

## **KK MAHAJAN**

Basically my main interest was not photography; it was Sports. I left Delhi University and joined Punjab University because Delhi Univ. did not take me into their cricket team. So I left DU, went to Punjab and played for PU. Cricket and badminton were my two basic interests. After graduation, I had applied to become a coach either in cricket or badminton at the Patiala Sports Institute. But someone told me that the Film Institute had recently started in Pune to train people in film craft. I applied to the FTII for cinematography, not thinking that I'd get into the course, more for the trip to Pune and Bombay. I hadn't done any photography. Only taking photos in picnics or school matches or of friends, that kind of photography. I had done nothing more than that. And fortunately or unfortunately, whatever you say, I got the call from Pune for the interview and then from the Patiala Institute.

I came to Pune and I found that many of the students had done a lot of photography – other than those who had come for editing. They were carrying a lot of photos and transparencies and things like that. I had nothing on me, so in any case I was not prepared. Whether I was taken in or not did not make any difference. So I just went for the interview and they asked me questions, including why I wanted to join. I said I don't know anything and I want to learn, that's why.

On the interview board, there was Bimal Roy from Bombay and the cameraman Dilip Gupta. These two were from outside. The rest were from FTII. In any case I did some kind of interview and I came back. I never expected to get through, but the next day when I went to see the board, my name was there, although it was last.

**But why did you decide on cinematography?**

In a sense because I had seen one shooting in Delhi. That was the first time in my life that I had seen a shoot. I happened to pass the UPSC office in a bus and a shoot was going on. I got down from the bus, and just watched the shoot for about 3-4 hours. Of course, it was a very magnum kind of unit. Big lights mounted on lorries and things like that. The cameraman sitting near the crane - and I found that the cameraman was the one person who was controlling the whole thing. Everything happened according to his instructions. So that thing, I think, stuck in my mind. That if at all I land up in films, I will be a cameraman.

**The films you saw in your time at FTII, was there anything that interested you, influenced you?**

Yes. In the sense that that was the time when the French cinema was at their new wave. Lots of new directors coming into French cinema, lots of new technicians and they changed a whole lot of conceptions. In European cinema and not only in the French, and many of them were quite successful. Both critically and otherwise. They ran, they got a lot of acclaim and all that helped me a lot because they, their technicians kind of broke all the rules. They would not stick to a certain kind of photography or something that would always look good. They broke all the rules and they went their way and by doing that they showed that even by doing this you can make it look good or the effect is very good.

The final effect is very good, like Godard's first film, what's the name – *Breathless*. You see Raoul Coutard - the cameraman - has not used any light, he has exposed for the street. The entire action is happening in the dark but people accept it. Everybody for so many years had put lights in the street but he did not

bother about it. He did what he felt was right and everybody appreciated it. The main character goes into a tunnel. Going in to the tunnel he saw darkness, and so did the audience (ha, ha). The screen is dark. When he comes out of the tunnel he sees, so well fine, we see. And you enjoy that seeing. Another person would have put some 20 arc lights so that the tunnel is seen and also the character running in the tunnel is seen.

Working with very few lights, working with no lights and using some other means of devising things - through this we achieved results that people appreciated, like my first film *Bhuvan Shome*, where we hardly used any lights. My second film, *Sara Akash* had just a few photofloods with which the whole film is shot in. A lot of windows, *Sara Akash* had lots of windows. But photofloods are these normal kinds of bulbs. In my third film, *Uski Roti*, again hardly any lights were used. And I did a lot of night work in the film but we would light with very few lights. And my fourth film, *Maya Darpan*, is shot entirely with photofloods, no other lights. Again in that film there is a lot of indoor work but the only lights used were photoflood lights. No babies, no solars, no multi-20s. Nothing. Only photofloods.

**Was this also a conscious decision keeping in mind the budget?**

That's what I am saying. The conditions were that you couldn't afford to have lights. So what to do. There should be some alternative to do it, and you took the alternative and did it.

