

Theater and Community:
An architectural language for social integration.

by
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Submitted to the Department of Architecture
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"Theater is necessarily political,
because all the activities of man are political
and theater is one of them."

Augusto Boal

Theater and Community:

An Architectural Language for Social Integration

By: Ernesto F. Rodriguez

Thesis Supervisor: Maurice Smith

Title: Senior Design Faculty

Submitted to the Department of Architecture on January 12, 1996 in partial fulfillment of the requirements for the degree of Master of Architecture.

Abstract:

The experimentation with an alternative form of theater, which questioned the traditional dramatic heritage, emerged in Puerto Rico during the second half of the 1960's. This new form of theater, known as Experimental Theater, searched for a new aesthetic language rooted in the use of the human body as an instrument of expression. At the same time, the companies and groups - composed mostly of college students - working with this kind of theater had a well-defined social, cultural and political agenda, which was clearly reflected in the nature of their performances.

The tradition of the Puerto Rican Experimental Theater has survived until today. It has experienced a change in its social and political approaches, which now are focused in the reinforcement of the Puerto Rican culture and the searching for the definition of a contemporary national identity. This idea of contemporary national identity presumes the breaking with the traditional system of dramatic representation used in the classical theater as well as in the early models of theatrical experimentation.

New groups work with new codes of national representation detached from conventional cannon, creating a vibrant and contested imagery.

In this line of work, the Puerto Rican group *Teatros de Cayey*, directed by the theater professor Rosa Luisa Márquez and the Puerto Rican artist Antonio Martorell present a paradigm in and of themselves. Márquez and Martorell propose a work based on a theatrical dialogue between dramatic text and pictorial image. At the same time their work has focused on its interaction with low income communities as well as with school and elderly hospitals and institutions. Their work is based in the assumption that people don't have to be actors to make theater and that theater can be used as a community tool in order to produce social transformations.

My thesis proposes a design for a new performing space in the metropolitan area of San Juan, Puerto Rico. The space will be conceived as a structure shared by the existing low-income community of Piñones and Márquez and Martorell's theater company. This marriage seeks to break the wall that exist between the theater community and the low-income communities that these companies work with. The selection of appropriate building systems and their deployment within the landscape will respond to the different aspects that define Márquez and Martorell's theater company. At the same time the design will stimulate interaction between outside professional theater groups and inside community theater.

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I greatly appreciate the support and dedication I received from my thesis committee: Maurice Smith, Fernando Domeyko and Dimitris Antonakakis. In particular from my professor and friend Maurice Smith and his endless hours of conversation and criticism, the best one I have found at M.I.T.

My gratitude to my fellow students for their company and support. In particular to the ones who play a protagonist role during the performance of this work. To Erik Mar, Winston Lim, Alberto Cabré, Charlotte Williams, Amin Amad, Michael Reed, Chris Nutter and Mayra Cabré.

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Finally, I will like to dedicate this building to Susana Matos and Lolita Villanua for their solidarity and love. To my family and hers and to my theater friends, the ones who are not in Puerto Rico and the ones who will never leave.

Ernesto Rodríguez, January 1996

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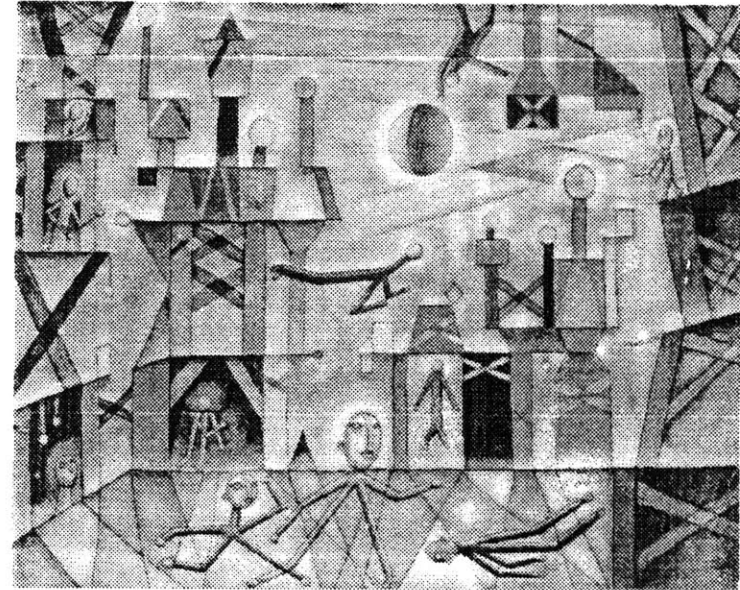


fig. 2 Xul Solar, *Teatro*, 1924.

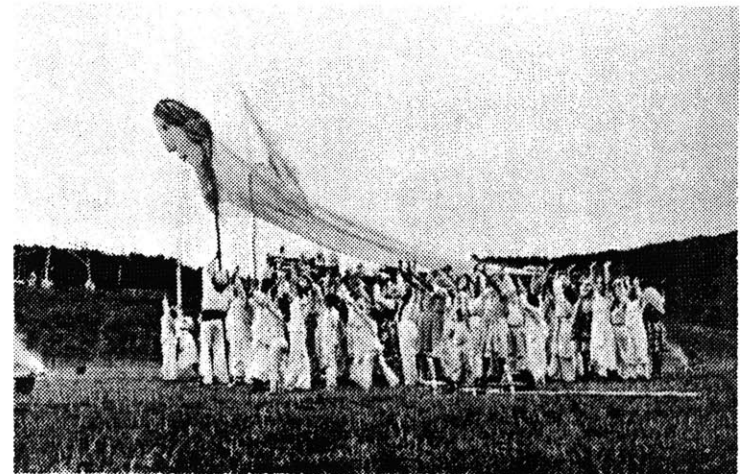


fig. 3 The Bread and Puppet Theater
Washerwoman Nativity, 1979.

Theater and Community:

An Architectural Language for Social Integration

Thesis proposal by Ernesto F. Rodríguez
Fall -1995

Introduction:

A theater group with a social agenda.

“If someone is placed at noon on an empty beach I’m not sure whether this is inspiring from a theatrical point of view. The world - and all its aspects great and small - has to appear within this void. Limits would have to be drawn up on such a beach to make possible the idea of infinity. Infinity only exist when bounded by limits; the galaxy is not theatrical.”

Ariane Mnouchkine

The experimentation with an alternative form of theater, which questioned the traditional dramatic heritage, surged in Puerto Rico during the second half of the 1960's. This new form of theater was known as Experimental Theater. It searched for a new aesthetic language rooted in the use of the human body as an instrument of expression. At the same time, the work of companies and groups, which worked with this kind of theater -- mostly college students -- had a well-defined social, cultural and political agenda, which was clearly reflected in the nature of their performances. The tradition of the Puerto Rican Experimental Theater has survived until today.



fig. 4 The Teatros de Cayey Theater Group
Fotoestática, Rio de Janeiro, Brazil, 1993.



fig. 5 Cultural Center, Banco do Brasil
Rio de Janeiro, Brazil, 1993.

It has experienced a change in its social and political approaches, which now are focused in the reinforcement of the Puerto Rican culture and the searching for the definition of a contemporary national identity. This idea of contemporary national identity presumes the breaking with the traditional system of dramatic representation used in the classical theater as well as in the early models of theatrical experimentation. New groups work with new codes of national representation detached from conventional cannon, creating a vibrant and contested imagery.

In this line of work, the Puerto Rican group *Teatros de Cayey*, directed by the theater professor Rosa Luisa Márquez and the Puerto Rican artist Antonio Martorell present a paradigm in and of themselves. Márquez and Martorell propose a work based on a theatrical dialogue between dramatic text and pictorial image. At the same time their work has focused on its interaction with low income communities as well as school and elderly hospitals and institutions. Their work is based in the assumption that people don't have to be actors to make theater and that theater can be used as a community tool in order to produce social transformations. As part of the same discourse the work and writings of the Brazilian theater director Augusto Boal and his "Theater of the Oppressed" as well as Peter Shumann's Bread and Puppet Theater have been of important influence in the *Teatros de Cayey* theatrical proposal.



fig. 6 The Bread and Puppet Theater
Nuclear Freeze Demonstration
N.Y. City, June 12, 1982.

Marquez and Martorell's theater group performs a theater characterized by a strong contact with the landscape, the creation of costumes out of nature, the use of gigantic colorful masks, the organization of outside processions to attract public and the invention of theatrical games and public workshops to incorporate theater to the daily life of low income communities.

Even though Puerto Rican Experimental Theater has been on stage for almost 30 years only few companies has had a permanent working space. Generally Experimental Theater companies and groups function in a nomadic fashion improvising alternative settings and stages for their performances or asking for help to the academic institutions around the island.

As a response to this phenomenon and recognizing the present necessities among those groups my thesis propose the design and construction of a new performing space in the metropolitan area of San Juan, Puerto Rico. The space will be conceived as a structure sheared by the existing low-income community of Piñones and Marquez and Martorell's theater company. This marriage seeks to break the wall that exist between the theater community and the low-income communities that these companies work with. The project will attempt to stimulate interaction between outside professional theater groups and inside community theater. As an ideal condition the thesis proposes the participation of both communities in the actual construction of the place.



fig. 7 The Bread and Puppet Theater
The Stations of the Cross.

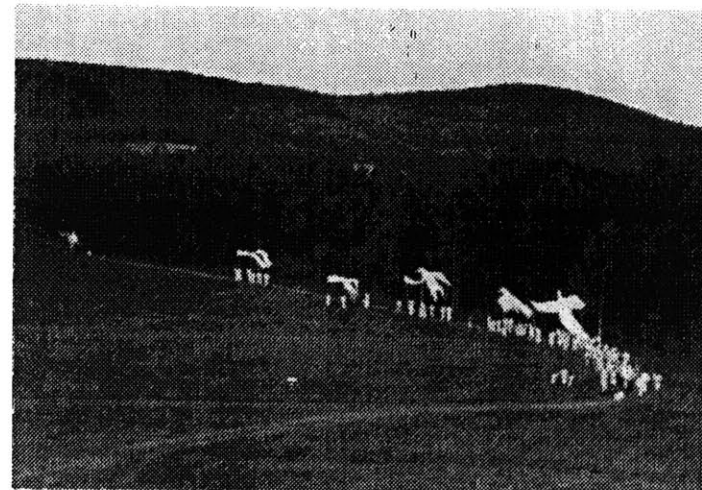


fig. 8 The Bread and Puppet Theater
Circus, 1979, the pageant.



fig. 9 The Bread and Puppet Theater
Fifth Avenue Peace Parade, March 26, 1966.

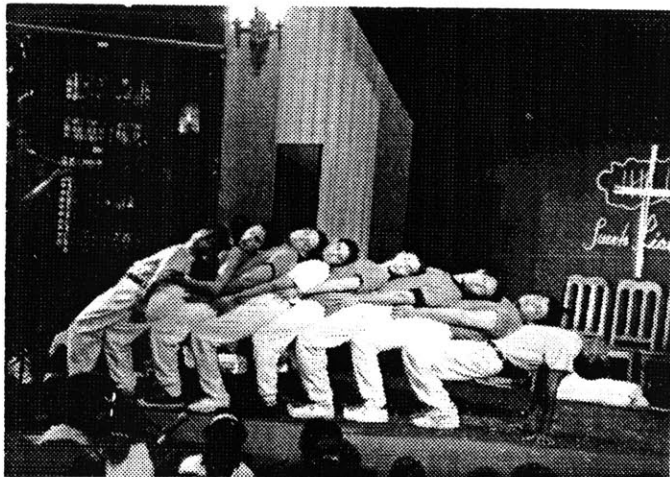


fig. 10 The Teatreros de Cayey Theater Group
El Sida, Rio de Janeiro, Brazil, 1993.

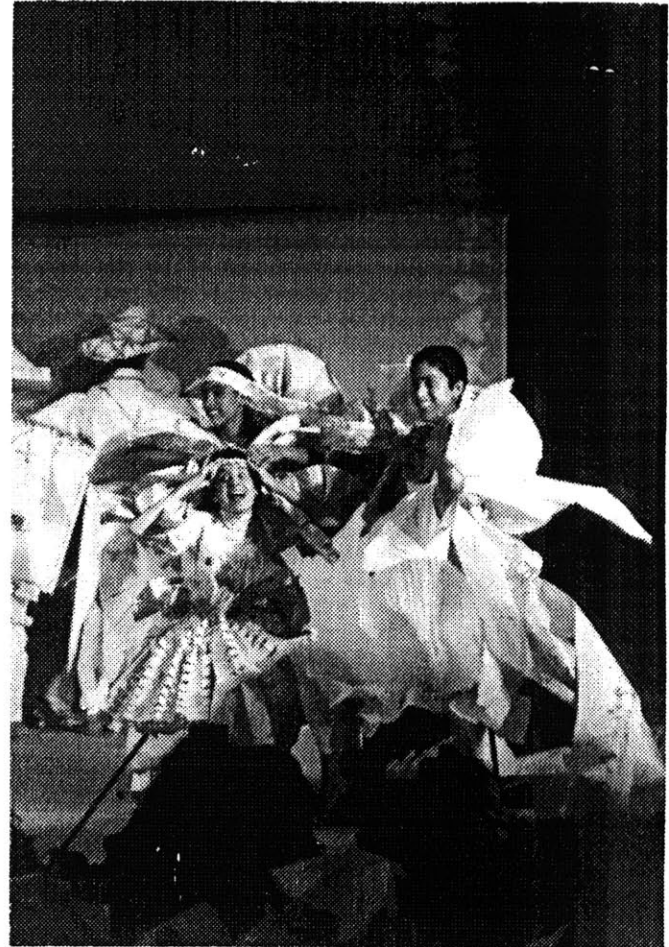


fig. 11 The Teatreros de Cayey Theater Group
Fotoestática, Rio de Janeiro, Brazil, 1993.

The Community :

The community of Piñones is located in the north coast of the metropolitan area of San Juan, Puerto Rico. Its built environment consist of detached single family houses grouped in two recognizable neighborhoods along the principal road, which runs parallel to the coast line. La Torre, the larger one, is the first neighborhood we encounter when coming from the city of San Juan. It has grown during the last 30 years at both sides of the road showing a defined organization base on use zones.

The first zone is the commercial one defined by its characteristic restaurants, bars and night clubs which covers the first section of the enclave at both sides of the road. The second zone is a small residential one which includes the administration offices of the community, the community center, the police department and the road intersection that gives access to a larger inland residential enclave -the third zone - at the south side of the main road. The forth zone is characterized by the beach activity as well as small commercial activity associated with it. This zone is specially populated during the weekends and holidays with local and visiting families.



fig. 12 Community theater



fig. 13 Mask Maker, Ponce, P.R.

The Site:

The site selected for the thesis is located right at the pivot point between the end of the second zone and the beginning of the fourth one, at the north side of the road facing the ocean. This site is characteristic because of the houses that surround it, which were built by families with no ownership of the land. These families have been living there for more than 20 years. However, in the last 4 years this community has been threatened by tourist hotel expansionism and by the government of Puerto Rico which claims the ownership of the land.

To build a large public building on this site will help to consolidate the community territory in a more cohesive and permanent built environment. At the same time the programmatic aspects of the project will provide the community with a new forum for collective dialog and participation. Furthermore the location and shape of the building helps on one hand to define the physical boundary of the community and on the other promotes the interaction with the public beach activities.

The design strategy is the deployment of the different selected architectural systems throughout the site in a coherent fashion regulated by existing and proposed dimensional stability.

The dimensional stability is obtained by repeating specific dimensions in the outside and inside of the building. This principle helps to ensure the reading of a physical continuity reinforcing the exchange connection between landscape and building.

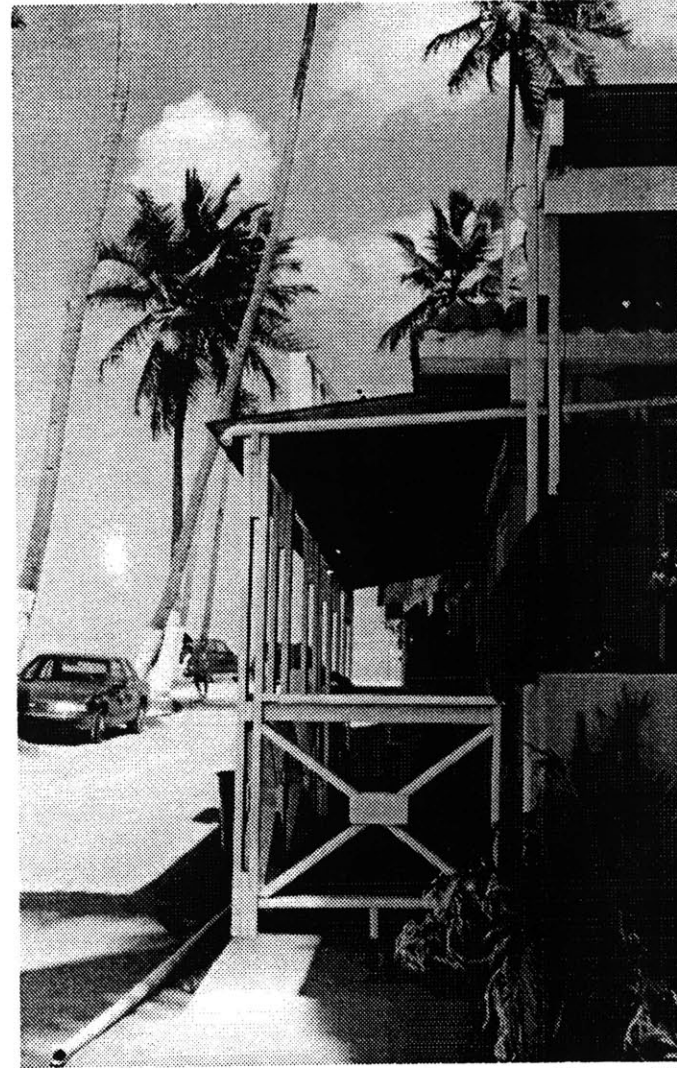


fig. 14 Bar/Restaurant, Piñones, P.R.

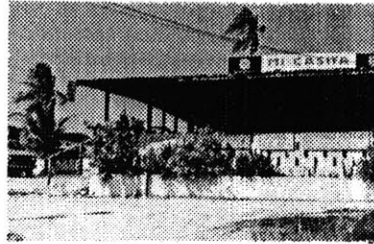


fig. 15, 16, 17
Commercial Zone
Piñones, P.R.

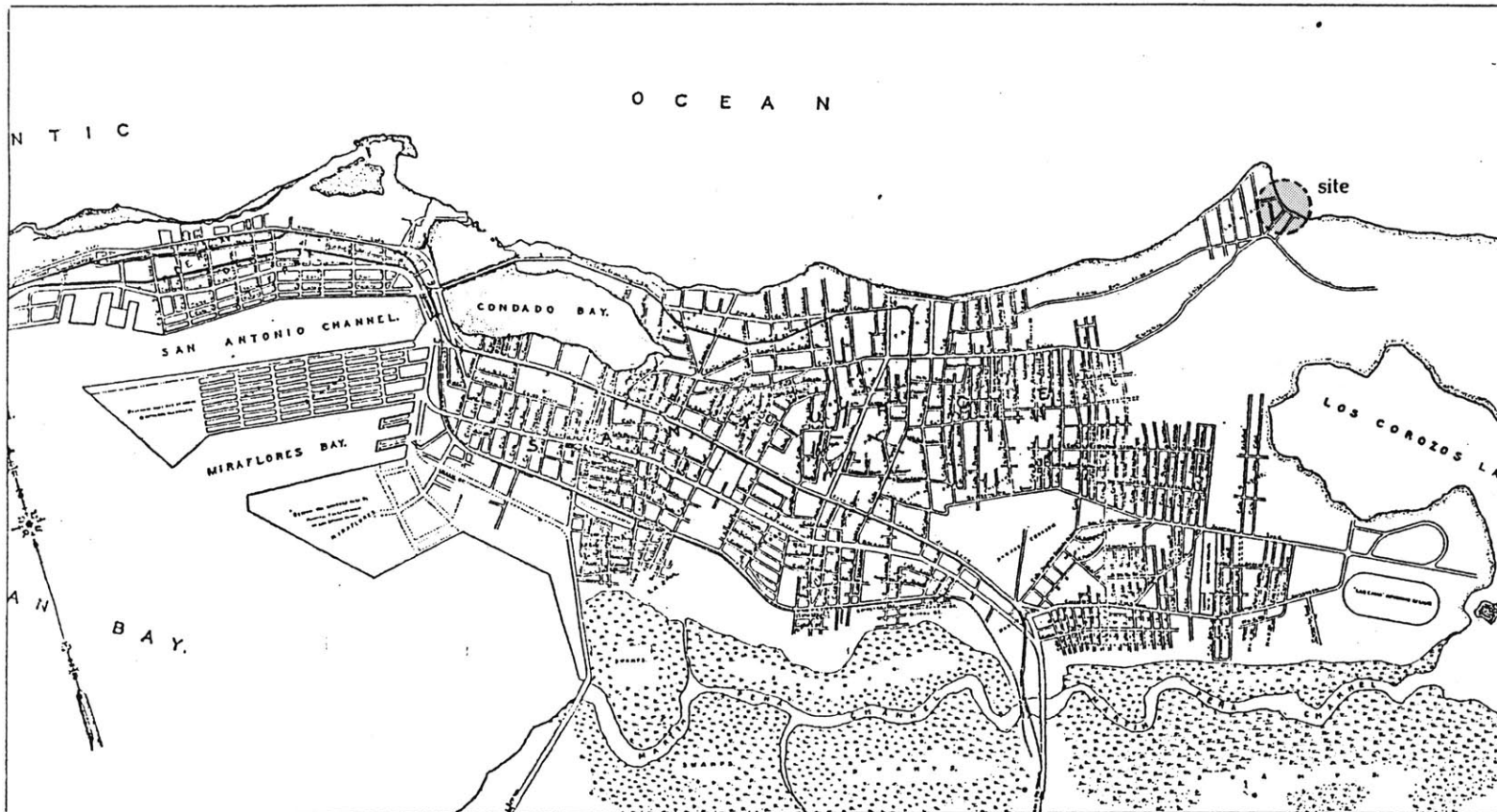


fig. 18 Metropolitan Area, San Juan , P.R. (site location).



fig. 19, 20, 21
Beach Commercial Structures
Piñones, P.R.

