

Creativity at Work:

# Go West: The Growth of Bollywood

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# Abstract

This paper builds insight into how globalization impacts cultural clusters, through a case study of Bollywood, the Indian film cluster in Mumbai. The paper's analysis of the recent growth and consolidation of Bollywood, as well as the cluster's development of a new film formula, illustrates that globalization does not necessarily entail westernization of culture. Instead, the paper suggests that early-mover advantages held by the world's core cultural clusters may be eroded by globalization, as it creates pipelines of information, talent and capital, allowing hitherto peripheral cultural clusters to access export markets and develop exportable products. Analyzing the role of the Indian diasporas for the export growth of Bollywood, the paper also offers a discussion of the difference between two different aspects of globalization: Global flows of people and global bridgeheads of people.

# Keyword

Globalization, cultural clusters, film industry, Bollywood, Hollywood

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# Go West: The Growth of Bollywood

“The barriers have been broken and the doors have been opened.”

Yash Chopra, Bollywood’s most prolific film producer  
(interviewed in Mumbai, March 18, 2006)

## Introduction

This paper builds insight into how globalization impacts cultural clusters through a detailed case study of *Bollywood*, the cluster of film and media companies in Mumbai, India.

Economic geography typically explains the growth of cultural clusters by virtue of self-reinforcing external economies, and scholars point to early-mover advantages of a few cultural clusters in Western economies, such as Los Angeles, Paris, London, Milan, and so on. In this logic, globalization for the cultural industries mainly entails westernization of mass culture and subordination of cultural clusters in emerging economies to peripheral positions in global networks. These clusters are seen as serving only local markets or carrying out production outsourced from core clusters in the West. Empirical evidence however begins to challenge such claims. Several cultural clusters in emerging economies now grow fast, export their products to a wide range of global markets, and occupy more and more central positions in global networks. Unfortunately, empirical documentation of these clusters remains sparse. Consequently, economic geography currently offers little insight into how globalization impacts their growth.

In order to stimulate such insight, this paper reports the findings of a case study of Bollywood. Producing roughly 1100 films annually, double that produced by USA, India is the world’s largest film producer. Bollywood, with an estimated 3.6 billion tickets sold globally in 2001 (compared to Hollywood’s 2.6 billion), is arguably one of the world’s most prolific cultural clusters (Kripalani and Grover, 2002; Lorenzen, 2009). Bollywood is well suited for theory building because it is an extreme and prototypical case of a cultural cluster that grows under globalization. With its growing global impact upon films, music, dance, and other art forms, Bollywood is developing its own strong global brand and is also becoming big business, attracting massive investments. Whereas Hollywood film producers and investors remain unable to make inroads into India, Bollywood companies now export at a massive scale to USA and other attractive consumer markets, and acquire cinemas and production companies abroad. Using extensive triangulation of novel primary data, in the guise of one quantitative and four qualitative data sets, the paper investigates why globalization has a positive effect on Bollywood.

## Cultural clusters, film clusters, and globalization

### *Cultural clusters*

While not resting upon economic geography's most impressive theoretical edifices, the problem of spatial *clustering* of specialized economic activity nevertheless attracts much scholarly attention. Markusen (1996); Feser and Bergman (2000); and Gordon and McCann (2000) seek to build taxonomies, and an increasing number of scholars also seek to theoretically explain the emergence and growth of clusters in cities and Marshallian districts. There is agreement that whilst every cluster typically emerges through an idiosyncratic confluence of historical factors (such as flagship firms, universities, capital, and politics), the continuous growth of a cluster hinges upon its ability to create cumulative causation (Myrdal; 1957) of one or several economic benefits for business firms of geographical co-location: *External economies*.

External economies of *scale* are the benefits of co-location of firms undertaking very similar economic activities. They encompass attraction of specialized labor, learning among firms with cognitive proximity, plus small and flexibly specialized firms' ability to offer high capacity and high quality through collaboration (Glaeser et al., 1982; Maskell, 2001, Morgan, 2004; Storper and Venables, 2004; Gordon and MacCann, 2005; Iammarino and McCann, 2006; Lorenzen and Frederiksen, 2008). External economies of *scope* encompass the benefits of co-location of diverse firms, be that firms in different stages of a value chain, or firms in entirely different industries. Such benefits encompass learning along value chains or across industries, facilitated by high trust and low transaction costs, and the opportunity for single firms to specialize deeply and build internal scale economies within single value chain activities (Henderson, 1988; Martin and Sunley, 2003). Survival of a cluster hinges upon its sustained competitiveness and growth. Hence, if it is not able to adapt its external economies to overcome exogenous (e.g. market) shocks or endogenous (organizational and political) challenges, the resulting lock-in to an obsolete development path will weaken and eventually erode the cluster (Martin and Sunley, 2006).

With the "cultural turn" (for an overview, see Martin and Sunley, 2007), economic geographers dedicate increasing attention to a particular kind of cluster: Agglomerations of firms in *cultural industries* such as film, TV, music, advertising, publishing, and so on (Caves 2000; Throsby 2001; Hesmondhalgh 2002; Pratt and Hesmondhalgh 2008). Even if the majority of research has been content with describing prolific cultural clusters found in metropolises around the world (Scott and Power, 2004; Cooke and Lazzeretti, 2008), some scholars do offer explanations of their growth. Explanations of cultural cluster growth typically adhere to the arguments of external economies outlined above. For example, Grabher (2002), Pratt (2002), and Lorenzen and Frederiksen (2005) demonstrate how proximity lowers transaction costs and allow for external scope economies in development projects among clustered advertising, media,

and music films. Furthermore, Bathelt (2005) outlines how local information “buzz” can propagate external scale economies in the guise of learning among clustered media production companies. However, some scholars also point out that, due to the urban location of virtually all cultural clusters (Scott, 1997; Scott and Power, 2004; Scott, 2007; Lazzeretti et al, 2008), it is also necessary to include external economies related to urban location (Jacobs, 1961) in the explanation. These include external scope economies arising from co-location of a cultural cluster with urban venture capital or with clusters in other industries (Lorenzen and Frederiksen, 2008). They also include the unique ability of large cities to attract talent (Glaeser et al., 2001; Florida et al., 2008).

### *Film clusters*

Like other cultural industries, the film industry also has a tendency to cluster in particular cities. The long list of film clusters encompass diverse cities such as Copenhagen, Seoul, Rome, Hong Kong, Paris, London, Kyoto, New York, Los Angeles, and Mumbai. Attempts at theorizing clustering in the film industry have centered on the case *par excellence*, Hollywood. Scott (2005) argues that Hollywood emerged in the first decades of the 20<sup>th</sup> century as a result of a coincidental confluence of royalty exemptions and external scope economies related to urbanization (land and finance) in Los Angeles. Then, the cluster developed external scale economies in the guise of huge specialized labor market and external scope economies by attracting a large number of different film value chain activities to Los Angeles. However, early on, taking advantage of its huge home market (Krugman, 1980; Davis and Weinstein, 2003), Hollywood also began to develop powerful internal economies. First, horizontal integration of production into large “studios” created huge scale advantages in production (Prag and Casavant, 1994; Eliashberg et al., 2006). Subsequently, widespread vertical integration of film finance, marketing, distribution and exhibition activities into these studios, forming a handful of powerful “majors”, created tight value chain control. The majors thus secured a relatively certain demand for their films (de Vany, 2004). After the Second World War, the cluster strengthened its external scale economies further. It built a flexibly specialized production model consisting of small-scale independent production firms, specialized suppliers, and freelancing creative and technical labor (Robins, 1993; Storper, 1989; and Anderson, 1987; Storper and Christopherson, 1987; Blair, 2001).

