Research Article

Rajnikant's Laptop: Computers and Development in Popular Indian Cinema

Joyojeet Pal

joyojeet@gmail.com
Computing Innovation Fellow
Polytechnic Institute of
New York University &
ATLAS Institute, University of
Colorado at Boulder
6 Metrotech Center
Brooklyn, NY 11201
USA
(510) 501–8679

Abstract

In the past decade, the role of information technology in development has seen an exceptional spike in interest. A positive discourse on the potential of information technology exists not only in the booming metropolises of the developing world, but also in those geographical regions where digital technologies such as computers are mostly absent. Examining the public discourse on IT, we find that mass media may well be important in constructing how people in villages and even cities perceive computers. Taking the specific example of popular cinema in India, we find a strong aspirational discourse in the ways in which computers and technology users are portrayed. These, in turn, relate to how IT and development have been portrayed in cinematic discourse over generations, in cinema from around the world, from even the earliest days of silent film. Reflecting on this, we find that the study of technological artifacts as represented in popular media in the public sphere has been a critical missing piece of work on information technology and development.

Prologue

Karthik is a hormonal brat, and Sakhti is a hardworking medical student from a poor family. The class-crossed couple decide to marry against the wishes of both sets of parents, and thus the plot thickens in *Alai Payuthey,* a 2000 blockbuster hit from South Indian filmmaker Mani Rathnam.

This kind of face-off between youthful love and parental opposition to marriage, a veritable obsession of Indian cinema, is perhaps one of the oldest and most successful themes. Back in the old days, Karthik would probably have been reduced to begging office to office for a job wearing a tie, finding in his useless paper degrees a metaphorical foil for the oppressive market economy (Roy, 1954), thereafter turning to a life of dubious ethical distinction (Bapaiah, 1985; Chandra, 1986; Rawail, 1985). Meanwhile, Sakhti would probably sit at home, sacrificing square meals and running a bare-bones household with a sanctimonious smile (Muthuraman, 1979). A number of themes would typically be highlighted in the couple's struggle, including the dependence of the man on the system to earn an honest living, the helplessness of the woman outside of the home domain, and the importance of parental consent and wisdom.

Instead, in *Alai Payuthey,* the couple turns to a new place for its salvation—information technology. Karthik starts a computer software company with his friends, eventually winning an outsourced contract from the United States that fixes the young couple's financial troubles for good, and in the process, rubbing a few parental noses in the dirt on the gold-

paved streets of South Indian cities. Karthik fails most stereotypes of cinematic occupational characterization. He is no idealistic teacher, nor upstanding cop, nor charismatic businessman. He is, at best, a lovable nerd, traveling on a motorbike to work with a laptop strapped to his back instead of in a holster. In effect, he is the archetype of exactly what he isn't in the movie—the perfect candidate for an arranged marriage.

Introduction

There has been a rapid diffusion of information technology across the developing world, and much has been written about implementation of good practices, or about impacts on the macroeconomy, social relations, and the like. Little, though, has been said about the way in which the technology is perceived; about the messages and representations of IT, like those in *Alai Payuthey,* which shape the IT aspirations and behaviors of millions. In this article, I select the example of India—a country vibrant in both IT and media—to investigate these issues.

There is enthusiasm for the idea of information technology as offering a ladder for economic ascendancy among the Indian upper and middle classes. For many of these people, the artifacts of change are visible both in the spatial evolution of skylines in "tech cities" like Bangalore and Chennai, and in the expanding options for professional advancement of engineers in the software sector, both in terms of high wages and international mobility. The question of whether opportunity of the kind embodied in the image of the software engineer emerging out of a village school is grounded in reality is difficult to answer, especially if one is informed solely by the changes in inequality as seen through macroeconomic indicators. The few studies that do exist on the subject suggest that participation in the "IT largesse" remains restricted across economic and cultural lines on issues such as caste, class, and religion (Fuller & Narasimhan, 2006; Ilavarasan, 2007; Upadhya, 2007), and while the research shows that a sizeable proportion of IT workers have a non-metropolitan background, education among their parents, especially mothers, tends to be high (Krishna & Brihmadesam, 2006). In short, the idea that access to the information technology revolution in India offers flatter access to social and economic ascendancy may be more of a middle-class imagination of opportunity in Indian society.

Yet the number of projects offering IT access to the poor and excluded in India as a means of expanding opportunity has increased in the last decade. This article advances my previous research (Pal, Lakshmanan, & Toyama, 2007), based upon 193 interviews across rural South India that recorded perceptions of IT, especially among those people with no prior experience using computers or no direct contact with users of computers. Such perceptions are social constructions of technology based on primary and secondary sources of information. Here, I look at the latter. Finding that media images were cited by several respondents as important sources from which they learned about technology, I analyze popular media imagery of computers in South India.

Building on past scholarship in technology and development, cinematic portrayals, and the role of icons in aspiration, I argue, using films produced since 2000, that popular cinema reflects much of the middle-class faith in technology offering a concrete hope for economic and social aspiration. In constructing my argument, there are three trends that I use: First, I examine the artifact of the computer itself and its portrayal as symbolizing power; second, I examine the portrayal of the computer user and the qualities attributed to him, and more importantly, to her; and third, I discuss the disproportionate concentration of such imagery in South Indian cinema compared to film from other parts of the country. In framing these findings, I look first at contrasting these films with portrayals in Western cinema, and second, I anchor my discussion within the recent development discourse in India. While the centrality of popular cinema in building national discourses of aspiration is possibly unique, in several aspects, to the nature of media consumption in India, I argue that conceptions of development—both those which are applicable to one's own potential and those which are seen to be relevant for an "other"—are both deeply influenced by reflections of aspiration within class contexts in popular media.

1. Related Work

There is much related work to draw upon in writing this article. Perhaps the most important of this is a small, but rich, body of work on South Indian cinema, much ignored in lieu of its more internationally popular northern cousin, Bollywood. Arguably the

most important and relevant theme running through the work on South Indian cinema has been that of the blurring between screen and real life regarding the characterizations of stars and their image management in the public sphere (Dickey, 1993; Jacob, 2009; Srinivas, 1996; Velayutham, 2008).

