

AM
MEX
08
SLIDE
C.01

**A HISTORY OF
MEXICAN ART**

SET 8

**MODERN ARCHITECTURE
IN MEXICO CITY**

**BY
ROBERT C. MACLAURIN
AND
KATHARINE B. MACLAURIN**

**HERBERT E. BUDEK
FILMS AND SLIDES
SANTA BARBARA, CALIFORNIA**

INTRODUCTION

Modern Mexican architecture is extremely impressive, reflecting engineering advances, an increased regard for the function of individual buildings, and a new interest in town planning. The designs of individual buildings and the arrangement of complexes of buildings reflect the new concept of space time.

Modern Mexican architects have broken with the Baroque and eclectic past and moved forward to exploit the potential of recent engineering achievements. Examples of engineering feats that have changed the face of Mexican architecture are the steel skeleton and the non-supporting curtain wall, the floating foundation, the technique of cantilevering, and the poured concrete shell. The importance of engineering is indicated by the prominence of engineers as collaborators and technical assistants in modern buildings.

New spatial principles have come into vogue. The traditional use of perspective and enclosed space has given way to the new concept of space-time, in which inner and outer space penetrate one another, and a building must be viewed from several angles before one has mastered its spatial plan and concept. The flat surface has come into its own: façades are no longer encumbered with rows of columns, niches, and other distractions to provide variety and a sense of depth; instead, the surface is considered decorative and complete in itself. Materials are used in their pure forms: bricks, concrete blocks, cement, etc. are undisguised by stucco or paint, and materials with contrasting textures are often juxtaposed. Glass is abundantly used to give an effect of lightness and immateriality. Window strips are often joined at the corner of a building without any piers; this increases the airy impression.

This expanding view of space is perhaps linked with the enlarging scope of architectural projects. Traditionally, a building was constructed as an isolated unit, its style and function often independent of those of sur-

rounding buildings. Now entire complexes are designed on large lots, with various buildings, in stylistic harmony, provided for related functions. Such projects have been increasingly undertaken by the Mexican government since the Social Revolution of 1910. Examples are seen in the President Juárez Housing Development, the Medical Center, and University City.

The stylistic features mentioned above are found to a certain extent in modern art everywhere. One particularly Mexican characteristic of the buildings to be illustrated is the use of murals and mosaics to decorate exteriors. These techniques, rarely used in colonial structures, have ancient roots in the history of Mexican art and architecture and have been enthusiastically revived.

1. Monument to the Revolution of 1910.

Designed by architect Carlos Obregón Santacilia. Sculpture by Frederico Canesi and Oliverio Martínez.

Standing at the end of the Avenida Juárez, this large monument commemorates the Social Revolution of 1910. Built of marble and stone, the monument consists of four huge arches supporting a copper dome 250 feet high. On each corner are enormous allegorical sculptures representing Independence, Reform, Agrarian Laws, and Labor Laws.

Stylistically, the structure belongs to the transitional period between classical and modern architecture. The monument shows tendencies of modern architecture in the flat surfaces, its undisguised use of concrete blocks, and the sharply cut pillars of the dome, undecorated with classical motifs. But the structure lacks the fluid grace and lightness characterizing the best of modern architecture, and the inhuman scale oppresses the observer.

2. Ministry of Hydraulic Resources (and Office Building of the Aseguradora Alianza, on right). Architects: Mario Pani and Enrique del Moral. 1950. From east.

The 22-story building is constructed in reinforced concrete on floating foundations. Its triangular ground plan is an exciting departure from the traditional rectangular plan. Horizontal panels of windows alternate with plain bands. The structure was originally intended as a commercial and office building, and the design called for abstract mosaics by Carl Mérida between the window; but these had to be sacrificed when the government took over the building and adapted it to the needs of the Ministry of Hydraulic Resources.

The basement of the building contains an auditorium accommodating 240 people, while the top story contains a day nursery for employees' children.

3. Ministry of Hydraulic Resources.

From northwest.

Classical and Baroque structures were designed to be viewed from one angle; attention was lavished on the main façade, while the

other sides were often left bare and featureless. Modern buildings, in accordance with the new concept of space-time, are so designed that the observer must see all sides before comprehending the whole. All façades and views are considered equally important.

