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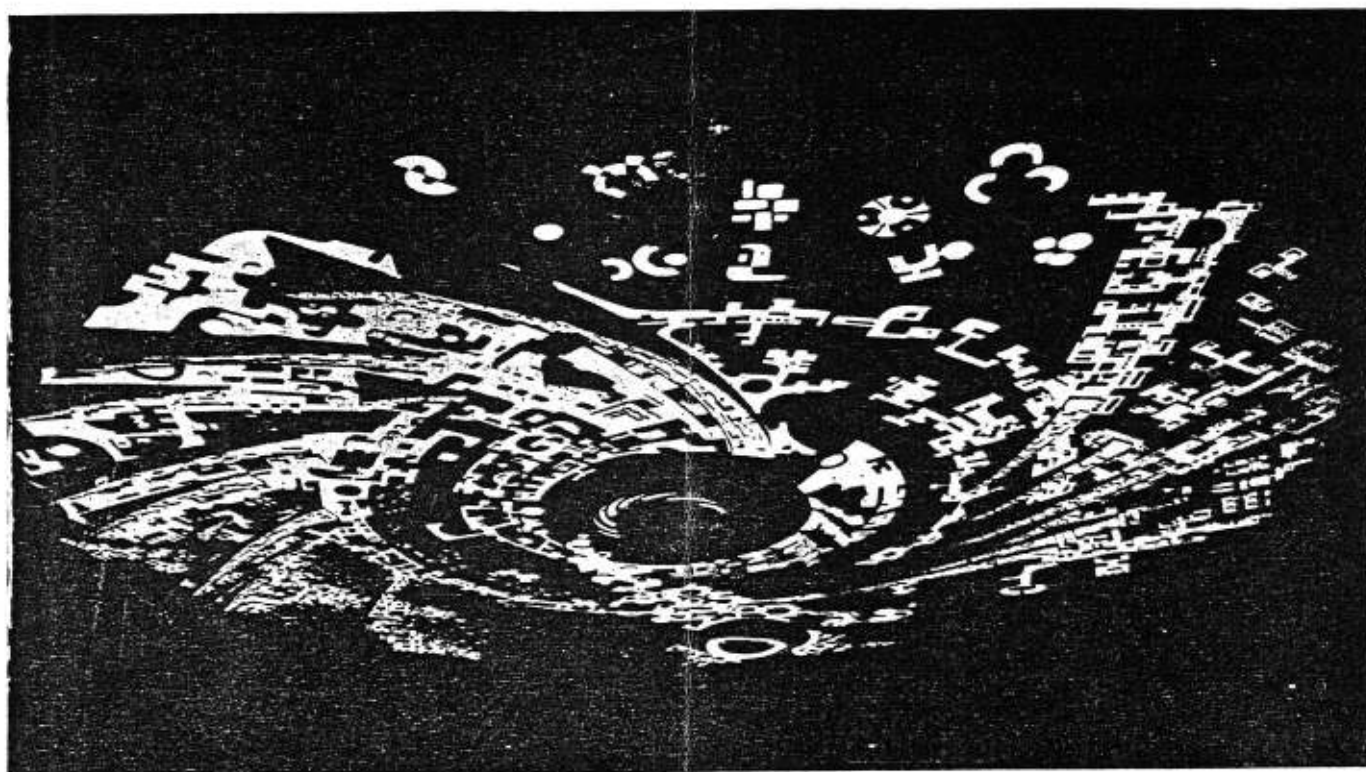
Lay-out by T. L. Patel

Cover : Auroville Model

The Journal committee will be glad to consider for publication articles, letters, technical informations on subjects of architectural interest, materials for review should be accompanied by drawings and photographs sufficient to illustrate the scheme. Photographs should be on glossy paper (full plate size). Presentation drawings should be drawn in ink. A high standard of presentation is much insisted upon.

The views expressed in Journal of the Indian Institute of Architects are not necessarily those of The Indian Institute of Architects and the Institute as a body accepts no responsibility for the statements made by the individual authors. However, the Editor reserves the right to edit, reduce and cut the article to suit the requirements of space in the Journal.

General Data About Auroville



Auroville model

A few miles north of Pondicherry, the township of Auroville will cover an area of about 16 sq. miles. This will be located in Tindivanam Taluk, South Arcot District of Madras State, on the Coromandel Coast of the Bay of Bengal.

Since its first stage of development in 1965, the Auroville project has gained a wide recognition. The General Conference of UNESCO has unanimously commended this truly international cultural township project in 1966-1968 and 1970 expressing the belief that it will contribute to international understanding and to the promotion of peace.

The project has been officially approved by the Ministry of Education, Indian National Commission for Co-operation with UNESCO. The Council for Scientific and Industrial Research has recognised the Sri Aurobindo Society with special reference to this project undertaken by it as an Institute engaged in Research in Social Science. The Ministry of Education has already started to help financially the construction of the first educational buildings.

The new city is planned for 50,000 residents who will come from India

itself and any other part of the world. Auroville means, literally, "City of Dawn". The name is given in honour of Sri Aurobindo.

Zoning: the township will be divided into four sectors: Residential—Industrial—Cultural—International.

a) Industrial zone:

As a self-supporting township, the industries and handicrafts primarily necessary for the life of Auroville will be grouped in this zone, and a large agricultural complex with farms, fisheries, orchards, dairy, nursery and veterinary hospital will complete it.

The industrial and agricultural units will be conceived to serve, as often and as much as possible, as models for duplication elsewhere, as well as training centres in modern technological methods and management procedures.

The geographical position of this zone in relation to the centre of the town is determined by the prevailing winds and the routes of access. Functional architectural designs, landscaping and colours will foster a happy and harmonious spirit in work.

b) Residential zone:

Architectural innovation and variation will be freely utilized in the different types of buildings—houses, private villas, apartment houses, hotels, guest-houses, etc. These will be set among gardens, around squares and along streets without motor-car traffic. Multiple expressions of beauty in form—picturesque views opening on fountains, ponds, flower beds and works of art—will create an atmosphere conducive to the expression of harmony.

c) Cultural zone:

This area is designed to bear witness to the cultural wealth of the world's civilizations, and to favour all research which can contribute to the development of understanding and a higher consciousness in man. Academies of arts and sciences will welcome artists and scientists from all countries to work in freedom and independence. This zone will have a World University, developing patterns of education for tomorrow, and an Agricultural Polytechnic; a Research Centre providing facilities for research and invention; a Centre for training in music.

dancing, drama, painting, sculpture, and other crafts and arts, and an Institute of Film Technology and Production; a World Communications Centre; and a large auditorium with pipe organ, for concerts, dramas, film shows and conferences. Fully equipped sports installations and facilities will emphasize the harmonious development of the physical body as an essential basis of evolution. A gliding club, riding school, golf course, tennis courts, swimming pools and a large stadium will extend this zone, aiming at Olympic Games proportions and standards. Nearby will be an international tourist hotel and seaside resort.

**d) International zone:
the zone of Union**

This area will be composed of pavilions of many nations and of the various Indian States with definite cultures of their own, and will incorporate the features most typical of each tradition. This will amount to an exhibition of World Culture and its Synthesis — in architecture, painting, sculpture, music, literature, decor, handicrafts, natural and manufactured products, and will indicate how much the nations have to contribute to each other.

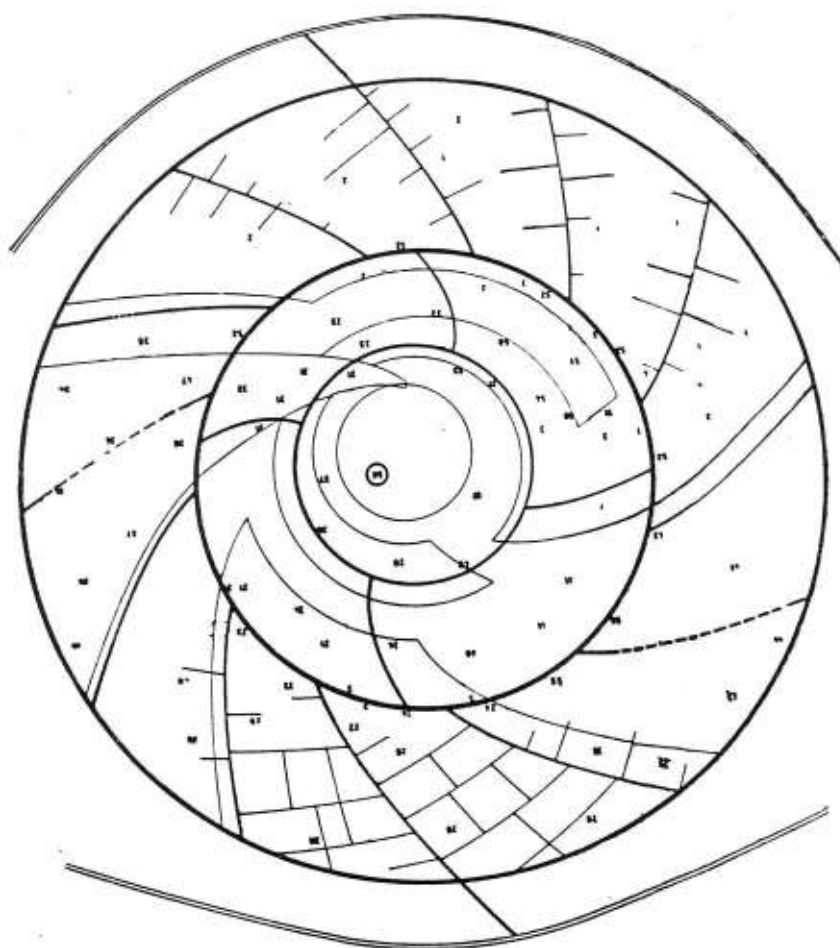
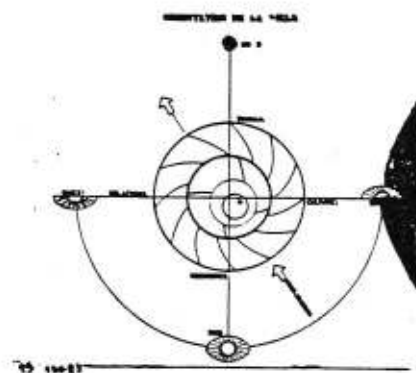
First Realisations:

Up to now, the development of Auroville on the land has taken three major aspects: an agricultural experiment, a first experiment in international community living and social welfare work in connection with a Tamil village on the outskirts of Auroville. Besides, several other points of activity have developed on the lands of Auroville.