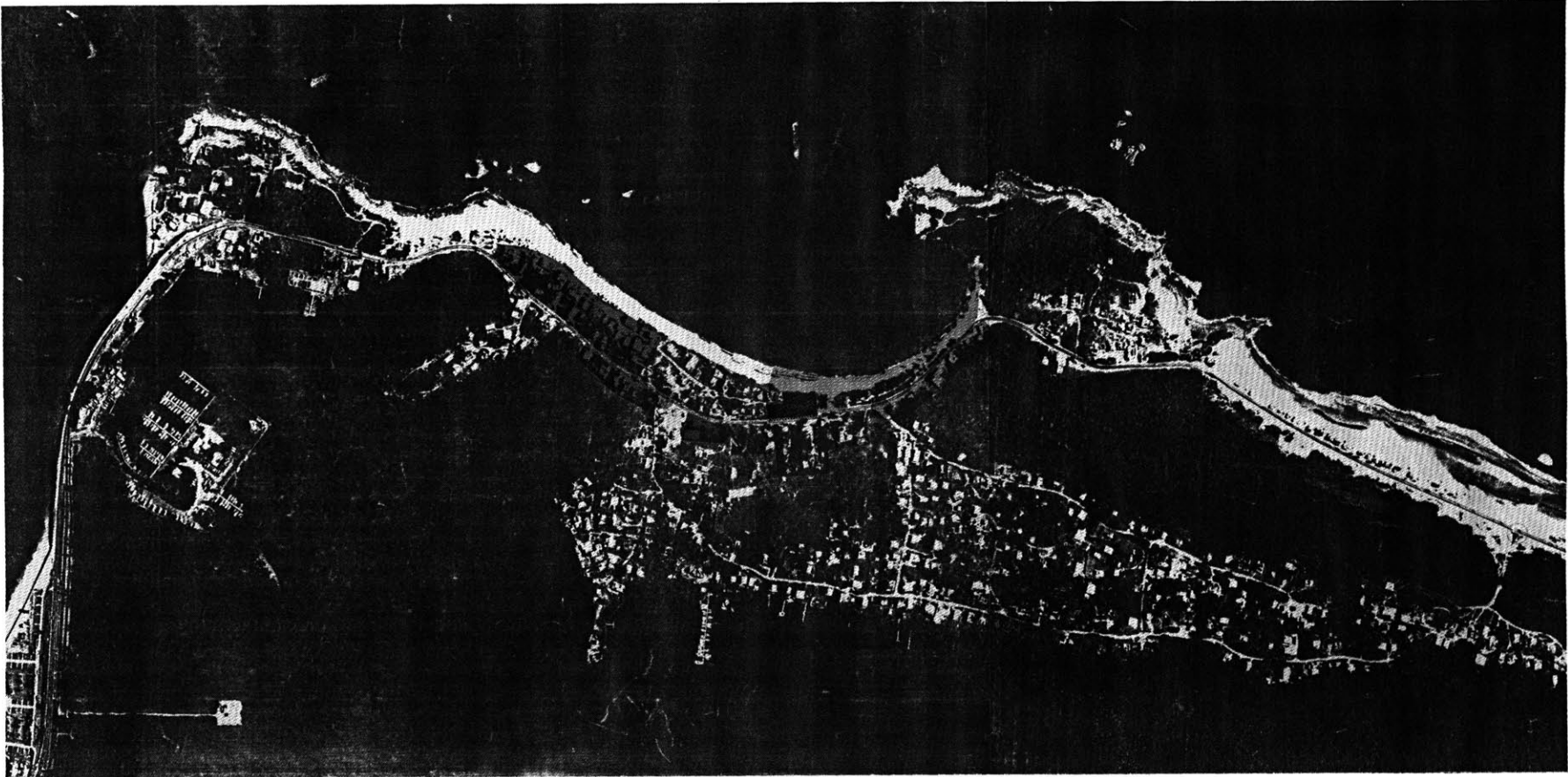


fig. 22 North Coast, Piñones, P.R. (site location)

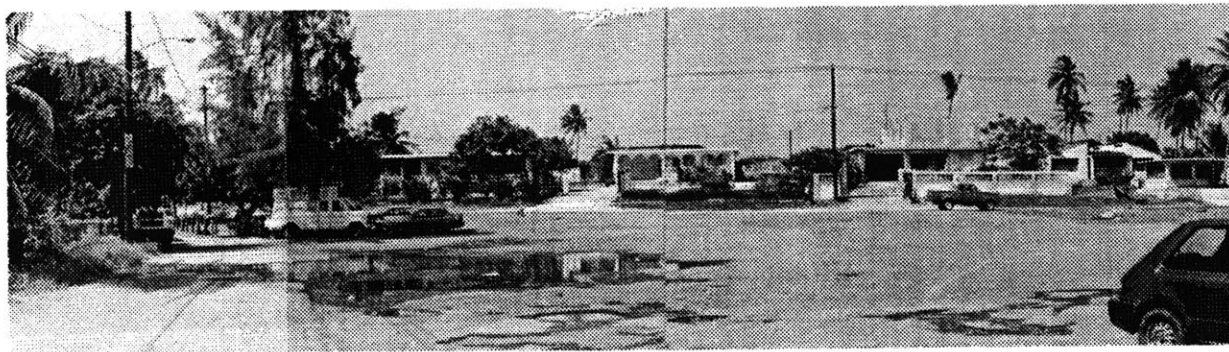
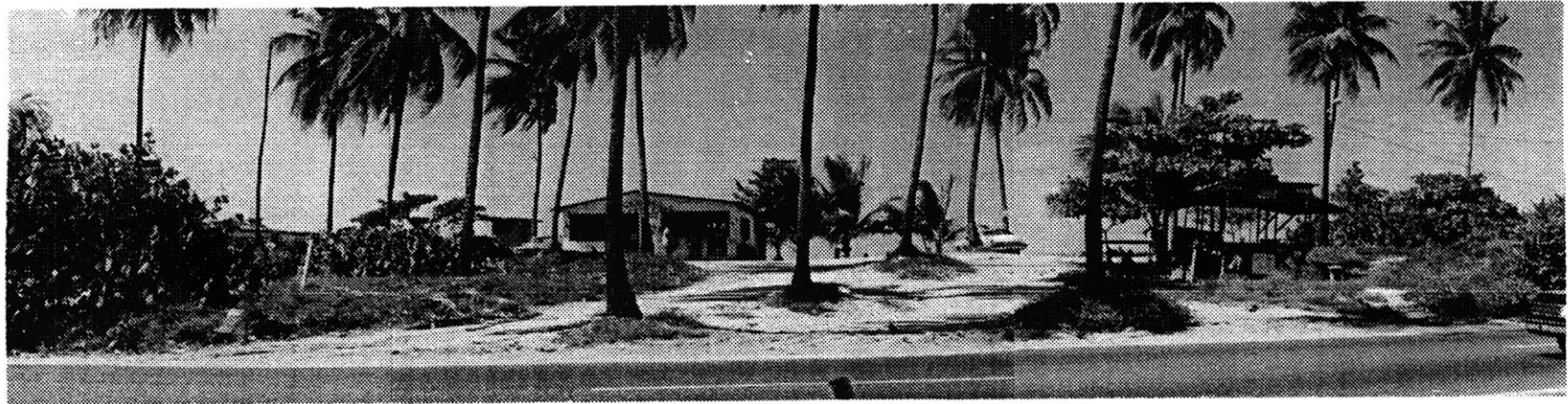
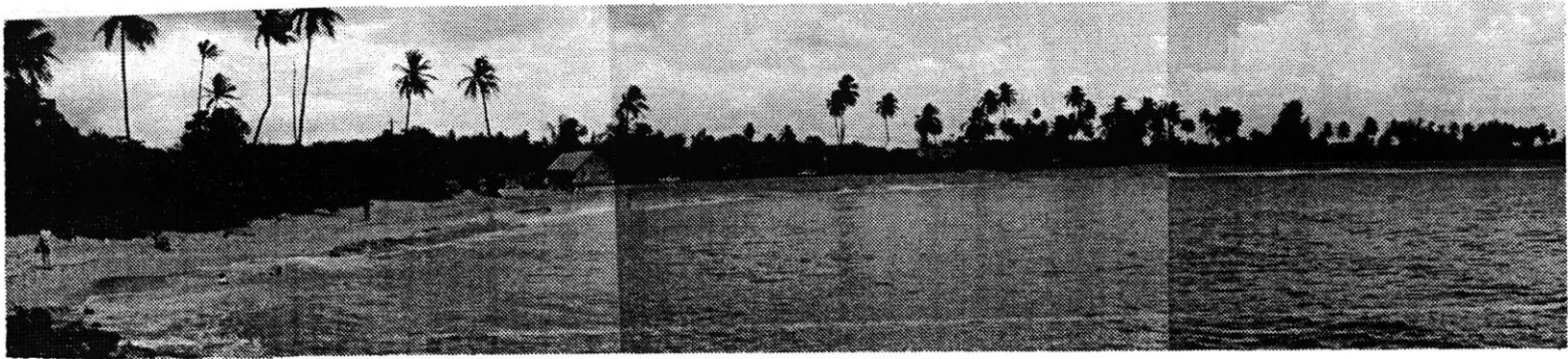


fig. 23, 24 , 25 Site Views



fig. 26, 27, 28
Commercial Zone
Piñones, P.R.

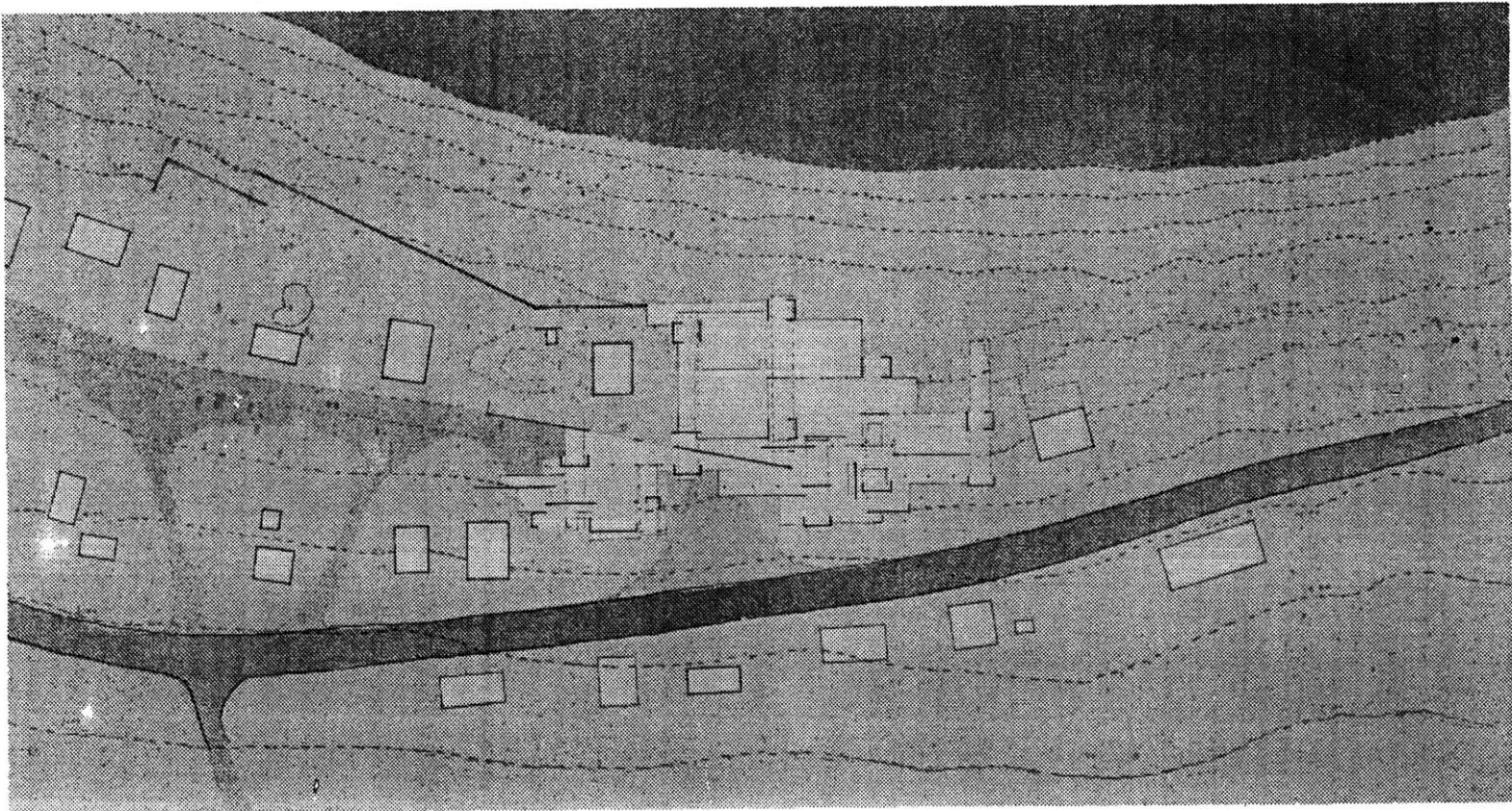


fig. 29 Site Plan



fig. 30, 31, 32
Residential Structures near site
Piñones, P.R.

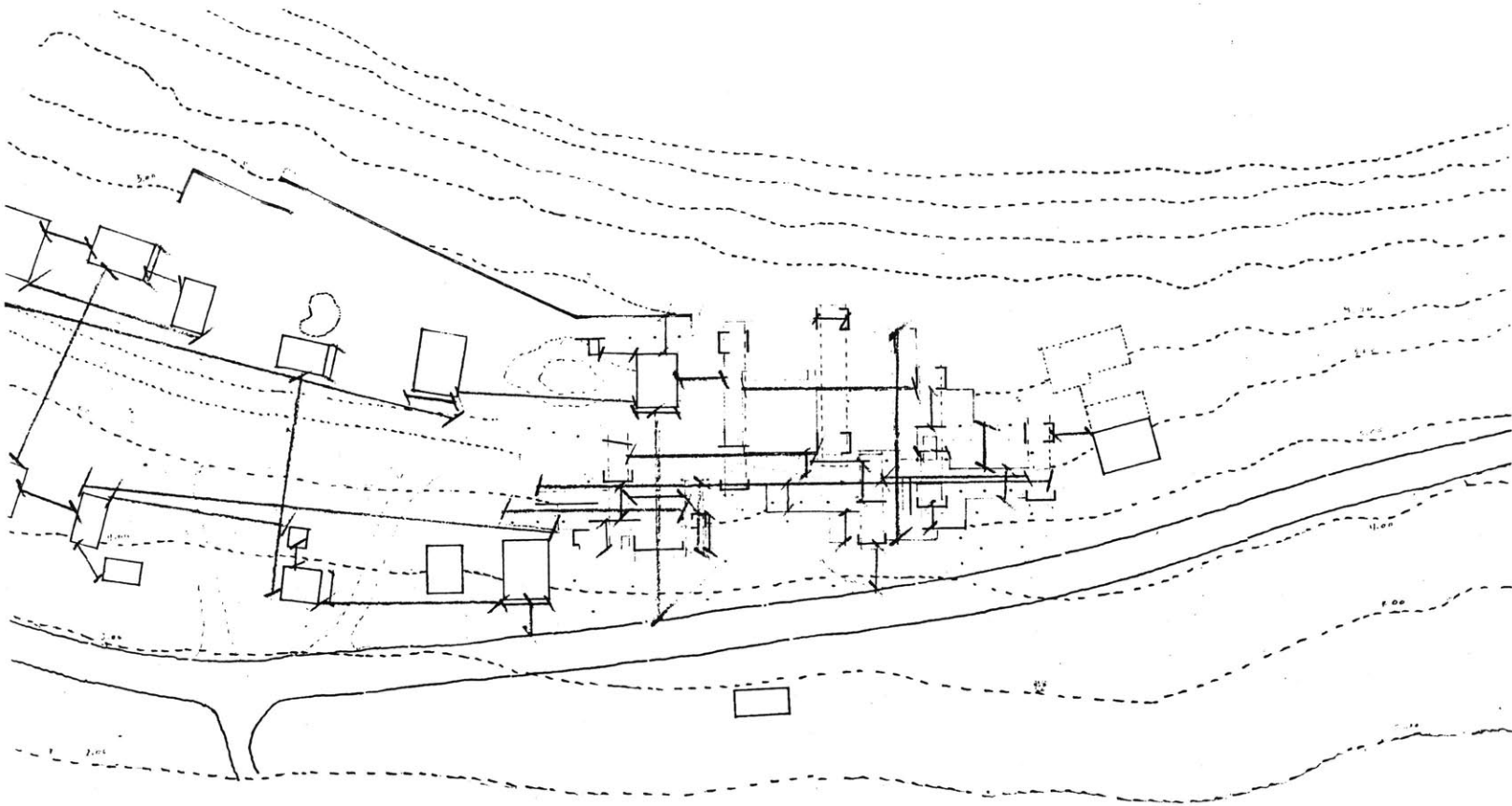


fig. 33 Dimensional Stability Diagram

Natural Forces of the Site:

Another reading of the site can be made by analyzing what I have called natural forces. Natural forces are the intrinsic conditions of the site that can generate a phenomenological dialectic relationship between nature and the architectural object. Examples of these forces are the movement of the sun, the movement of the wind and its changes during the day, the lower and higher tides and the recognition of the presence of the ocean, the possibility of ocean storms in the area, the topographic conditions, the quality of the ground surface, the sand, etc.

The introduction of an architectural object into a natural environment should recognize the presence of these forces and help to reveal them as part of the phenomenological experience of the visitor. It is there the only moment in which we can talk about an integration between nature and built realms. It is like setting the stage for a play by virtue of the contrast between the actors and the backdrop.

In this project the natural forces are revealed by the selection of the architectural systems, their deployment through the site and the territories they occupy. The building is divided in two zones defined by a seven feet deep change in level. This change in level runs the whole length of the building extending out as a big retaining wall which defines the boundaries of the community and the beach public realm.

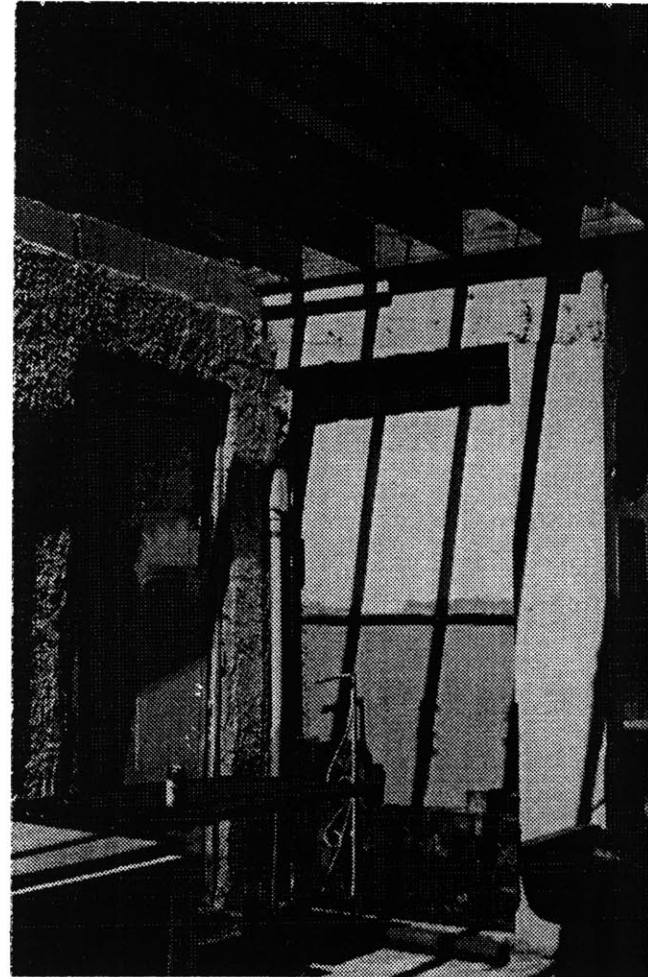


fig. 34 Existing structure
(sun light conditions)

The first zone, the one towards the beach, talks about the continuity of the landscape inside the building while four floating inhabited trusses span, perpendicularly to the coast line, the performing areas. This trusses rest over round pier-like supports which reveal the possibility of the ocean invading the interior of the building -in case of a storm- up to the seven feet high retaining wall.

The second zone starts after the retaining wall and takes the form of a series of walls which reinforce the direction of the landscape while at the same time remembers a breakwater construction. This zone protects the road from the potential presence of the ocean and gives acoustical protection to the performing area from the road. The walls which runs in a east-west direction help to channel the east winds of the coast maintaining the building well ventilated in the more enclosed areas. The area of the directional walls together with the beam system which roofs it creates an interesting effect of lights and shadows that reveals the movement of the sun during the day.

An interesting analysis of the project at this point of the discussion is to imagine the building as a ruin. The ruin of a concrete building shows the intrinsic qualities and performance of the primary architectural systems and preserve its success revealing the natural forces of the site.

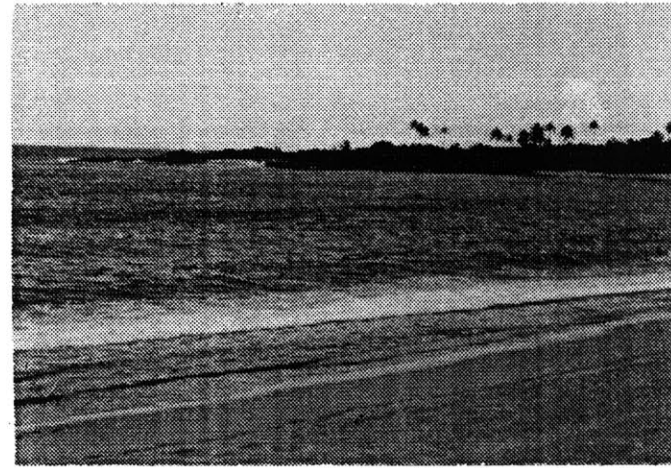


fig. 34 "The Force of the Ties"

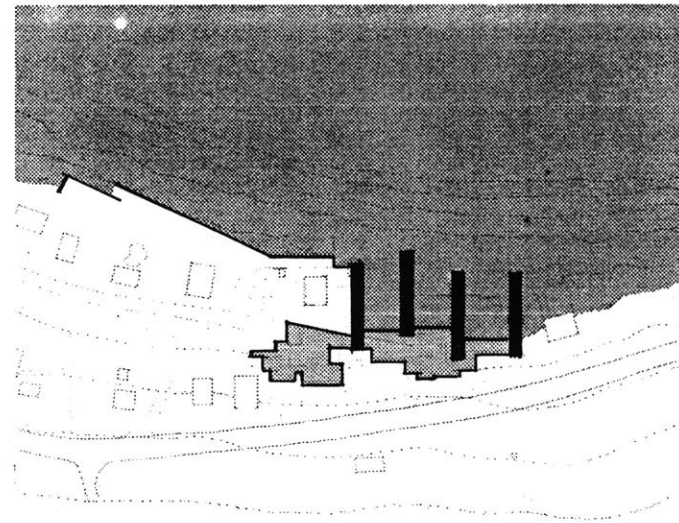


fig. 35 Site Natural Forces Diagram.

Design Strategies:

“ The Cartoucherie is the opposite of the black-box - the famous multi-purpose technical box which is in fact bristles with limitations. A few years ago, directors were saying: “give us a neutral space and we’ll handle the rest! “ I’m not sure if they’d still say the same thing today. I say an empty space, but an inspiring empty space that can be filled with images.”

Ariane Mnouchkine

The design will be informed by the different aspects that define the Puerto Rican Experimental Theater as an artistic and social phenomenon as well as the community aspirations.

-The building systems are deployed in an intimate relationship with the landscape. Allowing the crossing of the actors from a built environment to a nature one without visual or physical obstacles.

-The built qualities of the performance space allow for spatial transformations that can inform the different theatrical pieces. The dialectic relationship between the physical characteristics of the space and the actor’s creation process constitutes an important facet of this kind of theater.

- The use of natural light will be as important as the artificial one. The architectural object will allow for light manipulation for dramatic purposes.

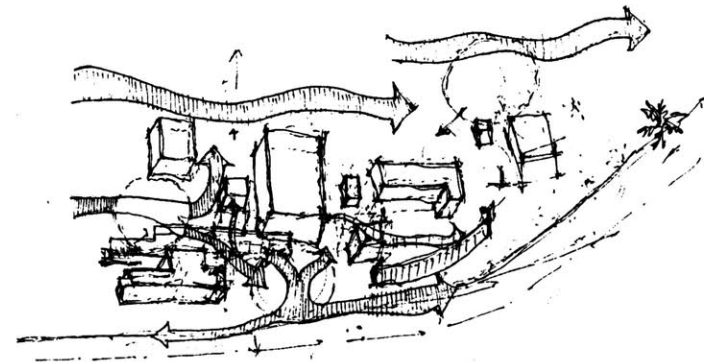


fig. 36 Site Movement Diagram.

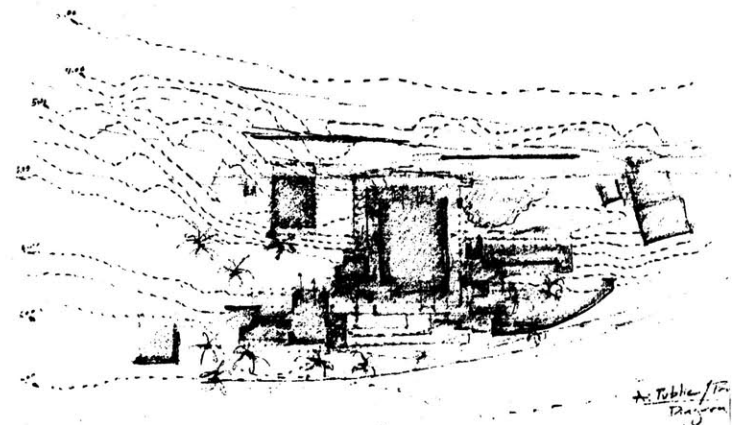


fig. 37 Open Field Deployment.

-The transformation of the performance space in terms of scale, capacity and the relationship actor-spectator.

-The creation of an architectural environment with regional characteristics capable of dealing with issues of architectural and cultural identity. The use of local materials in an innovative fashion, as well as the control of the climatic and luminescent natural environment are important factors in achieving this goal.

The Performing Space:

-The performing space was not conceived as a platonic box. If it was clear that the group aspirations were to have a transformable performance space, it was also clear that the black-box theater model has inherited problems. Analyzing existing black-box theater examples it's obvious how the architectural experience is sacrificed in the name of technological performance of the space. The new design seeks to break the rigidity of the box introducing three new variables:

1. The permeability of the enclosure of the performing space in terms of light and ventilation.
2. The permeability of the space at the ground floor in terms of the manipulations of the exchange zones between inside and outside space.
3. The breaking of the single volume of the box in different pieces that allows an exchange with the rest of the building and the singularities of the surrounding landscape.



fig. 38 Regional Architecture
Truss and screens systems.

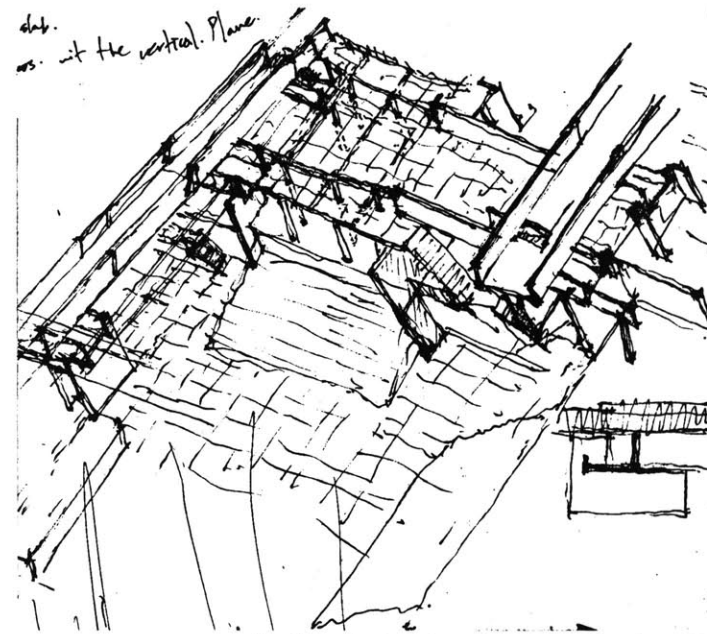


fig. 39 Performing Space (early sketch).

