Between the Headphones

Between the
Headphones:

Listening to the Practitioner

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Publishing

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INTRODUCTION

CHAPTER 1

STUDIES OF FILM SOUND IN INDIA

Sound is a new area of interest particularly in the field of film and media studies (Altman 1992; Balázs 1985; Biancorosso 2009; Bloom 2014; Chion 1994, 2009; Lastra 2000). The study of sound in cinema has only recently been established in screen studies and film sound scholarship (Buhler, Neumeyer and Deemer 2010; Holman 1997; Kerins 2011; LoBrutto 1994; Sergi 2004; Sonnenschein 2001). And, so far, attention has focused on Hollywood and European cinema. Reading sound in other world cinemas, particularly Indian cinema, has remained underexplored even though India is currently the world's largest producer of films with a formidable global presence. Efforts and attempts have been made to study the use of sound in Indian cinema, but much of this scholarship has been focused on the use of songs, voice, and background musical scores in popular Indian films (Booth 2013; Morcom 2016; Mukherjee 2007). Creative sound practices, particularly the use of components like ambience and sound effects, which are critical elements in film sound organization, are still underexplored. This book intends to fill this void by developing a practice-based understanding of the unique sound world of Indian films. It does so by drawing on extensive interviews and in-depth conversations with prominent sound professionals active in the Indian film industry over the last 90 years.

Indian cinema is known for producing sound experiences that typically encourage an overwhelming use of "song and dance" sequences (Chattopadhyay 2017; Booth 2013; Morcom 2016). The careful incorporation and attentive organization of sounds are generally ignored in the narrative strategy (Ganti 2012; Gopalan 2002; Rajadhyaksha 2007). Indeed, many popular Indian films keep mindful sound design at bay, mostly creating a loud and high-pitch auditory setting (Chattopadhyay 2015, 2021) or mise-en-sonore [1] providing a remote and imaginary cinematic landscape. Conversations with sound practitioners show that popular preconceptions of sound's role in Indian cinema may be erroneous if we consider the historical trajectories of its production as opposed to exporting an essentialist typecast. The advent of digital technology indeed makes it

possible to incorporate rich layers of sound components within the production scheme of contemporary Indian film sound organization.

In this book, the historical trajectory of Indian cinema will be revealed through conversations with practitioners that concentrate on their creative use of sonic experiences. Open-ended interviews help to inform the reader about the nitty-gritty of film sound production with a particular focus on its historical development. A practice-based perspective attending to the methods and approaches undertaken by the practitioners provides empirical evidence to qualify observations and claims. Conducted over many years (Chattopadhyay 2012–2019), the interviews constitute the project's primary source of real world knowledge.

Going through Indian cinema's sound production trajectories, the book examines how sounds have been variously rendered through different phases of production practices due to technological innovations. The entire "dubbing era" (1960s–1990s) exemplifies a period that underestimated sonic range and quality, giving more importance to typical narrative tropes. Latter phases such as the "digital era" (2001–) meanwhile render more "realistic" and concrete representations of sound. This uneven history will be outlined, unfolding through the lenses of sound practitioners themselves. Differing and concurrent practices, methodologies and approaches, as well as shifts in recording and organizing sound for the purpose of storytelling, are studied through illuminating dialogues with practitioners to reveal various sound practice phases. By tracing this trajectory, the book makes comprehensive, first of its kind, essential reading for filmgoers and is a valuable reference volume for Indian and international film researchers.

Notes

[1] "Mise-en-sonore" is a concept established in *The Auditory Setting* (Chattopadhyay 2021), which relates to other film and media studies terminology. The term "film space" is defined as the space that the spectator or audience encounters, a space that is organized and constructed (e.g., the linking of shots through sound editing and sound design). The area in front of the camera and sound device's recording field, on the other hand, is known as the "pro-filmic space". Combining these two definitions, it can be argued that the choice and arrangement of pro-filmic space substantially affect the spatial dynamics of the mise-en-scène of sound. "Mise-en-sonore" or the "auditory setting"—the actual sonorous environment, the spatial organization of sounds that the listener experiences—provides a setting that in turn influences the verisimilitude or believability of a film in the ears of the audience.