The Hollywood case has dominated theorizing of film clusters to the extent that much research of other film clusters now takes for granted that these cannot compete against Hollywood, not even on their own home markets. This is because the development path of Hollywood rests on early-mover advantages (Scott, 2005). After its emergence, the film cluster moved so fast in building external and internal economies that it has since enjoyed dominance on global film markets (Vogel, 1998; Wasko, 2003; de Vany, 2004; Epstein, 2006). Bakker (2005) offers a theory about this: Hollywood introduced *endogenous sunk costs* (Sutton, 1991) into the film industry by investing heavily in production quality,

marketing intensity, and distribution (Aksoy and Robins, 1992; Wildman 1995; Wildman and Siwek, 1988). Thus, the cluster raised the film industry's entry barriers far beyond what was given by industry-exogenous demand and technologies. Hollywood's marketing and distribution system overpowered most competitors on any export market. As a result, the cluster has been able to overcome the liabilities of foreignness (Hymer, 1976) on export markets that cultural clusters generally face because consumers abroad have different preferences for languages and styles. Hollywood has created a general preference for English language films and Hollywood styles and narratives on most of the world's markets for films (Hoskins and Mirus, 1988; Vogel, 1998; Elberse and Eliashberg, 2003; Papandrea, 1998; Doh, 2001; Lee and Waterman, 2006).

Contrary to standard assumptions in industrial economics (Sutton, 1991), the film industry has been largely dominated by one cluster — even during the last half a century when globalization expanded the size of film markets hugely. Bakker (2005) argues that this is because the endogenous costs sunk by Hollywood have continued to limit the competitiveness of other film clusters. In the following, we shall take a closer look at globalization and what it may mean for cultural clusters in general and film clusters in particular.

### ***Globalization***

*Internationalization* can be understood as trade and other relations (such as agreements and alliances) between nations or nationally based firms and organizations. By contrast, *globalization* entails the integration of a multitude of nations, firms, and organizations into global economic, cultural, and to some extent also political, systems (Ohmae, 1990; Held et al., 1999; Daly 1999, Friedman 2000, Stiglitz 2002). To be more specific, during the last half a century, political shifts as well as developments in transportation and communication technologies have facilitated the emergence of global product markets, labor markets, capital markets as well as global institutions and organizations, such as the UN, numerous NGOs, and transnational corporations. A key dimension of globalization is *connectivity*: The most influential trait of global institutions, firms and organizations is not the fact that they are represented at multiple locations, but that they create global connections and networks (Amin, 2002; Sheppard, 2002; Dicken, 2003).

Contrary to some claims (e.g. Cairncross, 1997; Friedman, 2000), globalization, and the transportation and communication technologies that facilitate it, does not mean the demise of spatial clustering (Morgan, 2004). It does entail global and hence tougher competition, but it also offers global market opportunities, and it empowers clusters by connecting them in global networks. Whether a cluster is able to survive under globalization is highly influenced by *how* it is connected in global networks. On the one hand, some clusters become subordinate suppliers to network hubs, more knowledge-based and value-adding clusters higher in the value chain (Humprey and Schmitz, 2002; Mudambi, 2008; Pratt, 2008). On the other hand, other clusters grow into hubs

themselves, by establishing pipelines of information from the world outside and boosting local innovation (Amin and Thrift 2002; McKinnon et al., 2002; Bathelt et al., 2004). Whether a cluster can profit from such pipelines depends upon its absorptive capacity (Gertler and Levitte, 2005; Giuliani, 2007). Many scholars still address emerging economies largely as passive recipients of products and investments from the OECD area. The bulk of the research on what globalization entails for cultural clusters located outside the dominant nations USA, UK, France, Italy, Japan, and so on, has focused on these clusters as peripheral in global networks. For example, Pratt (2008) considers the subordinate role of cultural clusters in emerging economies in global value chains, and Wasko and Erickson (2008) analyze how cultural production is outsourced in order to take advantage of cheap labor in such clusters. In cultural studies, a similar focus can be traced in the claims that a dominant Western cultural core homogenizes and westernizes its peripheries (Appadurai, 1996; Tomlinson, 1999; Giddens, 2000; Holton, 2000; Anheier and Isard, 2008). In the film industry, globalization has, for more than half a century, brought about a substantial growth of markets. Growing global trade and aligned consumer preferences for (Western) film narratives have allowed mass producers of films — mostly Hollywood, but UK and France have also played roles — to create and nurture a global mass market for mainstream films. During the last two decades, however, globalization has also facilitated the growth of global niche markets — such as art film aficionados, *Kung Fu* experts, or *Manga* lovers. Whereas global mass markets are stimulated by new technologies of film exhibition and distribution, global niche markets crucially hinge upon them. Largely, it is satellite TV, DVD, and the Internet that allow producers of niche films to reach their audiences around the world. Globalization has also meant that the world's film clusters are subjected to tougher competition, and that some of them are becoming connected in global networks of co-production (for a discussion, see Morawetz et al., 2007). What does globalization, then, mean for the growth and survival of different film clusters? Summarizing the research, one finds a skepticism regarding the indigenous growth prospects of peripheral cultural clusters. Scholars point out that globalization allows Hollywood to further consolidate its internal economies. Major film producers, now being huge multi-media conglomerates, invest further in marketing and distribution power, as well as use intellectual property rights from films across multiple platforms, such as TV, computer games, music, and online and print media (Scott, 2005; Epstein, 2006; Flew, 2007). Globalization also strengthens Hollywood's external scale economies by allowing the cluster to attract talent from around the world. Finally, globalization allows Hollywood to outsource labor-intensive production phases to cheaper film clusters around the world. Consequently, most studies of film clusters outside the USA have focused on the impact of Hollywood "runaway" productions (Coe, 2001; Wasko, 2003; Coe and Johns, 2004; Vang and Chaminade, 2007), rather than understanding the indigenous growth of these film clusters.

Viewing the majority of the world's cultural production as peripheral is of course unreasonable in an anthropological perspective. But it is also imprecise in an economic sense. Numerous cultural clusters in emerging economies now grow fast, export their products to a wide range of global markets, and occupy more and more central positions in global networks (Scott and Power, 2004; Cooke and Lazzarotti, 2008; Barrowclough and Kozul-Wright, 2006). In the film industry, notable examples encompass clusters in Mexico, Brazil, Korea, Taiwan, Nigeria, and, in particular, India. The empirical documentation of these film clusters remains sparse. As a result, little is still known about their growth dynamics, and how it is influenced by globalization.

In order to build knowledge of the seemingly positive impact of globalization upon cultural clusters in emerging economies, this paper offers an analysis of the recent growth of the most prolific of them: Bollywood. In the following, I shall outline how the paper undertakes this analysis.

## Method

The paper seeks to build new knowledge from empirical research, and the most appropriate strategy for that purpose is the case study method. In contrast to surveys and econometric methods, which allow for theory testing through correlating different phenomena, the case study method facilitates insights into the processes behind observed phenomena. Hence, it is suitable for building theory about their conditions and causes. The following sections explain how the case study of Bollywood was designed.

### *Case Selection*

The purpose of the paper's case study is not to test or illustrate incumbent theory, but to obtain new insights (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). Hence, the paper undertakes an *explorative* case study, designed to allow for insights to emerge as a consequence of, not prior to, data collection (Yin, 1994). As mentioned above, the general problem the paper seeks insight to is how cultural clusters in emerging economies are influenced by globalization. However, it is not possible to undertake a multiple case study of cultural clusters in emerging economies: The total population of such clusters is too small to allow for probabilistic sampling (Stake, 1995), and resource constraints prevent undertaking a maximum variation sampling (George and Bennett, 2005). Instead, the paper undertakes a *single* case study.

