

# THE ALFREDO KRAUS AUDITORIUM IN LAS PALMAS ON THE GRAND CANARY ISLAND

### OSCAR TUSQUETS

### THE BUILDING IN THE LANDSCAPE

A building of unique dimensions and features located at the western tip of the Las Canteras beach creates, as it is viewed from the entire northern edge of the city, a major visual impact due to its comprising the crowning touch on one of the views of this city against the backdrop of the ocean.

On its also being located far from any man-made structures, it takes on the appearance of an isolated structure standing alone unto itself which has little to do with the architectural context in the vicinity. To the contrary, its being built into the landscape aids in interpreting this building as a highly powerful object which has been located on this spot, pursuing, on one hand, the alignment of the eye with Mesa y López Avenue and, on the other, the direction in which it faces, which provides the finest of backdrops. A major sculptural aspect marks the exact point at which the axis of the building meets the axis of said avenue.

As a castle-like building must give the appearance of being as tall as possible, any idea of a basement is ruled out right from the beginning, and the lowest floor sits on a volcanic rock foundation. This fortress image is heightened throughout not solely by means of the materials employed to finish the exterior. but as a result of its volumetric aspects proper, originally comprised of the hexagonal shape of the main hall to which other geometric sections are added on either side to reinforce and add to its complexity with the major shadows, affording it with a its weighty, compact appearance. These attached structures house services for the audience and artists on the larger sides and the extension of the stage and the entrance to the smaller ones. The glass roof covering the fover at the entrance is accessible from the sides, as a result of which, whilst respecting the symmetry, it adapts to the anticipated flow of pedestrians.

The feeling of height of this complex as a whole is reinforced, in turn, by the tower components which, warranted by their interior placement, are also exaggerated to jut skyward to the utmost. The spacious skylight, translucent at the sides, crowns the top of the building, serving the opposite purpose after dark, when it takes on the appearance from any distant vantage point of being a huge lighthouse sitting on the edge, cast in shadow, of the rocky mass.

Only two materials comprise a break with the texture and color of the masonry: the stainless steel on the finished edge of the hexagon and on the lighthouse dome, and the local wood comprising the large glass roof at the entrance.

Towers, large masonry walls, a splash of square windows, all built on a rock foundation, upholds the initial fortress idea, additionally conceived to be positioned on a landscaped surface, such as a dune garden of volcanic rock craters sheltering the vegetation from the battering winds of the sea like the farmers on these islands have been doing for centuries, only that here, they are not circular but in triangles pointing out to sea.

As regards this park which serves as the crowning touch on the Las Canteras boardwalk, a sphere segment alludes to the strategic geographical location of the Canary Islands and indicates the direction and the distance at which the major Atlantic ports on the five continents are located.

### THE AUDITORIUM

The seating for 1700 which has been requested is large-scale for a symphony concert hall go, as a result of which we must seat the largest possible portion of the audience near the stage (above all, if we bear in mind that we prefer not to resort to overhanging balconies, as we shall be discussed at a further point herein). This intention would lead us to seat the audience all around the orchestra, as Scharoun did so wonderfully in Berlin or, in another regard, as did García de Paredes in Granada.

With regard to the case at hand, we ruled out this interesting alternative for two reasons. One is that the use of the auditorium does not lend itself well to this scheme, and the other is born out of the exceptional site on which this auditorium sits.

In fact, this juttingly-angled bow which plunges into the foamy Atlantic, which breaks with the neighboring reef, seems to us so extraordinary that the auditorium must in some way take it into account.

We know of no other large auditorium in the world which avails of this possibility. Therefore, in is our desire to capitalize upon these differences, we have designed a heretofore unprecedented backdrop on opening up a huge window overlooking the sea. This opening must be designed taking into consideration the problems of soundproofing, but this extra effort is well worth the result achieved.

Evidently, the backdrop proposed is incompatible with the audience being seated behind the orchestra, as a result of which we have adopted a fan-shaped plan view layout. The acoustic difficulties which come to fore in a large auditorium shaped like this is the loss of resonance off the side walls. This has customarily led to incorporating sound reflectors hanging from the ceiling, the appearance of which has given rise to more than one criticism as to the aesthetics thereof in some auditoriums. In our case, nevertheless, we shall achieve similar resonances on having designed the audience row seating into major vertical intervals. If we distribute groups of seats into consecutive terraces, walls capable of providing the initial resonance which we cannot entrust solely to the outer walls will thus be provided. This effect has been successfully employed by professor Cremer in other concert halls, the most famous of which is the Berlin Philharmonic Hall. Additionally, this arrangement into wellmarked levels, such as those created for planting vineyards on a mountainside, affords the audience with the possibility of widelyvaried vantage points for viewing the stage without dividing it into good and bad areas (parquet, balcony and general admission). One further advantage is that on not looking down over the lower rows, the feeling from the upper seats is that of being quite near the orchestra, and if the hall is not full, the effect is much less lackluster on not overlooking all of the seats.

