

Arupa in Pedagogy of Design: *Form of Silence* – 1

Silence in Sense experiences of Sound and Vision for Foundation Programme

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Abstract: Examination of 'Silence' in the frame work of 'Arupa the Implicate Order' in Design opens new doors in understanding creativity in 'learning and practice of Design. Nature of Silence with and without Intension is clarified. Parameters in 'Somatic and Collective' tacit knowledge specific to Pedagogy of design are dealt with. 'Silence in sense perception' and its role in learning '2D visual language of Design' are elaborated with two 'student tasks' experimented in M Des programme by the author in the early years(eighties) of IDC. as part-1 in the series: Arupa in Pedagogy of Design: 'Form of Silence'!

Long ago Louis Khan, well known architect, said: Form has no dimension.

So also Silence has no dimension, which gives us a good premise to explore Form of silence!

- Deep Silence is 'Arupa without Intension'. It is an abstract state by itself and is considered as a spiritually evolved state. We may say it is beyond HTO (Human Thought order) and BLO (Biological Life Order). Perhaps it is part of CO (Cosmic order). 'Silence without Intension', has the power to free I-psyc from all conditioning including biological and racial inheritance. *Pursuit of such silence without intension is likely to remain spiritual in nature and remain unconnected to activities in HTO.*
- 'Silence with Intension' has significance for everyday life and Design profession. Finding 'Intension or Meaning' gets related to one's Inner Order and Working Order one is in. Such Silence with Intension becomes Meditation when a person is totally absorbed in the act. It operates in HTO and BLO and is present in any field with 'Tacit and explicit knowledge', specific to it.

Tacit knowledge, was first propounded by Michael Polanyi. Harry Collins, a sociologist segmented Tacit knowledge(TN), into two types, 'Somatic' and 'Collective'. Somatic TN is based on individual body participation, whereas 'Collective TN' is based on group operation, covering the social domain of knowledge.

With this preamble, we shall explore 'Silence with Intension' in the domain of design and its Pedagogy with its foundation programme as focus.

'Silence in sense perception'

Six senses Sound, Vision, Smell, Taste, Touch and Kinesthetic or body movement dominate our perception.

Presence of 'Silence' implies

- Absence of 'I-psyc, with its indulgent, inner dialogue' caused by fragmented self!
- Holistic engagement of I-fac, with total attention

With this contention, how silence operates in (5+1) senses in general and in the context of pedagogy of design in particular can be examined.

1.0 Silence of Sound

We know silence of sound. 'Order, order' from a judge demands silence from all 'chit chats' or noise which is fragmented sound. The proceedings of the court are paid attention by all and it becomes the 'whole' with absence of 'fragmented sounds' or noise.

A classical singer totally absorbed in his/her singing is experiencing 'whole of sound', other sounds become inconsequential. A vibration of sound coming from far, does not affect such 'whole' which is '*active silence*'.

Listeners can participate in such a 'whole'. Thus a music concert becomes a 'framework' for group participation in 'arupa' of music performance with absence of any other sound. Music at that moment becomes the sole occupant of the 'mind' and that is 'Meditation'.

Active Silence is Meditation.

Participation in such a silence needs preparation of the listener. Mere 'stopping chit chat' is not adequate. I-psyc has to shut down its inner, ever present, indulgent, dialogue with the separated self! Otherwise the chattering brain of the listener can go on, with occasional attention to identify a 'Raga'! In deep participation, 'One' understands music even without knowing its articulated grammar, leading to '*tacit knowledge*' of 'Music'. Meanings of words become secondary in such perception of Music. Abstraction of sound prevails, (1), body participates.

Body participation or presence of kinesthetic sense is expression of 'silence in Music '! Rhythmic responses like clapping with beats, shaking of head, dancing, reveal such participation.

How, 'learning of tacit knowledge in classical music' takes place can be an interesting zone to explore for pedagogy of design and the Foundation programme in Design

1.1 Sound-Connections to Pedagogy of Design

Foundation programmes in design don't have a tradition of using sound sense. Somehow, effective connections of sound or music so far have not been made with practice of design. NID in early years had a sound studio to support 'Animation' projects. Students were exposed to western classical music in a relaxed mode after lunch in the auditorium, as an open, free to attend session. IDC did not have any support system for music sessions in the initial years as 'Animation' stream and a sound studio started much later. But, we tried to explore connections with classical music. Dr.Ashok Ranade, heading music departmentt at Bombay University gave series of lectures at IDC. He also used to conduct voice culture workshops at IIT.