Auro—Orchard:

Agricultural experiment in organic farming and introduction of new varieties

50 acres of land are being cultivated by a team of youth and the help of local villagers under the supervision of an agricultural expert in organic farming. Bore-wells have been dug to irrigate the cultivations.



ZONING

A. HABITATION

1. Collectifs, 2. Individuals, 3. Places, 4. Supermarchés.

B. TRAVAIL

20. Bureaux administratifs, 21. Ateliers techniques, 22. Bureaux laboratoires, 23. Ateliers d'artistes, 24. Artisans, 25. Petites industries, 26. Industries.

C. ZONE CULTURELLE

30. Campus, 31. Facultés, 32. Musée, 33. Auditorium, 34. Gymnases-piscines, 35. Terrains de sport, 36. Stade olympique, 37. Fac. médecine-hôpitaux.

C. RELATION

40. Pavillon de L'Inde, 41. Pavillons internationaux, 42. Hotel restaurants, 43. Zoo, 44. Jardin botanique, 45. Radio-télévision, 46. Studios radio-télévision-cinéma, 47. Observatoires, 48. Salle des congrès.

D. ZONE YOGA

50. Ecoles, 51. Cinéma, théâtres, théâtres spontanés, 52. Petits commerces, 53. Musée plastique, 54. Ecole et musée technique, 55. Musée spectacle du monde, 56. Temple de l'adoration, 57. Jardine de la méditation.

Aspiration: International living

In October, 1969, a first group of young people who had decided to participate in Auroville came from France overland to settle and develop Aspiration, a work-cum-living camp in the outskirts of Auroville. They were 15 people and since this date many others have joined them so that, nowadays, a community of 65 people approximately, consisting of several nationalities, is already gathered in Aspiration.

The first organisation of life has started on a communal basis with a common dining-room for all the inmates and the development of first activities such as a garage, a mechanical shop, a plastic shop, a school. At this moment the first Printing Press of

Auroville is being finished, also the first school building is being constructed with the help of government.

Social Welfare work at Kuilapalayam

Next to Aspiration is a Tamil village with a population of 1,500 persons.

Social welfare work started right at the beginning of the construction of Aspiration. Water connections were installed on two points near the village, a dispensary is functioning daily and children are being looked after and fed milk and cereals as a supplement to their diet. It is a project to improve progressively conditions of living in the village so that it becomes a model village serving to develop other villages in the Auroville area.

Interview with the Chief Architect Roger Anger

Q. As you, Roger Anger, are the originator of Auroville's architectural conception, we should first like to know you better: what was your activity up to now?..... what creative principles do you follow?

R.A. Very kind of you to ask, but such questions are relatively unimportant: what I will be as Auroville's architect will certainly differ to a great extent from what I have been up to now. If, at present, the responsibility of Auroville rests on me, my strong intention is to open the doors widely to other architects. In France a group has already been formed and is at work on the project. The universal nature of Auroville calls for the meeting of different trends of architectural creation in

its construction through the years. Inevitably I become more and more interested in the principles of urbanism and have utilised them for Auroville's successive layouts and, even more so, in the latest model of the town.

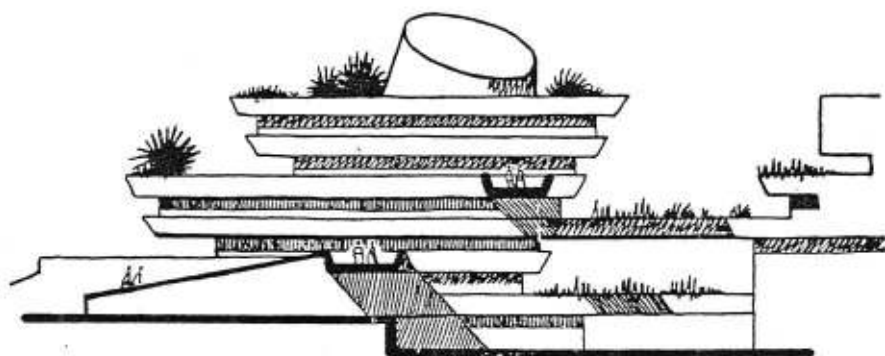
Q. Would you agree with the opinion that the first object of a town is to facilitate the meeting of man with man?

R.A. Obviously yes. Just as obviously it has been forgotten for a long time. The environment of man has been sacrificed to the egoistic needs of economy which has imposed a more and more rigid framework of life. Most modern urban realisations are suffering from this, and are characterised by the lack of attention on the true

as architectural solutions to suit the new society that Auroville wishes to create — a society among other things, where the power of money is no more the governing element of growth of the city.

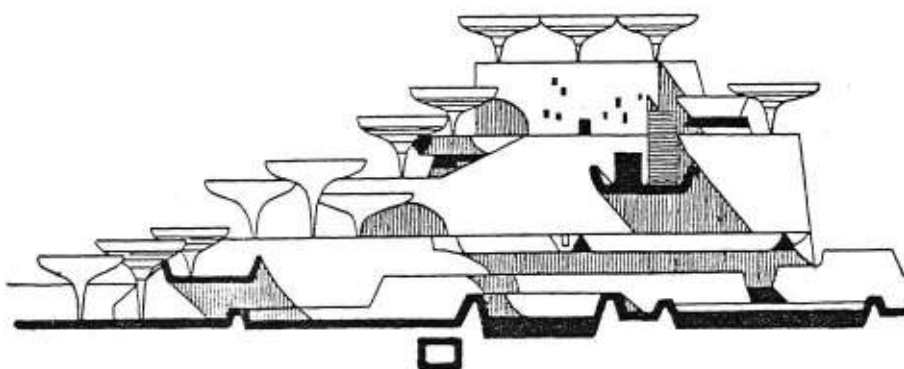
In order to allow for the meeting of man with man in a real manner, the town should be conceived as a living organism just as a biological organism, functioning as a whole, with each of its components in relation with the others and with the whole. Each of these elements finds its meaning and its dimension only in its relation with the whole — the evolution of man being everywhere the leading factor.

Materially speaking, a solution could be to create organic units with a limited number of people which would make contacts easier and more frequent. The densification of a number of centres of attraction is another possibility. They would allow an easy "coming together", just as streets and forums in the past were convenient meeting places where the dialogue of man with man was ever active. We also intend by means of a modern technology to create a special urban profile facilitating that intimate warmth of contacts that one could find in old traditional cities.



Schema for houses

order that the city may become a true planetary achievement. Well, if I mustabout myself..... like any French architect I studied at the "Beaux Arts". Very soon I had the opportunity to build a good number of spectacular projects. In France I am considered as belonging, not to a revolutionary, but to an "avant-garde" architectural trend. At the beginning of my career, I was very much concerned with the renewal of shape, with an architecture very strongly centred around the study of space. For a certain number of years now I have been to devote myself to an architecture concerned with man viewed as a social being and to conceive a kind of architecture with which man would actually be merged. The group of architects I am working with is studying pan-social architectural forms. They constitute a preview of the flexible type of architecture necessary for Auroville's first modules and could meet the dynamic imperatives of



Schema for houses

needs of man. Fortunately for us, the ideal of Auroville is such that we are obliged to go beyond all the contradictory pressures of conflicting egos, whether they be individual or collective. This is one of the main factors of the success of Auroville. It is also a risk because we are compelled to innovate, to find new urbanistic as well

Q. What field does Auroville offer for these considerations to be implemented?

R.A. We have the extreme advantage to deal with a project where the various functions of life: being, living, working, learning, etc..... are not separated anymore. They are all integrated consciously in the unique purpose of the city. We shall benefit

by a type of population who understands what is being tried and who is conscious of the goal to be reached, who accepts at the same time to experiment with new solutions and is ready to collaborate with the most contemporary discoveries in techniques, social science, economy and in the field of communication. Our four zones:—Residential, Cultural, Industrial and International are only separated in theory. The circular plan adopted allows for an integration of these sectors and makes communications easy. The land itself is flat but we intend to build artificial levels by means of a circular macrostructure which will give the town its dynamic outlook and constitute the highest densification zone. Approximately 50 per cent of the population will live in this "ring" — live yes, but also find here its activity.

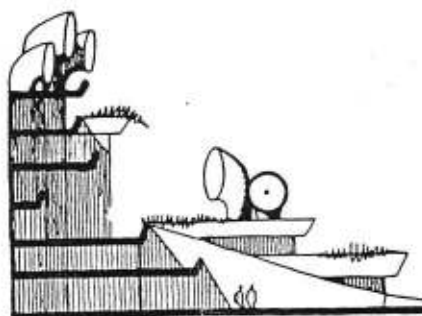
This intention of building high storeyed buildings shall not result in the creation of a dense, opaque mass. It will offer many trans-sections, views from outside to inside and vice-versa. We shall create a shade of architecture that will allow for undercover traffic and sudden outbursts of light within patios and elevated gardens. Within this ring a bustling life will exist, the town's vital soul. The ring itself, encircled by a hundred metre wide canal where small artificial islands will provide a rhythm, will be the intersection of all sectors, the town's centripetal focus. This is where, in addition to the fairy-like charm of canals, the main exchange centre will be located. Here, one will find theatres, sports grounds, recreation halls, forums for meetings, hotels for visitors who will come here to participate in the activities of Auroville. It is important to remember that Auroville is not a closed town, but a town open to the world.

