

AUROVILLE TODAY

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Matrimandir

THE PROJECT OF A LIFETIME...

INTERVIEW

Piero and Gloria are architects who have been closely associated with the construction of Matrimandir from the beginning. Piero has been responsible for the structure and the Chamber.

How did you and Gloria come to Auroville?

We had been in Finland for 2 years—a very beautiful experience for the contact with nature, for the contact with that society, and stimulating from an inner point of view. Finnish people know how to live in solitude. Going back to Italy, we had the opposite experience: such an extrovert country, so 'chatty'. We wrote to the Mother about the possibility of coming to Auroville and she answered that it was a good thing for us to come. We left with the idea of staying for one or two years.

The idea of an urban project (because we thought of Auroville as such) to be undertaken in an under-developed country, and with ideals linked to yoga (even though this word was at that time something vague for us) was very appealing. It seemed so different from what one normally thinks of as yoga: renunciation in the Himalayan solitudes. It was so different and so new, so strangely right to dedicate oneself in everyday life to an individual progress that becomes everybody's progress: a movement towards a spiritual collectivity.

What was Auroville like when you arrived in 1968?

We didn't find much. At that time there were only a few Aurovilians. Only after '68 did people really start arriving. They were building sheds scattered on the plateau, here and there, and beginning the first projects. We, as the only technicians, found ourselves involved in the work. Only at the end of '69 did people begin talking about Matrimandir.

It was Paolo (an Italian architect who sometimes visited Auroville, and who later helped me in many ways with the details of the inner room) who was the first one to become aware of the fact that if there weren't something strong to be realized in Auroville's centre, something which would gather the energy together which was so dis-

persed in many small streams and individual projects, nothing would develop. Paolo then wrote to the Mother and spoke to Satprem, who also showed enthusiasm for the idea of asking the Mother what to do at the centre of

Auroville. The Mother felt that the time had come; that her project, which had been waiting for such a long time, was now ready to descend, to manifest itself. (And actually the Mother took care personally of Matrimandir for some months, between the end of '69 and beginning of '70.) The Mother spoke about it to Roger Anger who worked out the preliminary design. On February 21, 1971 a wooden model, which still exists, was presented to the public. A ceremony symbolized the beginning of the work. I remember that Nolini (Trustee of the Ashram) brought a small box that the Mother had given him, and it was placed in a hole between the Banyan Tree and where Matrimandir is now. There was a symbolic fire which over 1,000 people attended.

An uncertain period followed, until around April/May, when the Aurovilians spontaneously started digging here and there. Things went on like this for some months. It was only around August that the work started to be coordinated a little more. I did a study for a work programme that Mother approved with an encouraging message. In October/November the work started to assume an organized form and it continued on the basis of more precise drawings.

How long did it take to finish the excavation for the foundations?

The final digging lasted three or four months with the help of over 400 village workers. The next step was the preparation of the drawings for the foundations and the pillars. On 21st February 1972, the Centenary Year of Sri Aurobindo, the ceremony of the laying of the first stone took place: it was a stone that had been taken to the Mother and on which She had drawn, with a trembling hand, an OM sign. I was very touched. This first stone was cemented in the East pillar. Approximately 2000 people attended the ceremony and each one of them put a stone

Working on Matrimandir has never been easy. Throughout the years, disagreements, misunderstandings and bruised egos have littered the site as Aurovilians and paid workers have laboured, as in some cosmic quarry, to chip away the resistance to reveal the true form of Auroville's soul. For to work upon Matrimandir is not simply to work upon a structure. It is also to work upon the intractable rock of ourselves. And there are no short-cuts...

Yet, inch by inch, beam by concrete beam, the process has continued until today the Chamber is almost com-

pleted, while a small army of helpers—recalling the epic days of the original excavation—are now busy planning and executing the final phases: the outer skin, the petals and the gardens. Here again, while strong differences have erupted, the whole community is attempting to solve the problems and reestablish harmony.

This issue of Auroville Today is both an update of the work, and an evocation of that process that, at one time or another, has snatched so many of us from our niches and tempered us in its scouring fire. □



Matrimandir foundation stone with 'OM' sign drawn by the Mother

in the cement mixer for the concrete destined for the east pillar. Everyone put it in according to his own way; many were throwing it in, others were setting it in as something sacred. I remember Satprem flinging it in with all his energy, a symbolic gesture. After this started a very nice period. We often worked at night, since the coolness made the concrete preparation easier and many of the Aurovilians and Ashramites were participating. This activity became so popular that students from the Ashram were coming to work till 2 or 3 o'clock in the morning. In this way the foundations and the pillars were made. This phase came to a close towards the end of 1972.

Building Matrimandir with volunteers and unskilled labour must have been difficult. Why such a choice?

There were precise indications given by

the Mother in regard to this. Also, we were not always able to take well-planned decisions. For example, after completing the pillars at the beginning of 1974, we were working with about a hundred workers, guided by a handful of Aurovilians. Then problems came up which culminated in a strike that went on for a couple of months. It ended with the decision that from that moment the work would be carried on only by Aurovilians. A short time after, problems with the Sri Aurobindo Society started causing a financial crisis, and that stretched itself until the beginning of the 80's. The work was never interrupted but had to proceed more slowly.

What about technical difficulties?

In India it is not easy to find advanced construction technologies. They don't even use tube scaffolding, and for lifting they use 'human chains' that take up the cement in small containers. When we started our work, the only useful things I found were two military lorry winches that I adapted to our needs. These served to build the pillars and the structure to the top. It was only when we started to build the space frame of the sphere, which was composed of pre-cast beams weighing more than half a ton each, that we

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Eminent Visit

On December 1st, 1991, the Vice-President of India, Dr S.D. Sharma, visited Auroville together with the Governor of Pondicherry, Dr Har Swarup Singh, and other Government officials. They were shown the town plan of Auroville and went to the Matrimandir.

THE PROJECT OF A LIFETIME...(contd.)

"It was clear from the beginning that the major problems were the human problems and not so much the technical ones."

had to look for something better. Then I designed a crane to be put on top of the Matrimandir. Getting it up on top of Matrimandir was the most difficult technical problem I faced. It was a question of lifting different pieces, weighing 1 or 2 tons each, 30 metres into the air... without a crane! We managed with a hand winch operated by two sturdy Aurovilians at the speed of 2 metres per hour! Another major problem was the one of calculations. When we started to build, pocket calculators didn't exist. I had to work out the first calculations with a slide rule and an old Olivetti that could only do addition and subtraction. Our structural engineer in Madras used to go daily to the Indian Institute of Technology, to use their IBM main frame computer.

Do you feel that you have followed Mother's vision of how Matrimandir should be constructed?

When The Mother spoke to us about the project, She told us that the important thing was that the symbols and the sphere with the sun ray upon it should be in their right place. She would take care that the room would become a place where the Force could act. Therefore, the immense effort of architects, engineers and workers to create the structure has been nothing but a preparation for the realization of the room according to Mother's vision. The existing structure has been made with the maximum respect for Mother's vision, as transcribed by Udar, an Ashram engineer. His drawing still exists and it contains the measurements of the Chamber. The room today is as faithful to the original design as it can possibly be. Only

one thing couldn't be respected: the underground entrance with direct access to the room at ground level. In the final project, this particular aspect has been lost due to the room being 15 metres above ground level, in the middle of the sphere.

People started working on the elements that compose the inner Chamber many years ago. For example, the purchasing of the marble that covers the room was done in 1977. The search for it had been laborious. We wanted to have the white marble from Carrara but unfortunately this marble does not exist in big quantities any more. Finally, we found a beautiful white marble in the Lasa caves in Adige Valley, Italy, at a height of more than 2,000 metres.

The room is almost finished. What does this mean for Auroville's future?

I imagine that people arriving today in Auroville would find themselves in a situation that is quite different from the one when we arrived and when nothing was there—only ideas and goodwill. I am sure the Matrimandir will have a strong influence on them. In fact, the Chamber will be a surprise for many Aurovilians, too. Only a few had any idea of how it could actually be. It certainly is a deep fulfillment, the purpose of my life realized.