CHAPTER 2

DRAWING THE TRAJECTORIES OF SOUND PRODUCTION

Interviews were conducted with sound professionals from a wide age group: from the late veteran Jyoti Chatterjee, whose career encompassed the early talkies in optical direct sound (1930s), to Nithin Lukose, a young sound practitioner who started his practice with digital technology (2000s). First up is veteran filmmaker Shyam Benegal, a foremost practitioner of sync sound in India.[1]

Such a wide timeframe is helpful when writing a comprehensive and inclusive trajectory of sound production in India from the unique perspective of practitioners, who are the direct stakeholders in this historical evolution. The diverse sound production practices in pan Indian cinema are traced with an interest in mapping the impact that historical sound technology developments have had on shifting aesthetics. A bottom-up approach to tracing such developments in sound helps to locate significant and representative works that carry evidence of the shifts that have led to contemporary practices. Open-ended interviews were conducted with 28 leading sound practitioners working in the Indian music, film and media industries, including veterans like Anup Dev and Hitendra Ghosh, and contemporaries like Resul Pookutty and Anish John. They are based on semi-structured questions using a qualitative approach to provide evidence of hands-on production practice.

Following the trajectories of sound production in India, the book aims to reveal that sounds have been inconstantly rendered through various phases of production practices, due to the effects of technological innovations and shifts. From the dubbing era's narrative bias to the digital era's more realistic representations of sound, technological developments have dominated key shifts (Altman 1992; Kassabian 2013; Kerins 2011, 2006; Lastra 2000); indeed, certain aesthetic choices made available by technological applications have shaped the historical evolution of Indian sound production practices. This history is outlined in order to understand the various differing and concurrent practices, methodologies and

approaches, as well as shifts in recording and organizing sound. Drawing on practitioners' perspectives and terminologies, the book divides these trajectories of sound into three prominent periods, namely: the optical "direct" recording era as it developed in the early talkies (1930s–1960s); the magnetic tape-based recording era that triggered dubbing practices (1960s–1990s); and the contemporary digital multi-track sync recording and surround sound era (2001–present). With this historical structure as its model, the book presents a dialogic and grounded understanding of Indian film sound on various levels, including historical, technological and aesthetic factors. This comprehensive mapping of sound production practices is contextualized within film and media production and sound studies discussing relevant film examples as case studies with the practitioners.

Notes

[1] An abbreviation of synchronized sound, a recording made on location, revived from an earlier practice of direct sound in Indian cinema into contemporary digital recording practice.

CHAPTER 3

CREATIVE INTERVENTION WITH LOCATION "SYNC" SOUND

This book investigates the processes of sound production in Indian cinema learning from the leading sound recordists, mixing engineers, production mixing specialists, sound editors and sound re-recordists working in the Indian film industry, both in Mumbai's mainstream Hindi cinema and regional cinema produced in Bengali, Malayalam and Tamil among other languages.

Within the inquiries about this sonic diversity, much attention is given to the digital sound system's emergence and its effects on sound making. One particular element of this investigation is sync sound recording. Terms such as "location sync sound" or "live sound" are used in the film practitioner's vocabulary when referring to the recording of sound, primarily the voice, on location in synchronization with the camera instead of re-recording the voice performed inside the studio in dubbing sessions at a later stage of post-production.

The growing digitalization of post-1990s film technology represents a cinematic revival of observational techniques related to location-specific details, particularly in direct recording of voice, effects and ambience on site. An emergent fascination with authentic location and spatial evidence in the film image suggests a rediscovery and revival of cinema's realist roots. In the past two decades, film sound experiences have undergone a massive transformation from analogue to digital. This has been regarded as a sea change in terms of work culture and reproduction formats. With the advent of digital technology in film sound, newer audio aesthetics have arisen, as noted by practitioners. Easily available and easily handled recording devices have brought fresh perspectives and new forms to film sound recording, design, spatialization, and reproduction. The technology has initiated in-depth methods of and scopes for reconstructing a film space through intricate processes of sound post-production. Location "sync" sound recording is a direct descendent of this trend. We learn from the practitioners that the new trend of location sync sound recording is a revival of direct sound techniques of pre-dubbing eras. It is characterized by on-location sound recording in synchronization with the camera. These

"real" sound recordings, which correspond to the site, are used in post-production without any asynchronous forms of sound making, such as the use of dubbing, Foley, and stock sound effects. On-location sync recording is supported by recent developments in technology, including hard disc recorders with multi-track options, dolly boom recording equipment with greater flexibility and locational reach, and application software like Pro Tools HD that offer precise control over each clip recorded on location. Multiple options for keeping different tracks of ambience, sync sound effects, and dialogue permit the recording of a larger number of sound elements and the processing of multilayered sound captured on location. The studio itself offers ample scope for digitally manipulating site-specific "real" sounds, which are treated as part of film mediation through which such sounds are re-contextualized in the film space. Regularly updated timeline-based applications can work with a virtually infinite number of audio tracks. A variety of plug-ins allow the processing of recorded sounds, involving them in cinematic depiction via sonic modulations restructuring their ambient characteristics in the diegetic narrative in spatial settings such as the expanded surround environment of Dolby Atmos.