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To reinforce the resonance achieved by means of the different levels located in between, we have designed large niches in the side walls, inside which reflectors are located which will afford the possibility of focusing the sound waves in the best direction for listening without compromising the visual order of the exterior.

Lastly, a sort of baldachin which juts out from above the large window to afford the possibility of affixing reflecting plates over the orchestra whilst also installing lighting apparatuses or hanging simple scenery.

The design of the inside pane of the window guarantees the desirable acoustic mix among the different instruments and affords the musicians proper with the possibility of hearing the orchestra well.

## ENTRANCE AREAS

Another advantage to be taken of the site on which this auditorium stands is the exceptional climate of these islands. The pleasant temperatures enjoyed year round have led us to confine the pumping in of cool air to the two necessarily sealed halls: the main hall and the multipurpose hall.

For other outbuildings on the lower levels, simply forced air ventilation has been planned. In all walking and lounge areas, the ventilation will be exclusively natural by way of doors and windows in some areas and by making others completely open.

This is, in the case of the entrance foyer, a spacious roofed area but open like so many others to be found in the traditional architecture in these temperate zones. Not closing in this area has allowed us to connect it with the emergency exit stairs and the entrance to the upper seats. According to current regulations, these stairs must be walled off into an independent fire sector, as a result of which, they are made, generally speaking, depressing passageways separated visually and acoustically from the foyer as a whole. Our two flights of steps, facing one another from either side of the entrance area, will in no way be reminiscent of the customary dreariness of fire escapes.

# ACOUSTICS SURVEY

The overall planning as regards acoustics in the main hall is based on the fundamental aspects of the different reports by Professor Lothar Cremer.

For the main hall, a reverberation time for the mean frequencies of nearly two seconds has been anticipated, which is ideal for playing symphonic music, but not very suitable for the opera or for theater performances, as a result of which we reiterate the fact that it would be advisable for Las Palmas to keep and modernize the Pérez Galdós theater, which is perfect for this type of performances.

For holding congresses, ballet performances or shows involving recorded music, electroacoustic and adjustable acoustic components will be employed, which will reduce the reverberation time, suiting it to these functions.

The volume per person is 10.6 m3.

The average area per person is 0.72 m2.

The orchestra can be laid out on a horizontal plane or graded slightly according to the conductor's requirements. The retractable slopes vanish beneath the chorus level. The chorus is laid out on a grade in front of the stained glass window. To achieve the proper absorption of the wind and percussion instruments, Professor Cremer recommends that the audience customarily comprised of students and members of musical association be seated in these rows for certain concerts.

In the rehearsal room, the reverberation time will vary according to the degree to which the room is filled. It will near that of a large auditorium when exclusively the chorus or the orchestra is practicing and will be noticeably less when the hall is filled with over 300 spectators, which will make it suitable for film viewing, lectures or chamber music.

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CONSTRUCTION FIRM: Dragados, Civil Work, facilities and furnishings, Iris Neón, Sign Lighting, Houses, Main Hall Seats, designed by Oscar Tusquets

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PHOTOS: Rafael Vargas, Andrés Solana



# INHABITING A ROCK

## JUAN BORDES

A building is firstly landscape. Reversible geology carved away revealing a latent geometry to crack open and turn inside out. It is a unique rock. And like those among which it rests, it is anxious to harbour the thronging life in its surroundings. Hence, the boldest and strongest, the pioneers, climb up to take the strategic vantage points: the octopuses lick the edges, the crabs select their holes and the "caboso" fish swim in their little puddles. But as yet parched by seaweed and crustaceans, the building harpoons a scorpion fish and brandishes it held high as one last gesture of intruding power, just before being engulfed by the landscape.

Theater on the sea. The theater of the sea. Juan - Néstor on Las Canteras beach. Three premises for a decorative scheme with a geographical, functional and historical aim. On the exterior the "caboso" (the tiny inhabitant of the puddles on the beach with the descriptions of any ancient mariner might have turned into a man-eating monster, keeps watch), the scorpion fish ( which, harpooned, splashes the sky with geometrics), and