VISITS TO THE CHAMBER

Some days there are 10. Some afternoons there are 500, coming from everywhere. Guests, visitors, tourists. For some, Auroville is a tourist attraction. Others have come to witness Mother's Shrine, Matrimandir. The House of the Mother draws, even in its present unfinished state, hundreds of people a day, and will draw many more in the years to come. How is Auroville going to respond to the challenge?

Anna Maria, one of the Aurovilians in charge of the visitors arrangements for Matrimandir, explains:

"We are just starting to learn how to receive people. As a general rule, we do not allow groups of tourists to enter Matrimandir. They obtain passes to enter only the gardens, and in future, when the gardens are finished and a separation has been made between the inner and the outer gardens, we intend to allow them only in the outer gardens.

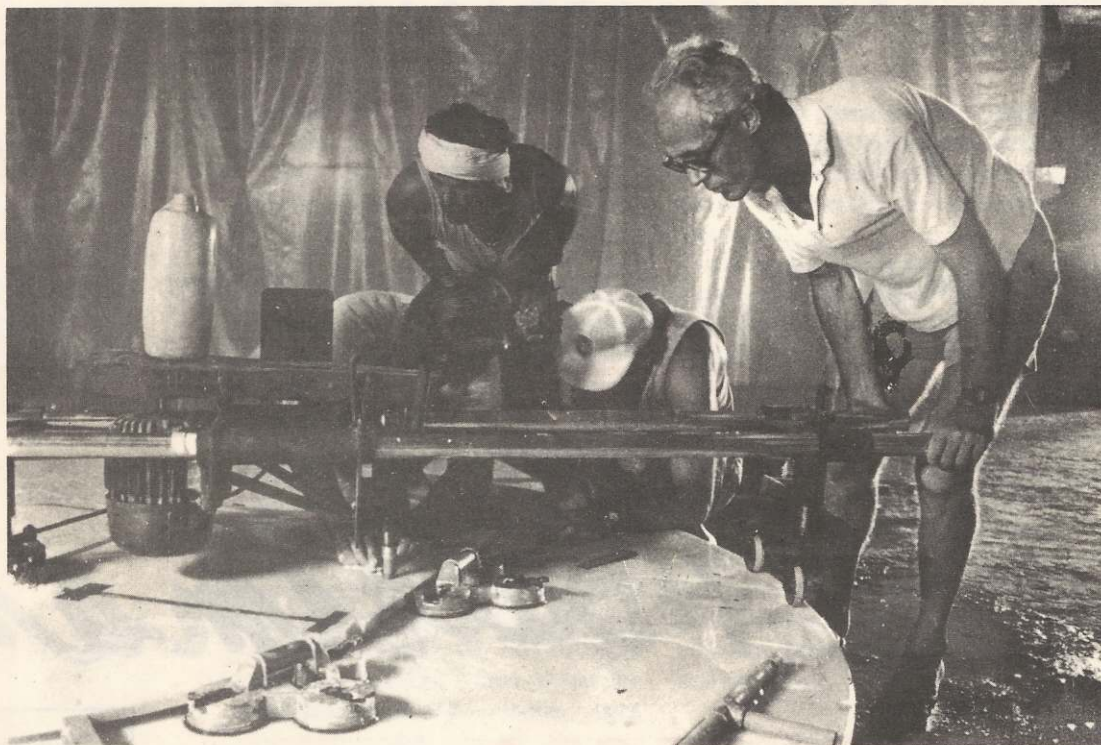
"Passes for the structure itself are given only to those individuals who have expressed a desire to enter the building. They can visit the chamber at certain fixed times. We are experimenting to find out what the right system will be: once a day at a fixed time, or on Saturday or Sunday afternoons. On the 24th of November we allowed a period of 3 hours access: the first hour for those who came only

to look, and the last two hours for those who came to concentrate. That worked very well.

"But the system of passes also has its negative side. At a certain moment there was a clash between those who were allowed in and those who were not. We know that we cannot judge who should go inside and who not, as we do not know how people will profit from their visit to the room. Perhaps we have to follow the example of the visitors arrangements to Sri Aurobindo's room in the Ashram in Pondicherry, where those who come to see just walk through at a certain time of the day. We must make a distinction between people who come to concentrate in the room and people who come just out of curiosity. For the latter, the system used in Sri Aurobindo's room is a very good one."

Divakar, another member of the visitors' reception team, proposed a more rigorous approach in a letter to all organizational groups in Auroville:

"We know we must all work towards the concretization of a centred, conscious atmosphere of search and receptivity; to let Auroville, with Matrimandir as its central focus, become another tourist or spiritual attraction is entirely inappropriate. Matrimandir, its gardens, its area must become the strong silent centre of Auroville growth and life, and the whole of Auroville must develop around it, at once protecting it and drawing from it for its inner needs.



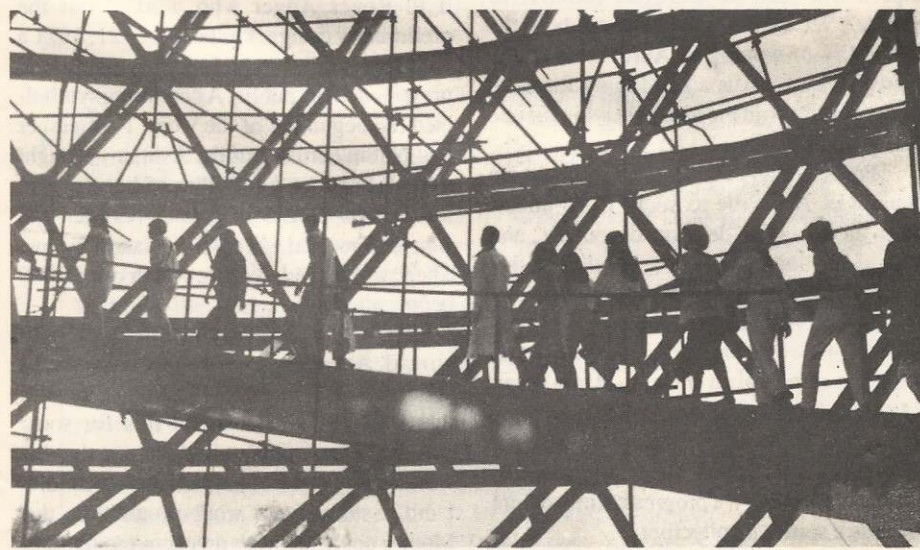
Piero in the Chamber, engraving The Mother's symbol (photo John Mandeen)

It was clear from the beginning that the major problems were the human problems and not so much the technical ones. The major difficulties were always personal. Facing so many misunderstandings, unjustified criticisms and assaults, many a time I had to force myself to stay on. I stayed only because of what the Mother wrote to me in her first message: "The safety and the solidity of the construction has to come before any personal problem. I count on you so that everything will be harmoniously completed." This message has always given me the strength to carry on.

A strong emotional event for me was the moment, at the end of 1974, when I read in the *Agenda* what Mother had said about Matrimandir in 1969/70. At that time these conversations with Satprem were still unpublished. When I succeeded at last in having

a copy of them, it was a very deep feeling and an incredible joy. I understood with what profundity Mother had conceived this space, what care and sense of beauty, of harmony... a project that I had only vaguely sensed but never really known, and to see all of it there, written on paper... The Mother not only speaks about the construction, She also speaks about the new consciousness, of the union of matter and soul, of this central symbol (the sun's ray on the sphere) as a symbol for the realization that is about to come. It was like discovering the true Matrimandir, this project of the Mother that took her only a few days and us a whole lifetime.

The original of this interview was in Italian for the magazine Domani. Alice and Francesca translated it, and Bill adapted the interview for Auroville Today.



15th August 1991: the first visitors to the Chamber (photo Franz)

The new Information Center should become a screening place from where, eventually, those visitors who are genuinely motivated to experience more can be guided further into Auroville...and from here, after adequate information has been provided, permission to visit a particular place should be issued.

"Access to the Matrimandir Inner Chamber may be allowed only to those visitors who have sought individual permission to enter, at a specified date and time (and this permission may have to be obtained in advance). The Inner Chamber is meant for concentration, and is not to be compared with

any known place of worship, and eventually—and as soon as possible—access to the whole area, including the gardens, will have to be restricted in the same manner."

