

MC RAVI VARMA RAJA – In response to the Questionnaire

(Ravi Varma/Mankada Ravi Varma)

Section 1: Personal Background & Early Years

1. Tell us something about your family background and the cultural context in which you grew up.

Born on 4th June 1926 at Mankada, a village in erstwhile Valluvanadu Taluk of Malabar District of the Madras Presidency- (presently Malappuram district of Kerala). Father: A. M. Parameshwaram Bhattathiripad Mother: M. C. Kunhikkavu Thampuratty. The house was known as Covilakam and being a matriarchal (matrilineal to be more accurate) family, and all living together, there were about seventy five individuals including children living in that housing complex, with two temples and three or four water tanks. Lunch and Dinner used to be the only time this extended joint family met together when cooks served standard Food everyday.

Early childhood memories include watching Father chanting Vedas and Mother back from the temple after morning prayers reading the Ramayana loud enough to be heard outside the room. We children had private tutors but my elder brother was sent to the local school, the first ever to go to a local public institution. Later, one by one, all the children started going to the school. Back from School we could not enter the house but had to go to the big tank, dip full in the water and bath before entering the house. Mother's elder sister was a good storyteller and we children used to gather around her after sunset and plead for a story session. Slowly and steadily we were acquainted with all characters of Ramayana and Mahabharata.

Life changed all of a sudden. The war came. All the rice-stock we had in the granaries had to be surrendered to the Government. Dependants and servants left with a bare minimum remaining. Tutors and Sanskrit Teachers too left. We too, when an opportunity came, left for Calicut, rented a house and lived there as a small family. This facilitated the girls to enter the high schools and pursue studies just like us boys. It was 1942 - there was Lot of Political activity. The Town hall used to have meetings everyday. It was not far from the District Library. As I got familiar with newer and newer authors and writers, I could also listen to patriotic speeches. August that year saw upheavals in Malabar. Arrests, lathi charges, news of national leaders and knowing them from their speeches and writings first hand knowledge became possible - we were soaked in a spirit of Nationalism.

From school to college and graduation passed off uneventfully. Time was equally shared by academic and extracurricular activities.

2. Were there any people in your immediate environment who had any interest in, or professional involvement with the visual or performing arts? Did they in any way initiate your interest in cinema or the visual arts?

Negligible – my older brother had a still camera – used mainly to do family photographs. But it was not used for pictorial work. As a child I had watched with great interest the drawing of images of deities on the ground by traditional artists for Pujas and festivals. In our House there was a particular place where such “kalam” is drawn with powders of green, yellow, red, white and black. Based on that there were festivals also periodically. I had developed sort of admiration for artists watching them creating images with ease.

3. How were films, people associated with cinema viewed in your family and in your immediate circle of acquaintances?

There was no aversion towards film people nor there was any admiration towards them.

4. Please describe in some detail the 'visual field' of your childhood.

Mankada is situated in a very picturesque place. There is very little level ground in the surroundings. It is all small hills. The pathways are ascends and descends, hills all around and in between. Small interruptions of paddy fields. A mile from our house there was a small mountain (NENMIMI MALA) with rock formations. They become silvery during monsoon with water falls here and there. The thick growth of foliage on the hills and in the lower part of the mountain had a lot of wild life in our childhood days. The cloud formations during monsoon with the hills and mountains protruding into them, and the coming of rains was wonderful to watch. Right on our lawn - to the left of our family shrine - stood a big banyan tree.

Off and on there were performances of art like Chakyar Koothu, Ottam thullal, Kalam, Pattu, Thalappoli all rich in colour and imagery. Occasionally there used to be kathakali also. Prior to Thalappoli the poothams used to visit all the houses. Once in a while the man inside the mask would lift the mask and his helper would fan him with a palm-leaf fan and give him water to drink. The torch-lit caparisoned elephant with the deity's Golden Image over it, the light through sleepy eyes was a rare revelation that I still remember.

5. Do you recall the first or very early films that you saw? Can you tell us something about that experience? What was/were the films? Do you recall

anything about the cinema hall, or space where the film was shown, and about the general atmosphere about the space?

In 1935 or 36 - I was a nine year old child - we were taken to Trichur mainly for participating in a marriage and were staying near the town. We children were under the care of a Senior Cousin Who had Visited Madras Once and seen a film. He was describing what he saw to us and finally told us that there is a theatre nearby and a film is being shown there. There was a show late at night and he agreed he would take us there. I do not remember what sort of film it was that but to us it looked like magic to see phantom images moving. There was lot of movement – jumping onto horseback, chasing, fencing. Walking back to our residence we were arguing how the photos were moving and how they looked like real humans.

6. How did you get interested in watching films? Were you ever a member of a film society or film club? Did you know about film societies?

I was interested in literature and the stage. Film was an extension of the stage. In those days there were professional theatres who would put up temporary tents and present plays. They were invariably themes from the Puranas. We could see the characters like Rama, Ravana with ten heads, Poothana suddenly changing from Mohini to a Rakshasi etc., which we had tried to imagine during the storytelling sessions at home. They were great events.

In due course of time the tents put up changed over to touring theatres, and electricity generators and portable projectors made it possible for showing films in these touring theatres. Tamil and sometimes English Films were shown. Films replaced the stage plays gradually. There were no Film Societies. In the early fifties while working in Films Division, rare films were shown in the preview

theatre as and when they were available. And Madras had a Film Society by late fifties. As soon as I came to know of it I joined it.

7. What were your other interests? Have those interests remained with you in later life?

I had interest in stage and was associated with amateur Malayalam stage in Madras in different capacities. I am still interested in stage but am no more active. Reading and occasionally writing was of interest to me and I continue that.

8. Did you have an interest in still photography? Were you ever a member of any amateur photography club?

In fact my interest in still photography started after I joined for the course in Cinematography at Madras. I was not a member of any club.

9. Can you name some of the important films that you saw when you were growing up? Why did you think of them as significant?

I do not remember them with their titles but some scenes come to memory. One - a fight on top of a running train is still vivid. Later, as a student of cinematography I managed to see almost a film a day. "*Goodbye Mr. Chips*" with Robert Donat as the school teacher, "*Good Earth*", "*Gone with the wind*" "*The Giant*" and of course "*The Bicycle Thief*" (First Festival 1952) and "*Yukiwarasoo*" All of them had memorable characters – "*Tale of two cities*" was another favourite film which I have seen more than once.

10. How, why and when did you decide to become a cinematographer? What were the factors that influenced this decision? Did your family encourage or discourage your choice of vocation?

It was more or less an accident. I chanced to see an application form to the Madras Polytechnic, which a cousin had collected and which he found useless. One of the courses mentioned in it was Cinematography. I filled it up and posted and in about a week the admission card arrived. The other courses I had obtained admission for were in the Banaras Hindu University. The nearer home course was preferred naturally because it was less expensive. In fact, on the first day of class, the lecturer after hearing from me that I was a graduate in physics with electrical engineering as subsidiary, told me that I would be wasting time in the polytechnic and that instead I should continue with a course in Banaras or Pilani. I decided otherwise and stuck to Cinematography.

SECTION II: On Learning to be a Cinematographer

1. Tell us about your education as a cinematographer.

Section for Cinematography and Sound Engineering was one of the faculties of the Madras Central Polytechnic. Probably in 1949, when I joined the course, it was the only course in the whole of India offering teaching of Cinematography. (Today it has grown into a full-fledged institute and is known as the Institute of Film Technology). One could specialise Cinematography or Sound Engineering but out of the three years of learning the first two were spent in learning both the subjects. The third year was for specialisation.

Though we did not have proper instructors, we had a good syllabus so we learnt from books and through chance discussions with some of the staff members who were also picking up knowledge of Cinematography. We did have good still Cameras, Dark rooms, Enlargers and other necessary accessories for a still laboratory. I remember to have spent lot of time at the enlarger trying to get a good picture out of a badly composed negative. We had an experienced dark

room assistant who would help us in mixing the developers and choosing the right printing paper. The students learnt of contrast and tones and the importance of correct exposure.

The exposure meter was invariably used in making pictures - that habit taught us to use the variety of photographic emulsions to their full potential. Colour was still not in vogue; colour films were not available. I remember Philippowsky, the German guest lecturer at the MIT, giving us a lecture on the researches going on in communication systems, passing of maximum information in minimum time, which has ended up in the present digital technology. His lecture took us to a very high level of information technology, at that distant past.

There was practically no coaching on lighting, though we had conventional lighting equipments. What little the teachers gathered from books like "Painting with Light" by John Alton, was passed on to us mechanically. But with still cameras and rolls of a film and the lights made available to us during practical classes, we lit up each other's face as per the ideas in the books available, and did develop some amount of practical knowledge.

The concept of key light, Filler, Back Light, Kicker, Cross Key, Contrast, Soft Lighting etc. become familiar to us at this stage. We had only two movie cameras, the standard Mitchell and an Imoh (Eyemo). The Mitchell had 1000ft magazines and the Eyemo (Bell and Howell) had 400ft magazines. Because the lecturer was friendly with the students, we had full freedom with the cameras. There were no models or artistes provided by the institute, so many of the students themselves become the models and artists and posed for the classmate who would work as the cameraman. The work would be exchanged later so that each student could try his learning in camerawork.

