

Platforms and Plateaus:
Ideas of A Danish Architect

Jörn Utzon

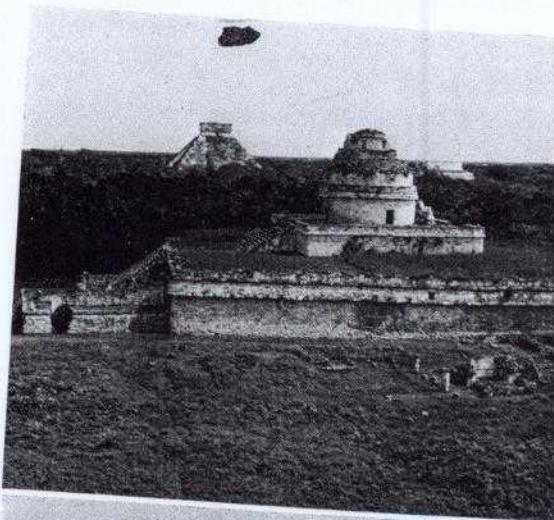
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L'idée de l'architecture en tant que « modification » de la nature selon les lois et les raisons de l'ordre humain (le contraire de l'architecture organique) est le point de départ de ces notes très intéressantes écrites par un des architectes les plus intelligents parmi les jeunes de tous les pays: Jörn Utzon, danois. Il étudie notamment un élément d'architecture et d'urbanisme si important qu'on pourrait le considérer symbolique dans tous les temps et dans toutes les civilisations: l'aire circonscrite, nettement délimitée et même isolée de son ambiance naturelle, très souvent, parce qu'elle est surélevée du niveau du sol (et parfois on tire parti des hauteurs naturelles), et devenue partout « architectonique ». On y bâtit certains monuments de la vie religieuse, civique, domestique, suivant les civilisations et les coutumes. Depuis les temples du Mexique et l'acropole grèque (on pourrait y ajouter maints exemples italiens), M. Utzon parvient jusqu'à nos jours, et il nous dit que c'est la même idée de la « plateforme » qui a déterminé ses propres œuvres les plus connues et importantes (l'Opéra de Sidney, par exemple, et le plan de Elviria, très récent). Il en découle un tas de suggestions capitales pour résoudre certains gros problèmes de l'urbanisme actuel: entre autres, les problèmes de la circulation dans les villes.

The platform as an architectural element is a fascinating feature. I first fell in love with it in Mexico on a study trip in 1949, where I found many variations, both in size and idea of, the platform, and where many of the platforms are alone without anything but the surrounding nature.

All the platforms in Mexico were positioned and formed with great sensitivity to the natural surroundings and always with a deep idea behind. A great strength radiates from them. The feeling under your feet is the same as the firmness you experience when standing on a large rock.

Let me give you two examples of the brilliance of the idea behind. In Yucatan, in Uxmal and Chichen-Itza, the same principle is followed, based on identical natural surroundings. Yucatan is a flat lowland covered with an inaccessible jungle, which grows to a certain uniform defined height. In this jungle the Mayans lived in their villages with small pieces of land cleared for cultivation, and their surrounding, background as well as roof, was the hot, damp, green jungle. No large views, no up and down movements.



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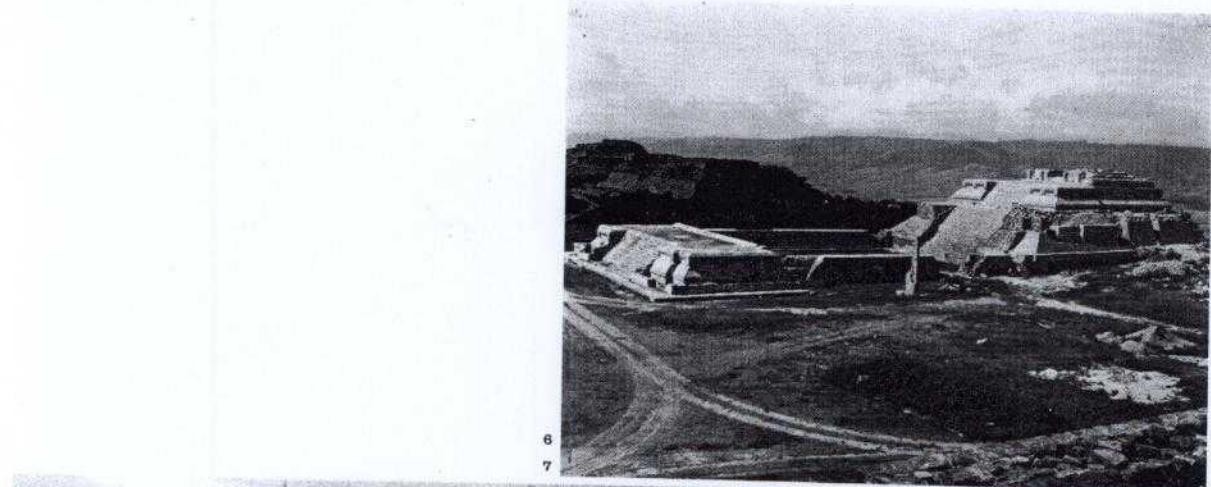
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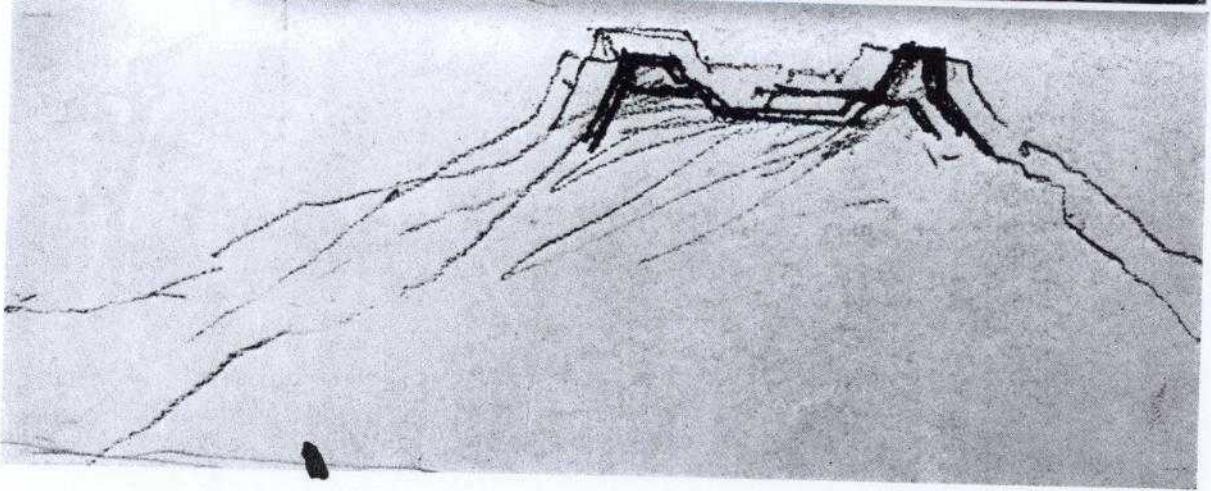
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In India and the East, not forgetting the Acropolis and the Middle East, many wonderful platforms of various kinds are the backbone of architectural compositions and all of them based on a great concept.

A few examples:

The big mosque in Old Delhi is an outstanding one. It is surrounded by the markets and the bazaar buildings, placed in a pell mell of traffic, people, animals, noise and nervous buildings. Here, raised approximately 3 to 5 meters above this is an enormous red sandstone platform surrounded by arcades on the outer contours of the platform. These arcades are closed by walls on three sides of the platform, so that you can look through only at the fourth side, and here, from above, have contact to the life and disorder of the town. On this square or platform, you have a strong feeling of remoteness and com-

6-8. Monte Alban.



plete calmness. An effect, no client or architect would have dreamed possible in advance, has been achieved by so very few means.

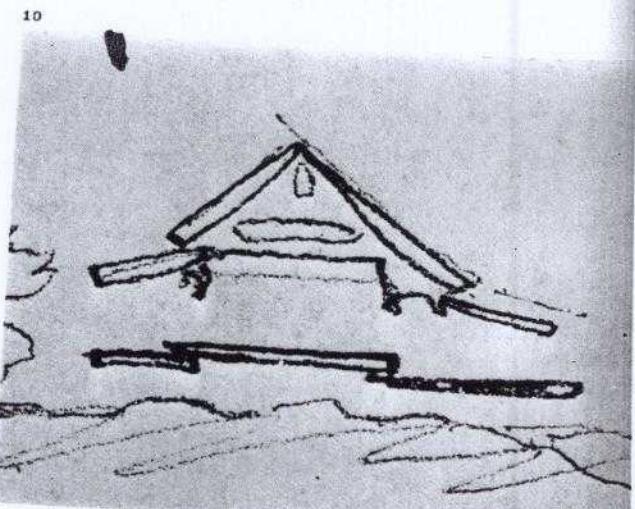
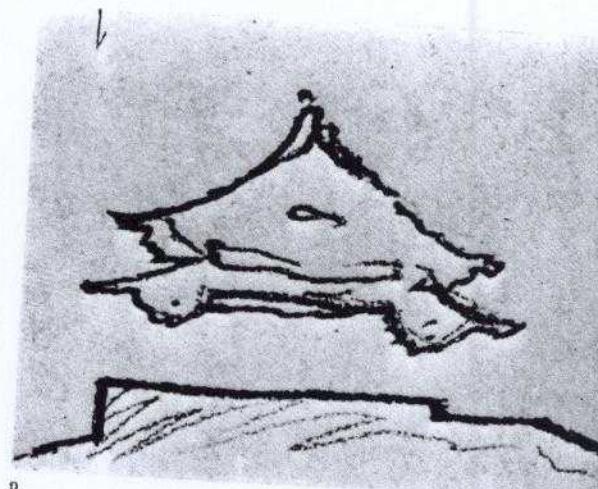
Chinese houses and temples owe much of their feeling of firmness and security to the fact that they stand on a platform with the same outline as that of the roof or sometimes even of larger size, depending upon the importance of the building. There is magic in the play between roof and platform.

The floor in a traditional Japanese house is a delicate bridge-like platform. This Japanese platform is like a table top and you do not walk on a table top. It is a piece of furniture. The floor here attracts you as the wall does in a European house. You want to sit close to the wall in a European house, and here in Japan, you want to sit on the floor and not walk on it. All life in Japanese houses is expressed in sitting, lying or crawling movements. Contrary to the Mexican rock-like feeling of the platform, here you have a feeling similar to the one you have when standing on a small wooden bridge, dimensioned to take just your weight and nothing more. A refined addition to the expression of the platform in the Japanese house is the horizontal emphasis provided by the movements of the sliding doors and screens, and the black pattern made by the edges of the floor mats accentuate the surface.

An almost violent, but highly effective and wonderful contrast to this calm, linear, natural coloured architecture is created by the Japanese women moving noiselessly around like exotic butterflies in their gaily coloured silk kimonos. The second example from Mexico is Monte Alban, an ingeniously chosen site for devotion to the Gods. The human regulation or adaptation of the site has resulted in something even stronger than nature and has given it spiritual content.

The little mountain, Monte Alban, almost a pyramid, dominates three valleys outside the town, Oaxaca, in Southern Mexico. The top of the pyramid is lacking and leaves a great flat part, approximately 500 meters to 300 meters. By the introduction of staircase arrangements and step-like buildings on the edge of the platform and keeping the central part at a lower level, the mountain top has been converted into a completely independent thing floating in the air, separated from the earth, and from up there you see actually nothing but the sky and the passing clouds, — a new planet.

Some of my projects from recent years



are based on this architectural element, the platform. Besides its architectural force, the platform gives a good answer to today's traffic problems. The simple thing that cars can pass underneath a surface, which is reserved for pedestrian traffic, can be developed in many ways.

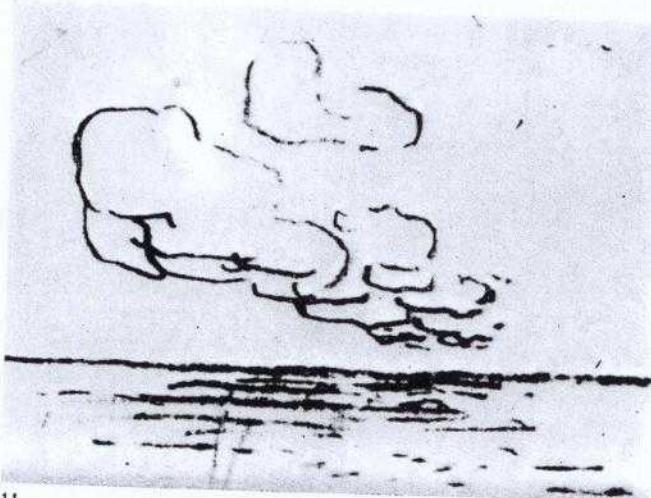
Most of our beautiful European squares suffer from cars. Buildings, that „spoke with each other” across a square, either in axis systems or in balanced composition, are not corresponding any more because of the traffic flow. The height of the cars, their speed and surprisingly noisy behavior make us seek away from squares, which used to be restful places for walking.

In some of the schemes shown, there are various traffic layers under the platform — for covered pedestrian intercommunication, for cartraffic and for parking. The buildings stand on top of the platform supporting each other in an undisturbed composition.

In the Sydney Opera House scheme, the idea has been to let the platform cut through like a knife and separate primary and secondary functions completely. On top of the platform the spectators receive the completed work of art and beneath the platform every preparation for it takes place.

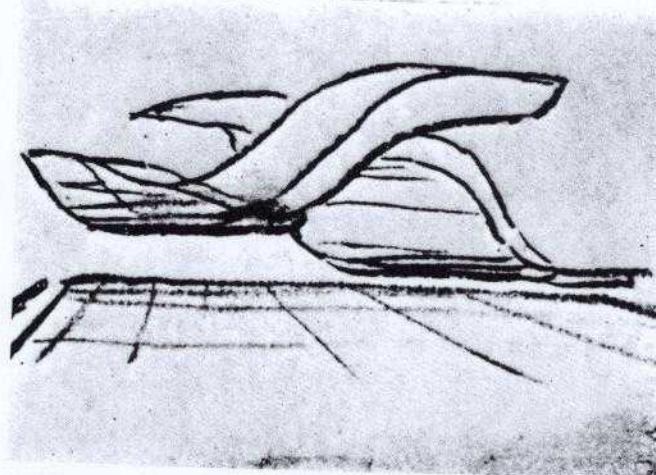
To express the platform and avoid destroying it is a very important thing, when you start building on top of it. A flat roof does not express the flatness of the platform.

As shown here in the schemes for the Sydney Opera House and the High School, you can see roofs, curved forms, hanging higher or lower over the plateau. The contrast of forms and the constantly changing heights between these two elements result in spaces of great architectural force made possible by the modern structural approach to concrete construction, which has given so many beautiful tools into the hands of the architect.