Q. What have you planned to facilitate the meeting of man with man?

R.A. Auroville will attempt the rehabilitation of streets, a change from rush-ways to a satisfying and happy system of circulation for man, from meeting place to meeting place: squares, fountains, gardens a play of integrated volume, pools, staircases, wings of shade, shafts of light, etc.

In the residential zone these streets, with all their meeting places will become arteries for creative neighbourhoods (not dormitories) of people enjoying some particular common acti-

vity that will be their distinctive mark, a source for unique offerings to others. There will be auditoriums, amphitheatres, research and leisure centres, restaurants and shops for several such neighbourhoods. Finally, in the cultural zone, installations will be built where the whole town may enjoy festivities with as many as 100,000 visitors.



Research for natural ventilation

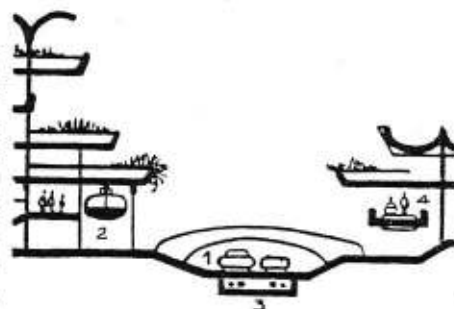
Q. Auroville is being deliberately conceived as an experimental town. What does that imply from the urbanist's viewpoint?

R.A. Auroville will be a totally unprecedented psychological, social educational and architectural experiment. The continual growth of the town does not refer to the number of inhabitants which will not exceed fifty thousand, but to an evolution of the physical body, of the life of Auroville, of its society and also of its genius. This is why the most plastic formula will be the best from the urbanist's viewpoint. Here, by the way, we come to what will be the principle of tomorrow's urbanism: giving the town basic lines of power, main penetration channels, through a macrostructure that shapes the outlook and facilitates and inner direction. Then, just as with a bottle-rack, a mobile microstructure is fitted in, and can be changed, modified according to the needs of the town, the zone, as well as the individuals. Urbanism cannot be separated from plastic, open-ended architectural vision. Both are striving after an environment where man can live and evolve with joy. A macrostructure, like a mountain, cannot easily be changed. The macrostructure is an arrangement of space involving an underworld of sewage pipes, of water and electricity connections, main circulation ways wandering through the surface relief, natural or artificial climatic conditions bathing the whole complex. Once the macrostructure is positioned, everything

becomes possible. On this structure is laid an outer skin, changeable and plastic so that it may be stretched, so that its colour may be altered. Such an approach is the only one that will allow an evolution of the town in time and within a given space. The clothing of the town may be changed, renewed without drastic destruction.

Q. Has Auroville already evolved, even before starting to take a physical body?

R.A. Several successive layouts have already been made and each represents a different stage of a consistent conception. In fact, we would like to allow Auroville to materialise according to its own dynamism so that a real communion establishes itself between those who will live in Auroville and those who will create it. This is, for architects, one of the most difficult problems to solve. Anyhow, we have no intention of building arbitrarily. Not even one single area will conform to an exclusive architectural design. Many different teams must be at work and

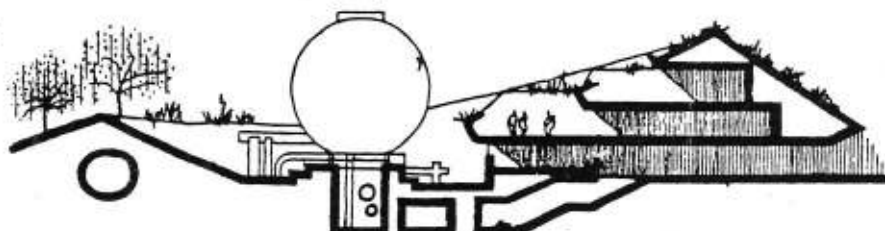


1. Road for minicar
2. Rail for minicar
3. Energy and evacuation of fluids
4. Covered side walk for pedestrians

collaborate each contributing very different expressions, under the co-ordination of a group empowered to unit this diversity.

Q. Auroville's construction will start. What other urbanistic problems can you mention?

R.A. Auroville's main lines of strength have been determined for a long time: the main penetration ways, the ring and the four great sectors. The international sector, an area with a low density of population, causes little or no problem. In the industrial sector we plan extension space for each industry. Residential and cultural sectors are the most difficult to keep plastic and evolutive. At present, we still lack the financial means to build macro-



Scheme for integration of a factory to the ground

structure. We shall then start with areas of lesser density. By the way, all trees now on the site will be kept as they are.

Q. There have been talks about successive aspects of Auroville and even about many Aurovilles?

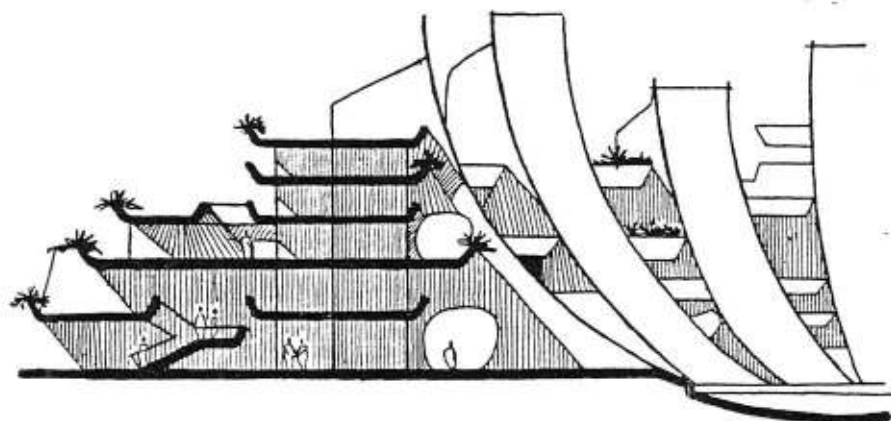
R.A. We are now approaching the practical aspects of construction. After looking at Auroville as a whole, we must look at each aspect separately

according to the growth of the town. Technically, with up to five thousand inhabitants we may utilise existing facilities, connect the power lines to Neyveli's supply and use artesian wells for water. With a population of twenty-five thousand, water problems become more acute in a district where water is scarce. We envisage then a sea-water desalinization plant. The same thing holds true for roads: we will make use

of those now in existence up to the moment when the first deviations become necessary. A first set of single storeyed thatched roof polyhedric houses without foundation allows already a grouping of seventy five people around a small restaurant-pavilion. This organic unit will grow into another, three times bigger, which in turn will be integrated in a similar manner... each larger unit will be fitted with more and more cultural and sports installations. It may be that our first colony will not exceed one thousand persons. When we reach two or three thousand people, first section of the future city will have been built. Our experimental colony may later become a part of Auroville or remain as an "historical site" or be completely rebuilt.

And so Auroville will have started, not unlike big holiday village... to become ultimately one of South India's most important technical and cultural centres.

At a stage between five to ten thousand inhabitants we shall see what we call Auroville's first visage. Between ten and twenty-five thousand its second visage and the third from twenty-five to fifty thousand. Above fifty thousand, new Aurovilles will start to be built, let us hope, for Auroville is being devised to help solve community living problems all over the world.



Solar park

The Matrimandir

Q. What is the Matrimandir?

R.A. As the Mother has said: "The Matrimandir wants to be the symbol of the Divine's answer to man's aspiration for perfection the union with the Divine manifesting Himself in a progressive human unity?"

Here is the model. You can see how the earth opens as if it were under the pressure of an irresistible force. And the golden sphere of consciousness comes out of the depths. The spiritual meaning is obvious. It shows how out of the evolution of earth shall come the new age promised by all traditions.

Q. If I understand correctly, this is a religious building?

R.A. No. If it were, I would have designed a cathedral or a temple. The meaning of the Matrimandir is above all religious. It expresses the spiritual endeavour itself the rebirth of man into a new consciousness — "Realisation" as it is called in India.

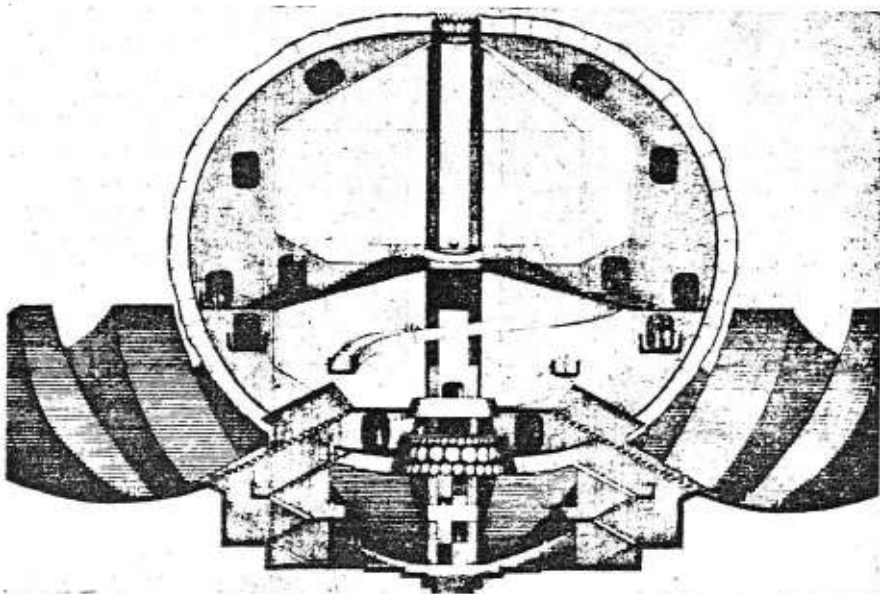
Q. How did you get the idea of building such a symbol?