The community as a whole still has to decide on the issue, and no doubt the rules will continue to change in the years to come. Guidance, however, has materialized. As someone said in a recent general meeting on Matrimandir: "When you go to Matrimandir, you feel it is so beyond us. If you ask, Matrimandir can tell you what to do. Matrimandir can now speak." Let's listen...

Carel

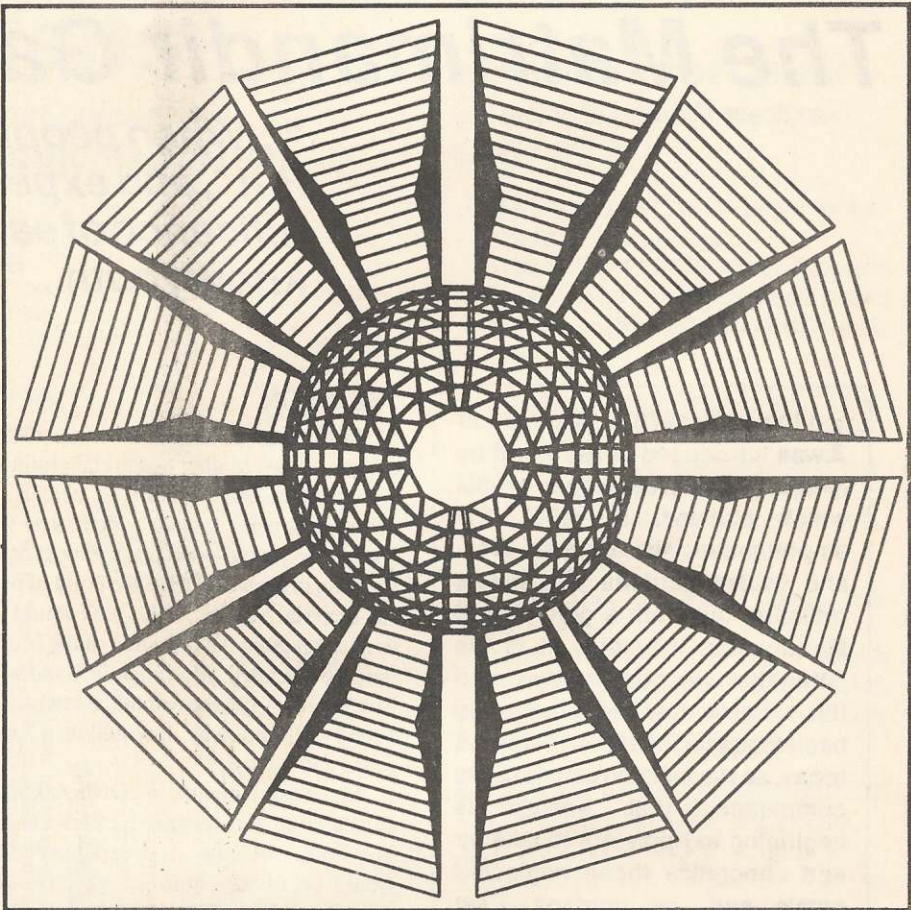
CHRONOLOGY OF MATRIMANDIR'S CONSTRUCTION

June 23, 1965	Mother first mentions the concept of Matrimandir.
December 31, 1969	Matrimandir is named and Mother describes the Chamber
March 1970	Mother selects one of the 4 models presented by Roger's architectural group.
August 14, 1970	First dedication ceremony near the Banyan Tree
February 21, 1971	Dedication ceremony for the beginning of the excavation for the foundations
March 1971	Land for Matrimandir is purchased and the excavation begins.
January 30, 1972	Excavation of 20,000 cubic metres completed
February 21, 1972	Dedication ceremony for the start of construction. Each person present places a stone in the concrete mixer.
June 8, 1972	The four foundation footings completed
June 2, 1973	All four pillars completed to the fourth level
November 17, 1973	The four support pillars completed. Mother leaves her body at the same moment.
November 17, 1974	Completion of four pairs of cantilevered arm-brackets meeting the central ring at floor level
May 29, 1976	Casting of the ring to join the four ribs at the top
November 17, 1976	The floor of the Chamber is cast
January 20, 1978	Arrival of the Italian marble for the Inner Room
April 8, 1978	Chamber roof completed
January 24, 1979	Completion of ramps and successful loading test of 20,000 kg on the first ramp
September 1, 1983	Letter from AVi Netherlands announcing that Zeiss in Germany can make the crystal
August 15, 1987	The space frame, consisting of 1200 pre-cast beams, is completed after 8 years.
August 8, 1988	Concrete 'cap' completed atop Matrimandir
January 6, 1990	Arrival of the twelve columns from Italy
April 27, 1991	Crystal hoisted into the Chamber
August 15, 1991	The Chamber is opened for concentration
August 22, 1991	The Crystal is placed in position in the Chamber

TIME AND COST ESTIMATE OF WHAT REMAINS TO BE DONE

Task	Time	Cost (in Rs.million)
Inner chamber completion	1991-92	3
Outer skin (structural)	1991-92	4
Outer skin (decorative)	1992-93	20
Inner skin	1992-mid '93	1
Bottom tank	1991-92	0.5
Interior of level 1 and 2	1991-mid '93	1.5
Petals	1991-93	11
Inner gardens	1991-93	1
Amphitheatre	1991-92	2
Outer gardens	1992-93	3
External services	1991-93	3
TOTAL		Rs 50 million (US\$ 2 million)

Note: From 1971-September 1991, Rupees 20 million(US\$ 0.8 million) has been spent on Matrimandir.
(Information provided by the Matrimandir Management Group.)



Matrimandir seen from above, with petals. This 3-dimensional drawing (and the one on page 7) was created by Guna and Dirk, using AutoCAD software on an Aurelec 486 based computer. Specifications for the petals are based on a design dating from January 1978, which was provided by the Matrimandir planning office for the purpose of this drawing. The design may have been modified slightly since. The petals are still under construction.

Edith Schnapper

A friend, deeply loved and widely respected, has gone. She decided to leave her body in the early morning of Thursday, December 12, shortly after she had been brought to hospital with an attack of bronchitis. Edith Schnapper: musicologist, philosopher, scientist, spiritual psychologist, lover of nature, friend of Auroville; her qualifications are too numerous to be listed. Above all, she was a child of the Mother, and it was in that spirit that we met, years ago, in 'Boytons', the English country house she shared with Joy Calvert. Together they founded and were the stimulating forces behind Auroville International U.K. Many people will remember the outwardly frail figure of Edith, when she addressed a meeting. Often, she would draw parallels between Mother's discoveries in the cells of her body and the discoveries of modern science, in which she took a great interest.

Remembering Edith is a joyful activity. Her intense love for Auroville and her total commitment to the spiritual ideals it stands for were deeply impressive. Nor can I forget her bright eyes and her sparkling sense of humour. Who has not heard her telling one of her favorite 'experiences', when, in meditation, in a moment of grace, she wondered "Mother, what have I done in a previous life to be allowed to know Thee?" and received as immediate reply: "Absolutely nothing!". Our peals of laughter rang through the morning room...

Edith wrote a number of books, including *One in All*, an anthology of religion, and *The Inward Odyssey*, the concept of the Way in the great religions of the world. Most interesting is her last book, *The Spiral Path of*



Spiritual Psychology, in which she researches the psychological processes that take place in an individual who becomes committed to the search for Truth. The book deals with topics such as aspiration, identification, the search for guidance, consciousness, communion, union and, finally, identity with the Divine. During one of our morning walks in the surroundings of 'Boytons', airing Matthew Parker, the dog, and ourselves, she confided that this book was the reflection of her own experiences, and her gift.

Edith left detailed instructions about what was to be read at the cremation of her body, and I can do no better than to quote a few of these lines below. Edith, I remember your friendship and love with gratitude.

*"Remember why thou cam'st
Find out thy soul, recover thy hid self,
In silence seek God's meaning in thy depths,
Then mortal nature change to the Divine."*
Sri Aurobindo, Savitri., VII, ii.

