

Between East and West



Figg. 1, 2 Le Corbusier, *The Palace of Legislative Assembly*, 1951-65. Chandigarh (India), general view and master plan for the capitol (*below*).

A fundamental issue in the history of civilisation, the relationship between East and West has been characterised by fruitful exchanges and mutual enrichment as well as by colonisation and conflict.

The last century has witnessed the collapse of colonialism, and the rise of internationalism as well as, most recently, the globalisation of cultural processes; in terms of architecture this changing situation has offered emblematic opportunities to reflect on themes of **expressive identity and technological innovation in contexts that differ profoundly from the Western world**.

Le Corbusier, *The Palace of Legislative Assembly in Chandigarh, India, 1951-1965*

In 1947, after the fall of the British colonial regime and the division of the Punjab province between India and Pakistan, Chandigarh was founded and constructed as **the capital of the Indian Punjab**.

The initial design of the city, planned by Albert Meyer, called for 150,000 inhabitants but was subsequently enlarged to house 500,000. Between 1950 and 1952 Le Corbusier's team completed the project with several substantial modifications. Apart from the urban planning that would only be finished in the following decade, **Le Corbusier** focused his attention on the architectural design of the city's municipal hall which also contains the *High Court*, the **Legislative Assembly** and the *Governor's Secretariat*. The architect's aim was to confer **modern forms** on the new capital's centre of representation, **cutting all ties both with the colonial past and with traditional Indian architecture**. These are the only city buildings to rise more than four stories and they have been erected on a vast area which is conceived of as a kind of Acropolis of monumental buildings.

In this project the architectural conception is inspired and developed according to the city's **climate**. So we see large sun-reflective walls, high porticoes which cast deep shadows, loggias – borrowed formally from traditional Indian architecture – which gather and filter sunlight as mirrored and diffused by the reflecting pools from which they seem to arise.

The sun, identified with power, is also the complex's symbolic reference point. «*The astronomical instruments in Delhi [...] point the way for men to join the cosmos, with an exact adaptation of the forms and the organisms to the sun, rain, air*» (from Le Corbusier, *Carnet*, 1950).

The innovation here is found in the use of **reinforced cement**, a construction technology that, although it symbolises Western modernity, is alien to building practice on the Indian sub-continent. Here Le Corbusier employs it in rough forms of large and unusually-expressive nature, exalting its material qualities. The aggressive climate, the unspecialised labour, the limited budget: these motives all stimulated the search

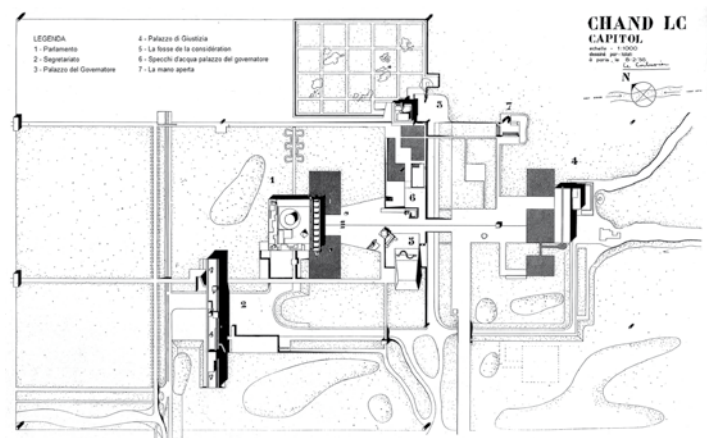




Fig. 3, 4 Louis Kahn, National Assembly Building, 1962-1973. Dacca (Bangladesh), general view and plan (below).

and experimentation of **daring technical solutions** such as the industrialisation of the building site, and the deconstruction of the building plan into simple elements that could be prefabricated in a workshop.

The Assembly's volume is raised from a square plan, with three sides faced by regular sun-reflective walls while the main façade has a deep and high portico upheld by blade-thin support walls and roofed with a powerful convex canopy recalling the curving form of sacred cows' horns.

The interior of the **Parliament Building** covers a large area, like a city square with high pilasters that support the roof. From this main space branch off the perimetral offices and service areas as well as the great circular **Assembly Hall**. The latter, overhung with an immense skylight, is marked by the hyperbolic tower for ventilation that rises above it, well visible above the building's roof.

The **Pool of Meditation** is a key point in the immense area of the capitol complex; here, among reflecting pools and asymmetries, a large sculpture arises in the form of an open hand which recalls the actions of greeting, receiving and giving. Some 26 metres high, the metallic sculpture turns freely in the wind on its long hinge and it has become as much a symbol of its city as of the great master who designed it.