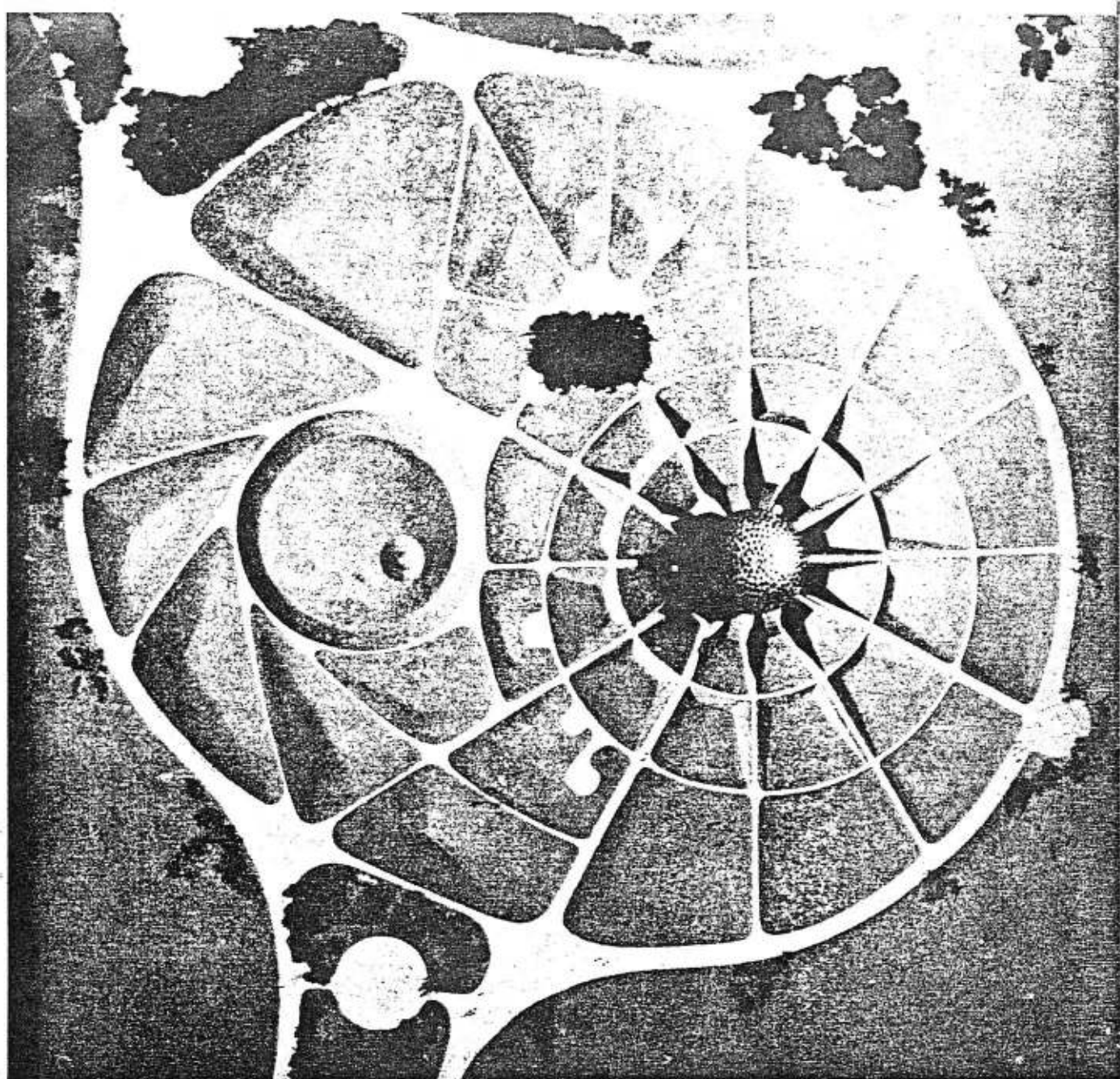
R.A. The idea is not mine: the Mother of Sri Aurobindo Ashram gave us the assignment. She told us to build the Matrimandir before other things. She gave precise indications about the

measurements and the arrangement of the main inner chamber of the Matrimandir. The measurements were precise almost to the centimetre.

Q. How could she, not being an architect, determine such exact measurements?

Section of Matrimandir





General view of the Matrimandir area

R.A. This I don't know, you must find the answer for yourself. Well, with the information she had given us, we started to work and evolved a general shape is nearly spherical. fictions of the building and its decoration.

Q. You have just told us about the meaning of the Matrimandir and how the project was initiated. Would you now explain the architectural conception.

R.A. Without going into all the details, I can give you a general description. We started with many models that were shown to the Mother and She chose this one. As you see, the general shape is nearly spherical. Observe that I say nearly spherical: it is the exact projection into space of

an old tantric symbol concerning Creation and Unity. When looked at from above, the building is circular and when viewed from the side, it is slightly oval. From whatever side, it keeps the same aspect.

Q. What materials have been chosen?

R.A. Inside there will be white marble and a structure in rough cast concrete. Outside, this basic structure is not covered in a final manner: we chose to leave provision for future changes so that the outer aspect of the Matrimandir may be modified according to the evolution of consciousness of Aurovillians.

In order to achieve this idea, we designed a plastic "skin" that covers the inner structure. This "skin" itself will be covered by golden discs, also

in plastic, fixed at the end of iron rods that will move slightly in the wind. The sunlight will be reflected on this entire moving surface and will produce a sort of vibration which seems to come from the building itself. It will give the feeling of a mass of light that is alive.

Let us now take a closer look. First of all we come to a circular area composed of 12 gardens designed like opened lotus petals. None of these gardens is similar to the others. And yet they make up an overall design. They are separated by streams that originate at the four points of the compass. These streams delineate the shape of the 12 gardens. All together they reproduce the symbol of the Mother. Separately now, they express

each of the aspects of the Mother through a floral decoration that may be changed according to the artistic will of the gardeners. The flowers are placed in removable vats.

After passing these gardens, we continue on one of the paths leading to the building. There are 12 paths altogether going through a landscape of pyramid-like masses of dense earth, delineated by the streams that unite the ponds of the gardens.

It takes us straight to the Matrimandir. As we go on, the earth becomes higher and higher on each side. It forms a twelve-sectioned crater from which arises the Matrimandir. Now we are walking between 2 oblique

walls, 30 feet high, as impressive as a fault line. The walls become lower and lower. We are in the crater. And here is the Matrimandir. It looks as if it were suspended in the air in the middle of this strange corolla.

Before entering the structure, see a water tank under the sphere. The bottom side of the building seems to rest above the water which, though it is in the shade of the building, received daylight directly..... Let us look up: the Matrimandir is open, in the vertical axis, from top to bottom. A column of light pierces the building.

The doors to the Matrimandir are in the pillars. Walking now into the building through one of them, we climb

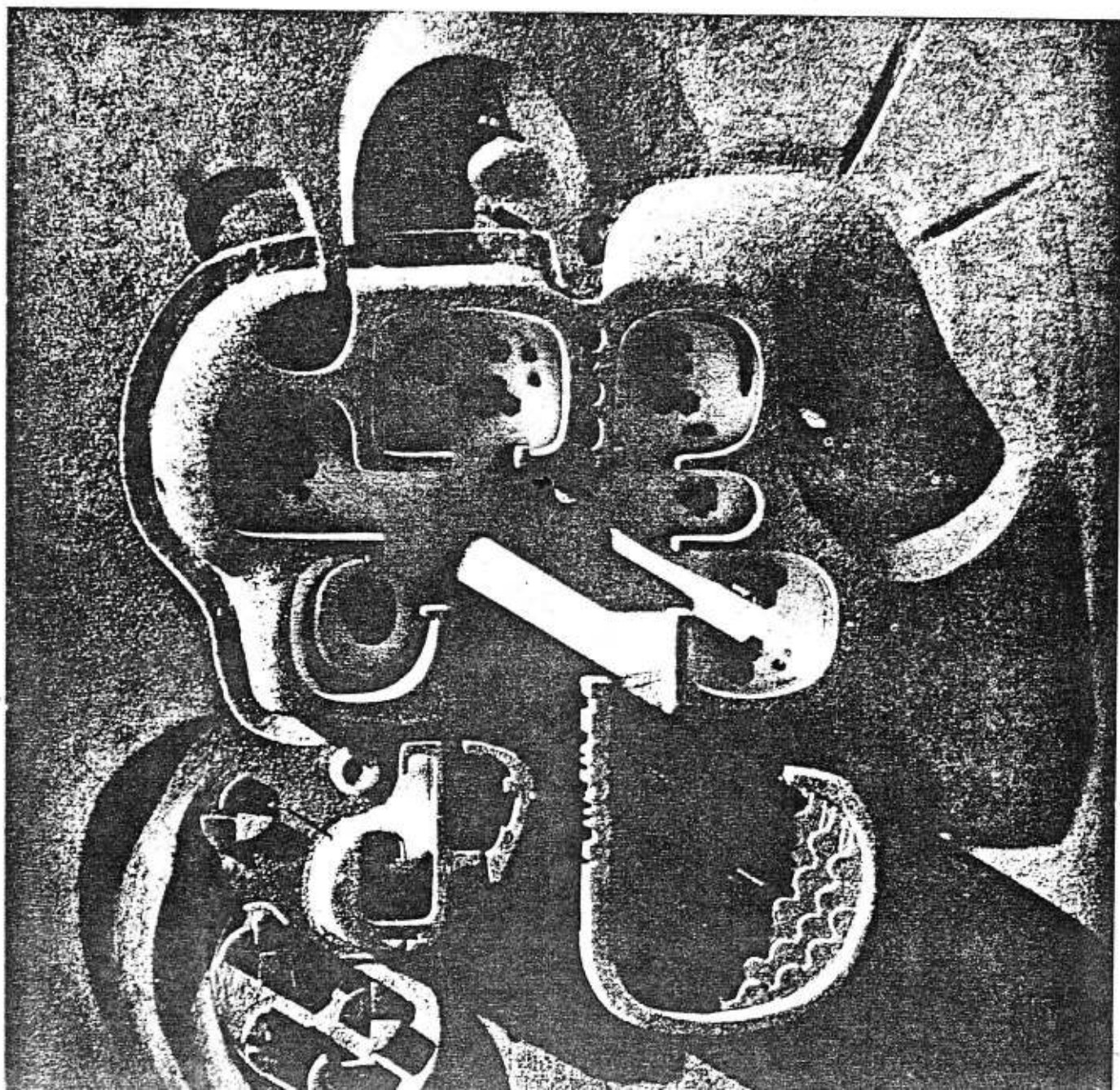
up a staircase towards an elevated inner room. This room is a wide landing before the spiral ramp leading us further on to the main chamber.