*Imagery sessions I introduced had a component of listening to music while relaxing the body. A kind of self-hypnotic state was induced. It effectively put participants into a zone of *silence*. Students often experienced deep states of 'guided imagery' which took them to inner explorations, often touching the unconscious/ sub-conscious levels. Many people do not know how to relax from I-psyc even temporarily. Yoga nidra (sleep) and shava asana, a yogic posture, are well known in Indian Tradition. In one creativity and problem solving workshop, we conducted in 'Pay Pal' at Bengaluru, many participants reported that the relaxed state they experienced was first of its kind in their life!*

'guided Imagery sessions'

These were conducted to mostly to IDC students of M.Des and BDes. Some colleagues also attended.

Some were conducted for Trainees from Industries. These were mostly in IDC auditorium under controlled conditions. Few were done for Children. Some sessions were done in Other places.

In 'guided Imagery sessions', which I conducted for students at IDC, it was a closed door session held at IDC auditorium.

Procedure:

Students are asked to do few body stretching exercises for relaxation. They can sit or lie down in a relaxed posture on floor or chair as they like.

Soothing Music is played. Students are asked to close their eyes, listen to my voice coming from mike as well as Music. Suggestions are given to relax each part of the body and then to become a bird and fly, responding to the music which touches body and relaxes it. Several scenes are suggested like beautiful lake, a dancing group. People dancing may become geometric elements.

These suggestions generally trigger individual imagery. Such an engagement can go on 20minutes to half an hour. Then Voice is stopped slowly. Students keep listening to the music and are left to themselves for their inner journey.

Many continue in a kind of sleep state for some time. They are asked to wake up after 10 to 15 minutes. They are encouraged to give 'feedback'. Many narrate their experience. Few do not want to talk.

Generally, sessions are liked. Some felt that, they have relaxed first time in their life.

One person in his forties said he lost his head ache which he had continuously. Couple of elderly persons felt healthier after a session. One person (a friend, activist) said he could not 'let go' and participate. He was just trying to figure out what I was trying to do.

Sound as a Sense with highly developed knowledge and practice encompassing Folk Music to Classical Music, Vocal to Instrumental, has enormous potential, yet to be tapped by Design Pedagogy. Even as this write up was taking shape, I had a brief on-line dialogue with Kiran Kulkarni (KK).

KK: Loved the participation of the body - sound enters body for sure and haven't seen many commentaries around this. This is very true. What melodic sound does to the body, is little known.

AGR: probably relaxing

KK: If the sound is not verbalized like in talk it quickly surpasses the cognitive brain zone and reaches the body parts in strange ways. When I listen to Nikhil Banerjee my whole body is stunned and emotion is spread all over equally in the body not in mind alone.

- Practicing designers like KK have a good background of Indian classical music and probably makes tacit connection to Music with 'Interaction design', which he practices. But the deep connections may not be decoded as explicit knowledge and may remain as personal knowledge.
- Ramkripa, another IDC alum, and a senior designer in automobile area made an interesting presentation in a seminar at IDC, few years back. She just exposed the audience with visuals and selected classical music pieces, and left the audience to make their own connections. She made no explicit connections through verbal language. Yet her presentation was quite convincing to many in the audience!

Such Individual tacit learnings need to be brought into the frame work of design pedagogy through planned actions.

A possible experiment in a class room

- Notion of 'Active Silence' can be explained to students to start with.
- Three objects in POP like cylinder, cube and pyramid can be given to the group.
- A selected piece of 'Music' can be played.
- Students can be asked to respond by modifying the objects taken. The music can continue in the back ground.
The same task could be repeated with a different piece of Music.
- The results could be compared after taking the personal feedback from each student.
Such research mode in Pedagogy of Foundation programmes could result in documented visual material to act as a bank of tacit knowledge.

2.0 Silence of Vision

What is 'Silence of Vision'?

Closing eyes, experiencing a blind state, leads to one type of state with absence of Visual input. But, it is not a sufficient condition for 'Silence' as internal dialogue can go on!