4. Office Building of the Aseguradora Alianza. 1958. (American Embassy on right). Architect: Juan Sordo Madaleno. From east.

Standing between the Ministry of Hydraulic Resources and the American Embassy, this office building is a welded steel frame structure. The three buildings, all approximately the same height, harmonize architecturally, with an emphasis on horizontals. The idea of integrating groups of neighboring buildings stylistically is indicative of the broader scope of modern architecture and the developing interest in town-planning. Colonial buildings were designed as independent units, with little regard for surrounding structures and styles.

5. Office Building of the Aseguradora Alianza. From north.

The building rises like a tower, the shimmering glass surfaces of one portion giving it an air of insubstantiality and contrasting pleasantly with the solid walls of the other portion. The frequent use of glass to cover entire wall surfaces in modern buildings has been made possible by the use of the steel skeleton. With a steel framework, the wall loses its structural importance and functions primarily as a curtain giving protection from the elements.

6. Office Building of the Aseguradora Alianza. Entrance from east.

The entrance portico is a light and airy structure, a slab-like roof supported by slender rectilinear columns. The narrow horizontal slabs reduce the framework to a human scale but preserve the openness of the structure. An interest in the fluidity of space is characteristic of modern architecture. Interiors are no longer invariably broken up into enclosed units, and the increased use of glass lessens the distinction between inside and outside.

4

7. Insurgentes Theater. 1952. Architect: Alejandro Prieto. Glass Murals by Diego Rivera. From east.

One feature of modern architecture is a return to the flat surface, unadorned with colonnades, niches, cornices, and other devices traditionally used for an effect of depth and a play of light and shadow. Windows often have no frames or trimmings, and large sections of exterior walls are frequently left completely blank, with contrasting colors or textures used for variety. Many walls in modern Mexican buildings are enlivened with murals and mosaics, a tradition dating back to pre-Conquest structures. The curved, windowless façade of this theater is decorated with a glass mural by the famous artist Diego Rivera, representing the history of the Mexican theater, from Indian performances in pre-Conquest days through the colonial era of Juan Ruiz de Alarcón to the modern days of the playwright Rodolfo Usigli.

8. Insurgentes Theater. Detail of Glass Mosaic.

A detail of the left side of the mural depicts colonial theater, with haughty members of the nobility dressed in the elaborate velvet and brocaded costumes of the period. A taste for the bloodthirsty and dramatic is indicated by the Indian head impaled upon a weapon.

9. Insurgentes Theater. Lobby.

The curved lobby has a modern fluidity of space and a bold color scheme. Rounded columns without capitals support the bright blue ceiling, whose rough, nubby surface contrasts with the smoothness of the columns. Dispensing with the stucco work of the past, the modern architect takes an interest in the pure forms of various materials and likes to provide a contrast in textures.

The theater seats 1,200 and has a revolving stage equipped with a moving belt and central platform lift.

10. President Juárez Housing Development. 1952. Architects: Mario Pani and Salvador Flores. Three 10-story Buildings from south.

This housing development is typical of the government projects which have been undertaken in Mexico since the Social Revolution

16. President Juárez Housing Development. 4-Story Building and a 9-Story Building. From south.

The Type D buildings are of brick, with large sections of glass and vertical strips of open-work wall where the stairways are located. Each apartment is provided with a cement balcony, its outer wall left rough and grainy in a textural contrast with the brick and open-work.

In the background is a 9-story apartment building.

17. Ministry of Communications and Public Works. 1954. Architects: Raul Cacho and Augusto Pérez Palacios. Mosaic Murals by Juan O'Gorman. From northeast.

This large building consists of three main wings housing the planning, construction, and administrative departments of the Ministry of Communications and Public Works. As the minister aimed for a distinct Mexican flavor and envisioned a building of outstanding architectural integration, he commissioned a large number of architects, engineers, painters, and sculptors. The striking murals by O'Gorman are entitled 'A Hymn of Praise to the Fatherland.'