The research design that allows best for building insights on the basis of a single case is purposive selection of an extreme (outstanding) case, the findings for which can then be inferred logically to apply to a larger population of cases (Flyvbjerg, 2006). For example, positive findings for a negatively deviant (critical) case, can be inferred to also apply to less deviant cases. Or, when

particular contextual factors allow a case to stand out, findings for that (paradigmatic or prototypical) case can be inferred to be revealing or illustrative for mechanisms or tendencies that may apply to other cases if the contextual factors also come to apply to them. All theory built from single cases may be subject to later testing through multiple case studies or surveys (Eisenhardt and Graebner, 2007).

Bollywood is picked as the paper’s single case, because it, rather than being representative of all cultural clusters in emerging economies, is *extreme* and *prototypical*. Bollywood is extreme in the sense that it is the cultural cluster — arguably, not just in the emerging economies, but on a global scale — that performs best under globalization. Some insights into precisely how globalization impacts Bollywood may, with caution, be inferred to less extreme cultural clusters. The cluster is prototypical in the sense that India, with its wide-open borders for flows of products, labor, and capital, is very intensely subjected to globalization. Insights from Bollywood may hence be very illustrative of the future for other cultural clusters in emerging economies.

***Data sources and triangulation***

In order to avoid problems of validity arising from data bias, we chose to triangulate (Yin, 1994; Stake, 1995) one quantitative and four qualitative data sets. These sets encompass aggregated data on industry and cluster level (statistics, government reports, key informant interviews) as well as data on changes on the single firm and inter-firm relational level (firm-level case studies and interviews with managers and talent). Even if a longer historical backdrop is given by the quantitative data sets, the main data sets focus upon the changes in Bollywood during the period 2003-2007, where the cluster’s performance was skyrocketing and changes in its external and internal economies became apparent.

In order to build the qualitative data sets, a total of 58 interviews were carried out. As Bollywood informants are unreachable through formal channels, the author and collaborators had to use multiple personal networks as well as show up unannounced at social and business events in order to arrange interviews. Hence, four elongated periods of fieldwork in Mumbai during the period 2005-2008 were needed. Interviews were all face-to-face, of durations between 30 minutes and 3 hours, and taped, transcribed, coded, and interpreted as described below.

Figure 1 below gives an overview of the data sources.

*Figure 1. Data sources*

Data set	Description of data type	Method of building data set

<b>Quantitative data</b>		
<b>Database on all 11,500 Bollywood films produced 1913-2006</b>	Names of production company, distributor, cast, and other key participants of each film.	Primary data. We integrated data on Hindi language films made available from <i>Indian Motion Pictures Producers' Association</i> and <i>Indian Film Trade</i> with data from trade journals assembled by <i>ScreenWorld</i> .
<b>Qualitative data</b>		
<b>Interviews with 17 key informants</b>	Descriptions of changes at film production level and cluster level (external economies and impact of globalization).	Primary data. 21 interviews. We made a purposive sample of 6 managers from the biggest or otherwise most influential production companies plus 11 informants from industry associations, related industries, and industry observers (journalists, historians). As the ongoing changes of Bollywood became very conspicuous after 2003, the informants could discuss these explicitly. We used a short unstructured protocol for open-ended interviews (Miles and Huberman, 1984; Stake, 1995). The key statements of each informant were triangulated with statements of other informants.
<b>Government reports on Bollywood</b>	Descriptions and expert evaluations of development trends at industry and cluster levels.	Secondary data. We made a full sample of all reports published in the period 2005-2008: CII and KPMG, 2005; FICCI and PWC; 2006; 2007; 2008; IBEF and PWC, 2005; Khetepal, 2005; Kohi, 2003; Kohli-Khandekar, 2006; USIBC and Ernst and Young, 2008.
<b>30 embedded case studies</b>	Descriptions of changes at firm level and inter-firm relational level (production project design and performance).	Primary data. 18 interviews. We purposively selected 30 films as extreme cases: Those with the best box office performance — not only representing the commercial core of Bollywood during the period of our study,

		<p>but also likely to cause the greatest level of imitation by Bollywood films produced after our study. Out of a total population of the 652 Hindi language films produced in 2003-2005, a sample of the top ten earners for each year (identified by deducting production costs (listed on <a href="http://www.ibosnetwork.com">www.ibosnetwork.com</a>) from box office collections in the year of release (listed on <a href="http://www.ibosnetwork.com">www.ibosnetwork.com</a> and <a href="http://www.imdb.com">www.imdb.com</a>) for the top 35 box office grossing films (all territories) for each year) was selected. This yielded a sample of 30 film projects, and interviews with producers (who were often also manager-owners) in 15 production companies were undertaken, covering 23 of the case films.</p> <p>The interviews had a replicated design with a semi-structured 500-word interview protocol. Answers were checked for case-specific influences (the production company's history and external environment) and triangulated using online resources and the films themselves.</p>
<p><b>Interviews with 15 random informants</b></p>	<p>Results and interpretations from other data sources were discussed.</p>	<p>Primary data. 19 interviews. A sample of creatives and managers (2 actors, 7 directors, 2 scriptwriters, 1 PR freelancer, 3 managers of production companies) was randomly selected through snowballing. A semi-structured interview protocol was used.</p>

The data sources were triangulated as follows. In order to capture cluster emergence, growth and changes in external and internal economies, a novel original database on all Bollywood films spanning the period 1913-2006 was constructed. However, while such historical sources allow for representation of a historical change, insight into a change that is still ongoing and for which no statistics yet exist, hinges upon other data types (George and Bennett, 2005). In order to get such insight, we triangulated the statistics with interviews with 17 key informants with knowledge of Bollywood's current growth and changes. In order to compensate for potential bias of these interviewees, we triangulated again, this time with expert evaluations of industry trends as published in government reports.

In order to build detailed insights into the impacts on globalization upon single Bollywood companies and products, we used qualitative data in the guise of 30 case studies, embedded in the overall Bollywood case (Yin, 1994). The embedded cases were extreme: We picked the most successful film projects in the period 2003-2005, because these were likely to give the best insight into current dynamics of competition and the possible future ways of producing Bollywood films. These case studies added deep insights into e.g. the product development processes and changing external vs. internal economies in Bollywood. In order to compensate for the potential problem of the researcher's bias when carrying out subjective interpretations of such cases (Eisenhardt and Graebner, 2007), triangulation of our interpretations was now made with two additional qualitative data sources. First, interpretations were triangulated with the aforementioned government reports. These supported, but added no new insight to our interpretations, and finally, we triangulated with (sometimes repeated) interviews with 15 randomly chosen creatives and managers. After 19 of these interviews, no challenges to the interpretations came forward, and consequently, further triangulation was halted (Lincoln and Guba, 1985; Yin, 1994).

### ***Data coding and interpretation***

As mentioned, the case studies were explorative, allowing for new insights to be built unconstrained by incumbent theory. Hence, a round of first-order *open coding* (Glaser and Strauss, 1967) of the data took place, without modifying data to fit existing theoretical categories. The results of this coding were subsequently coded again in order to add new knowledge to existing theory. In this coding, the new insights were, only as far as that made sense, interpreted using existing theoretical categories in economic geography. The categories used for this *axial coding* into second-order insights (Strauss and Corbin, 1990) were cluster emergence, external economies of scale and scope, internal economies, globalization, pipelines, and absorptive capacity.