Two spiral paths reach this chamber, 2 others lead outside: the landing of the ramps separate the area into 4 equal parts. In the centre, our eye is focused on a luminous ball — 2 feet in diameter. It receives the light coming from the top, diffuses it into the room beneath. We would like to keep this ball suspended and immobile in the air by means of a magnetic field. It is easy to understand that this main chamber is devoted to meditation.

Here is revealed the second spiritual
(Continued on page 31)

Two Experimental Schools

Inside view of the open type school

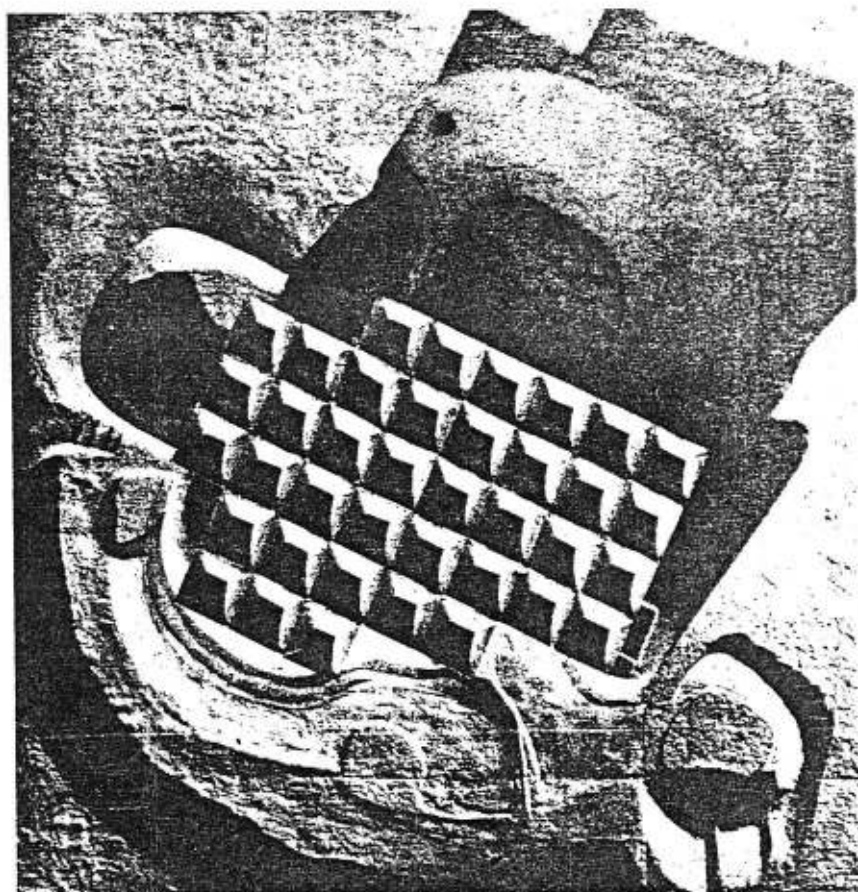


A dynamic approach to new architectural possibilities in conjunction with the research in new ways of teaching and learning has resulted in two projects for experimental schools. The construction of the first one is nearing completion.

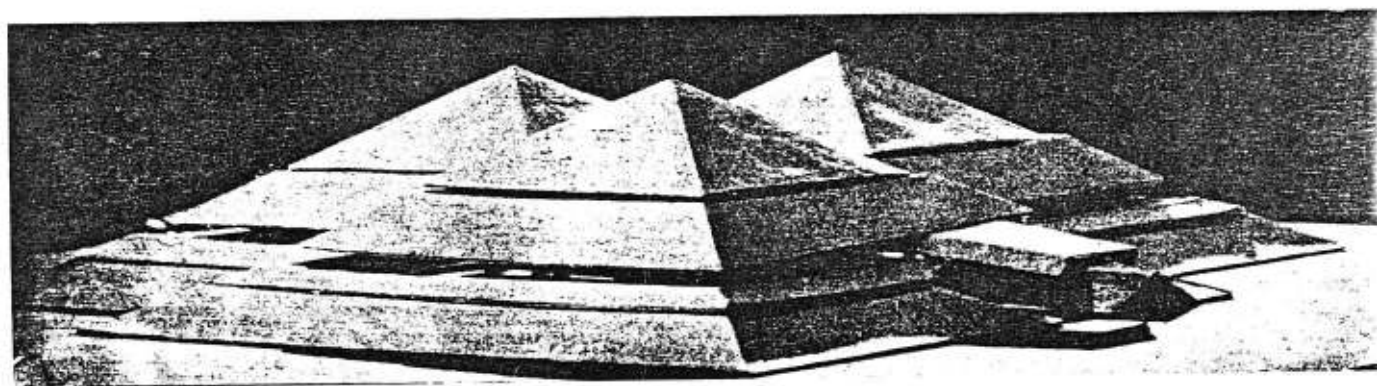
The building of the first school, when seen from outside, has round-shaped walls. From inside the walls are vertical. There is a sort of corridor in between these two walls which, besides being useful for storing things, serves as a very effective thermal insulation, thus helping to keep the rooms cool. The outer wall allows for a play of varied shapes (see photograph). The walls are not load bearing and hence, if any change is needed in the internal arrangement, this can be effected easily.

Ventilation is obtained by a special arrangement in the roof for there is a free flow of breeze across the space between the roof elements and the beams. The translucent polyester roof elements, held in position by suitable clamps in the trough concrete beams diffuse natural light during the day. The trough-shaped beams collect and dispose of the rainwater from a height of nearly three metres above the ground giving the effect of "waterfalls". The beams are spanned on concrete columns which take up the load of the roof.

This school is of an "open" type. Inside everything is intercommunicating — one room with another. There is no rigid partition anywhere.



Model of the open type school



Model of the pyramid school

The second school, in opposition to this conception, is of a "closed type". It stimulates much more concentration. The idea here is to create a world devoid of contacts with the environment — rather, a small "universe" is created within the walls of the school.

Pyramidal in shape, the building is essentially a concrete structure with sloping roofs, peripheral hollow beams

supported on novel pyramidal columns.

First, there is an area for gardens — very simple ones — arranged all around the school. Within the gardens it is easy to create small class-rooms by simply positioning mobile screens. The size of the rooms can be varied by moving the screens according to the number of children to be accommodated for each subject. The central part

of the school is a vast multipurpose area without partitions.

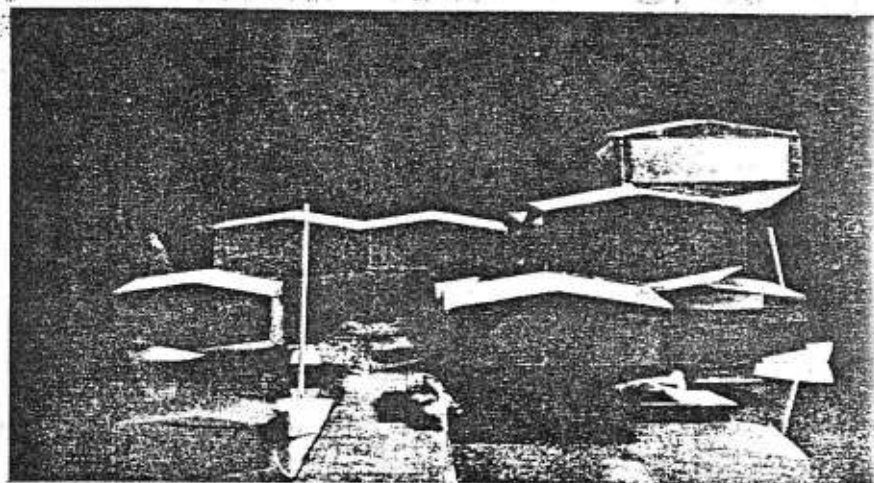
Ventilation and illumination are conveniently arranged by means of two horizontal slits in the wall of the pyramid. Each slit is in communication with the peripheral garden and the central area.

"Bee-hive type" house

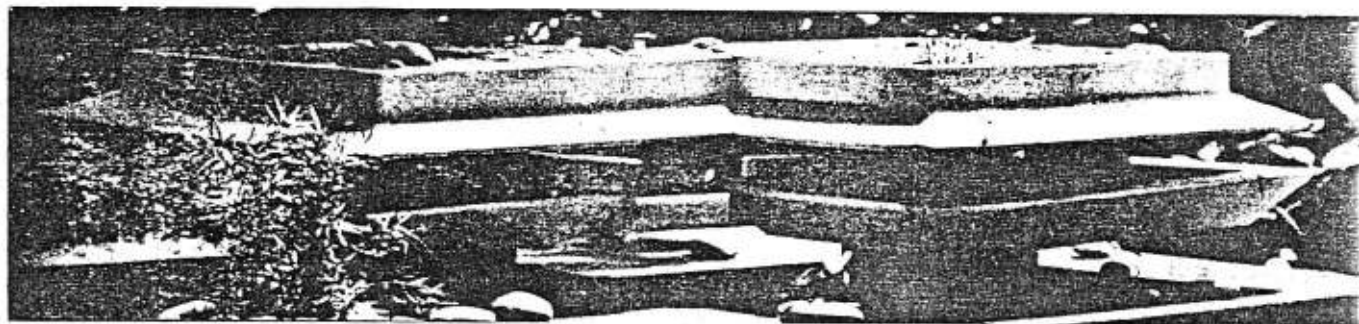
Each cell is a separate entity with facilities for bath and toilet. It is possible to form a group of these cells by juxtaposition both in the horizontal and vertical directions. In the vertical direction, however, it is limited to three.