When the whole magazine ran out, it would be sent to a laboratory and get processed and printed. This self-learning at the institute gave us the self-confidence to handle a Mitchell Camera and a fair amount of knowledge of lighting.

2. When you look back on the exercises that you had to do as a student of cinematography, what are the things that come to mind?

If only the students had some guidance from experienced and knowledgeable cinematographers and if there was good planning, the time spent in the classes could have been better used – looking back I have a feeling that lot of time had been wasted during those three years. At the same time an institutional training was beneficial for we could co-relate the theoretical knowledge of photography with what was demanded of us in practical working conditions.

We did not have the system of doing a diploma film during those days. The course in Cinematography was just evolving.

6. Were you attracted to the work of any particular cinematographer/s. If so, what attracted you to their work? Tell us something about the important cinematographic influences on you in this period? Have you found that in the course of time, these influences have varied, or have they remained the same?

During student days, Hollywood films were thought to be the ultimate in Cinematography. Later when I saw Russian and continental films I realised that there could be other styles too. All said and done it was the whole of the film that was appreciated and it was difficult to separate the cinematography work from the totality of the film. However I still remember shots of films like *Good Earth*, *The*

Giant, Gone with the wind etc. But “*Rashomon*” and “*Knife in the water*” were revelations of the possibilities of the camera. I started liking the continental films more than the American films for their camerawork. I do not remember names of cinematographers but one name I remember is that of Sven Nykvist – Bergman’s cinematographer.

7. What if any, were the other sources of influence (outside cinema and filmmaking) on the shaping of your vision?

Prize winning still photographs that used to appear in weeklies and photo magazines. Paintings, especially like Rembrandt’s which gave lighting on their objects due consideration.

8. What suggestions do you have about the education of a young person studying cinematography in a film institute today?

The institutes teach Cinematography as pure technology whereas Cinematography is as much art as it is technology. I had suggested to the Madras Institute of Film Technology to make modifications in the syllabus and include a study of important works of known painters. It fell on deaf ears. Present training is good but specific studies of chosen cinematographers and discussion on specific works should form the main part of the final year curriculum. There should be opportunity for the students to work with chosen cinematographers in their final year. Cinematographers can be invited to do short films along with the students in the institute itself. Films and Videos can be made on the working methods of Cinematographers and can be offered for viewing in the classrooms.

The training has to become exhaustive – the post-shooting work on the film processing, grading and printing are also important. The students should involve in these and by the time he completes the second year these physical

activities should be familiar to him. For this the institute should have the facilities of mini-laboratory and the latest technical equipments for grading and printing.

9. If you learnt in the industry, what were the sources of information on technical matters? What was the relationship that you had with the cinematographers from whom you learnt your craft? From the point of view of learning your craft, can you tell us about any significant experiences that you had?

Since it was compulsory to put in a year of practical apprenticeship in studio, I joined the local studio and was an apprentice in the camera department. There the seniors never parted with their knowledge gained through sheer imitation and observation of their immediate superiors. The apprentices were kept at arm's length lest they spoil the costly equipments. We were allowed to watch from close quarters the threading and loading of the camera because these activities used to happen before the cameraman arrived on the set.

When the cameraman measured the light, he did it as a very confidential activity. Finally he would tell the senior asst "Normal aperture" and the assistant with great care set the aperture invariably at f2.3 (The T calibrations did not exist those days). In due course I found out that the key light on the face of the artiste was always read on the exposure meter scale as 20- (G. E. Meter – the foot candle equivalent was probably 200).

Until he got this reading he would go on making the keylight stronger and softer or ask the light boy to put a single net or double net as required. Lot of effort was spent to get the magic figure of 20 on the Exposure-meter scale. The stock used was always Kodak Plus X. At the end of the shooting, a special test was exposed – a close up of the artiste, and the laboratory processed it after

developing bits from the test length to different timings and choosing the best suited, and finally the whole exposed film was developed to the chosen test bit timing.

It was always the “Normal Aperture” (2. 3) and the “Night Effects” (2. 8). When we went outdoors for shooting the cameraman became nervous – shooting was done with direct sunlight on the face of the artist for which a traditional aperture (inherited knowledge from his predecessor) was used. There were expert cloud-watchers among the light boys who would predict with fair accuracy the time for cloud to pass and unfiltered sunlight to appear.

The industry did not provide the technicians access to books or refresher classes by knowledgeable cinematographers. We who went with a three year – diploma actually lost our self-confidence in a short period of one year. But there is another side to it also. I remember some of the light boys who had grown along with the studio, who had put in 15 to 20 years of service, who could light up a set as good as the senior cameraman would do without the help of an exposure meter. They knew where to keep the lights and at what intensity – knowledge gained through intelligent observation. Honestly, what I gained from the Industry were some good friends from among co-apprentices and the goodwill of the technicians. What I lost in that one year of studio apprenticeship was my self - confidence and self esteem.

10. What is the nature of the relationship between you and the cinematographer/s from whom you learnt your craft today?

I did not have to work with any established cinematographer as such. From the commercial studio of Madras I went to Bombay. Films Division Govt. of India was to train three Diploma holders in Film Technology in practical work and

make them familiar with documentary filmmaking. Since there were no other Film Teaching institute in India at that time, the three selected were from the Madras Central Polytechnic.

Though we were given hopes of getting absorbed in the different departments of the films Division after six months of training, we were told to apply for the posts of assistants in the departments. The candidates who had appeared for the interview including cameramen from the industry with experience of independently shooting films. Two of us from among the trainees therefore joined as assistant cameramen. For about six months, there was only periodical work but in about a year's time the two of us from the polytechnic had got familiar with all the equipments and were ready to do any work of cinematography.

After about 5 years of work as assistant cameraman I left Film Division. But the years in Film Division gave a lot of experience. I toured all over India, worked in all conditions of weather, and became familiar to all kinds of photography - from available light to huge sets with artificially lit interiors. I still remember lighting up the Saranath Museum, The Kashi Viswanatha temple at Varanasi, etc.

I may have learnt from the then cameramen of Films Division but it was more or less learning by observation and experimentation with lighting composition and framing. The cameramen had full confidence in me and some of them used to leave the complete work on me. The self-confidence lost in the Madras commercial studio was regained while in the Division.

SECTION III: On Entering and being in the Profession.

1. Tell us something about how you entered the profession? What were the first few projects that you worked on?

After leaving films Divisions I came back to Madras. It was hard to get a regular job for a cinematographer in those days (1960) and it was real struggle for existence. Miscellaneous work as and when it came was welcome. I established my contact with the cinematography dept of the polytechnic that was in the process of becoming an independent institute – the section head of the polytechnic was re-christened ‘the principal’ of the institute and my co-trainee in Films Divisions took over as the principal of the Institute. He invited me to do some part time work in the institute. I guided the students to make short films.

A BBC unit at the time was making a series of short films on South Indian temples and a friend’s cameraman who was accompanying them and wanted to return to Bombay, asked me to do the rest of the work with them. I was able to do their work very satisfactorily. I was able to buy a 16mm camera and when BCINA (later named Visnews) started their work in India, my old friends in Bombay had recommended my name to the Delhi representative. BCINA made me their stringer for South India.

A fertiliser company in Madras who wanted to make a series of semi-educational films gave me the work. This was akin to some of the work I had done at Film Division. I shot with my 16 mm camera; all the sound work was done in 35 mm. Edited 16 mm print was blown up to 35mm in a local laboratory. The mixed sound track was in 35mm. The final print of the film was in 16mm - contact print of the picture and reduction print of the sound track.

These films were dubbed in several other Indian languages. This subject matter was invariably the scientific way of cultivation of a crop and the use of the fertiliser in that particular crop's cultivation. This was sort of training for me and I got familiar with all aspects of filmmaking. By now the Films Division had put me in their panel of producers approved for making films. The miscellaneous work gave me the necessary experience to make any type of films.

2. How has your experience of being an assistant influenced your relationships with your assistants today?

I have treated all work as a learning process. It is impossible to become a know-all in filmmaking. Assistants who come to work with me should have the same attitude. We discuss all matters concerning the execution of the work and I give them full freedom to make suggestion and clear their doubts.

3. Is there anything in the generally prevalent relationship between assistants and cinematographers that you think needs to be questioned?

There are no secrets to be jealously preserved in cinematography today. Books on photography are not rare now. Feature film work should be an open demonstration of one's own methods, and those who are eager to learn must be encouraged. Cinematography is inspiration plus perspiration. Those who have the inspiration should be helped.

4. Can you talk about any devices that you designed or innovations that you brought into practice? How did these come about?

I do not work to a formula in photographing films. Location shooting is improvisation all the time. Emulsions and film stocks have changed for the better continuously through the last 30 years. There were changes from film to film.

The 1st major film I shot was "*OLAVUM THEERAVUM*" a Malayalam film (1968-70). We had a sequence in the film in which there was a sort of a rape scene happening in a 6ftX4ft room inside the small hut. There was no place to keep the lights inside the room. I could hold the camera in hand and stay in a fixed place. There was no place for the director. He was ready to brief the characters and move out of the room. It was a violent scene with violent movements. I consulted my associate. We arrived at a solution.