18. Ministry of Communications and Public Works. From east.

Mosaic friezes frame the windowed areas, forming a colorful border but preventing the airy lightness created by glass meeting glass at corners. The murals, which undeniably dominate the building, have been criticized as detracting from its architectural unity; nevertheless, the brilliant colors, so characteristically Mexican, have an irresistible appeal.

19. Ministry of Communications and Public Works. Mural on north side.

A mural on the north side of the building depicts marine and river operations through the ages. A variety of costumes and races are portrayed, with boating crafts of diverse types and a modern bridge in the background. In the foreground is a charming assortment of aquatic creatures, including the octopus, crocodile, seal, and turtle.

20. Calle Lieja Office Building. 1956. Architect: Juan Sordo Madaleno. From west.

This building, designed by Juan Sordo Madaleno, was one of the first curtain wall structures built in Mexico. The curtain wall, so named because its function is shelter rather than support, was made possible by the use of the steel skeleton in construction and has resulted in the widespread use of glass in modern façades.

The windows and the bands separating them horizontally are identical in width, but monotony is avoided by the use of a concave curve in the side façade. The building has a shimmering delicacy.

21. Office Block on the Avenida Insurgentes. 1956. Architect: Ramón Marcos. From north.

Built to occupy an oddly shaped plot along the wide Avenida Insurgentes, the flat-roofed glass structure is almost trapezoidal in plan. The building has curtain walls with rather frequent divisions in the glass surface.

22. Banco del Valle de Mexico. 1957. Architect: Augusto Alvarez. From north.

The bank building is composed of two sections: a 12-story tower on the main street, and a long 4-story wing continuing down a side street. The tower, seen here, has two glass walls contrasting with plain walls set off by colored bands.

23. Banco del Valle de Mexico. From south.

The entrance, stairway, and elevator are shared by the tower and the lower wing. The building has a steel frame, obviating the necessity for central columns in the interior, which is wide and airy. A pleasing simplicity and directness characterize the structure.

24. Latin American Tower. 1957. Construction Supervisor: Adolfo Zeevaert. Consulting Architect and Designer: Augusto Alvarez. From east.

This tower, located in the center of the business section, is the tallest building in Mexico. Its 43 stories extend 595 feet upward, culminating in a large television transmission tower and observatory.

The style of the tower shows the Gothic de-

light in verticality seen in the Empire State Building, which this structure resembles slightly.

25. Latin American Tower. Lower Portion.
From east.

As Mexico City, founded on a lake, has no accessible stone strata, the tower is set on floating piers sunk deep in the clay lake bed. As a result of the excellence of its design and the light materials used in its construction, the tower withstood Mexico's severest earthquake in 1957, without a single pane of glass cracking.

26. Medical Center. About 1961. Architect:
Enrique Yáñez. Convention Hall from south.

The Medical Center, like the President Juárez Housing Development and the recently built University City on the outskirts of town, is a product of the modern interest in comprehensive planning and in complexes of buildings with common or related functions. Administered by the National Social Security Institute and entirely financed by the National Lottery, the Medical Center is a complex of ultramodern laboratories and hospitals.

The 17 buildings, which include doctors' and nurses' residences as well as beds for 3,000 patients, are notable for their modern design and brilliant murals. Providing for the many specialized functions of a combined hospital and research institute, the buildings include a surgical department, instruction rooms, a laundry and pharmacy, separate TB and cancer hospitals, a Women's Clinic, an Emergency Clinic, a department for dietary diseases, a convention hall, and an administration building.

Shown here is the spiraling curve of the convention hall.

27. Medical Center. Administration Building.
From northwest.

As the terrain is uneven and unstable, each building was designed as a simple prismatic block to spread the stress evenly. Numerous architects planned the various buildings, but a successful attempt was made to keep a harmony of proportion, materials, and style in the complex as a whole.

The Administration Building, situated beside the convention hall, is a rectangular building with curtain walls and a colonnaded ground floor which provides a sense of lightness. A covered walk approaches the building across the paved terrace. The covered walk, frequently seen in modern Mexican building complexes, provides shelter from sun and rain.

28. Medical Center. Surgical Department
from southwest.

The Surgical Department lies at right angles to the Administration Building and contains lecture rooms for medical students as well as surgical facilities, combining the practical and theoretical sides of medicine.