Carel

The Matrimandir Gardens

"...When people enter the gardens, they will say, 'Ah, this is it', and experience physically, concretely, the significance of each garden. In the garden of Youth, they will know youth..." —Mother

In the early 1970's, Matrimandir was introduced to the world by means of a rosewood model which showed, in relief, the amphitheatre, the Banyan Tree, and twelve gardens and petals radiating out from a gold-disked Matrimandir. Inevitably, it is the latter that catches the eye, and this reflects how the energy has been focussed over the years. But today, as the main structure nears completion, that energy is beginning to ripple out to take up and concretize those neglected petals and the gardens. Last month, in fact, saw the beginnings of the new rose garden—the first major work in the inner gardens for many years.

But what is the origin and significance of the Matrimandir gardens, and what is the present plan?

THE VISION

In June, 1965, in a number of talks and conversations, Mother began elaborating her vision of Auroville. At the centre, She described a park: "a park which I saw when I was very young—perhaps the most beautiful thing in the world from the point of physical, material Nature..." This park would have as its focal point the 'Pavilion of the Mother' (later to be called 'Matrimandir') and would be separated from the rest of the township by a road and a gateway. It would be a zone of peace and quiet.

In the same month, in conversation with an ashramite, Mother gave the park a name—The Park of Unity—and explained that it would be divided into 12 gardens which would represent the twelve attributes of the Supreme Mother (see diagram). Beyond these 12 gardens, Mother wanted huge trees to represent unity and aspiration.

Later, Mother added more details. In addition to the 12 gardens, there would also be a 'Garden of Love' immediately surrounding Matrimandir, and a 'Garden of Unity' spreading out from the Banyan tree. She also specified some of the flowers, shrubs and

cacti that should be planted to evoke the specific attribute of each garden. In particular, She wanted many varieties of hibiscus—'Power'—to be planted, and for ten of the twelve inner gardens She specified a particular variety that would give a predominant colour scheme to each garden. 'Existence', the first garden, was to be to the east of Matrimandir, and the other gardens were to follow in an anti-clockwise sequence (see diagram).

In 1969, Mother asked Narad (Richard Eggenberger) to take up the work. "It must be," She said, "a thing of great beauty—of such beauty that when people enter the gardens, they will say, 'Ah, this is it', and experience physically, concretely, the significance of each garden. In the garden of Youth, they will know youth, in the garden of Bliss they will know bliss, in the garden of Perfection they will know perfection, and so on. One must know how to move from consciousness to consciousness."

THE BEGINNINGS

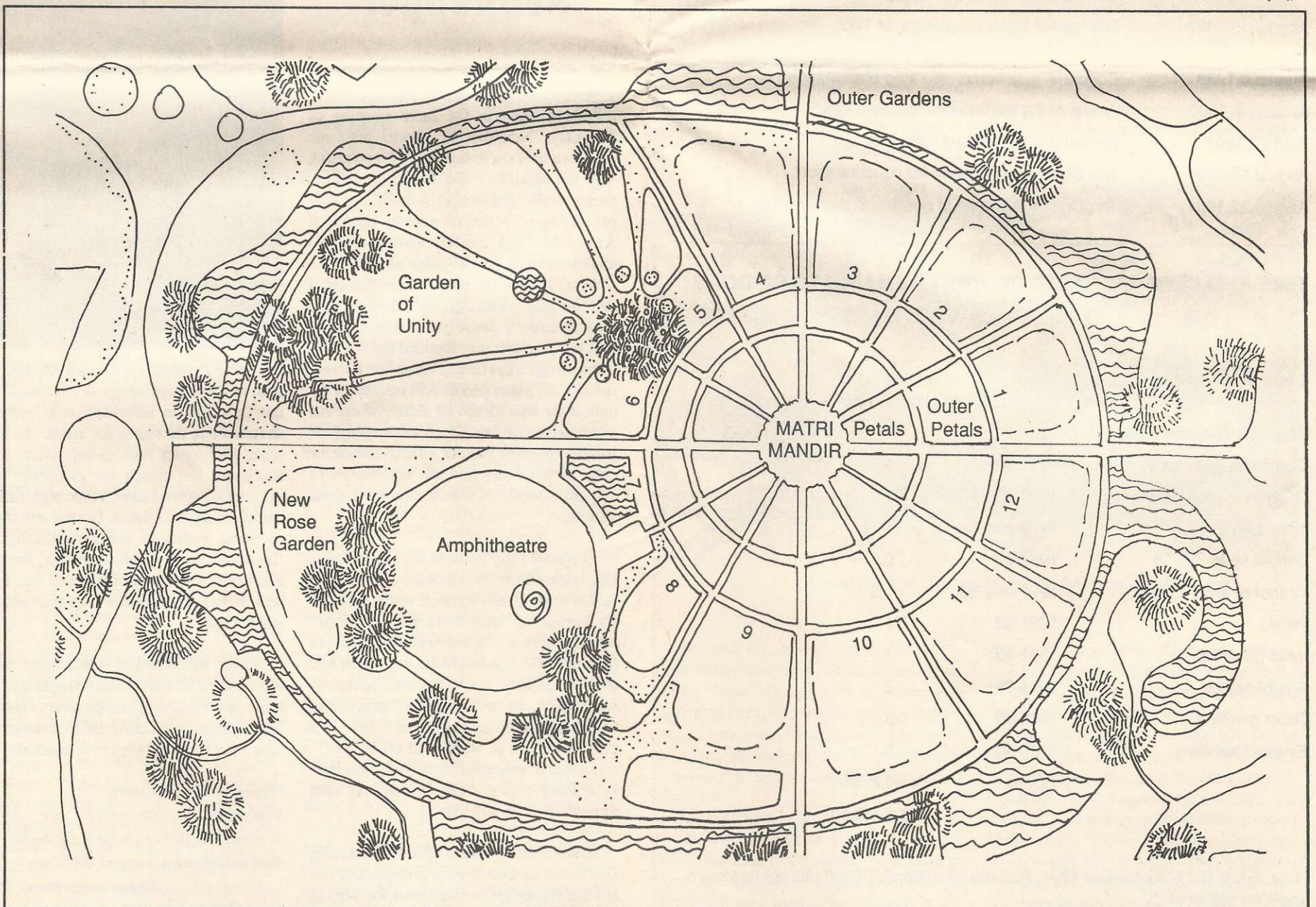
In 1970, the work began. Narad moved to Auroville and, with Amrit, chose a place for

the future Matrimandir Nursery. For the next five years, they collected and propagated plants, shrubs and trees for the Matrimandir gardens. At that time, recalls Amrit, there were no concrete perceptions of the specific forms of the different gardens.

Meanwhile, the excavation for Matrimandir had begun. Mother saw the entire garden area surrounded by a lake, the soil from the excavation being collected on one side in order to make it look like a mountain. Therefore, a number of Aurovilians began 'intuitive' landscaping with the excavated earth, changing the design a few times over the years, and so providing the village digging team with work—and insights into the Aurovilian mind—for years to come.

In 1975, Narad and the Nursery team finally began planting the outer gardens with trees. The trees were selected in accordance with the dominant colour scheme of each inner garden; trees planted to the south of Matrimandir, for example, would have yellow flowers. It felt that a new movement had begun. However, in 1980 Narad left Auroville, the outer gardens were neglected, and many of the rare and beautiful trees

