

**Preview : [brochure] the Tokyo
International Forum by Rafael Viñoly
Architects : June 12-August 3, 1993**

[text by Anne Dixon]

Author

Rafael Viñoly Architects

Date

1993

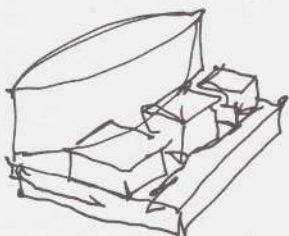
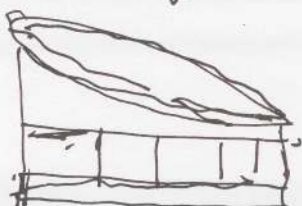
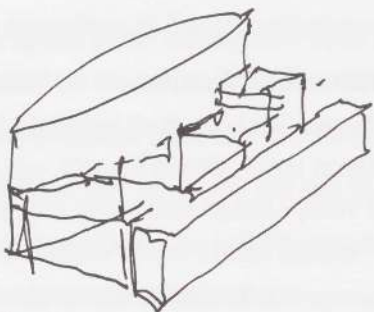
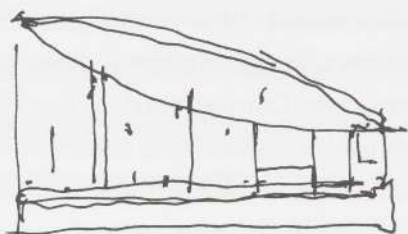
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from our founding in 1929 to the present—is
available online. It includes exhibition catalogues,
primary documents, installation views, and an
index of participating artists.



Preview:

**The Tokyo International Forum
by Rafael Viñoly Architects**

June 12 – August 3, 1993

The Museum of Modern Art
New York

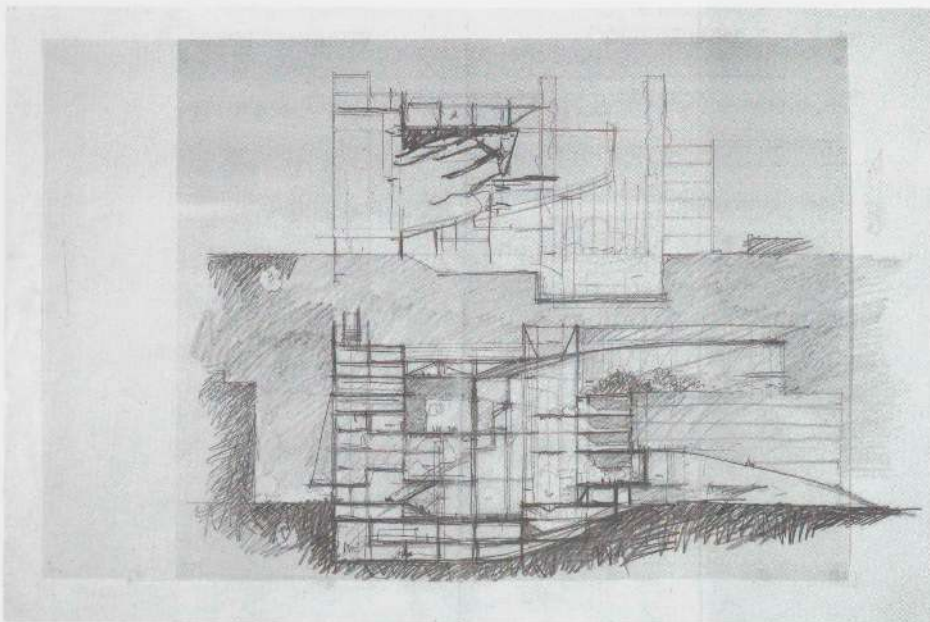
Rafael Viñoly's Tokyo International Forum is one of the largest and most complex urban projects now under construction. When completed, the combination performing arts and convention center will house four theaters, two spaces for exhibitions or trade shows, forty conference rooms, reception facilities, public spaces, and restaurants. Commissioned and funded by the Tokyo Metropolitan Government, the Forum represents the city's commitment to maintaining its international stature in both the economic and the cultural arenas.