We tied a reflector on top of the room. There was empty space between the wall and the thatched roof. A 2KW Junior was kept outside the room and the beam was centred on the reflector tied through that empty space. We added 3 more lights and the fairly uniformly lit room gave a meter reading of f2.5 (NP 55 ORWO stock). Since we were using a 28mm lens there was enough depth, following focus was not necessary. I could change my position freely from shot to shot. The result seen on the rushes was good.

This sort of lighting was used extensively in the next film I shot (*SWAYAMVARAM*). We had by then got a big plywood board painted in brilliant pure white. When there was no matching with exterior to be done, this bounced main light from the centre top of the room was done first, and the general exposure level built by boosting the light source. We had four portable booster ColourTrans which together when bounced (boosted to maximum intensity) used to give an exposure level of f/2.3 to f/2.8, depending upon the size of the lit up area. Face lights were babies (500 Watts fresnel lens incandescent lamps), which gave the faces of characters an intensity slightly above the main booster source. Then through the windows and doors, a slightly stronger light (2KW Juniors) was thrown in. It all together gave a natural affect on the distribution of light in the room.

When halogen lamps came into use, this method of lighting became possible for larger areas. In the same film (*Olavum Theeravum* 68-70) I started mixing sunlit exteriors with artificially lit interiors. Lighting became complicated in these shots and complicated at times with characters moving from the exteriors into interior and vice versa. In such shots interiors had to be built up for an exposure of f/9, and the sunlit portions were chosen with the sun behind the principal objects. Since the interiors cannot be lit up to f/9 by bounced light (heat generated become intolerable), in such shots specular lights were to be directly used. Those were times when exterior sunlit areas were never mixed with interiors. We resorted to such shots so that the houses and porches looked natural, and actual location shooting became the new fashion in film making particularly in Kerala.

5. Were there any 'improvisations' that you had to resort to, in order to deal with a particular problem or situation?

Shooting on location for low budget films needs improvisation quite often. Since I had worked only for low budget films, I had to resort to very unconventional methods. In the first film I shot there was a sequence of the female character sitting on a swing and singing a song. The script mentioned - "The camera follows the character". Tripod and panning would have looked awkward. We made a swing with two parallel seats and mounted the camera on one, and on the parallel seat the character sat. The result was very impressive with both the character and the camera swinging in unison.

In a later film, the sick female character was to be taken out of the room in a stretcher and to be followed in trolley. With the doorway and a verandah in-between, it would have been difficult for a track to be laid. We did not have a

crane either. The camera was mounted on the stretcher, the interior room was lit up uniformly to an exposure of $f/ 5.6$, the exterior lighting was chosen by timing it at twilight at an exposure of $f/ 6.3$. The whole thing – camera, stretcher and patient - were carried out of the room into the lawns with the camera running. The final shot was very impressive.

6. How did you get the 'break' to shoot your first film?

It was the late sixties. When I left Bombay in 1959 and came over to Madras, I thought that I would be able to make a film of my own, and the way I want it. The wish was dormant but surfaced when I saw good and outstanding films. But having shifted to Madras and left a monthly-income job, it became necessary to find a livelihood first. So news coverage, (BCINA and later Visnews) short documentaries, cinematographic work for visiting documentary makers and instructional films – whatever came my way I did the job and was managing to exist.

There were offers in between to do cinematography for feature films in Malayalam but there was no guarantee that they would end up as good films. So I hesitated until the new Pune Film Institute alumni wanted to do a film and asked me to do the camerawork. I was hesitant, but some celebrities of the Malayalam film industry, along with the film institute alumni, again met me. That was persuasion enough to make me agree to do that particular film.

That film did not make any impact but the production executive of the film wanted to do a film on his own. He met me with a new Director and I agreed to do that film. That film became a milestone in the feature film industry of Kerala. The photography was an extension of my documentary style and a complete break from the existing feature film style. That film was *Olavum Theeravum*. The

script, the direction and photography was all different and fresh. In Madras City it was released in a theatre where only English films were shown till then. The audience mainly consisted of the film makers of Madras film industry and it ran to full house for three weeks, and had to be removed because the theatre had an English film waiting to be released in the theatre.

Major newspapers and weeklies reviewed it in glorious terms and the photography got the lion's share of the praise showered on the film. But the impact on me of all that was the kindling of my desire to make my own film. There were many offers (the film also got an award for photography along with for direction and script) for doing photography for Malayalam films. I did not accept any and went back to doing newsreels and documentaries.

That was the time when Adoor Gopalakrishnan told me that he has written a script and was to make it into a film. He was negotiating with FFC (Film Finance Corporation) for finance. He wanted me to do the photographic work of the film. I did not commit immediately. But Gopalakrishnan sent me the script and I read it carefully. I realised that if this script becomes a film it would change Malayalam film totally. I decided to participate in the making of the film. Then onwards, I have been doing a Malayalam film occasionally, dividing my time between documentaries, newsreels and feature films.

7. Can you trace a graph of your learning curve from film to film, or project to project?

My work with feature films had long breaks in between. I do not think there is any smooth continuity, and I progressed from film to film. I felt I am starting afresh with every film. A graph cannot faithfully represent this discontinuity.

8. Please describe in detail at least 3 important sequences that you have shot in the course of your career. Describe also the work that you had to put in, in order to realise these sequences.

I would choose a sequence I had to do independently (I was designated asst cameraman at the time in Film Division) in a train compartment. When they shot inside running trains Film Division cameraman used to close the windows (down the shutters) so that the exposure can be controlled. But I found this practice killed the charm of the shot. The possibility of an excellent visual – faces against moving trees and cloud-patterned skies would have added to the charm of the visual.

I had good relationship with the electrician and the light-boys. I discussed the problem with them and they agreed that we should attempt the shots as explained. It was their co-operation that made the shots possible. I chose the side of the compartment for the action and characters so that the exterior was back-lit by the sun. An aperture of f/ 8 to f/ 5.6 was safe. We had a generator accompanying our coach and it was not difficult to build up the lighting inside the compartment to that level. The result as it came out of the laboratory was good.

In the film "*Elipathayam*" there was a shot in the script of carrying the rat-trap with the rat in it to the water-pond. It was to be a long trolley shot. It would have been impossible to do a lengthy trolley shot in that terrain. There was a pathway and lots of pineapple like small plants all over. Instead of a 50mm lens trolley shot following the object closely in the trolley, I put the camera away from the object with a zoom lens. The object was framed for a medium close, and I panned the camera along with the moving object. The pineapple plants were in between and the total effect was marvellous. The light was carried on shoulders

and was concentrated only on the rat-trap and the person carrying it. Similar shots were to be there in two other sequences in the script. They were also done in a similar way.

These shots were uncommon in the Malayalam films of the late seventies. In an earlier Malayalam film, the director had conceived a shot from inside a deep well - the camera pointing up on the face of a character about to jump in to the well to commit suicide. It was again a low-budget film and we could not have made a platform and lowered into the well, with the camera on it and supported by pulleys and strong ropes. We had bamboo mats lying near by. When rolled up they became empty cylinders. We used two or three bamboo mats, rolled them up, and when put contiguously it gave a good length. The art director offered to paint them black inside. It took about half an hour. The camera was put at one end and with the lens inside the face of the empty cylinder, and at the other end the character looked into the cylinder. We took care to see that the sky was behind the character. A wide-angle lens was used to give the correct perspective. The shot was good enough for the sequence.

9. Can you tell us something about the problems that you have had professionally and technically and how you have dealt with them?

Almost all my films are shot on location and the consistent problem was the right place to keep the light. When once the halogen lights came into use the size of light has come down, but still we are not able to put it in the right place to get the lights in a proper direction. In *Elipathayam* - the house in which we shot, the ceiling was hardly six and a half feet high. The rooms were small. Recently I had occasion to visit that house and I was wondering how I managed to take all those shots in it. I do not remember having told the director that any one shot

cannot be taken, but had solved the problem as and when I faced it and had been able to get tolerably good results.

During the shooting of the same film (*Elipathayam*) we had continuous rains. After the second rainy day I suggested to the director that we shoot in the rain. Some umbrellas were procured and electrical testers were provided to each light boy. After switching on the power they were to check the lights for power leakage, and eventual shock from the light. They were to wear footwear all the time. The first day's experience made us bold. The biggest problem was the electric power. We had no generator and the power was drawn from the house-mains. I could hardly get 20KW of power. But since there was rain outside the building we could safely work at lower apertures.

But the same rain brought power breakdowns. Sometimes we had to wait for hours. But with rain all around and dripping from the roofs, the tragic scenes got the right setting. It was worthwhile to shoot with all those prohibitive problems. That was a trendsetter for Malayalam films to start shooting in actual rains; Kerala has a long rainy season.