CHAPTER 4

USE OF AMBIENCE AS AN ARTISTIC ELEMENT

The focus of this investigation is on the processes of sonifying a film through cinematic devices and sonic tools available to the sound practitioner. I have noted in my article "Reconstructing Atmospheres: Ambient Sound in Film and Media Production" (Chattopadhyay 2017) that among these tools, "ambience" or ambient sound broadly denotes the background sounds that are present in a scene or location: wind, water, birds, room-tone, office rumbles, traffic, forest murmurs, waves from the seashore, neighborhood mutters, etc. Ambience is a standard term used by sound practitioners to denote the site-specific environmental sounds that provide characteristic atmosphere and spatial information in a media production. The book's interviews and in-depth conversations focus on critically listening to those methods used in Indian cinema to record and produce sonic environments that incorporate ambience. Analysis examines *how* ambience is used as a site-specific element to compose the auditory setting (Chattopadhyay 2021) by rendering spatial awareness in the production of film. In this book, the practitioners shed light on the unnoticed importance of ambient sound. They inform about specific methods and creative strategies involved in constructing or evoking a relatively convincing presence of a location within the mediated environment of a film by means of various forms and formats of sound recording and spatial organization of recorded ambient sounds. The practitioners elaborate how they choose to use certain layers of ambient sound among a multitude of other recorded sound components, incorporating them into the strategy of narration in such a way that they produce a spatial realization of presence of the site in the diegetic world. The absence or relative inclusion of ambient sound in the sound organization determines the qualitative degrees and intensities of the story's believability (Chattopadhyay 2017).

We learn why ambient sound is most effective when the practitioner is intent on sculpting a spatial sensation and an embodied experience of "being there", more so than other layers of sound such as voice, music, and sound effects. Among these layers, the voice includes dialogue between characters, thus relaying the primary narrative information

(Bordwell 2009). Voice in cinema, however, is simply less "spatial" in nature, making it more creatively limited as a sound component when compared to ambient sound. The post-synchronized voice, produced by dubbing or similar practices, is "disengaged from its 'proper' space (the space conveyed by the visual image) and the credibility of that voice depends upon the technician's ability to return it to the site of its origin" (Doane 1985: 164). This return to the original site can be achieved by the technician's creative and innovative use of ambient sound. Film music tracks and sound effects "establish a particular mood" (Doane 1985: 55) instead of providing a sense of space. Sound effects are also important for the narration and for creating feelings of, for example, romance and suspense. In the mixing stages, the hierarchy of different sound components usually follows specific conventions, as American film sound scholar Mary Ann Doane notes when discussing Hollywood conventions: "Sound effects and music are subservient to dialogue and it is, above all, the intelligibility of the dialogue which is at stake, together with its nuances of tone" (ibid) – many of these conventions are exercised in Indian cinema too. In this hierarchy of sonic elements, ambient sound remains fluid and malleable. Equally, ambient sound can provide the specific atmosphere of a site in the production of a diegetic reality inside the film space. To sound practitioners, ambient sound injects life and substance not only to what we see on the screen but also to the off-screen diegetic space. We are made aware in this book of how practitioners use layers of ambient sound to construct the perceptual experience of reality by artistic means. As the most creative element in film sound production, ambience helps to ground the sense of a specific place in a way no other layer of sound can. These practical considerations and creative perspectives of the practitioners underscore the spatial capacities of ambient sound as compared to other film sound components.

CHAPTER 5

INTER/INTRA-VIEWING[1]
AND AUTO-ETHNOGRAPHY

Interviewing film sound practitioners provides convincing evidence to qualify this book's inquiry and research. Extensive conversations form its essential body of empirical research resulting in a comprehensive historical understanding of sound practice in Indian cinema. The interviews are based on a set of questions to generate real-world knowledge about sound production practices. My role in this research is not only as interviewer but also as an active participant in the conversation. This intervention is significant for two reasons. Firstly, as a sound practitioner myself, I am able to offer novel insights into the debate. Secondly, I am also a scholar and researcher: my input during interviews can develop discourse through self-reflection and the auto-ethnography of myself and practitioners, making them thoughtful and contemplative, which in turn helps generate new knowledge from the conversation. This provocation always enables a more profound discourse.

