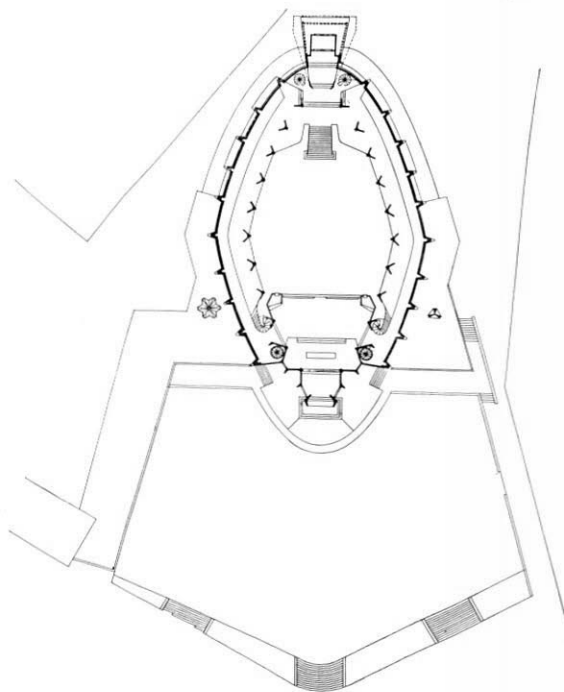
Bernard Laffaille, René Sarger, Engineers

Guillaume Gillet's Church of Notre Dame de Royan, now almost completed, includes a parish center, a presbytery, and a gymnasium and playing field. A spacious court accommodates open-air masses and is adjoined by classrooms and the sacristy.

The nearly oval plan of the church is derived from two interesting parabolas topped by a doubly curved concrete "saddle" roof. Walls are made of individual V-shaped piers, the narrow spaces between them filled with glass. Each pier is tapered at its base, resting on a single point, and is buttressed by the roof of the ambulatory. Galleries circling the building above provide additional stabilization for the piers.

The buttressed piers of Gothic architecture, which much of this building suggests, were joined at their summits in great ribbed vaults evoking the image of trees in a forest. But unlike its Gothic predecessors, the piers in Gillet's church carry an unrelated roof form. Its saddle shape does not grow out of the vertical structure, but instead cuts the piers at graduated lengths, like the pipes of an organ, and unifies the entire nave. This effect is perhaps at its strongest when the interior is seen from the top of the flight of steps linking the main entrance to the nave floor some twelve feet below.