In a film I shot (*Kodiyattam*, Director Adoor Gopalakrishnan) there were a number of scenes to be shot inside a lorry. The main character of the film was to work as a helper of the lorry driver. To fix the camera inside the lorry in different positions a tripod could have been used, tying it to the different parts of the lorry or we could have hired a vacuum fixer and mounted the camera with its help. The first would be cumbersome and the second would be expensive, and such vacuum fixers were not readily available and if at all available would have cost a lot of money. I decided to shoot the whole sequence (20 to 25 scenes) with

a handheld camera. The shots cannot be distinguished from shots that could have been taken with expensive accessories.

I was working along with Robert Gardner (American documentary maker and Director of Audio Visual Arts Centre at Harvard) on a long documentary film - it was on the 'Yaga', a complicated ritual practice of the Namboodiris in a village in Kerala. The rituals were done inside the thatched huge tent. We had measured the light available at different times of the day. For 100ASA Eastman colour film, the exposure sometimes fell below $f/2$. We did not want to mix artificial light with the natural light. It could have distorted the colours even if we had used gelatine filters over the lights. I suggested removing part of the thatched coconut leaves symmetrically from all sides of the roof and replacing it with white cloth. After arguments and counter arguments among us and the Namboodiris, on my word of assurance, it was agreed that we should try that, since we had no other way of solving the problem. Two rows of the thatched coconut leaves were removed and the space was covered with white cloth. The filming became possible with a minimum aperture of $f/2.8$.

10. Can you tell us about how you have seen the position of a cinematographer change:

- a) In the industry at large**
- b) In a film unit**
- c) In terms of public perception.**

The cinematographer has changed lock, stock and barrel during the last 25 years. This may be true about all in the filmmaking process. They are now better educated, well informed and therefore socially accepted as a cultured person. To an extent, the various Film Institutes contributed to this evolving of the filmmaker. It is also true that individuals from sophisticated social circles are

entering the field of filmmaking. In fact, foreign units coming to India and working along with us are surprised to find that their Indian counterpart is better educated than them. This is also true about the financiers and producers - when they find that they are dealing with people at a higher cultural level they adopt a little more respectful attitude towards the actual filmmakers of consequence.

SECTION IV: On the Practice of Cinematography.

1. Do you have preferences in terms of what you like to shoot, and why?

My preference is for Nature, Wild Life, Historical and period based work. Architecture, graphic elements and documentaries. Must be inborn, there cannot be an explanation.

2. Tell us your opinion (based on your experience) about what you think is the nature of the relationships between cinematographer & director, cinematographer & art director/costume designer, cinematographer & choreographer/action director, cinematographer & sound-recordist, cinematographer & assistants, cinematographer & actors (experienced & inexperienced, stars & non stars), cinematographer & light boys, cinematographer & laboratory technicians, cinematographer & production in charge.

Mutual respect.

I have not tried to build up any special relationship with any of them but when I find them intelligent and dedicated to their work, I give them my full co-operation. I expect the same from all of them. I consider it would create good films when the relationship between the various participants in filmmaking is based on the above attitude.

3. What in your opinion is the relationship between the craft of Cinematography and the other departments in film making:

- **Art Direction**
- **Editing**
- **Scriptwriting**
- **Music**
- **Sound**

Basically it is good cinematographic work that provides significant visuals that go to make a film notable. A good script is a must for it. The visuals are inspired by the script. The cinematographer draws his inspiration from the script through the Director of the film. Art Direction regulates these visual conceptions to an extent. Editing can enhance the charm of the cinematographer's work when it creatively juxtaposes the visuals created by the cinematographer - director combination. Music gives a soul to the visual and enlivens it.

4. Please tell us about at least 3 instances from your experience that clearly illustrates the cinematographer-director relationship. Who are in your opinion the significant directors that you worked with, on which films and for how long?

The director should have a clear image in his mind of the shot he wants taken and should be also to convey this in words to the cinematographer. He should have full faith and regard for the cinematographer and confidence in his capacities. The Cinematographer should ask more questions to get a complete idea of the shot before he sets up the camera and starts lighting. What I have learnt from Directors is not about the shots, but about the editing continuity of the shots. This is the restricting point in choosing the camera positions. Most of the

directors whom I have worked with, I find are concerned with the camera's angles with respect to a smooth continuity. Most of them want shots to be taken in serial order so that they do not go wrong on continuity. For the cinematographer this approach creates problem but he puts up with it in the larger interest of the film.

5. "Without a well worked out screenplay/script and an imaginative director who is willing to take risks to open out possibilities for the camera, the cinematographer's labour is not worth the footage" - Comment.

The statement is true. But at the same time the cinematographer himself should be committed to good cinema. He should be able to rise above commercial consideration. He should not go with the highest bidder. He should refuse to contribute to bad cinema.

6. What in your opinion are the different professional and technical demands made on cinematographers in:

- **Mainstream Commercial Cinema:** I am not able to answer this question because I have avoided working for the mainstream commercial cinema.
- **Parallel Cinema:** If Parallel cinema is the nomenclature for better cinema and good cinema, and since they do not collect enough from the theatre, these films are made on shoestring budgets. Economy at every stage of productions is a must. Wastage has to be avoided.

The cinematographer and the other technicians have to be committed to the ultimate quality of the film. Equipments and raw stock should be essential minimum and not at luxury levels. The cinematographer should use his intelligence and knowledge to get effective shots rather than shoot without limits and choose the shots from among the abundantly and wastefully collected visuals on the editing table. At least in Malayalam films very good cinematographic work has appeared in the parallel cinema.

- **Documentary:** In documentaries the Director-cinematographer relationship has to be much closer. I have felt while making documentaries that it would be better to have a Director who is the cameramen for Documentaries. A good percentage of shots in documentaries should be candid instant shots. There is not enough time between deciding on a shot and executing it. Genuine instant happenings cannot be rearranged for taking the shot. By rearranging we lose much of the candidness of the visual collected.
- **Ad Films:** No experience in ad films
Music Videos, Television Serials, Television Shows: Very scanty experience in such work.

7. What are the different ways in which you approach working on film and working on video?

From a cinematographer's points of view there is not much difference between working on film and working on Video. The film has a recommended speed (Exposure index) recommended by the manufacturer. But the sensitivity of video-camera's tube usually has no such index. When I had to do Video work I light it up to a particular intensity and expose the tape with the auto exposure and examined the result. By slightly varying the light intensities, I arrived at the right aperture for that intensity. From these values one can tentatively arrive at an exposure index. With the exposure index thus calculated, all further work I can be done using this exposure index. I do not make much difference in lighting a scene for video and for film excepting filling up the darker areas slightly to a higher level in video.

8. What do you think is the importance and role of new image making technologies, digital and computer aided image making in shaping the work of the cinematographer today?

The new image making techniques are going to make revolutionary change in filmmaking. The visuals gathered casually can now be corrected with digital techniques. The cinematographer who collects the basic images at the time of "shooting" would become less important. The computer graphist with his digital equipments can work on these visuals and change them completely. Out of focus images could be transformed into clearly defined images. He can play with the colours creating new shades, can change blue to red and yellow to green. What Walt Disney created with elaborate planning and strenuous execution, the computer graphist would do with great ease.

Laboratories, film stock, processing and printing would become a thing of the past. The Director-Cameraman-Editor combine would be single individual basically a painter-artist with rich imagination, image sense and story telling gifts all rolled into one. Movies would be created on table-tops. Stars, heroes, heroines would lose their importance - they would become probably just models for the graphist to create a variety of human faces on their drawing table.

9. What are the international trends that you see emerging in cinematography today? What kind of work do you admire in Hollywood, European Cinema, Other Asian Cinemas (Iran, Hong Kong, Japan, China, South Korea etc.) in Mainstream Indian Cinema, in parallel and regional cinema in India?

The cinema the world over has been inching away from stage-play to Real-play, reality and credibility. Some of the countries are a few yards ahead. Even India has progressed from Shantaram to Satyajit ray. There is a marked difference between the cinematographic styles of American cinema and the European Cinema. One finds exaggerated colours in the American cinema, a sign of drama whereas the European Cinema uses colours in a very controlled

way as happens in nature. The Indian mainstream is more inspired by the American cinema. The parallel cinema (call it the serious cinema) has its inspiration from the European (French, Hungarian, Polish) Cinema. Japan can be clubbed with Europe rather than with America.

10. What are the trends that you see emerging in Documentary cinematography?

Portable light weight Cameras and portable sound recorder (presently video cameras) has made it possible to register reality as and when it happens – This certainly takes the documentary nearer truth.

11. What are the trends that you see emerging in cinematography for advertising?

Advertising film are becoming more and more dependent on table-top opticals and animation.

12. Do you perceive a difference between the cinematography of the mainstream film industries in Bombay, and in the South? If so, what is the nature of this difference? Is there a difference also in terms of the work culture, professional standards etc?

Not much difference exists between mainstream films in the north (Bombay) and south. Both are imitative of the American styles. There is no obvious difference between the two work cultures.

13. Do you think there are different schools of cinematography, in India as well as internationally?

I suppose we could divide the schools broadly as:

1. Exhibitive – bringing out the various possibilities and advancement of photography used mostly out of place.
2. 2. Using photography to suit the need of a particular situation and make it serve strictly the mood and emotional content of a scene.