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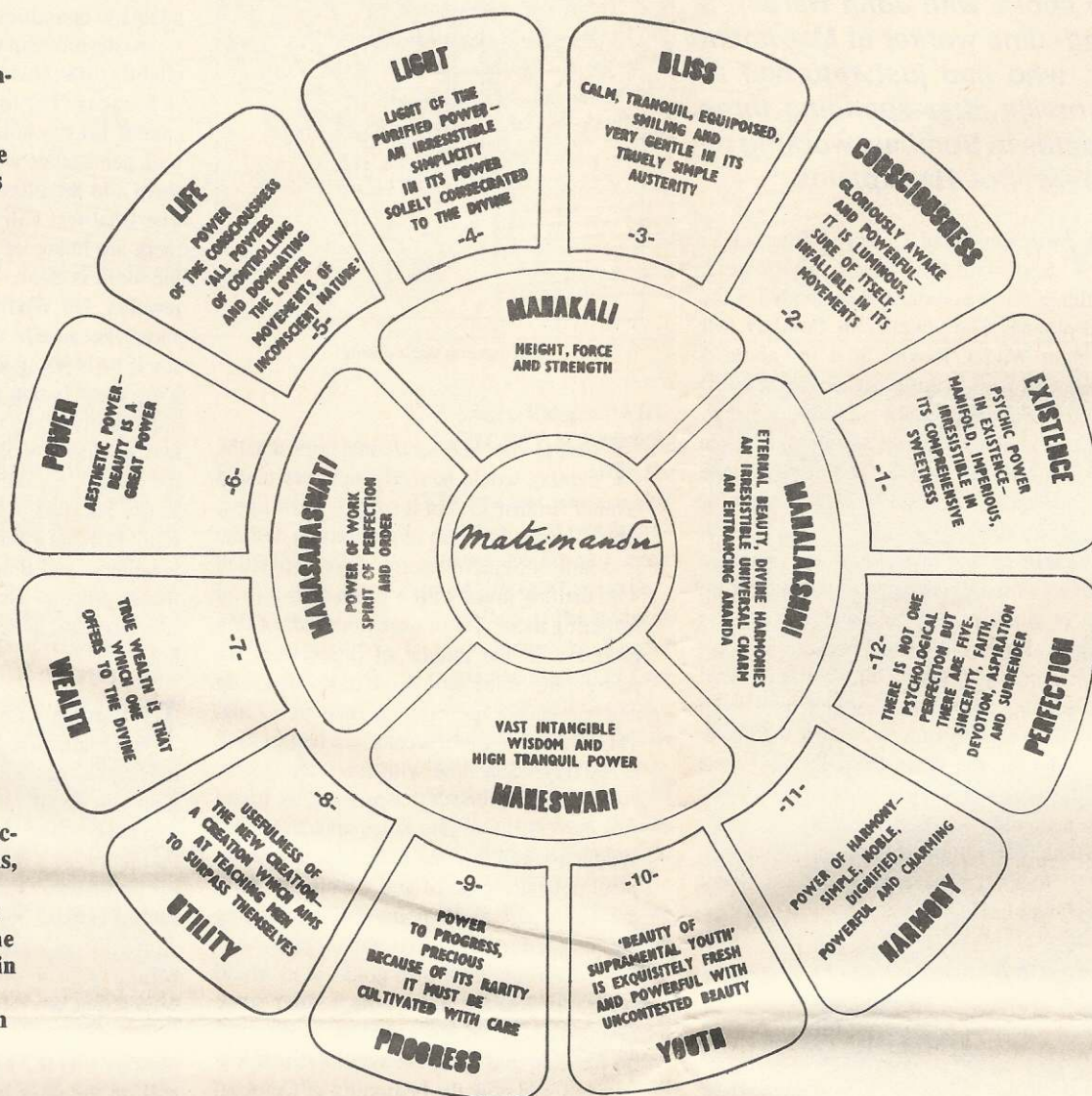
Present design for the Matrimandir Gardens

The Matrimandir Gardens

Q: What is it in a flower which makes it take and reflect a certain colour?
Mother: 'The scientists say that it is the composition of its atoms but I say that it is the nature of its aspiration.'

The original schematic design for the Matrimandir gardens.

To each garden shown on the diagram (with the exception of the gardens of Wealth and Perfection) belongs a particular Hibiscus flower with the same meaning, which will be the predominant flower present in that garden.



The present design (see bottom left) shows the actual shape of the gardens, and also the Garden of Unity and the new Rose garden. The place for the Garden of Love will be in the centre, but its final position has not yet been decided.

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planted by him died. And while the painstaking work on Matrimandir continued, the time did not seem ripe for concepts like the inner gardens and petals.

Around this time, however, Francois Grenier took up responsibility for the garden area. He excavated a large area for a lake, beautified the space around the Banyan tree and landscaped and planted one of the Matrimandir access roads. He also made a number of plans for the arrangement of the inner gardens. But when Roger Anger, the chief architect of Matrimandir, returned in 1987, the two of them found it difficult to work together, and Francois withdrew.

A NEW PHASE

That same year a German landscape designer came to live in Auroville. Within a few days, Walter had been introduced to Roger and he immediately plunged fully into the work of the gardens as a member of a large group of Aurovilians working on designs and models. By December, Walter and Asha had a design for the inner gardens, a design that was subsequently approved by a Matrimandir meeting. The next step was to survey the whole area—begun by Jacques in 1988 and finished last year—and to work in detail on the form and contents of each garden.

How did this design differ from the one in the original model? In the original design, the gardens were small, merely places to sit and wonder at Matrimandir. In the new design, the 12 inner gardens are larger (approx. 50x50 metres), as is the Garden of Unity. The outer oval would now be sur-

rounded by a water channel, with small lakes and ponds at intervals to act as irrigation reservoirs.

Since last December, Walter has been working daily on the details of some of the gardens, helped by Galina, a Russian engineer. In addition to its particular plants and shrubs, each garden will now have its own form. The Garden of Wealth, for example, will have a large pond for the water lilies to balance the area devoted to the cacti, while the Garden of Harmony will feature terraces with creepers. Some of the gardens are already planned in fine detail—down to the placing of individual plants—and three gardens, 'Light', 'Bliss' and 'Wealth', are ready for the final execution drawings. Some gardens, however, are not yet so clear. "It's not something you can force," says Walter. "The work speaks its own language, and I have to follow that."

NEXT STEPS

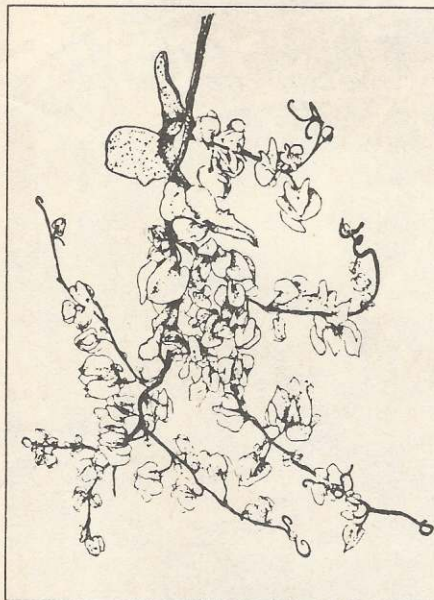
Last month, work began on the new rose garden to the west of the Amphitheatre that will replace the old one near the Camp. By July 1992, 1700 roses will be planted there. And, very soon, work will begin on creating a 12-m diameter pond in the Garden of Unity, replacing the old irrigation tank for the Banyan tree sprinklers. Work on the twelve inner gardens, and on the Garden of Love, will have to await the completion of some of the petals. Meanwhile, the amphitheatre is being covered with Dohlpur stone and the oval road is being traced.

How long before the basic conception of the gardens is materialised? Walter is

cautious. He feels that the basics can be completed in 10 years, although, if more Aurovilians became involved in the garden work, it could be even sooner.

And the effect of this? "I've no idea," says Walter. "I only know that at the moment, and during recent difficulties here, I felt I had to work on the garden of Unity—even if what I designed was only to end up in the waste-paper basket. Somehow, I feel that if someone is working on unity, anywhere in the world, it must have some effect."