More broadly, this work carries forth several relevant bodies of work that I refer to very briefly. In examining popular cinema as a mode of institutional information, this article advances further discussions in film theory on nationhood and aspiration (Foster, 2005; Friedberg, 1994; Higson, 2002). It is particularly important here that this discussion is situated within the frame of transition—in our case, the idea of technology generally, and IT specifically, as a bridge between social exclusion and inclusion into "development." There is much work on the idea of the transnational identity in transition in cinema, particularly in terms of political reimagination, such as post-fascist or post-totalitarian cinema in Germany (Fehrenbach, 1995), Spain (Hopewell, 1986), and Latin America (Burton, 1986). Such work contributes valuably by chronologically defining both what one is, and what one is not, within the frame of a critical change factor—in this case, the political. In the cinema we examine here, this critical change factor is frequently the access to the computing artifact. Also, dealing with constructions of the self and the other, there has been much recent work done on identity within a globalizing context, such as that which has been written on transnational Asian identity in film (Lu, 1997; Van der Heide, 2002), on Middle Eeastern film (Tapper, 2002), or on Ghanaian and Nigerian video films concerning value negotiation on issues of religion and "African-ness" (McCall, 2002; Meyer, 2004). We draw on a rich body of work on Indian popular cinema oriented both more broadly on issues of national identity (Chakravarty, 1993), and more specifically on cultural change (Gokulsing & Dissanayake, 2004; Rajadhyaksha, 2003).[1]

Within the growing literature on identity on the Internet, there has been much work on both self-perception and online representation (boyd, 2007; Nakamura, 2002). Related to the cinematic themes of globalization and development, there

has been literature on the creation of online identities of diaspora communities of Filipinos (Ignacio, 2005), Chinese (Wenjing, 2005), and Nigerians (Bastian, 1999), for instance, or on issues of self-representation in Sub-Saharan Africa (Fürsich & Robins, 2002). The negotiation and careful crafting of online identity and networks has also been studied with regard to groups such the Zapatistas (Garrido & Halavais, 2003) and West African online scammers (Burrell, 2008). And yet, an important difference between these and the cinematic representations lies in the intended audience. We have much to learn from how people create self-perceptions and intend self-representation online, but the audience in such cases, are people who are already technology users. In comparison, the popular cinema of India is aimed at consumption, both by people who reflect themselves as ascendant by being IT users, and by audiences outside any immediate access to the technology, possibly looking for a way in.

2. Methodology

Some elements of the survey data reported above are included in this article; however, the main focus is an analysis of film. I have reviewed 91 films from Western and Indian cinema that incorporate themes of relevance to technology and development. Of these, 47 are specifically Indian films from the 1990s and 2000s that depict computer users or computing artifacts in some form. These films are largely in the Tamil and Telugu languages, for reasons I discuss later. Regarding the way the films were selected, quite simply, I watch a lot of films, and I make a note whenever I see a computer on screen and then include that for analysis. I also identify films by running searches on various terms either on IMDB (the Internet movie database) or websites that review Indian films.

The textual analysis I present here is primarily my own reading into the characterization, and in the few instances where I have managed to contact the filmmakers or others associated with the film, I use their input in this description. To explore the question of intentionality in the way that the computers were characterized, I spent some time in the film industry discussing the ideas emergent in this article

---

1. Needless to say, this literature review only scratches the surface of the kinds of relevant work. For example, an additional area of recent growth has been in activist cinema, which appeals to a widespread audience, such as Abderrahmane Sissako's Bamako (2006), in addition to copious documentary cinema on the subject.

and interviewed people from the Tamil and Telugu film industry whose work is discussed here. These include four directors and one distributor: Rajiv Menon, Suhasini Mani Ratnam, Siva Anantasubramanian, Siddharth, and distributor Dr. Srinivasan from Abirami Films. Each of these interviewees is associated with at least one of the films I cover here, some with several. Mr. Menon is the director of *Kandukondain Kandukondain,* a landmark film in the representation of women as computer users. Ms. Ratnam is a veteran director in Tamil cinema whose films are known for strong depiction of female characters. Siva Anantasubramanian is the director of *Chukkalo Chandrudu* and was the assistant director on *Alai Payuthey,* the film introduced at the very start of this article. Siddharth is a film director, but he is interviewed here mostly because of his work, prior to his directorial career, as a film publicist who worked on several of the big budget films mentioned here. Lastly, Dr. Srinivasan heads distribution operations for Abirami Films, the largest film distributor in South India, which distributed a number of the films I cover, including the iconic *Sivaji.*

3. Discussion

Ideas of technology and society in cinema have dated back over a century to the fanciful silent short film, *Trip to the Moon* (Méliès, 1902), and the representation of technology in cinema has straddled the lines between science fiction and what may be, and between technology and social readjustment. The latter, especially the idea of technology as transformative, came to center stage in the 1920s and 1930s, around the period and often the theme of rapid industrialization. Scholars have been interested in two important and fairly consistent themes around technology and society in cinema. The first, the dystopian ideas of technology and urban living either in the present or future are well-represented in Fritz Lang's *Metropolis* (1927), a futuristic epic set in a fractured 21st century, or in Charles Chaplin's *Modern Times* (1936), set on a dehumanized 20th century factory floor. These ideas of technology as mystical, all-pervasive, and potentially at odds with humanity have been a consistent theme of cinema and literature throughout the decades of vast technological change around the world (Atkinson, 2005; Bendle, 2005). A second early theme had a more proactive view of technology, primarily industrial

production, and traces its origins to the early Soviet cinema highlighting technology as a nationalist enterprise. This theme, often attributed to Lenin's view of cinema as a means of social and economic propaganda (Youngblood, 1992), was later emulated in several other nationalist cinematic traditions around the world, where cinema has been seen as both a symbol and, simultaneously, a propagandist tool of modernity (Singer, 2001). Broadly, two related themes have fallen under this umbrella: The first was that of a struggle between traditionalism and modernism, one seen in several "third world" cinemas (Akudinobi, 1995; Lopez, 2003); and the second was of the use of technology (especially big industry) in nation-building, which India, in particular, saw a fair share of in the postcolonial years (Mukherjee, 1960). While technology in a more general sense was a consistent theme of cinema, computers themselves did not appear until well into the 1950s, and even then, they tended to be fanciful, clunky, large panels (reasonably similar to what computers really looked like!) used in science fiction cinema.

The first films to feature computers were science newsreels in the immediate postwar period, and in 1951, the first film featuring a rudimentary computer was *When Worlds Collide,* about a war to keep earth safe from a renegade asteroid (Maté, 1951). Several such films followed. The rising popularity of television in the United States spurred the appearance of computers on the small screen, starting with the 1962 sci-fi show *The Jetsons* (Zaslove & Nichols, 1962), then in scattered episodes of the spy-caper serial *The Avengers* (Newman, 1961), and finally in 1966, with the hugely popular sci-fi series *Star Trek* (Roddenberry, 1966). This fantasy archetype from Western media was heavily reprised in Indian cinema, though perhaps the more interesting discussion is the longevity and distance from reality of this fantasy phase. The image of the fantastic machine lends an easy segue to our next theme. This was the dystopian imagination of computers guided by the popular conceptions of artificial intelligence as typified by the man versus machine face-off in *2001: A Space Odyssey* (Kubrick, 1968).

The individual human intermediary of computers on screen remained by and large the socially awkward scientist. It wasn't until the late 1970s and early 1980s, when the use of computers in schools increased significantly, that the media introduced us

to a new technology user—the young geek. Around the early 1980s, a spate of "hacker" films came out featuring teenagers and youngsters using computers, a trend started by the Canadian *Hide and Seek,* about a kid who sets off a nuclear emergency by hacking into a mainframe (Bonnière, 1977). The ubiquitization of computers on screen, where the computer moved out of being a scientific spotlight to being an everyday item, started around the late 1980s, with films focusing on industries where computers had become fairly commonplace, such as banking and finance (Stone, 1987). By the 1990s, around the time of the Silicon Valley economic boom (Faden, 2001), and especially the widespread permeation of the Internet,[2] there was a huge spike in technology-related blockbuster cinema made for popular consumption in Hollywood. As we shift our focus over to discuss the representation of technology in Indian cinema, we find many of these themes repeated, with one striking exception. While the computer user as "hacker" is a consistent theme in Hollywood (and used selectively in India, as we shall see), the computer user as "aspirational" is almost entirely missing. The software engineer in Hollywood is not an "upwardly mobile" character; instead, he or she is automatically part of a geek universe, and their characterization, when sympathetic, is generally related to their intellectual prowess rather than their class mobility.