The Tokyo International Forum design competition was held in 1989 under the auspices of the Union Internationale des Architectes. The jury, which included I. M. Pei, Fumihiko Maki, Kenzo Tange, Vittorio Gregotti, and Arthur Erickson, selected Viñoly's design from a field of nearly four hundred entries, citing it for its "extremely clear functional organization" and as best suited to the site.*

*"Viñoly Takes Tokyo Forum," *Progressive Architecture*, January 1990, p. 27.

Viñoly's design is an aggregate of simple volumes, each fulfilling separate programmatic functions. Four cubic structures, lined up in descending sizes, house four theaters with varying capacities. The largest of the theaters will be the biggest theater in Tokyo and one of the largest in Japan. A long, rectangular structure connecting the theaters will contain box offices, educational and tourist information facilities, and a rooftop observation deck. Three below-ground levels will enclose the exhibition spaces and parking areas.

The immense marquise-shaped glass and steel hall was designed in collaboration with structural engineer Kunio Watanabe. It is the project's main reception area and is intended to ensure the Forum's landmark status. The 680-foot-long roof of the glass hall is supported by columns at only two points. The near-parabolic steel roof structure resembles the wooden

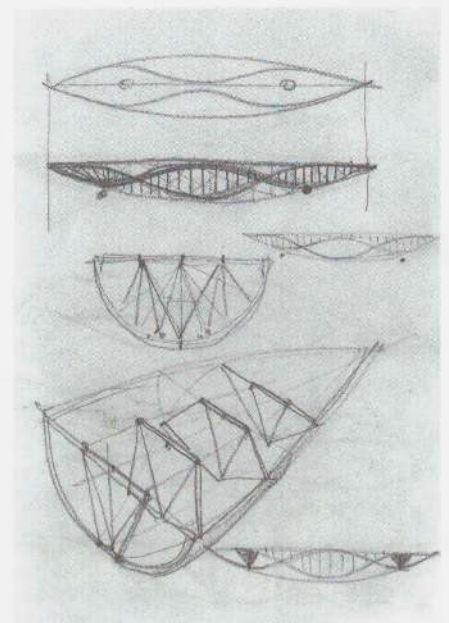
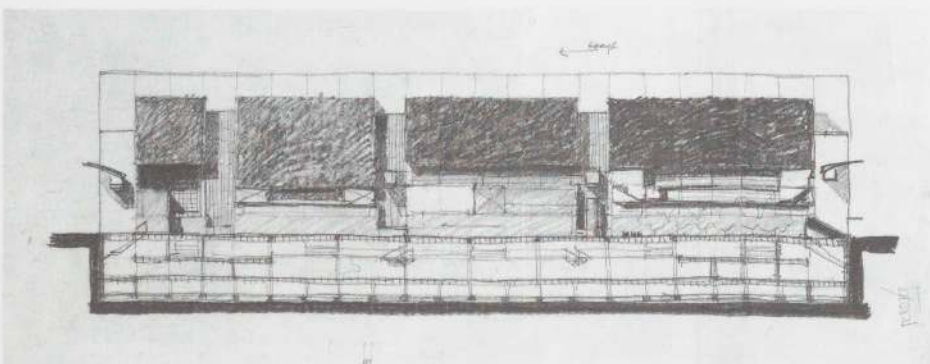


left: Sketches, transverse sections, 1989. Pencil and crayon on blueprint mounted on paper, 30 x 42"

below left: Sketch, east elevation of theater structures, 1989. Crayon and pencil on trace, 12 x 31 3/4"

below: Sketches for roof structure of the glass hall. Page from sketchbook, c. 1990. Pencil on paper, 11 x 8"

right: Interior perspective of glass hall, 1993. Computer-generated Iris print



each framework of a ship's hull and is interwoven by long, undulating tension cables and arced compression beams. Hanging from the perimeter of the roof trusses is the 190-foot-high glass wall. Ramps and bridges traverse the interior space and cross the plaza to connect the glass hall to the theaters.