Alan



Harmony (Antigonon leptopus, Coral Vine)

from : Flowers and their Messages

FLOWERS FOR THE 12 GARDENS (according to Mother's specifications)

1. HIBISCUS: PSYCHIC POWER IN EXISTENCE. Colour: pink
OTHER FLOWERS: Psychic influence in the emotions; The being organized around the psychic; Psychic Aspiration; Psychic offering
2. HIBISCUS: SUPRAMENTAL CONSCIOUSNESS. Colour: golden yellow
OTHER FLOWERS: Radha's consciousness; Consciousness turned towards the light; Intensity of the consciousness in the full supramental light
3. HIBISCUS: ANANDA. Colour: pale cream yellow
OTHER FLOWERS: Krishna's Ananda (light blue); Ananda in the centres (cream-white/pink; Ananda in the physical body (cream-white/red)
4. HIBISCUS: LIGHT OF THE PURIFIED POWER. Colour: white, bright orange.
OTHER FLOWERS: Light; Light without obscurity; Integral opening to the light
5. HIBISCUS: POWER OF THE CONSCIOUSNESS. Colour: light red
OTHER FLOWERS: Life energy; Quiet strength in the vital; Spiritual awakening of the vital; Faultless planning of work; Transformed sex centre
6. HIBISCUS: AESTHETIC POWER. Colour: mixed
OTHER FLOWERS: Power of expression; Power's aspiration to become an instrument for the Divine's work; Beauty arising from perfect consecration
7. CACTUS: WEALTH. Colour: mixed
All kinds of water lilies and cactae
8. HIBISCUS: USEFULNESS OF THE NEW CREATION. Colour: pink
OTHER FLOWERS: Skill in works; Enthusiasm; Mahasaraswati's perfection in work
9. HIBISCUS: POWER TO PROGRESS - colour: cream-white
OTHER FLOWERS: Progress (multi-coloured)
10. HIBISCUS: BEAUTY OF SUPRAMENTAL YOUTH. Colour: orange-pink/apricot-yellow
OTHER FLOWERS: Eternal youth; Energy turned towards the Divine; Strength in the vital
11. HIBISCUS: POWER OF HARMONY. Colour: bright golden yellow
OTHER FLOWERS: Collective harmony; Harmony, vital/integral
12. PLUMERIA/FRANGIPANI: PSYCHOLOGICAL PERFECTION. Colour: white/yellow
OTHER FLOWERS: Simple sincerity; Faith; Devotion; Aspiration; Surrender

Additional gardens

GARDEN OF UNITY: (stretching out from Banyan Tree)
All kinds of plants from all over the world

GARDEN OF LOVE: (close to Matrimandir inside petals)
Divine Love; Unmanifest Divine Love; Victorious Love; Beauty of Supramental Love; Godhead; Aditi; Wealth

Nothing prepared me for the crystal...

Nothing prepared me for the crystal. Ascending the ramp, I was already subtly off-balance. The curved approach through a wilderness of space seemed too measured, too tame, after those years of clambering up ladders and thudding along planks to arrive, almost unexpectedly, at the chamber door. And this new incursion of decorum among the rough-edged vastnesses was further reinforced, as I angled up the ramp, by the well-groomed Aurovilian at the top greeting me with 'namaskar'.

I stepped inside. Moments of deep disorientation, even disappointment. I'd expected something overwhelming—a shaft of light sheering through darkness to pierce and effloresce the globe before diffusing, like powdered gold, across Mother's symbol. Whereas, here was unremitting daylight, vast, empty space and, in the centre, a glass globe poised on the fragile angularity of four interlocking Sri Aurobindo symbols; a globe which, moreover, democratically reflected, and inverted, every image falling upon it—the walls, the ceiling, a visitor's inquisitive face, me standing awkwardly in the doorway...

I began circling the chamber, instinctively seeking the point from which the globe would be pure, integral, freed from this surface play of reflections and inverted images. But from every angle, the images stared back, eluding my growing desperation to penetrate this calm, reflecting eye.

I sat, baffled, and stared at the globe. And slowly, slowly something else came through. I became aware of an immense solidity upholding this dance of impressions. Of an absolute poise and integrity wedded to an absolute plasticity and availability to the moment. Of the meeting, the embrace, of time and the timeless.

Later, in Pondicherry, the voices began. "Why didn't you Aurovilians wait until the Matrimandir was finished before placing the crystal? It's not the right time now." But it's never the 'right' time, because Matrimandir will always catch us off-balance. And it's always the right time because the crystal, like Matrimandir itself, will always create the perfect image out of what we perceive to be unfinished, temporary. So, everything that seemed wrong in the chamber—the daylight, the reflections, the lack of mystery—was driving home what I should never have forgotten. That our work here is with matter. Mater. And matter, like the crystal, refuses abstraction, deification. It's simply there. Just as, one day, without ceremony, the crystal was there, challenging us to see it how it really is. Here. Now. And always. —Alan

Auroville Information Directory

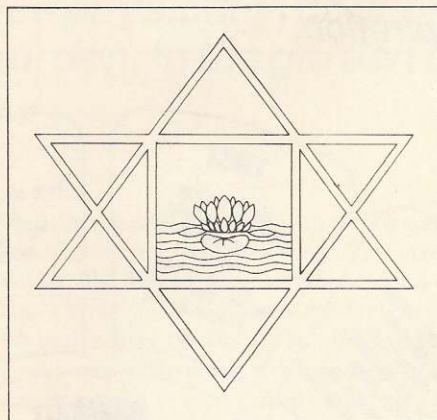
The first Auroville Information Directory (AID), providing detailed information on all aspects of Auroville-related life and work—the communities, services, productive units, environment and alternative energy, guest accommodation, the villages etc.—has just been published. Copies are available in India at Rs. 75 (postage Rs. 10 extra). In other countries the cost (postage included) is UK £3, US \$5, FF30, Dfl. 9, DM 8. Cheques should be made payable to 'Auroville Fund', specifying 'Auroville Directory'. Copies and further information available from the Auroville Communication Centre, CSR Office, Auroshilpam, Auroville 605101.

In Auroville Today No. 31 we wrote about the first stage of the manufacture of Sri Aurobindo's symbol. In November we spoke with John Harper, a long-time worker at Matrimandir, who had just returned to Auroville after spending three months in Bombay, working on the symbol. He explains.

When Piero and I went to Bombay in April with the symbol and the gold, we thought it was more or less ready for the gold-plating. The jeweller in Bombay, Mr Nariman Wadia, looked at it for about 5 minutes with his magnifying glass and asked us right away if we could make another one! Piero and I almost fell out of our chairs. We told him how much effort had already gone into producing this one. It was a work of almost two years, so we were not happy with the idea of having to make a new one. The problem with the symbol was that there were a lot of small holes, mainly in the corners because of the welding, and he was objecting to this porosity. It would later result in a bad gold-plating. We agreed that he would try to bring it up to standard, and left it with him. By mid-July, the news from Bombay was that the work was not going well. Everybody at Matrimandir felt that someone should go to Bombay, find out what the problem was, and try to get the process moving. So I went at the end of July.

Once in Bombay, I began to try various methods for filling the holes. We looked for conductive paints and tried electroplating with copper. Eventually it was felt that the only thing left to do was to fill up the holes with solder. Mr Wadia was not so enthusiastic because he felt the symbol was too full of holes, and that we had to make a new one. But he thought that this last solution was worth a try. It was the middle of August.

SYMBOLIC WORK



Sri Aurobindo's Symbol

There always had been some hope that the symbol would be ready and gold-plated around August 15, but it simply wasn't possible. For the last part of that month and the first half of September, my days were filled with drilling holes with a 1 mm drill-bit and soldering them. There were hundreds of tiny pinholes. In the middle of September, we thought the holes were more or less filled up and we started giving it a final polishing. Then for a few more weeks, we had to sand every day, each time with finer sandpaper. As we got to the end of that process, we found still more of these tiny holes appearing! Mr Wadia assured me that there was no way to plate over these holes and eventually get a good gold plating. He pointed out that during the plating process—first with copper, then with silver and then with gold—acid would get trapped in the holes which, after some time, would come out and make black spots on the gold and spoil the symbol. So at that point (it was now the beginning of October) Mr Wadia and I agreed to stop the work, and we put the symbol back in its green box. I phoned Piero, who was in Italy at the time, to tell him about the situation, and I went back to Auroville with the symbol.

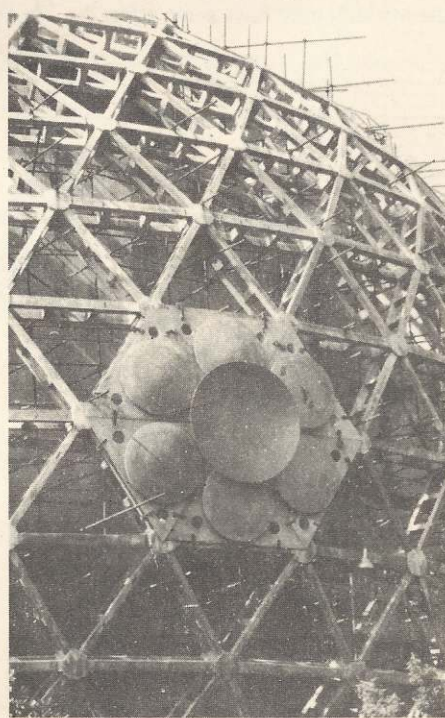
Piero then contacted jewellers and goldsmiths in Italy, and they suggested some materials which could be used to repair the symbol. Subsequently, he brought back adequate quantities to Auroville.