Louis Kahn, National Assembly Building in Dacca, Bangladesh, 1962-1973

Just like Chandigarh, Dacca (also spelled Dhaka), in **Bangladesh**, is the **capital** of one of the areas that split apart following the collapse of British colonialism. An American architect of Jewish descent born in Latvia in 1901, **Louis Kahn** was called upon to design the new **National Assembly Building for Dacca**. He had just finished the XX International Congress for Modern Architecture in Holland and had reached the height of his career.

He carried out the Assembly citadel as if it were a **fortified castle**. This symbolically-charged ivory tower was designed to create what the architect himself termed «**an environment with neither time nor change, a place possessing the characteristics of eternity.**»

The building's arrangement has a **central plan**: situated in the middle, the Assembly hall is surrounded, in a radial way, by other functions. These majestic and clean volumes are

created via the use of such elementary geometrical figures as the rectangle, the circle and the triangle. Giant parallelepipeds house the offices while cylindrical volumes contain housing and cafeteria for the members of parliament and the heads of government ministries. The great entrance hall and the room for prayer are located on either side of the same axial arrangement.

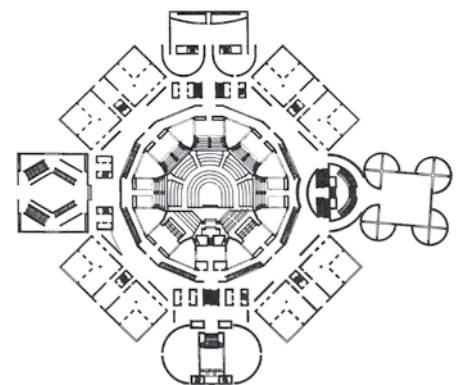
In fact the new nation of Bangladesh was formed not only for political and economic reasons, but also to grant independence to this region's Muslim majority. Therefore next to the civic community's most representative space, where laws are passed and society is given order, Kahn situated a **mosque**. Placing the religious space and the Assembly hall side by side was Kahn's way of connecting daily activity with our most spiritual being, showing a meditation on Man taken in his most complete form.

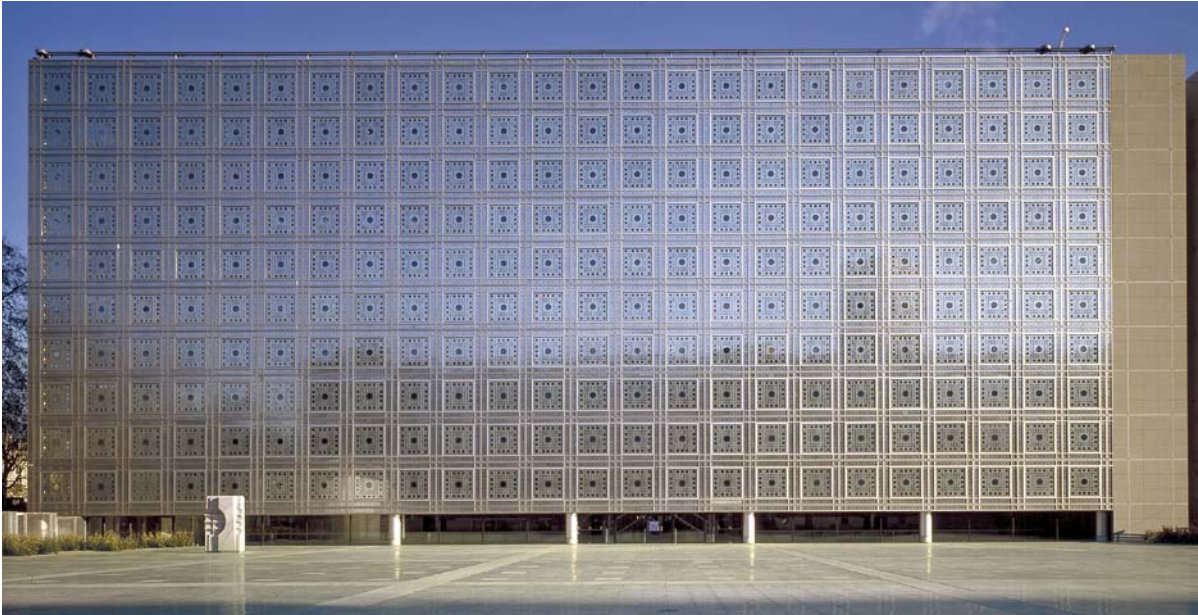
The project's symbolically-charged depth is made palpable by the architecture's great expressivity. By going beyond the Modern Movement's rationalist premise Kahn proposes an **essential composition** with a quality of absoluteness in the design, in the volumes' stereometry, and in the choices regarding technology and construction.