In exploring why technology in cinema is important to our understanding of postliberalization India, we turn briefly first to the importance of cinema in public discourse in India. The political importance and development discourse of cinema gained early recognition among the Bolsheviks following Lenin's own affirmation of cinema as a tool of propaganda (Kepley, 1990). Much Indian popular cinema under British rule was politically censored and limited to non-nationalistic themes, with the exception of a few cloaked swipes at the colonial government through wordplay in dialogue or songs that slipped through the cracks. Most progressive themes were restricted to social issues perceived as part of the "White Man's Burden" in India, an example being cinematic attacks on the caste system, a theme of

limited outrage to the colonial censors (Akudinobi, 1995; Osten, 1933). Independence threw open the floodgates, and Nehru personally took something of a first step in recognizing the importance of cinema in the nation-building exercise, commissioning Italian director Roberto Rosselini to make a film on India in 1950. Thereafter, he supported films like *Mother India* (Khan, 1957) and several of Raj Kapoor's early post-independence films (Mishra, 2002). In this period, a number of the top filmmakers in the Bombay industry were from the socialist activist movement of the freedom period.

Socialist secular writers were formerly active in the freedom movement, and subsequently incorporated several nation-building themes into their cinema. But it was farther south, in the Madras film industry, that cinema as an explicit electoral weapon was imagined by politicians and filmmakers alike (Dickey, 1993). The Dravida Munnetra Kazhagam (DMK) as a political party was quick to use films as a propaganda tool for spreading its message, beginning a trend that is now synonymous with several South Indian cinematic cultures: casting movie actors in physical and metaphorical form imitating temple idols, usually with scantily concealed political undertones (Hardgrave, 1973).[3] Development was a consistent theme of South Indian cinema, and it continues to be one now. However, the explicitly polemical films of the 1950s gave way by the 1960s to films in which the lead character and the artifacts or actions surrounding him (yes, usually "him") were the primary tools of symbolism.

Much work has been done on the cinematic culture of India, on its representation of modernity (Appadurai & Breckenridge, 1995; Dwyer & Patel, 2002; Rajadhyaksha, 2003), and more recently, on television in the post-liberalization India (Mankekar, 1999). In looking at computers and computer users on screen, we contribute to the discussion on middle-class values and aspirations and their manifestation in the public sphere.

In this relation, it is also important to mention work that has examined the impact of such screen portrayals, as the idea of this article originated in work in rural India that showed that "computers"

---

2. *This is somewhat comparable to the appearance of computers and computer users in India, which became much more common a decade later, when home computers achieved reasonable (though far from ubiquitous) permeation in urban India.*

3. *This development came into being despite the fact that DMK was an explicitly atheist party.*

were high on parents' aspirations, even if mass media was their primary source of information on technology (Pal et al., 2007). Much work in recent years has focused on the influence of cinematic and televisual representations on public imagination, including on economic and social decision-making (Dolnick, 2008; Fernandes, 2000; Holbert, Shah, & Kwak, 2003; Jensen et al., 2007; MacPherson, 2007). Interestingly, while much work has focused on the protagonists and their characterizations as elements of modernity (Jacob, 1997; Pandian, 1992; Sharma, 1993), little has focused on the actual artifacts themselves, despite, as we will find, much continuity among these symbols of modernity.

From the early days of Indian cinema, the idea of modernity has had a tenuous track record—in some quarters, because of its perceived closeness to Western values. Consequently, technology and its representations have frequently been caught in an awkward, contested space between traditional and modern values, often implying the schism between rural and urban landscapes. One of the earliest films to straddle this space was *Dharti Mata* (Bose, 1938). The title literally means "Mother Earth," and the film features two friends, one who goes abroad to study and returns home an urbane engineer to find mineral wealth on his ancestral soil, and his buddy, who stays back and decides to stay true to his rural roots and farm the same earth on which the former wants to drill. The clash between the protagonists ends with the village-bound son-of-the-soil winning out, an ending that would reprise itself repeatedly over the years.

Fast forward to the new millennium, and to *Kandukodain Kandukondain* (Menon, 2000), the Indian remake of *Sense and Sensibility*. Here, the protagonist is a woman who lives in her ancestral village, but when the going gets tough, she leaves for the city and ends up living happily ever after as a software engineer. *Kandukondain* may not be the archetype for all films of the generation, but as a popular blockbuster, the film featured several of the key themes that we highlight here on the changing view of modernity, especially because of the reversed gender roles in the film.

3.1 ICTs and Gender Empowerment

During field research in rural Karnataka in 2005 that would eventually lead to this exploration of cinema, in a village where the local government had just installed computers in a primary school, a 21-year-old teacher offered an interesting insight on computers and the workplace at the village computer center. Both her parents were illiterate casual laborers.

> I want to move out of the village. I am looking for a job with computers because my parents will let me move to Udupi or even Bangalore if the work is in computers. For any other job, they won't let me leave the village. (Geetha, computer teacher, Rural Udupi, Karnataka, interviewed December 2005)

About a year later, an interesting corollary to Geetha's statement came from a taxi driver interviewee, who lived in the neighboring state of Tamil Nadu and was a father of two girls in their 20s.

> Both my daughters work in Chennai in computers. In the early days, we would never let our [referring to the Thevar caste] women travel to the city to work, but if they work for computers that is good. There are good facilities with only ladies housing, and many other families from our village have sent their daughters to work in Chennai now. (Selvaraghavan, taxi driver, Coimbatore District, Tamil Nadu, interviewed October 2006)

There is already a growing body of work on female technology workers in Indian call centers that probes this issue more closely (Radhakrishnan, 2008), and the local movie theater is a starting point into some of the changing social conceptions of women's work.

If we think back to Indian cinema, and to the typical occupations of women on screen, well, reasonable women don't have jobs; those who do typically do so because of the failure of some critical male provider. Thus, the dead, drunk, or incapacitated rural husband or father gives way to the woman who works the field, at the risk of lascivious attention of the agrarian landlords or plantation managers (Khan, 1957; Roy, 1958). When the female ends up working in the city, if she's generally less educated or desperate enough, she will likely end up as a casual laborer at risk from the lecherous building contractor (Chopra, Y., 1975; Krishnamurthy, 1981). Now, these informal sector jobs tend to go to the "mother figures," arguably because the pitch for visual glamour is somewhat diminished by the sweat of bricklaying. The young

heroine in a film tends, more often, to work in the organized sector.