Architectural Systems:

-The final physical form results from the intensification of the different architectural systems which inform the design as a whole. Different elements of the same systems were formally transformed according to their localization on the landscape or inside the building. At the same time transformations were made in order to achieve a degree of structural integrity. The architectural systems are:

1. Continuos Surface: The continuous surface is the totality of the cast in place concrete that defines the ground boundaries of the building. The intention was to create a continuous plane which moves smoothly through the building creating changes in level as well as surface exchanges and reciprocities with the landscape.

2. Directional Cast in Place Concrete Walls: The directional walls is the system that defines the south facade of the building and at the same time, it establish the main direction of the building running east/west, parallel to the topography of the site. The deployment of the wall system in this fashion allows cross ventilation and serves as a buffer zone for the theater space from the road. The directional walls bearing nature varies depending on its location. The walls can be single or double loaded bearing as well as high or low retaining walls. This wall system can be read as a transformation and/or extension of the continuous surface system.

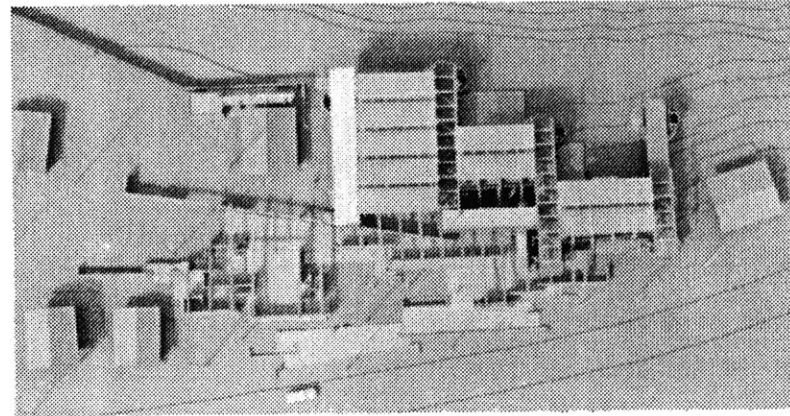


fig. 40 Continuos Surface Movement.

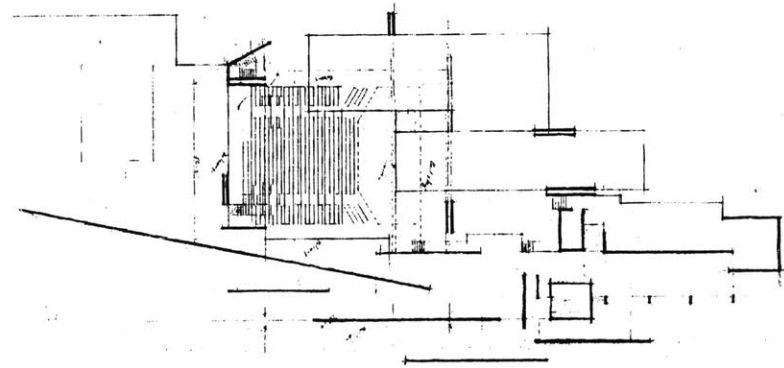


fig. 41 Concrete Wall System (early sketch).

In the interior of the building the wall system performs different roles. It defines the internal circulation of the building while at the same time the wall surface serves as exhibition space.

3. Cast in Place Support System: The support system is meant to support the pre-cast concrete trusses that run perpendicular to the wall system and defined the large performing areas. The supports were designed in plan as a series of concrete channels and semi-circles that change according to their position on the site. The channel supports appear in the interior of the building while the round supports on the outside towards the ocean, responding like piers to the natural forces of the ties. Each support has been doubled in order to achieve inhabitation definition at every structural level within the building. Each individual support can be used as a small performing stage or just as a place to rest protected from the sun. The deployment and shape of the support system reinforce the idea of exchange between natural and built environment. It gives a character of openness to the building towards the beach activity, inviting the people to occupy this zone at any time of the day. At the same time the material quality of the supports can be read as a continuity of the continuous surface system contrasting with the finished quality of the pre-cast concrete trusses.

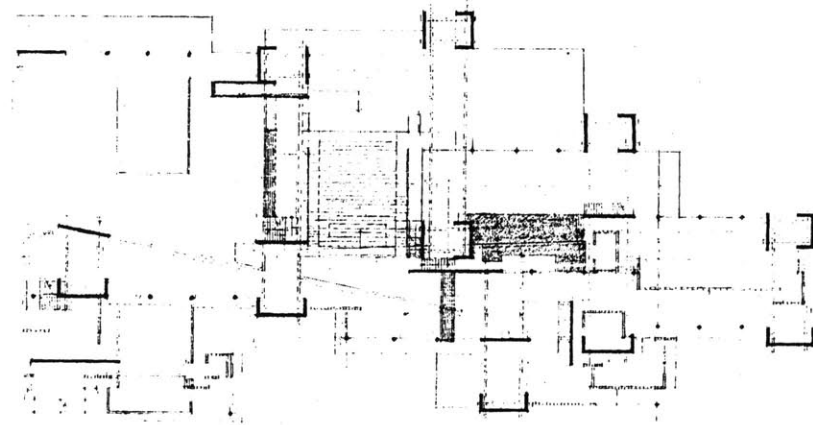


fig. 42 Support System (early Plan).

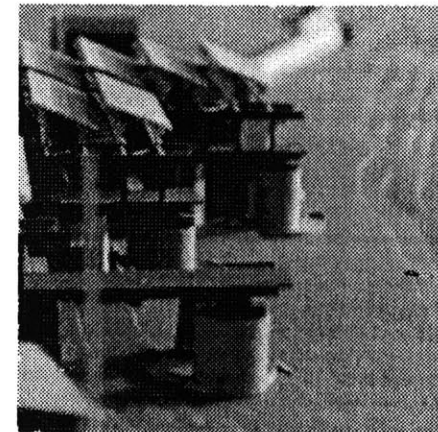


fig. 43 Round Support System.

4. Pre-Cast Concrete Trusses System: The pre-cast concrete trusses system were introduced to the project as an attempt to completely clean of obstacles the performing space and its potential growth/transformation towards the landscape. Spanning such a large dimensions presumes the use of a steep beam section that was easily turned into a zone of inhabitation. In this manner the concrete trusses appear as a elevated finger-like extension of the building which delimits the performing areas, the side-stage area and the workshop/living area floating in a second level over the nature/built landscape.

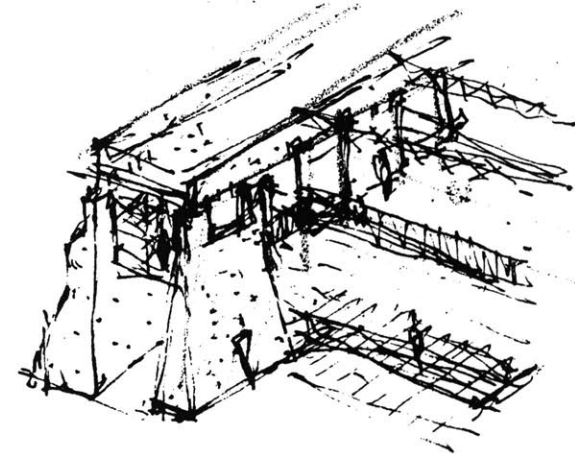


fig. 44 Support and truss System (early sketch).

5. Roof Systems: The design use three different roof systems, one for each building zone.

a) The building zone defined by the directional wall system was roofed with a simple concrete roof similar to the ones used in the Piñones Community area for institutional buildings. A clerestory was added in order to gain natural light and give a light quality to the roof showing the beams protruding out of the roof line over the walls. At the same time a light well and a light slit were introduce in order to mark specific moments inside the building and clarify the movement through it.

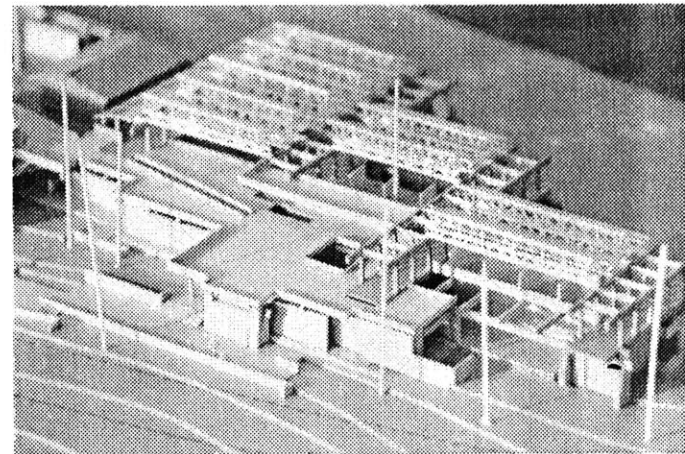


fig. 45 Roof System.

b) The building zone defined by the pre-cast concrete trusses was roofed with wood trusses spanning from one concrete truss to the other and segments of tilted and bent zinc plates. The utilization of this material respond to the vernacular construction tradition of the area and it was used with the same dimensions of the surrounding houses, but in a additive fashion. The zinc plates were tilted and bent in order to get advantage of the natural light and define differences of light qualities within the different zones of the building.

c) The pre-cast concrete trusses were roofed with curved zinc plates interrupted by a rhythm of glass slits that creates a light pattern inside the truss and serve as a transparent gutter which canalize the rain water.

6. Enclosure Systems: The more important factor taken in consideration when designing the enclosure systems was the capability of this systems to be transformed in accordance to the different set configurations. The transformability should range from the total closeness to the total openness passing through different degrees of screening. At the same time it was important to be able to use the systems when open as part of the building furniture. Two different systems were designed with their variables.

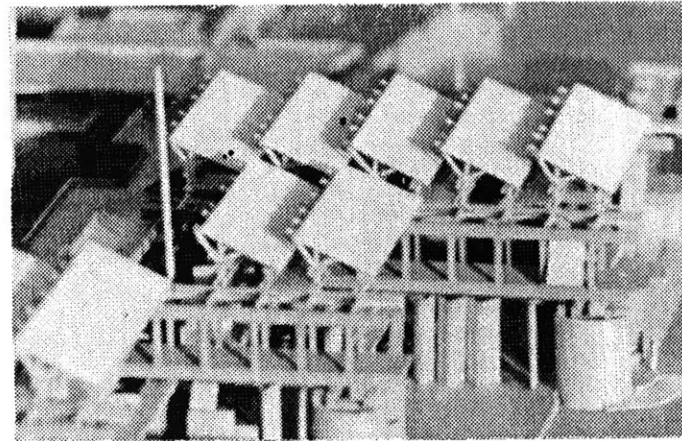


fig. 46 Roof and Concrete Truss System.

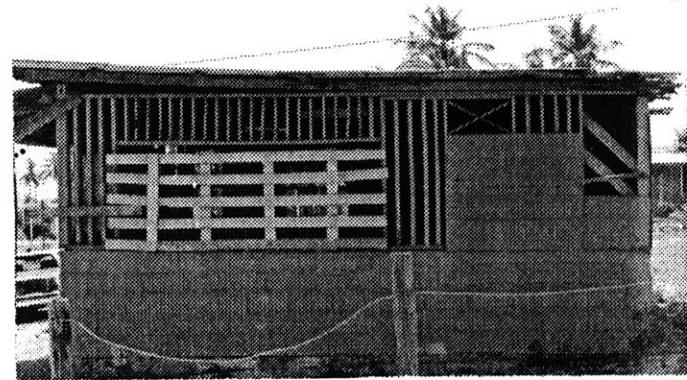


fig. 47 Existing Structure (enclosure system).

a) Horizontal pivoting wood doors were used to enclose on the ground floor the facade which runs parallel to the beach front. The same system was used for the windows of the concrete trusses in the second floor, so that occurs an alternation in the use of the systems in section and direction. This system when open serves as a shedding canopy and establishes a exchange zone between the outside and inside of the building or the truss.

b) Vertical folding wood door with movable louvers were used to enclose on the ground floor the space under the concrete trusses. This space when is closed delimits the main performing area as a self-centered space but, when it is opened the performing space expands endlessly towards the landscape. This type of door can be use as part of the scenes or they can be completely folded and grouped away. The same door system was use in a horizontal way on the upper part of the facade which runs parallel to the ocean line. In this arrangement the doors can be opened at different highs creating an interesting effect of light and shadows. At the same time the doors have movable louvers which add another level of light and ventilation control. Once again there is an alternation in the use of the system in section and direction.

c) An combination of concrete blocks and the former two enclosure systems were utilized in the more domestic areas of the building in order to create more defined privacies.

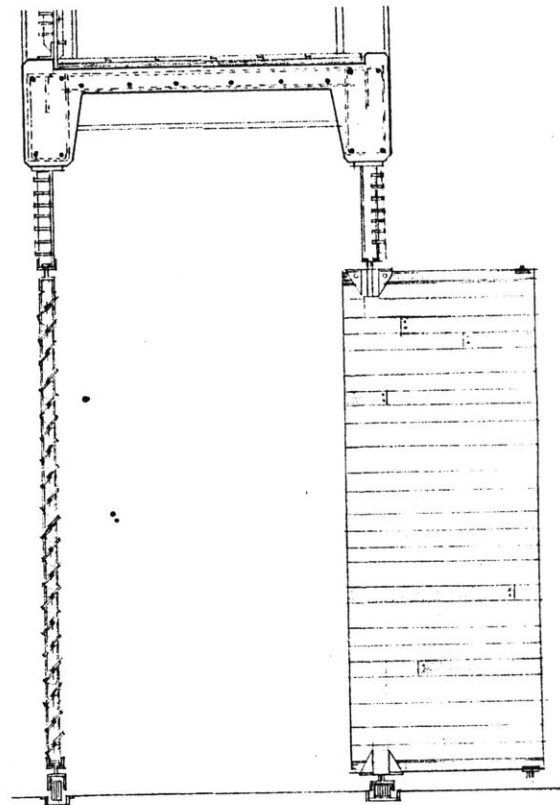


fig. 48 Detail Enclosure System.

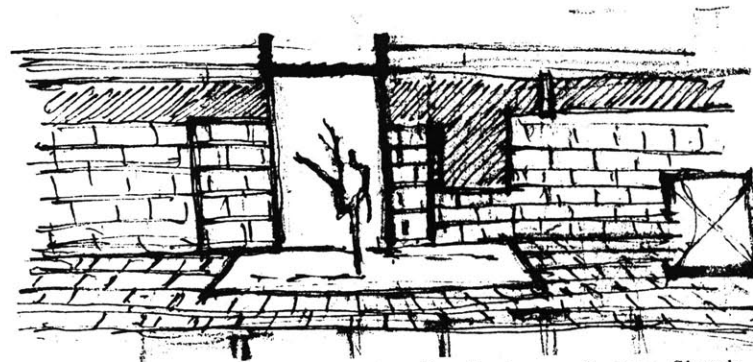


fig. 49 Enclosure System Sketch.

7. Movable Wood Seating System: A standard folding seating system was located at four different places in the scheme to provide a multiplicity of seating configurations. Each seating unit was divided in two parts in order to move them easier and multiply its arrangement possibilities. This system allows the users to manipulate the space configuration by themselves and not through the bureaucracy of the theater administration. The seating system can be moved outside of the theater for an open-air performance or use unfolded as partitions or movable wall on the scene. When it is closed the actors have the totality of the space as a creative ground.

(For a diagram of the systems location see appendix 2.)

- The use of different materials namely concrete, concrete block, zinc, wood, glass and steel and a gradual transformation of them through the landscape. The transformation from wood structures (existing buildings) to concrete structures (the new performing space) will occur at different levels within the different systems. In that sense a material like wood which performs as the main structural role in the existing buildings will function as screens in the theater.

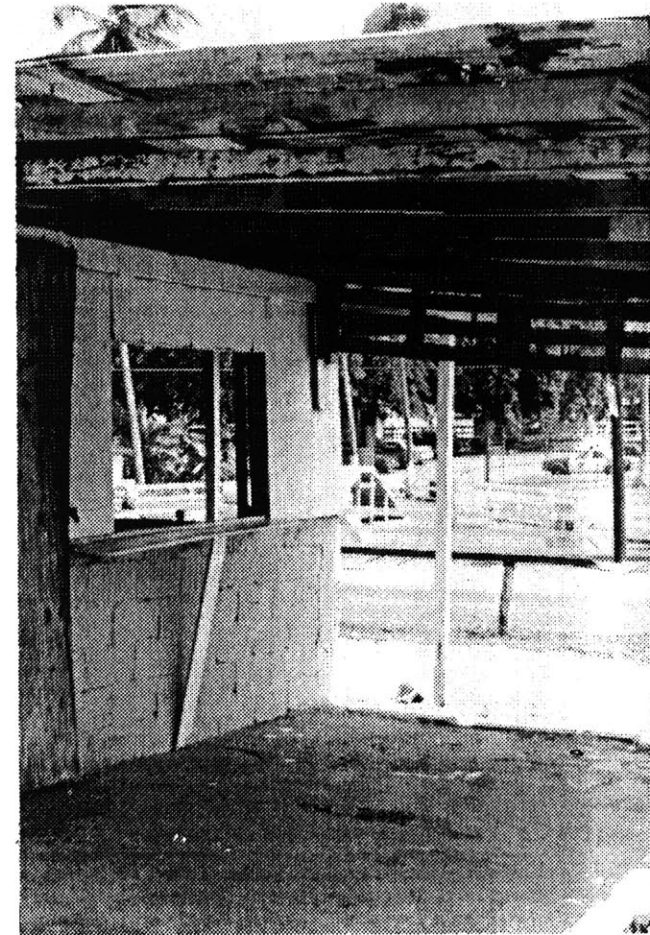


fig. 50 Existing structure showing the use of different materials.

Experimental theater and dance performing space.

Program:

- foyer
 - lobby
 - Marquez and Martorell's group office
 - internal patio
 - art gallery
 - bathrooms
 - performing space
 - potential side stage
 - dressing rooms
 - workshop space
 - storeroom
 - students and guest living areas
 - children theater
 - children theater side stage
 - outside gallery
 - Piñones community office
- Total area: 20,000 sqf.
Capacity: 400 seats average.

Auditorium

Type: independent auditorium.
Configuration: variable with galleries.
Area: 285 sqm.
Length (max.): 19m.
Width (max.): 15m.
Height (max.): 9m.
Difference in height: variable
Number of rows: variable

Stage

Type: undetermined. No fixed flies, no stage frame.



fig. 51 Half Moon Theater, London.



fig. 52 Minimal Stage Configuration

Stage configuration:

The performing space was designed to accept as many configurations as possible without using complicated and expensive technical equipment. By utilizing a light modular seating system and a simple enclosure system the actor have total freedom in the arrangement of the space.

The enclosure system combined with the elevated concrete trusses allows the spectator to have visual and physical continuity from the theater to the landscape. At the same time the landscape can be brought inside the theater by shuffling sand over the performing surface. These are some possible configurations but not the only ones:

- front stage perpendicular to the coast line.
- front stage parallel to the coast line.
- theater in the round.
- three small stages at different highs with broken seating configuration.
- large longitudinal stage with U-shape seating configuration.
- open to the landscape stage with L-shape seating configuration.
- inside front stage with outside seating.

In addition to all these configurations the design of the building provides endless spots for theatrical performances. From the space inside the concrete supports to the flat platforms on the south facade of the building and the small courtyard in front of the children theater gallery.

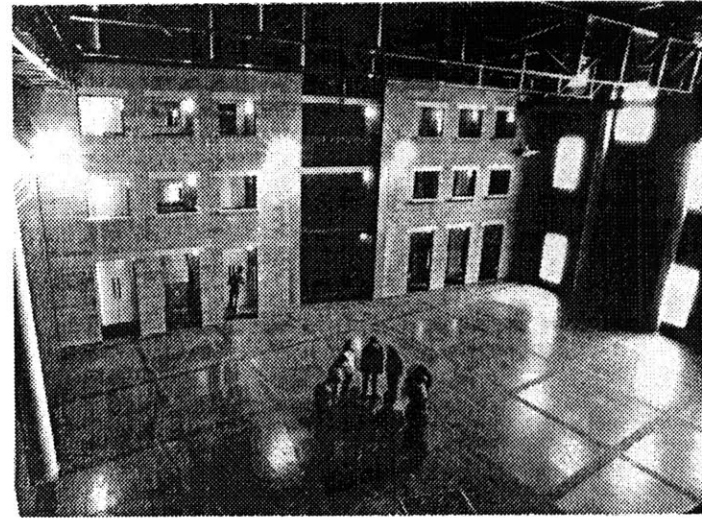


fig. 53 Half Moon Theater, London, (empty stage).

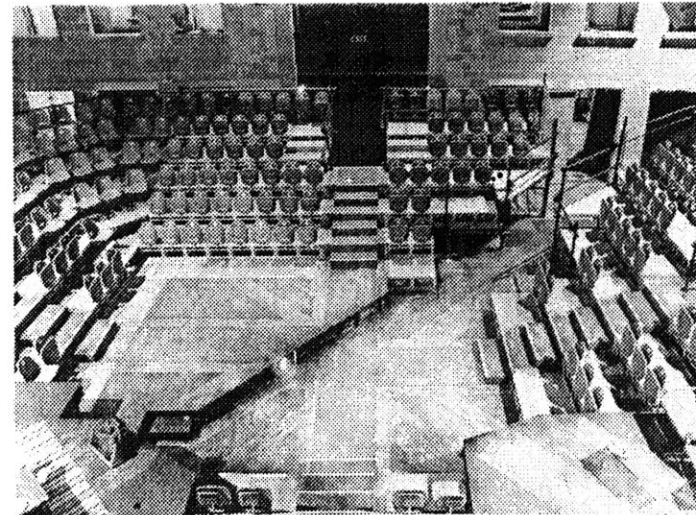


fig. 54 Theater in the Round.

Performing space configuration plans:

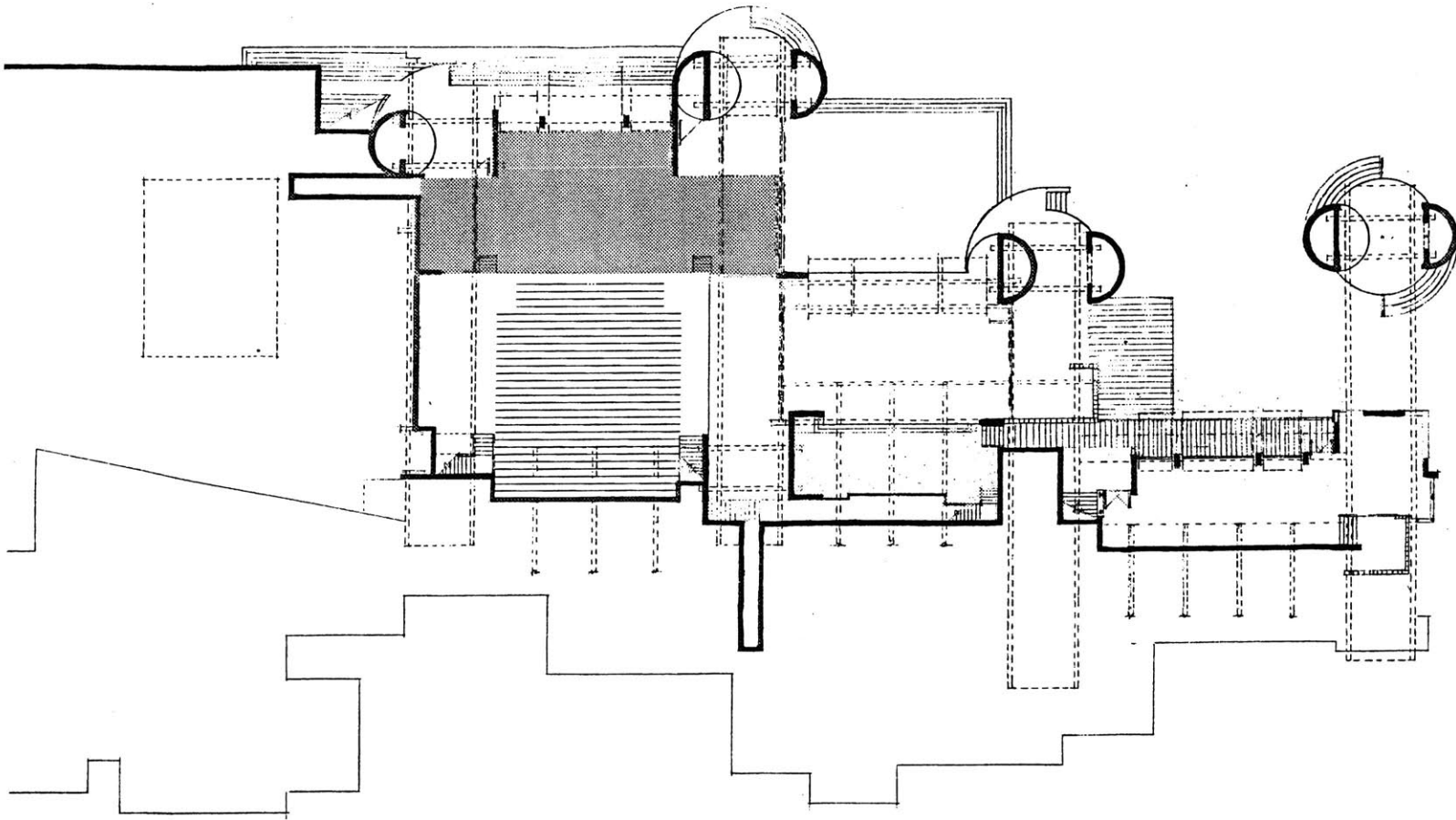


fig. 55 Front stage perpendicular to the coast line.