Auto-ethnography is a form of qualitative research in which self-reflection is encouraged to generate new knowledge in a particular area of scholarship by exploring anecdotal and personal experiences and connecting this autobiographical narrative to uncover wider cultural meanings and social understandings. The sonic auto-ethnography in this book excavates personal listening experiences (Connor 1997; LaBelle 2010; Voegelin 2010) and self-narrative (Findlay-Walsh 2017) or the introspective recollection of a practitioner's own developments to comprehend and conceptualize their craft and artistry. This auto-ethnographic approach is considered a key contextual, design, and compositional element for gauging the sound practitioner's contributions to the making of Indian films. An understanding of sound production processes in Indian cinema is developed through mutual listening and reciprocity via in-depth conversations rather than using a more direct interviewing approach from an objective outsider's position. The revealing thread of practical knowledge is often found by letting the practitioner

speak freely. Equally, the position of the practitioner in the production chain is a crucial parameter for these conversations to be revealing. As some of the practitioners I talked to were my peers or immediate seniors from the FTII and the SRFTI, two of India's national film schools, it was also easier to access and engage with them on this level, almost like an extended model of film school debate.

Notes

[1] Intra-view is my coinage invented to relate to the idea of speaking with oneself, focusing on the aural. Self-talk is a common thing, but not so much discussed in the scholarly discourses in the arts and humanties. In the interviews with the sound practitioners, there has always been an element of soliloquy reminiscing about their past works. This revealatory approach is underscored in this coinage, which has been previously used in my two recent publications from a series of intra-view/-auditions:

Chattopadhyay, B. (2020). "Howl Redux: On Noisific(a)tion". In Mandic, M (ed.), *Law and the Senses: Hear*. London: University of Westminster Press (forthcoming).

Chattopadhyay, B. (2017). "Autolistening". In Francis, Richard (ed.), *Exercises in Listening issue* 3. Auckland, New Zealand: End of the Alphabet Records.

CHAPTER 6

CO-LISTENING WITH THE SOUND PRACTITIONERS

The interviews and conversations are based on a specific set of semi-structured and open-ended questions about handling sound from recording to design and how technology impacts these processes. According to Jody Miller and Barry Glassner, scholars of qualitative research in the social sciences, semi-structured and open-ended interviews solicit "authentic accounts of subjective experience" (Miller and Glassner 2011: 131). The friendly and open-ended approach with which I have conducted interviews over the years in familiar work environments such as sound studios has helped practitioners "to speak in their own voices about their art and craft" (LoBrutto 1994: 1). Sound Studies scholar Mark Grimshaw asserts that a questionnaire-based qualitative approach involving semi-structured interviews "allows the interviewer a certain level of control which directs the interviewee down particular paths. Equally it allows the interviewee to expand on themes outside the limits of the questions, which can reveal unexpected information" (Grimshaw 2011: 54). The dialectics between the top-down approach of reflective analyses and the bottom-up approach of ethnographic interviewing thus form the backbone of this book, ensuring that "even the more abstract notions about filmmaking and film sound remain grounded in real-world practices" (Kerins 2011: 10).

Interviews with well-known sound designers Subash Sahoo and Aloke Dey focus on various modifications and alterations within re-recording and mixing practices during the shift from analogue to digital. The interviews with on-location production mixing engineer Anil Radhakrishnan and Anish John, two of the younger generation of sound practitioners primarily working with digital technology, focus on the nitty-gritty of location recording with multi-track digital sync technology, involving innovative methods and approaches. The interview with veteran sound and music mixing engineer Anup Deb explores the practical differences between the analogue and digital domains of sound recording and mixing. Anup Mukherjee, another veteran sound mixing engineer and sound

designer working primarily in the Bengali film industry of Kolkata in Eastern India, talks about the arrival of digital sound in Indian cinema and its impact on filmmaking: the way sound technicians have upgraded their skills, approaches, and methods. Other veteran sound practitioners such as Hitendra Ghosh provide insights into this change through personal anecdotes. The late octogenarian Jyoti Chatterjee, sound mixer for many of Satyajit Ray's films, talks about early sound recording and mixing in the pre-dubbing era and the introduction of dubbing to Indian cinema; his interview provides valuable insights into Ray's use of monaural mixing. And Shyam Benegal, one of the pioneers of independent Indian cinema, talks at length about the necessity of ambience in film.