The long north side of the building is decorated with forceful stone mosaics by José Chavez Morado, enlivening the blank walls of the projecting surgical lecture rooms.

29. Medical Center. Surgical Department.
Detail of Mosaic by Morado.

Done in a simplified, vigorous style, the mosaics portray the story of scientific progress. Morado designed a mosaic for the Department of Natural Sciences at University City with a similar theme: the god and sources of science.

30. Medical Center. Women's Clinic. Entrance
from south.

The cantilevered portico of the Women's Clinic is a bent concrete slab supported by V-shaped pillars.

The building is decorated with a stylized frieze, the angularity of the design reflecting the influence of ancient Mixtec mosaics.

31. Medical Center. Women's Clinic. View
Between Buildings. From southeast.

Structures like the Women's Clinic, consisting of several buildings of various heights, are joined by bridges to prevent damage caused by earthquakes and uneven settlement. The two rectangular buildings of the Women's Clinic are linked by the passageway seen here.

32. Medical Center. Cancer Hospital.
From east.

The Medical Center has separate units for patients suffering from different diseases,

such as cancer, tuberculosis, and dietary ailments. The Cancer Hospital, located near the laboratories, is seen here. The Medical Center contains not only extensive facilities for treatment but also serves as a school for 5,000 medical students and as a research institute.

33. Medical Center. Emergency Clinic.
From south.

The Emergency Clinic has an intriguing exterior design, its lower portion consisting of an overlapping openwork pattern of concrete panels. This construction serves as protection from the glare of the sun. Below is a stone wall, its large, variously shaped stones held together with mortar inlaid with pebbles, a technique seen in the ancient Indian ruins at San Juan Teotihuacán.

34. Medical Center. Emergency Clinic and TB Hospital. From south.

The overall plan of the hospital complex was based upon the aim of orienting the wards to face southeast.

Here the Emergency Clinic is seen on the right, with the taller TB Hospital looming to the left. The buildings are viewed from the street bordering the complex. No through-traffic is allowed in the Medical Center.

35. Emperatriz de América, Church Near Insurgentes Theater. 1963. Plan by Juan Domenzain, Civil Engineer and Winner of a Competition Held for the Design. Domenzain Was Assisted by Other Civil Engineers and Architects.

Since 1950 Felix Candela has popularized the use of shell-concrete structures, cylindrical, undulating, domical, and hyperbolic paraboloids in shape. These shapes, both practical and inspiring, have been used for market halls, pavilions, warehouses, and churches, where they are especially effective as a change from the traditional flat roof.

Here a small parish church is seen, cruciform in plan, but consisting of parabolic concrete shells.

36. Emperatriz de América.

Main Portal from southeast.

The exterior walls of the church are unadorned, the plainness of the surface emphasizing the dramatic forms and the soft pearly tint of the surface itself.

37. Emperatriz de América.

Bell Tower from southwest.

The bell tower, supremely simple in design, is a ribbed concrete column, with a concrete cross rising above it.

38. Emperatriz de América.

Interior from south.

The interior is equally dramatic. The marble pews are cut in jagged, slanting lines. The interior is lit by stained-glass windows, whose shape echoes the soaring curves of the exterior. The mosaic pieces of the narrow panel below are arranged in the undulating forms of snakes. Worshipped by the ancient Indians as a symbol of fertility, the serpent has traditionally been a favorite motif of sculptors, painters, and workers in mosaic.

39. Emperatriz de América. Interior. Detail of Stained Glass Windows on North Wall.

The panes of the arched windows are arranged in patterns that draw the eye upward and outward, a detail reinforcing the effect of the whole.

40. Emperatriz de América.

Exterior of Stained Glass Windows on South Door.

This window creates the effect of leaping, flickering flames. Fire, the mastery of which separates man from beast, is another motif with its roots in the ancient past. To early man, fire represented warmth and life and was naturally associated with the sun, worshipped by most ancient civilizations; fire was an important element in pre-Columbian ritual. The use of the motif here exemplifies the Mexican interest in embodying ancient and indigenous themes in the most modern and daring creations.

THE END