Each unit, supported by a short column in the center, is large enough for the accommodation of one person or a couple. To house a family, several units are interconnected by doors and interior staircases. In each unit, between the floor and the base, all the distribution and evacuation pipes are concealed and they are taken out through the central supporting column.

When two units are constructed together, by dividing one of it into two halves in the horizontal plane, it is possible to have a balcony or an elevated garden.



Model of bee-hive type hut



Project for square type house

Elevated "square type" houses

The basement of this type of house is made of reinforced concrete walls. The floor and the terrace of the house are suspended from the two pairs of

main beams in mutually perpendicular directions which transmit the load to the reinforced concrete wall down below. The exterior forms are varied with light prefabricated materials such as

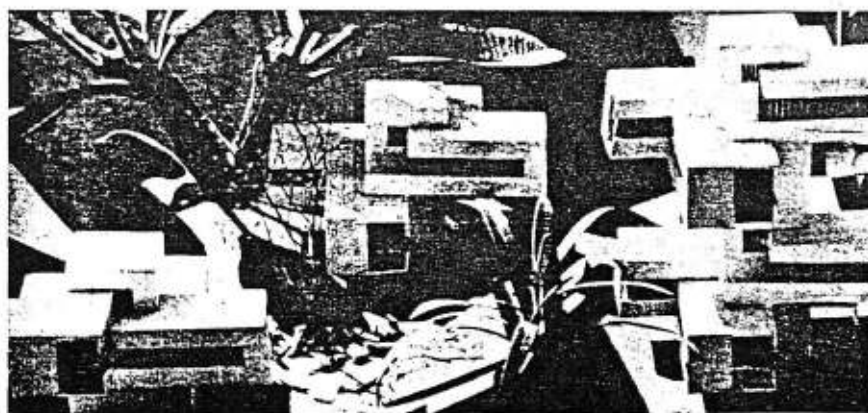
Asbestos sheets fixed to the concrete portions. The terrace can be used to make a private garden. The space under the floor of the house can also serve as garden.

"Spiral type" buildings

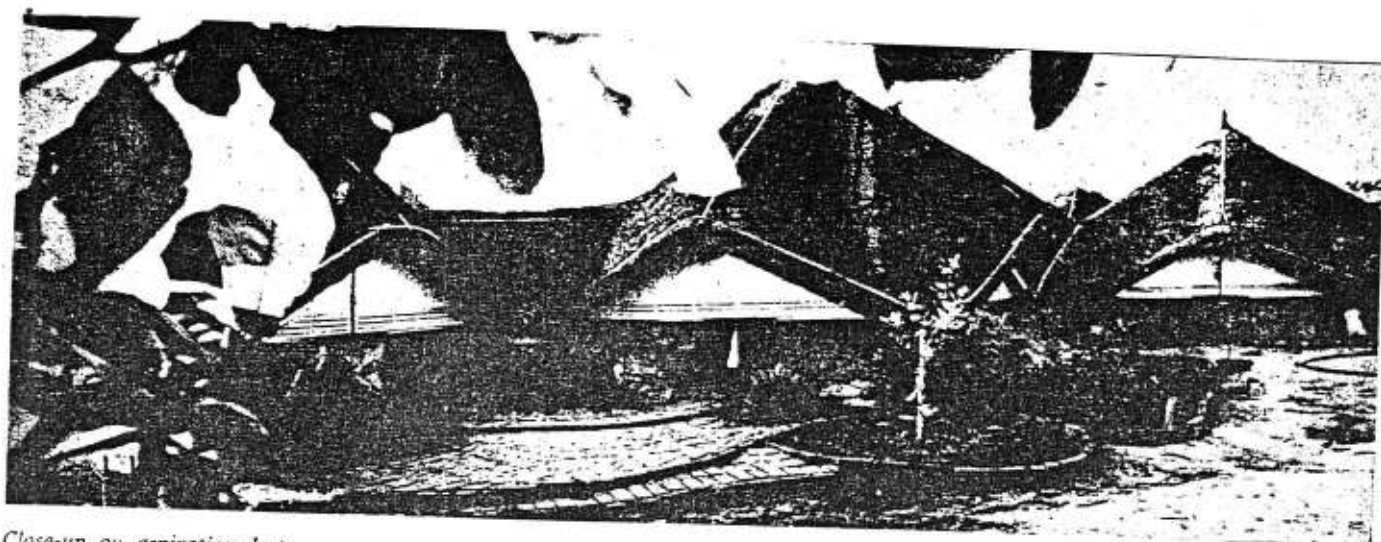
These buildings are designed to accommodate bachelors who are given a small room each at one floor level. This room is the only one at its own level. The next room is positioned at 45° or at 90° turned about the vertical axis and at the next higher level.

The structure is made of reinforced concrete beams transmitting the load finally to the concrete walls down below.

Each room is open completely to three directions affording plenty of ventilation.



Model for individual houses



Close-up on aspiration huts

"Square type" huts in Aspiration

The general idea of Aspiration goes back to 1968 when it was decided to start the construction of Auroville with a group of semi-temporary houses in which could stay young people wishing to work at the construction of Auroville and ready to attempt an experiment in community life.

The first nucleus of Aspiration was finished in September 1969. It consists of 9 "units" and a cafeteria. Each unit has four square rooms. The size of each is 3.80m. Two rooms are linked by a corridor with cupboards, which leads to the bath-room, both situated at a level of minus 0.50m as compared with the floor of the rooms. Each room can lodge one or two persons.

The structure of the roof is made of wooden rafters (5 x 10 cm) joined with nuts and bolts and fixed on an iron basis. A galvanized wire net 40 x 40cm stretches from the beams. Cocoleaves and thatch are used for covering and insulation. Windows are made of triangular shutters which rest completely against the slope of the roof when opened.

Cost of construction including materials and labour was Rs. 12,000 for each unit of 4 rooms and 2 bath-rooms, accommodation satisfactory for an average of 6 persons.

General view of Aspiration-square huts for youth campus



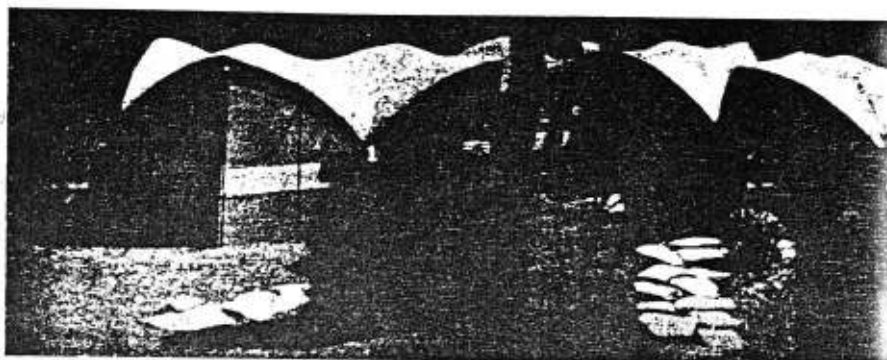
Inside aspiration's hut

"P. H. type" huts°

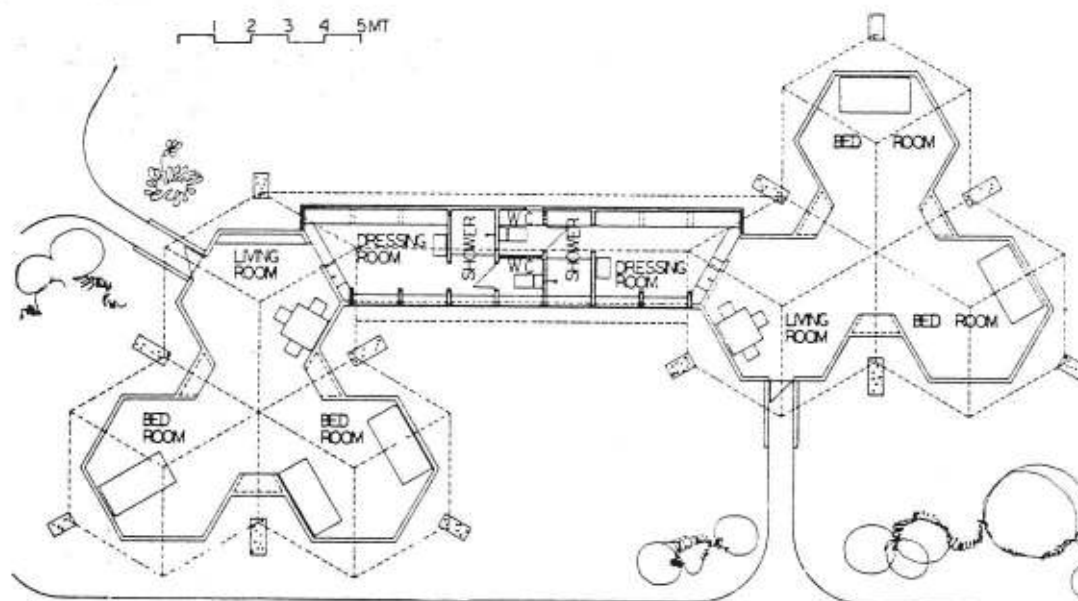
These low-cost hexagonal huts can be used for temporary housing schemes like the work camps for instance. The roof is made of premoulded triangular asbestos sheets. Each hut is covered by joining three such roofing sheets.