Whereas, total attention, without an internal dialogue of I-psyc, is 'Visual Silence'. Such a state of 'Active Silence' is 'Meditation' as well.

Visual arts brought a 'frame' to look at as total representation, which was adopted by field of Design as well. 'Moving digital screens' are a new challenge. We can probe nature of Silence in the non-digital mode to start with.

Silence in breaking inner Visual boundaries

Figurative arts represent reality metaphorically. A sketch of a face, or well painted portrait represents actual face of a person. It is a metaphoric depiction. But a sketch with lines or a cartoon is an abstract representation with a specific statement of the creator. Absence of such metaphoric interpretation leads to abstract representations. Abstract 'art' has been 'the foundation' for such abstract depictions. Process of creation in 'Abstract Art' is significant to understand 'Silence in sense of Vision'. Picasso has talked about how he goes on destroying the initial ideas as he paints, till a new image 'even new to him' evolves

! One can see how I-psyc goes through a jump when the creator gets involved in 'Active silence' and allows the unconscious to operate! A zone of 'Deep Silence' is imperative when such jumps in creative acts occur! Active Silence touching the 'inner order' of the Artist results in deep Silence. We see significant change in the style of Artist. He or she has broken an inner boundary to enter into a new terrain.

Field of Design has developed a graphic language of Vision. Seeing graphic elements as abstract, with no metaphoric interpretations' amounts to 'Silence'! It demands an ability to see visual elements as they are, in their own right! Beginnings of 'teaching such graphic language' was made by Paul Klee at Bauhaus, with his famous 'pedagogical sketch book! Basic design tasks with abstract elements like circle, square or triangle are intended to learn graphic language. A dialogue process between the student and teacher becomes a basis for 'Silence' to operate to see circle as circle, square as a 'square', triangle as a triangle, etc., Earlier I-psyc associations and interpretations like seeing circle as a 'ball', needs to be emptied by the learner. Then I-fac makes a new beginning to see and feel the elements and the visual space around which defines their 'Meaning'. Explicit Expressions like a horizontal line as resting and an inclined line as active, unstable element brought a visual language to be learnt by designers. However, Active Silence to touch the inner order of learner becomes necessary for learning such a language! Frequent engagement in visual domain with 'intentional silence', leads to 'aesthetic sensitivity'.

Abbott Abbott's 'Flat land' narrative and MC Escher's 'figure and ground depictions', D'Archy Thompson's grid variations are 'frames of silence' in the field of visual design to acquire 'tacit and articulated' knowledge.

2.1 Visual sense in Pedagogy of Design

Starting from Bauhaus many tasks in sketching, composition, 2-D form, using letter forms, etc, have been used at NID and IDC. New tasks were also introduced with in the general 'frame work'.

In all such pedagogic efforts, a dialogue with the teacher, discussion in the class room becomes important to create a zone of *silence* for an individual student. The unique experience reaches the 'Inner Order' of the student to acquire 'Somatic Tacit knowledge' specific to design. Concepts of Symmetry, Balance, Proportion,.. get connected with notions, which are familiar to students as life experience. 'Visual language' in design has its own character. It is 'abstract' in nature and not

interpreted metaphorically through language. Language is only used metaphorically in the dialogue mode in design community.

For example to learn expression

A task may be posed to choose different proportions for a **rectangle** of same area to make it look

Strong

Precise

Robust

Students are encouraged, not see them metaphorically connected to real life objects.

Visually seen proportions will be

Strong 1:1

Precise 1: 5 or more

Robust 1: 1.2 to 1.5

Often phrases like,

There is no **strength** in the form (Dum nahi hai, in Hindi),

No **flow** in the composition,

no **life** in the design,

.....,

are used.

Such use of language often introduced in 'Design Pedagogy' becomes 'collective tacit knowledge' of design. Multiple senses are in operation when visual language is learnt by a student. '**Silence**' is an important vehicle to make connections between different sense experiences to acquire the visual language!

