

*Drawing of the main building of the National Institute of Physical Education, dedicated to the multidisciplinary study of all sports.*

## SCHOOL FOR SPORT

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RICARDO BOFILL ARCHITECTURE STUDIO

The National Institute of Physical Education, subordinate to the Generalitat, will be used during the Olympics for the wrestling competitors and for some communications data processing functions. Planning and design took many months, and evolved from three different buildings to one ; both the location and the configuration of spaces were changed, primarily due to the difficult conditions of the subsoil.

The final location of the Department is more than half a kilometer from the site initially chosen, in a very restricted area in geological terms, located at one end of the axis around which the Olympic Esplanade is organized. In fact, the site and the location of the cliffs of the old stone quarries and the filled-in garbage dump necessitate a rectangular floor plan developed for one of the earlier projects, which better meets the requirements of the program.

Some of the questions which arose were : what exactly is an athletics department, how does it relate to athletics in general and to the Monjuïc complex in particular, and what cultural and sociological impact on the area can be expected from it ?

To begin with the Department itself, it may be considered a center for graduates and post-graduates for training teachers dedicated to multi-disciplinary study, to understanding and practising all sports, in order to train a pool of teachers capable of promoting physical education in all strata of Catalan society. It is a university building with more than a thousand students studying physical education during the academic year. Nevertheless, there is a certain dichotomy regarding the use of the building, since the athletic facilities (tracks, gymnasias, pools, etc.) are also used by federations and colleges when not needed by the students. Those events usually take place in the evenings or during vacation periods, and can be just as numerous, and even better attended, than the students' own events, but they should not affect the privacy or security of the Department's teaching or social areas.

#### A PRIME LOCATION

It is splendidly located to take advantage of the many sports facilities in Monjuïc, both those which already exist and those which are still in the planning stage. Its presence should bring the surrounding area to life, with students, spectators and participants, although due to their own program planning, it is clear that many of the spaces intended for such events have been duplicated.

The social and cultural advantages of the Department should develop with time. However, both students and faculty could become major sports fans after the Olympics, especially offering cultural programs through the use of available spaces to hold exhibitions, sporting and communications events (with large screen television

coverage by satellite of sporting events of international importance), conferences and music performances ; and also, with the establishment of a first class sports library and data bank, backed by a copying center and a video-tape library. The video producers would cover the main sports events in order to achieve nation-wide distribution to schools. Laboratories are available to study and research biological effects in order to help physicians and athletes work together to achieve optimum performance.

Another attraction could be the full-time use of the bar and restaurant areas, which command a splendid view of the athletic fields and the Mediterranean beyond, making it a meeting place for all visiting athletes.

All these activities would provide an incentive for the general public to use the building and bring life to the area, particularly in the evenings, when the Department is underutilized.

These plans and the program guidelines have contributed to a design concept according to which the building is arranged around a "parti" (a planning configuration) which is very clear and easy to understand, from which emerges the idea of a "university college" form, held together by a covered arcade (itself probably derived from the ecclesiastical cloister). This form has been reinterpreted to meet the requirements of the program. The different game courts and the gymnasias are distributed among two squares which form covered courtyards of 50m X 50m each, located on either side of the central vestibule. Around its perimeter there is an arcade, and at the side, front and back are four wings for auxiliary service facilities. The East-West axis of the buildings is a continuation of the main axis of the whole Olympic Complex and is divided in the middle of the vestibule by the North-South axis which forms the basic geometry of the building composition.

There is a North-South slope on the site which is put to advantage in the plan with two floors facing North and four facing South, all of which rise to the same height level.

#### A SPACE WITH DIFFERENT ARTICULATED VOLUMES

The "university college" form helped make it possible to overcome a major limitation in planning the athletics pavillion, in which the size of the pavillion inevitably overwhelms the auxiliary

support service areas and tends to give a functional and utilitarian impression for the space as a whole, totally inconsistent with the architectonic language considered ideal for the setting of Monjuïc

With this solution, the facades of the teaching block facing South (with the grand staircase descending to the playing courts) and the administration and office block facing North, effectively absorb and conceal most of the 9 meter-high competition halls, while at the same time leaving the East and West facades as open galleries, in glassed-in arcades which let in day-light onto the activities on the patio and in the hall. Thus the group of volumes may be considered as a homogeneous whole rather than as a collection of articulated volumens of different sizes.

The main entrance to the building leads from the tree-lined avenue which describes a curve toward the northern part of the site, and is defined by a portico with a pediment, where the governing board and the counselling area are located.