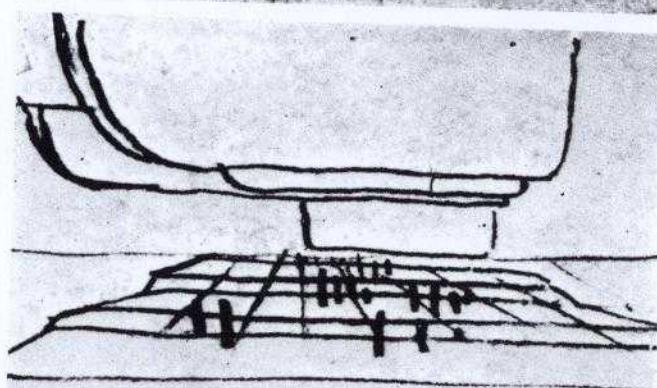


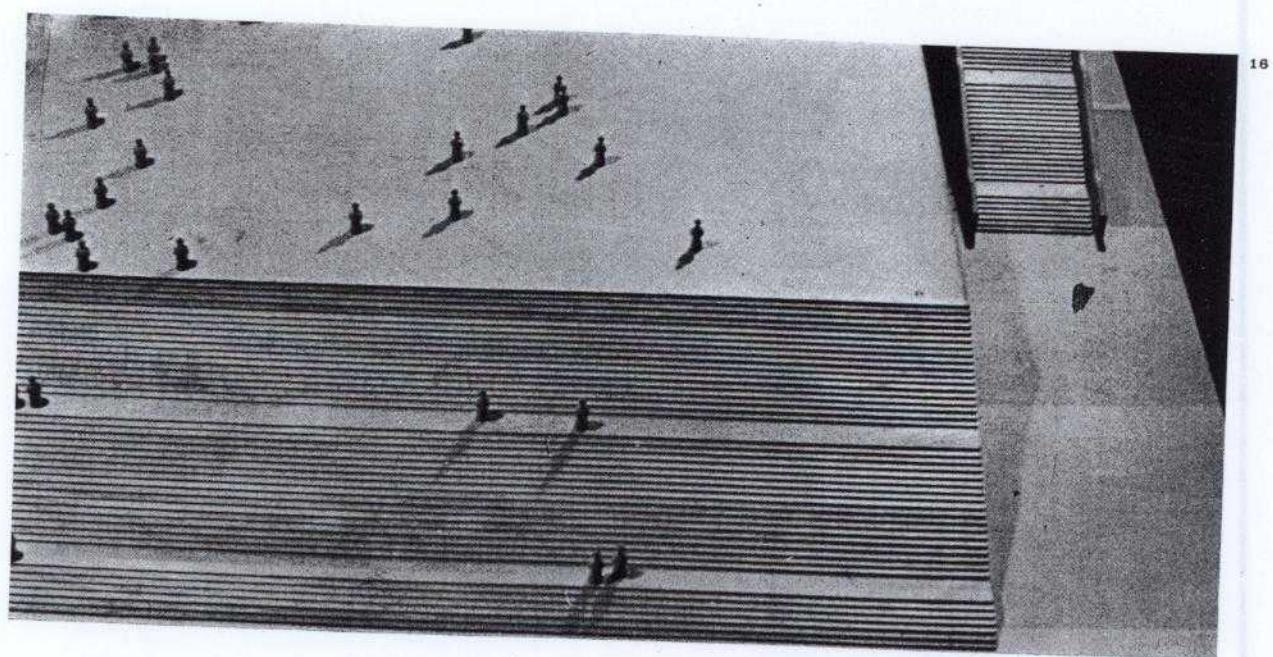
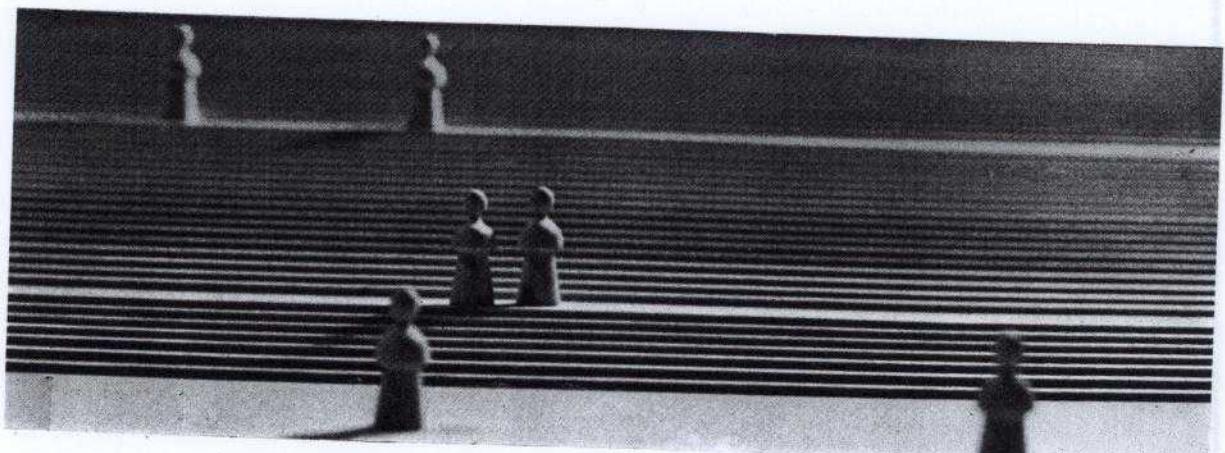
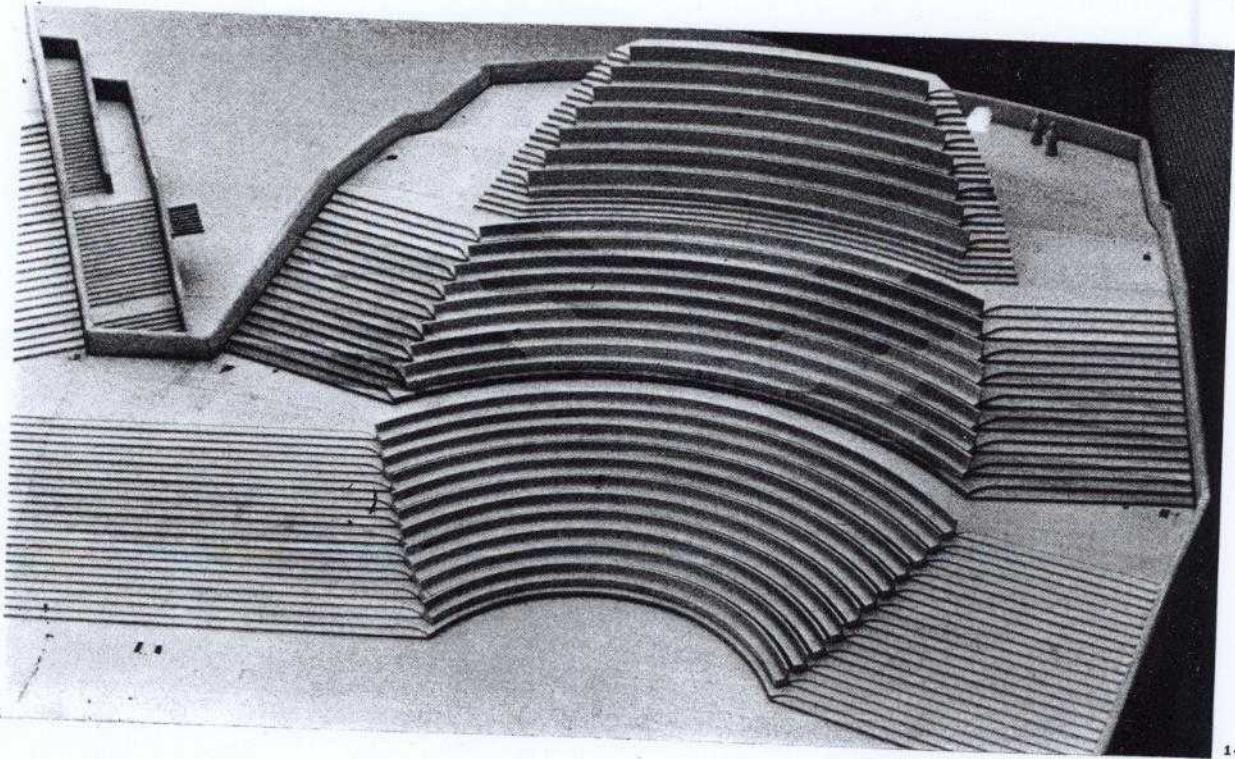
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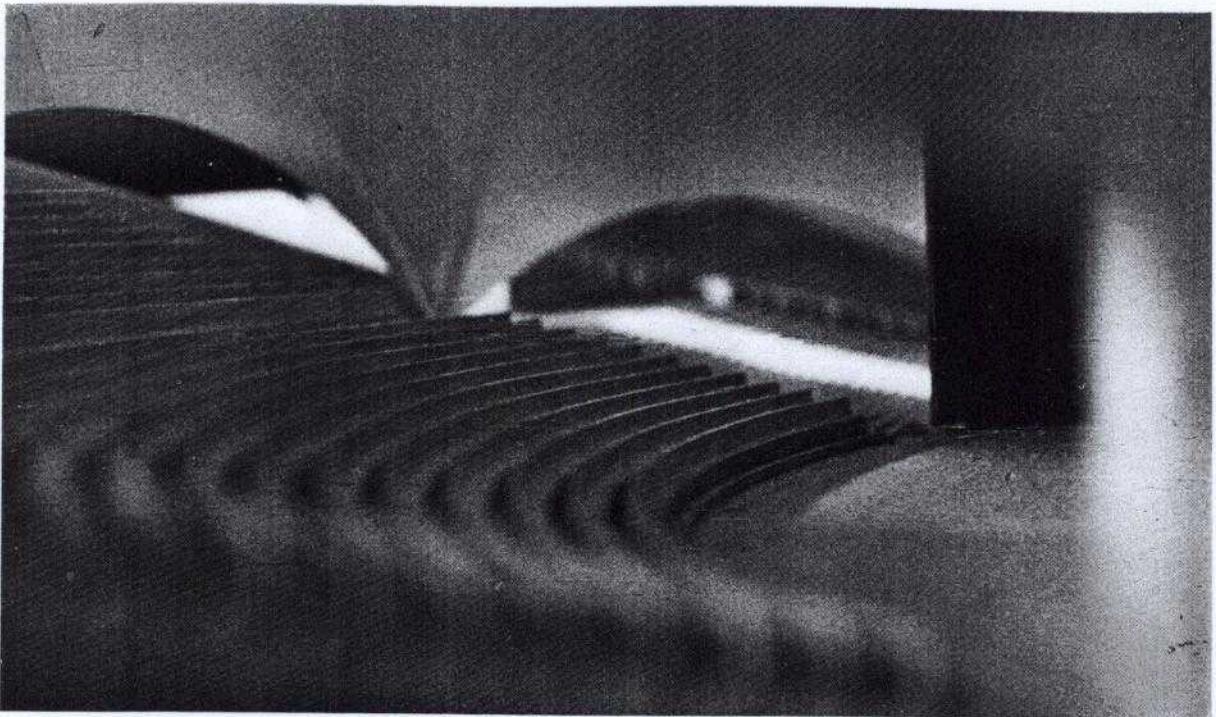
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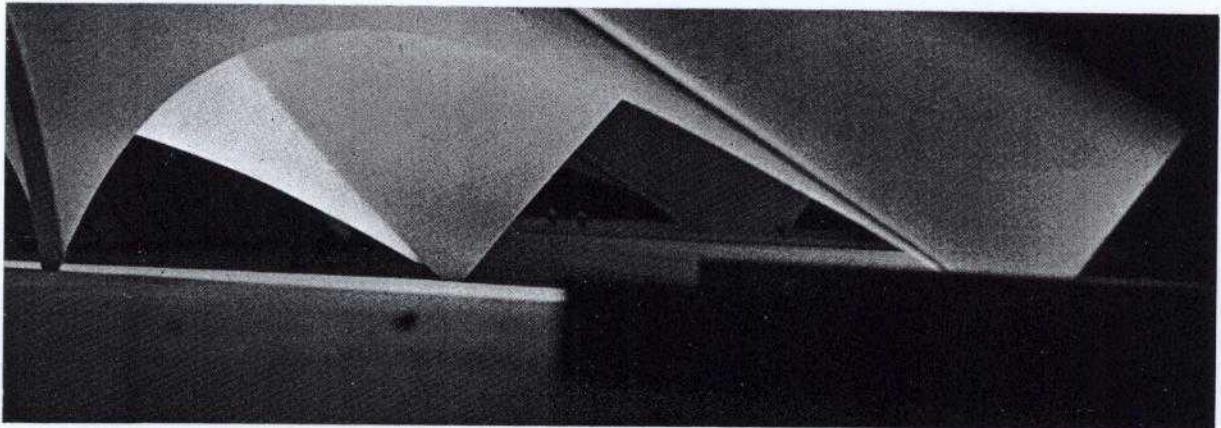
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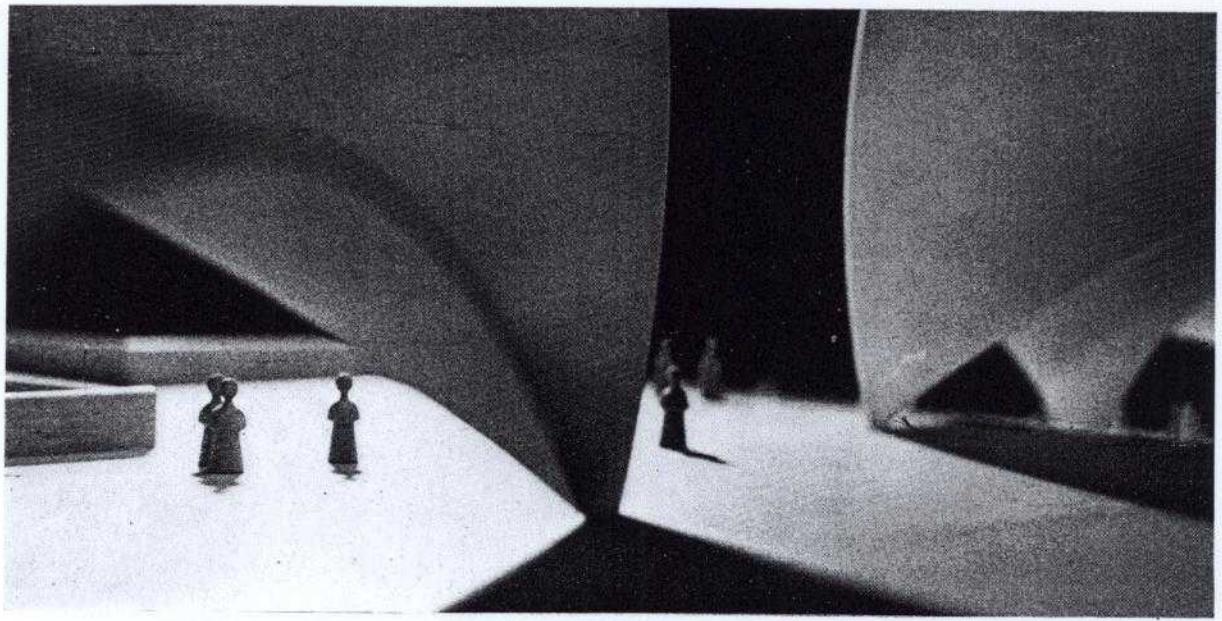