14. What kind of cinematography would you have very negative feelings about?

I hate the first - when I see slow motion used out of place, strong backlight that kills the facial expression of the artist, bleaching the background without purpose, opticals that jar the flow of the visuals etc. of the first school followers.

15. How do you keep up with new trends and ideas in cinematography? What are your sources of information on new developments?

By seeing latest films from Europe, and from photographic journals.

16. What is the level of your interaction with other cinematographers? What issues would you discuss with your cinematographic colleagues?

Mostly around laboratory work, new emulsions advertised by manufacturers, new type of lights available etc.

17. Are there enough forums for debate and discussion on cinematography? What are the role of the associations, guilds and other organisations of cinematographers?

No.

18. What is your opinion about the practice of giving awards for cinematography? Has this helped raise standards? Has it encouraged unhealthy competition and patronage networks?

No harm – if the judges are knowledgeable people.

19. Do you think that cinematography gets the critical attention it deserves in the press and in film criticism/reviewing?

The critiques may not be critically able to evaluate a cinematographer's work unless of course he is familiar with evaluating visual art as such. It may be better to leave it alone than to make pretentious opinions on a sincere work.

20. Do you think that the ordinary viewing public in India is sensitive to and aware of the contribution made by the cinematographer to a film or television programme?

Not unless it is extremely bad.

21. Why do you think there are very few women in the profession of cinematography? And why are so few women taken on as assistants?

They prefer to be in front of the camera than behind it. The trend is changing; we have a few good filmmakers among women.

**22. What do you think of the payments given to cinematographer?
"Cinematographers are well paid but highly exploited." - Comment**

I do not think the remuneration for the cinematographer has risen proportionate to the inflation. The associations and unions have fixed up standard rates but they do not go in for a survey of the actual conditions of work and payments. There is a provision for a *bhatta* (daily allowance) for all the technicians and specialists including directors of the film during the days of actual

work. But since directors and cinematographers do not clamour and claim this, no such payments are made. The big-budget films should pay decently to the director and cinematographer. Low-budget films also should have a minimum norm in paying the technicians.

23. What is your opinion on the payments and working conditions of assistants, light boys, grips electricians etc.

Working conditions have certainly improved like accommodation, food, transport etc. But in the last 50 years nothing has been done to regulate working hours. No human being is capable of working for 12 hours continuously without losing efficiency. Some producers claim that they have completed shooting for a film in 20 days to 25 days. But in actuality this means 20 days and 20 nights or 25 days and 25 nights.

On location the work starts early in the morning and even in normal cases shooting goes on until 10 p.m. This is about 15 hours. But in the majority of cases work continues till 2 A.M. That is about 19 hours. This results in making the technician half asleep all the time of the film shooting. He is not working at his full efficiency. Even in films that are termed "Art" the working conditions are the same. Film making perhaps is the most disorganised sector of the money-making business.

24. Do you find yourself having to become involved in protecting the interests of the camera crew often? Why is this so?

There are no competent authorities for the filmmaking industry to regulate working hours, working conditions and compensations. We have Film Chamber, Worker's unions and trade associations. The unions are satisfied with good wages for the workers but do not care about working conditions of the

workers. Since I have worked only for films of my choice, I did not have to face this problem too often. But I admit there were embarrassing situations. I do feel hurt when a co-worker of mine (this includes assistants, light boys and other) is insulted or treated badly. Now that filmmaking has been declared an industry, I hope there would emerge rules and regulations to improve working conditions

SECTION V: Technical Questions and Issues.

1. Pre-production planning

1. Given a choice between Film and Video what would you like to work on and why?

Even though I prefer shooting on film I would like to have a video camera side by side (in Europe and America all film cameras are provided with Video view finders and simultaneous recording which makes it possible to check the shot immediately after execution).

2. What are your preferences in Film & in Video Accessories & Gadgets?

Till-date I have worked on movie cameras without any video accessory.

3. What are the different meters that you feel are essential to your work, and why?

Any one good-exposure meter is good enough, but if you have one meter for incident light and another for reflected light readings it would ease work. For a long time I had only a weston-master and I used to go on the reflected readings. Now I have two: Sekonic and Luna. The Sekonic is used during lighting to measure incident lights and Luna is used to measure the final lights reflecting from the objects, to decide on the aperture for the shot.

4. What are your preferences in terms of aspect ratios? What, in your opinion is enhanced, and what is lost, when you move from one aspect ratio to another?

There is total confusion about aspect ratios. At the final exhibition level in the theatres the screens have become bigger. The mask used on the projector gate is anything, they call it by different names. During a film festival at Trivandrum, in the press previews I found the picture square. On enquiry I found the mask used on the projection was locally made and they had tried to file away a part of it and bring it to 4:3 ratio.

We, the cinematographers are the worst affected in the modifications of the old standard academic proportion of the frame. Our framing of the picture is thrown to the winds and often find the image we carefully composed, mutilated at the theatre. In the high time it is standardised to a fixed proportion. 1:1.33 was good but 1.66:1 or at the most 1.85:1 can be adopted. Beyond that the elongated frames lose on close-ups and waste a lot of space on the frame. Stressing on objects on the screen by placing them compositionally on the frame becomes difficult. Cinemascope and cineramas did not do much aesthetically to promote the art of Cinema.

5. What are your preferences in terms of film stock, and why?

There is not much scope in choosing the stock in India. Until recently the choice was left to the discretion of the permit issuing bureaucratic machinery with an advisory panel of Film producers (financiers). We shot with whatever was available. Now Eastman or Fuji is the first choice, and then only Geva or ORWO. I do not think any production uses ORWO-colour these days. Even for prints ORWO is no longer, used unless of course for economic reasons.

All the feature-films I shot after “*Kodiyettam*” were in Eastman colour. For *Elipathayam* the first few prints were taken in ORWO-colour. But when a print was to be sent for the London festival it was decided that a print should be taken on Eastman colour positive. The print was much better in quality. By the time the next film was produced, from the first answer print onwards Eastman colour positive was used. Because of the permit system the cameraman and sometimes even the producer could not have the freedom of choice.

6. Which camera/s do you prefer to work with, and why?

About the choice of cameras the conditions are the same as the choice of raw stock. The producers themselves do not own the equipments. The hired equipments arrive just before the shooting commences. Even if we take tests there is no possibility of the tests processed and printed and seen before the shooting commences. In most of the cases it is the producer who decides from whom the camera can be hired. Since most of the equipment hirers own Arriflex cameras of varying models, 90% of Malayalam films are shot with Arriflex cameras. The choice is only between the antiquity of a particular camera and another.

7. Which lenses do you prefer to work with, and why?

Most of the films I have shot are shot on location. I use block-lenses for 90% of the film. Unless there is zooming action in the shot I do not mount the zoom on the camera. Resolving power of the block lens is higher than the zoom lens. I find the 35mm, 50mm and 28mm are the maximum used lenses in the films I have shot. Zoom is sometimes used for its telephoto focal lengths. 18mm lenses become of use in a few shots for its exaggerated perspective.

8. Given a choice between working in a studio and a location, what would you opt for, and why?

The choice between location shooting and studio shooting is not based on photographic point of View. Location work gives the visuals a real authentic look which is very difficult to achieve inside the studio. Shooting on location is much more difficult than shooting inside the studio as far as the cameraman is concerned, from the point of view of lighting. But since the cinematographer cares more for the overall excellence of the film, he puts up with the difficulties and problems of camerawork on location.

My choice is for location shooting. As far as Malayalam film is concerned, if I may say so, I am responsible to a great extent in pulling out Malayalam films from the Studio.

9. From a cinematographer's point of view, what typically are the things most neglected and forgotten at the budgeting and production planning stage?

Most of the Film Producers do not consider it important to plan ahead a production since very few of them are full-time producers. This is one of their activities and on location; they or their representatives create confusion.

10. How much say and involvement do you have in discussions about sets, locations, costumes and props? What are the things that you think have to be kept in mind when discussing these questions prior to production?

I am kept aware of the work going on at the locations before the shooting starts and am shown the locations selected by the Director and art-director. My point of view is how to solve lighting on location, space for keeping

the lights etc. Invariably these problems crop up and we solve them to the best of our ability.

11. "If we do a comparative analysis of the heads and amounts of expenditure in an average film, we find that the least amount of money is actually spent on what the film is going to end up looking like" – Comment.

Very true.

12. What are the different kind of tests that you are able to do, and would like to do prior to filming (In terms of equipment and stock tests)?

Stock tests are not important because we get all the data necessary from the manufacturers. Camera lenses are to be tested, as well as the image steadiness of the camera. We did have problems when once we hired the equipment from the Kerala Govt. owned KSEDC camera equipments. The laboratory reported out of focus shots in the rushes. It was traced to a 35mm lens that they had supplied. We had to re-shoot the portions.

13. What is your opinion on the general standards of maintenance of camera equipment, lights and accessories?

With individual exceptions, the conditions are generally poor. Even the Govt owned establishment has set poor examples.

14. To what do you attribute the absence of innovations in technology, equipment and accessories, especially with relevance to Indian conditions? What can be done to remedy this?