At the moment we are making tests, using slightly different techniques than I was using in Bombay. The first indications are that we cannot fill the holes all in one go, but that with persistence we may be able to eliminate them and therefore use the present symbol. The final test will be very objective: either there are holes, or there are no holes! Once the work is done, I would like the Bombay jeweller, Mr Wadia, to come here and have a look, because he is the man who will finally say if he is going to do it for us or not. He is a top class Indian jeweller who travels a lot abroad. In July he was in Germany. There he met several jewellers who had heard about the crystal, not only because it was made by Zeiss, but also because it is extremely difficult to make a perfectly spherical object for jewellery, and they had been following the whole process. He is personally very interested to participate in the gilding of the symbol.

Returning with the symbol, I found that the situation at Matrimandir was quite unharmonious, with a lot of verbal struggles going on about various aspects of the work. It corresponded, I felt, quite precisely to the fact that I, as a representative worker, could not finalize this symbol work. This symbol is such a central object, a central symbol for Auroville, that unless everybody is together behind it in a sufficient harmony, then it seems that we might not achieve the goal. There were, of course, all kinds of material reasons why the job was not completed. But still, in the days just after I came back, the correspondence with the problem of harmony struck me. And now we are making a big effort to sort out these problems among the people. It WILL work. It's just a question of whether we manage it sooner or later.

THE MATRIMANDIR SKIN

"A bone of contention" was an apt description for the proposed exterior cladding of the Matrimandir.



Prototype (now discarded) of disk pattern, attached to the Matrimandir space frame

mandir, more commonly known as 'the skin', up until a few weeks ago, when loud voices were raised against the proposal to use ferro-cement triangles and gold-plated polyester disks. Are these materials fit to cover the exterior of the Matrimandir, when its interior is such a beautiful combination of solid concrete and austere marble with its core of pure crystal glass? Now, a couple of stormy meetings later, there has been a shift. Mother's words that we have to all agree as it is "the only way to do good work" are often heard these days and seem to have penetrated minds and hearts, for today we are witnessing an approach towards a harmony that few people would have thought possible.

The story of the skin is as old as the concept of Matrimandir itself. In 1970 four models of Matrimandir were presented to Mother. It is said that She gazed intently at the one in which the disks were represented by gold-plated push pins in a regular pattern. This model carried Her blessings, and became famous all over the world through a large brochure.

The technical studies into the feasibility of this skin started in 1971, but were interrupted in 1976, due to the problems with the Sri Aurobindo Society. In Roger Anger's

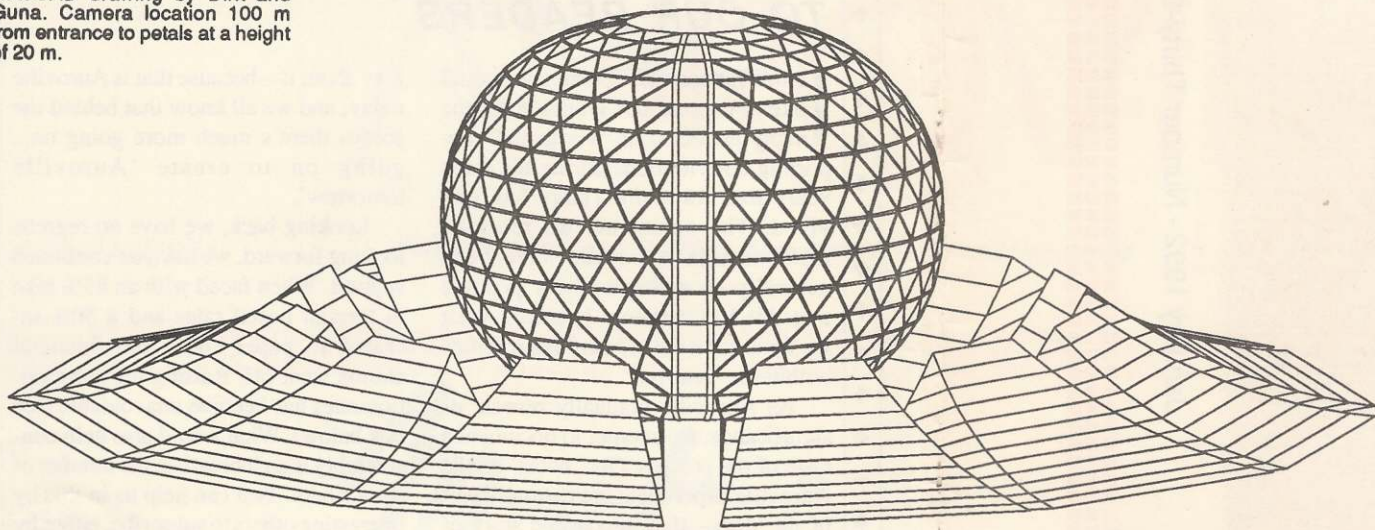
absence, work on Matrimandir quietly continued, but the research on the skin and disks was stopped.

This does not mean that nobody thought anymore about how to finalize Matrimandir's exterior. In fact, many did. In the autumn of 1987, soon after Roger's return to Auroville, various models, each proposing a different finish, were presented to a well-attended general meeting which lasted more than 6 hours. By a show of hands, the meeting ultimately expressed its preference for the original design of Matrimandir. "When I saw the marble model of Matrimandir, I loved it, it was like a full moon. But when I afterwards saw the model with the golden disks, I realized I saw the sun", said an Aurovilian.

Since 1987, many studies have been executed. Engineers from Holland, Germany and India have worked on the possibilities of covering the outside with glass. But after a lot of research, the technical difficulties involved seemed to be insurmountable. Finally it was proposed to fill the present open structure with ferro-cement triangles, each containing a 'porthole', a small round opening with a glass inset, 'wells of light', allowing for the diffused play of light on the inside of

continued on next page

AutoCAD drawing by Dirk and Guna. Camera location 100 m from entrance to petals at a height of 20 m.



THE PETALS

Surrounding Matrimandir will be 12 petals. Each petal will contain a small meditation chamber, in accordance with Mother's instruction. She gave them the following meanings and colours:

- Peace (deep blue);
- Sincerity (light blue);
- Humility (deep green);
- Gratitude (pale green);
- Perseverance (pale yellow);
- Aspiration (orange yellow);
- Receptivity (orange);
- Progress (orange red);
- Courage (red);
- Goodness (reddish violet);
- Generosity (pure violet);
- Equality (blue violet).

The colour-scheme is in accordance with that of Mother's symbol.

(continued from previous page)

Matrimandir. On top of these, gold-plated disks, concave and convex, would create a radiating skin. This proposal has many advantages: it can be executed entirely in Auroville, and it is technically and economically feasible.

However, the 1987 meeting, though decisive, had left many people unhappy. It had not been possible to reach consensus, and the research into ferro-cement was looked at suspiciously. Not surprisingly, the proposed skin met with fierce opposition, on technical and aesthetical grounds. Should we really go in for ferro cement? After a few months of heavy discussions and mounting tension, the parties decided to meet, and the present outcome is a move towards harmony: the possibilities of having a more transparent or translucent kind of glass skin are again being studied, and results are being expected soon. Meanwhile, a new prototype of the skin is being fixed to Matrimandir for all to see.

"The sooner the Matrimandir is ready, the better it will be for everybody, especially for the Aurovilians", Mother said a long time ago. In the words of Roger Anger in an open letter to the community:

"Today we can unite our efforts to complete the house of Mother as soon as possible, and forget all our rivalries. Truly, there is a great urgency to work so that Her Force may be present and effective in Auroville and upon the Earth."