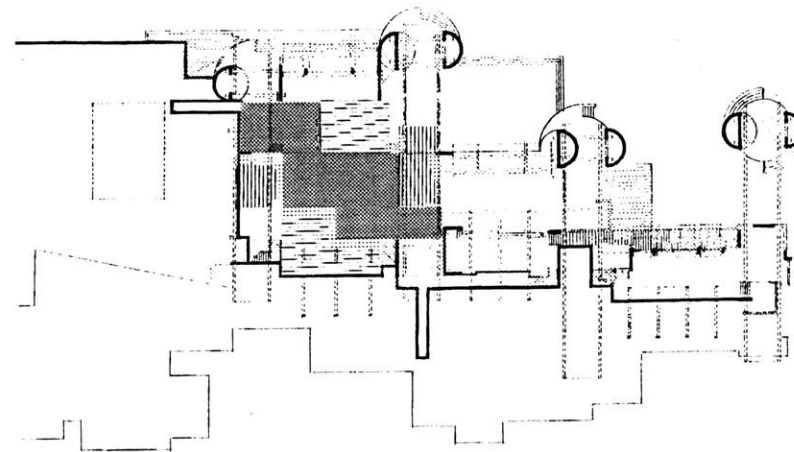
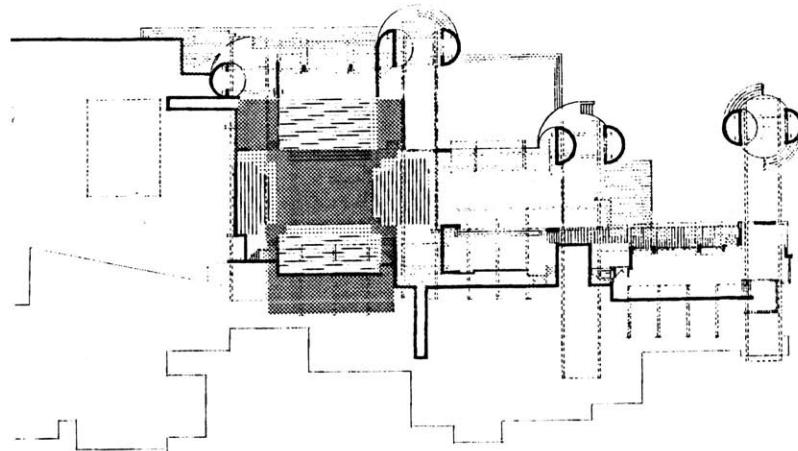
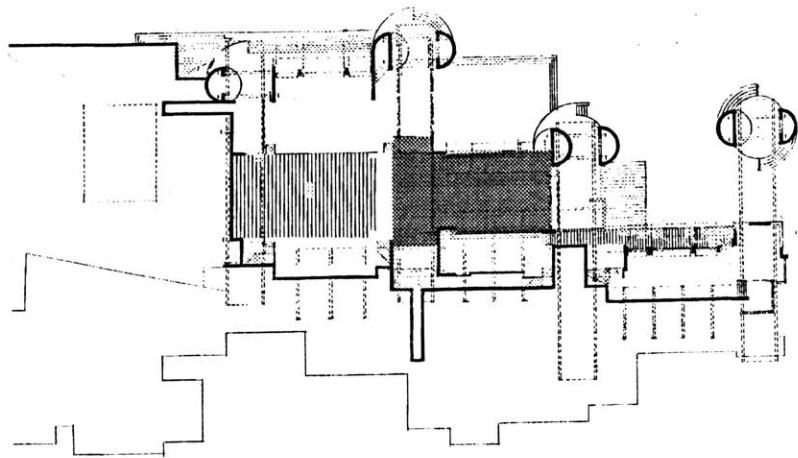


fig. 56 Front stage parallel to the coast line.
fig. 57 Theater in the round.
fig. 58 Three small stages at different highs with broken seating configuration.

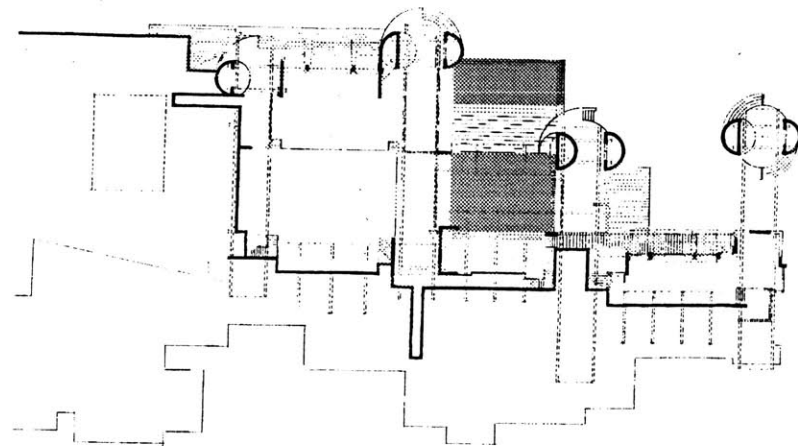
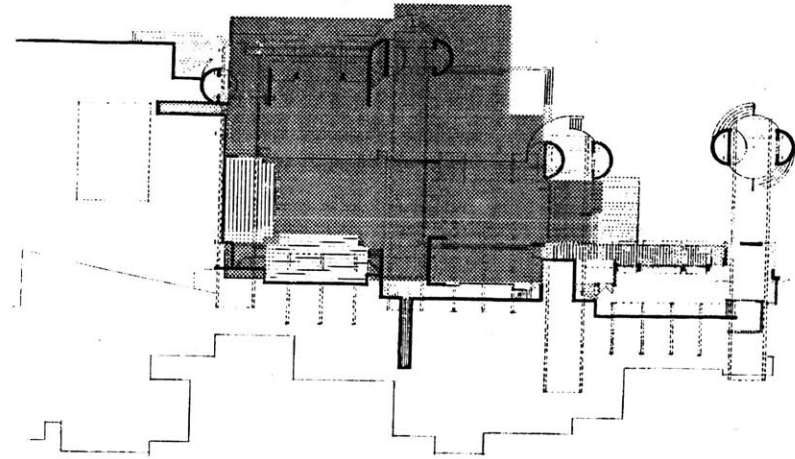
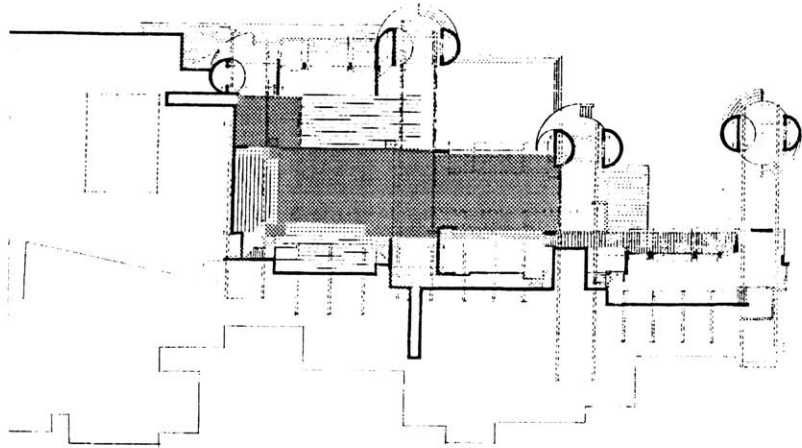


fig. 59 Large longitudinal stage with
 U-shape seating configuration.
fig. 60 Open to the landscape stage with
 L-shape seating configuration.
fig. 61 Inside front stage with outside seating.

Public Access:

The idea of a public building which tries to generate interaction between two different social groups, namely the Piñones community and the theater community, became a challenge. The location of the building help to achieve this goal. It functions as a bridge that ends the community residential area and connect with the beach recreational zone. At the same time the building extend out of the limits of the theater space creating a wide and open exchange zone of activities. This zone occurs at the end of the internal pedestrian path of the community where the children theater and gallery is located. On the other side of this zone we encounter the preserved existing bar and the public access to the beach.

In the direction south-north the building establishes a clear boundary to the road with only two visible apertures to the building. One is a threshold which connects directly with the open gallery and the bar zone and the other is the formal entry to the theater lobby. Nevertheless when approaching the building from the community path in the west-east direction, the system of concrete walls allows pedestrians to cross the structure from one end to the other. This promenade inside the building shows to the visitor a series of ocean vistas through the building while at the same time establishes different points of access to the beach area.

In this sense the whole building turns into a crossing spine from which the community establishes contact with the theater people and vice versa.

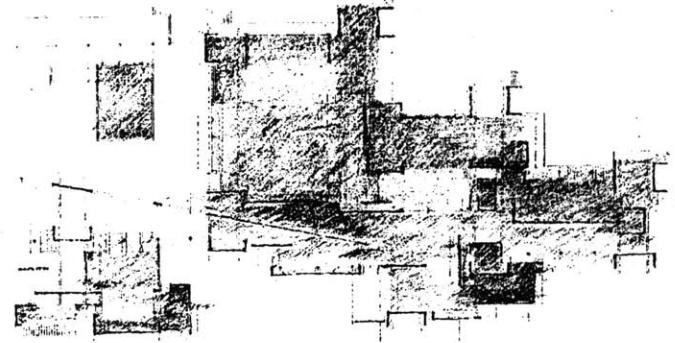


fig. 62 Sketch showing public outside path.

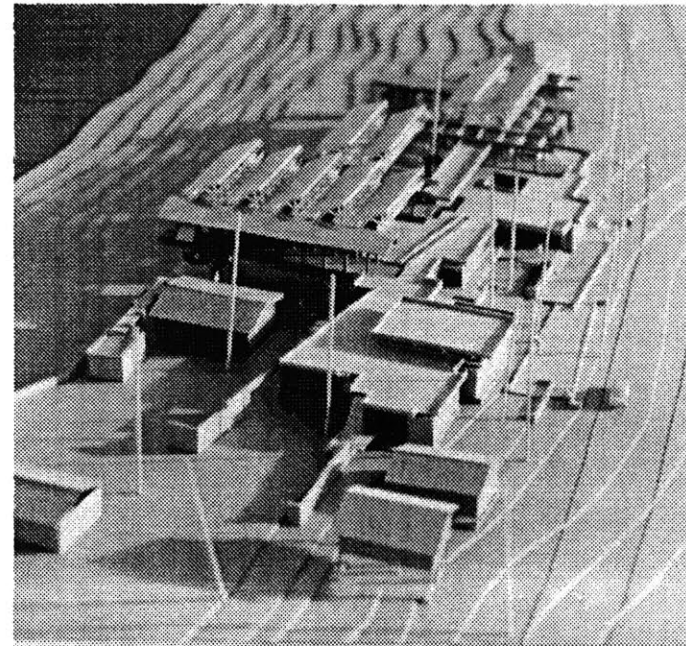


fig. 63 Shadow access points on the west-east direction.

Spatial Sequence

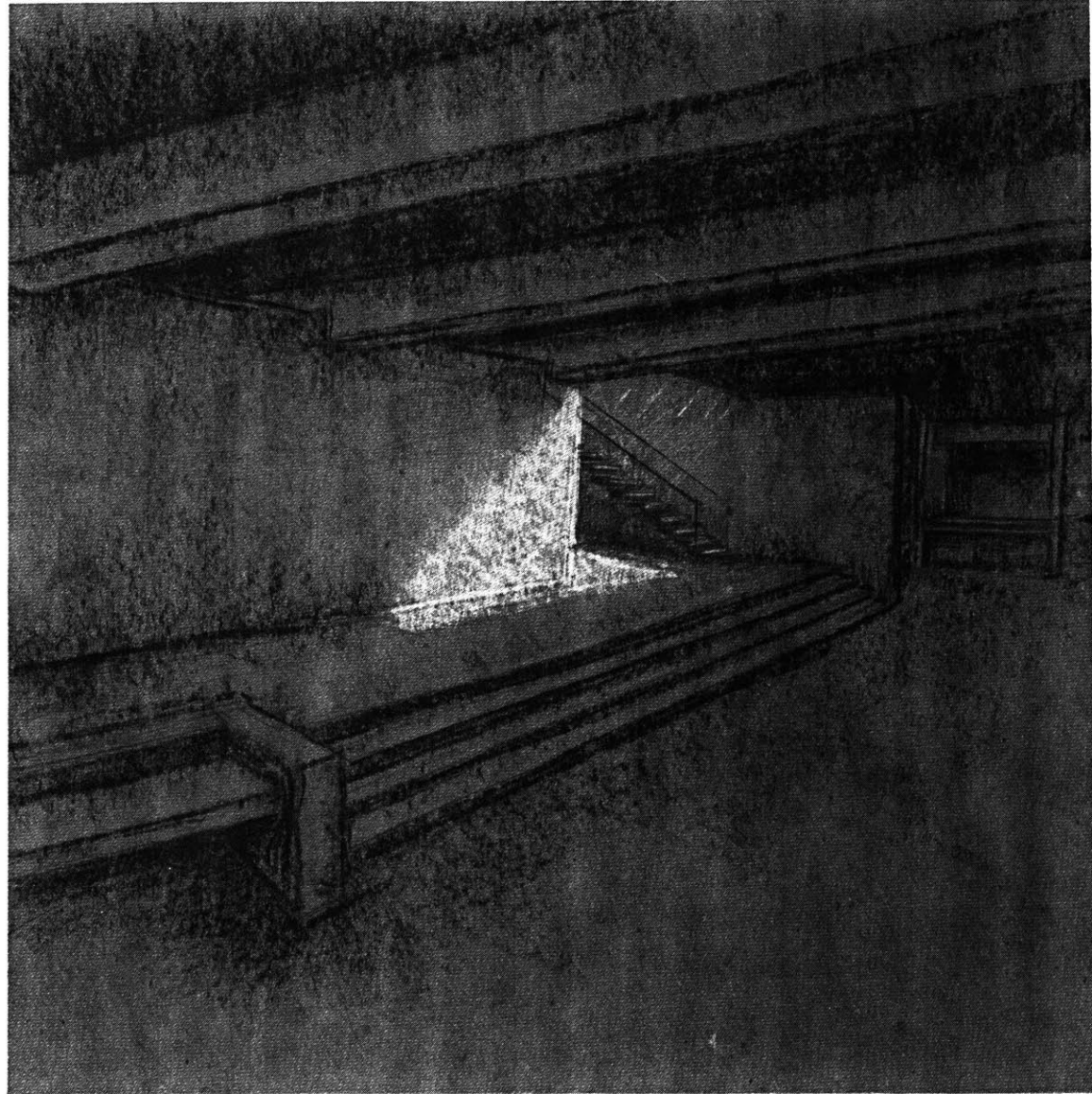


fig. 64 View from the theater entrance to the foyer.

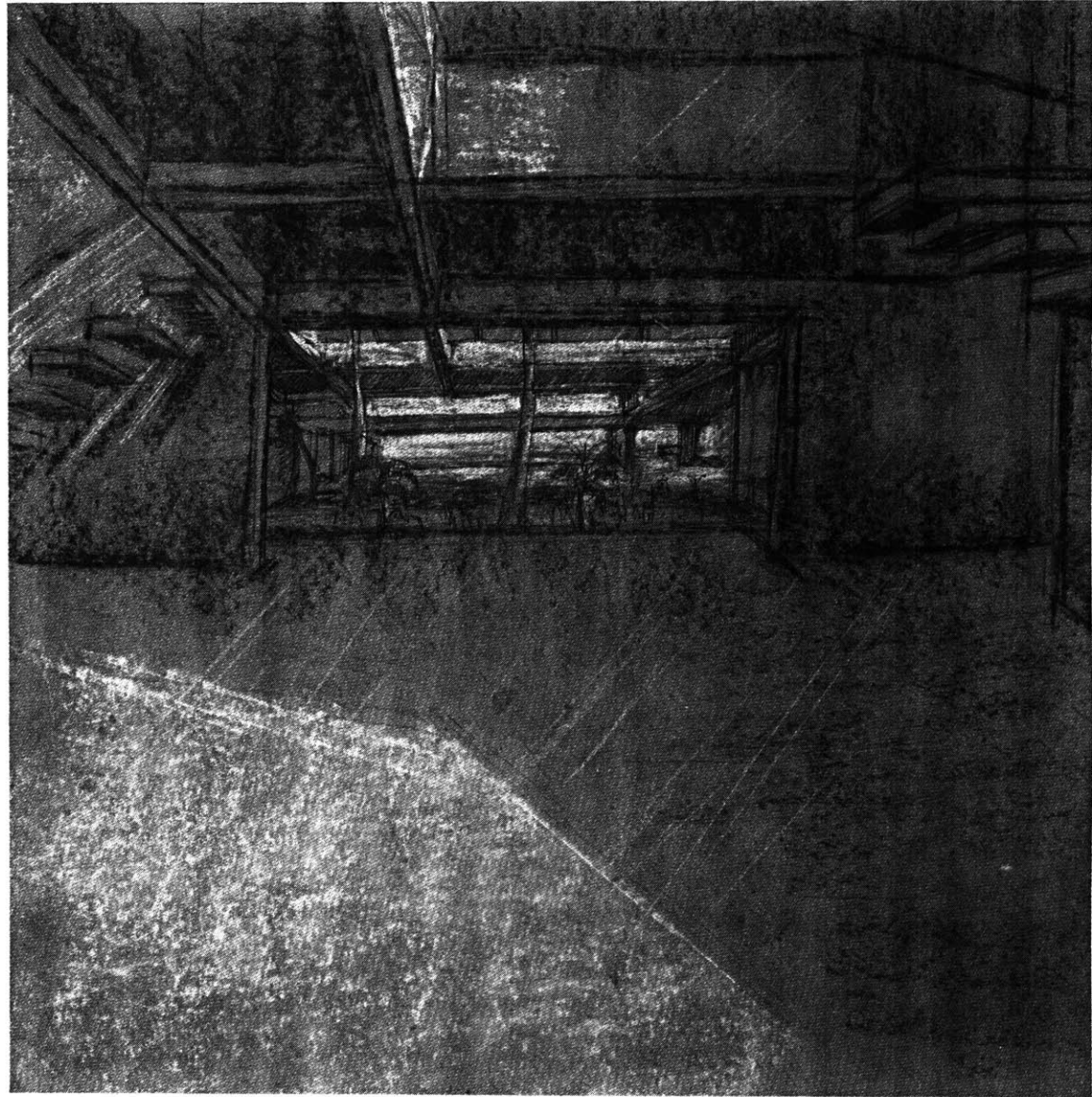


fig. 65 View to the ocean through the internal garden from the theater lobby.

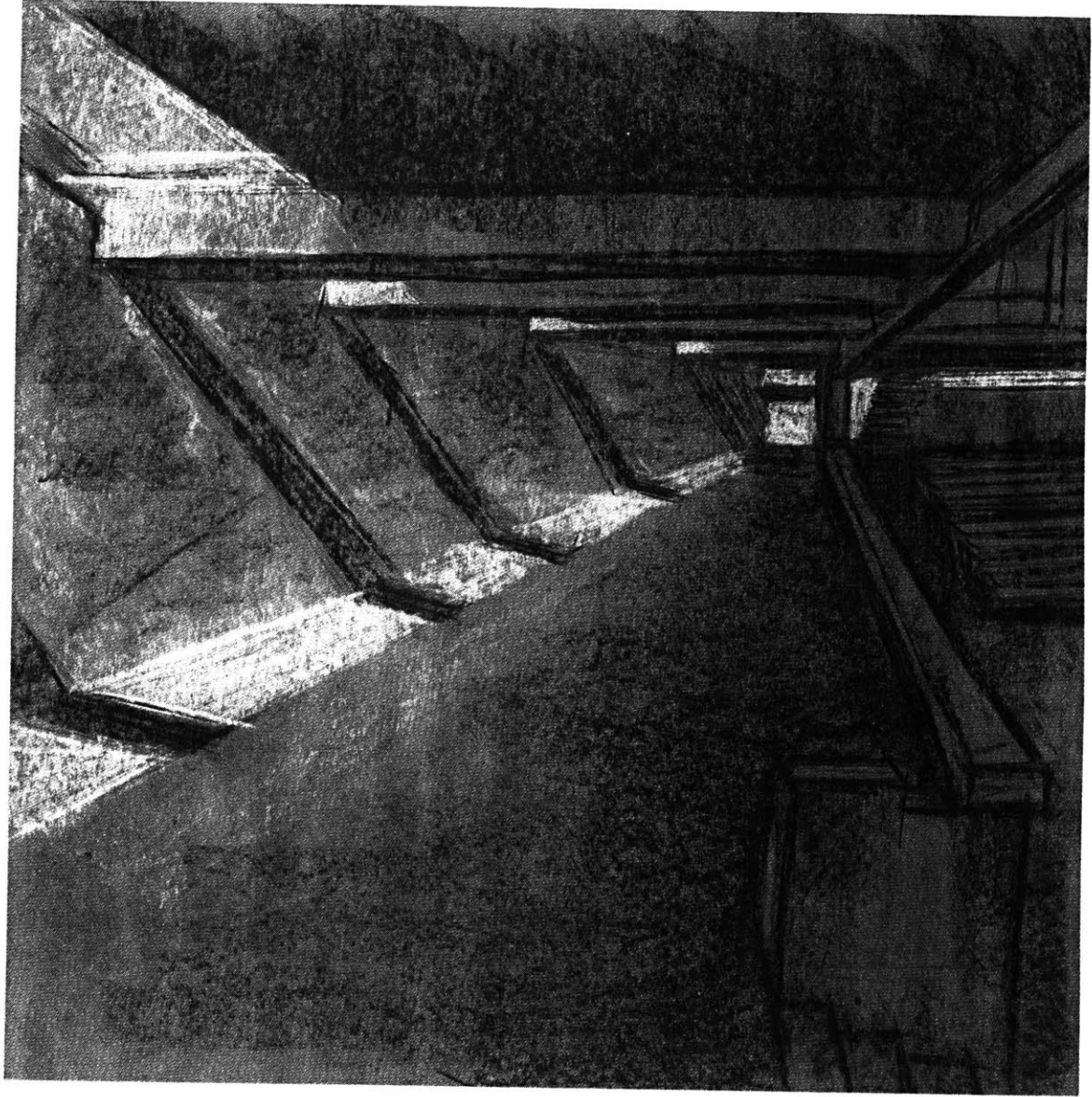


fig. 66 View to the theater main balcony.