Practitioners from the younger generation of sound designers such as Bishwadeep Chatterjee, Dileep Subramaniam, Dipankar Chaki, Manas Choudhury, Bobby John, P. M. Satheesh, Pramod Thomas, Vinod Subramanian and Kunal Sharma talk of their various methods of working with sound in cinema after the introduction of digital technology. They also speak of the roles that ambient sound and sound design have in creating site-specific atmospheres. They discuss the introduction of digital synchronized sound in Indian cinema, technically known as sync sound. The conversations with sync sound pioneers in Indian cinema Nakul Kamte (*Lagaan* 2001) and Subash Sahoo (*Kaminey* 2009) are particularly insightful as they discuss real world mechanisms and professional ploys of recording sound on location to (re)produce an authentic and realistic tone and texture of the site. In a longer conversation, Oscar-winning sound designer Resul Pookutty (*Slumdog Millionaire* 2008) speaks of the various practical struggles in sustaining a sync sound practice, working with surround sound formats like Dolby Atmos, and the ensuing changes in the philosophy of sound production practices. My contemporaries—such as Pritam Das, Sukanta Majumdar, Hitesh Chaurasia and Jayadevan Chakkadath—are particularly assiduous when talking about the role of ambient sound in transforming film towards an embodied experience. They inform us about multi-channel sound systems like Dolby Atmos and Auro 3D, and the enormous possibilities these systems open up for narrating the story with intricate details about the site. Sound practitioners inject this book with practical insights based on the rudimentary elements of real world sound production.

The interviews also shed light on India's normative modes of cinematic sound practice. For example, according to the sound practitioners, one reason for not using sync sound earlier has been the feudal working structure within Indian film based on certain industry stars and inflexible hierarchies. Sync sound requires the glorified actor's

complete participation on the film set, on a par with the location sound technician, who has long held a lower status in the film crew's hierarchy. According to the interviewees, the introduction of digital technology has opened up scope for a more creative sound practice that not only has substantially changed the sonic experience but also realigned the hierarchy of film crews, making the sound practitioner's role more significant.

These interviews are reproduced in this book in their original form, transcribed directly from the audio recordings made during the ethnographic fieldwork, with any grammatical issues this may entail.

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PART II:

INTERVIEWS

CHAPTER 7

SHYAM BENEGAL[1]

S: You want to know about sync sound work. Well, you see, sync sound work started not very recently in the Indian cinema. In fact, all sound films used to be shot in studio circumstances as soon as the silent era was over. For instance, if you think of *Alam Ara*[2] and so on, you'll find that they actually had sync sound. That was the old methodology. They used to have these studio cameras - the big very unwieldy things and they were properly sound insulated. So, the machine sound couldn't be heard. They used to have mics and the sound recordist usually used to sit at the corner of the recording studio and you had to keep absolute silence. The studios that were made for silent cinema had to be, again, insulated. Despite that, once in a while you'd have pigeons coming in and I have experience of that. Jyoti studios, where I used to have my office, was the first sound studio in Bombay. It started in 1931. Prithviraj Kapoor[3] and everybody started their careers there. It was called the Imperial studios in those days. Later on it was called the Jyoti studios. Now, you see, that was the methodology of recording. They used to record on 35 mm. In fact, there was another system also at that time where you could record optically on the film itself. But that wasn't so popular because if you made a mistake, you know, it was pretty costly to get it re-done. So, this was an easier option which Hollywood had adopted and which we started to do. But one of the innovative practices of the time, particularly with Prabhat, was that they actually recorded songs outdoors. If you see some of those films - if you go to FTII[4] you should have a look at some of the films made in the 30's in Prabhat studios - they used to have a sound recordist with a boom mic. When it was being shot, the sound recordist would be recording sitting on a "*Thela*" (hand drawn cart) and the instruments also had to be playing. You couldn't have any elaborate kind of group. So you had to have a harmonium and a tabla - two-three instruments, which were carried along. You had the camera on a trolley in front, and then you had this *thela* for the music to be played, which was being recorded simultaneously as the girl or boy, whoever was singing. So this used to be done. That was the system. There was no playback during those days. That's how it started. It

was very interesting. But it certainly restricted the acting style because the people couldn't take their heads away from where the microphones were.