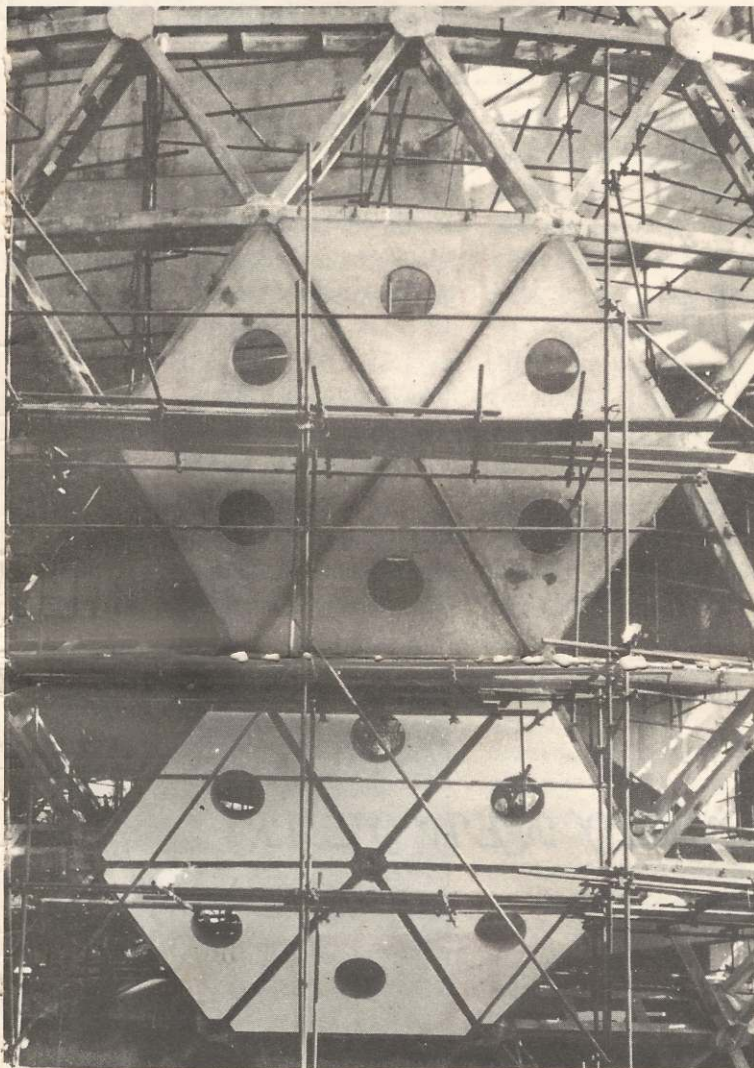
Yanne and Carel

FERRO CEMENT TRIANGLES AND PORT-HOLES

The present solution for the skin is to put ferro-cement triangles, each containing a 'porthole', on top of the present skin structure. Round ceramic tiles of 24 mm diameter will decorate the outside of the ferro-cement triangles. Ferro-cement, cast in situ, will also be used for the inside with a white finish.

In order not to see the back of the disks from the inside of the Matrimandir through the portholes, it is proposed to use a special type of translucent glass.

The result will be a luminous play of light on the entire inside surface the Matrimandir.



DISKS: SANDWICHES OF METALS, GLASS FIBRES AND RESIN

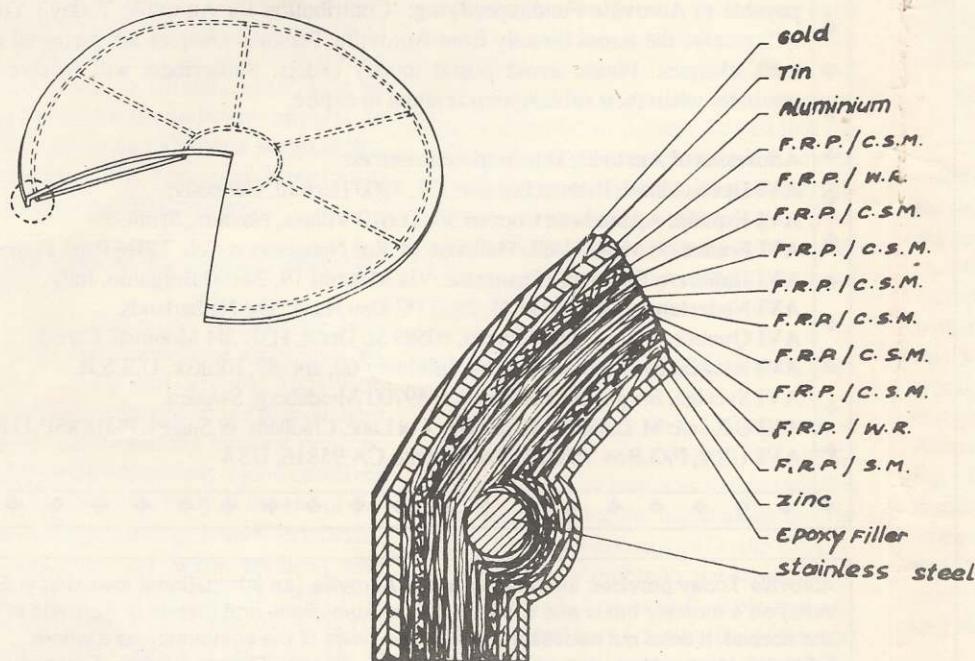
The disks will be built as a complex sandwich, consisting of 15 layers (insert). The topmost layer will be pure, 24 K gold, affixed to the layer underneath (tin). This has to be done by a process that is quite common in Europe, but unknown in India. A layer of high temperature polyester resin is put on the tin, which penetrates the metal. A very thin layer of gold leaf, 1/10th of a micron, is applied on top of that.

A total of 12 kgs of gold will be needed, allowing for waste. The entire disk manufacturing process, including the gold application, will take place in Auroville. Only the lamination process (the processing of gold into gold leaf) will be done outside, in France. By changing the temperature during this process, different shades of gold will be obtained. In this way, it will be possible

to make disks with different colour tones.

A first prototype of the disks has been studied by the Aerospace Center of the Indian Institute of Technology in Madras, and has gained its approval. Subsequent versions will be tested in I.I.T.'s wind tunnel until the disk can successfully sustain a wind speed of 200 km/hour (the recent cyclone which hit Tamil Nadu had a wind speed of 60 to 70 kms/hour).

The disks will be affixed to the Matrimandir by means of rods made of a so-called spring steel (harmonic steel). The disks will oscillate slightly in the wind, and the steel rods, together with neopren rubber, will absorb their vibrations and prevent them being transmitted to the Matrimandir structure.

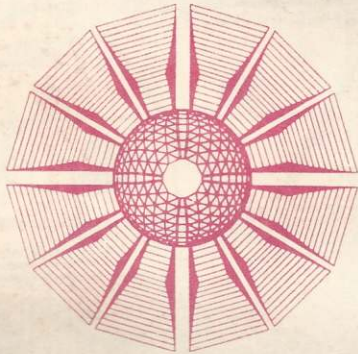


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In this issue: Matrimandir

ANNE AND MICHAEL
GRACE
AUROVILLE

January 1992 - Number Thirty-Six

HAPPY NEW YEAR!



TO OUR READERS

In this January 1992 issue, we would like to express our gratitude for the many encouraging words and supporting contributions during the three years that *Auroville Today* has survived. The comments we received from outside Auroville have been generally so embarrassingly positive that this has certainly balanced what we have sometimes heard from critics within the 'family.'

As Auroville gradually reveals its significance, we attempt to document a taste of the process. Our 'notes' on the Auroville experiment are naturally part of the story—that impossible story of timeless dreams and daily duties that is Auroville. Our limitations in trying to communicate that story are obvious to us and no doubt even more to you. We can share that understanding—even

joke about it—because that is Auroville today; and we all know that behind the scenes there's much more going on... going on to create 'Auroville tomorrow'.

Looking back, we have no regrets; looking forward, we ask you continued support. When faced with an 85% hike in foreign postal rates and a 50% increase in paper costs, the financial alarms went off. Raising the subscription rates has become unavoidable (see box below). What would also help considerably is an increase in the number of subscribers. You can help us in this by interesting others to subscribe, either by donating a gift-subscription or by sending us names and addresses of those who may be interested in receiving a sample copy.

The editorial team

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