In the sections to follow, the paper presents the empirical results, organized using the above theoretical categories. The empirical material is presented in two parts. First, the largely descriptive section 4 provides a historical overview

of how Bollywood emerged in the early 20<sup>th</sup> century, and how its external and internal economies were very low up till the 1990s. At that time, a sudden export boom drove massive investments and put the cluster on a self-reinforcing positive development path. Section 5 then explains how Bollywood could leapfrog thus, by analyzing in detail how globalization impacts the cluster. Section 4 is based on secondary data (statistics and government reports) triangulated with key informant interviews, and section 5 presents results from interviews with managers and talent (the 30 embedded case studies plus interviews with random informants), triangulated with key informant interviews and secondary data (government reports).

## **Background: The development of Bollywood**

This is the first of the paper's two empirical sections. It rests on secondary data triangulated with key informant interviews, and describes the emergence and history of Bollywood, focusing on the cluster's current remarkable transformation and growth.

### ***20<sup>th</sup> century: Cluster emergence and low external and internal economies***

With its first production in 1913 and producing more than 100 films annually by 1933, the Indian film industry had an early start. The emerging film industry clustered in two cities. In the Indian cultural capital, Kolkata (then Calcutta), there were external scope economies of co-locating with cultural clusters of literature, music, and theatre. In the economic powerhouse of the Indian economy, Mumbai (then Bombay) film producers could enjoy external scope economies of venture capital from manufacturing industries and merchants spilling over into film production. The nascent Bollywood cluster produced both the first Indian film and the first Indian sound film in 1931. By then, more than half of India's film production took place here. With the advent of sound films, film imports to India from Hollywood and other foreign film clusters virtually seized, and the home market segregated along language divisions, the biggest market segment being that of Hindi films (a language used across North India and today's Pakistan). Even if Hindi was not the official language in Mumbai, centuries' inflow of Hindi-speaking migrants to the city meant that it became India's dominant Hindi film cluster. From its inception, Bollywood was a cottage industry (Shoosmith, 1987) with specialized production, distribution and exhibition companies enjoying only low external scope economies of collaboration, and had built no internal scale economies at all.

Internal and external economies of the cluster grew in the 1930s and 1940s, albeit modestly. With rapid urbanization in North India, the market for Hindi films grew (and was soon to be boosted further when Hindi became India's national language). However, because Indian cinema exhibition consisted of

thousands of small, single screen-cinemas with low ticket prices spread across the subcontinent, with very primitive technologies available to distribute films to them, it was not possible for Bollywood to build internal economies in either film exhibition nor distribution. The only value chain activity where internal scale economies were possible was production. Like in the contemporary Hollywood cluster, in the 1930s, Bollywood grew a handful of studios which by the early 1940s produced around two thirds of Bollywood's 150-200 annual films (Barnouw and Krishnaswamy, 1980). However, these Bollywood studios did not have the money or incentive to integrate downstream. In stead, they relied on external scope economies arising from their location in Mumbai together with a growing network of hundreds of small-scale distributors, each of these competing to obtain distribution rights from the studios. Another economy of scope was the good relationship the studios built to financiers from other Mumbai industries, willing to channel capital to film projects. After Indian independence in 1947, Bollywood changed dramatically, and many of its internal and external scale economies eroded. The studios were weakened by poor sales and rising fixed costs during the Second World War. After the partition of India and Pakistan, dozens of small-scale film production companies that entered Mumbai from Pakistan outcompeted the studios altogether. Bollywood once again was completely horizontally and vertically disintegrated. The new production companies outcompeted the incumbents because they, like their contemporaries in Hollywood, developed a film *formula*, which, after proving its market value, would successfully be applied again and again with small variations. Together with the disintegrated structure, this formula would characterize Bollywood for the latter half of the 20<sup>th</sup> century. The Bollywood formula appealed to an all-Indian audience across regional, social, and religions and social divides. Hence, it was commercially extremely successful from the start and pursued and refined vigorously in the decades to follow. In the 1970s, it was endearingly named *masala* (Hindi for "spice mix), because it blended genre elements such as romance, drama and comedy with song-and-dance sequences in symbol-driven narratives. Productions were lavish and expensive, and a key component to *masala* was also the use of star actors, driving up production costs further. Having no internal scale, production companies could only engage in so artistically complex film projects because they were able to draw upon social networks among producers, directors, technicians, stars, and other creative talent (Lorenzen and Taübe, 2008). Having built such external scale economies in production, Bollywood nevertheless suffered from lack of external scope economies. Compared to the old studios, the new small production companies did not enjoy similarly good relations to financiers. Hence, for five decades, Bollywood saw constant struggle for film finance. Furthermore, relations between the many independent production and distribution companies became strained, raising risks for production companies. For distribution companies, low external scope economies meant a lock-in to a business model with inefficient releases and low collections.

Bollywood’s external as well as internal economies remained low for the rest of the 20<sup>th</sup> century. A hit film would sometimes earn a substantial profit for a production company, a distributor, or an investor. However, fortunes were short-lived and exit rates high. Piracy also soared, due to inefficient distribution, and is still estimated to cost Bollywood more than 30% of revenues (Ernst and Young and USIBC, 2008). The high-profile Bollywood producer Ashutosh Gowariker (interviewed in Mumbai June 24, 2005) described the cluster in the second half of the 20<sup>th</sup> century very simply: “Chaos! Complete mayhem!”

**Late 20<sup>th</sup> century: Export growth**

Since the 1930s, Bollywood had enjoyed a small but stable export to India’s main trade partners (e.g. Russia and the Middle East), cultural neighbors (e.g. Pakistan, Bangladesh, and Afghanistan), and countries where centuries of migrations and British colonialism had created large Indian diasporas (e.g. Nepal, Burma, South Africa, and Sri Lanka).<sup>1</sup> Main exports of Indian films (all languages) in 1988 were to The Arabian Gulf (35.4%); USSR (14%); Indonesia (14.3%); Sri Lanka (3.8%); and Burma (3.6%). At that time, countries like Morocco (3%); Jordan and Fiji (both 2.6%) were almost as big importers as UK/Ireland (3.3%)(NFDC, 2007).

After Indian independence, new Indian diasporas began to grow rapidly in countries offering education and work opportunities, such as USA, UK, Saudi Arabia, United Arab Emirates, Canada, Singapore, Australia and New Zealand, Kuwait and Oman. In 2001, the old and the new Indian diasporas combined were conservatively estimated to a size of 20 million people globally. At that time, in 11 countries, the Indian diaspora exceeded half a million people, and in at least 48 countries, there were more than 10,000 Indian diaspora members (Ministry of External Affairs, Government of India 2001; Walton-Roberts, 2004). Given the rate of Indian immigration over the last decade, the diasporas in some of these countries are now notably larger (see figure 2).

Figure 2. The size of the of the largest Indian diasporas (2001)

The new Indian diasporas	The old Indian diasporas
USA: 1,700,000	Nepal: 4,000,000 ***
Saudi Arabia: 1,500,000	Burma: 2,900,000
UK: 1,200,000 *	Malaysia: 1,665,000
United Arab Emirates: 950,000	South Africa: 1,000,000
Canada: 850,000	Sri Lanka: 860,000 ****
Singapore: 310,000	Mauritius: 715,000
Oman: 310,000	Trinidad and Tobago: 500,000
Kuwait: 295,000	Guyana: 395,000
Netherlands: 220,000	Fiji: 335,000

<sup>1</sup> Even if the term “diaspora” earlier mainly referred to displaced Jews, it is now generally used about migrants from one particular region or country, forming a permanent community in a new country of residence (Brah, 1996; Clifford, 1997; Fortier, 2000; Axel, 2002).