This is true about all industries in the country. There has been some work done in the making of accessories, like trolleys, tripods, cranes, and bodies of lights. Even still photography cameras are imported. With the licence-permit

system, for industries to start new ventures, they have to face a lot of difficulties. Now that there is more freedom let us hope it would reflect in the Camera manufacturing enterprises too.

15. What in your opinion is the importance of lab reports on stock tests?

When you have procured the stock from the manufacturer or their authorised dealers, a test is not necessary. But when you keep the balance of the unexposed stock with yourself and use it later, tests become necessary.

16. How do you decide upon a particular laboratory?

Theoretically the cinematographer should be able to choose his laboratory. To an extent the producer tries to choose the same laboratory. But ultimately since he is the man paying, he chooses laboratories which would allow financial adjustments, easy terms of payment, and who maintain good public relationship. There are not many laboratories to pick and choose at Madras.

2. Lighting

1. When you begin thinking of a lighting design for a film, do you work towards an overall look for the entire film, or do you work out your lighting scheme in terms of different sequences, scenes and shots.

Since most of the films I have shot have been done on locations, a plan for the whole film for lighting was not possible. Especially since I use available light to a great extent, the lighting pattern is decided to suit the providing lighting conditions at the locations. The only planning is in estimating the type and number of lights to be carried to locations.

In a film that I photographed and directed, a character is freeing himself from fetters and the effort makes him fall violently and die. The place was a veranda and the grills along one side of the veranda were casting shadow patterns on the floor. To take advantage of the shadow patterns we finished lighting, quickly creating patterns with our artificial lights. The shadow patterns aped the grill shadows and created an atmosphere of total lack of liberty for the person entangled in the lighting pattern.

2. How do you realise 'the look of a film' in your work? Please talk about this in detail, with examples in terms of lighting, framing, saturation, colour and movement.

I do not think I plan the look of a film in advance. But having imbibed the spirit of a script (Example – the film *ANANTHARAM* – there is a child's point of view in the major part of the film, the rest you have more whites than usual in the rooms, windows, walls which probably depict the view of a schizophrenic). It is definitely not pre-planned but this characteristic of the spirit of the script creeps into the visual somehow. Instead of the cinematographer himself analysing this, a serious student of Cinema should make a close study of the few serious Indian films.

3. How do you begin to light a set?

Since I light up through bounced light, after discussing the shot with the director, I decide where to put my bouncing reflectors first (now Thermocol sheets), and bounce from it 2KW fresnel halogen lamps. Then try the character movements with dummies. To accentuate the light on the faces slightly, we use baby lights (500 watt fresnel halogens). Then to bring in a feeling of windows and doors depending on the exterior light situation, throw broad lights with filters of

butter paper. Then put appropriate filters for colour correction. Then measure the lights at select points and compute the aperture.

4. Do you light for the frame, or for points of emphasis within the frame?

Does Lighting determine the frame, or, does framing determine the lighting.

Please answer with examples from your work

It is always the frame that decides the lighting.

5. What are your preferences in terms of specular/ bounced/ diffused lighting, and why?

Bounced and diffused lighting. It is natural and pleasing to the eye. It does not exaggerate but only states, it does not distort, it only expresses.

6. What kind of filters do you use, in what contexts, and to what effect?

If possible I avoid filters (here in reference to colour films). Colour films are made to suit the colour composition of the light that illuminates the object. To correct the colour content of the light, to modify the colour temperature the Wratten 85 filter is used when the shooting is done with film stock designated for artificial light. I do not like any more filters or diffusers in front (or behind) the lens. I have avoided using the natural density filters. Instead I used to cut the shutter of the camera.

7. Do you like to work for a 'lit' feeling or for an 'unlit' feeling? Why?

I like an unlit feeling. More natural and credible.

8. Do you ever mix Tungsten and Daylight? In what situations? Why?

The films I have shot have been made on location, therefore the daylight shots are invariably mixed with daylight. For an interior shot we do not avoid the exterior seen through the window or door.

9. "The Film Industry wastes a lot of power. There is a lot of unnecessary lighting in films today" - Comment

It may be true with the "Exhibitionist" type of lighting. The industry imitates the 'arty' because it cannot create real art.

10. Do you ever consciously make an effort to use fewer lights?

No, but when you are only aiding the available light on location, the result is equivalent to using minimum lighting.

11. How much room or leeway do you give to the possibility of changes in your lighting scheme in terms of variations (clouds, sunshine, changes in the weather etc.) in the light condition in your locations?

If one wants to match the existing lighting conditions as one starts lighting and to change it halfway through the lighting or rehearsals, one may have to use dimmers (adjustable resistance in the electrical circuit). But this would involve a lot of lighting energy being wasted. Even when we draw power from a generator, what is available to the Indian cinematographer for moderately budgeted films is 50 kilowatts. When one adopts bounced light techniques - this becomes effectively 25 KW. To my knowledge no cinematographer of Malayalam films attempts this.

12. Do you incorporate such variations into your lighting pattern, or, do you insist on taking shots at particular time and only under pre-determined light conditions?

It is always a compromise when it comes to matching the exteriors with the tungsten lit interiors. We try to adjust the lights, if the exterior varies pronouncedly. Waiting for the right lighting conditions would remain a dream for the Indian cinematographer. We wait for the stars and not for the sun.

13. Do you insist on working at a particular aperture setting for a film? Do you have a favourite aperture setting? Why?

No again it is of the same reason that since I match with the exteriors it is not convenient to work with a constant aperture. We do maintain a record of the shots and I find I have used apertures varying from T1.8 to T22. While printing, every negative varies from shot to shot. It is the final print the matters not the intermediate negative.

14. What makes a location or a set interesting to work with in terms of Light? What can we say is the 'feel' of a location?

Apparent depth is achievable through lighting, but real depth comes from deep focussing (Higher apertures). Variation of colours also helps. Block lenses are used for 95% of the film. Zoom is used where zooming action is intended and sometimes to avail of the Tele focal length of the zoom.

15. In a given location or set, how do you consciously incorporate natural light sources, available practicals like lanterns, firelight, candlelight etc., architectural features like pillars, doorways and different elevations in the designing of your shots and lighting?

Lanterns, firelight and candlelight can conveniently be placed to enhance and help the composition and to highlight important objects, or sometimes even spot the character. When it come to doors and windows they help not when they are right across the frame in the background, but on the sides

throwing a highlight pattern in the frame. Pillars and doorframes can be advantageously used in balancing the frame by using them in the right place in the frame. They are especially useful in trolley shots when the camera travels across, and the movement created gets an enhanced value.

16. Do you ever experiment in terms of playing with differences in exposure for different takes of the same shot?

No. Since I calculate the exposure taking into consideration the highlights and shadows.

17. How do you work in the possibilities of camera and character movement into your lighting scheme for a given shot? Please give at least 3 examples from your work.

One of the most difficult shots was in "*Elipathayam*" where the rat was supposed to move in the circular light pattern of the torch as Unni was chasing it. We put a special metal cut out on a baby light, and from the top of a table the beam was panned as the rat ran helter-skelter. It did not look all right through the camera viewfinder since most of the time the rat was in the shade and under the table and the cot.

Then a light-boy (Srikandhan) offered to do it from the ceiling. He held the baby light with both hands and clung to the ceiling using his legs like an accomplished acrobat. The floor was cleared. I was standing right on the ground with camera in hand and a helper by my side, and the rat was let out. We had one 2KW light bounced and spread over the whole area. It was for the chaser and it just gave an exposure as he crossed the frame. After one or two rehearsals (The Irula expert was able to retrieve the rat every time, though we had half a dozen spare ones) the arrangement was a success. We could see the rat most of the time, the light-boy's feat was admirable, following the rat with his beam of

light. We must have taken several shots, the one in the film is the final edited result.

There is a shot in "*Kathapurushan*", where after completing the last rites the character is moving away from the funeral pyre. We had a cloudy sky that day and the flames stood out. We had put Junior lights without filter to cover the characters walking by the side of the pyre. The light's reading on the face was a few foot-candles above the diffused sunlight. The whole lighting became so simple because of the diffused sunlight at the time. Even when the pyre went out of frame as I followed the character away from the pyre, the presence of a flame nearby was seen on the character.

In "*Anantharam*" there is a sequence when the two brothers are studying in their study-cum-bedroom. There were two table lamps as source of light intended for their tables and placed accordingly. Instead of lighting with conventional lighting we changed the lamps of the table lights into photofloods. It created the right highlights and shadows. There is however a mild filler from the bounce-board (thermocool sheet). The result was good. As the characters moved away from their light sources, their face light changed accordingly and accurately.

18. Do you like to use the idea of moving your camera between different intensities of illumination in a given space? Or, do you prefer evenness in terms of lighting on the set?

It looks more natural to use the camera between different intensities of illumination in a given space.

19. Have recently developed faster film stocks changed or had any impact on your overall philosophy and pattern of lighting?

When you use slower film, even in night effect shots it is necessary to use a mild filler. In the shots taken with the high-speed films this filler is not necessary. In case you want absolutely black areas, you may have to prevent the stray leaking lights to these areas. Better to work on a lower level of lighting and calculate exposure based on the highlights only.