Here too, many of the same issues exist. There are screen roles in which women portray alternatives to the mother figure, such as nurses or doctors (Balachander, 1987; Majumdar, 1962; Sahu, 1960) or caring social workers or teachers (Chopra, Y., 1973; Kapdi, 1979; Kapoor, 1955; Padmarajan, 1983). These are reasonably respectable jobs for women, and not macho enough for the male protagonists. The female character who fails to secure any of the above spills over into the organized employment sector. The villainy of the rural landlord and the urban building contractor are now reprised in the lascivious, white-collar, bourgeois rogue who harasses female coworkers (Balachander, 1977; Chopra, B. R., 1978; Prakash Rao, 1976). In rare cases, there can also be the daring self-starter saleswoman (Neelakantan, 1972; Paranjpe, 1981; Rawail, H. S., 1949) or the spoiled heiress-boss (Kanwar, 1994; Mirza, 1992). In most of these cases, a male character, usually the hero, offsets the perils of the woman's tryst with his domain of the economy. Of course, exceptions exist; for example, the woman embraces the perilous world with vengeance or connivance, the former when she takes on the role of Hindu goddess Durga as a police woman (Dixit, 1976; Rama Rao, 1983) or as an avenging angel (Bhogal, 1988; Chopra, B. R., 1980). What remains degenerates quickly in the caste hierarchy of professions, from the mildly uncomfortable bar dancer or performer (Hussain, 1973; Sippy, 1982), to the circumstantial prostitute (Balachander, 1973; Samanta, 1971; Sasi, 1980), and finally, to the campy gangster's moll (Anand, V., 1967; Hussain, 1973; Ramachandran, 1973).

Kandukondain Kandukondain took a gentle step in a different direction. The female protagonist in the film, a Brahmin girl, Sowmya, is reduced to penury after being hoodwinked out of her ancestral village home by evil relatives. She proceeds to move from the village to the city, where she rectifies her family's situation by learning to use computers and getting a job as a software engineer. Her character not only lifts her entire family out of poverty, but emerges as the most valuable technologist in her firm and almost relocates to the United States to work as an engineer before better sense prevails, and she marries her wooing admirer. What is uniquely compelling about the characterization of

Sowmya is that she remains "traditional" to the end, but straddles the modernity space effortlessly. She dresses conservatively, except for dream sequences with song and dance, serves her family dutifully, and acquiesces to an arranged marriage. When she does start her software job, her workplace does not demand flashy hackers; instead, her interactions with her engineer boss highlight the importance of the traditional urban middle-class work ethos. Despite her success, she does not turn into a slick skirt-wearing executive, and in not doing so, she kills two birds with one stone: She remains the agreeable screen heroine and succeeds as poster child for "appropriate ICTD"—a woman who both wins her way out of poverty and manages to stay, culturally, rather untainted.

> When the software movement started, it was emancipator—for example, Jane Austen wrote *Sense and Sensibility* before the Suffragist movement, so in my adaptation, the two protagonists stand for art and knowledge. The heroine moves from a rural to urban setting and out of poverty by becoming a software engineer. My protagonist was not to be an angelic face of rural ethic . . . I saw this (the new India) as a meritocracy . . . I specifically chose technology for what it represented—knowledge and egalitarianism. (Rajiv Menon, director, *Kandukondain Kandukondain,* interviewed December 2009)

While there had probably never been an Indian film with a female character playing an engineer, save for the oddball automobile mechanic's daughter, the female software engineer and female outsourcing center workers became popular in a huge way around this time (Bhadran, 1999; Goud, 2003; Madan, 2004; Prabhakar, 2002; Selvaraghavan, 2007; Shankar, 2002; Yelleti, 2008), including in films featuring a reversal of roles, where the female lead plays an accomplished technologist of some form, but the male lead is portrayed as professionally subservient (Selvaraghavan, 2005; Vamsy, 2002). One film stands out as an interesting continuation of the progress in *Kandukondain*. In the Telugu film *Anand* (Kammula, 2004), the protagonist, Roopa, takes Sowmya's position a step further. Here, she not only supports herself through a software job, but sheds much of Sowmya's demure qualities, both in reinforcing her independent identity and in challenging traditional behavior roles expected from her by suitor and in-laws alike.

An even more interesting addition to the technology and gender empowerment idea comes in the film *Swagatam* (Dasarath, 2008). In it, the male protagonist is a demanding customer at an arranged marriage matchmaking bureau. The manager of this bureau (coincidentally, the female lead) has an online candidate repository, and she tells the male lead to use the computer to filter through his requirements for a spouse. She kindly reminds the hero that a woman's greatest trauma is being rejected at the arranged marriage meeting, and that technology should be used effectively to circumvent this problem, and thereby, to empower women. Given that marriage is practically an ever-present theme in Indian cinema, it is not surprising that several other films have used technology as a go-between for arranged or other marriages (Kathir, 1999; Prabhakar, 2002).

Although the computer as a cupid connector has been a fairly strong theme through most Indian cinema, the female software engineer has been less so. Regional cinema in languages such as Bhojpuri (mainly screened in North-Central India), Bangla (mainly screened in West Bengal), and Oriya (mainly screened in Orissa) largely caters to rural audiences, or what is referred to in trade parlance as "B circuits," and still features a lot fewer women in professional positions. In those very same states that speak Bhojpuri, Bangla, or Oriya, the A-circuit theatres typically show Hindi films, regardless of the majority language of the local populations. In Hindi cinema, on the other hand, female characters who use computers have tended to be more Westernized or upper class, such as the student who studies computer science in college as a qualification—before her eventual marriage—like Madhuri Dixit in *Hum Aapke Hain Koun* (Barjatya, 1994), or the "smartypants" Preity Zinta in *Koi Mil Gaya* (Roshan, 2003). Their characters are significantly different than those of the Sowmyas or Roopas, where the appropriation of information technology into the middle class domain has been less of a concern. In our discussion of aspiration, we return to this issue.

3.2 Aspiration

If we want to show a modern scene for the audience, we can either rent a Mercedes car, or show a café with some young people and a few laptops. This is cheaper from the art direction perspective, and shows youth, modernization, technology—all in one. (Siddharth, director, *Balae Pandiya* and *Publicist,* interviewed December 2009)

There are few windows more insightful into the aspirational environment in India than the marriage market. Typically, the highest catches in the dowry market in rural India went to male holders of government jobs that offer (among other things) stability, an invaluable element in the rain-dependent agrarian landscape (Sambrani et al., 1983). Films have long portrayed doctors and "big officers" as good catches for families trying to marry off daughters. In the 2000s, that role was taken over by the software engineer[4] returning (or not) from the United States.

An early example of this new classic "catch groom" of South Indian cinema was Arvind Swamy, who, in the blockbuster hit *Roja* (Rathnam, 1992), played a computer engineer whose arranged marriage is a plot point early in the film. Over time, two broad strands of software engineer-related marriage scenarios have emerged: The first depicts the engineer as the middle-class hero (Kranthikumar, 2001; Renjith, 2002; Vasanth, 2007); and the second is the counterpoint in which parents desire a groom who is a software engineer or NRI (non-resident Indian), but the hero is usually a son-of-the-soil type (Menon, 2000; Narayana, 2006; Selva, 2002). While the endgame of these films is often an ode to the anti-hero, the focus on the software engineer as essential to middle class aspiration is nonetheless highlighted.