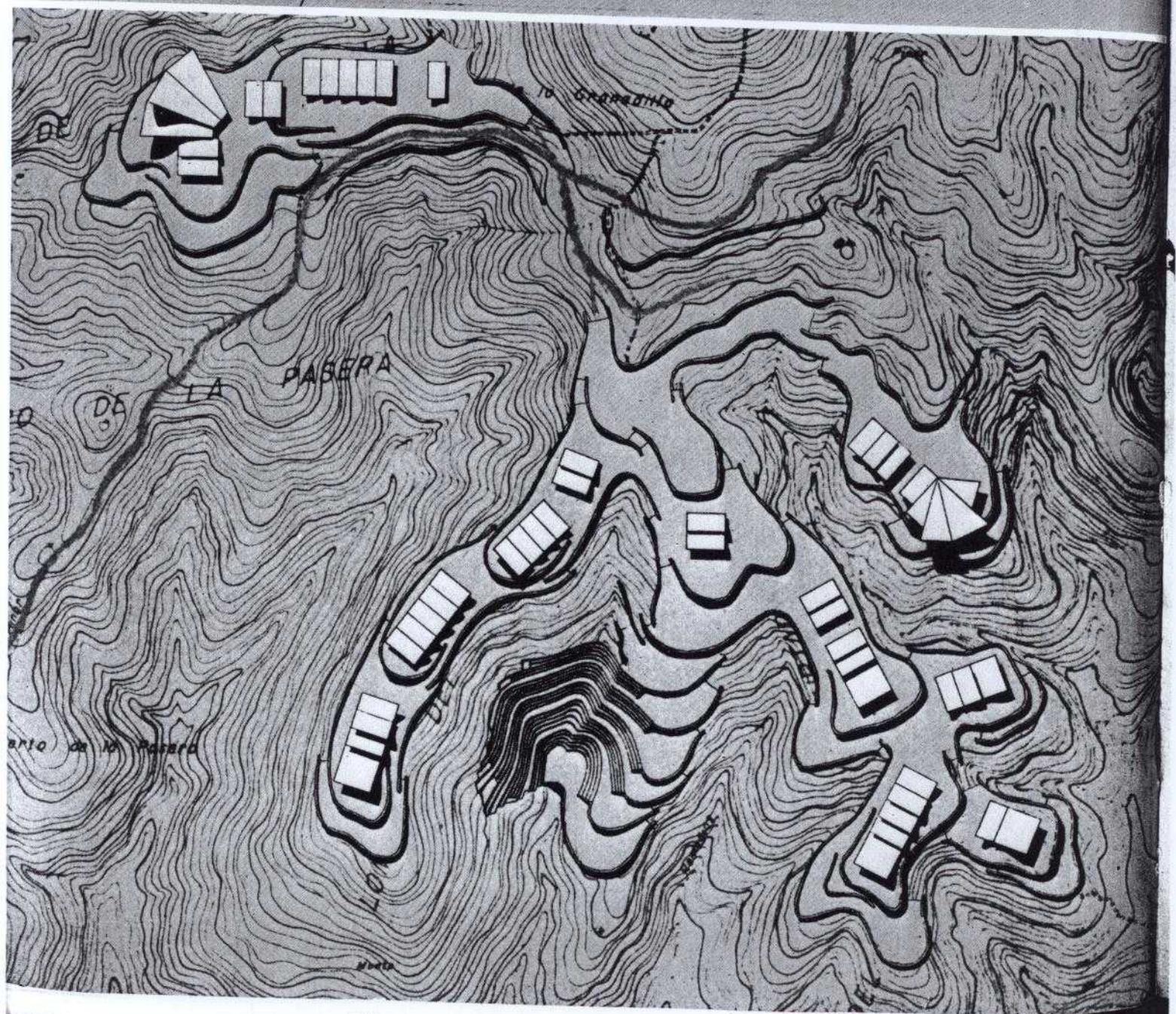
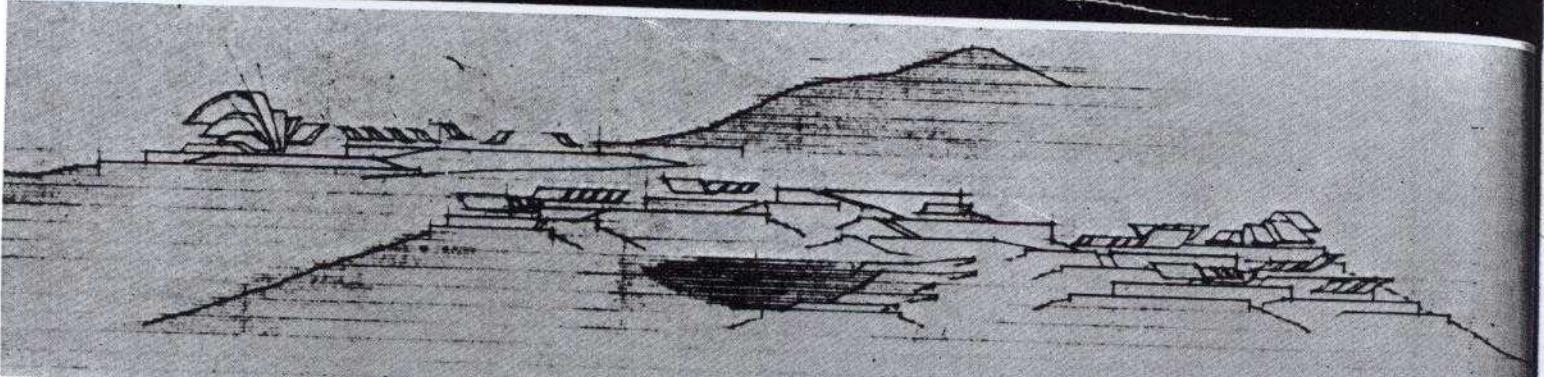
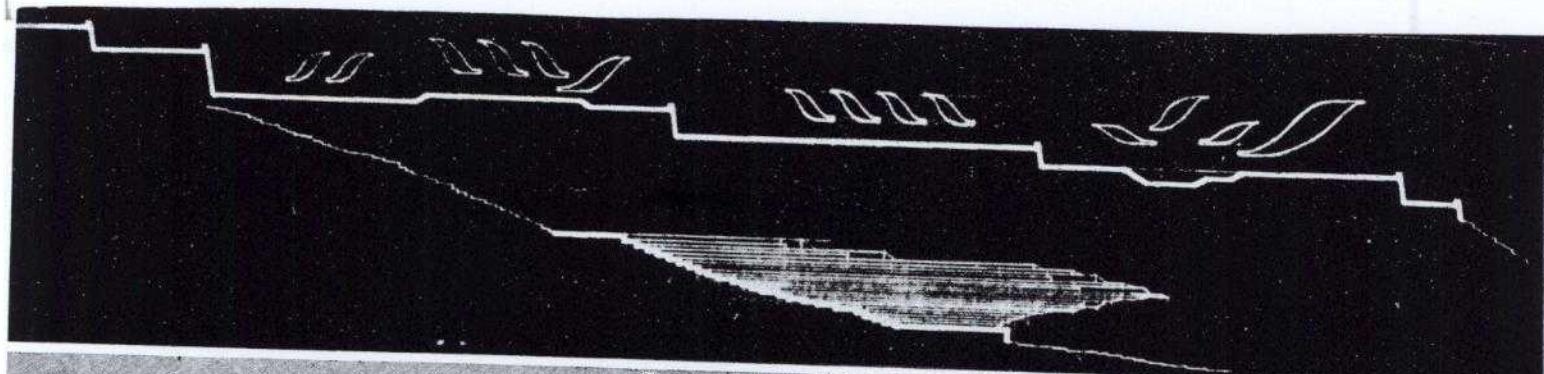
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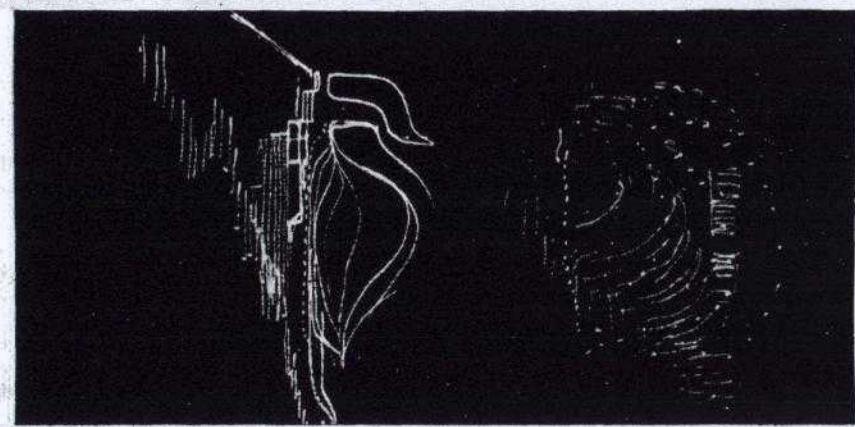
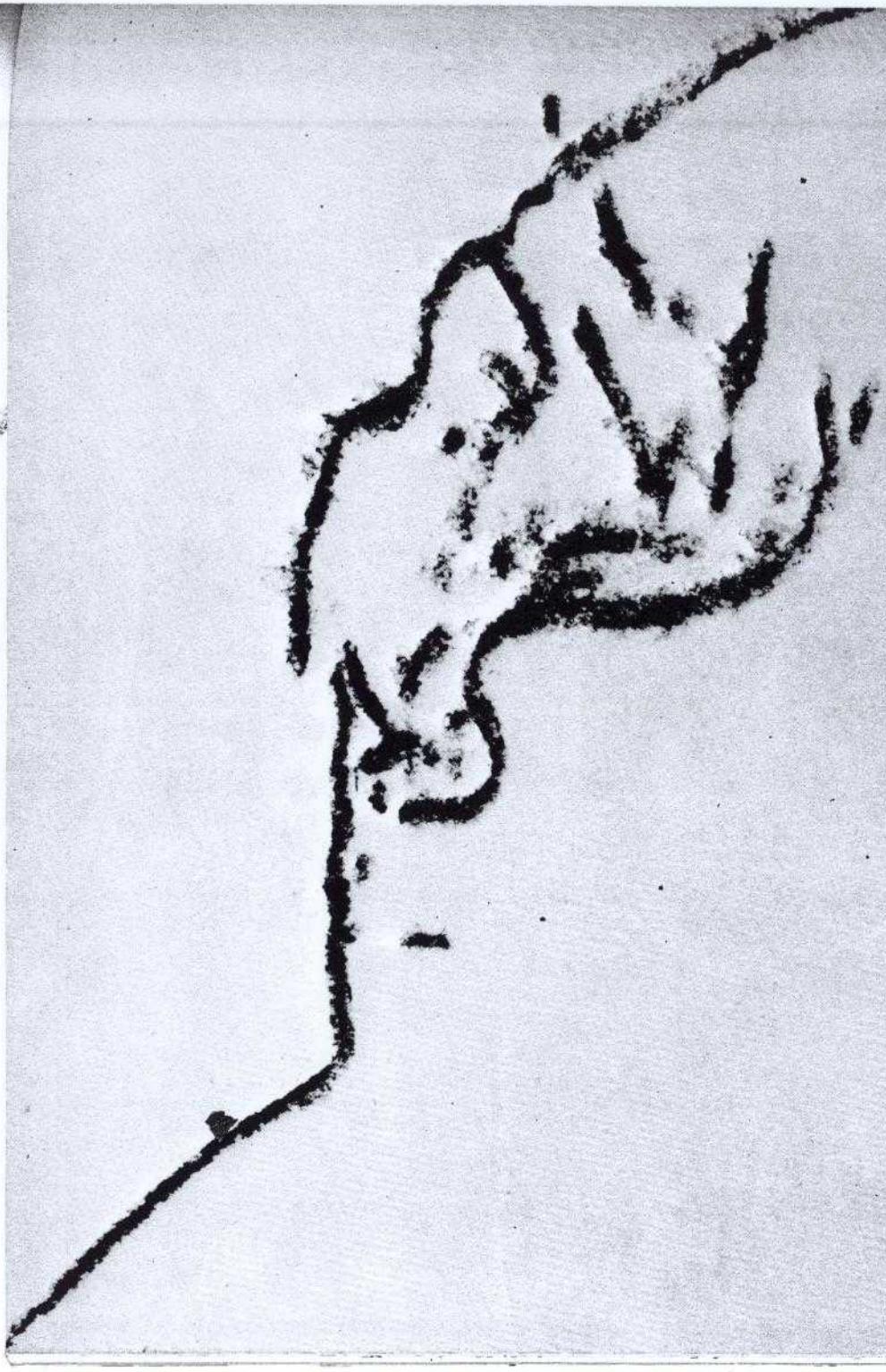
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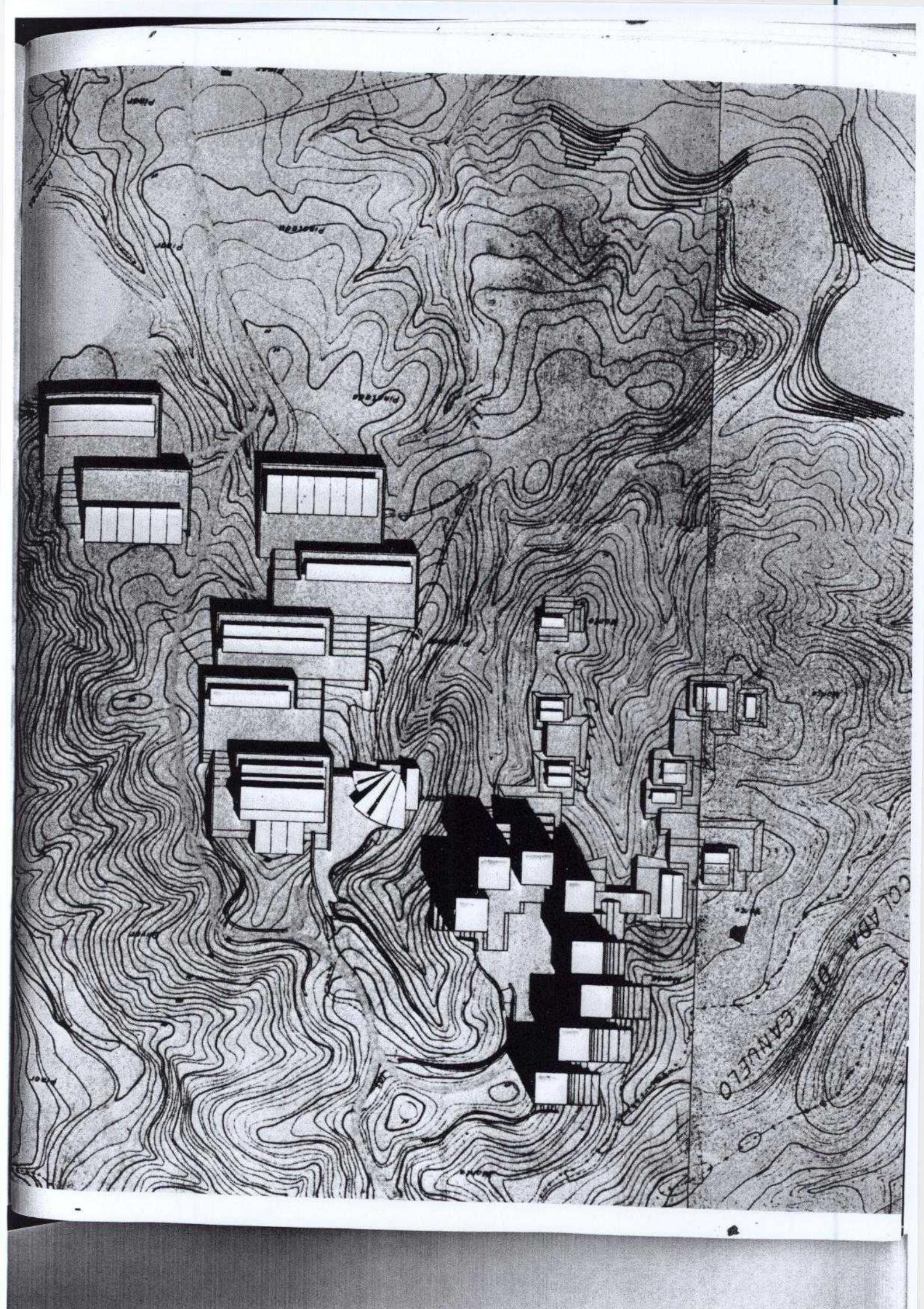
14-19. Photographs of model of the Sydney Opera House