20. When do you say that the lighting for a shot is done?

I told this a little earlier - that before finishing lighting I get a complete rehearsal to check everything. Most of the guesses may be correct but the rehearsal gives you an accurate picture of the lighting. Since there is need for many rehearsal, lighting can be completed within that time. Most of the time there are minor changes in the shot and therefore lighting is really over only just before the take.

C. Framing

1. "The presence of a video monitor or video assist diminishes the autonomy and authority of a cinematographer on a set in terms of determining the framing of a shot" - Comment.

I do not think this is true. When I frame a shot I insist the director sees it and agrees with the framing. Rarely have we differed on this point. For the cameraman, his framing is for an individual shot. He may not have the whole sequence in mind, whereas the director has the full sequence and the editing pattern in mind. There should be mutual consultation before finally fixing the frame. A video assist would help a lot in getting the shots as accurately as envisaged. Many of the retakes are safety takes which can be avoided if a simultaneous video recording is done. I wish all hired cameras had this provision

of add-a-vision. Each film can save a few rolls of raw stock with the help of video assist.

2. How do you guide the viewer's eye within the frame? Through graphic elements, symmetry/ asymmetry, volume, light or colour

By colour composition and light distribution, placement of object in relation to other objects in the frame.

3. What are preferences in terms of working with different camera angles?

The camera angle should be decided by the total composition of the visual. Even in close up of a face, a change in the camera angle changes the appearance.

4. How do you create depth in a frame? With the help of light, or colour, or both?

Depth is created mainly by focussing. Depth of focussing creates greater depth – lighting helps – creating shadow areas and light across areas along the field creates an apparent depth. Some of the colours are termed receding colours and some others, forward colours. If a red object is kept in a blue background, there is an apparent feeling of distance between the background and the object. For feature films these problems rarely appear but in animation films, these problems take an important place.

D. Lenses & Lensing

1. What are your preferences in terms of working with block and zoom lenses?

Block lenses are preferred. Zoom is used only if zooming is required for the shot. Sometimes when telephoto focal length is required the Zoom is mounted and used.

2. Which makes of lenses are your favourites? Why?

With hired equipments there is not much choice. What we come across are Bausch and Lamp, Zeiss, Cooke, Tessar etc.

3. Do you think that variations in focal length have expressive and subjective connotations? Please give examples to illustrate your opinions.

Focal length of a lens governs perspective of a visual seen through it. The relative magnification in front of it is different in relation to the focal length. This in turn affects the apparent speed of movement.

In "*Utharayanam*" the newspaper boys, as soon as they get the newspapers from the distributor, run to their different destinations to sell their lot in competition with the other boys doing the same. A wide-angle lens (28mm) was used. The boys stood in front of the camera, almost touching the lens and as the sound of the camera-start they run away from the camera. They fill the frame in the beginning and become tiny figures as they go away from camera in no time, and eventually disappear before the bottom line of the frame. The shot was very effective.

Usually close ups are taken with normal lenses. In "*Anantharam*" we have a close shot of the compounder of the Doctor's clinic beating the boy. A wide-angle lens (28mm) was used. There was a slight forward and backward movement of the face of the compounder which was exaggerated by the lens and

his protruding eyeball were magnified in the forward movement creating a strange effect on his face, a fearful look.

In "Dikkatra Parvathi" (Tamil film) the 18mm lens was used to take a close up of the mother in front of the hut looking out for the arrival of her wayward husband, and the one-year-old weeping baby is sitting deep inside the house crying. Though slightly distorted, the whole shot told a story. Because of the short focal length of the lens - the mother, the whole interior of the house including the child was in focus.

4. Does working in different aspect ratios have any relationship to the kind of lensing that you would go for? Compare between film and TV, and between 16mm, 35mm and cinemascope.

Rarely have I had occasion to shoot with other aspect ratios than the normal 4:3. When you make a still photograph, you do not have to confine to pre-decided aspect ratios. It is not very difficult to adapt to any aspect ratio. Composing with different aspect ration comes naturally to a versatile cinematographer. There has been undue and hyped importance given to different framings. It is all about using the space well and artistically. One disturbing factor with TV is the misuse of the wide-angle focal length especially in news work. I find ugly distorted faces of the human being on the TV screen.

5. What in your opinion is the subjective and aesthetic factors that makes zooming different from moving the camera itself?

While zooming, not only the framing of the shot but the whole perspective of the shot changes. When the camera itself moves, the relative magnification of the objects remains the same and therefore there is no obvious change in perspective. If there are too many faces or objects in the frame, it

would be a better transition from the long shot to close up with a trolley than with a zoom lens.

E. Movement

1. What is the way in which you approach movement? Do you see movement as a way to move from the whole frame into its details, or to move from details towards the whole?

It is only a personal preference and it may not be objective - I prefer to move from details to the whole.

2. Do you think that movement affects the subjective experience of the duration, or 'time value' of a shot?

Probably it depends on how the movement is planned. There are shots so well planned that we do not feel the movement at all, in such cases the time value of the shot becomes unimportant.

3. When you are thinking of revealing a space in your shot division or breakdown, do you prefer to work in terms of a series of camera set ups that move the viewer within the space, or do you prefer a fluid mobile camera on tracks and trolleys?

There cannot be a hard and fast rule in this case. There may be situations in the script or sequences which would dictate the use of either method.

4. What are your preferences in terms of a choice between a stable frame, which allows for movement within it, and a dynamic, mobile camera? Why?

This should again be determined by the situation and sequence in the script. I do not have a permanent preference for either.

5. What are the common difficulties and problems that you face in executing camera movements?

The tripod and lenses used are the limiting factors in camera movement. When you use a wide-angle lens the scope for movement dwindles and with longer focal lengths, the distance between the object and camera has to be high and therefore the shot is not feasible in limited space. The limitation in the focal length of the lens affects the perspective one would like to have. The shot has to be compromised.

6. In which conditions would you consider taking the camera off its tripod and going in for handheld shots?

I quote the example of the film "*Kodiyettam*" - a good number of sequences were to be shot inside the lorry. The two characters in these sequences were the driver and his principal aide and assistant - the cleaner. It would have been impossible to use the tripod and take the variety of shots seen in the film new. I chose to shoot with a hand held camera; the alternative was to use a vacuum fixed camera-head. That would have cost quite a lot. We saved a lot of money and more number of shots was taken in the limited time. All the shots taken in the films I have worked in, where it was needed to take shots inside cars, buses, bullock carts and during processions with unfamiliar crowds I have done the shots with a handheld Arriflex.

7. What is your opinion on the use of steadicam shots that are increasingly evident in films today?

If the script demands such a shot the steadicam can be used. But to me the movement looks unnatural since the shot is to imitate the perspective of a character walking, but in reality it does not give the correct impression.

6. Colour

1. Do you think of colour in any way other than only in terms of registering the presence of colour?

If you use it understandingly as in painting, it is the ideal use of colour. Lot of colour exists in nature. For effective visuals these can be used if one has a good colour sense. A good cinematographer is expected to have this colour sense. Natural and pleasing colour exists in nature.

2. What are the personal associations and cultural connotations that you have with different colours? Do you make use of these categories in working out a colour scheme for a film?

I am aware of these psychological aspects of colour but in actual practise we do not follow this. Your eyes get used to colours in your surroundings, and these impressions come into effect when you choose colours. I feel these can vary from people to people. Black in the west is associated with sorrow and tragedy. By usage we also are aware of this association for black, but even then "black" does not evoke sorrow in us spontaneously.

3. What are your thoughts on monochromatic rendition and on working for deep, saturated colours as stylistic options?

It is the theme and content of the sequence that should choose between non chromatic rendition or saturated colour.

4. Do you basically think of a frame in Black and White terms and then add colour (as ornament or flourish), or is your conception of a frame always in vivid colour?

Conception is more or less with colour.

5. How do you work with the art director and costume designer to develop a colour palette for a film?

I do not basically involve with the work of art director or costume designer but only try to improve on the basic ideas they have.

6. What is the kind of work that you do on colour in the laboratory?

Only while grading and printing, by suggesting improvement and telling them what we really want to achieve.

7. To what extent if at all do you play with the colour balance on video?

My experience with video is very little. The initial white and black balancing is however done.

8. Do you find any difference in the rendition of colour in video and film?

With the present improved quality video, the difference become negligible.

G. Laboratory & Post Production Work

1. What are your thoughts on the grading process?

If you have the same grader working for your films he would be able to grade to your taste without you interfering during grading. Leave it to them, they will do a better job than if you interfere in grading every shot. But it would be

better if you help the grader while correcting the results of the first print and then on. We have been correcting upto the fifth and sixth prints.

2. What is the extent and nature of experimentation that you would do in the laboratory?

Not much, excepting making the print lighter or deeper.

3. What is the input of the work in the lab into the ultimate look of a film?

Clean handling of the negative without adding dust and physical marks to it. In liquid gates, see to it that the liquid itself is clean. Though the laboratories do good work in processing, grading and printing they sometimes miss in treating the negative with care and delicacy. The look of the film also depends on its cleanliness.