In some films, the less-than-desirable character turns to computers as a means of social acceptability, and in others (Bhargavan, 2007; Ravishankar, 2002), the drive is primarily economic, often explicitly as a means of getting jobs in the United States (Menon, 2001; Rasool, 2004). We find among male software engineers a distinction between the north and South Indian stars. In Hindi (north Indian) films, the engineer stereotype is typically applied to the "cool youngster" hacker characters, usually teen idols, (Anand, 2008; Ghosh, 2004; Roshan, 2006;

---

4. In the late 2000s, South Indian actresses Renuka Menon, Gayathri Raghuram, and Kanika Subramanian all left the film industry to marry software engineers in the United States. In the past, the common stereotype/joke was of actresses leaving the film industry to marry doctors abroad, which is both interesting and a potential topic for a larger study on the "legitimacy" of actresses.

Singh, 2007), and very comparable to the Hollywood depictions of teenage computer users from the 1980s and 1990s. Most of the South Indian depictions, however, are not necessarily hackers who do cool things with computers, but rather, they are people who have IT-related jobs. This distinction is interesting, as it underlines the differences between the viewing cultures of popular Hindi and regional cinemas, a theme that has been articulated in Ashish Rajadhyaksha's examination of the "[W]esternizing trend" of Hindi cinema (Rajadhyaksha, 2003), an upper-class, urbane narrative, in short. In contrast, in South Indian cinema, while the fantasy sequences (songs, dance, etc.) have roughly the same "modernity" as their Hindi counterparts, the narrative themes are much closer to the wider middle-class audience appeal. Thus, the persistence of software engineer characters is seen not just in the "urban" South Indian cinema (meaning *urban* in both setting and primarily appeal), but also in the "mass" cinema.

3.3 The "Mass Film" and the Iconization of Computers

"Computers can be used to fight evil. We can do anything with a computer" (Shivraj, fifth grader, Devanahalli, Karnataka, during an interview in January 2007).

"Computer can save us. When neighbouring country is attacking, this is known to our scientists by tracking it on the computers" (Udhaykumar, fifth grader, Coimbatore, Tamil Nadu, during an interview in January 2007).

In this section, we turn to the difference between the aspriational cinema, which we cover in the previous two sections, and the "mass films," which not only highlight an interestingly different view of technology and modernity, but also bear uncanny resemblance to some of the Hollywood characterizations of the past. By *mass films,* we refer here to the films that are primarily aimed at urban lower-class and rural viewers. The term, derogatory as it may seem, is quite commonly used by filmmakers and analysts alike to refer to "people's" cinema, and several major film stars have come to be associated with this movement. While these terms can also refer to low-budget movies made for rural audiences, a fairly large share of mass films are actually big-budget productions, usually featuring a movie star with a significant, often frenzied, fan following. Such

actors typically associated with mass cinema tend to portray larger-than-life characters and have outsized public images (Pandian, 1992). Recently published work on mass films has brought attention to their importance as bringing "agency" for young fans who assiduously worship such stars' films, in ways that create an image trap for the male star (Srinivas, 2009). A mass star, he is accepted precisely for his righteous predictability.

The dialogue in mass films is typically political and populist, almost propagandist, and can probably be traced back to the films of M. G. Ramachandran, popularly known as MGR, who never drank or smoked on screen, committed no act of villainy, remained staggeringly attractive to women, helpful to every needy person, and entirely unbeatable in any physical or intellectual contest. MGR went on to become a hugely popular politician in Tamil Nadu, remaining virtually invincible at the polls. His films weren't propagandist in theme, but were instead propagandist in characterization. Thus, the film would be a regular potboiler, much in the theme of formulaic entertainment, but within the film, his character would be larger than life in both action and dialogue. The dialogue from his films and his bombastic screen style were synonymous with his political persona, and his fan clubs served as political mobilizers. MGR's political (and cinematic) mirror image in neighboring Andhra Pradesh (with a relatively comparable cinematic culture) was N. T. Rama Rao (conveniently called NTR), a screen superstar who rose to become the state's political *supremo* in the 1980s.

MGR's "mass star" successors are somewhat less pious in contrast, but fairly comparable in their abilities to commit superhuman acts, deflect bullets, and most important, save mankind. Fans of mass stars frequently refer to their cherished stars with honorifics such as "Dear Leader" or "Elder Brother," and many of the stars end up in politics. The opening few weeks of a film by a mass star can almost certainly expect to play to full houses, as well as to prompt celebrations and prayers that accompany any release or key dates, such as the film's 100th day in theaters. Fan clubs frequently arrange discussions of the said star's films, but rarely do they discuss the quality of the acting or characterization (these are typically beyond critique); such meetings are typically praise sessions for the star. Entire tomes of scholarly literature are devoted to the functioning

and discourse of fan clubs for mass stars (Dickey, 1993; Srinivas, 1996).

The use of information technology by these mass stars is particularly interesting, because their audiences are often not the middle-class Indians who watch many of the urban-based films noted earlier. Interestingly, then, we find the ideas of IT use in such mass star movies somewhat simplistic, but still in line with the overall theme of what a mass star does—save the world. Typically, a mass star is a perfect son-of-the soil, thus almost always speaking in the vernacular throughout a film (unlike in Hindi films, for instance, where English is often interspersed with the Hindi dialogue), excelling and promoting local arts, and so on. In a sense, the mass stars' use of computers is comparable to their use of English. Mass stars generally use English only occasionally, laconically, and with much emphasis, usually when challenged by an English-speaking adversary or intransigent love interest. In the same vein, a mass star may use a computer just to underline that he can, even if it is entirely irrelevant to the plot. As a son of the soil, he is able not just to play the game by the rules of the hinterland, but he can also match up to modernity (Sivamani, 2002).

> There is no star with a bigger draw than Rajnikant. For his fans, he is perfect, he is their leader. If there is a latest technology, Rajnikant should be able to use it in the eyes of the viewers. (Suhasini Mani Ratnam, director and partner, Madras Talkies, interviewed December 2009)

In *Sivaji The Boss*[5] (Shankar, 2007), by some estimates the top-grossing Indian film of all time, Rajnikant, arguably India's most maniacally followed star, plays the eponymous hero, a software engineer-cum-social worker bent on rectifying the ills of the Tamil world. In his quest, Sivaji uses his voice-recognition-enabled laptop to control his vigilante operations and outmaneuver his rivals. Similarly, the use of computers to maintain and control databases of villains has been used effectively by megastars Vijaykanth (Murugadoss, 2002), Chiranjeevi (Vinayak, 2003), and Ajithkumar (Vasu, 2006; Vishnuvardhan, 2007). The idea of computers as a tool to assist heroes in cleaning up society has been used to much effect recently, mostly in films featuring websites for "submitting un-rectified crimes" for appropriate appraisal and corrective action by the hero on the other end of the Internet connection (Jayaraj, 2004; Shankar, 2005)

The quotation from Shivraj at the start of this section was not an isolated one. We were surprised at how often, during our interviews in rural India, the same answer was repeated to us over and over—"Computers can do anything"—with its source ranging from children's fantasies to adults with no direct experience with computers, but who nevertheless allocated human attributes to the machines, for example, saying "Computers can teach us English" in clear seriousness. It is far-fetched to ascribe such notions specifically to films, but it is worth looking briefly at some of the omnipotent deeds of computers. Perhaps a compelling analogy would be that computers can do anything, just like Rajnikant. It is not surprising in this light to know that movie star Mammootty was selected as the Brand Ambassador for the rural computing initiative in Kerala, Akshaya.