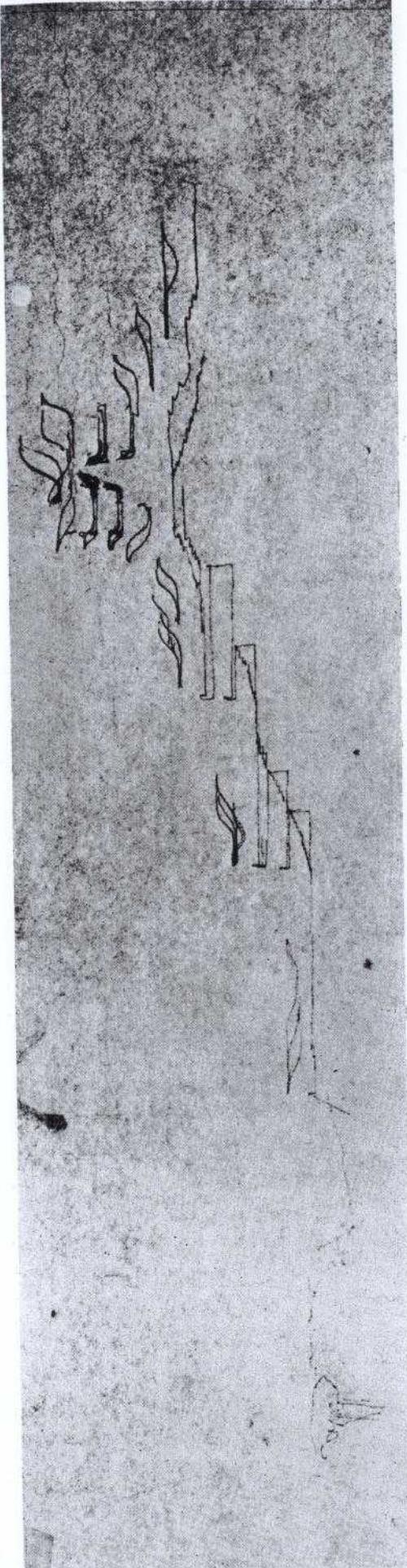
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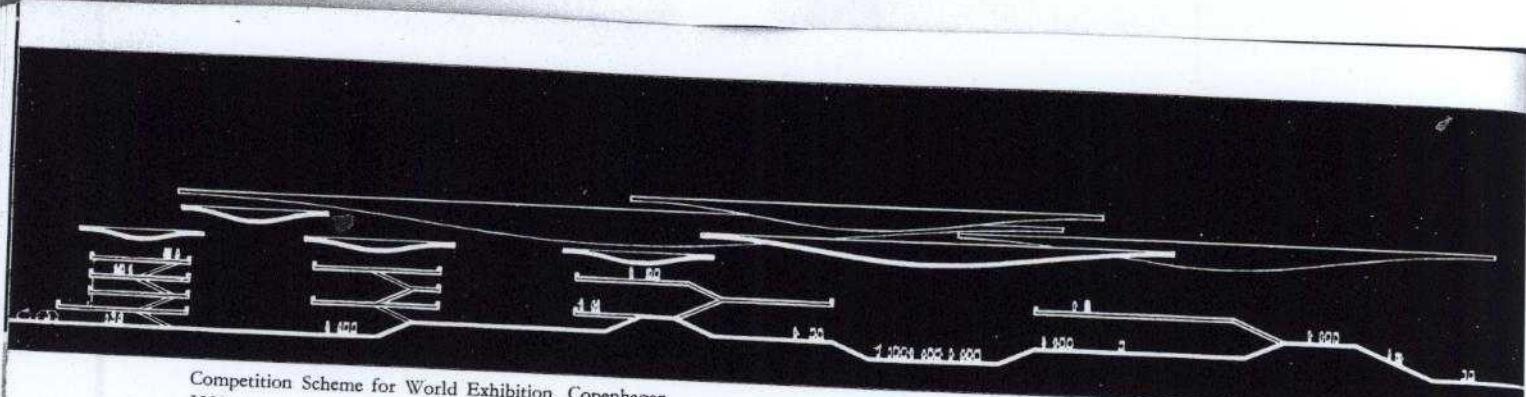




Elviria

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The competition area for this town is in a marvellous position on the Mediterranean Sea. So the sea view must be the dominating motif in the town planning of this district. So every building in this scheme has undestroyed contact with the sea, no matter how far from the beach. A study of the special qualities of the terrain reveals that there are certain points in this grand country which stand out as distinctive features from the whole area, points at which it is tempting to concentrate. The first one is where the mountains meet the plain just before it flows out to the beach. This point has been selected for our commercial centre and the hotels, restaurants, etc. The other one is high up in the mountains where some clearly defined plateaus spread out like fingers in a very dramatic way. This remote point has been chosen for our peaceful humanistic centre.



Competition Scheme for World Exhibition, Copenhagen
1939.

26. Section.

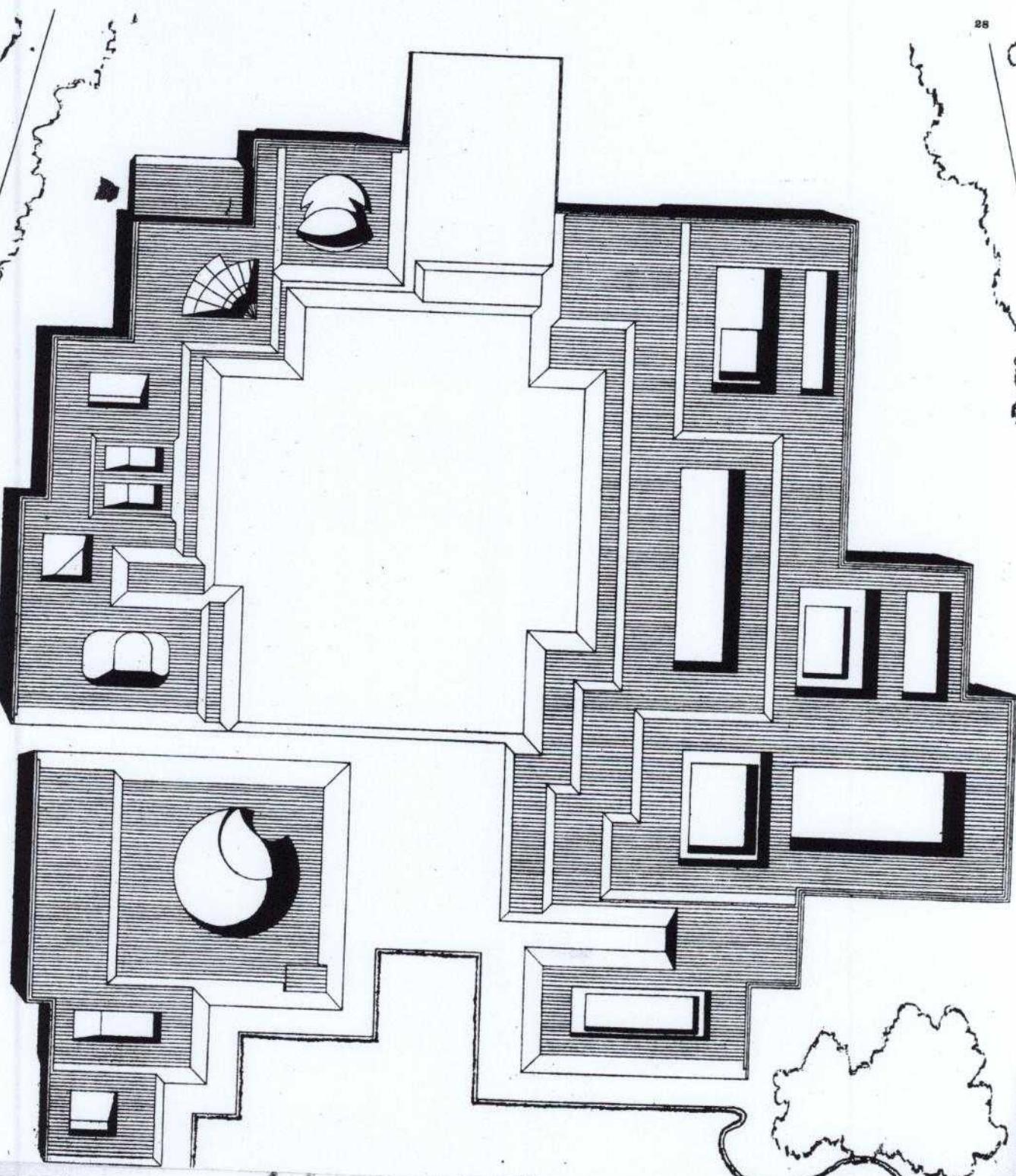
27. Floor Plan.

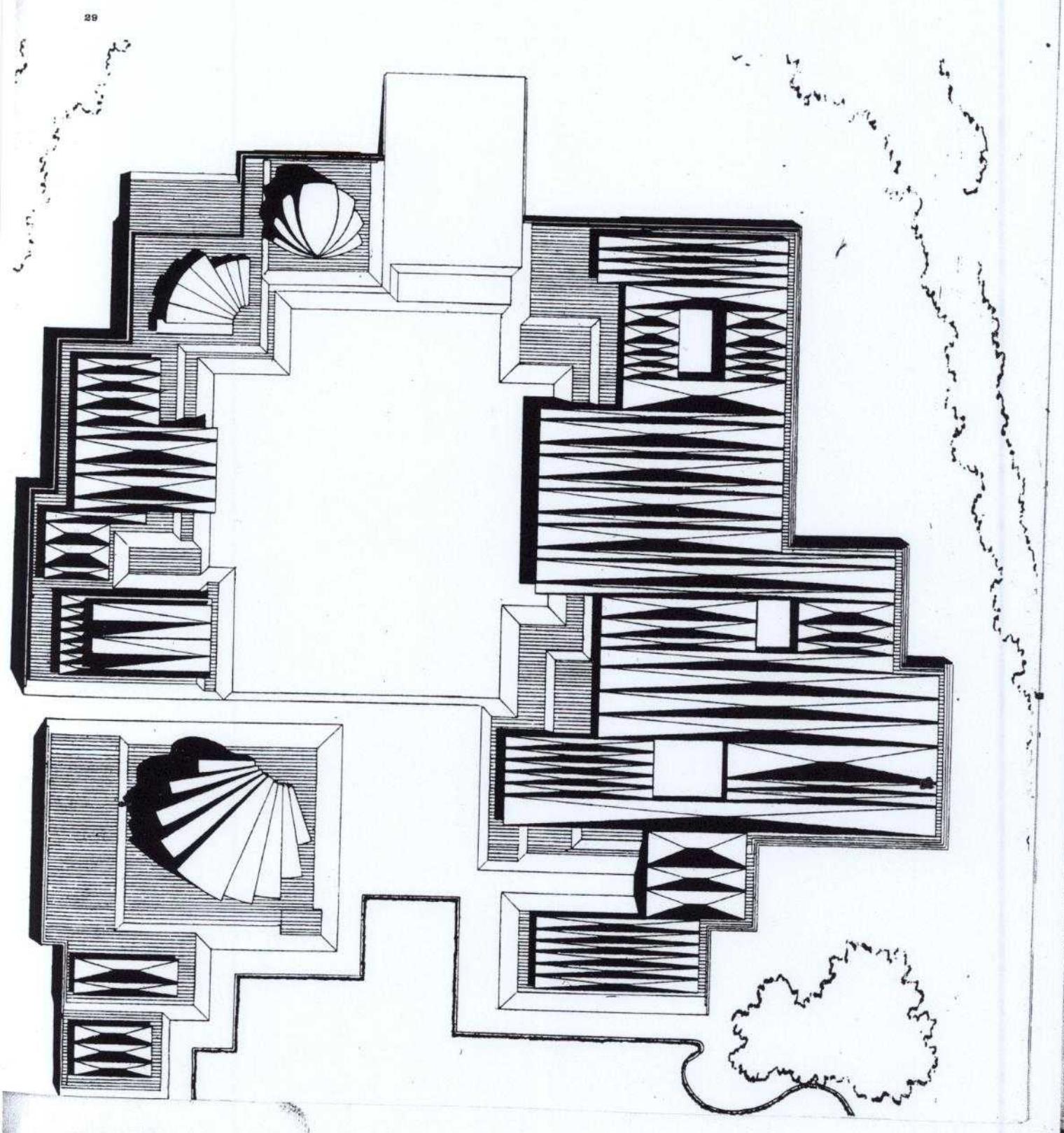
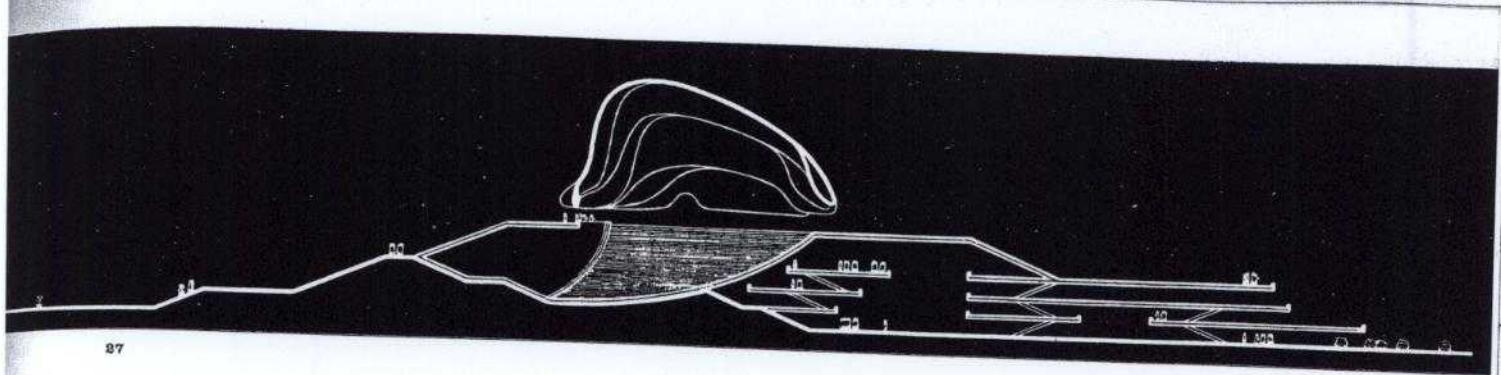
28. Section.