Australia: 190,000	Reunion: 220,000
Thailand: 150,000	Kenya: 105,000
Bahrain: 130,000	Yemen: 100,000
New Zealand: 100,000 **	Tanzania 90,000

The figures include non-resident Indian citizens (NRIs) and persons of Indian origin (PIOs), i.e. foreign citizens who held Indian passport earlier, or children of or spouses to Indian citizens or PIOs. All figures are rounded, as some are estimates from national statistical bureaus, other are based on census data. 2001 is the last year for which such a comparison of countries can be made. For instance, the last available survey from the UK (accessible from National Statistics UK, [www.statistics.gov.uk](http://www.statistics.gov.uk)) is from 2001, and the last US Population Profile (available from US Census Bureau, [www.census.gov](http://www.census.gov)) is from 2000.

\* In the UK, the 2001 sizes of the Pakistani and Bangladeshi diasporas were (rounded) 750,000 and 280,000, respectively.

\*\* The New Zealand figure is from the 2006 census.

\*\*\* The figure for Nepal varies widely, The 2001 census by the Nepali Central Bureau of Statistics (which can be accessed at [www.cbs.gov.np](http://www.cbs.gov.np)) lists 100,000 NRIs in Nepal, but Non Resident Indians Online ([nirol.com](http://nirol.com)) estimates Nepali NRIs + PIO as high as 4,000,000, due to the historically fuzzy border between Nepal and India.

\*\*\*\* The figure for Sri Lanka denotes only PIOs ("Indian Tamils").

Sources: National statistics as compiled by Ministry of External Affairs, Government of India (2001); 2001 UK Census (from National Statistics UK ([www.statistics.gov.uk](http://www.statistics.gov.uk)); 2006 New Zealand census (from Statistics New Zealand, [www.stats.govt.nz/census](http://www.stats.govt.nz/census)); 2001 Nepali census (from Nepali Central Bureau of Statistics, [www.cbs.gov.np](http://www.cbs.gov.np)); Non Resident Indians Online ([www.nriol.com](http://www.nriol.com), accessed April 10, 2008); 2001 Sri Lanka Census (from Department of Census and Statistics, Sri Lanka, [www.statistics.gov.lk](http://www.statistics.gov.lk)).

From the 1990s, and at first largely inadvertently, Bollywood saw a sudden growth in export earnings from the new Indian diasporas in North America, the UK, and a range of Arab countries.<sup>2</sup> Soon after, East Asian and markets such as Singapore and Australia began to rise. Exact export data cannot be provided, but two leading Bollywood distribution companies (of both film and TV) report that USA and UK now account for 50-60% of their export revenues (Ernst and Young, 2008). Today, Bollywood is the largest foreign exporter to the US entertainment market, and successful films are currently screened in up to 75 US cinemas, some earning in excess of USD 1 million in their opening weekend, making them appear in the top 20 box office charts (Times of India, 2006). The new Indian diasporas constitute very profitable export markets, because their purchase powers are much higher than those of the Indian home consumers or the old Indian diasporas. In 2005, UK's GDP/capita was 9 times,

<sup>2</sup> The Pakistani, Bangladeshi, Sri Lankan, and Afghani diasporas are also avid consumers of Bollywood products. In the UK, for instance, the Pakistani and Bangladeshi diasporas combined are almost as large as the Indian, in effect doubling Bollywood's market in the UK.

Australia's 14 times, USA's 17 times, and UAE's 20 times the Indian GDP/capita of 2,700 USD (CIA World Factbook, 2008). In USA, the highly skilled Indian diaspora is even more prosperous than the average population (Pandey et al., 2004; Mitra, 2007). This means that even modest sales on diasporic markets earn Bollywood large revenues. For example, subscribing to a Hindi content TV channel costs 24 USD monthly in the UK, six times the price in India (FICCI and Ernst and Young, 2008), and the cost of a video CD from leading distributors is typically 2.50 USD in India compared to 13-18 USD in USA for the same film on a DVD ([www.shemaroo.com](http://www.shemaroo.com); [www.erosentertainment.com](http://www.erosentertainment.com); [www.yashrajfilms.com](http://www.yashrajfilms.com)). The revenues from theatre distribution abroad is even higher: The 2005 average cinema ticket price was 35 cents in India, 6.55 USD in USA, 7.8 USD in Australia, 8.17 USD in the UAE, and 9.55 USD in the UK (European Audiovisual Observatory, 2007). As a result of its booming exports to these new profitable markets, Bollywood exports earnings have grown 30-50% annually during the last five years to its present 16% of total revenues (CII and KPMG, 2005). A recent estimate is that Bollywood now collects more than USD 200 million annually abroad, and a further export growth of over 20% is expected until 2010 (CII and KPMG, 2005; FICCI and Ernst and Young, 2008). *Zee TV*, India's biggest Hindi TV channel, has 4 million subscribers abroad, collecting 40% of its revenue from exports (FICCI and Ernst and Young, 2008), and the leading cable provider in USA, *Comcas*, is now offering a *Bollywood on Demand* service. Bollywood's collections from cinema exhibition on export markets has experienced a 21% growth in the period 2006-2007, now accounting for 9% of Bollywood's total turnover (FICCI and Ernst and Young, 2008).

### ***Present time: Investments in internal and external economies***

Earnings from the export boom since the 1990s have begun to change Bollywood profoundly. The first change is that incumbent companies are investing in internal economies. A couple of production companies that first stumbled upon big export successes channeled their earnings into building internal scale in production as well as developing internal distribution capabilities. The most successful of these, the grand old family-owned *Yash Raj Films*, invested its export earnings wisely and managed to reinforce its export success throughout the 1990s and the beginning of the new millennium. Now, this company has the largest turnover Bollywood has yet seen (100 million USD in 2005) and is fully self-supplying with production as well as most distribution services. A dozen of other incumbent production companies with just a few export successes under their belt are now also investing in internal economies in order to imitate *Yash Raj Film's* business model. Furthermore, the biggest two of Bollywood's many independent distribution companies, *Eros* and *Shemaroo*, are also investing rapidly in building a scale and efficiency hitherto unseen in Bollywood.

The second change resulting from the export boom is a major policy shift. After only recently having opened the Indian borders to globalization in 1991, Indian

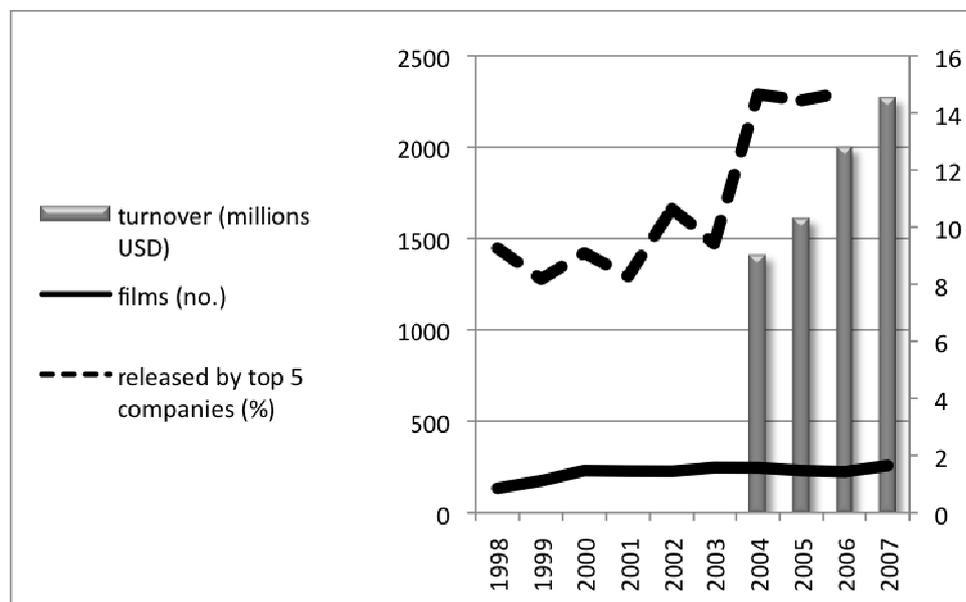
policymakers became convinced by Bollywood's somewhat surprising export growth that the cluster could potentially become an important Indian growth factor, if given better framework conditions. This political shift was remarkable, because in stark contrast to many Western cultural clusters, Bollywood never enjoyed public support earlier. On the contrary, for almost a century, British colonial rule and later India's manufacturing-based growth strategy impeded the film industry's performance. But towards the end of the 1990s, Indian state governments began cutting the whopping entertainment taxes (in some states amounting to over 150% of ticket prices). Furthermore, the Indian national government, in a bid to encourage investors to engage with Bollywood, credited Indian entertainment industries "official" status with the semi-public *Industrial Development Bank of India*. This new policy framework worked to reinvigorate external economies of scope between Bollywood and financiers from other Mumbai industries. But it happened on a much larger scale than in the 1930s and 1940s: Tremendous investments began to flow from Mumbai's booming telecom, software and media industries into strengthening Bollywood's external and internal economies.