An experiment done in a Theatre session with students at IDC, suggests that making such connections are possible. Students had a difficulty to grasp concept of 'security', in visual language. But they spontaneously enacted 'security', by surrounding a person with a protective posture. Perhaps the expression was more innate in 'kinesthetic sense'. Theatre session with body experience offered a 'frame work' to connect kinesthetic sense to visual sense! A video of their 'enaction', was shown to the group after the theatre session, with further dialogue. This paved the way for students, to see the meaning of abstract graphical elements in a new way! However, 'Learning' remained a 'Personal act' with '**Silence**' embedded in the process!

Arupa, the implicate order, gives us an interesting 'frame work' as we can make connections from deeper orders, with 'what we have been intuitively adopting in design pedagogy' based on past traditions.

Form as 'Order' is yet to be articulated in design schools!

Design Pedagogy in general, addressed the 'language of Vision' in 2D and 3D.

All the elements of design become part of it, culminating into:

- the graphic / visual language in 2D
- language of 3D form and space in the product zone.

Challenge of Design Pedagogy is to set new tasks, suitable to the particular group of students considering their previous learning. Problem setting is a creative zone for the teacher. Possibility of

many solutions coming within the frame of constraints is already clear to the teacher as a 'problem setter'. Guiding students further consolidates the 'problem setting'. Any new exercise done with the results and process shared becomes a 'bank of tacit knowledge' to design community, benefiting a new learner or a new teacher. To pursue this contention, I will share two tasks, in detail, which I experimented with M.Des students at IDC. These were initial tasks to expose the student to 2D visual language. Most of the students were graduate engineers. Only 3 were graduates of Architecture

2.1.1 T-Task: Letter T becomes old, depict graphically, only in black and white

This task was introduced to M-des students in 1982 (1)

My Contention



We all learn many things as part of life experience. For instance, a child learns that an old person is different from someone who is 'younger', in looks, behaviour etc.,. Grandparents are perceived as different from parents, uncles etc.,. Children start observing physical differences in their bodies. A grand dad or grand ma may be bent, may have wrinkles on hand or face which are noticeable.

Two enfoldings are taking place in this learning: one at I-psyc level and one at I-fac level. Both may be combined in unique personal ways. I-psyc may unfold the kind, considerate, pampering features whereas, I-fac notices and enfolds the subtle information of grandpa/ grandma on muscles, skin surface like colour, texture, lines, etc., by feel. The child may not see the qualities as 'abstractions' like curved lines etc. As holistic, generalised perception, child is able to extend the category to other old persons or grandparents of their friends. A tacit knowledge gets enfolded. Such enfolded 'Tacit knowledge' gets unfolded as explicit 'Visual language' or 'sub-order of visual/spatial knowledge' as seen in the new frame work of Arupa the Implicate order.

Visual/ Graphic language in 2D is rooted in 'Abstraction'. The letter T has an abstract form. It has an implicate order as part of alphabets, with sound association. It has an identity and structure by which it could be recognised even with many variations and shape-distortions. In some sense the letter had its own 'personality' as an abstract form. It is different from elements like Square or triangle. It gives scope to imagine it as 'old or aged' in its own right. I thought it could lead to a novel way of thinking in graphic relations and 2D space. T, as given, could be seen as healthy person represented by two rectangular bars.

Students were puzzled with the task. It was unlike what they had faced earlier! The three architects in the class were used to vague problem statements. But this was equally puzzling.

I thought it was a wonderful opportunity to introduce the student to 'Synectics' of WJJ Gordon. I had spent some time with him in Boston under UNESCO fellowship. I had also gone through a course on 'Metaphors in Learning and Design' offered by Donald Schon and Jeanne Bamberger at MIT.

We started with comparisons from Gordon, which were posed to students to respond with their own poetic logic.