If we look back, before the computer-using days of the mass stars, shades of fantasy and omnipotence among computers in Indian film were akin to Western cinema of the 1960s, especially in early Indian science fiction (Parvez, 1986; Srinivasa Rao, 1991). Computers and their ability to make visual magic broke box office records with international Miss World pageant winner Aishwarya Rai's first screen appearance in *Jeans* (Shankar, 1998). Here, her brother creates a visual double of Aishwarya to convince twin brothers that they are both in love with two different girls, a reasonable exercise in balancing technological savvy with the need for romance in scripts. *Jeans* and the hugely popular MTV video of Michael Jackson's single "Black or White" (Landis, 1991), featuring faces that morphed into one another (or was it simply the glut of Photoshop engineers in India?), also helped to create one of the most enduring computer tricks in Indian films, which is still a common feature of mass films—the ability of a machine to take a scanned picture of a child lost several years ago and morph out of it a perfectly accurate image of the adult version, while auto-adjusting for sartorial grace and the few extra facial pounds on the likes of Vijaykanth (Perarasu, 2006; Vidhyadharan, 2008).

---

5. BOSS in this film stands for "Bachelor of Social Science."

4. Conclusion

Is there intentionality in these portrayals? As someone who has written and failed to sell scripts in the past, I can speak from experience that there is, in fact, some degree of production-level engineering of characterizations.

> We think about every smallest detail in the characterization. It is essential for the common viewer to digest the protagonist's profession. It may be different for other parts of the country, but if you present a software engineer as a hero, even a villager in Andhra Pradesh will immediately pick it up. It will not be considered elitist. (Siva Ananthasubramanian, director, *Chukkallo Chandrudu,* interviewed December 2009)

Despite this, I would argue that the question of intentionality is impossible to answer, given the recursive loop of whether society influences media or vice versa.

The idea for this research emerged from confounding outcomes in other research that indicated a mismatch between people's stated interest in information technology and their actual use of ICTD projects in rural India. People were very excited about computers and the possibility of their own access to them, but they were unclear how IT could be practically useful in their lives. Further, such ideas about technology were seen to not just influence researchers' estimation of what the likely adoption for certain ICTD projects might be, given the apparent enthusiasm about technology, but they could also influence the population's own propensities to invest in ICTD projects without necessarily having a clear idea of the value of such technology. For serious scholars of ICTD, attributing this phenomenon mainly to the "buzz" around technology is not adequate, and an examination of the discourse encompassing this buzz is necessary. As ICTD matures as a strong body of independent literature, it will be vital to incorporate learning from existing bodies of thought in development studies. Here, I aim to gently open the windows into the concerns of critical theory and discourse analysis.

This analysis of computers and cinema in India brings to light a number of interesting findings about how filmmakers have chosen to portray technology in Indian cinema, and it is particularly interesting to look at where these portrayals are comparable to other cinematic traditions, and

where, as in the aspirational characterizations, they are unique and deeply related to the prevalent discourse of technology being a means of social and economic leapfrogging. What is also remarkably telling is the much greater prevalence of technology-related themes and characterizations in South Indian films compared to north Indian cinema, given the disproportionately higher concentration of IT-related industries and opportunities in the major South Indian metropolises. These cities, like Hyderabad, Chennai, and Bangalore, saw tremendous demographic, landscape, and social transformations in the late 1990s, the same time that computers as movie characters spiked up the charts.

Many of the aspirational characters may well draw their original inspirations from real-life "heroes," often engineering graduates from the hinterland who moved to the cities, saw remarkable growth in their own incomes and social statures, and then frequently moved abroad, where they enjoyed opportunities that would have been much more challenging to aspire to a generation back. Most importantly, many of these graduates were women. What the cinematic analysis shows us is, indeed, a reflection of a larger perception of what counted as the "India Rising" metaphor for the urban middle classes and the rural aspiring middle classes, which, incidentally, largely comprise the regular filmgoing population. It is the aspirations of these classes that we see portrayed in a subsection of South Indian cinema today. We can then compare the output geared for these aspirational markets with the poorer hinterland markets of the mass films, which take on a simplistic form, carrying forth, with selective filters, the transplant of the middle-class imagination of technology down the economic and social chain.

In conclusion, we turn briefly to the iconoclastic proposition of popular Indian cinema being proactively used to impact development. Were the screenwriters of the films we noted contemplating issues of technology and development, and of impacting society, or is what we see here a sheer reflection of popular psyche? Irrespective of that, as demonstrated, research has already shown that certain types of entertainment media experiences in India have had positive social outcomes, especially regarding gender-related issues like female child protection and domestic abuse prevention. This could well be dangerous knowledge for the ICTD commu-

nity, a significant part of which is comprised of scholar-activists. Indeed, some of us may question whether cinema and other forms of mass media and culture can or should be proactively used to impact information technology uptake. It is important that we think of these questions. We are, after all, in development, and for many of us, all research implies the responsibility of considering real-world intervention capability. When we do start thinking in that direction, perhaps a social scientist in the room can point out the parallels of such ideas with Leninistic cinematic propaganda and ask if technology intake ought to be promoted at all. After all, asking questions is what we do; decisive action, on the other hand, is Rajnikant's domain. ■

Acknowledgments

References (Scholastic Texts)

Akudinobi, J. (1995). *Tradition/modernity and the discourse of African cinema.* Oak Ridge, TN: Iris Publishing Group.

Appadurai, A., & Breckenridge, C. (1995). Public modernity in India. In C. Breckenridge (Ed.), *Consuming modernity: Public culture in a South Asian world* (pp. 1–22). Minneapolis, MN: University of Minnesota Press.

Atkinson, P. (2005, December). *Technology and the vision of utopia.* Paper presented at Imagining the Future: Utopia, Dystopia and Science Fiction conference, Monash University, Melbourne, Australia.

Bastian, M. (1999). Nationalism in a virtual space: Immigrant Nigerians on the Internet. *West Africa Review, 1*(1).

Bendle, M. (2005, December). *Zarathustra's revenge: The sordid utopia of contemporary science fiction films.* Paper presented at Imagining the Future: Utopia, Dystopia and Science Fiction conference, Monash University, Melbourne, Australia.

boyd, d. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social life. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning, 119–142.

Burrell, J. (2008). Problematic empowerment: West African Internet scams as grassroots media production. *Information Technologies & International Development, 4*(4), 15–30.

Burton, J. (1986). *Cinema and social change in Latin America: Conversations with filmmakers.* Austin, TX: University of Texas Press.

Chakravarty, S. (1993). *National identity in Indian popular cinema, 1947–1987.* Austin, TX: University of Texas Press.

Dickey, S. (1993). The politics of adulation: Cinema and the production of politicians in South India. *The Journal of Asian Studies, 52*(2), 340–372.

Dolnick, S. (2008, May 1). Keep movie heroes alcohol-free, Bollywood urged. *The Washington Post,* p. C7.

Dwyer, R., & Patel, D. (2002). *Cinema India: The visual culture of Hindi film.* Piscataway, NJ: Rutgers University Press.

Faden, E. (2001). The cyberfilm: Hollywood and computer technology. *Strategies: Journal of Film, Theory, and Culture, 14*(1), 77–90.