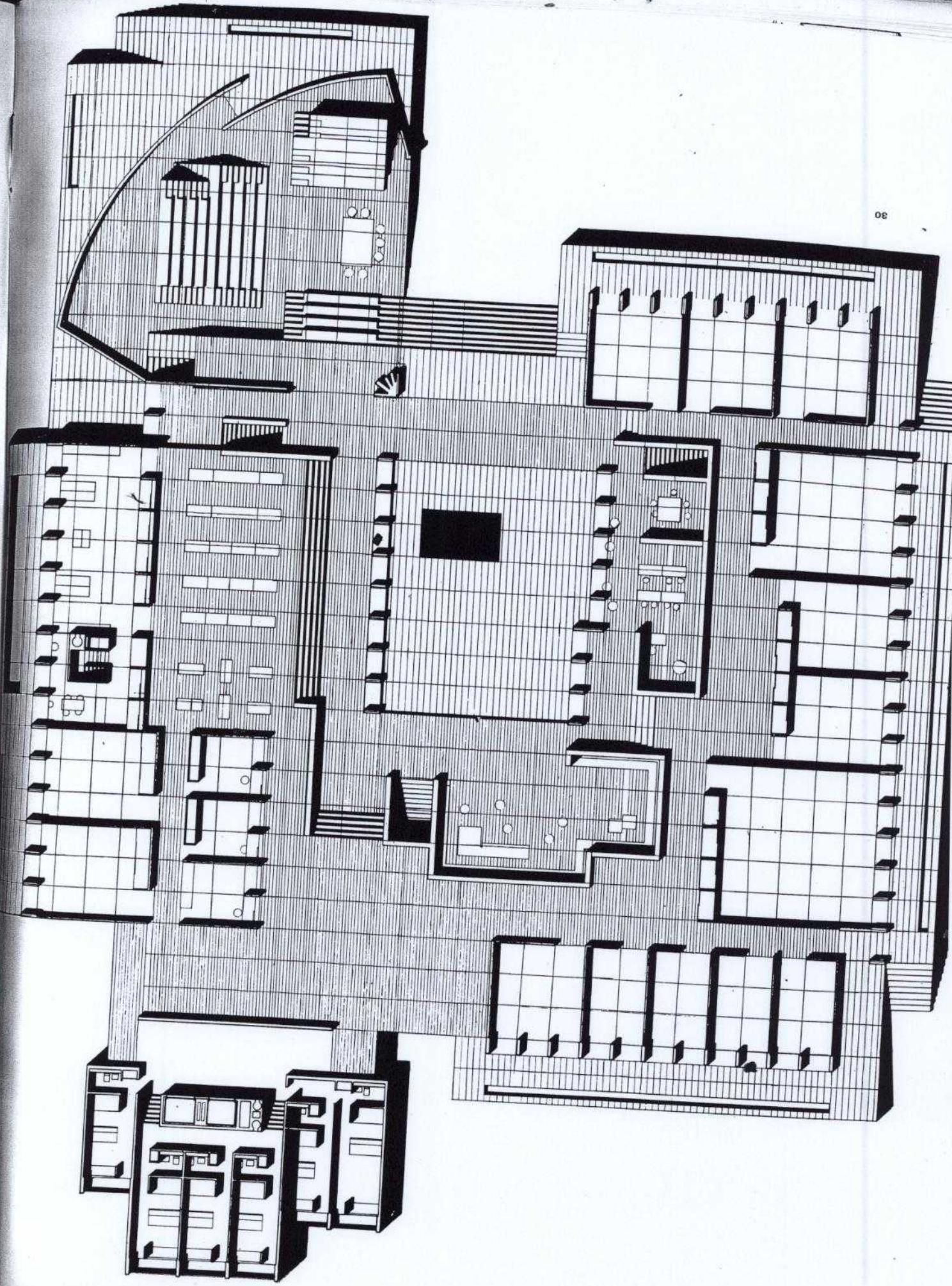
29. Roof Plan.

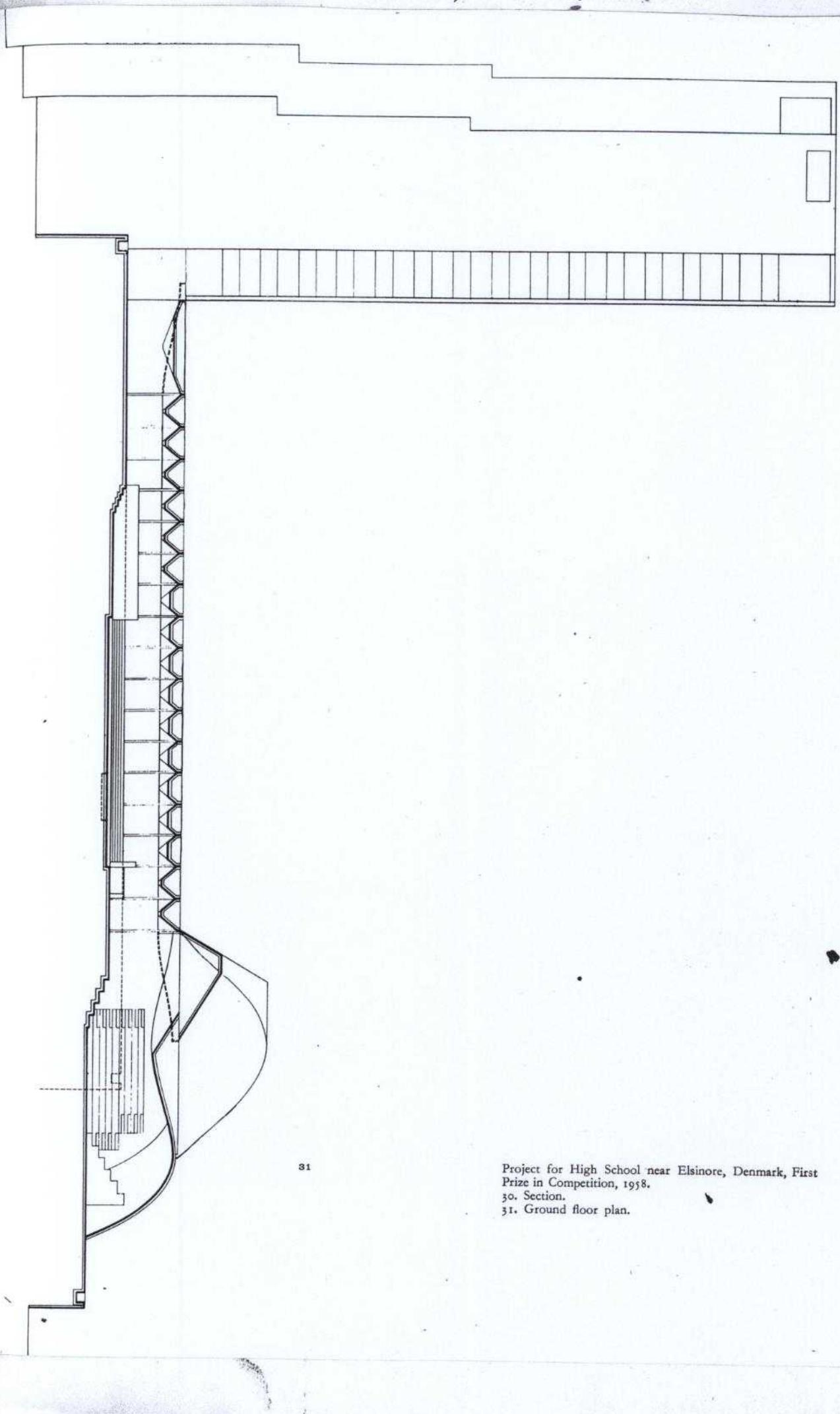
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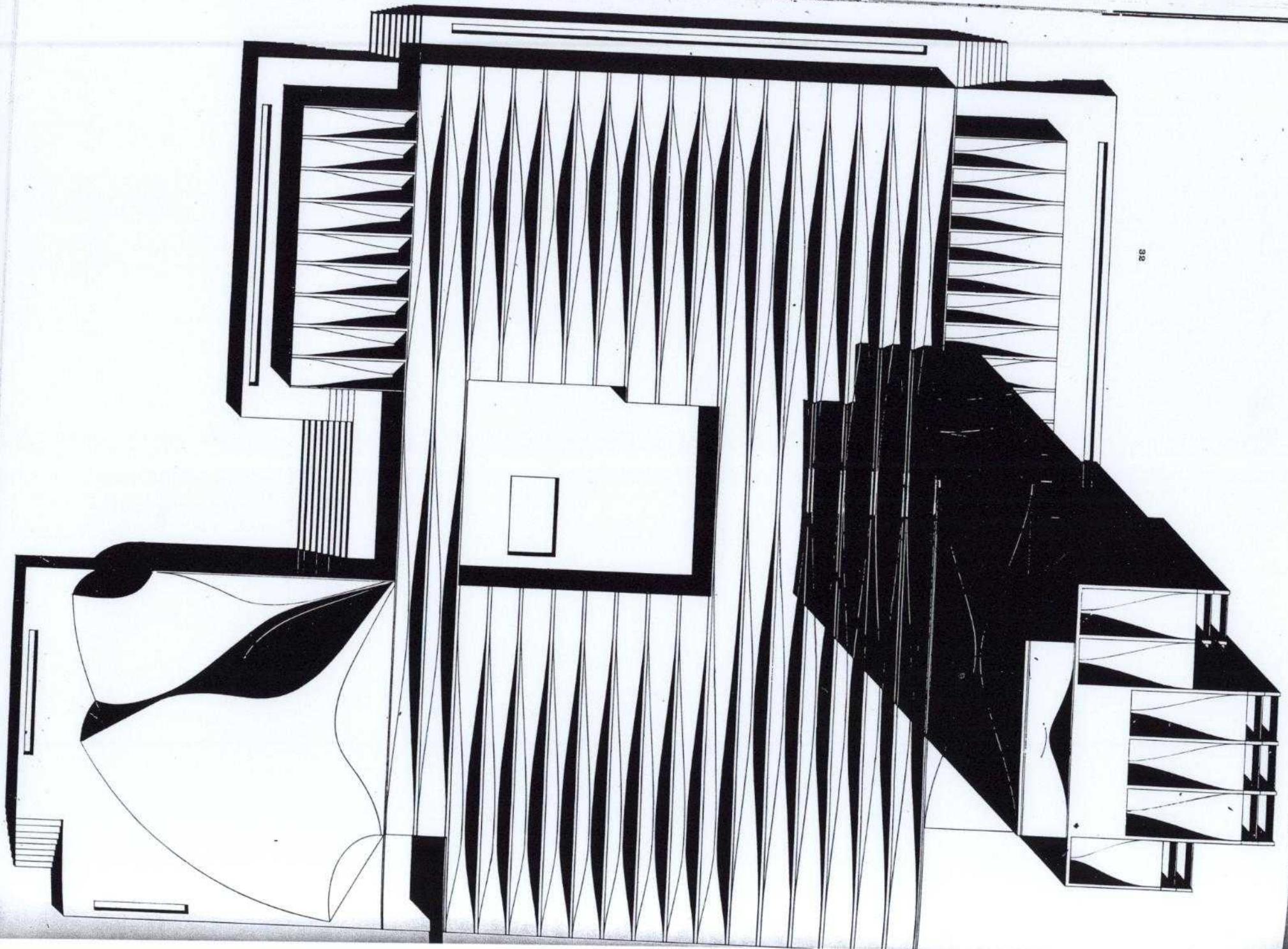




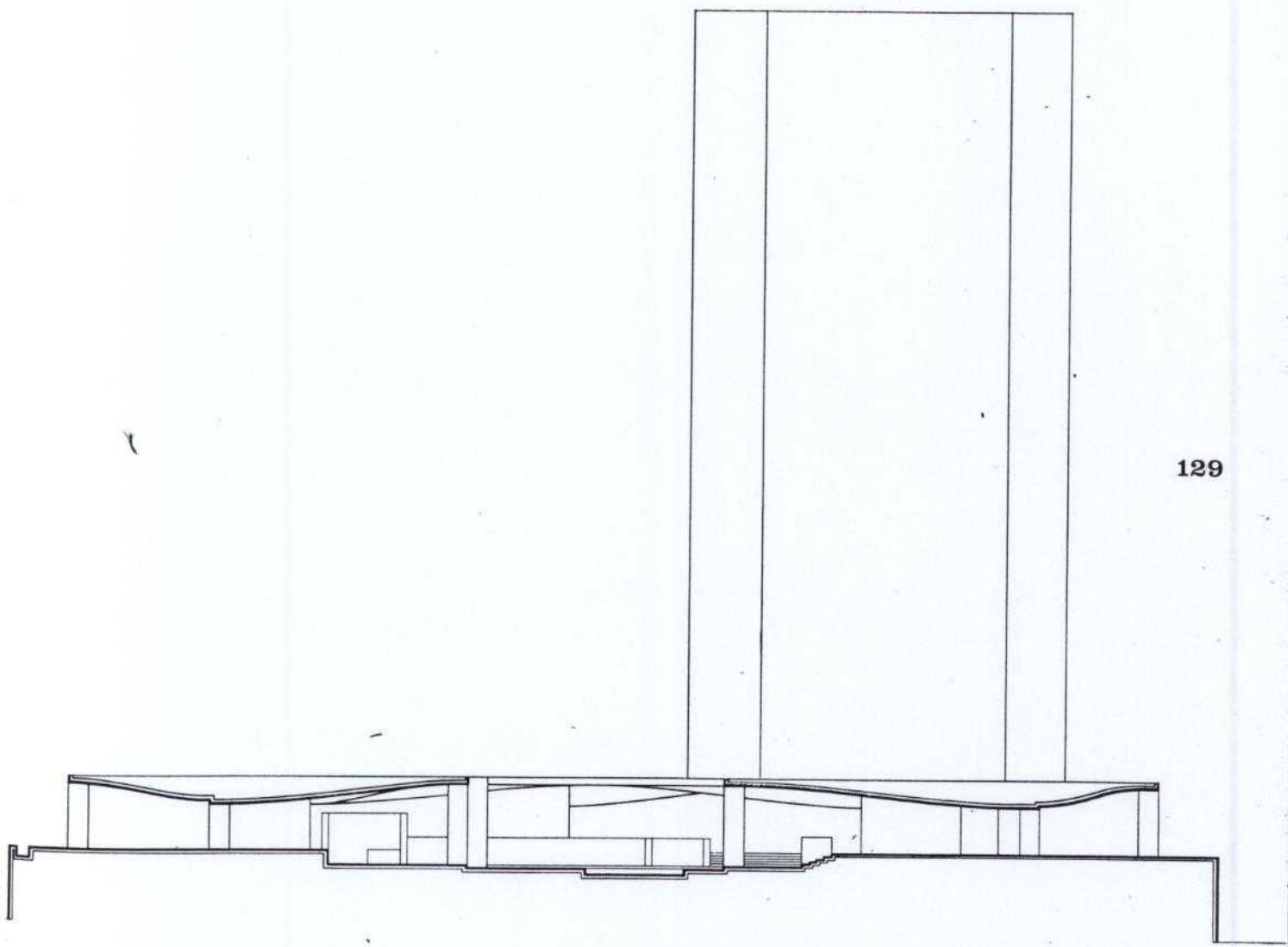
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Project for High School near Elsinore, Denmark, First
Prize in Competition, 1958.
30. Section.
31. Ground floor plan.