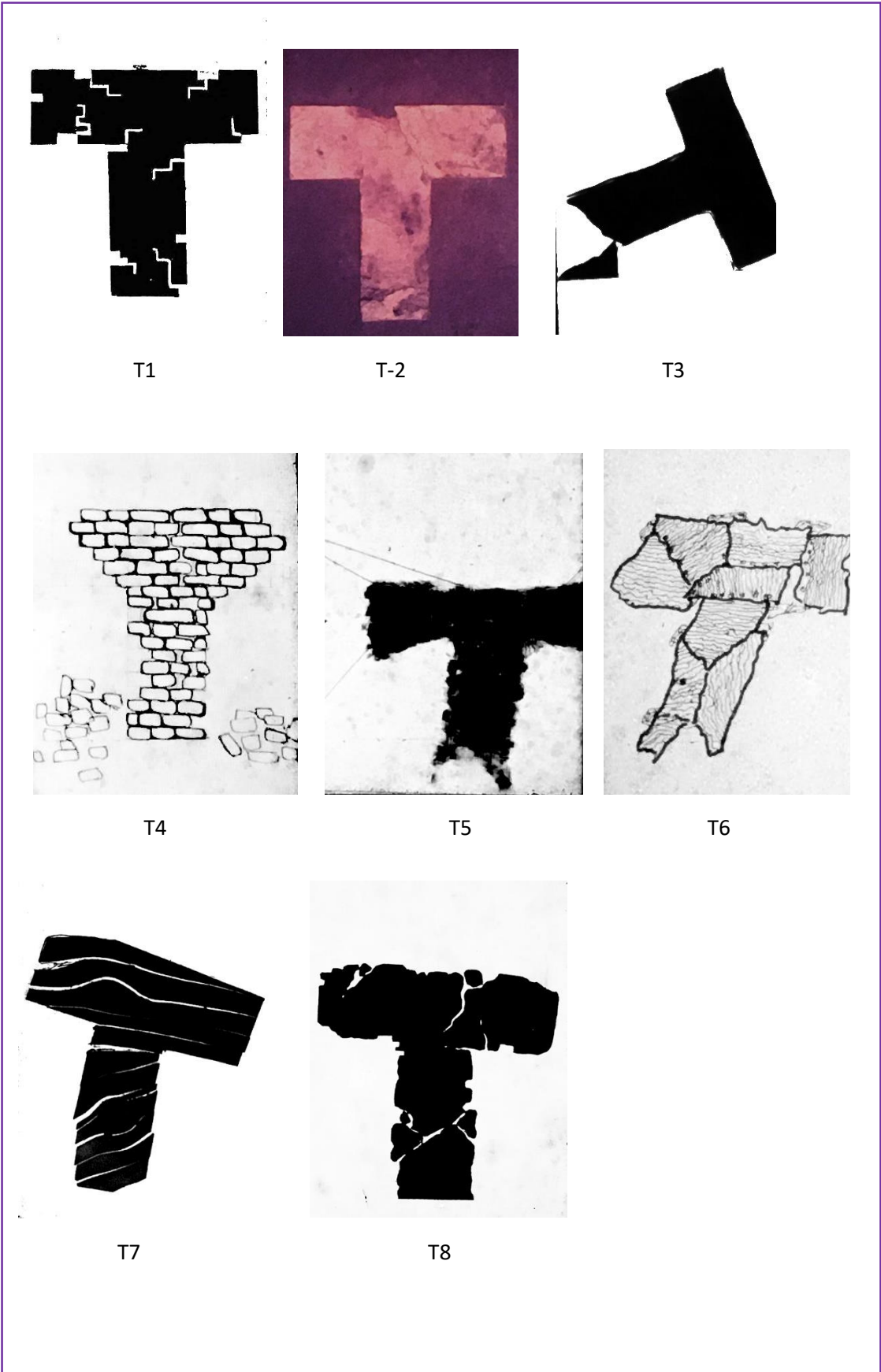
From Synectics workshop



- *Which is stronger?
a concrete wall or a blade of grass?*
- *What are U more sure of?
Gravity or Tomorrow*
- *Which grows more?
Trees in a forest or self confidence*
- *Which lasts longer?
An ice cube in burning building or a snail on Super highway*

One can opt for either and give a response, which can be poetic or make use of imaginative logic. One gets pushed to think beyond common sense logic as the comparisons are carefully designed to look for patterns behind. For example, a blade of grass can be stronger because a road roller may knock off concrete wall, but a blade of grass can spring back after the same road roller runs over it. One can get an insight into the concept of strength. A blind resistance can be compared with strategic yielding. Such notions of strength and strategy have been part of Eastern Martial arts like Kungfu and Kalari Payattu of Kerala. But one can also argue that a goat can eat grass blade but

Student response for T-task had some surprises for me. Seen further, are the output of the students. Unfortunately, only 8 out of 12, could be found in my documents.