Fehrenbach, H. (1995). *Cinema in democratizing Germany: Reconstructing national identity after Hitler.* Chapel Hill, NC: The University of North Carolina Press.

Fernandes, L. (2000). Nationalizing the global: Media images, cultural politics and the middle class in India. *Media, Culture & Society, 22*(5), 611–628.

Foster, G. (2005). *Class-passing: Social mobility in film and popular culture.* Carbondale, IL: Southern Illinois University Press.

Friedberg, A. (1994). *Window shopping: Cinema and the postmodern.* Berkeley, CA: University of California Press.

Fuller, C., & Narasimhan, H. (2006). Information technology professionals and the new-rich middle class in Chennai (Madras). *Modern Asian Studies 41*(1), 121–150.

Fürsich, E., & Robins, M. (2002). Africa.com: The self-representation of sub-Saharan nations on the World Wide Web. *Critical Studies in Media Communication, 19*(2), 190–211.

Garrido, M., & Halavais, A. (2003). Applying social-networks analysis to study contemporary social movements. In M. McCaughey & M. Ayers (Eds.), *Cyberactivism: Online activism in theory and practice* (pp. 165–184). New York: Routledge.

Gokulsing, K., & Dissanayake, W. (2004). *Indian popular cinema: A narrative of cultural change.* Staffordshire, UK: Trentham Books.

Hardgrave, R. L. (1973). Politics and the film in Tamil Nadu: The stars and the DMK. *Asian Survey, 13*(3), 288–305.

Higson, A. (2002). The concept of national cinema. In A. Wilson (Ed.), *Film and nationalism.* Piscataway, NJ: Rutgers University Press.

Holbert, R. L., Shah, D. V., & Kwak, N. (2003). Political implications of prime-time drama and sitcom use: Genres of representation and opinions concerning women's rights. *The Journal of Communication, 53,* 45–60.

Hopewell, J. (1986). *Out of the past: Spanish cinema after Franco.* London: British Film Institute.

Ignacio, E. (2005). *Building diaspora: Filipino community formation on the Internet.* Piscataway, NJ: Rutgers University Press.

Ilavarasan, V. (2007). Software workforce. *Alternative Economic Survey, India, 2006*(07), 253–263.

Jacob, P. (1997). From co-star to deity: Popular representations of Jayalalitha Jayaram. *Women: A Cultural Review, 8*(3), 327–337.

Jacob, P. (2009). *Celluloid deities: The visual culture of cinema and politics in South India.* Lanham, MD: Rowman & Littlefield.

Jensen, R. T., & Oster, E. (2007). *The power of TV: Cable television and women's status in India.* Cambridge, MA: National Bureau of Economic Research Cambridge (NBER).

Kepley, V., Jr. (1990). Soviet cinema and state control: Lenin's nationalization decree reconsidered. *Journal of Film and Video, 42*(2), 3–14.

Krishna, A., & Brihmadesam, V. (2006). What does it take to become a software professional? *Economic and Political Weekly, 41*(30), 3307–3314.

Lopez, A. M. (2003). Train of shadows: Early cinema and modernity in Latin America. In E. Shohat & R. Stam (Eds.), *Multiculturalism, postcoloniality, and transnational media* (pp. 48–78). Piscataway, NJ: Rutgers Uninversity Press.

Lu, S. (1997). *Transnational Chinese cinemas: Identity, nationhood, gender.* Honolulu, HI: University of Hawaii Press.

MacPherson, Y. (2007). Images and icons: Harnessing the power of the media to reduce sex-selective abortion in India. *Gender & Development, 15*(3), 413–423.

Mankekar, P. (1999). *Screening culture, viewing politics: An ethnography of television, womanhood, and nation in postcolonial India.* Durham, NC: Duke University Press.

McCall, J. (2002). Madness, money, and movies: Watching a Nigerian popular video with the guidance of a native doctor. *Africa Today, 49*(3), 79–94.

Meyer, B. (2004). Praise the Lord: Popular cinema and Pentecostalite style in Ghana's new public sphere. *American Ethnologist, 31*(1), 92–110.

Mishra, V. (2002). *Bollywood cinema: Temples of desire.* New York: Routledge.

Nakamura, L. (2002). *Cybertypes: Race, ethnicity, and identity on the Internet.* London: Routledge.

Pal, J., Lakshmanan, M., & Toyama, K. (2007). My child will be respected: Parental perspectives on computers in rural India. *Information Systems Frontiers, 11*(2), 129–144.

Pandian, M. S. S. (1992). *The image trap: MG Ramachandran in film and politics.* New Delhi: Sage.

Radhakrishnan, S. (2008). Examining the global Indian middle class: Gender and culture in the Silicon Valley/Bangalore circuit. *Journal of Intercultural Studies, 29*(1),7–20.

Rajadhyaksha, A. (2003). The Bollywoodization of the Indian cinema: Cultural nationalism in a

global arena. *Inter-Asia Cultural Studies, 4*(1), 25–39.

Sambrani, R., Sambrani, S., & Aziz, A. (1983). Economics of bride-price and dowry. *Economic and Political Weekly, 18*(8), 275–279.

Sharma, A. (1993). Blood, sweat and tears: Amitabh Bachchan, urban demi-god. In T. Kirkham & J. Thumim (Eds.), *You Tarzan: Masculinity, movies and men* (pp. 167–180). New York: St. Martin's Press.

Singer, B. (2001). *Melodrama and modernity: Early sensational cinema and its contexts.* New York: Columbia University Press.

Srinivas, S. (1996). Devotion and defiance in fan activity. *Journal of Arts and Ideas, 29,* 67–83.

Srinivas, S. (2009). *Megastar Chiranjeevi and Telugu cinema after N. T. Rama Rao.* Oxford, UK, and New Delhi, India: Oxford University Press.

Tapper, R. (2002). *The new Iranian cinema: Politics, representation and identity.* London: IB Tauris & Co.

Upadhya, C. (2007). Employment, exclusion and merit in the Indian IT industry. *Economic and Political Weekly, 42,* 1863–1868.

Van der Heide, W. (2002). *Malaysian cinema, Asian film: Border crossings and national cultures.* Amsterdam University Press.

Velayutham, S. (2008). *Tamil cinema: The cultural politics of India's other film industry.* Oxford, UK: Routledge.

Wenjing, X. (2005). Virtual space, real identity: Exploring cultural identity of Chinese Diaspora in virtual community. *Telematics and Informatics, 29*(5), 395–404.

Youngblood, D. J. (1992). *Movies for the masses: Popular cinema and Soviet society in the 1920s.* Cambridge, UK: Cambridge University Press.

References (Films)

Anand, S. (2008). *Bachna Ae Haseeno.* India: Yash Raj Films.

Anand, V. (1967). *Jewel Thief.* India: Navketan Films.

Ananthasubramanian, S. (2006). *Chukkalo Chandrudu.* India: Gemini Films Combine.

Balachander, K. (1973). *Arangetram.* India

Balachander, K. (1977). *Avargal.* India.

Balachander, K. (1987). *Manathil Uruthi Vendum.* India.

Bapaiah, K. (1985). *Aaj Ka Daur.* India.