The exterior walls are made of colored board or similar materials in which openings are placed for windows and ventilation.

° P. H. is the abbreviated name for: "doubly curved shell", which is the exact shape of each moulded asbestos sheet.



Model for P.H. houses

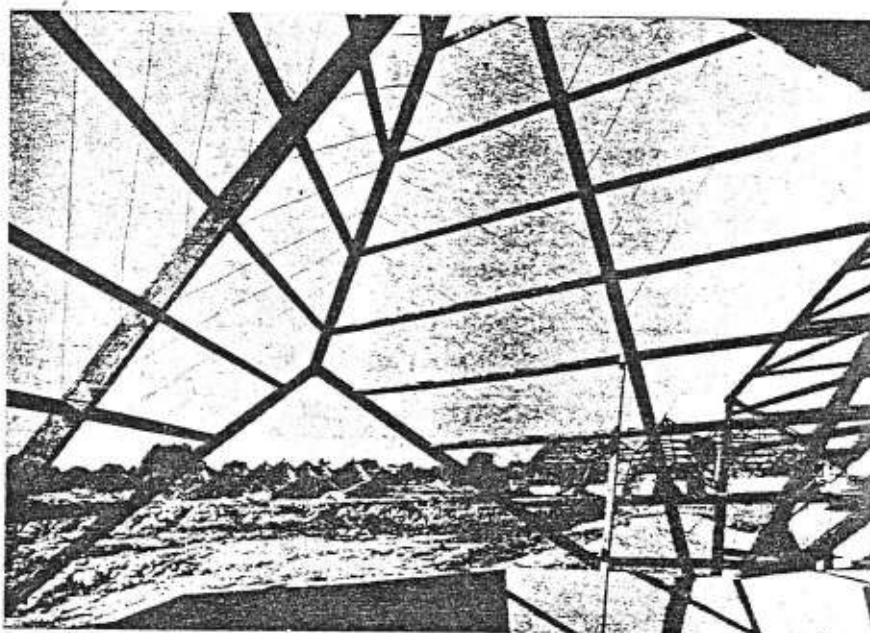


Hexagonal huts in Aspiration

The plan of these units is made according to the necessity of building houses convenient for families or groups of people wishing to expand the experiment in community living by sharing the same house, somewhat like the traditional joint-family houses in India.

The general characteristics are similar to those of the "square" huts, but the total area for the 3 rooms is 42m², dressing-room, bath-room and toilet.

Three such units are at present under completion.



Construction of hexagonal type huts

Auromodel Health Centre

One of the first endeavours to improve the standard of living in the village of Kuilapalayam near Aspiration was the opening of a medical centre with a temporary bamboo structure.

Following the success of the enterprise, the construction of a health centre which is to cover a larger area and provide medical facilities for a population of 15 to 20,000 has been decided.

The plan is made of two parts: One for consultation, visits, dispensary work, preventive medicine; another for treatment, surgery and a maternity clinic.

The first part is developed around a large central waiting and reception hall where food and medicine for children can be given and where educational documentary films can be shown. The other part extends between the admission ward and the operation theatre.

The roof structure delimitates the services and passage-ways. The planimetry takes into consideration the possibility of building an inside garden and of giving an impression of space by perspectives, lights, patios, changes of level in roof and pavement.

Roofing and louvres are made of R.C.C. and basement of granite blocks. Covered area: 800m². Construction on the way.

"Service farm" house

The project of this prototype farmhouse dates back to 1969. It consists of elements of similar dimension, built on 2 levels and united by a passage-way on one of the levels, containing one or two toilets and bath-room.

Each element is composed of 2

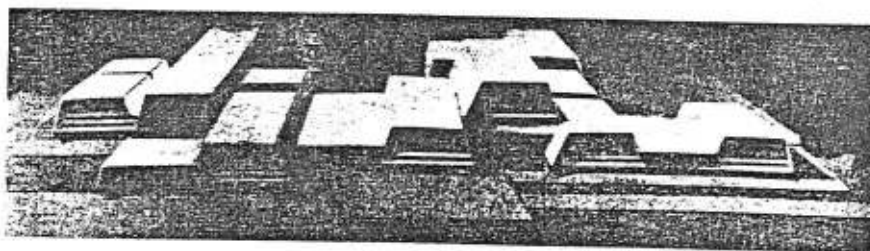
double-bedrooms with independent entrance and a large veranda for living and dining space. The roof is made of wood and iron covered with Asbestos sheets.

Each unit can easily be associated with another. A pleasant garden area is provided.

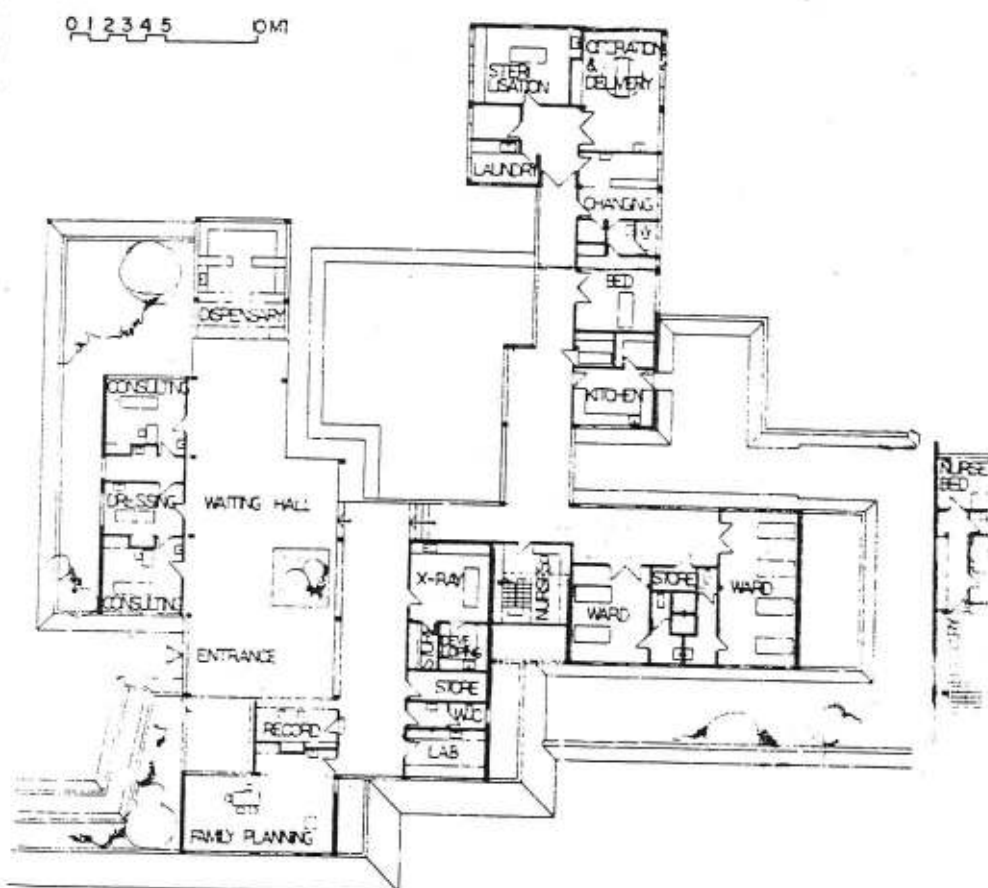
Total area for each unit: 60m².



Model of Service farm



Health centre project



Project for an administrative building

The shape of this four storeyed building is a truncated pyramid, viewed from all four sides, with the base of the pyramid inverted on two sides.

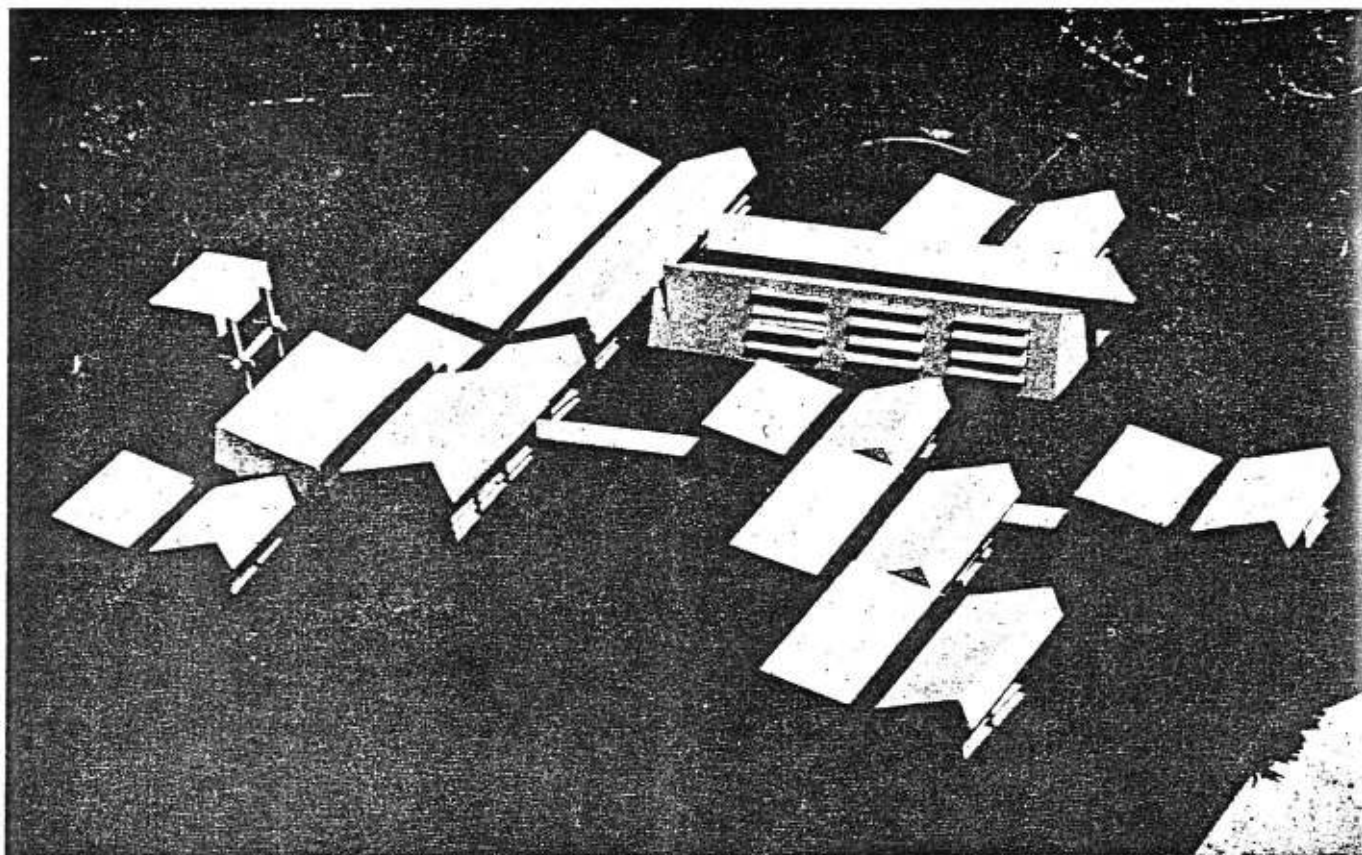
The structure is completely a reinforced concrete one. A play of triangular panels decorate the exterior walls behind which verandas are located at each floor level. The distribution of rooms is different at each level.