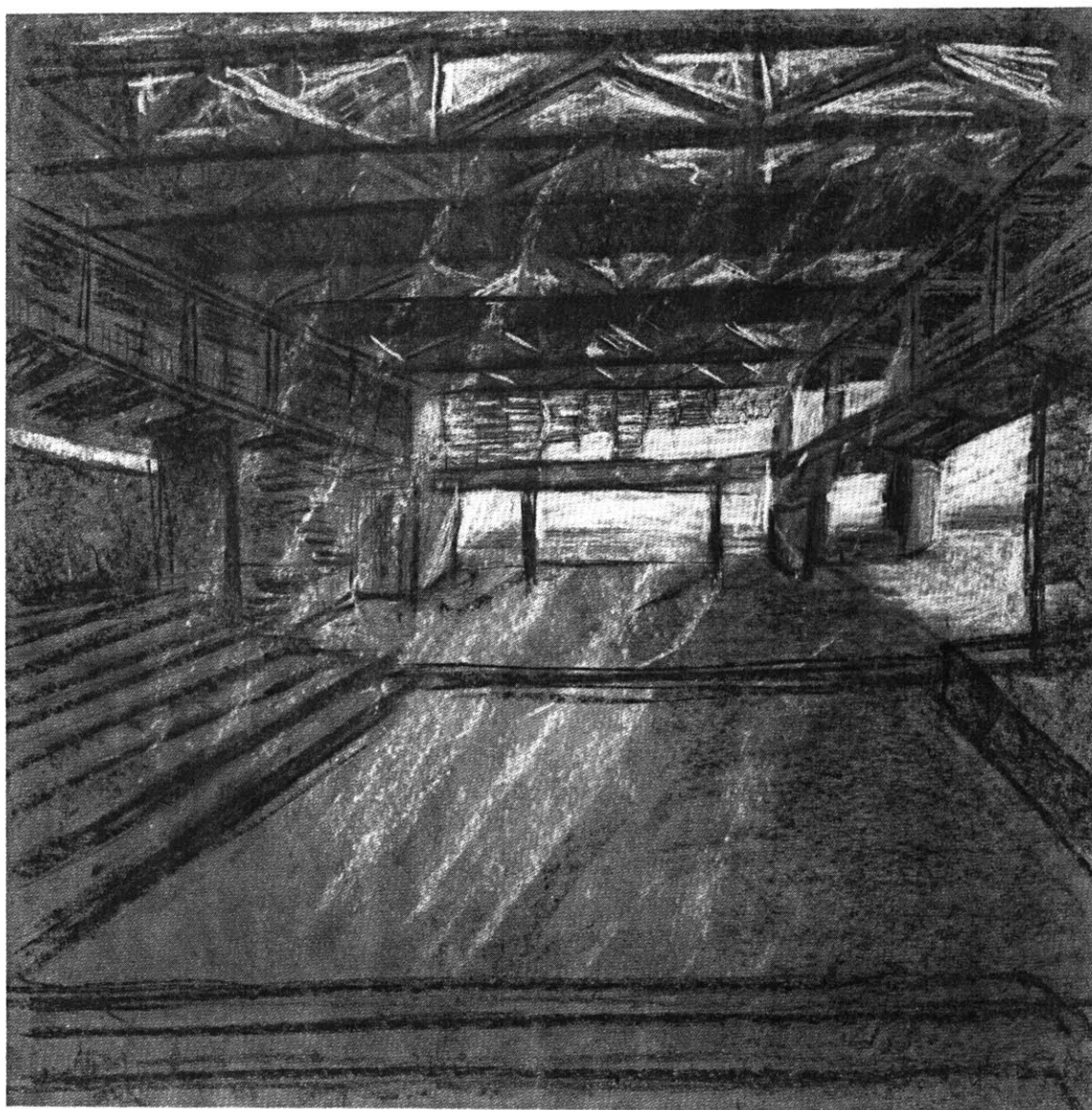
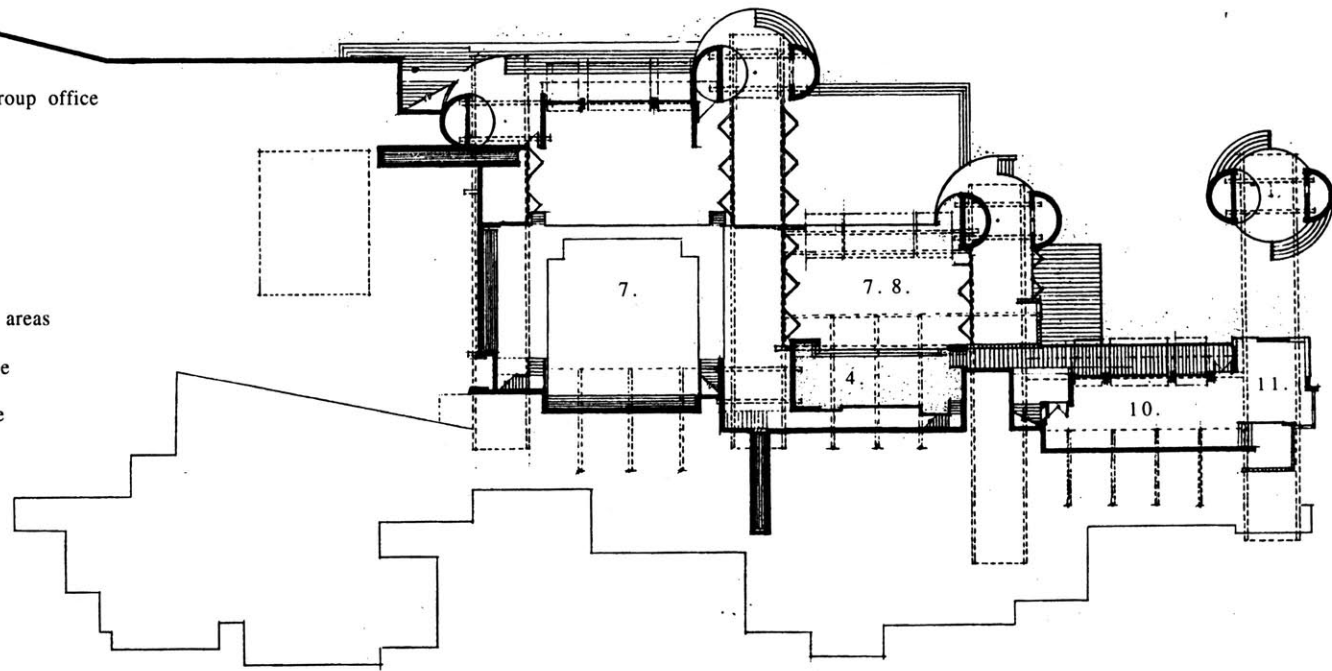


fig. 67 View of the ocean through the performing space from the main theater balcony.

Final Drawings:

Legend:

1. foyer
2. lobby
3. Marquez and Martorell's group office
4. internal patio
5. art gallery
6. bathrooms
7. performing space
8. potential side stage
9. dressing rooms
10. workshop space
11. storeroom
12. students and guest living areas
13. children theater
14. children theater side stage
15. outside gallery
16. Piñones community office



0 4 8 16 32 64

fig. 68 Plan: Ground Level 0

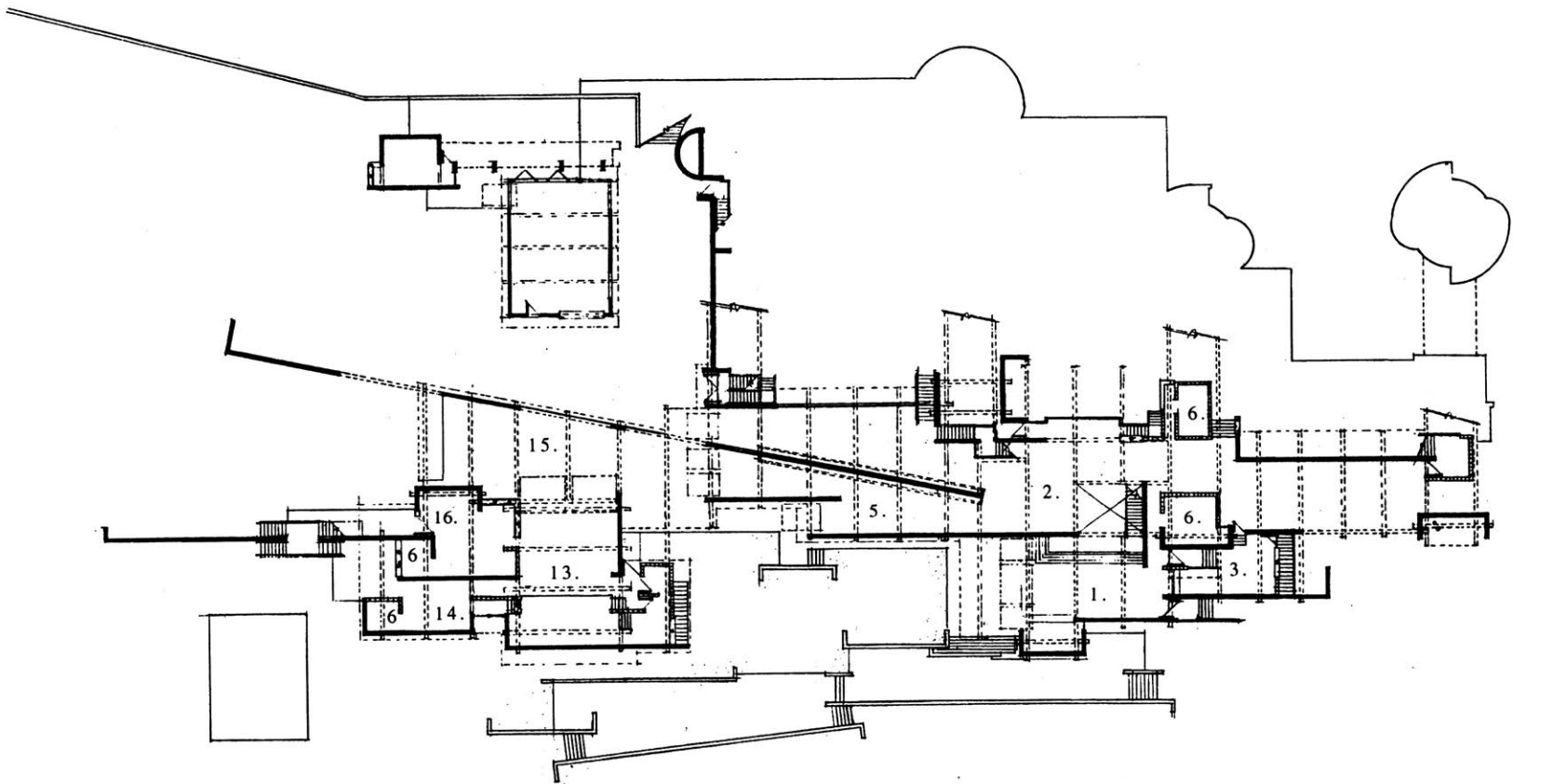
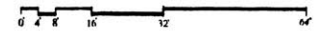


fig. 69 Plan: Ground Level +7 ft



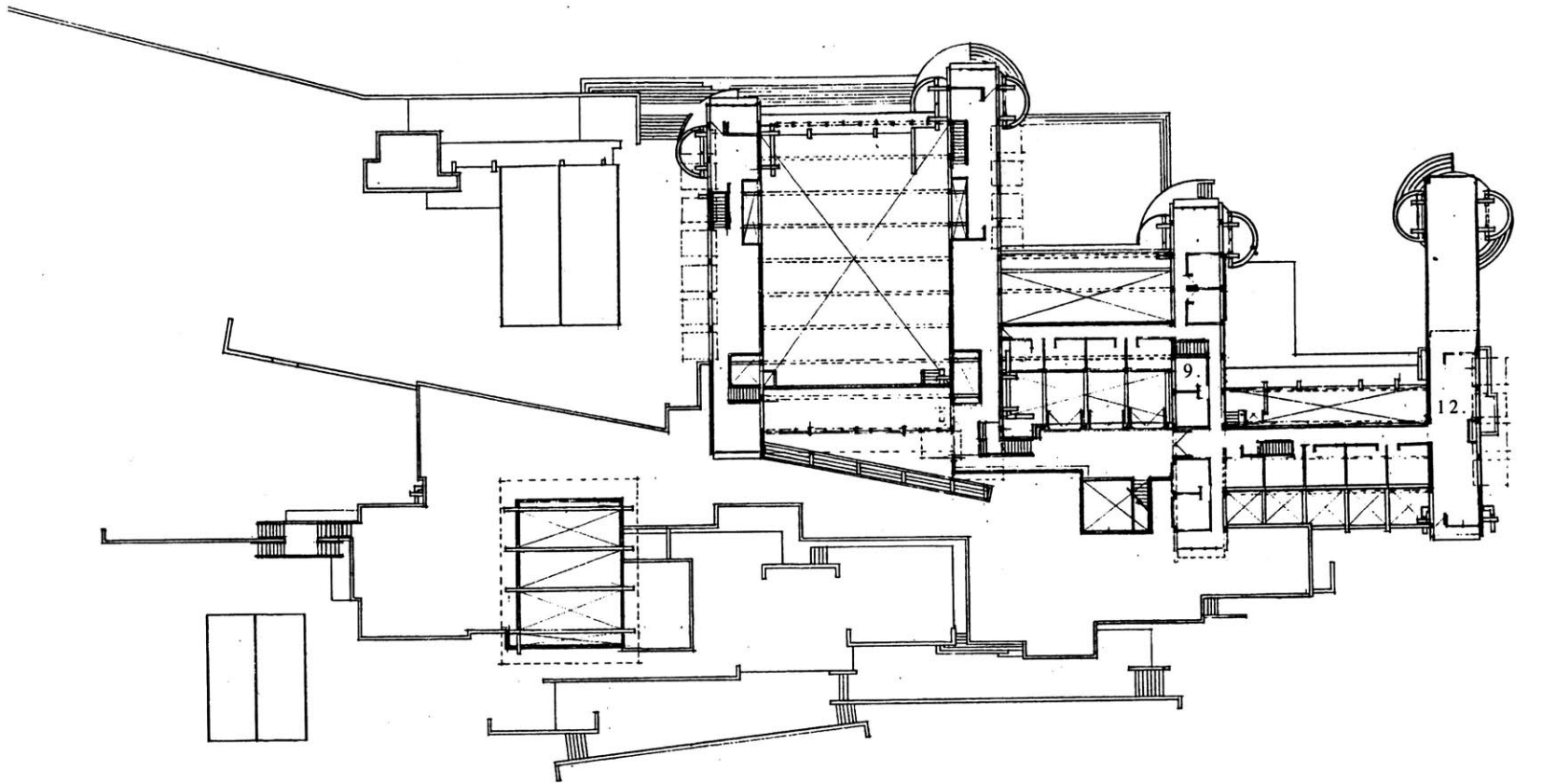


fig. 70 Plan: Second Level

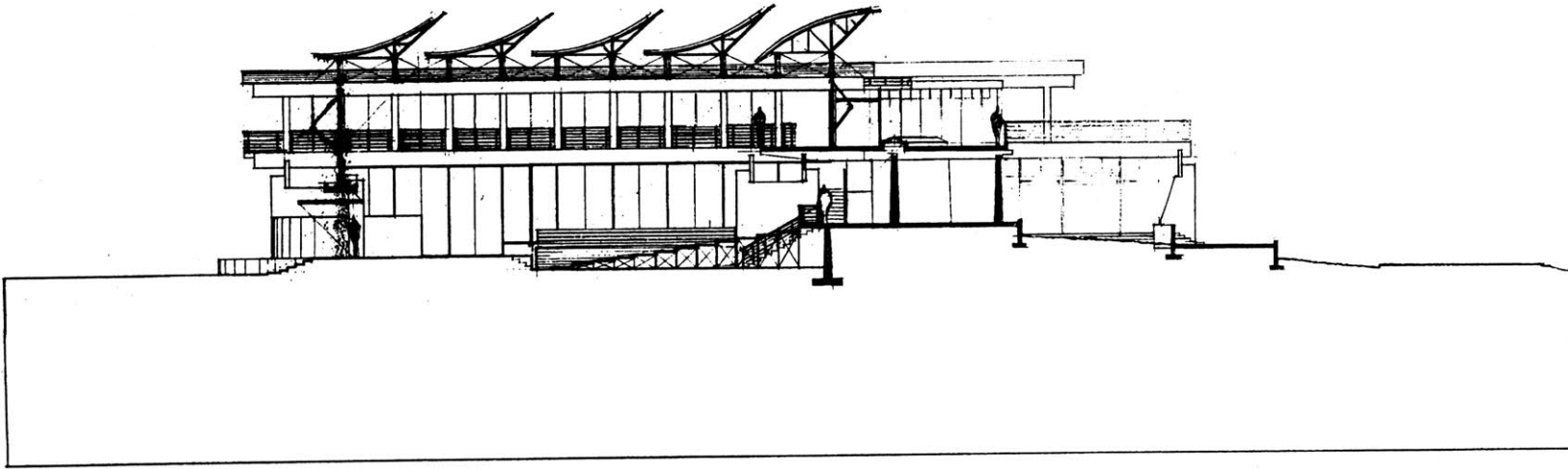


fig. 71 Transversal section through the performing space.

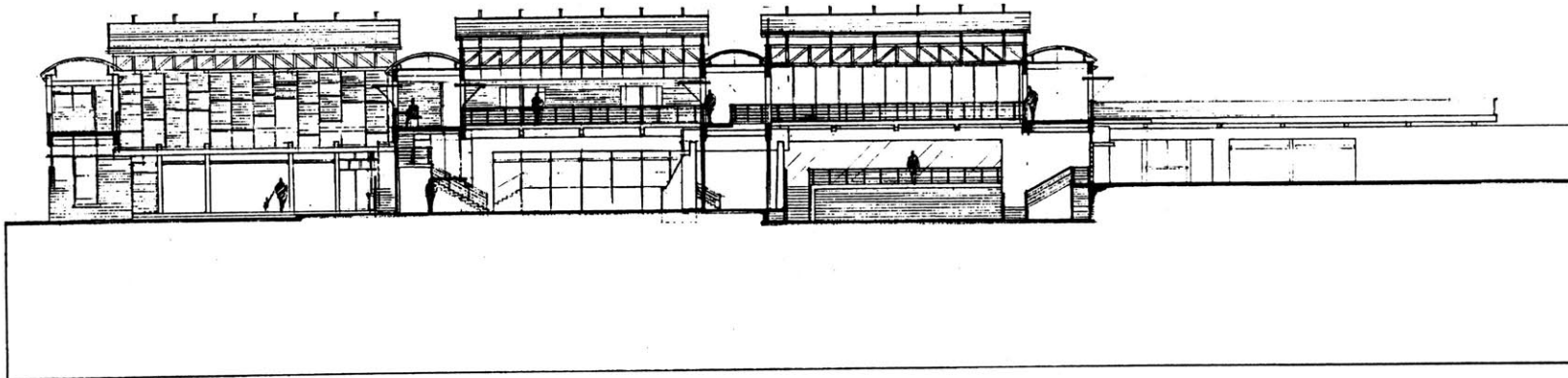


fig. 72 Longitudinal Section through the performing space.

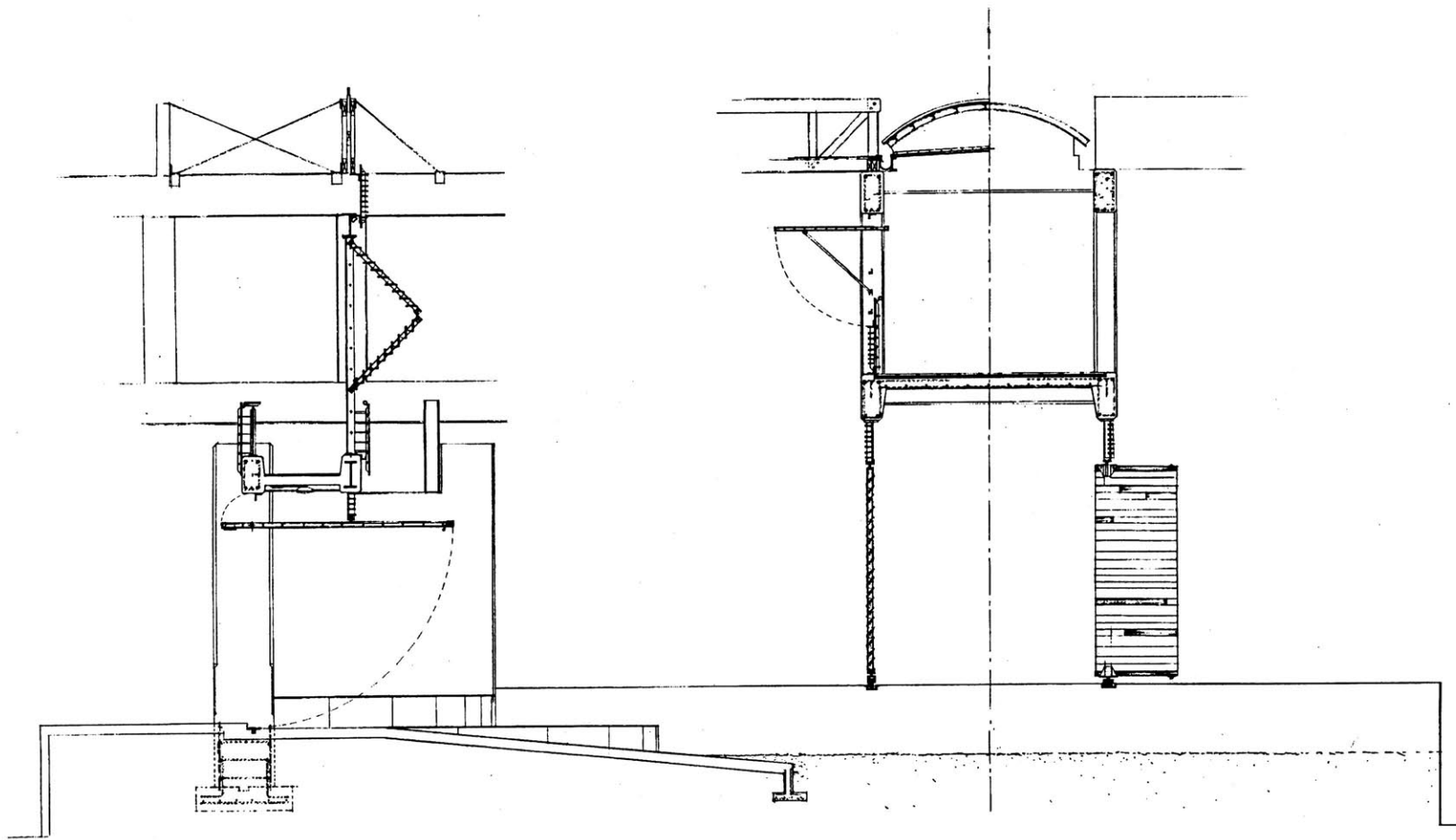


fig. 73 Enclosure Systems Wall Section

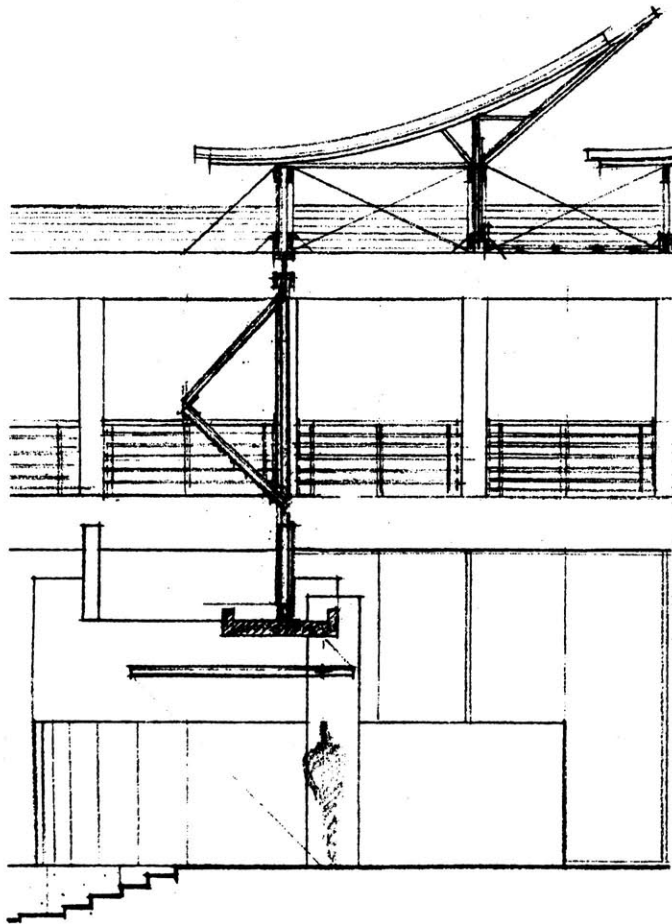


fig. 74 Performing Space Roof Detail.