plan



east elevation

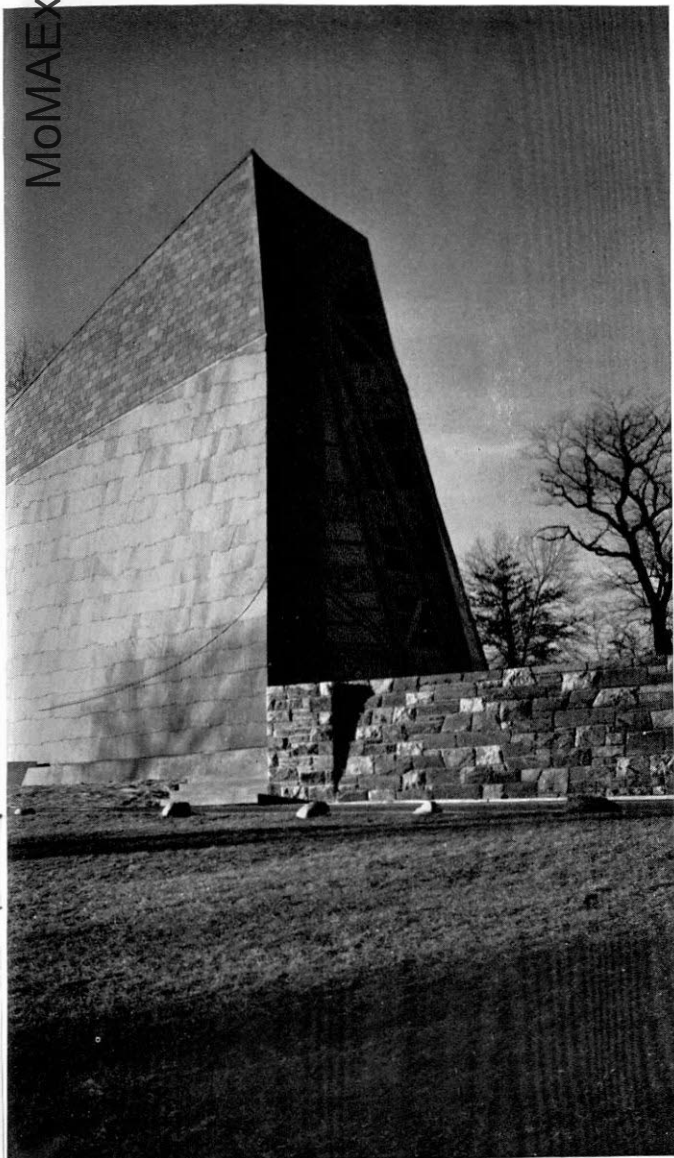


(Model: 59.120)

FIRST PRESBYTERIAN CHURCH STAMFORD, CONNECTICUT

*Harrison and Abramovitz, Architects
Sherwood, Mills and Smith, Associates
Felix J. Samuely, Engineer
Edwards and Hjorth, Consultants
Stained glass executed by Gabriel Loire
from designs by the architect*

Architect Wallace Harrison set out "to build a sanctuary for a Presbyterian church today which might be the same light structure of stone and glass achieved so marvelously in the middle ages." At the same time he wished to develop still further the medieval use of stained glass by carrying it up into the roof of the building. To accomplish this he used a structural system of pre-cast concrete frames filled with chunks of multi-colored glass. The major length of the nave is thus made into windows carrying abstract patterns representing scenes of the Crucifixion along the north and of the Resurrection along the sunnier south wall. The designs were executed by Gabriel Loire after sketches by the architect. The entrance to the building is at one side through a low and dimly lighted narthex. The nave and narthex itself rise from both sides of this entrance, and together with the canted planes and splayed shape of the nave give the church the appearance of a huge fish—an early Christian symbol equally apparent in the floor plan. Windowless exterior walls, and most of the roof, are covered with slate shingles in a pattern suggesting the scales of a fish.



TRANS-WORLD AIRLINES TERMINAL
IDLEWILD AIRPORT, NEW YORK

Eero Saarinen & Associates, Architects
Ammann & Whitney, Engineers

The soaring cantilevered roofs of Eero Saarinen's project for Trans-World Airlines' Terminal result from the architect's effort to create a building "which would be distinctive and memorable" and "in which the architecture itself would express the excitement of travel."

He has used four interacting vaults of slightly different shapes, supported on four Y-shaped columns, to enclose a space 50 feet high and 315 feet long. Embarking passengers enter this space under a marquee extended like a visor from one of the vaults, and proceed from the ticketing area into the main waiting room where tiered seats are ranged in an amphitheatre. Elevated areas housing services, restaurants and stores are at each side, connected by a bridge overlooking the main room. The bridge, steps, services, seats and all other details are "part of the same form-world" as the cantilevered vaults and their monumental supporting piers.

This unity of forms gives to the building an evocative character independent of abstract architectural composition. The flowing contours and merging shapes suggest not only motion but a moving object, although the architect apprehensively maintains that "any resemblance to anything other than a piece of architecture is purely in the eye of the beholder, or in the editorializing of the 'trend-maker'." The east and west vaults in particular evoke the image of poised wings—an effect appropriate enough to the building's location and purpose.

EXHIBITION 640 - FOUR NEW BUILDINGS - ARCHITECTURE AND IMAGERY

Loans:

58.587 Gillet: Architectural model of Notre Dame de Royan

Lender: M. Guillaume Gillet
10 rue des Nonnains d'Hyères, Paris IV

59.3 Gillet: detailed elements of facade structure "L'Eglise Notre Dame de Royan"

Lender: M. Guillaume Gillet

59.120 Model of First Presbyterian Church, Stamford, Connecticut (interior)

Lender: Harrison & Abramovitz, architects
630 Fifth Avenue
New York City 20

59.210 Model of TWA Airlines Terminal

Lender: Eero Saarinen & Associates
West Long Lake Road
Bloomfield Hills, Michigan

58.584 Model of Sydney Opera House

Lender: The Sydney Opera House Appeal Fund
93-95 Clarence Street
Sydney, Australia

59.4 - 59.20;

59.23 - 59.37 Drawings, photographs and titles for the Sydney Opera House

Lender: Mr. Jørn Utzon, architect
Helleback
Denmark