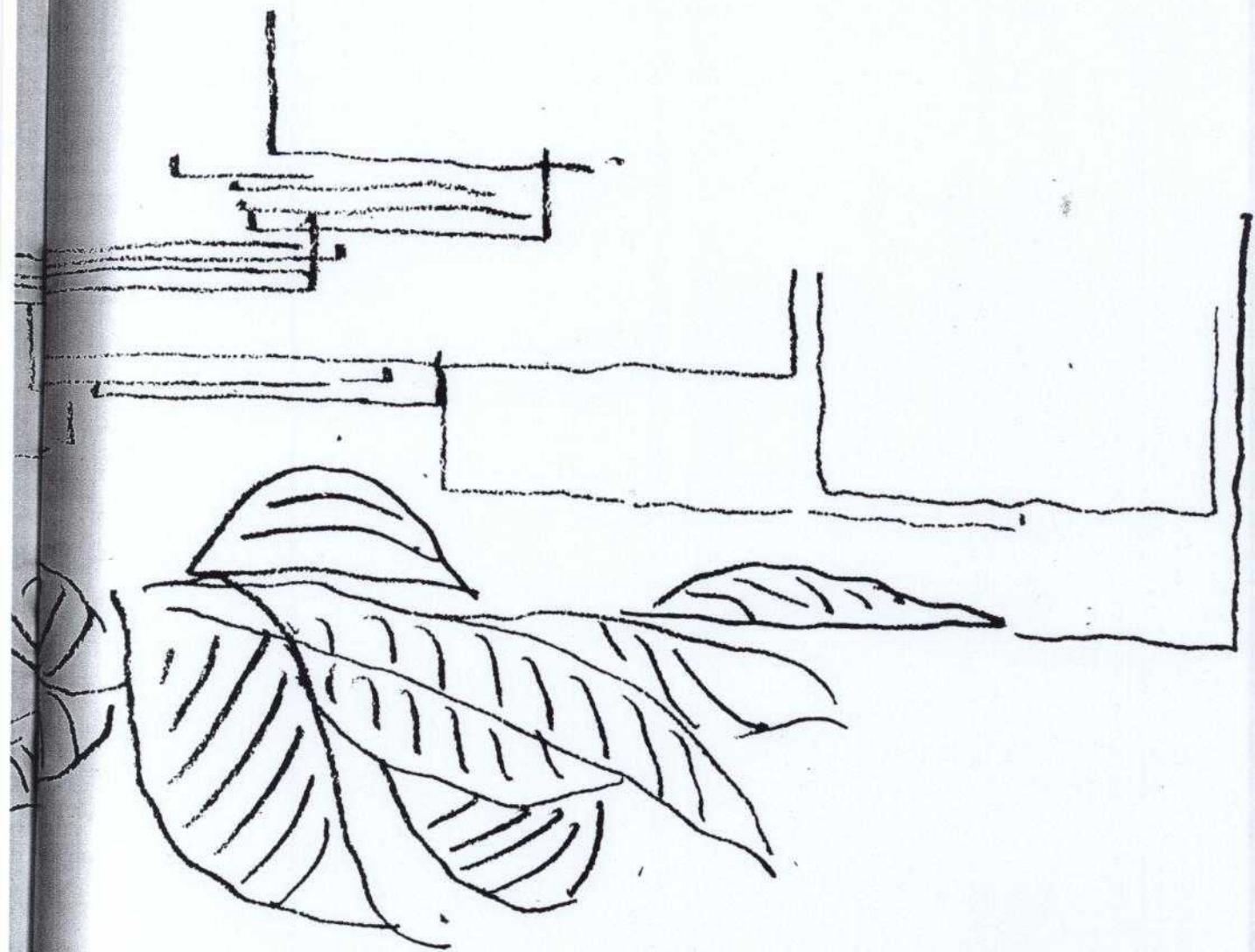


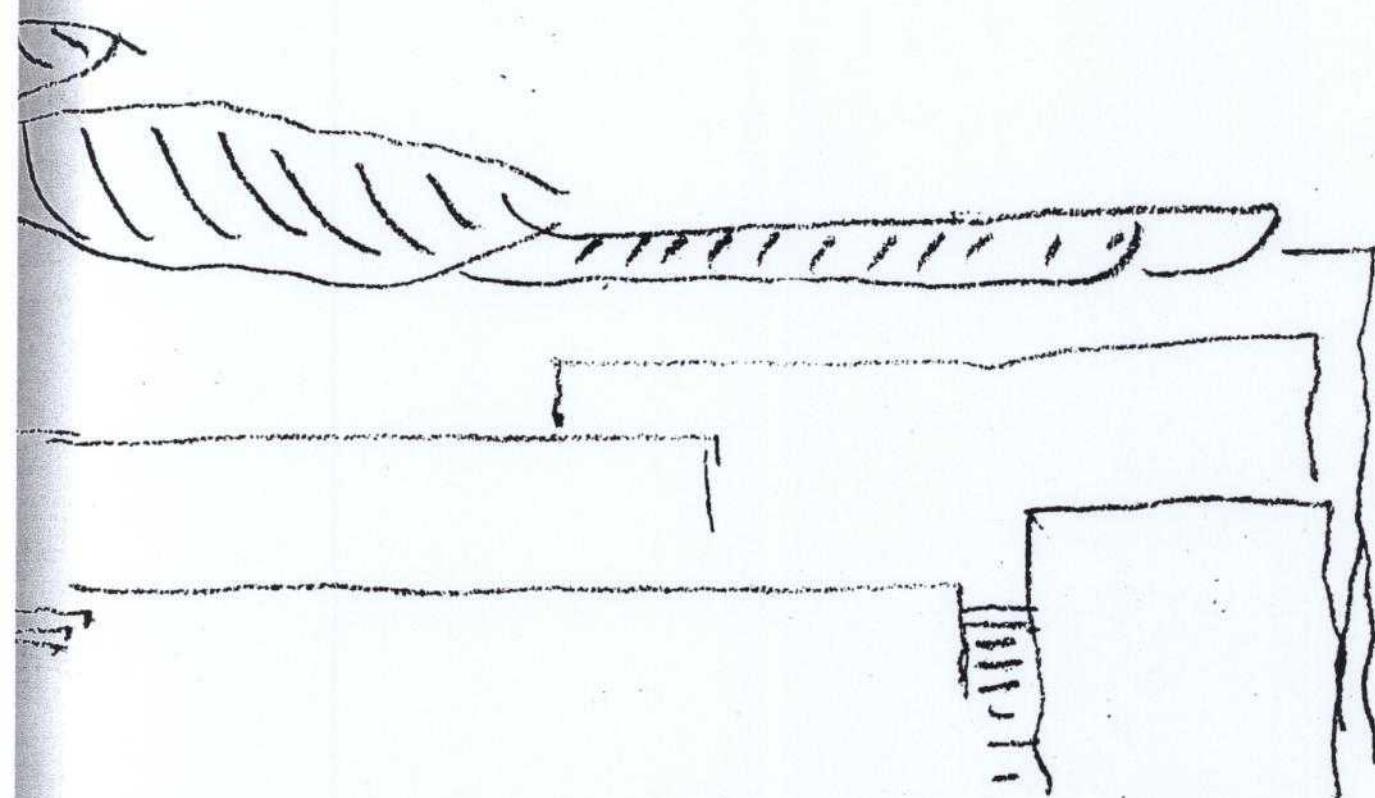
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Project for High School near Elsinore, Denmark.
First Prize in Competition, 1958.
32. Roof Plan.
33. Section.

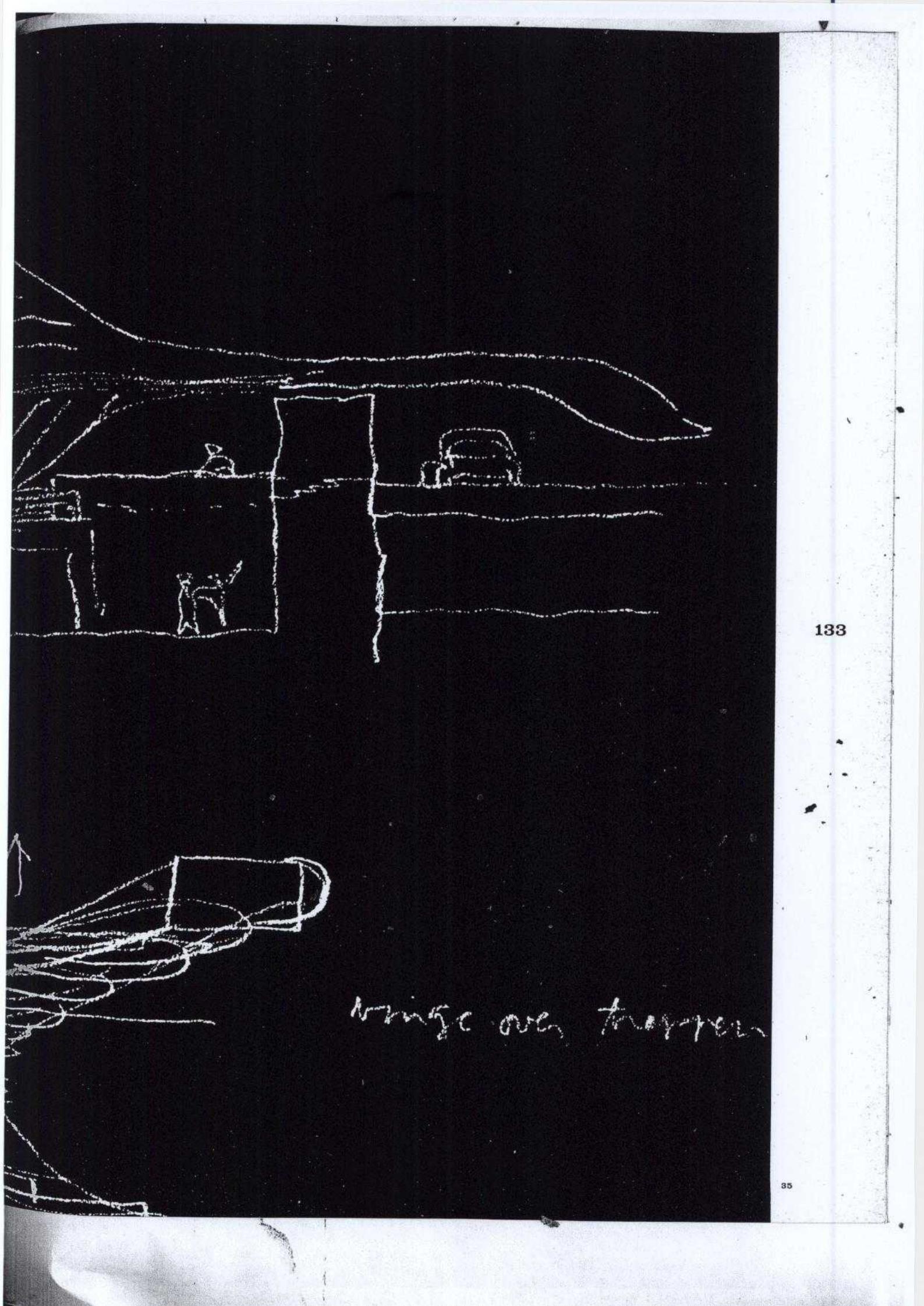




The roof can be hanging above, it can be spanning across or jumping over you in one big leap or in many small ones. The problem is to master the waterproofing, the structural requirements and the heat insulation in one mass-pro-

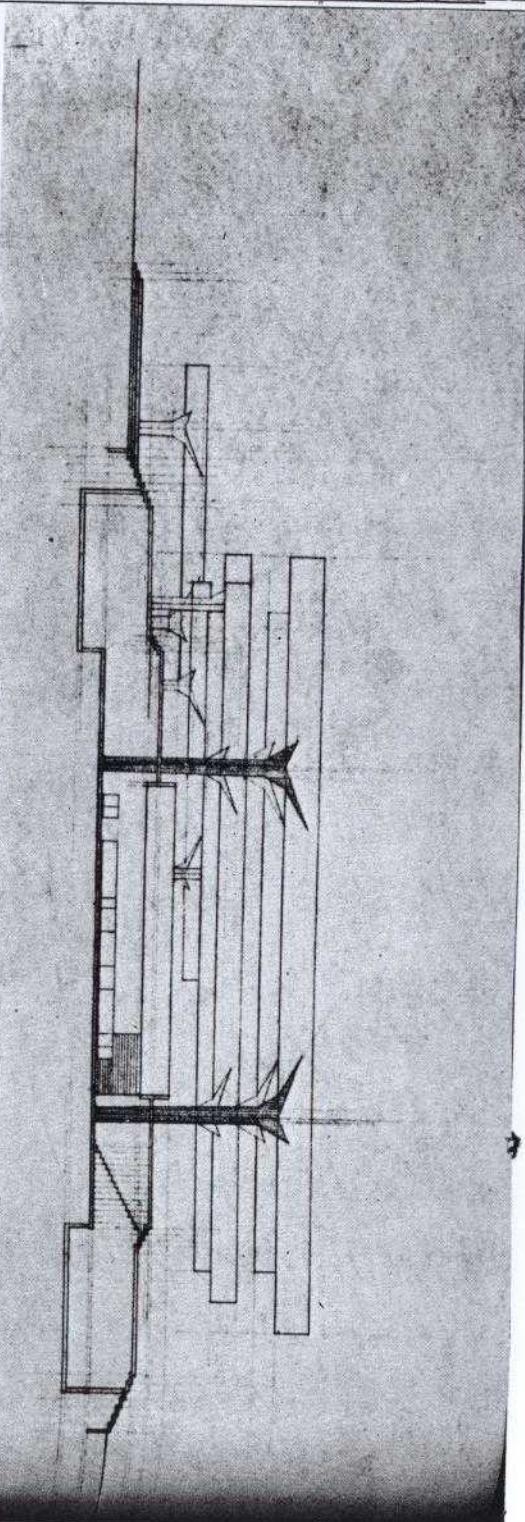
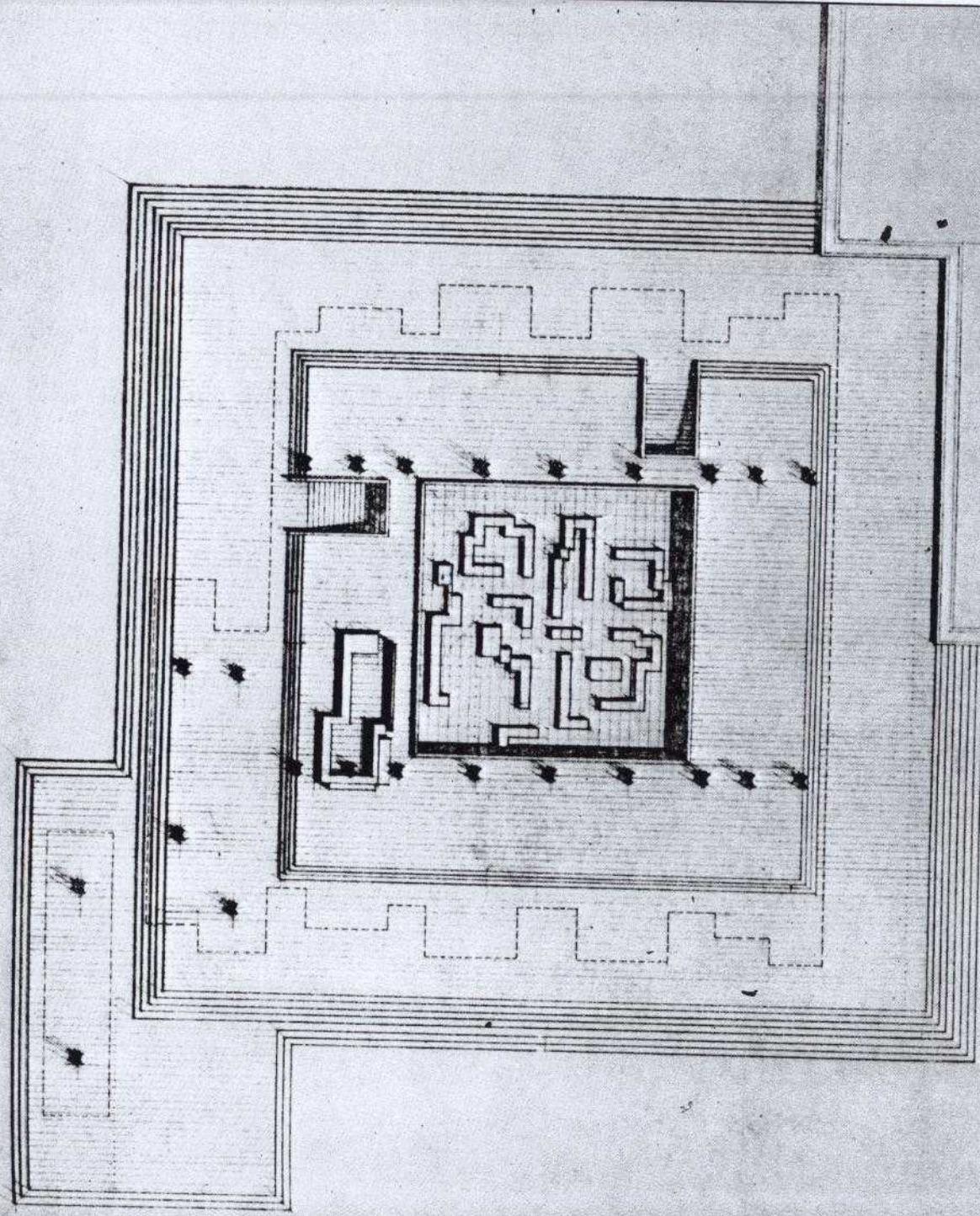
duced element, which in combination with itself can give various roof-forms, a nice problem to be solved. This platform, courtyard — house shows a vivid roof-grouping formed by such an element-composition.