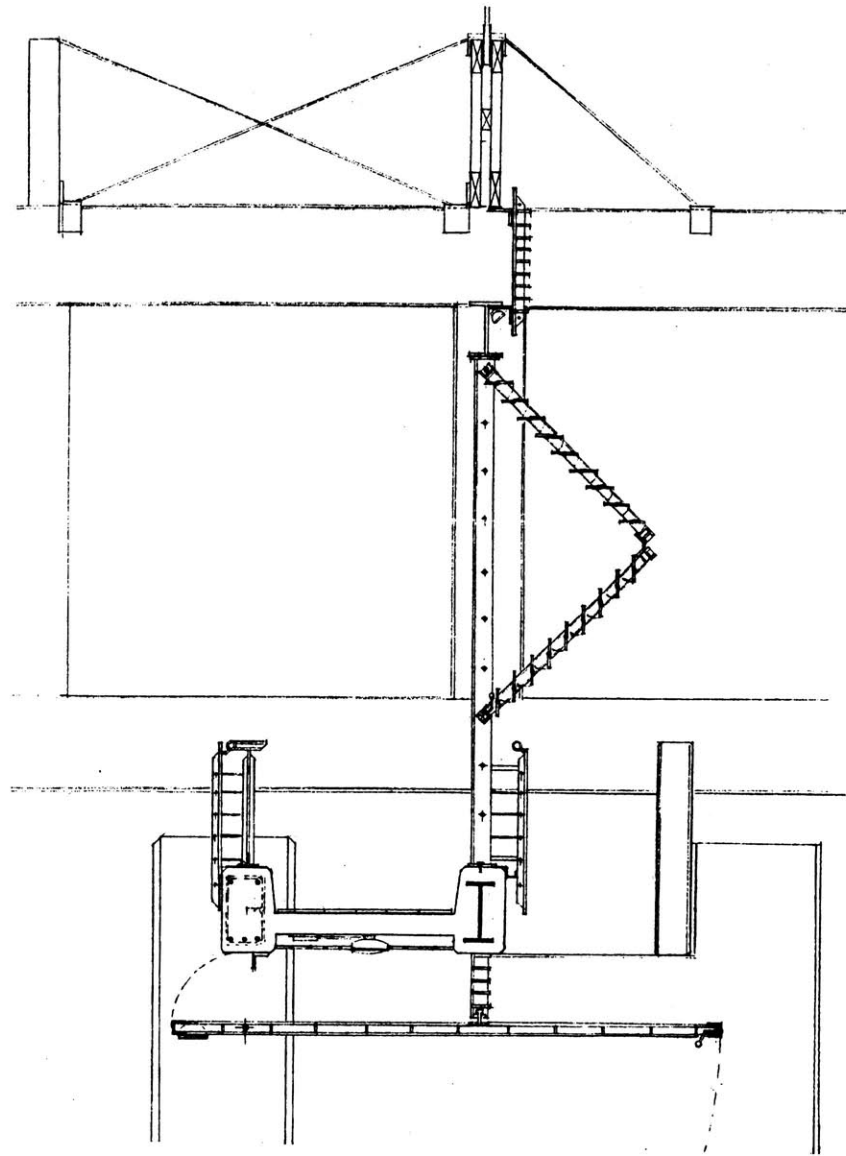
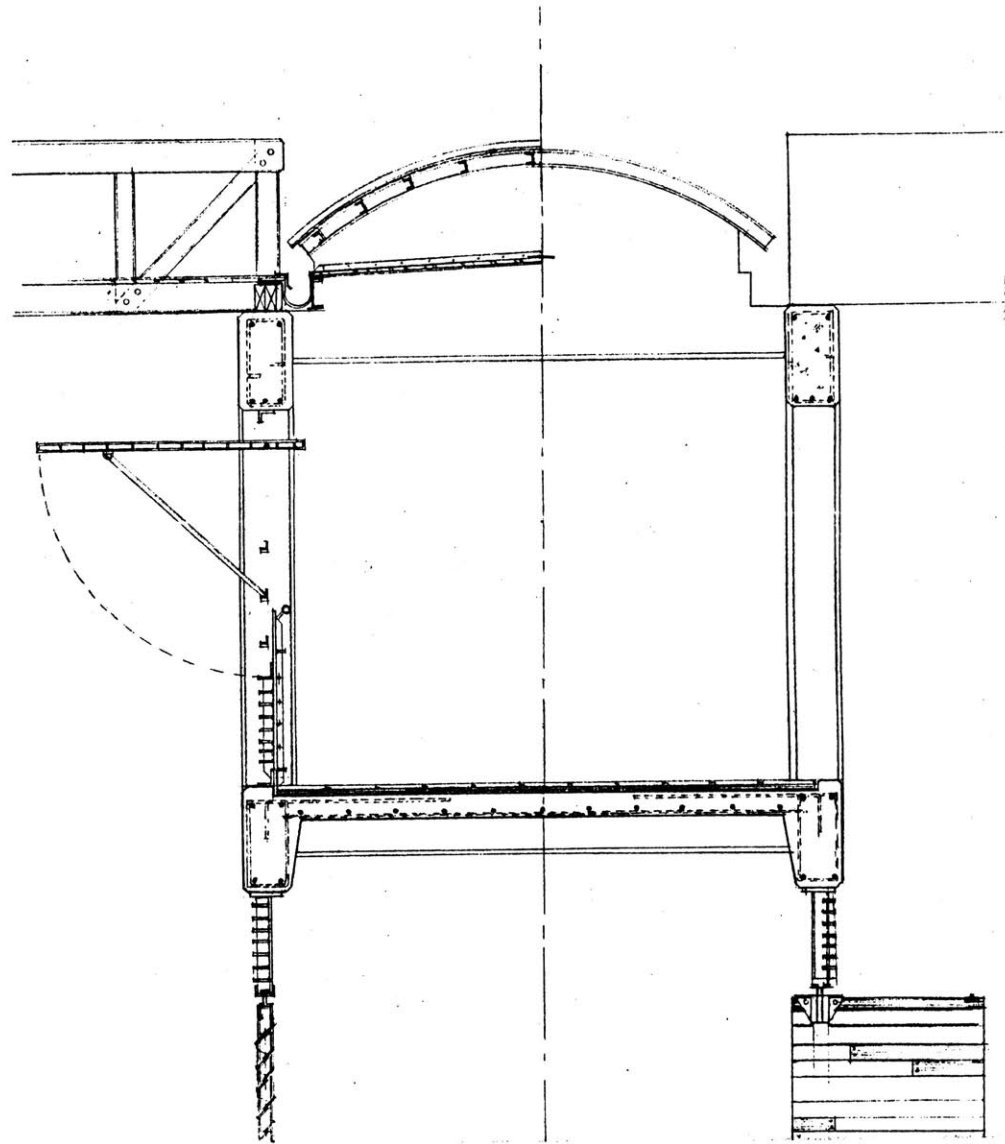
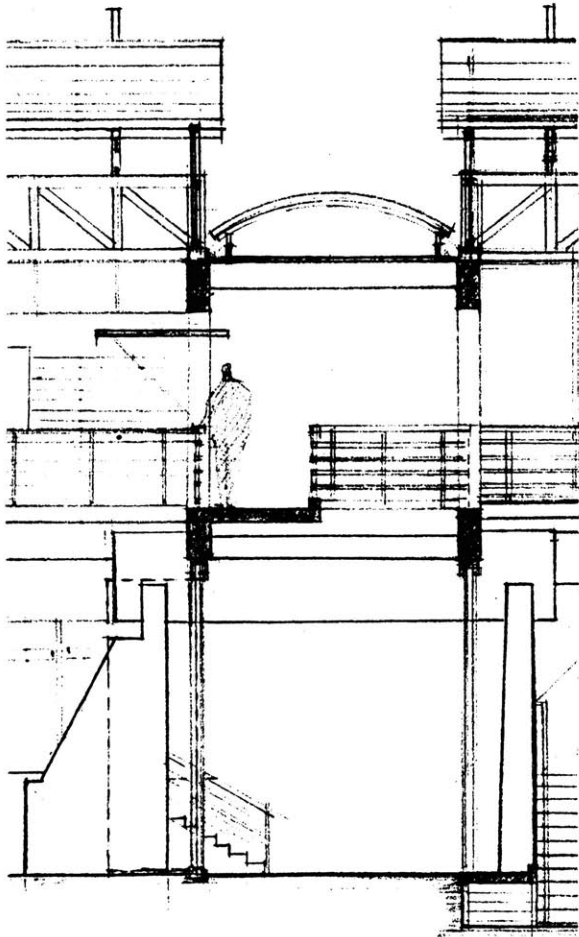


fig. 75 Movable Door Detail.

fig. 78 Concrete Truss Section.
fig. 79 Truss Construction Detail.



Final Model:

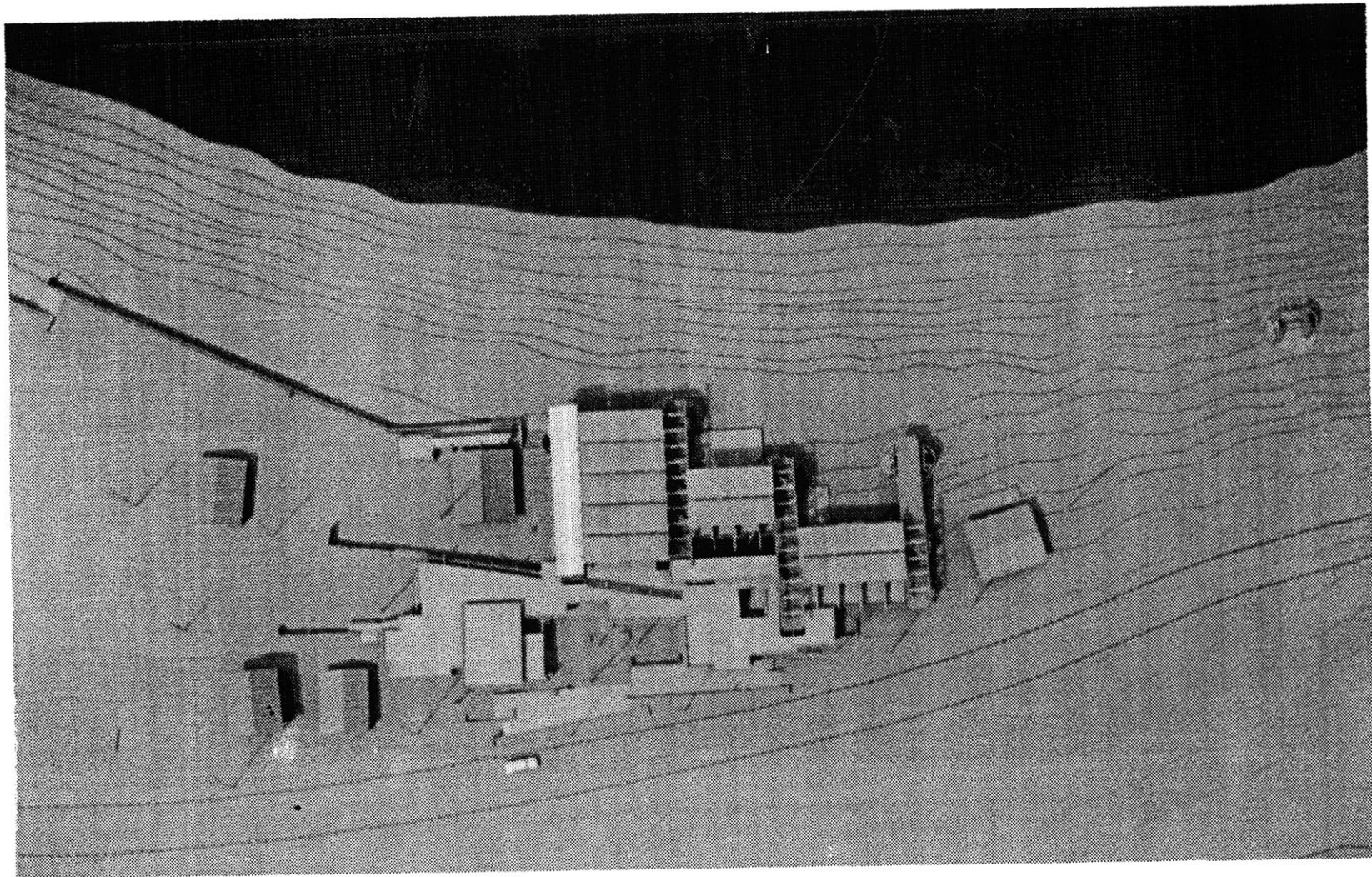


fig. 78 Aerial Plan

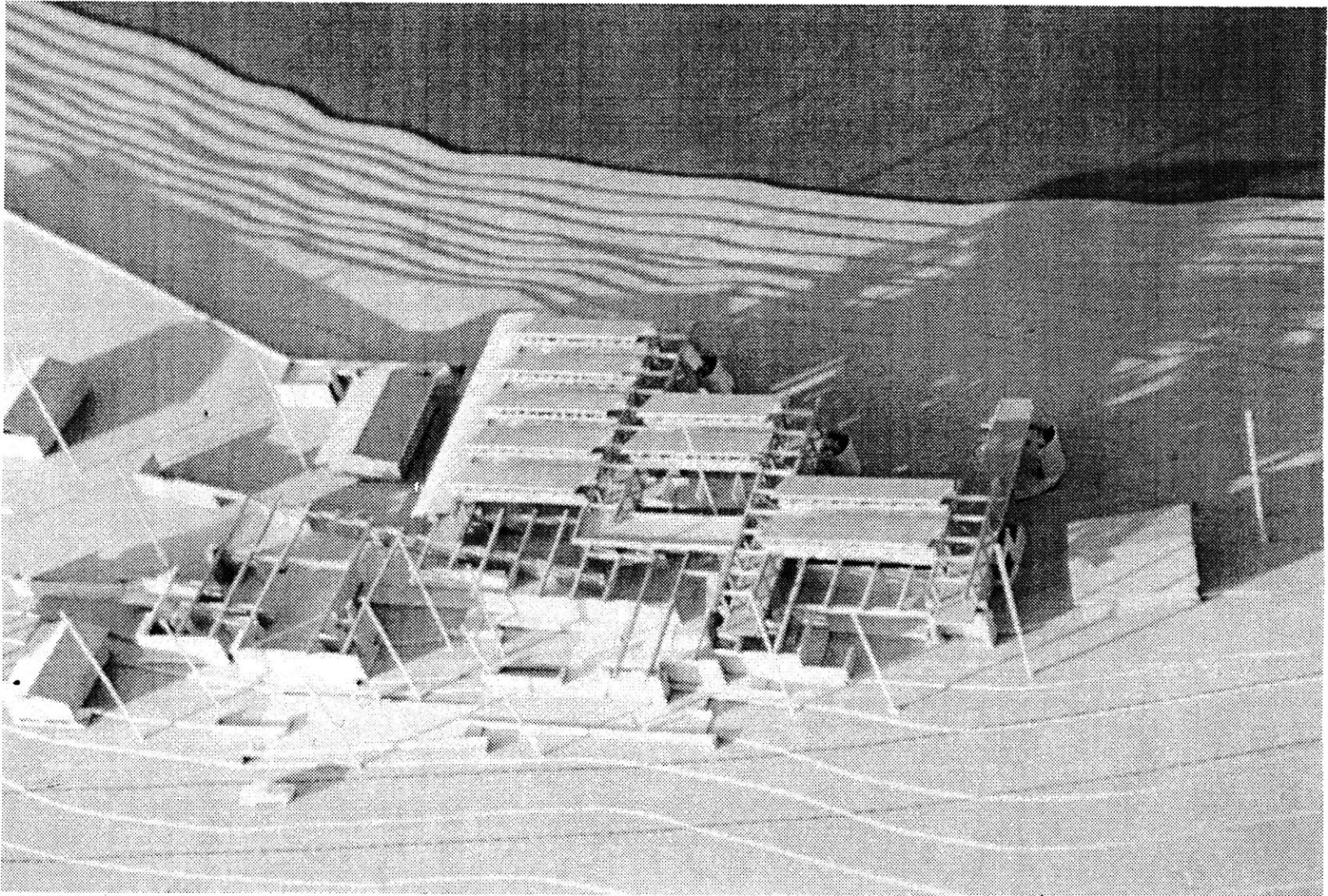


fig. 79 Concrete Beam System

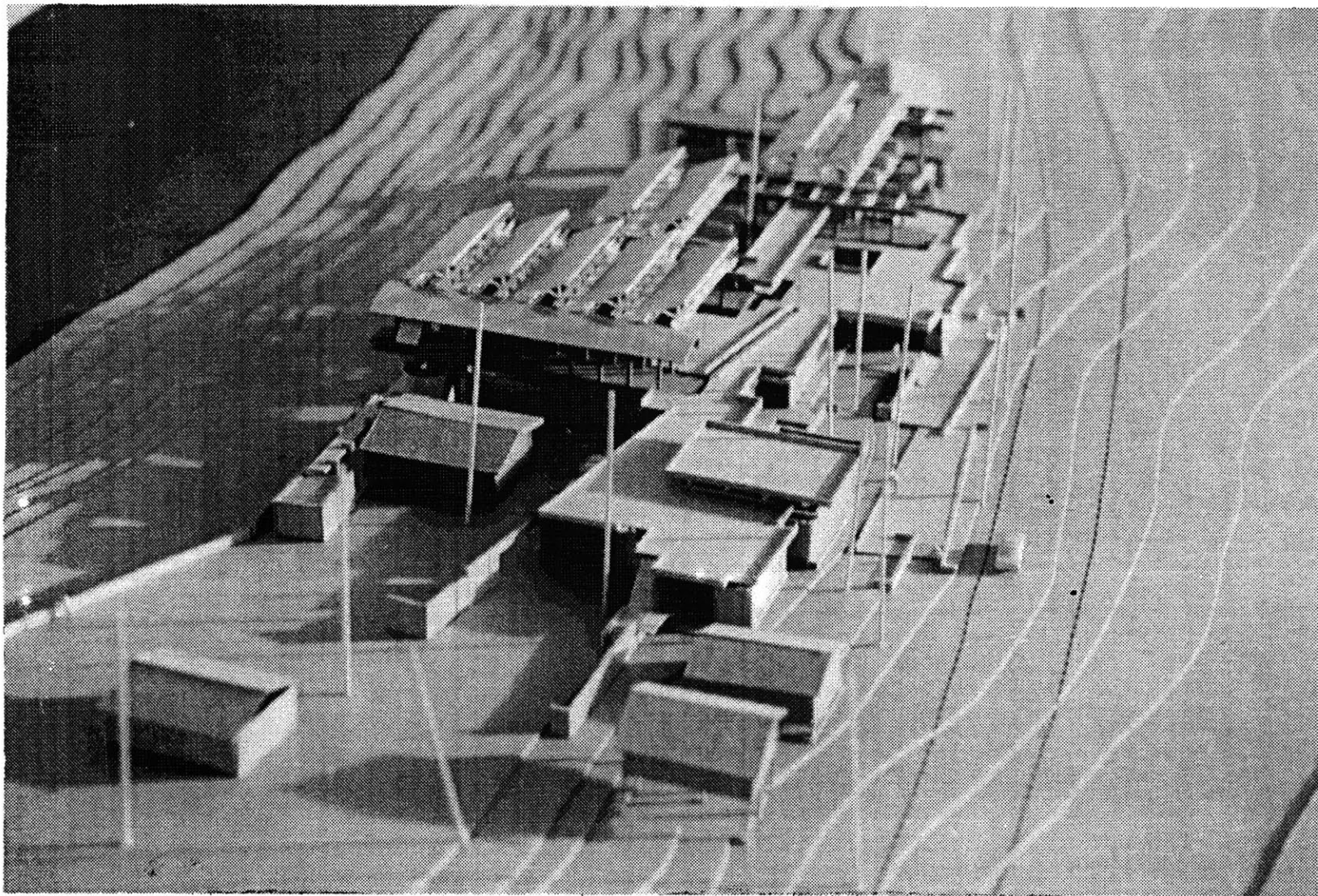


fig. 80 Aerial View - west-east direction.

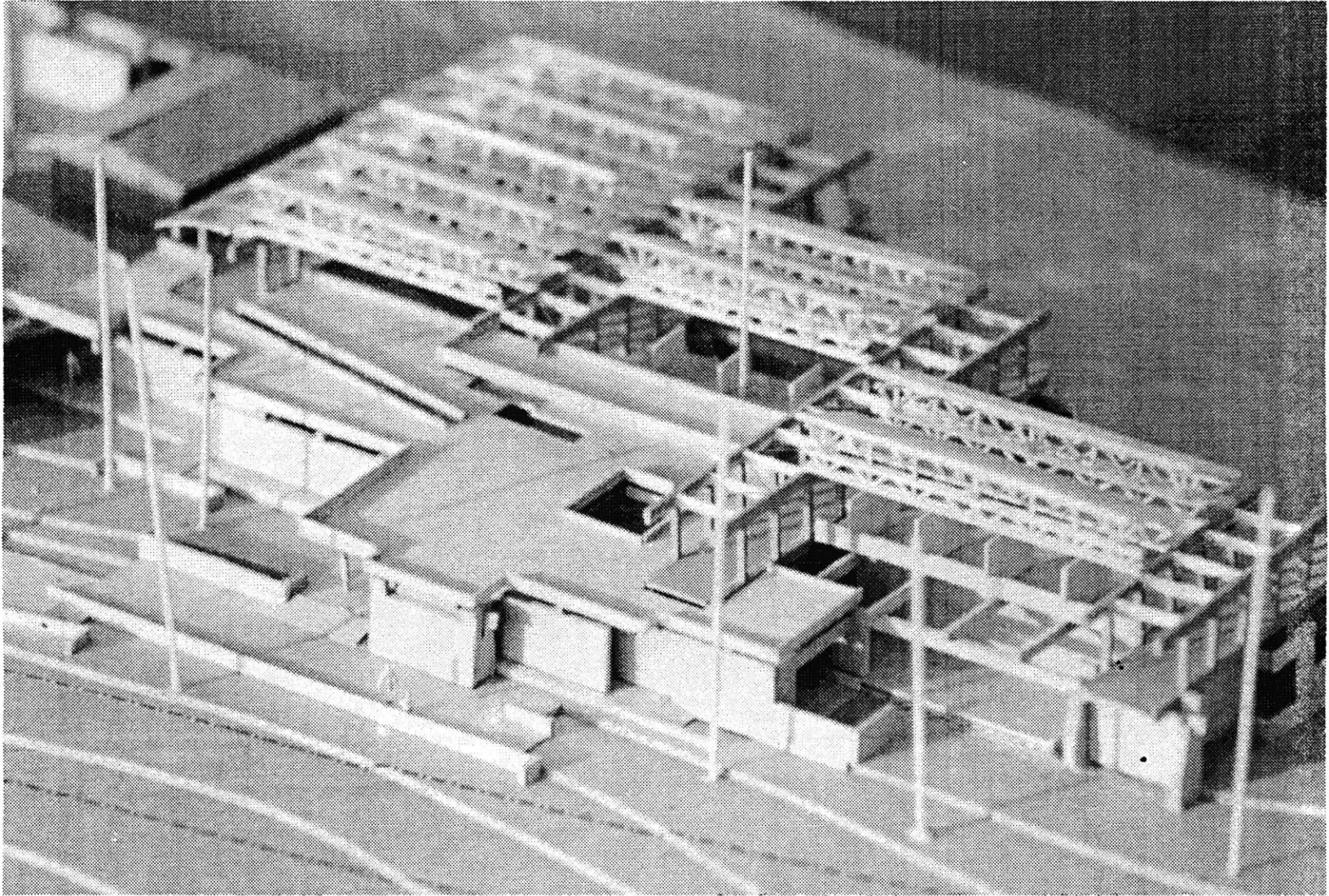


fig. 81 South Facade Detail.

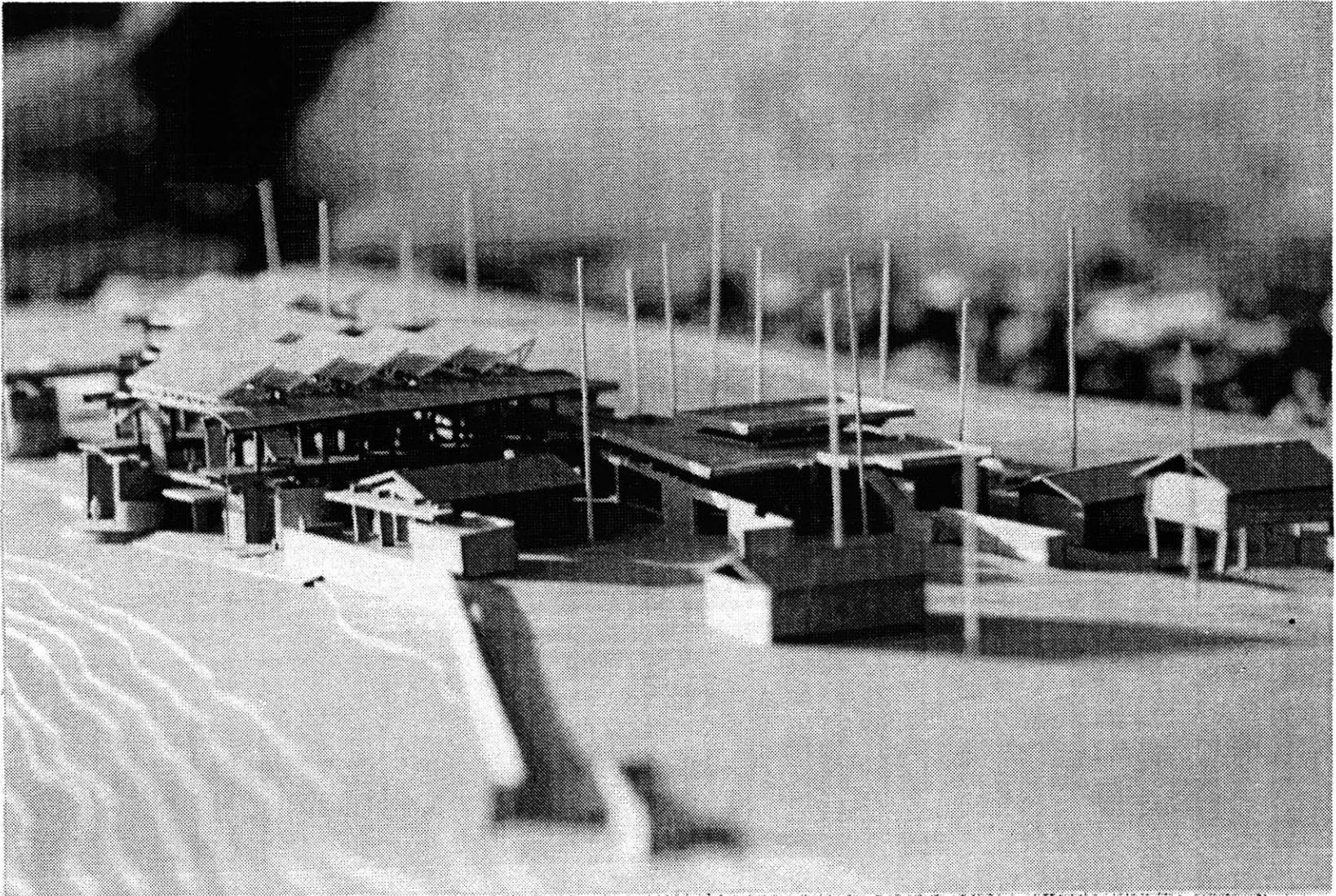


fig. 82 Existing Bar Courtyard.