The third major change of Bollywood is, therefore, new entries into the cluster from other industries. The most notable examples are the entry of four prolific Mumbai companies from other industries into Bollywood: *Sahara One*, the main Hindi TV channel; *UTV*, India's biggest TV program producer, *Percept*, India's biggest PR company, and *Reliance*, India's biggest telecom company have ventured into film production and distribution on a big scale. All these newcomers to Bollywood focus on building internal economies in distribution, and rely mostly on external economies for content, buying most of the films they release from small independent production companies. Together with the two incumbent distribution firms that now build internal economies, these newcomers represent a new scale-intensive way of distributing films that is quickly winning market shares from the small-scale independent distributors. For the first time in Bollywood history, distribution of firms systematically create crowding effects, pre-empt piracy, and aggressively use new exhibition platforms such as video, satellite and pay TV, and the Internet — in fact, to a much higher extent than Hollywood (Currah, 2007).

The last major change of Bollywood is not driven directly by the cluster's export success in the 1990s, but it is facilitated by the policy shift that was a direct consequence of the export boom. Large investments now flow into Indian film exhibition. After decades of deteriorating and closing single-screen cinemas, new multiplex cinemas are being constructed in a large number of Indian cities. These investments aim at profiting from demographic developments on the Indian home market: The emergence of a 300+ million people strong middle class (growing at 5% annually), a development driven by the doubling over the last two decades of the Indian GDP/capita and the explosion of Indian cities. The growing urban middle-class audience prefers multiplex cinemas with greater choice and better amenities. More importantly, it has high purchase power and a high consumption of entertainment.

The growth effects of the ongoing investments in Bollywood’s external and internal economies are substantial. Entertainment is now, after ICT, India’s fastest growing sector. The revenues of the Indian film industry have grown 360% in the period 1998-2005, and 58% in the period 2001-2005. Bollywood spearheads this positive development. In 2006, Bollywood was acknowledged by investors as one of India’s central growth industries. In 2004, Bollywood produced 16% of all Indian films, but accounted for more than 40% of the Indian film industry’s revenues (CII and KPMG, 2005). 2006-2007 revenue growth for Bollywood was 14% (as compared to the Hollywood growth of 7% for the same time period), but the annual growth rate could reach as high as 30% by 2010 (Kapoor, 2005; FICCI and PWC, 2007). For 2007, a record output of 257 films saw more ambitious distribution and marketing schemes than ever before. As illustrated in figure 3 below, the most notable development of Bollywood since the late 1990s is not production of more films, but rather a growing horizontal integration of distribution (the growing percentage of films released by the top 5 companies) accompanied by dramatic turnover growth.

Figure 3. Bollywood’s turnover, production, and horizontal integration 1998-2007



Turnover and film production on the left axis, top 5 companies’ releases on the right axis.

Sources: Own database; FICCI and PWC (2008)

As mentioned, since the 1930s, Hollywood has had very little penetration in India. Today, Hollywood has a market share of 4% in India, the lowest anywhere in the World (CII and KPMG, 2005). Since the turn of the millennium, investors from Hollywood have sought to profit from the growing Indian domestic market in other ways: Through venturing into co-productions of Hindi films and purchasing shares in Bollywood companies. Not knowing how to churn out a good *masala* film, enjoying no social network relations to stars

and other creative talent (Lorenzen and Täube, 2008), and with Bollywood not needing foreign venture capital, Hollywood's attempts of entering India have been unsuccessful. By contrast, Bollywood is now strong enough (even with the ongoing financial crisis) to invest in USA. In 2008, Bollywood company *Reliance* placed a 500 million USD investment in Hollywood flagship *Dreamworks*. As we have seen in this section, towards the end of the 20<sup>th</sup> century, an export boom drove massive investments in Bollywood, and an evolutionary path of self-reinforcing external and internal economies seems now to be under creation. Why did this happen? How could Bollywood, which at the beginning of the 1990s was characterized by horizontal disintegration and no export infrastructures, boost its exports so dramatically? The next section will demonstrate that the answer is, simply put, *globalization*.

### **Analysis: Globalization's impact upon Bollywood**

Resting on interviews with managers and talent, triangulated with key informant interviews and secondary data, this section analyses in detail how globalization impacts Bollywood. The chapter revolves around the most important aspect for Bollywood of globalization: The new Indian diasporas. Accounting for the interaction between Bollywood and these diasporas, the paper analyses how it gives rise to growing exports, development of new products, and the cluster's investments in marketing, distribution and exhibition infrastructures.

#### ***How the diasporas strengthen Bollywood's external and internal economies through exports***

As mentioned in section 2, cultural clusters generally face liabilities of foreignness on export markets (Hymer, 1976). Until recently, Bollywood suffered greatly from such liabilities. The cluster could not afford to invest in marketing and distribution on a scale sufficient to influence consumer on export markets to favor the distinctive *masala* film formula. However, Bollywood's liabilities are much lower on particular *segments* of the most attractive global markets in USA, UK, Canada, and the Middle East: The Indian diasporas. Like other diasporas, rather than realizing "the myth of return to the homeland" (Brah, 1996; Clifford, 1997; Fortier, 2000), the Indian diasporas act out their longing for the homeland through symbolic acts, such as consumption of cultural products. And to a high extent, the Indian diasporas share the Indian home market's appetite for Bollywood products.

However, during most of the 20<sup>th</sup> century, Bollywood did not take advantage of the diasporas, because the cluster was unable to distribute its products to them on any significant scale. For example, in spite of its significant size, the diaspora in North America is very geographically dispersed and consequently, except

from in a few metropolises, cinema exhibition was generally unprofitable.<sup>3</sup> Hence, until the 1990s, Bollywood treated all export markets as one, largely unattractive, territory. Most Bollywood production companies let the state-owned *National Film Development Corporation* handle all export rights, which were then acquired by independent small agents living abroad and focusing on distributing to only one national market with very little (if any) marketing effort. Consequently, in the West, Bollywood was consumed in a system parallel to that of mainstream Western films: Video rentals from ethnic shops and occasional screenings in peripheral and often run-down theatres or community halls (Brosius, 2005; Dudrah, 2006). For Bollywood film producers, foreign collections were meager, even for the relatively successful films. The prolific producer Yash Chopra (interviewed in Mumbai, March 18, 2006) recalls: "In those days, we used to release films for free. I had gone for London to attend the premiere and it was free. Nobody was supposed to pay us money. We used to pay our own costs to promote the movie. They would maybe send me 2-3 tickets, otherwise no money to us."