In the individual and collective discussions, analogies like, 'if T is a wall how it ages' and 'if T is made of ply-wood, how it would become old to get separated as split veneers', came up! Abstract depictions followed. However, it seems, metaphoric links in the intended direction only happened with some students.

As we can see in figs T4, T5, T6 the images remained figurative. Students could not make depiction with abstracted equivalent graphic elements.

It looks the exercise had tremendous impact on some of them. Long debates on 'aging' happened.

One of them made various alternatives and used to see every day for weeks. Yet the process of moving to an abstract graphic language after the above task, seemed hazy as one of them could not recall the 'silence' zone, which might have happened in the learning. A concerted research in Pedagogic / learning process could yield explicit knowledge.

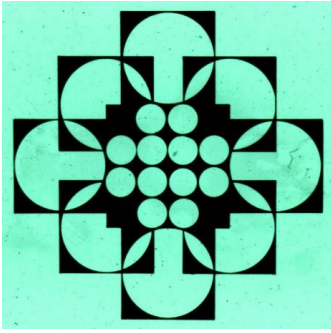
Over a period, most of the students have reached senior positions today (2023), like Dean in a design school, director of NID, head of R&D in major company, etc.!

I recognized that 'longer individual dialogues were necessary. Short module of 3days for the task did not facilitate such a dialogue.

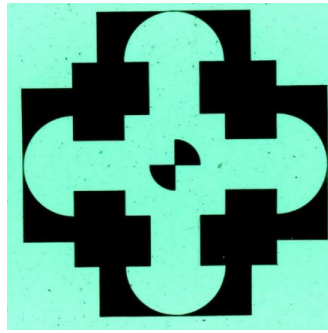
2.1.2 Flower in a Square: Depict flower in square only using square and circular elements

In the following years, there was a change in the course format. One day in a week for each course over the semester was introduced. It became a blessing in disguise for a new task I set in for M Des students in 1986 (2). Flower was taken as theme. Varieties in flower, its meaning when metaphorically used as in 'flowering', etc were discussed during introduction. Some students took longer to reach the final solution. But as we can see results below, they exhibited understanding of graphic language, to a great degree.

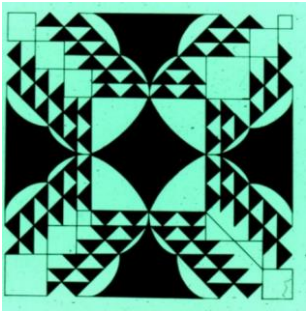




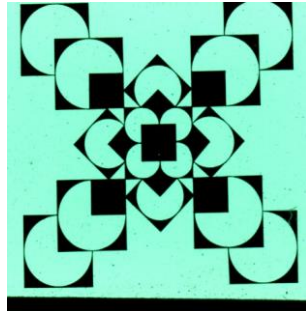
F2D1



F2D2



F2D3



F2D4



F2D5



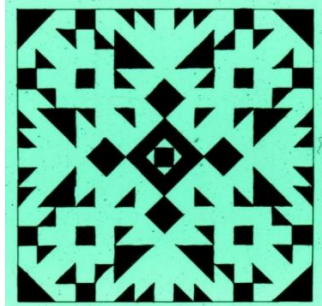
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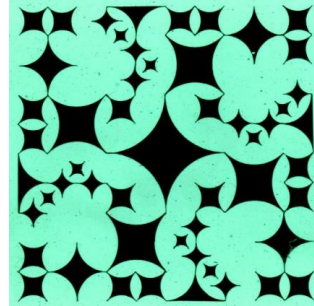
F2D7



F2D8



F2D9



F2D10

1.0 Batch of students(82-84) who worked on T –Task:

R.Dilipan, S.Ghose, Vasant Mehar, Ravi Mokashi, M.A.Munshi,Sunil Parikh,Kodali Rao,Indrani Sen, Chandravalee Sengupta (jhumki), Pradyumna Vyas.

2.0 Batch of students (86-88) who worked on 2D flower:

B.K. Chakravarti, S.K.Dulked, Suresh Hiremuth, Vinay Mundada, Jayaprakash Mehta, Vani Sheshadri, Anupam Shukla, K.Srinivas, C.Suresh, Boban Varghese