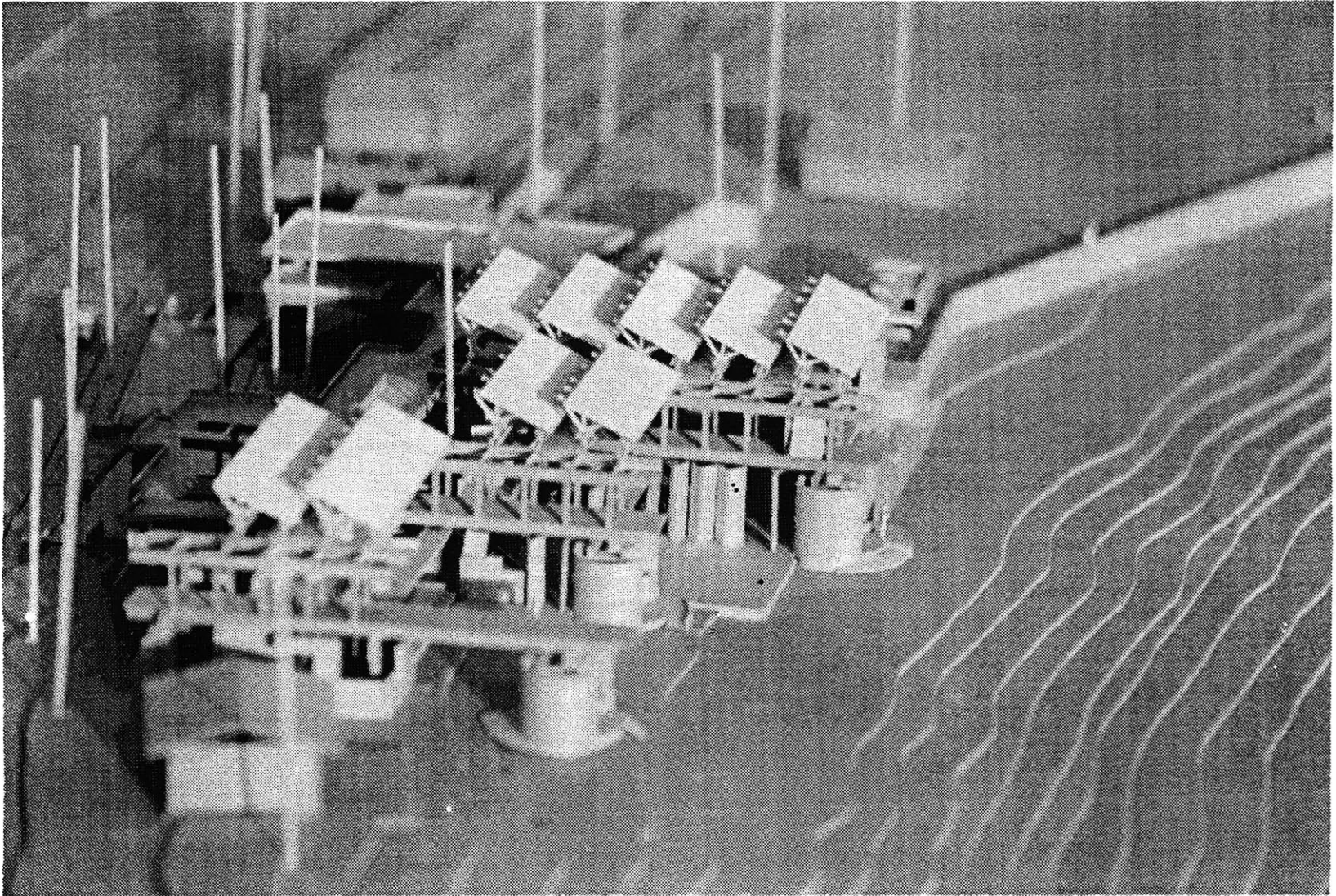


fig. 83 Aerial View - east-west direction.

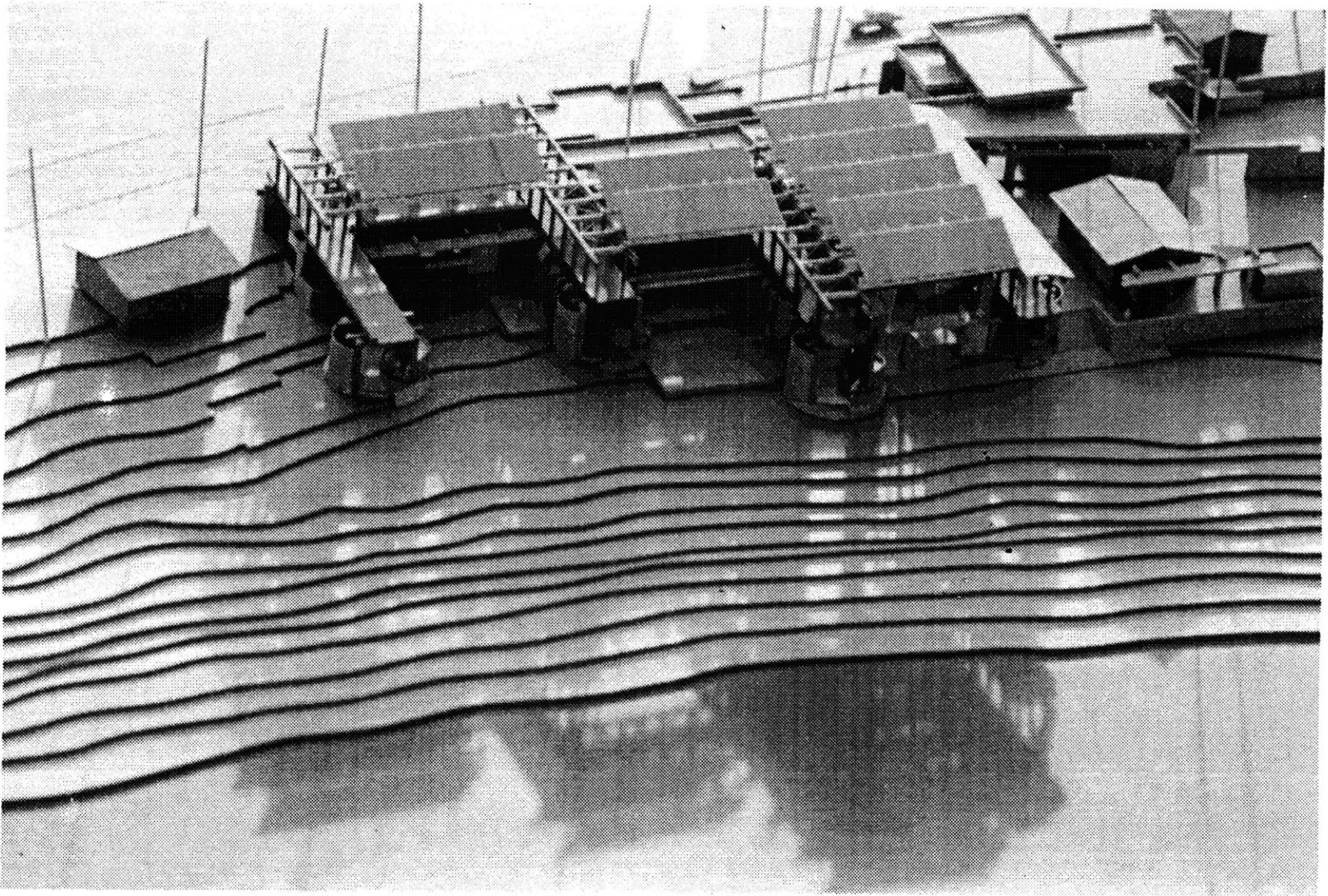


fig. 84 Aerial View - north facade.

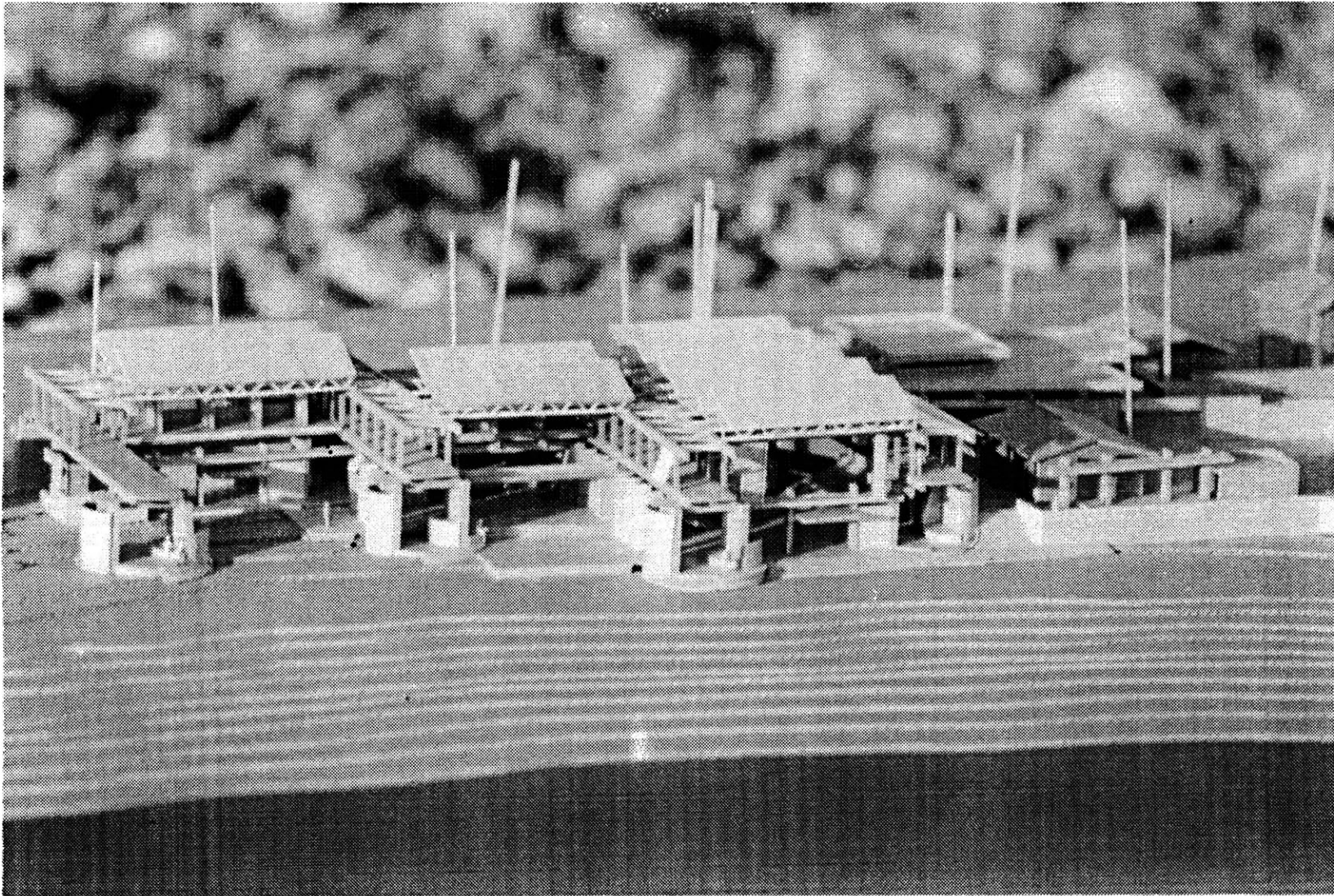


fig. 85 Performing Space relation with the ocean.

Conclusion:

The history of theater and its architectural expression. The design of this project resulted in an effort of harmonize two different approaches toward architecture which at the end should produce a physical object capable of social transformation within a defined program.

These two approaches are:

- A phenomenological approach which establishes the uniqueness of the place, by the manipulation of materials, the shaping of the forms and the natural light, the impact of the structural solutions and the recognition of the natural forces of the place.

- A systematic formal and dimensional approach which ensures on one hand a consistent palette of formal behaviors and on the other a infinite possibilities of human inhabitation. This approach proposes at the same time the importance of establishing a constant exchange of physical forms and space conditions in order to produce spatial continuity.

The definition of the program and its social, economic and political agenda is without doubt the strongest area of research when making an architecture capable of social transformation. But the physical form has to sustain and reinforce that effort establishing the conditions with its own presence and message.

(For further conclusions read appendix 1)

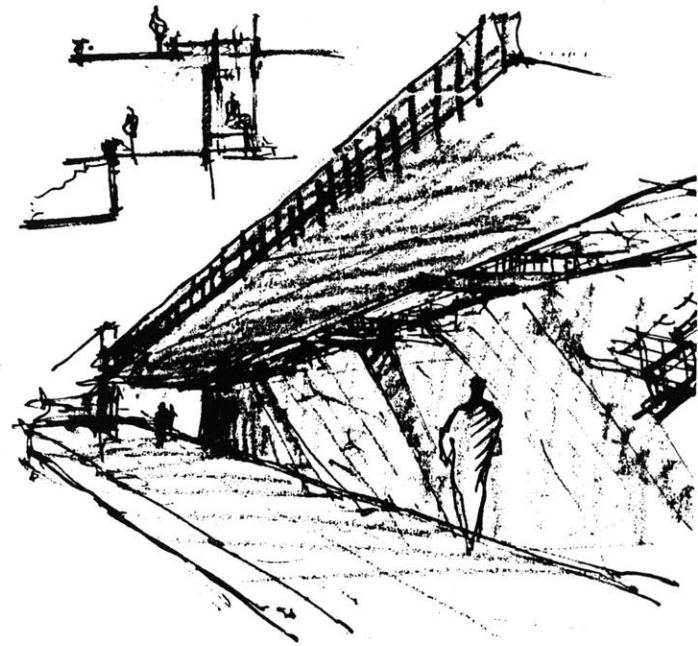


fig. 86 Performing space balcony
Sketch and section.

Bibliography:

- Ackerman, Diane, (1991), *A natural History of the Senses*, New York, Vintage Books.
- Anthenasopoulos, Chritos,(1983), *Contemporary Theater: Evolution and Design*, New York, John Wiley and Sons
- Armstrong, Leslie & Morgan Roger, (1984), *Space for Dance: An Architectural Design Guide*, Publishing Center for Cultural Resources.
- Bachelard, Gaston, (1969), *The Poetics of Space*, Boston, Beacon Press.
- Bloomer, Kent and Moore, Charles, (1977), *Body, Memory and Architecture*, New Haven, Yale University Press.
- Boal, Augusto, (1985), *Theater of the Oppressed*, translated by Charles A. & Maria-Odalia Leal McBride, New York, Theater Communications Group.
- Boal, Augusto, (1992), *Games for Actors and Non-Actors*, translated by Adrian Jackson, London/New York, Routledge.
- Boal, Augusto, (1995), *Rainbow of Desire: The Boal Method of Theater and Therapy*, translated by Adrian Jackson, London/New York, Routledge.
- Boulet, Marie-Laure; Moissinac, Christin & Soullignac, Françoise, (1990), *Auditoriums*, Paris, Editions du Moniteur.
- Brecht, Stefan, (1988), *Peter Schumann's Bread and Puppet Theater*, London/New York, Routledge.
- Breton, Gaele, (1989), *Theaters*, New York, Princeton Architectural Press.
- Buildings for the Arts*, (1978), by the editors of Architectural Record, New York, McGraw-Hill.
- Burris-Meyer, Harold and Cole, Edward C., (1964), *Theaters and Auditoriums*, Huntigton, NY; Krieger Publishing Company.

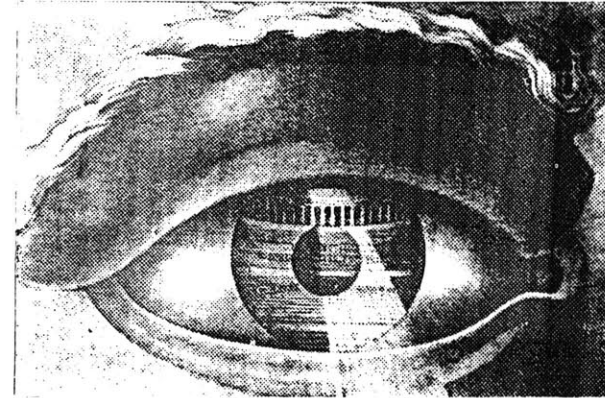


fig. 87 Ledoux drawing.

- Corry, Percy, (1974), *Community Theaters*, London, Pitman Publishing.
- Crosley, Mark, June (1982), *Re-creating the context: The Design of a Community Theater*, Cambridge, MIT M.Arch. Thesis.
- Day, Christopher, (1990), *Places of the Soul: Architecture and Environmental Design as a Healing Art*, London, Aquarian Press.
- Duncan, C. J., (1966), *Modern Lecture Theaters*, London, Oriel Press LTD.
- Elder, Eldon, (1993), *Will It Make a Theater? Find, Renovate and Finance the Non-Traditional Performance Space*, New York, American Council for the Arts.
- Fitch, James M., (1960), *American Building: 2: The Environmental Forces That Shape It*, Houghton Mifflin Co.
- Frampton, Kenneth, (1983), "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Foster, Hal, ed.; *The Anti-Aesthetic: Essays on Postmodern Culture*. Seattle, Bay Press.
- Ham, Roderick, (1987), *Theaters: Planning Guide for Design and Adaptation*, London, Architectural Press.
- Jewell, Don, (1992), *Public Assembly Facilities*, Malabar, Florida; Krieger Publishing Company.
- Lobell, John, (1985), *Between Silence and Light: Spirit in the Architecture of Louis I. Kahn*, Boston, Shambhala.
- Mackintosh, Iain, (1993), *Architecture, Actor & Audience*, London/New York, Routledge.
- Marble, et al, (1988), *Architecture and Body: Columbia Architecture Journal*, New York, Rizzoli International Publications Inc.
- Marquez, Rosa Luisa, (1992), *Brincos y Saltos: El juego como disciplina teatral*. Cayey, Puerto Rico: Ediciones Cuicaloca.

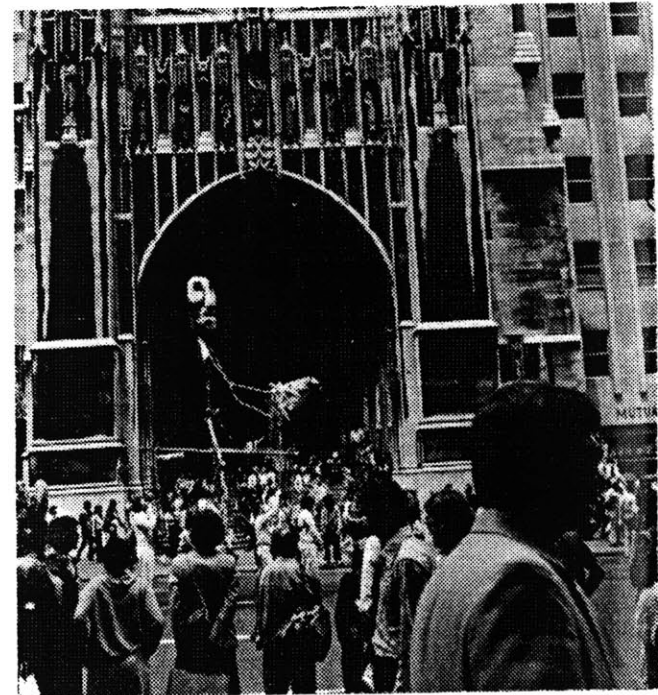


fig. 88 The Bread and Puppet Theater
Death on his Horse, Nuclear Freeze Demonstration,
New York City, June 12, 1982.

-Norberg-Schulz, Christian, (1980), *Genius Loci: Towards a Phenomenology of Architecture*, New York, Rizzoli International Publications, Inc.

-Rasmussen, Steen Eiler, (1959), *Experiencing Architecture*, Cambridge, MIT Press.

-Roche, Bonita, (1979), *Contemporary Theatrical Space: A lobby Design*, Cambridge, MIT M.Arch Thesis.

-Schubert, Hannelore, (1971), *Moderner Theaterbau*, Stuttgart, Bern; Karl Krämer Verlag.

-Seamon, David, (1993), *Dwelling, Seeing, Designing: Towards a Phenomenological Ecology*, New York, State University of New York Press.

-Sennett, Richard, (1974), *The Fall of Public Man*, New York, W.W. Norton & Co.

-Silverman, Maxwell, (1968), *Contemporary Theater Architecture: An Illustrated Survey*, New York, New York Public Library.

-Stephen, Joseph, (1964), *Actor and Architect*, Manchester, Manchester University Press.

-*Theater Space*, (1977), International Federation for Theater Research, Munich.

-*The National Theater: "The Architectural Review" Guide*, (1977), Edited by Colin Amery, London, The Architectural Press Ltd.

-Tidworth, Simon, (1973), *Theaters: An Illustrated History*, London, Pall Mall Press.

-Tuan, Yi-Fu, (1977), *Space and Place, The Perspective of Experience*, Minnesota, University of Minnesota Press.

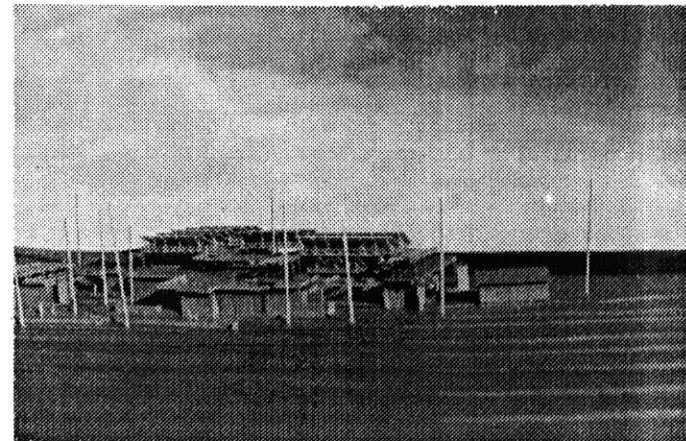


fig. 89 Project View.



fig. 90 Early Conceptual Sketch

Notes and Credits:

Notes:

1. Boal, (1985), *Theater of the Oppressed*, translated by Charles A. & Maria-Odalia Leal McBride, New York, Theater Communications Group.
2. Mnouchkine, An Empty Space That Provides Inspiration, in Gaelle Breton, *Theaters*, Princeton Architectural Press, p. 16.
3. Ibid., p. 17.
4. Breton, A Mirror of Society, in Gaelle Breton, *Theaters*, Princeton Architectural Press, p.13.

Credits:

All illustrations and photographs are by Ernesto F. Rodríguez (author) unless otherwise noted.

* Photographs of the theater group Teatreros de Cayey, taken by photographer Miguel Villafañe during The 1993 Theater of the Oppressed International Festival in Rio de Janeiro, Brazil.

- fig. 1-* Guto Muniz, Grupo Galpão, Belo Horizonte, Brazil.
fig. 2- Xul Solar, *Theatro*, oil painting, 1924.
fig. 3- G. Lange, Washerwoman Nativity, 1979, in Brecht, *The Bread and Puppet Theater*, vol. 2 . Routledge, 1988. p. 340.
fig. 6- Keith Myers, New York Times Pictures, Nuclear Freeze Demonstration, New York City, June 12, 1982., Ibid. ,p.348.
fig. 7- E. George, The Stations of the Cross, Ibid., p.193.
fig. 8- P. Moore, The Pageant, Circus, 1997, Ibid., p. 643.

fig. 9- F. Mc Darrah, Fifth Avenue Peace Parade, March 26 , 1966, Ibid., vol. 1, p. 421.

fig. 18- Map: San Juan, Puerto Rico.

fig. 22- Map: Loiza, Puerto Rico, Estado Libre Asociado de Puerto Rico, Departamento de Transportación y Obras Públicas, Autoridad de Carreteras y Transportación, Oficina de Fotogrametría.

fig. 52- M. Goldwater, Half Moon Theater, London, in Gaelle Breton, *Theaters*, Princeton Architectural Press., 1989, p.46.

fig. 54- Ibid.

fig. 55- Ibid.

fig. 88- Ledoux, drawing, Ibid., p.4.

fig. 89- B. Brown, Death on His Horse, Nuclear Freeze Demonstration, New York City, June 12, 1982, in Brecht, *The Bread and Puppet Theater*, vol. 2 . Routledge, 1988. p. 350

fig. 91- H. Faget, Bread and Puppet Circus, 1974, Ibid., p. 198.

fig. 94- Cross section: flies and understage of an Italian stage; in Gaelle Breton, *Theaters*, Princeton Architectural Press., 1989, p.9

fig. 95- Conversion of the Viex Colombie theater featuring "designed stage", Louis Jouvet, Paris, 1921., Ibid. p. 13.

fig. 96- Epidaurus theater, 340 BC, Ibid. p. 6.

fig. 97- Pompeii odeon, 75 BC., Ibid. p.7.

fig. 98- The Swan Theater, London, c.1600., Ibid. p.8.

fig. 99- Section Italian theater, Ibid. p.10.

fig. 100- Festspielhaus, Richard Wagner, and Otto Bruckwald, bayreuth, 1876., Ibid. p.12.

fig. 101- Kiosks line the beach in Piñones., STAR photo by Javier Freytes., p. 19.

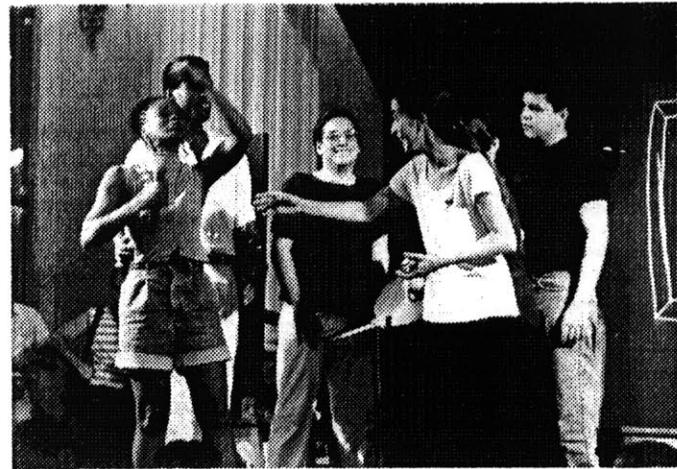
fig. 102- Many of the tiny shacks along scenic Highway187..., Ibid. p.24.

fig: 130- Xul Solar, *Teatro*, oil painting, 1924.

fig. 91 The Bread and Puppet Theater Circus, 1974.

fig. 92 Teatreros de Cayey - Forum Theater, 1993.

fig. 93 Teatreros de Cayey - Fotoestática, 1993.



Appendices

Appendix 1:

The Piñones Community Theater:

The New Model in a Historic Perspective.