Globalization has completely changed that situation. During the 1990s, Bollywood was less daunted by property rights complications than Hollywood (Currah, 2007) and began to embrace new technologies of exhibition and distribution in order to reach markets abroad. Bollywood's use of TV (cable and now also satellite), video (earlier VHS, now DVD), and, lately, Internet downloading, rendered the problem of the diasporas' geographical distribution much less important. As soon as Indian satellite TV channels became accessible, the diasporas responded enthusiastically and fast, and when Bollywood products were offered on video and the Internet, exports to the diasporas grew steadily. Diasporic demand has risen so fast that today, all main Bollywood distributors, as well as a range of production companies, sell both to TV channels abroad and directly to consumers through DVD retailers and a plethora of websites. Says top producer Yash Chopra (interviewed in Mumbai, March 18, 2006) about the use of new distribution technologies: "It's the start of a revolution if you ask me ... Indian films are going global." Veteran producer Boney Kapoor (interviewed in Mumbai, March 30, 2006) adds: "The breakdown [for my films] today would be 40% Indian box office, the rest overseas and electronic [distribution]".

As described in section 4, the export boom allowed incumbent Bollywood film producers to build their own distribution capabilities, and created new scale-intensive distribution companies. The cluster's new distribution muscle is also used for aggressive marketing: For the first time in a century, Bollywood products are now marketed across the world, using all possible platforms. Even if this marketing infrastructure is being developed in order to target the diasporas, it also earns Bollywood a presence in mainstream video stores and on film festivals. As a result, mainstream European and US TV channels, film festivals, and cinemas are now beginning to purchase Bollywood films.

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<sup>3</sup> In UK, the Indian/Pakistani diasporas agglomerate more notably in cities with manufacturing and low-skill jobs.  
Page 21 / 38 Creative Encounters Working Paper # 26

The diasporas' demand for Bollywood products has made it viable for the cluster to invest in distribution and exhibition abroad. Concerning distribution, the old system is being abandoned: Each export market, such as USA and UK, is now defined as one territory, and in stead of agents, many production companies are currently investing in setting up own distribution abroad. Concerning exhibition, decades of exhibition on video and TV has made Bollywood films so visible and accessible to the younger diasporic audiences that a demand for cinema exhibition has shot up. Consequently, Bollywood distributors now systematically supply cinemas in the main diasporic markets, and several Bollywood companies are buying up cinema chains abroad. *Reliance Entertainment*, one of the biggest Bollywood companies, currently owns more than 200 cinemas in North America.

### ***How the diasporas aid Bollywood's product development through pipelines of information***

Impressed with the earnings of the first Bollywood blockbusters on the UK and US markets in the 1990s, mainstream Bollywood film producers have begun to experiment with adapting the hitherto dominant *masala* film formula in order to accommodate the diasporas' preferences even better. This process of product development takes advantage of pipelines of information (Bathelt et al., 2004) established between Bollywood and its export markets. Far from being passive consumers, the Indian diasporas signal their preferences not just through consumption patterns, but also through direct dialogue with Bollywood. Online, in printed media, and in personal discussions with directors and producers, members of the Indian diaspora voice opinions about styles and narratives and provide critical inputs to the development of new Bollywood films. Furthermore, several Bollywood directors, producers and actors live part-time abroad and commute between e.g. London or New York and Mumbai, thus obtaining inspiration and information for product elements. Karan Johar, a Bollywood producer and director of several of the biggest export successes, signals his enthusiasm for learning from the preferences of the diasporas thus: "They are Indians, whether they live in New York or Bihar. NRIs [Non-Resident Indians] are more Indians in their heart than most of us in India." (Rediff, 2006).

The result of the product development aided by the information pipelines to the diasporas is the emergence of a new film formula. This formula can be called *global masala*, because it mixes the hitherto dominant Bollywood *masala* formula with Western-style narratives and aesthetics. *Global masala* usually has a simpler narrative, often centered on modern middle-class families in the diasporas (or with close connections to it), with new perceptions of modernity and identity — not the least concerning gender roles (Moorti, 2005). To the traditional *masala*'s mix of lavish sets and accomplished song-and-dance choreography, *global masala* adds hi-tech special effects, incorporates global sounds into Indian film music, uses cinematography with Western aesthetics, and blends Western and

Indian trends in art and fashion designs. *Global masala* also has a particular cast of stars who appeal to the diasporas' preferences (Ciecko, 2001; Rajadhyaksha, 2003; Athique, 2005; Punathambekar, 2005). As veteran producer Boney Kapoor (interviewed March 30, 2006) points out, many new stars, such as Shah Rukh Khan and Aishwariya Rai Bachchan, are consistently used because they are "overseas friendly". *Global masala* films are increasingly shot on iconic diasporic locations, such as New York, London, Dubai or Sydney. This tendency, in turn, profits on the growing number of national film funds subsidizing Bollywood location shooting. As explained by one of the Bollywood producers who shoot most abroad, Mukesh Bhatt (interviewed in Mumbai, April 7, 2006): "[Foreign film funds] give me a red carpet, packaging, discounts, my tickets, everything. They gave me very good deal. When we shoot there and our movies release, not only Indians watch the films ... we have the ... Asians, the Pakistanis, the Bangladeshis, the Srilankans ....So when 1.5 billion people watch our movies they decide their next tourist spot from the movies. Once Bollywood went, the tourists followed!"

Due to its high education levels and its many family and business ties to the diasporas, the urban middle-class audience in India increasingly shares the diasporas' preferences for *global masala* films. Distinctively Indian, but with styles and narratives resembling mainstream Hollywood products, these films also appeal to Western audiences for "World" cinema. The combination of growing audiences both at home and abroad makes it possible for Bollywood to release its *global masala films* in a way that was not possible for its earlier products. Earlier, the biggest Bollywood mainstream films typically released in a couple of hundred prints to the big Indian one-screen cinemas. New *global masala* films release in much higher numbers to multiplexes at home and abroad, often simultaneously. For example, the 2006 blockbuster *Don* was released at the same time in 700 prints at home and 325 prints on main export markets, was dubbed in 6 non-Indian languages and its overseas marketing budget topped USD 1.9 million (Times of India, 2006b). It earned 2.2 million USD overseas (FICCI and Ernst and Young, 2008).

### ***How the diasporas strengthen Bollywood's external economies through pipelines of capital and talent***

Research on diasporas typically points out their dual (or multiple) identities of being embedded in their new place of residence while socially reproducing a longing for their place of origin. There is growing research on how the Indian diasporas gets involved in Indian culture, politics and business (Paranjape, 2001; Axel, 2002; Mishra, 2002; Saxenian, 2002; 2006; Rajadhyaksha, 2003; Jayaram, 2004; Athique, 2005; Brosius, 2005; Punathambekar, 2005; Bose, 2006; Dudrah, 2006; Dwyer, 2006; Täube, 2007).

A very distinctive sign of this involvement of the Indian diasporas is its creation of pipelines of *capital* to Bollywood from prosperous Western economies. In a sense, the diasporas invested in Bollywood's exports long before the cluster

itself did. For decades, it was the diasporas running video import companies and occasional cinema communities in USA, Canada and UK (Tyrell, 1999). But now, the involvement of the diasporas goes much further. They are becoming important participants to the development of the Indian economy. In 2007, the Indian diasporas remitted more money to its country of origin than any other diasporas: USD 27 billion, compared to the remittances of the Chinese and Mexican diasporas of USD 25.7 and 25 billion, respectively — a growth of 6% since 2006 and 109% since 2000 (World Bank, 2008). There is a well-oiled institutional infrastructure facilitating the Indian diasporas' investments in Indian industries, and the national government has allowed for 100% FDI in the film industry (IBEF and PWC, 2005). Hence, Bollywood now routinely attracts finance from the diasporas. This includes single film productions, where diasporic businessmen act out their longing for the home country not by getting involved in Indian politics, but by channeling money to a Bollywood film production. Such investments originate from a broad range of countries, but the largest sums come from USA, Canada and UK. Some diasporic investments in Bollywood strengthen the cluster's internal economies, as the diasporas are becoming notable shareholders in many incumbent production companies. However, the diaspora is also visibly strengthening Bollywood's external scope economies, as it invests in new distribution companies and the construction of multiplex cinemas.