**Do you remember some scenes that were a challenge to work towards in FTII?**

Kumar Shahani's diploma film, for example. They wanted me to shoot in the studio. Most of the film is set in a train. They said we'll have a set of a compartment and we'll have back projection, which had just come in. Absolutely new. We had just learnt how to expose for back projection and all that. But I said I would not do it. The only thing is, I want one 5-Kw generator. That is my only requirement. With great difficulty they agreed. The generator had a wooden base and it had to be cut to be put inside the train. And after a few shots, it failed.

The time for a diploma film was fixed. Not more than 6 days. You have to finish a film in that much time. So I couldn't say that I will not shoot till a new generator comes or this one starts working, because the train is not going to stop, the train will keep going (ha, ha). So I talked to Kumar. And I said that the effect would be semi-silhouette. You will not get full details of the artistes, is that okay with you. And he said, yes its okay with me. That's how I did the shooting without any lights.

There was some light coming from the windows. We were using some white paper and we were using the camera box tin! But finally it was not very great. I would say it was satisfactory, not great.

In Kumar's diploma film there is one shot which even today people say they like. It was a handheld shot taken inside a running train. Mrinalda (Mrinal Sen) had seen the film, and he asked me, So how did you take that shot? I said *dada* its very simple, what is this. I just held the camera in hand and took the shot (ha, ha).

**Was there any Indian cameraman whose work you admired?**

Yes, Subrata Mitra. I have seen almost all of his films, and I still think that he is the best cameraman produced in India. There has been no better person so far. I have also seen him working. Now I even know him well. I have tried my best to reach his level, but so far have not succeeded.

Also, imagine that he was working in the 50s and early 60s, that too in conditions in Calcutta. There the conditions were not as good as the Bombay film industry or the Madras film industry. Say on a set like *Charulata*. I am sure he hardly used studio lights. He has used the lights that he has himself invented because if you watch that set you will not find a shadow of any object falling on the wall. He has invented his own lights, his own kind of lighting conditions and he has used them for the kind of effect he wanted. Or you can pick up any other film. Say, another film with a very good set like *Jalsaghar*. Some one like me, if I had to light a pillar like in that film, I would use 4 lights. But I don't know what kind of light he used – such a smooth, beautiful effect. He has his own way of working; he uses lights in his own way. Even what he did with Ismail Merchant, excellent results, absolutely excellent. *Bombay Talkies, Guru, Householder*.

### **BHUVAN SHOME**

In Kumar's diploma film there is one shot which even today people say they like. It was a handheld shot taken inside a running train. Mrinalda (Mrinal Sen) had seen the film, and he asked me, So how did you take that shot? I said *dada* its very simple. I just held the camera in hand and took the shot!

Then he said okay, what are you doing these days. I said I am working with Shyam Benegal, I've done 2-3 documentaries and about 150 ads. So he said okay, I'll get in touch with you. Then in '68 September or October, I get a

message from Calcutta, What are you doing? So I told him I'm doing nothing. He said okay, I'm coming to Bombay and we are going to see a location. He came to Bombay and both of us went to see the location in Gujarat. And in Dec. '68, we shot *Bhuvan Shome*.

For the first 3-4 days we shot without actors. We shot some village scenes – a bullock cart going by, people walking by in their Kathiawari dress, market shots, vegetable market, fish market. Then we shot for a few days with actors. After about 8 days with the actors, we decided to have a break for a week, go to Bombay and see the rush prints, and shoot the rest after that. Mrinalda was not very confident. I said okay. So we went back to Bombay and we saw the rush prints. When he saw the rushes he was not very happy. He said all the shooting without the actors is very good but shooting with actors is not good. Then I asked him, what do you want? He said, in a film when you shoot with actors, they should be clearly seen on the screen and that too when they are outdoors and in sunlight! I said okay, I'd see that there is enough light. Then we did the rest of the shoot. When the film was completed and he saw the rushes in Calcutta, he wrote me a long telegram like a letter, praising my work, and about my future and other things like that.

The reason that the actors had been looking dark was that I was not using enough fill light. I thought that since the sunlight is f16, and the landscape looked good in that so I went with that. But the actors looked dark. So afterwards I increased the fill to f11 and then everything looked all right.