The use of glass as a building material is especially notable in Tokyo, which is prone to earthquake activity. Viñoly sees the resistance to glazed structures in that city as psychological, rather than based on insurmountable technical problems. The glass does add to the sense of daring of this project, which will have the largest glass roof in Tokyo and will be a prominent feature of the city's skyline.

The outer edge of the glass hall rests on a long, curving structure housing the conference center, offices, restaurants, and cafés. This structure also serves as a sound and vibration

barrier, separating the glass hall and the plaza from the rail and subway lines to their east.

The 6.7-acre site, which had been occupied by city government buildings, is located in central Tokyo, adjacent to the densely built Ginza commercial district, and is bound by subway lines and railroad tracks. Viñoly's design responds directly to the particularities of the lot. Defining itself amid a hectic urban environment, the building is massed at the perimeters of the site, allowing open and calm public space at its center. The landscaped plaza marks a natural pedestrian route to and from nearby rail and subway stations. The arc of the rail line to the east determines the curve of the glass hall. The street perpendicular to the west facade serves as an approach to the Forum and situates its main entrance.



Computer-aided analysis and engineering were needed to address the technical and programmatic complexities of the project, yet the design process, even of the roof structure, continually involved sketching and the building of study models. Similarly, the construction of the unusually large scale model would not have been possible without both the exact laser-cutting of parts and the intensive labor of model-making craftspeople.

Though built as a presentation model for the client, Viñoly's model served as a study-in-progress for the actual structure, demonstrating potential weaknesses in the design and providing a testing ground for solutions that were implemented during construction. The construction process, which is taking place above and below ground simultaneously, is expected to take close to four years, to be completed in 1996.



The exhaustive scope of the international design competition, the centrality and magnitude of the site, and the level of capital investment in the project testify to the importance of the Forum to the Tokyo government. Not unlike the grand structures built for nineteenth-century world expositions, this monumental civic project asserts economic strength and cultural prestige on both international and domestic fronts. Viñoly's Tokyo International Forum, with its mammoth glass and steel pavilion, is meant to infuse trade and commerce with the thrill of spectacle, not only of theater but of architecture itself.

Anne Dixon

Department of Architecture and Design



Rafael Viñoly was born in 1944 in Montevideo, Uruguay, and studied and practiced architecture in Buenos Aires, Argentina, before setting up an independent practice in New York in 1979.

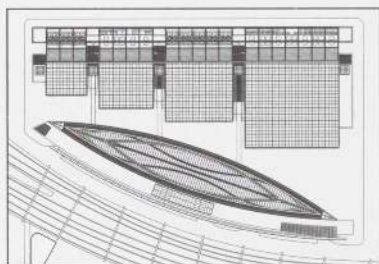
His previous commissions include Chácara Tangará, a 90-acre planning project in São Paulo, Brazil (1989); the John Jay College of Criminal Justice, New York (1988); The Manhattan office and residential tower, New York (1983); and the Mendoza Sports Complex stadium, Cerro de la Gloria, Argentina (1976).

The exhibition was organized by Terence Riley and Anne Dixon.

This exhibition is made possible by the Tokyo Metropolitan Government, with additional support from Taisei Corporation and Obayashi Corporation.

All works courtesy Rafael Viñoly Architects.

left: Aerial perspective, 1993.
Computer-altered photographic image, Iris print



above: Roof plan

center: Theater plan

below: Transverse section

cover: Form-finding sketches.
Page from sketchbook, 1989.
Ink on paper, 9 x 6"