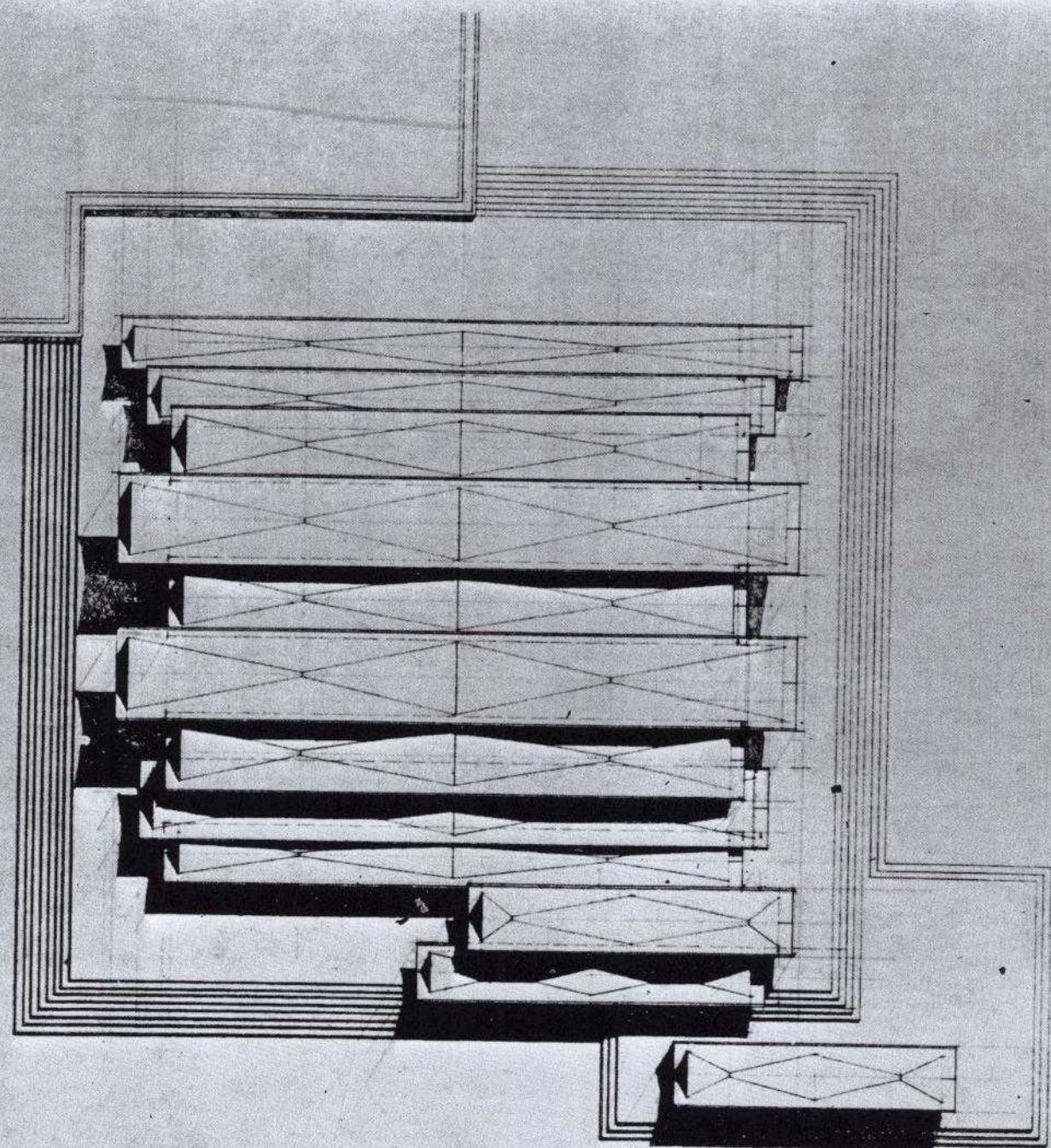
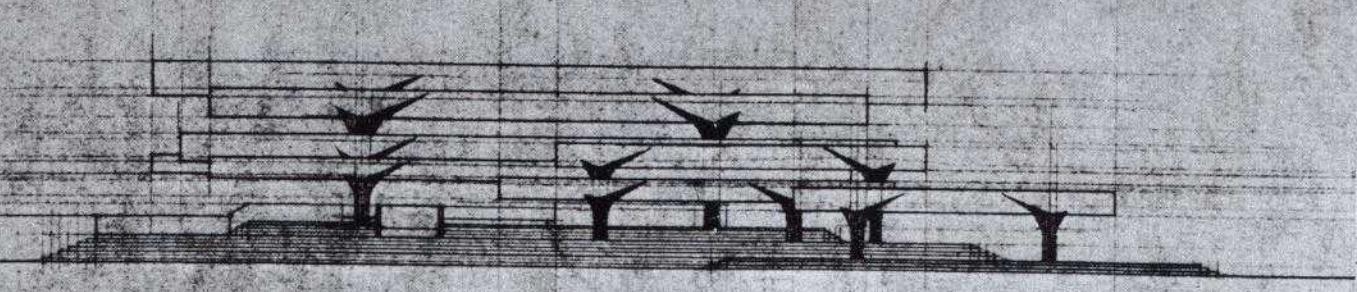


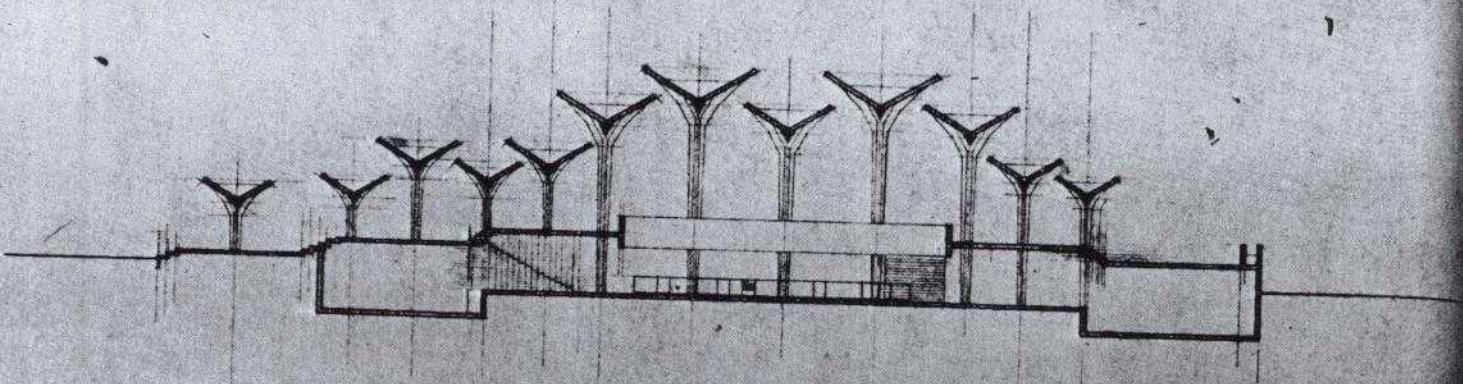


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wings over trigger

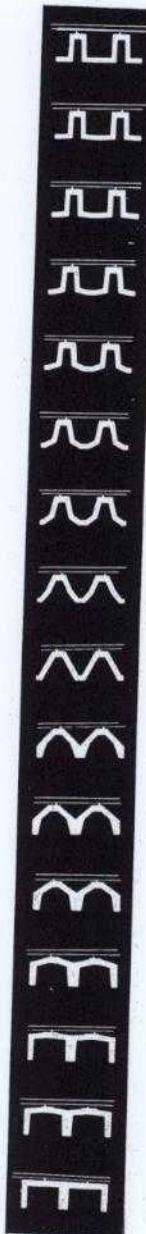






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Scheme for Shopping Centre.
 36. Section.
 37. Ground Floor Plan.
 38. Elevation.
 39. Roof Plan.
 40. Section.

Infinite variation of the platform-idea is possible. Another example is shown in the small shopping centre, where the shopping takes place in the central crater in the low volcano-like section and where the delivery of goods from cars take place in an undisturbed manner from below.

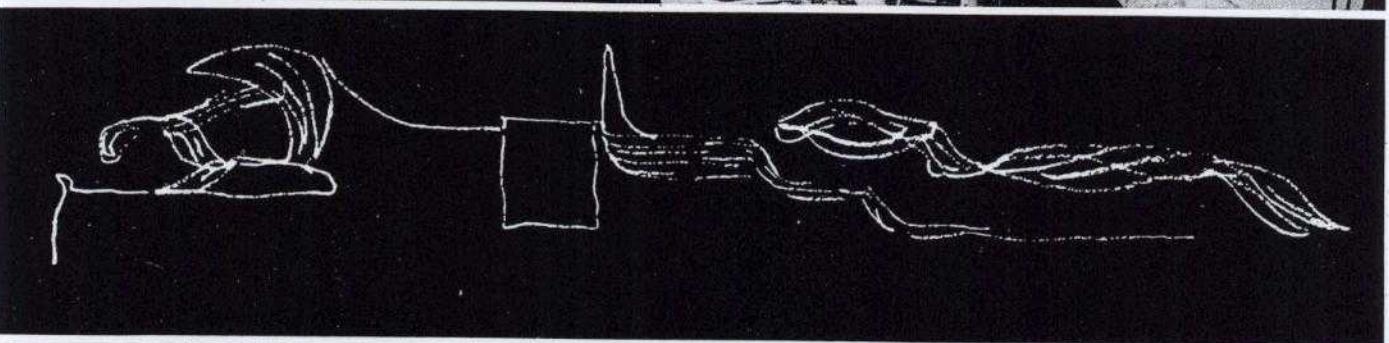
In plateau projects many technical difficulties have to be overcome. One of them, the rainwater drainage problem, which is a serious one, has been solved in a simple way in the Sydney Opera House scheme in collaboration with the Structural Engineer Ove Arup. The folded slabs with their tapering forms and hollowness on the top side create an ideal drainage system for the surface of the granite platform. The granite flagstones 2×1 meter $\times 3"$ are spaced with a small gap in the joints to let the rain run through and are reposing horizontally on the edges of the folded slabs so that the whole platform becomes a sieve.

Pictures 24.

1. Site in Sydney with Opera House, Oct. 1961
2. Idea sketch for structure in base.
3. Folded slabs over car entrance.
4. Sections in folded slabs.

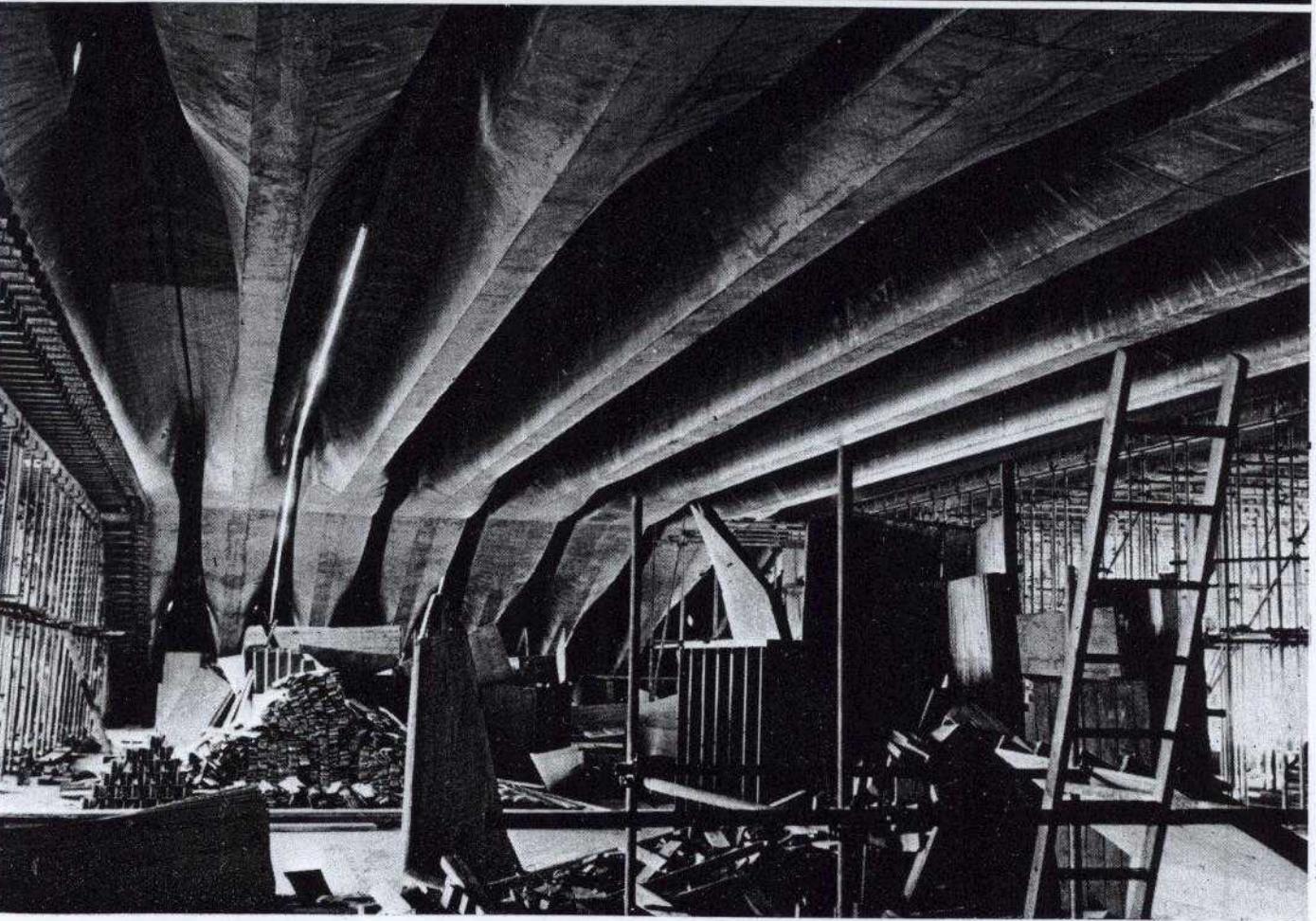


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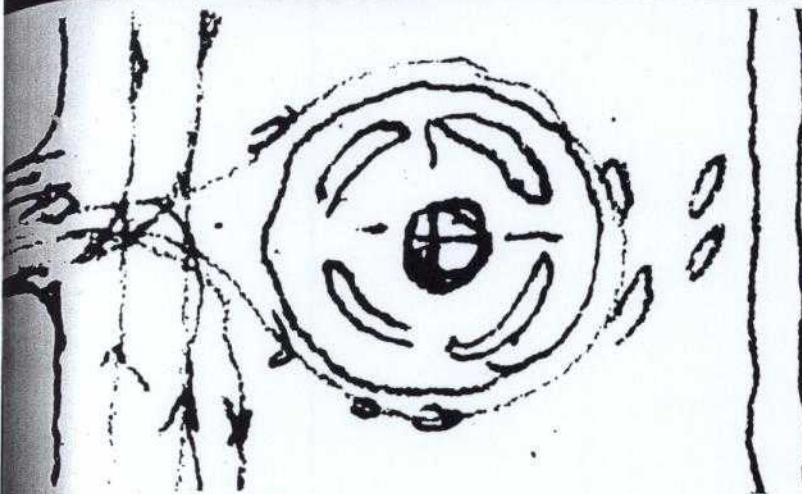