In *Bhuvan Shome*, there was another thing I did which was somewhat unusual in film shooting in India in those days. The house that is the main house

in the film has an *aangan* (a courtyard), and bright sunlight throughout the day. But being sunlight, it would travel from east to west and there would be varying light in the whole day. To counter that, I made a big scimmer - big enough to cover the whole *aangan* with its shadow. We tie it using the huge tree in the courtyard. So even though the sun would travel through the day, it made little difference to us as we had constant light throughout the day. We didn't use any lights in the film at all - as a matter of fact we didn't even carry any lights!

However, one day Mrinalda one day said he wanted a shot of the young girl (Suhasini Mulay) coming out of the room into the verandas, and then into the *aangan*. So I said, dada, we don't have any lights. There will be complete darkness in the room. But all he said was, so what? So I sat down to think. Finally I asked him, do you think the owners of the house will give us permission to remove tiles from the top of the house? We'll put them back of course. The owner agreed, we removed tiles, put a cloth on the roof, got plenty of light streaming into the room, and we took the shot.

You know there is one shot in *Bhuvan Shome* that was responsible for a great deal of learning. Perhaps you remember the shot as well. Suhasini is sitting on a buffalo and coming down a small hill. It's a long shot to start with, and Suhasini's first shot in the film. Mrinalda said to me that it would start as a long shot but as the buffalo keeps moving, we keep going close. We zoom into a close-up of Suhasini's face and follow her on her buffalo ride. I said fine. Now, we had taken 6-8 reflectors for the shoot. We could only put them up out of the range of the long shot, beyond the edge of the field. So we put them up, but they made no difference to the reading at all! Whether we put the reflectors up, or moved them out, we got the same reading. And I thought, well, dada is going to get

upset again because the artiste will not be properly exposed - and that's exactly what happened. Anyway, she doesn't have dialogue. She was against the sky so she was almost semi-silhouetted.

Later Subrata Mitra saw the film in Calcutta. I met him after the film. And he asked me, Mahajan, did you use reflectors in that shot? I said, yes I did dada. Then why can't we see her face? Why isn't her face correctly exposed? She is being introduced in the film, its her first shot, and we can't see her face clearly - that's not good. I said, dada I couldn't do anything as the shot starts very wide and goes in very close. The reflectors made no difference at all. So he said, next time if you face such a situation, use a G-15 filter. Then you don't even have to use reflectors. You will be able to control the sky and still be able to get detail of the face of the character. I said, I wish I had known this earlier. I mean I knew about the G-15 filter, but I never thought about using it in such a way. The G-15 is a filter that is a yellow and orange mix. It cuts out the blue in the sky and brings out the face. And amazingly enough, we had been using Subratada's camera for shooting *Bhuvan Shome*.

At the time that we shot *Bhuvan Shome*, the colour film that was available was not very fast - 64 ASA for outdoors and 50 ASA for indoors. The black & white film was faster. *Bhuvan Shome* I shot on Kodak Double X. That was the only film I shot on Kodak Black & White stock. *Sara Aakash* was shot on both NP55 and NP77, i.e. 100 ASA and 250 ASA. The same for *Uski Roti*. I couldn't shoot on Kodak again because they banned Kodak in order to push ORWO.

## **USKI ROTI**

I worked in two films with Mani Kaul. Mani was very particular about his shots. He would explain exactly what he wants. The compositions in *Uski Roti* were all inspired by Amrita Shergil's paintings. Mani told me that he wanted Shergil kind of compositions. I had just finished a film on her before I started *Uski Roti*. I had seen almost all her works, about 150 paintings. That particular film has lot of resonance with Shergil's compositions. To achieve this composition one needed a two-dimensional look ...