Q: Hm.

S: So, it was somewhat tied up in, you know, they were kind of imprisoned because of the placement of the mic and they had to be facing the mic all the time. The demand on the actor was quite enormous. Firstly, the person had to sing, had to be in tune, instruments were to be played in tune. While doing all this, even the slightest shifting this way or that way meant that the recording would go bad. We had such kind of problems, but it was very fascinating and very interesting. When I made my film *Bhumika*[5], some of these particular things I had brought into that film. The beginning of sound in Indian cinema was a fascinating one. It was usually done in the studios. They had to be closed up so that you would't get exterior sounds. When they were shooting, everybody had to keep absolutely silent. Even now you have to, but it was much more particular at that time. Then when they had to go outdoors with sound, the first way of doing that was to the songs. It would be later when equipment became less problematic that you would do the dramatic scenes outdoors. But you did have for a long period of time - way into the 50's and even into the early 60's - they used to have a soundtrack with the recording equipments when they were shooting exteriors. The person with the boom mic had to be really very expert because the cameras were powerful than the mics today. So they had … they were directional mics. So you had to be very careful about how you record the sound. They used to do these kinds of recordings and the camera of course was a studio camera - Mitchell. Even in the 70's, when I heard about how they used to do it – because afterwards when camera equipment became much lighter and smaller - you had these Arri's. When Arri [Arriflex cameras] started coming into the market, then you had a cover for an Arri, but it used to be very… I mean, it wasn't pleasant while shooting, very low. It restricted your movement to a great deal, which a Mitchell did not. There used to be a Japanese equivalent of that camera called Seiki. When I shot *Ankur*[6] in 1973, I used a Seiki camera and it was entirely sync sound. I was among the first people to shoot a sync sound film in its entirety with a Seki camera. I did have a studio Mitchell, which I'd taken from the studio. It wasn't working that well. So, I took the Seiki instead and I took the cameraman who was absolutely wonderful. He had experience going back to the 1920's. I took a sound recordist who also had started his career in the 1930's. So I had two people who had immense experience with this kind of work and I shot the entire film with a Seiki camera, not on Arri. Everybody used to take Arris in those days. It had already started from late 60's - people were

shooting on Arriflex and just took a pilot track. Then they used to dub their sounds in a studio. I refused to take a pilot track because at that time I was kind of fanatical about getting the right and exact sound. I was very much impressed with the idea, which was very current in Europe at that time – the use of direct sound. The whole idea was that you had a sense of reality that you got with it (direct sound) – impossible to get in the post-sync - the emotion, the performance. The performance was not broken into two parts - the visual performance and the sound performance. It was an integrated performance. I was absolutely the biggest advocate for that. When I made my film in 1973, I was among the very first people to do an entire sync sound film without taking recourse to any person dubbing. Not a single dialogue that you hear in *Ankur* was post recorded. Everything was done on the location where we shot the film, with natural sounds and all. Then we emphasized the soundtracks, had other tracks to add to the environmental sound and everything else. But there was nothing - no dialogue was ever post-sync recorded. It was all recorded at that time. Now, this is very important for me. It has always remained the most important thing when I make a film. I've always believed, and continue to believe, that performance has integrity – it's sound and visual together. You cannot separate them without losing out on the quality of the performance, you know. What they do on the set is what you have approved onto film. You cannot have something else, another element coming and replacing the sound part. You will never have the same quality. But what happened in Indian cinema - and exactly at the 30's what used to happen - in the 40's same thing was happening. But now they take things outdoors, with the equipment getting better. They had those big studio Mitchells. They used to carry them outside and shoot. If you look carefully at films of that period compared with that of early period and so on, one of the things you may have noticed is that in the 1920's, there's so much dynamism in the style of shooting, the movements of the camera and particularly the outdoor movements, you know. In the 30's, we suddenly find a certain static quality because it was restricted by the equipment they were using. Then you moved into the 40's where sound became the thing, which most people were shooting inside studios anyway, and there were hardly any speech work that was being done outside of the studio. All the dramatic scenes were being done in the studio, including everything else like travelling cars and all that. Then it became very easy when playback came because you separated the two elements. Particularly for songs, you could shoot song all over the place and do the playback. You could sync the two and use it later. So, this was the pattern. All the way through the 40's and the 50's, our directors in India were recording dialogue like it