Barjatya, S. (1994). *Hum Aapke Hain Koun?* India: Rajshri Productions.

Bhadran. (1999). *Olympian Anthony Adam.* India.

Bhargavan. (2007). *Thiru Ranga.* India.

Bhogal, A. (1988). *Zakhmi Aurat.* India: Manta Movies.

Bonnière, R. (1977). *Hide and Seek.* Canada: Karl Lorimar Home Video.

Bose, N. (1938). *Dharti Mata.* India: New Theatres.

Chandra, N. (1986). *Ankush.* India.

Chaplin, C. (1936). *Modern Times.* Hollywood, CA: United Artists.

Chopra, B. R. (1978). *Pati Patni Aur Woh.* India: B.R. Films.

Chopra, B .R. (1980). *Insaf Ka Tarazu.* India: B.R. Films.

Chopra, Y. (1973). *Daag.* India: Yash Raj Films.

Chopra, Y. (1975). *Deewar.* India: Trimurti Films.

Dasarath. (2008). *Swagatam.* India: Aditya Ram Movies.

Dixit, C. P. (1976). *Fakira.* India: Eros Entertainment.

Ghosh, K. (2004). *Fida.* India: Tips Films.

Goud, R. K. (2003). *Jodi No. 1.* India: RK Movies.

Hussain, N. (1973). *Yaadon Ki Baaraat.* India: United Producers.

Jayaraj, R. (2004). *4 The People.* India.

Kammula, S. (2004). *Anand.* India: Amigos Creations.

Kanwar, R. (1994). *Laadla.* India: Neha Arts.

Kapdi, M. (1979). *Aaitya Bilavar Nagoba.* India.

Kapoor, R. (1955). *Shree 420.* India: RK Films.

Kathir. (1999). *Kadhalar Dhinam.* India: A.M. Rathnam.

Khan, M. (1957). *Mother India.* India: Mehoob Productions.

Kranthikumar. (2001). *Kanden Seethaiyai.* India.

Krishnamurthy, R. (1981). *Thee.* India.

Kubrick, S. (1968). *2001: A Space Odyssey.* Burbank, CA: MGM/Warner Bros.

Landis, J. (director), & Jackson, M. (singer). (1991). *Black or White.* New York and Los Angeles: Epic Records and MTV/Viacom.

Lang, F. (1927). *Metropolis.* Germany: Universum Film A.G.

Madan. (2004). *Pellaina Kothalo.* India: AA Naluguru Films.

Majumdar, P. (1962). *Aarti.* India: Rajshri Productions.

Maté, R. (1951). *When Worlds Collide.* Los Angeles, CA: Paramount.

Méliès, G. (1902). *Le Voyage dans la Lune.* Paris: Star Film/Edison Manufacturing Co.

Menon, G. (2001). *Minnale,* India: Cee Entertainment.

Menon, R. (2000). *Kandukondain Kandukondain.* India: Sri Surya Films.

Mirza, A. (1992). *Raju Ban Gaya Gentleman.* India: Sippy Films.

Mukherjee, R. (1960). *Hum Hindustani.* India: Filmalaya.

Murugadoss, A. R. (2002). *Ramana.* India: Oscar Films.

Muthuraman. (1979). *Aarilirunthu Arubathu Varai.* India.

Narayana, K. L. (2006). *Rakhi.* India: Sri Durga Arts.

Neelakantan, P. (1972). *Raman Thediya Seethai.* India: AVM Productions.

Newman, S. (1961). *The Avengers.* New York: American Broadcasting Company.

Osten, F. (1933). *Acchut Kanya.* India: Bombay Talkies.

Padmarajan, P. (1983). *Koodevide.* India.

Paranjpe, S. (1981). *Chashme Buddoor.* India: PLA Productions.

Parvez, S. (1986). *Jumbish.* India: Ghalib Studio.

Perarasu. (2006). *Dharmapuri.* India: A.M. Rathnam.

Prabhakar, T. (2002). *Neethone Vuntanu.* India: Lakshmi Art Pictures.

Prakash Rao, K. S. (1976). *Secretary.* India.

Ramachandran, M. G. (1973). *Ulagam Sutrum Valiban.* India: Emgeeeaar Pictures.

Rama Rao, T. (1983). *Andhaa Kanoon.* India.

Rasool. (2004). *Unnai Paartha Naal Muthal.* India: Anandi Arts.

Rathnam, M. (1992). *Roja.* India: Hansa Pictures.

Rathnam, M. (2000). *Alai Payuthey.* India: Madras Talkies.

Ravishankar. (2002). *Varushamellaam Vasantham.* India.

Rawail, H. S. (1949). *Patanga.* India: Varma Films.

Rawail, R. (1985). *Arjun.* India: Cineyug Entertainment.

Renjith. (2002). *Nandanam.* India.

Roddenberry, G. (1966). *Star Trek.* Los Angeles, CA: Paramount.

Roshan, R. (2003). *Koi . . . Mil Gaya.* India: Film Kraft.

Roshan, R. (2006). *Krrish.* India: Film Kraft.

Roy, B. (1954). *Naukari.* India: Bimal Roy Productions.

Roy, B. (1958). *Madhumati.* India: Bimal Roy Productions.

Sahu, K. (1960). *Dil Apna Aur Preet Parai.* India: Mohan Pictures.

Samanta, S. (1971). *Amar Prem.* India: Shakti Films.

Sasi, I. V. (1980). *Avalude Ravakul.* India.

Selva, V. (2002). *Youth.* India: Ayngaran International.

Selvaraghavan, K. (2005). *7G Rainbow Colony.* India: Ayngaran.

Selvaraghavan, K. (2007). *Aadavari Matalaku Ardhalu Verule.* India: Sri Saideva Productions.

Shankar, S. (1998). *Jeans.* India: Sri Surya Films.

Shankar, S. (2002). *Kunjikkoonan.* India.

Shankar, S. (2005). *Anniyan.* India: Lakshmi Ganapathi Films.

Shankar, S. (2007). *Sivaji.* India: AVM Productions.

Singh, A. (2007). *Raqeeb.* India: Inderjit Films Combine.

Sippy, R. (1982). *Shakti.* India: M.R. Productions.

Sissako, A. (2006). *Bamako.* Mali.

Sivamani. (2002). *Law and Order.* India: Jyotirmayi Pictures.

Srinivasa Rao, S. (1991). *Vikram.* India: AVM Pictures.

Stone, O. (1987). *Wall Street.* Los Angeles, CA: 20th Century Fox.

Vamsy. (2002). *Avunu Valliddaru Ista Paddaru.* India: Anandi Arts.

Vasanth. (2007). *Satham Podathey.* India: Kaivallya Entertainment.

Vasu, P. (2006). *Paramasivan.* India: Kanagarathna Movies.

Vidhyadharan. (2008). *Vaitheeswaran.* India: Annamalai Films.

Vinayak, V. (2003). *Tagore.* India: Oscar Movies.

Vishnuvardhan. (2007). *Billa.* India: Sri Keerthi Creations.

Yelleti, H. (2008). *Ankit, Pallavi and Friends.* India: Innovision Cinema.

Zaslove, M., & Nichols, C. (1962). *The Jetsons.* Los Angeles, CA: Hanna-Barbera Productions.