Theater designers, producers and actors have been dealing with the question of, what should be the ideal spatial configuration for the contemporary theater?, for many years.

It has been proven that the 60's and 70's model of the neutral box or black-box theater failed achieving the poetics of the theatrical experience. If in one hand the black-box provided for multiple stage configurations and a actor-spectator relationship freedom, on the other hand it lost the capacity of transporting, like previous models did, the spectators to another reality: The reality of theater.

My theater proposes a new approach to the design of a theater. This approach comes directly from the experience of working with a specific theater group and as an effort of recognizing the type of work they realize.

The two fundamental points of research on the design for the new theater type are:

- 1) The aim of spatial continuity and exchange between the performing space and the landscape.
- 2) The aim of spatial continuity and exchange between the building as a whole and the territory occupied by the existing community of Piñones.

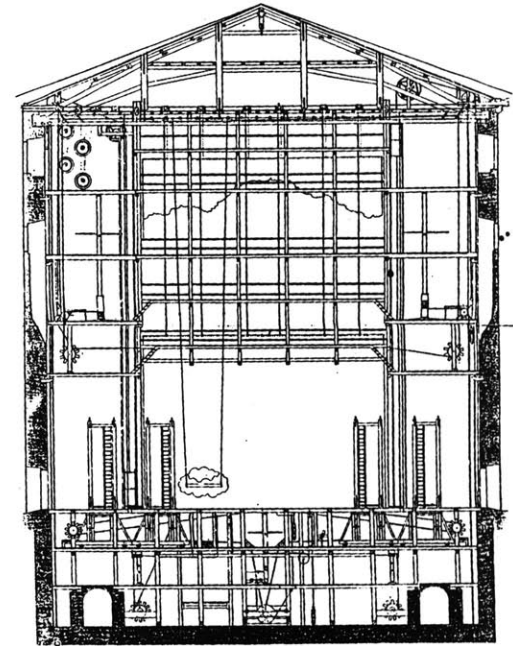


fig. 94- Cross section: flies and understage of an Italian stage.

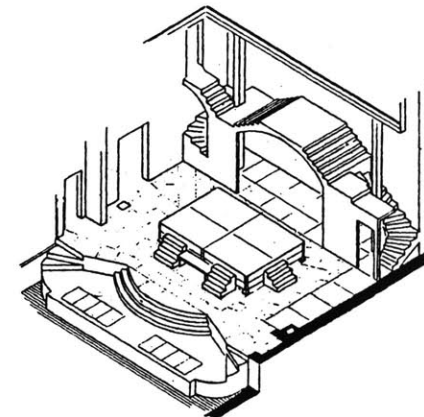


fig. 95- Conversion of the Viex Colombie theater

The design process of such a type necessarily involves the analysis of historical models and precedents. Existing models achieve some of the qualities desired for the new proposed theater while at the same time they can serve as examples of what not to do.

The model of Greek theater is the first one that comes to mind when talking about the integration of performing space and landscape. The virtue of this model resides in the way it takes advantage of the slope of the place to generate its form. Two major points of criticism are:

- 1) It doesn't allow for spatial configuration transformations, being the actors confined to a fixed location in relation with the landscape.
- 2) It doesn't allow for alternative uses with different weather conditions.

Another positive aspect of the Greek theater employed in the new theater type was the recognition of the landscape as a potential scenic back drop. This idea combined with the incorporation of a transformable enclosure system allows for a unique manipulation of the natural light for dramatic purposes. In that sense the new model does what the follower of the Greek model -the Roman model- did in the city with a flat ground, but retaining the natural environment as immediate context, behind the walls.

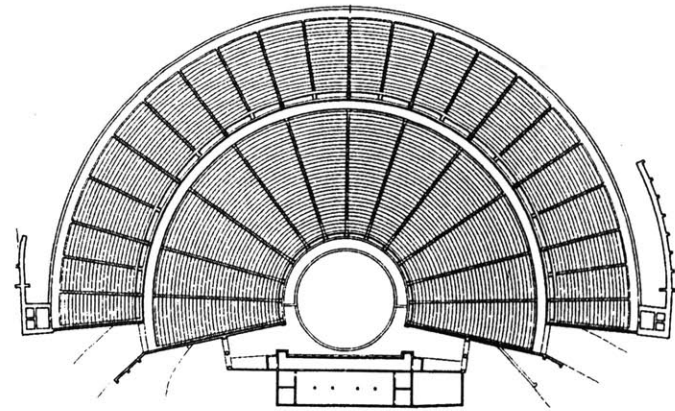


fig. 96- Epidauros theater, 340 BC.

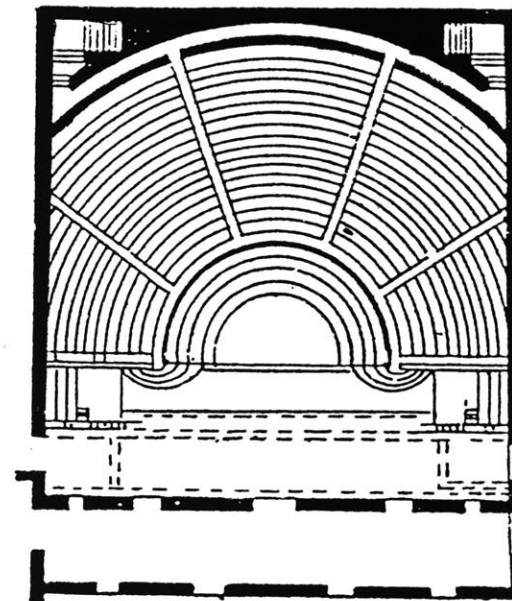


fig. 97- Pompeii odeon, 75 BC.

The new model recognizes as well the importance of the out-door performance of the medieval times, when theater was made in front of the churches or at the public squares. In this line of thought the new model provides for a variety of out-door scenarios of dramatic action while at the same time the building serves as a background without representing, as use to do the churches, a symbol of oppression.

The idea of the galleries which originally surge during the mid-sixteenth century with the Elizabethan model is represented in the new model by the elevated concrete trusses. Nevertheless, the spatial organization of the building, rejects the idea of a social/hierarchical schema, when it is conceived not as a fixed configuration. In this sense balconies and galleries can be inhabited not only by spectators, but also by actors with different uses. Breaking the convention of galleries being privileged positions for privileged audience.

The Italian model of the 1600's and its French variants were studied because of the influence they have had in the design of modern theaters. The idea of including actors and spectators in the same space -a sort of continuous box that bridges the gap between these two different worlds-, in my opinion, is the starting point of the black-box theater spatial distribution. This logic evolves even more combined with the idea of Richard Wagner's Festspielhaus theater, which defines the sitting area as a unified zone with the same visual and auditory conditions. The theater space turns into a "democratic box" because of an explicit technical agenda.



fig. 98- The Swan Theater, London, c.1600.

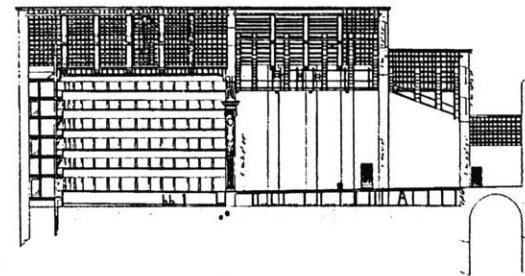


fig. 99- Section Italian theater.

In modern times as Gaelle Breton has said: " The treatment of theatrical space was no longer a process that aimed to provide an illusion of reality, but rather a means of expressing the very essence of the drama." At this point the idea of an ideal stage configuration was no longer in the mind of the theater people, they rather tried to experiment with transformable spaces which informed the theatrical piece and not vice versa. The architecture took a secondary role in determining or at least influencing the dramatic action.

It is at this point when the black-box theater and its consecutive failure appeared. The theatrical space turned into a transformable technical box suppressing the poetic aspects of the theater architectural experience.

The new model should be design recognizing the specifics of the program and, if it is the case, the specifics of the theater group or groups which are going to use the space. It should respond to their necessities and demands . That will give to the designer a departure point in order to generate a dialog between the architectural conditions of the theater and the technical specifics of it, while at the same time he will ensure the unique sense on place that a theater needs.

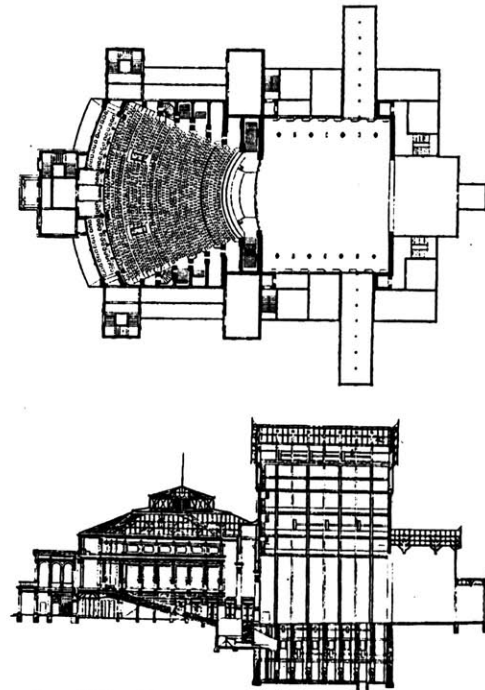
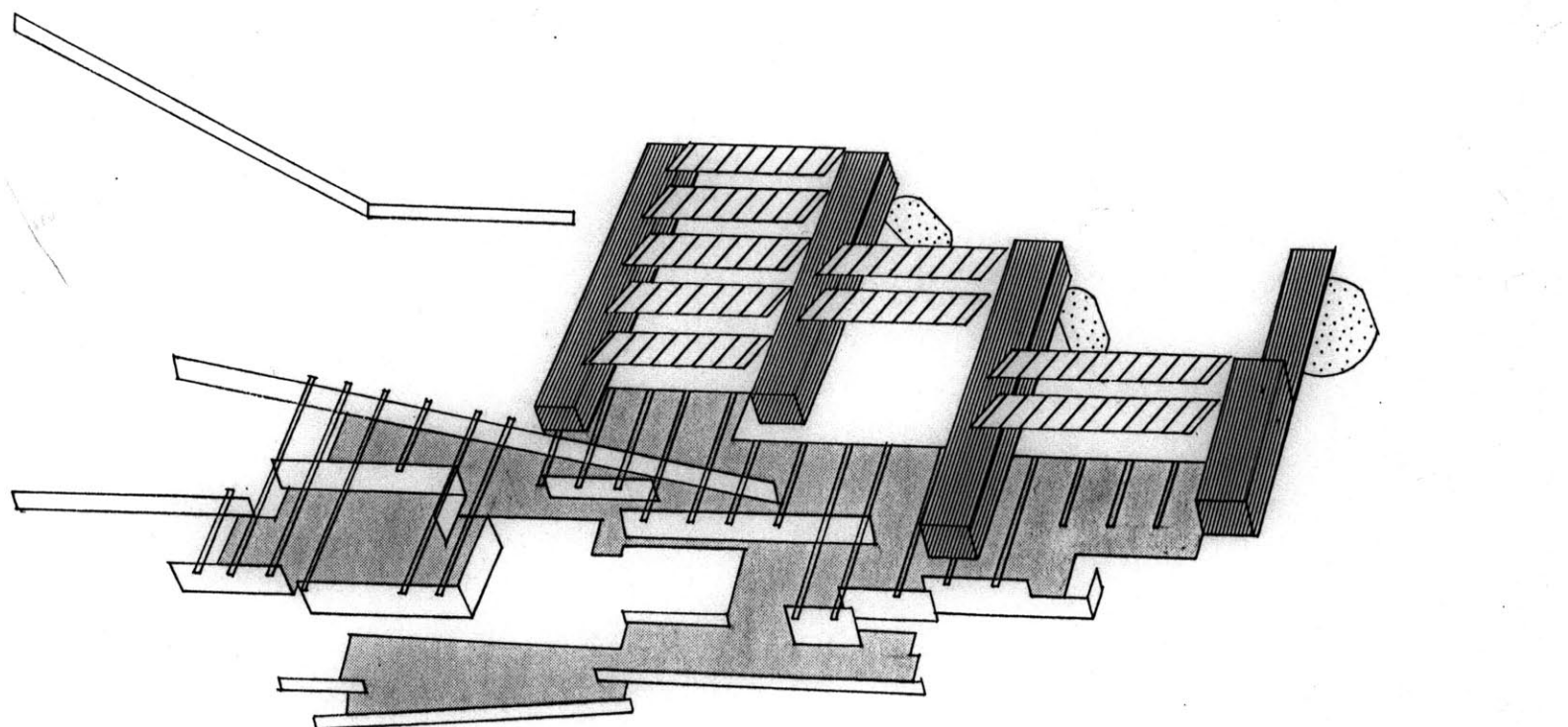


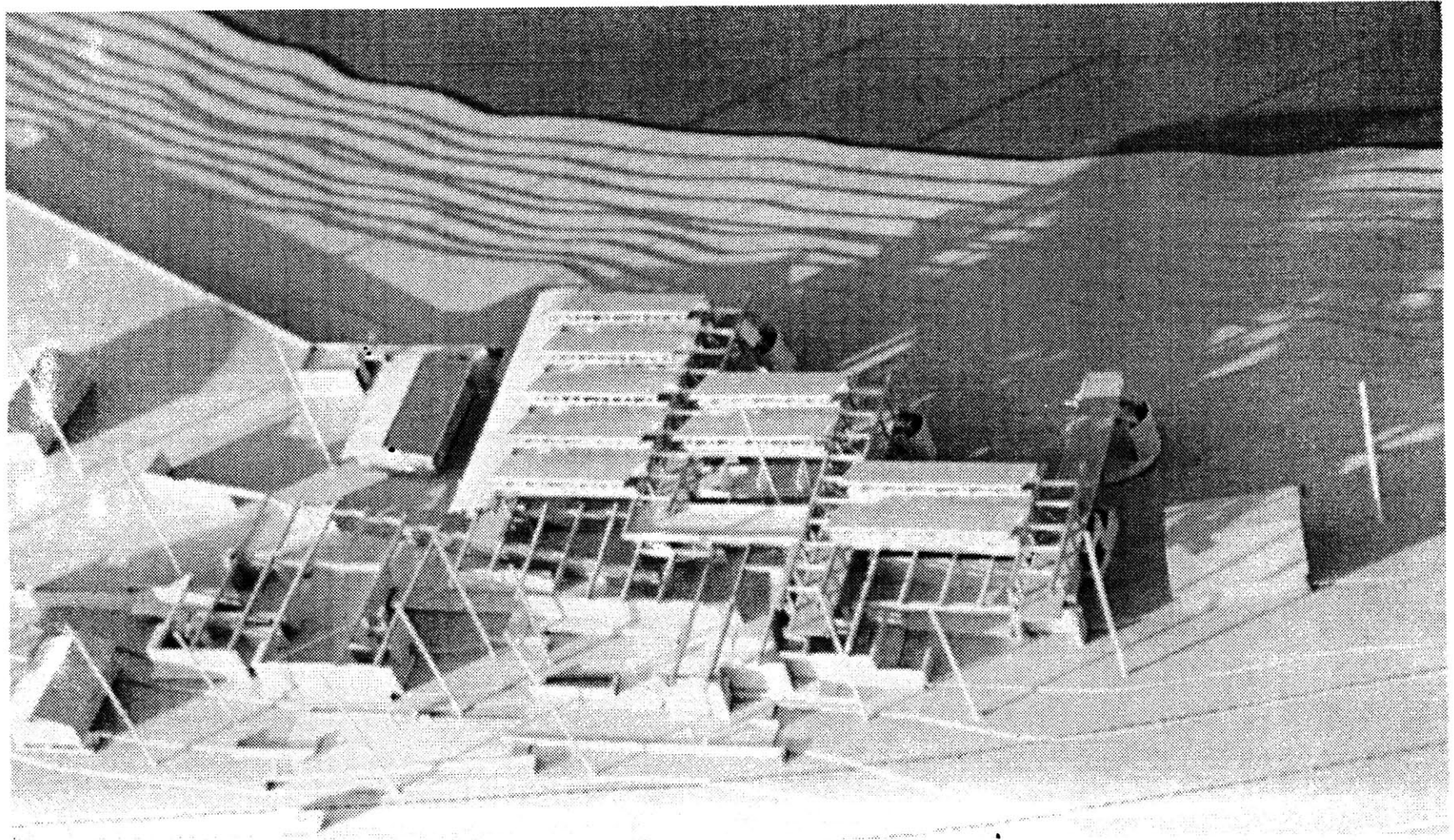
fig. 100- Festspielhaus, Richard Wagner, and Otto Bruckwald, bayreuth, 1876.

Appendix 2

Architectural Systems (diagram).

- 1. continuous surface.
- 2. directional cast in place concrete walls system.
- 3. cast in place support system.
- 4. pre-cast concrete truss system.
- 5. roof systems.
- 6. cast in place concrete beam system.





Aerial view of the building (without concrete roofs).



STAR photo by Javier Freytes

Kiosks line the beach in Piñones.

Present imperfect in Pinones



JOHN MARINO

Dispatches

LOIZA

Regulars may be dancing their last dances at several Piñones nightspots known for their cheap drinks, loud music and the flamboyant dress of their clientele.

And many of the tiny shacks along scenic Highway 187 which serve up *bacalaitos*, *alcapurrias* and other fried delicacies could disappear any day now.

It all depends on when the government decides to begin enforcing a new zoning plan established by the Planning Board and approved by Gov. Rosselló last June.

The plan seeks to balance the commercial and residential interests in the area, while protecting the fragile natural resources of Piñones, its proponents say.

But it will clearly change the carefree way of life embodied by Piñones — the last undeveloped beachfront land in the metropolitan area. Although when that will happen remains unclear.

The plan sets aside 500 *cuerdas* (each one is .97 of an acre) of the approximately 10,000 *cuerdas* in Piñones for small-scale commercial and residential use. It also establishes a recreation trail and seeks to preserve much of the area as a passive recreation zone.

The Planning Board is also considering a mammoth \$300 million tourism project in the Talega

Please see PINONES, Page 24

From Page 19

Pinones

sector of Piñones by PFZ Properties, Inc.

"The Piñones area has always been a very touchy one because of the conflicting interests there," said Luis Frías, Planning Board Secretary, adding that the plan seeks to balance those interests.

He also said that area residents were informed of the plan and took part in public hearings, but most residents say they just recently realized a new zoning plan had been approved.

"The majority of the people here don't know what's going on," said Tito Quiñones, a longtime Piñones resident and merchant. But those that do are worried about the future of their livelihoods, he added.

For years, the government has taken a loose approach to regulation of businesses in Piñones, which means that several businesses that have been established for years are operating illegally under the standards of the new zoning plan.

As a result, a *laissez-faire* attitude has developed here with many business people believing that bureaucratic trifles such as permits are not necessary in Piñones. But the new plan could pave the way for changing all that.

The big problem for many businesses is that they don't have clear title to lands or are leasing a business from an owner without clear title.

And without clear title, they won't be able to get a use permit from the Permits and Regulations Administration, which allows them to get all the other necessary permits to operate from other government agencies — such as a liquor license from the Treasury Department.

Quiñones and other businessmen estimate that some 60 percent of the businesses in the area could be illegal and are subject to closure when government decides to enforce the new zoning plan.

One of them is Harrio Escalera, who paid the \$50 application fee but has yet to receive a permit for Las Dos Palmas, a small beachfront eatery.

Even Quiñones — whose family won a court case dating back to 1958 against the government proving they owned a parcel of land since the 1800s — still hasn't been able to renew his use permit, although he is confident he will ultimately prevail.

In fact, only a handful of businesses have been succeeded.

"They told me I was issued the first permanent use permit in 25 years," said John Fritz, who just opened up Hemingway's — a "gringo bar with literary pretensions" in the Crash Boat sector of Piñones.

When Fritz applied at the regional ARPE office in Carolina, officials there initially tried to give him a "provisional permit" that was good for one year.



STAR photo by Javier Freytes

Many of the tiny shacks along scenic Highway 187 which serve up *bacalaitos*, *alcapurrias* and other fried delicacies could disappear soon due to a new zoning plan established by the Planning Board last June.

Fritz, however, objected, insisting that the agency either give him a permanent use permit or deny his request, which would allow him to appeal the decision.

Although Fritz prevailed, his objection threw light on ARPE's practice of granting provisional one-year permits for Piñones businesses.

The practice apparently allowed the regulatory agency to put off making final decisions on use permits while the Planning Board was drawing up its master zoning plan. But it also allowed several illegal businesses to operate for years and may have even led to their growth.

Now that the zoning plan is in effect, ARPE will begin to issue permanent use permits to area businesses, although many will probably be turned down.

The provisional use permits granted last year to businesses expired at the end of September, meaning that the survival of several businesses appear to be in the hands of government regulatory bodies which must decide how and when to enforce the new zoning plan.

The plan establishes areas which would be for food kiosks. And the illegal businesses throughout the area would presumably be allowed to transfer to one of these areas. Such a move would probably have the support of current vendors, Quiñones said.

But officials are not explaining clearly when they may start enforcing the regulations against illegal businesses. About 40 businesses that applied for an operating permit will be granted one last temporary permit that will last until May 30, 1996, said Hermína Pereira, ARPE's regional director.

After that, businesses will either have to be in compliance or be closed down, he said. Other businesses, who failed to apply, may be shut down sooner. Rumors that a few high profile discos, which have been the scene of violent crimes, would be shut down last weekend never materialized.

But many merchants fear that the government may begin shutting down less troublesome places, as well.

fig. 101- Kiosks line the beach in Piñones.
fig. 102- Many of the tiny shacks along scenic Highway 187.

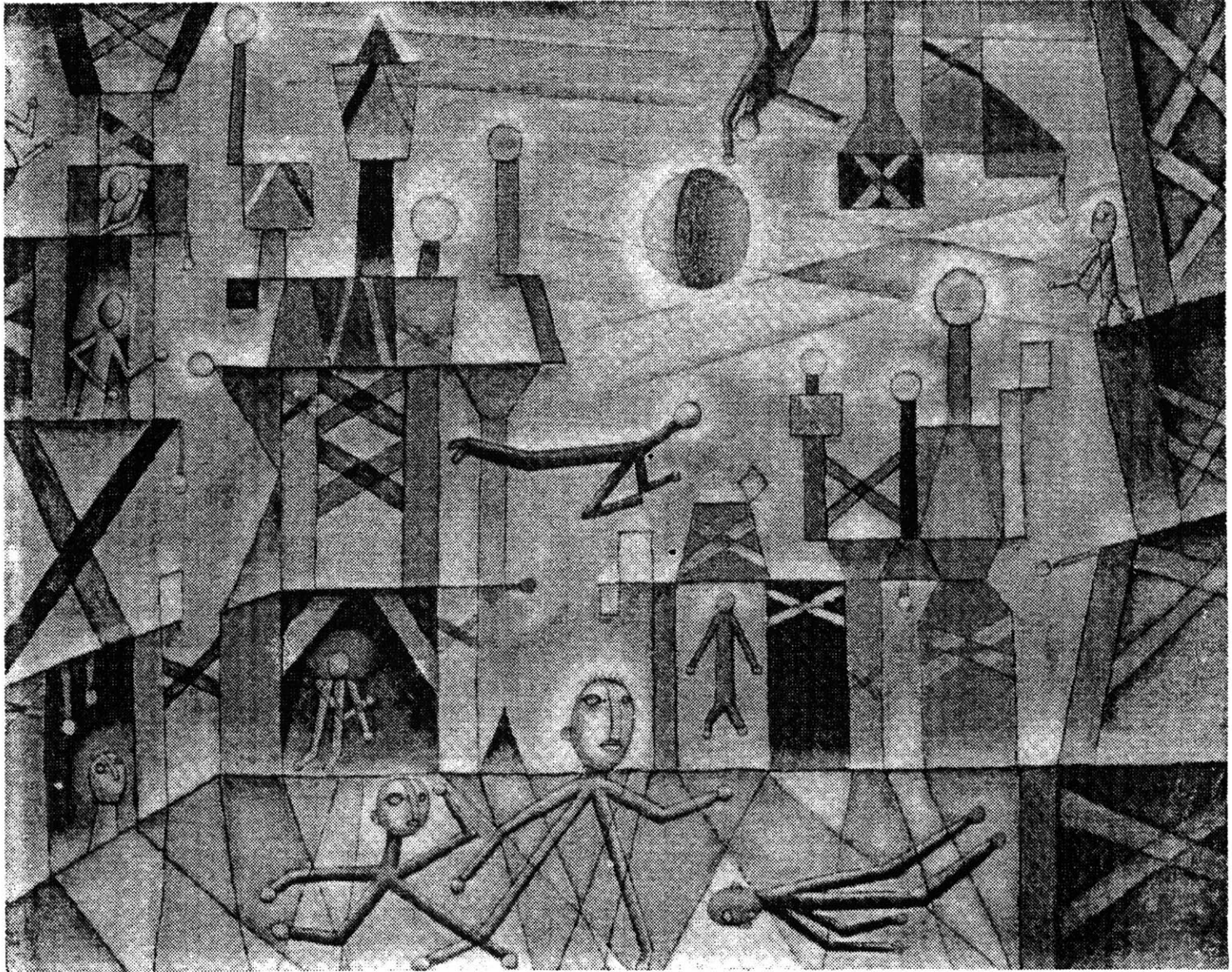


fig: 103- Xul Solar, *Teatro*, oil painting, 1924.