All sixteen long shots were taken with 135mm lens. We worked out some mathematical calculations to get a consistent dimension. The characters had to be either 3 feet away or 5 feet away or 8 feet away or beyond 12 feet from the camera. And if any trolley moves it will move from 3-5 or 3-8 or 3-12. So the final dimension remains the same. So the entire film was shot like that. But if we were a 28mm lens the entire scene will be shot with the same lens and the distance of the character from the camera will be 3 or 5 or 8 or beyond 12 feet. So, there is a certain visual rhythm to the entire film. Shots don't suddenly jump from long to close. The 2-dimensional look only worked with the long shots. I decided to work with the block lens for the long shots instead of a zoom.

In this film I used lot of filters. Because the main characters were at the bus stop which didn't get sunlight. We were always shooting against light and we had a village and a railway track behind, which was again against light. So, always we were faced with very bright sky. It was a winter bright sky. Sun moved from east to west, but never seems to come in the place where the girl used to sit in the bus stand. So I had to use lot of filter to cut off the sky and balance with the face.

In *Ashadh Ka Ek Din* (Mani Kaul) I didn't use a single filter, because the background was all green mountains and most of the action takes place inside a hut. I use soft lighting but no filters. The visual effect was very interesting. The visual pattern was same as we did in *Uski Roti*.

### **MAYA DARPAN**

Maya Darpan was something special. It was one of my earlier films and in colour. Kumar was a very close friend and we would chat for long hours on lot of things. One day he told me that he wanted unsaturated colour. I said, sala every body wants saturated colours and you want unsaturated colours? What are you talking about?

He said, I don't want red to look too red, blue to look too blue, green to look too green. These colours should look diffused. I didn't understand. And at the same time *usko blue to chahiye hi nahi tha pure film-me*. No blue in the entire film. I said, but you have got outdoor shots. How will you shoot the sky and other things? Blue is bound to be there excepting of course if you take shots against light or in the evening or some thing like that so you can have white sky. He said, *ha OK*, we will do that. We will shoot at a time when the sky looks white.

I did not understand this desaturation. Normally what happens is that colours are made like so as to enhance the colour. But I tried one thing. Normally the tungsten film is balanced at colour temperature of 3200K. So I decided I will use light which has colour temperature more than 3200K. I decided to use photofloods which had a colour temperature of 3800K. I shot the entire film in photofloods. Outdoors we shot against lights and only when we thought that sky would look white. We were shooting a lake, and lake reflects lot of light. So we

used to go very early around 6am to shoot thinking that the sky will be less present on the lake. But these things are only possible with some directors.

## **TARANG**

*Tarang* took seven years but I don't think we shot more than 60-65 days over all those years. It was shot from 1974 to 1981. When we shot the film, there was only one colour stock that Eastman made available, and it was not very fast stock. The highest speed was 100ASA for indoors and 64ASA for outdoors. The camera was Arri II C and nowhere is any zoom used. The film is shot with block lenses.

We shot extensively on location - in a big house that belonged to Kumar's friend. The house was totally emptied and then redone according to the requirement of the film. The colour scheme of the film was worked out before the shooting started. Like the colour of the set, of the curtains, of the bedspreads, of the upholstery, the kind of furniture and the kind of flooring. *Bansida* (Bansi Chandra Gupta) did the entire flooring with *chatais* of neutral colour, slightly off-white. I used a lot of patterns on the floor in order to break the neutrality of the flooring.

I used a lot of geometrical lines in that film. In many sequences you will find patterns which are triangular, patterns which have diagonals and patterns which have horizontals. Straight lines, taken out of geometry. No spherical patterns at all.

The *jhoadpatti* scenes in the film were shot partly on location, and partly on a set we created. Both the location and the set were by the railway tracks as Kumar wanted local trains constantly shuttling by. On location, shooting was quite difficult as the cinemascope aspect ratio covered a large area of the hut and it became difficult to have lights, camera movement and character movement - all in that little space.

You see that the *jhoadpatti* scenes are not very brightly lit. You see the characters clearly, but there is lot of contrast on faces, on the background. Even when we shot on location, you will see that the inside of the hut is quite darkly lit compared to the exterior. Whereas when I was lighting the big house and the office, I lit them comparatively on the brighter side. Less contrast. This was to show the affluence of a rich family."