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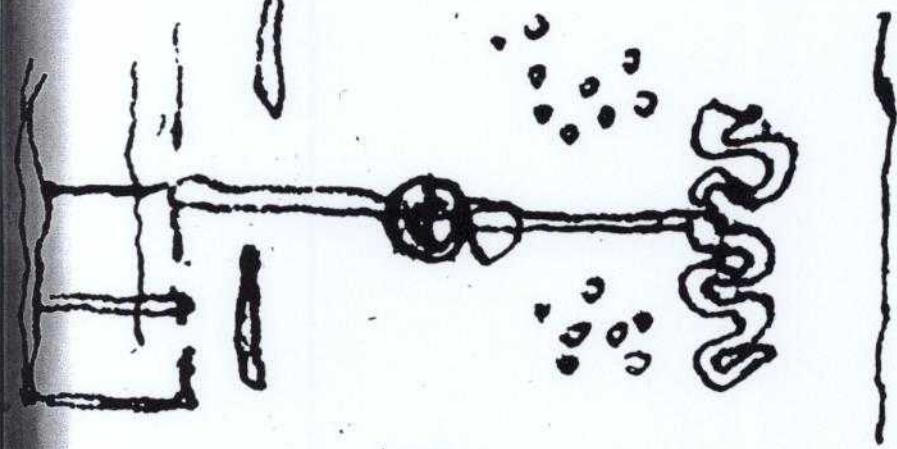


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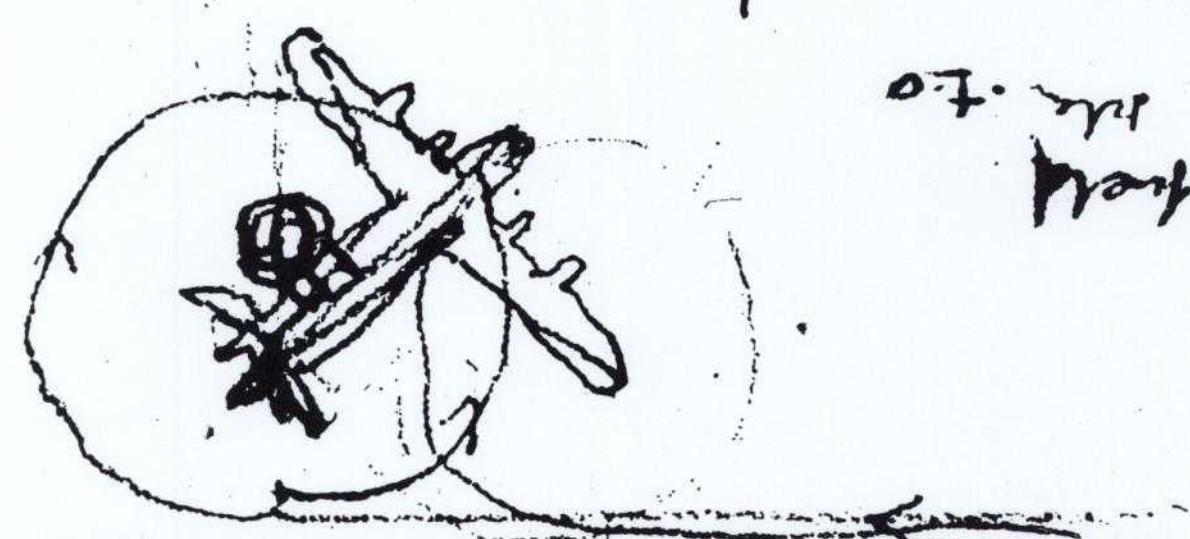
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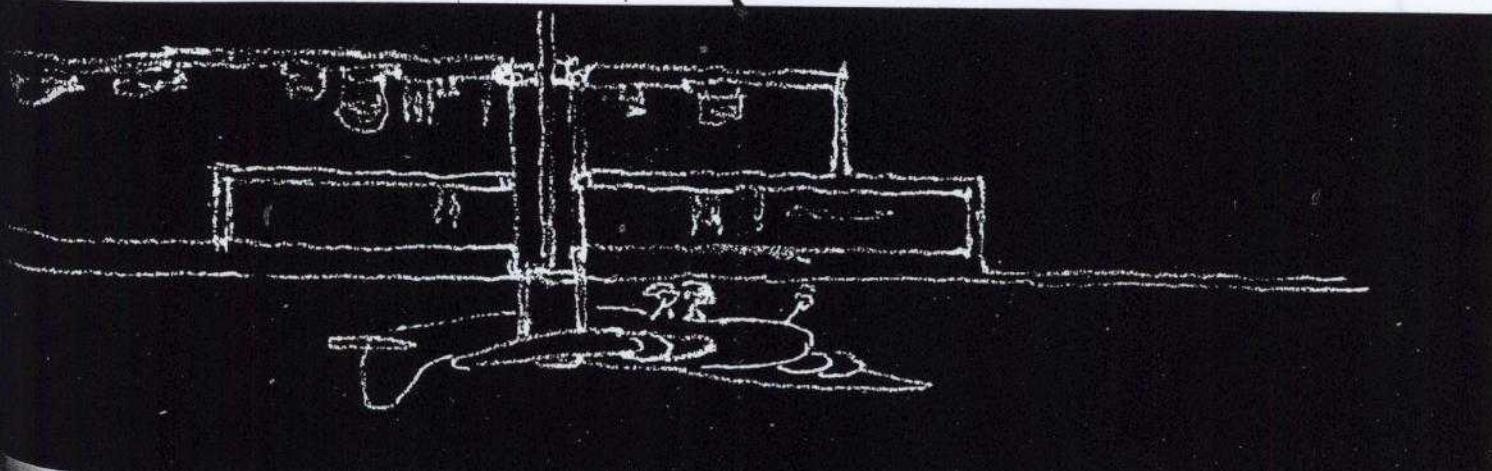


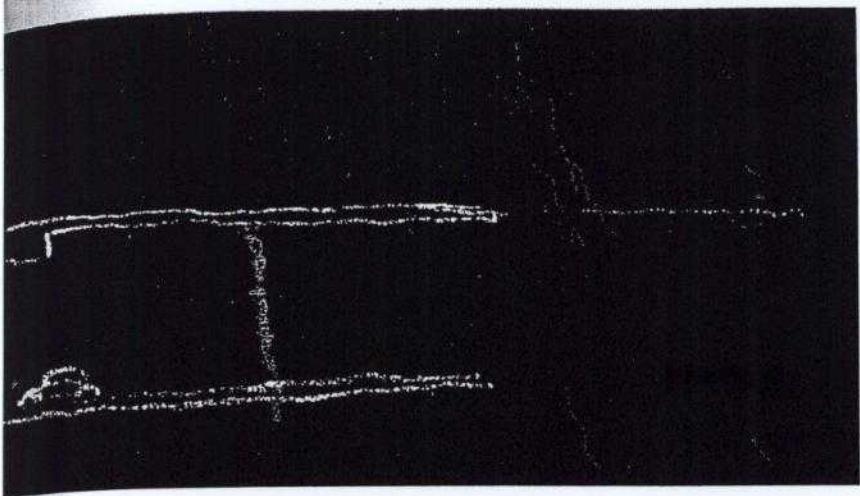
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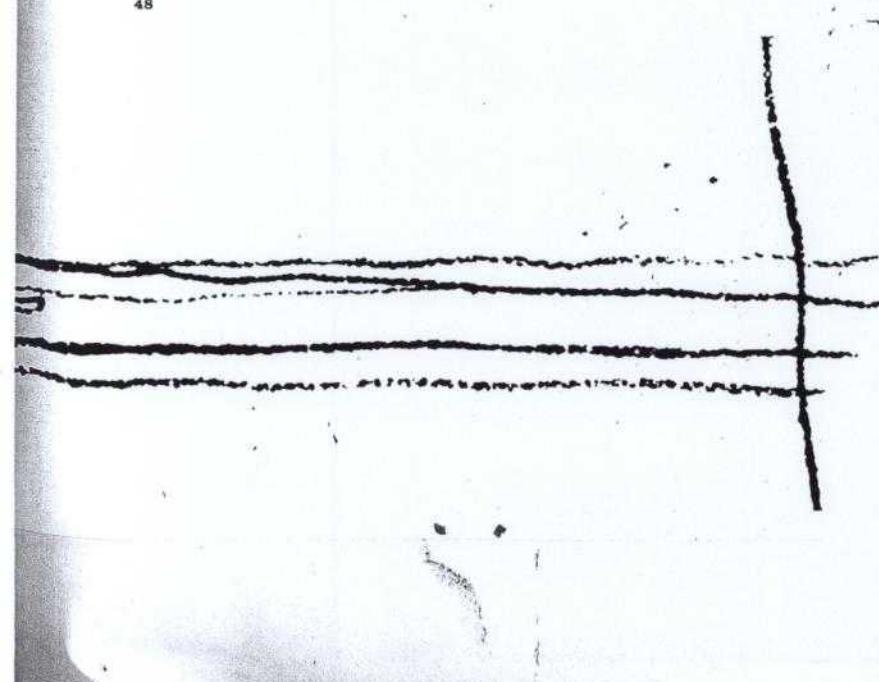
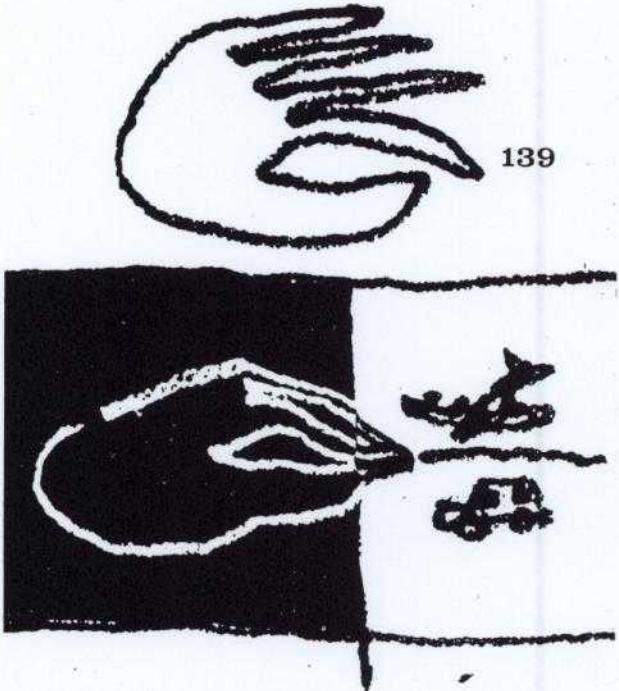


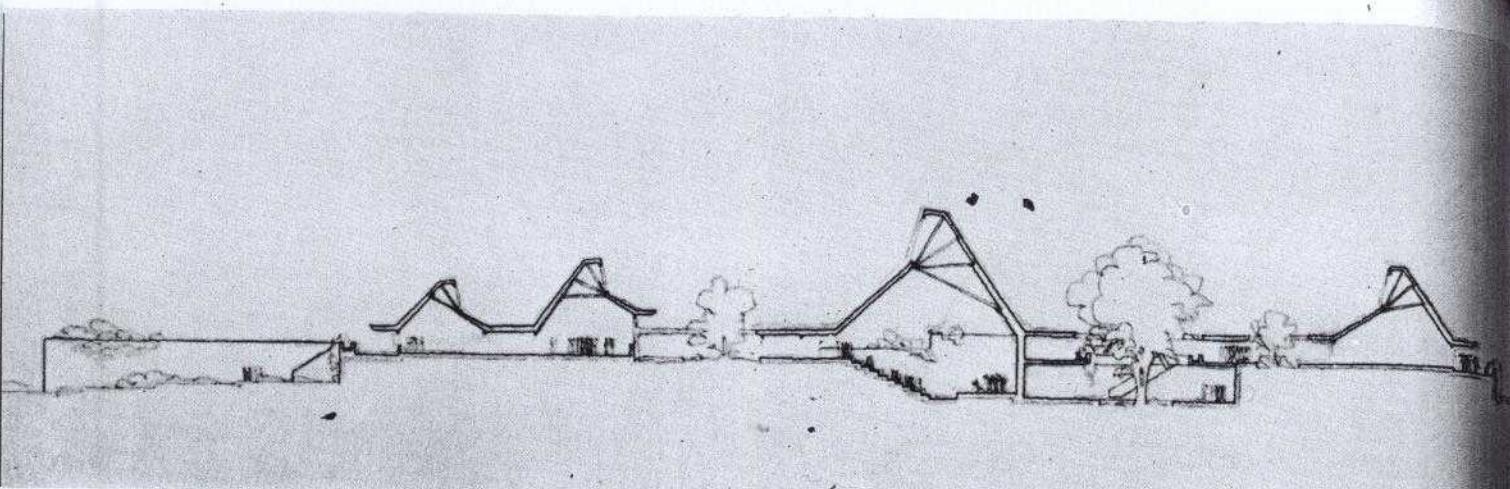


The enormous modern hand-finger-type airport is in many ways unreasonable. Both the aeroplane and the automobile can drive to a certain point with absolute precision. By letting them meet at the same point above each other and by introducing the necessary number of floors in between for the handling of luggage, customs and passport control and waiting rooms, the passengers and their luggage can be transferred in the shortest possible distance from automobile to aeroplane by elevators.

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Scheme for High School near Elsinore, Denmark.
Third Prize in Competition, 1958.
50. Section.
51. Site Plan.

The platform in the High School scheme stands in a slightly undulating landscape and emphasizes, by its squareness and straightness, the soft movements of the landscape.

Jörn Utzon

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