Project for a low-cost gymnasium

The building is made of 4 sections around a central point. The way in which it is built allows for a natural ventilation.

The structure is of bamboo and the roof covering in cocoleaves and a kind of locally available grass for thermal insulation.

A Hand-made Paper Factory



First of a number of centres of work in liaison with the Tamil population on the outskirts of Auroville, is the project of building a hand made paper factory next to the village of Kuilapalayam near Aspiration/Auromodel.

This will give work to approximately 60 villagers.

Idea:

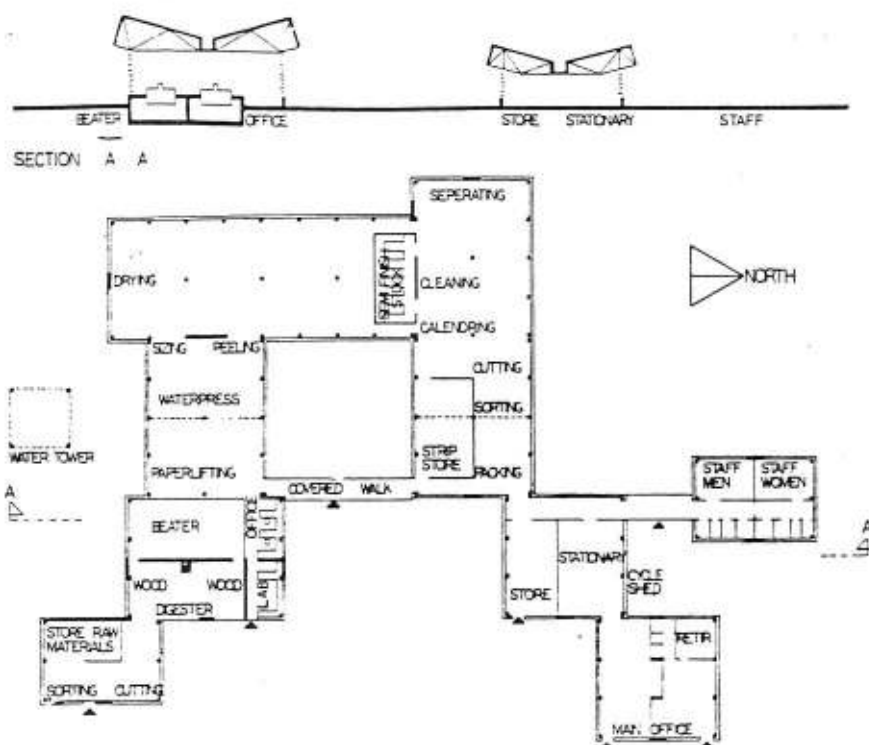
In order to provide a pleasant atmosphere for work, the maximum ventilation is sought, and accomplished, by means of movable horizontal louvres on both walls of any building, creating a constant draught. These big louvres also allow to keep in view the surrounding gardens — an arrangement of rocks, flowers, trees and pebbles.

The buildings are east-west oriented except for the paper-drying shed which must absorb the maximum heat from the sun (see plan).

Construction:

Load bearing concrete pillars are spaced by 3.90m. A concrete gusset allows for rain-water to fall on the surrounding garden. The two parts — wing-roof is made of asbestos sheets. The walls are made of bricks, the red colour of which harmonize with the deep red of the soil of Auroville.

Model of hand-made paper factory



Next Future Projects In Auroville

The development of Auromodel, a social and technical experiment for Auroville, that of Bharat Nivas "the house of India" in the international sector of Auroville and the construction of Matrimandir — heart of the new city — are three major projects to be developed within the next years.

Bharat Nivas:

It is expected that the designs for Bharat Nivas shall be chosen in March when the three contestants chosen at the end of the first stage of an all India architectural competition will give their final model and plans to the Auroville administration.

Bharat Nivas will consist of 2 sectors:

- a) a common zone:
 - a conference cum auditorium hall cum theatre for 500 persons.
 - a restaurant capable of providing all the varieties of Indian dishes for 500 persons.
 - an Institute of Linguistics which will provide for the study of all Indian languages together with a student hostel for 50 students.

b) state sectors: each state sector shall provide:

- a permanent exhibition hall, an information center for visitors with a library service.
- sufficient office accommodation and lodgings for the person in charge of the sector.

Auromodel: is being devised to house two thousand inhabitants: technicians and other pioneers who will live in Auromodel while working at the building of Auroville. The construction of the first elements of this project is planned for 1971.

Geographical data:

Auromodel is located near the village of Kulapalayam, near the sea, at approximately 3 miles from the centre of Auroville.

The land is a plateau that commands a beautiful view of the sea.

Architectural project:

Auromodel will cover an area of 6 hectares. The project tries to create a relationship with the Tamil village but at the same time avoids any direct

interference with the village constructions.

The connection with the village will be created through a number of service buildings such as a dispensary, a technical school, a kindergarten for both children of Auromodel and those of the Tamil village. A series of schools shall provide education for the children.

The density of buildings will be rather high in order to create a town atmosphere and increase the contacts between people and to facilitate human exchange.

The architectural studies try to create an environment that provides an atmosphere favourable to a new way of life: very simple yet aesthetic private rooms and apartments, emphasis on community premises and cultural cum work centres, creative nucleus for the future team that will direct the building of Auroville.

Matrimandir: the soul of Auroville, the centre of the future township, Matrimandir will be the first architectural realisation of Auroville. The start of the construction is planned for 1971.

Would You Like To Work For Auroville?

Auroville is looking for architects, qualified draftsmen, engineers and any person whose training is valuable for the building of a new city.

People wanting to work for Auroville should have a spirit of dedication and an intense will to help in the progress of the project with their whole effort and the best of their technical knowledge and talent.

It must be understood that working for Auroville will be a difficult task requiring much determination and a sincere will to help to foster an ideal

without which the project itself has no meaning.

Auroville intends to develop a new form of living where work is not performed in order to gain one's livelihood but in order to develop one's capacities and do service to the whole group at the same time. It is therefore expected that people working for Auroville will be given the choice to work for the project "without salary", charge being taken by Auroville of their needs and of those of the family according to possibilities.

Applications to work for Auroville

should be sent to the Secretary, Auroville Construction Office, Pondicherry — 2, India, with full particulars of qualification, experience, etc. Copies of testimonials may be attached and a recent photograph.

At present, people working for Auroville will live either in Pondicherry or on site according to the type of work and the needs of the project. In the near future it is expected that all people working for Auroville will live in "Auromodel", a colony that is being developed for this purpose and as a prototype for the life in Auroville.

(Continued from page 23)

meaning of the Matrimandir: Until now, the consciousness was emerging from the depths of matter. But there is another force, another consciousness, which is secretly similar to the first one. Yes, remember that we spoke of the light coming from above. These are two powers: one is hidden in the sacred heart of things and is at once their reason for being, their basis and their life. It is a rising force, a power that breaks open the crust of matter. But there is also a descending power that comes from the height, from the supreme level, a down-going force that

awakens. It stimulates the emergence of an ever new creation. The conjunction, the meeting of these two forces in the heart of the Matrimandir symbolises the perfect Realisation.

Speaking of symbols, you have noticed 2 figures: 4 and 12, which come frequently in this composition. Have a look at the model. You see the shape of the Mother's symbol. It is a kind of seal which is integrated into the whole project. Finally, coming back to our visit to the Matrimandir, we shall start on our way out of the main chamber by any of the 2 spiral ramps located between the concrete frame and the

plastic "skin" which covers the Matrimandir like a cocoon. An opalescent light passes through the skin itself.

A last word: the road which surrounds the gardens of the periphery has exactly the same shape as the Matrimandir, that is, the tantric shape we spoke about earlier. The area encircled by the road is exactly 10 times bigger than the Matrimandir's outline. Interesting..... It happened without conscious intention. Puzzled, I asked the Mother about the occult signification of the number 10. She answered that 10 is the figure of accomplishment!