In that place there is an independent foyer, which is entered from a grand staircase leading down to the auditorium, with another direct access to the conference room and the main doors of the hall of the Department. This ensures that both the auditorium and the conference rooms can be used at night when the rest of the Department is closed. The main hall is the real center of all social contact activities and overlooks the two patios with competition tracks which are on a lower level. The hall can be used for meetings, inaugurations, examinations, dances and parties, etc., as well as for all kinds of exhibitions. Facing South are an open portico and an observation terrace with large staircases which descend to the playing courts; they can be used as a place to sit and chat, and from them one can watch the games and enjoy the sun. The bar restaurant is located below the staircase and opens on to the lower terrace, from where one can go to the library through a separate entrance; the library consists of a large, informal reading room and various other, smaller rooms for audio-visual activities. There is also a changing room for visiting teams on this lower level, which can be entered through the service entrance located in the fence which surrounds the playing courts. The upper level is entirely occupied by changing rooms which open directly

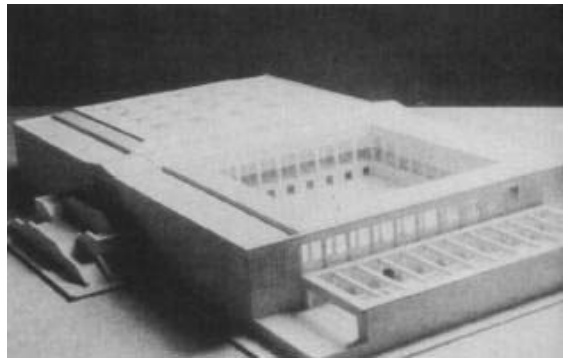
on to the covered tracks and which are entered from the sides and from a mezzanine level to be swimming pool complex, which is a separate volume facing east, joined to the department by the base wall and an arbour from the circular esplanade of the Plaza de Europa.

Above the changing room areas and at the back of the main level of the hall are the classrooms, conference and seminar rooms, facing south, as well as the teachers' office the administration, video production center and laboratories, facing north.

Walking through the galleries gives one an uninterrupted view of the competition rooms, in which the various activities put into practice what is taught in the classrooms.

The patios can be divided into various spaces which can be separated visually and physically by means of acoustic curtains.

The thin lower covering of the roof acts as a controlled source of natural light and also houses all the artificial lighting and communications systems.



### A DECIDEDLY MODERN BUILDING

Approaching the aesthetics of the building involved the architectural studio in a series of interrelated semantic debates in which an equilibrium was sought which could satisfy the highest design criteria.

The original debate centered on the architectonic and landscape language which would match that of Monjuïc, a nineteenth century style, a romantic and eclectic neo-classicism,

which in some cases resulted in singularly bad taste, but which to a considerable extent remains the predominant style throughout the area. This design "spirit" could either be ignored or copied and refined.

The latter course was chosen, i.e. refining the classical intentions and using modern technology, in this case prefabricated stone panels (architectonic concrete) with minimalist and conceptual relief to barely hint at the architectonic language. The result is a restrained, modern building which fits into the visual environment.

The "parti" of columns around the competition rooms supporting the roof and the galleries which link the inner facade and these columns, set a compositional pattern and give proportion to the vertical lines of the windows, doors, columns, pilasters and solids, while the inner facade is treated as an urban facade with the same prefabricated stone panels. The horizontal lines resulting from the change a base of two stories with a simple order of columns above, extending around the whole building and ending in a frieze under the copper roof.

The technology of the prefabrication systems has its own rules, particularly for joints, relief work and reproduction of pieces while saving on matrices; although the rest of the building is traditional, it was thought that it might be possible to achieve some small progress in building technology if a system were used which had been previously approved by competent local builders, rather than run the risk of bringing in technology from outside, with all the attendant problems of additional costs and know-how.

An attempt was made to keep the materials as simple and pure as possible, but the volume of work requires a high return, and thus higher costs. Prefabricated stone of the light sandy color of Monjuïc was contrasted with lacquered aluminium elements and smoked glass surfaces which reflect sunlight. All the terraces and staircases are paved with slabs of artificial stone. The interiors consist of varnished wood parquet, sheets of cork or ceramic. The interior walls are of plaster, wood or covered in fabric.

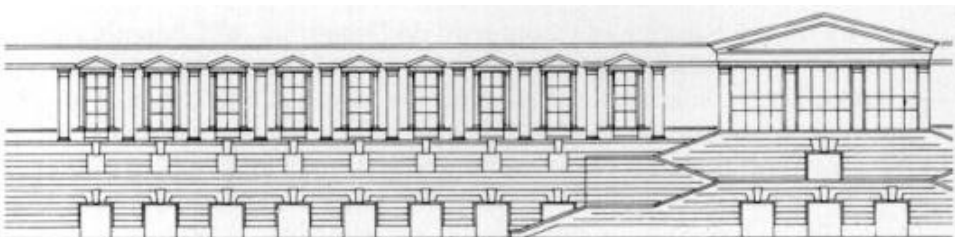
All flat ceilings consist of light acoustic panels, sand and arranged in a modular system in alternation with glass and natural light diffusers, aside from all the additional connections behind specially designed lacquered aluminium screens.

The outdoor playing courts are laid out as a continuation of the volume of the building and are part of the same geometry. They consist of a large central grass field, with the sides formed by two small tree-shaded parking lots, in addition to hard courts for tennis and hockey. All these areas are on an elevated platform of earth surrounded by a fence planted with Mediterranean trees.

In spite of the building's large volume, it has been designed in such a way as to fit into the general context of the hill and its gardens, so that it appears to have been part of the landscape for a long time, while at the same time the architects attempted to have it give the impression of a decidedly modern building within the minimalist classical tradition.

*P. H.*

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*The buildings is decidedly modern within the minimalist classical tradition.*