4. What is your opinion on the standards of Indian laboratories? What can be done to make for better standards and working conditions in the laboratories?

We have access to the inner workings of the laboratories. But I find smaller laboratories - where the personal relationship between the employees are better, where they have a pride of achievements of their organisation - give better results. I have admiration for the laboratory worker who in spite of poor working conditions, turns out remarkably good work. It is up to the management to inform and continuously educate and inspire their technicians.

5. What in your opinion are the essential qualities and features of a good film print?

Aptly graded and without physical injuries.

6. How much space is there for a cinematographer to intervene in video post-production - say in terms of colour rendition and image brightness? If a cinematographer's presence is taken for granted in a film laboratory, why is he/she generally absent from the entire process of video post-production?

I have not done much work in Video. But while transferring the film to video from film print we do sit with the telecine people and tell them when there is any distortion.

8. Viewing Conditions

1. What is your opinion on the standards of screens and projectors in cinema theatres in India? What can be done to make for better standards and viewing conditions in the theatres?

It is very true that we have no overall standard or a set-up to maintain the quality of projection to pre-set standards. There is need for an organization with enough powers to inspect the projection arrangements in theatres. There are rules governing the conditions of projection, but there is no implementation.

1. Screen brightness
2. Proportions of the screen
3. The mask on the projector gate.
4. Steadiness of the film at the gate
5. Distance between the screen and the viewer.

When I join the laboratory-man to check a print, he would say the print is slightly light since the projectors at the C. Class theatres do not give you a bright screen as in the A class theatres. The carefully composed picture appears on the screen of a particular theatre mutilated. The image on the screen vibrates

vertically and the times horizontally. When we had to test the steadiness of the camera frame we made a test exposure of 100 ft. We could not get a projector which was free from unsteadiness at the gate. The projector at the preview lab theatre was no exception. One is not sure of one's careful work reaching an equally good projection.

2. What is your opinion on the quality of telecine transfers in television stations?

We cannot condemn outright the telecine transfers at the TV stations. I have come across some good transfers. But when a film I shot and directed was telecast from Trivandrum, the picture became dim when the subtitles appeared and brightened up in frames where there were no subtitles. At NFDC Madras, the transfers are as good as the equipment can give. Probably the same type of equipment was used in both the places. The human factor counts. It only shows that at one place the workers are dedicated and get the best out of the equipment available to them. How to improve the quality of the workers is a national problem.

3. What is your opinion on the quality of transmitted video signals on television (including satellite TV)

Good with exceptions.

SECTION VI: Aesthetic questions

1. Do you adapt different styles in different categories of filmmaking?

No.

2. Can we make a distinction between 'realist' and 'expressive' cinematography? What are the markers of this distinction?

That is how you interpret Reality. A realist tries to make his images real and credible. Expressive Cinematography pinpoints certain aspects of this reality. We need not make such a difference between them.

3. How much freedom do you give yourself in terms of changing your style? Or, do you work towards maintaining a consistent stylistic signature in all your films?

There is no conscious effort on my part in establishing a style of my own. I do not deliberately imitate others. As far as Malayalam film is concerned, I was instrumental in taking the Malayalam film shooting to authentic locations. Even authentic lighting conditions were chosen from Nature. While doing this I had to break established laws (practices) of the Malayalam films. I remember the lines of the poet – "Sometimes it smiles and sometime it weeps". This need is reflected in the shots of the river in "*Olavum Theeravum*".

4. Subrata Mitra once said, " Could *Pather Panchali* have been shot with Panavision cameras, and sophisticated accessories?" - Comment.

I agree with Subrata Mitra totally. New printing processes have not improved the literary quality of writing. 10 years after "*Pather Panchali*" we shot "*OLAVUM THEERAVUM*" we had only an Arriflex camera with just three lenses the 28mm, 50mm and 75mm.

5. Can an excess of technological gadgets sometimes be a hindrance to the practice of cinematography, and to creative freedom?

I would just qualify your statement by changing the word 'creative freedom' to 'creative effort'.

6. How does the presence of the human body affect the decisions that you take in terms of lighting for a frame? What is the relationship of the image size of your frame to the volume occupied by the human figure within it?

If it is in terms of feature films, the human body or the character becomes the most important object of the frame. The space occupied may not count, but the lighting certainly takes into consideration the presence of a character.

7. What are the different elements that you take into consideration when you position the human body within the frame? Do these elements change when you move from a studio set to a location, from an interior scene to an exterior scene and from daylight to night?

The position of the human body would have to be decided by the other important and eye catching objects that can occupy the empty space of the frame. In the film '*Nekkukuthi*,' there is a very unusual frame of the granite temple structure overpoweringly occupying three-fourths of the frame and the garland-weaving girl modestly occupying one fourth of the frame. That was typically a frame that defined the character. Studio and location, night and day are not the deciding factors.

8. Are there any differences in the way in which male and female figures are lit and framed?

To the extent that their standing and sitting positions differ from each other.

9. Are there any differences in the way in which, the eyes, the face and the body are lit and framed?

Each face is lit treating it as an exclusive object. It is the variations in lighting from the general conventional way that makes lighting an art. The eyes and the nose decide the position of the Key light and the Key decides the position of the other Lights. The body too needs individual attention.

10. Do different characters in a narrative demand the application of different lighting codes and conventions?

Yes.

11. "The visibility of the Star in mainstream films demands its own form of lighting." - Comment.

The star becomes the heroine or hero in the story structure of the film. Even poets of yore described the physical appearance with great care. In a story-film there is nothing wrong in giving them special care while lighting.

12. Do you light up the space and then allow the characters to move within it, or, do you light the characters and by doing so evoke the space?

Do the overall lighting first and then make up the differences on individual faces.

13. "Pragmatic considerations and Time Management determine the aesthetic of a film" - Comment.

Pragmatic planning and time management do not give a soul to the film. If they could provide the aesthetic element of the film, we could have evolved a formula for aesthetic creations.

14. "Editors spoil cinematographers labours" - Comment.

Editing by itself is not an independent activity in the creation of a film. The script and the Directors' discretions decide the using of a shot, its length, its position in the sequence etc. and therefore the manner a shot is used is for the ultimate good of the film. The cinematographer's labours should subscribe to that end.

15. Do you shoot an urban setting differently from a rural setting?

No.

16. "There is a preference for the panoramic eye in the depiction of the rural, and for the dynamic, mobile eye in the depiction of the urban" - Comment.

A statement for its own sake. Where is the dividing line between the urban and rural?

17. " The mobile camera (extended tracks & cranes and steadicam) have transformed the cinematographic experience and effect." - Comment.

The cinematographic experience has continually changed from its inception. When Griffith invented the close up, the change for progress started. It continues. The mobile camera is a step in that progressive direction.

18. Do you imagine the sound track when you are shooting?

No, because I do not have that sensitive an ear for music.

19. "Conception of a sound track gives rhythm to the shot taking" - Comment.

Very true. It is evident when we picturise songs.

20. Is shooting a beautiful object beautifully good cinematography?

Shooting an object effectively and reproducing its beauty is good cinematography. It need not be to reproduce it deliberately ugly is also good cinematography.

21. What is the notion of beauty that you aspire for? What are the aesthetic goals that you set yourself?

The beauty that is deeper than the physical vision. To take the human being to a higher and nobler perspective.

22. Have you seen the concept of 'Beauty' change in the course of your career as a cinematographer?

As one grows mentally, the perception also changes. To that extent the conception of beauty must have changed.

23. Why is the pursuit of 'Beauty' alone the motivation for so much cinematography? Can there be other motivations?

Because cinematography is the art of the visual. After all beauty is in the mind of the beholder.

24. Do you find that there is a generally accepted notion of an 'aesthetic minimum' for cinematography today? Does this constrain or enable you? Do you have your own, personal 'aesthetic minimum'?

Because the cinematographer is a socially responsible human being depending upon the society, he lives in does have an aesthetic minimum. I do have my aesthetic minimum. It is evident from the films I have worked for, also from the films that I have to work for.

25. What are the aspects of the cinematographer's craft that you find unrealised in your working life? Just as a Director has the freedom to discuss an 'idea' and develop that into a script or screenplay, why does the cinematographer not have the same freedom to develop a specifically cinematographic conception into a full-fledged script!

I came into films as an accident as explained earlier. I realised that Cinematography is not just technology, much after I started pursuing it. Cinema's greatest tragedy is that it reaches the viewer through commercial circuits. Now that the cinema can reach the viewer at his residence through the medium the Viewer will be able to pick and choose. The films will then be representative of the good or bad taste of the people at large.

As it is a cinematographer cannot aspire to give shape to an idea of his, because finance is not readily available for experimentation. Satyajit Ray's "*Ashani Sanket*" (Distant Thunder) was a visually planned film. The theme was a manmade famine. The film starts with some remarkable visuals of nature with the horizon and sky clear and beautiful. At the end of the film with a low angle shot the same horizon and sky above is ugly with faces of starving people. But our critiques and *pandits* of cinema did not notice this highly cinematic film. They accused it of picture postcard /photography and condemned it. Like many of his other films, this film too needs deeper study and analysis from a purely visual point of view.