Natural materials like marble and brick are used next to reinforced concrete; in this way the complex appears to **unify tradition and constructive logic**. The Assembly's walls are faced with concrete and marble inserts, while the service buildings use brick facing.

The great wall facings and the use of arches recalls the **monumentality of** ancient Roman architecture and creates a compact entity in which the only apertures are a few giant circular or triangular cuts.

Here it is easy to see how Kahn has adopted the **double casing system of building**: on the inside, the dual walls create an empty area or cavity that filters





Figg. 5, 6 Jean Nouvel, Arab World Institute, 1987-1988. Paris, view of the entrance front and detail of a mashrabiya.

and protects the space from direct sunlight. It is a way to form large areas of shade and to mediate the passage between indoors and outdoors.

So, just as Le Corbusier had done at Chandigarh, the wall casing behaves like a kind of *brise-soleil* or sun-shading structure. However, although the constructed masses are archaic and powerful in appearance, they are nonetheless modelled by light and by the design of spatial divisions.

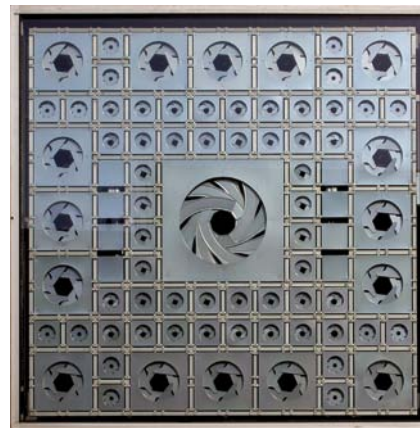
A good example of this can be seen in the large entrance hall marked by deep vertical slit that runs the whole height of the volume; or, again, in the alternating radial volumes that produce a sequence of defined shadows and a rhythm of wide-reaching empty and full spaces.

Jean Nouvel, Arab World Institute, Paris, 1987-1988

Opened to the public in December 1987, the Arab World Institute results from a partnership between France and twenty-one countries belonging to the Arab League. It is the headquarters of a private foundation whose mission is **to study and to promote knowledge of Arab culture**. To achieve this, the building houses a museum of Arabic-Muslim art, a library and an auditorium; indeed the Institute building has been designed to host a wide variety of multidisciplinary events and initiatives: music, dance, theatre, visual arts, photography, programmes for young people.

Showing France's desire to further diplomatic relations with Arab countries, the Institute's realisation in Paris is an example of the great public works promoted during Francois Mitterand's presidency in the 1980s. A team of leading architects including Jean Nouvel, Gilbert Lézénès, Pierre Soria and Architecture Studio was called upon to develop the area on the Seine's right bank in a strategically central position of the capital.

Overlooking the ancient Île Saint-Louis, the building is located between two of the city's most modern sections: one of these is characterised by the continuous buildings typical of the eighteenth and nineteenth century style, while the other area's fabric is more recent and discontinuous. Therefore this project's aim was to achieve a modern structure that could insert itself into the urban fabric while also **figuratively and historically recalling** elements of Middle-Eastern culture,



The **mashrabiya** is a device for natural forced ventilation used by traditional buildings in Arab countries.

It is composed of wooden panels that have been pierced by very many, regularly laid-out holes that cover and protect the window opening. By using this lattice-work to reduce the area exposed to air the passage of wind is increased. When placed near a damp surface, pool or tray of water, the mashrabiya helps spread cooler air throughout the home interior.

without falling into stereotypical features or direct quotations. The building is an architectural synthesis in which **images of Western modernity and references to Arab culture exist side by side**.

This stereometric construction in glass and aluminium employs components re-interpreted from traditional Eastern architectural elements. Examples can be seen in the façade's *mashrabiya*; the inner courtyard or *riad* onto which the fourth floor museum fronts; the *ziggurat* which inspires the library's tower; the *hypostyle hall* in the underground area which recalls the monumentality of ancient Egyptian temples.

The southern façades is composed of 240 **mashrabiya**, not in the traditional wood but rather in aluminium: in fact these are moving diaphragms activated by photo-sensitive cells (like the aperture in a camera), which correct the form according to the changes in outdoor light. In this way the structure becomes a curtain-wall in constant movement. Sensitive to sunlight, each rotational device generates basic shapes like the square, the circle, the pentagon, the star. These produce a constantly changing repertory of decorative elements very similar to the *Alhambra* in Granada; they are all visible on the outside of the building while, indoors, they create fascinating effects of light and dark. At the same time they are a physical assertion of geometry, trigonometry and algebraic precision which are all disciplines invented by the Arabs.