A further way the diasporas contribute to Bollywood is through creating pipelines of *talent* to the cluster. Increasingly, creative labor from the diasporas gets involved in Bollywood's product development processes. Many allegedly "Bollywood" films popular with Western audiences (such as *Monsoon Wedding*; *Water*; *Bend It Like Beckham* and *Bride and Prejudice*) have in fact been made by diasporic directors abroad. Given the success of these films, Bollywood now seeks to "repatriate" many of these directors through offering them co-productions or full-blown Bollywood productions. This strategy worked well for *The Namesake*: A Hollywood production by a director from the Indian diaspora in Canada and with potential to sell both in India and abroad, it was co-produced by leading Bollywood company UTV. It turned out to gross more abroad than any of UTV's pure Bollywood productions.

Talent pipelines may also channel talent permanently to India. In spite of concerns over brain drain, India does repatriate skills and entrepreneurs, as NRIs or even PIOs move part- or full-time to India. The most well-known case is hi-tech skill holders moving to Bangalore (Saxenian, 2002; Pandey et al., 2004; Mitra, 2007), but some creative labor from the Indian diasporas get so involved with Bollywood that they end up moving to Mumbai. Technical talent in e.g. sound, cinematography, and postproduction, are increasingly trying their luck in Mumbai, as are a range of more or less talented directors, actors and models from the diasporas dreaming of Bollywood stardom. The flow of highly educated and globally experienced people from the diasporas to Mumbai is an important strengthening of Bollywood's external scale economies, and also boosts the cluster's absorptive capacity and ability to take advantage of its information pipelines (Gertler and Levitte, 2005; Giuliani, 2007).

## Discussion and conclusions

It is evident that globalization has strengthened Bollywood. As sketched out above, the rise of new distribution and exhibition technologies and the emergence of a global film market has not caused Hollywood to make any inroads into India — on the contrary, it has caused Bollywood to export to USA and other attractive markets. Apart from driving this export, globalization has allowed Bollywood to develop new global products, strengthened a broad range of the cluster's external economies, as well as channeled investments into internal scale economies in distribution. Bollywood is leapfrogging, compared to Hollywood's slow growth and conquering of export markets in the previous century. And whereas Hollywood's strong internal and external economies drove the cluster's exports, for Bollywood, the causality runs the other way. The developments of the world's two most prolific film clusters are so different because, contrary to Hollywood, Bollywood's creation of a self-reinforcing growth path takes place under conditions of globalization. Below, I shall summarize and discuss some insights we may gain from the Bollywood case into how globalization impacts cultural clusters.

The first insight is that *globalization may erode the early-mover advantages held by core cultural clusters*. Bollywood takes advantage of the rise of a global labor market (the rise of new Indian diasporas) in combination with new transportation and communication technologies (state-of-the-art distribution and exhibition technologies), in order to create a veritable boom of exports to the world's most attractive consumer markets. That this cultural cluster thus has been able to overcome its late-mover disadvantages as a film exporter (Bakker, 2005; Scott, 2005; Pratt and Hesmondhalgh, 2005) suggests that other cultural clusters, including those in emerging economies, may also use the rise of a global labor market to gain access to new export markets. This insight is of high potential relevance for the many other cultural clusters with large diasporas, such as the Chinese, Taiwanese, Hong Kong, Russian, Korean, and so on.

The second insight is that *globalization may create information pipelines allowing cultural clusters to develop exportable products*. The frequent interaction between the Indian diasporas and Bollywood producers and directors is a good example of global information pipelines (Bathelt et al., 2004) facilitated by new transportation and communication technologies. Through these pipelines, the Indian diasporas have acted as lead users (von Hippel, 2005) in providing information and inspiration to Bollywood's development of the *global masala* film formula. According to Leonard-Barton (1995), lead users are particularly valuable for incremental innovation processes. The development of cultural products is exactly an incremental process, entailing a trial-and-error mixing of style elements and narratives. Hence, the insight gained from how pipelines

and lead users help Bollywood in developing a new film formula is relevant across cultural industries.

Bollywood's development of a new product formula for export markets inspires a third insight: *Globalization does not necessarily entail westernization of culture*. In the film industry, as in other global mass-market cultural industries, product formulas that span social and ethnic divides is an effective strategy for overcoming demand uncertainties. Over the last decades, Hollywood has added new cultural elements to its formulas in order to make them also cater to global audiences (Wasser, 1995; Miller et al, 2001). Now, Bollywood is in the process of taking similar steps. The cluster is developing a formula that — like California rolls, chicken tikka masala, or salsa — is a *hybrid* product. It mixes elements from several national cultures and thus appeals to global audiences (Canclini 1995; Pieterse, 1995; Webner and Modood 1997). However, Bollywood's new *global masala* formula does not represent a mere diffusion of cultural elements "from the West to the rest" (Wang and Yeh, 2005). It is a new independent genre with potential to reach the Indian diasporas, the Indian home market, as well as Western audiences. The insight gained from the Bollywood case is relevant across cultural industries: Globalization may, given the right circumstances, allow for the creation of new global products, rather than the destruction of local cultures (Cowen, 2002).

Fourth, the Bollywood case suggests that *globalization may create pipelines channeling talent and capital to cultural clusters*. The Indian diasporas channel more than information back to Bollywood: The cluster also benefits from pipelines of talent and capital, as creative labor in the diasporas participates in Bollywood film projects, and wealthy Indians abroad invest in the cluster's productions and infrastructures. This direct involvement of the diasporas in the development of Bollywood is an example of consumer co-creation (von Hippel, 1988; 2005; Morrison et al, 2000). Such co-creation is potentially of particular value in the cultural industries (Potts et al., 2008). The Bollywood case illustrates how globalization may facilitate this process on a global scale.

The final insight into how globalization impacts cultural clusters we can gain from the Bollywood case is that *cultural clusters may benefit from both global flows of people and global bridgeheads of people*. We can see a global flow of people when talent of Indian origin goes against the migration stream, travels from e.g. USA, and settles back in India in order to work in Bollywood ("reverse" brain drain). When talent commutes between a home in USA and Bollywood (what Saxenian (2006) calls "brain circulation"), it also represents a global flow. These flows positively impact not just Bollywood, but also potentially the place from which the talent travels. Hence, flows of talented people may benefit all clusters that are thus connected. This is illustrated by Saxenian (2002; 2006) in her analysis of another notable global flow of people. The "new Argonauts" are entrepreneurs who travel back and forth between Silicon Valley and their home countries, such as China, India, Taiwan, and Israel, channeling knowledge, capital, and hi-tech products back and forth between the Silicon Valley and hi-tech clusters in emerging economies. By contrast to such flows, we can use the term *global bridgeheads of people* about the majority of the members of the Indian diasporas

who strongly impact Bollywood's development by staying put in USA, UK, or Canada while investing in Bollywood, consuming its products, and acting as its lead users. In military terminology, a bridgehead is a fortified area that is extended into hostile territory, allowing an army to advance into that territory. By analogy, a long-standing diaspora that pulls a cultural cluster's exports and pipelines information and capital back to it, functions as an export bridgehead for that cluster. If a cultural cluster, like Bollywood, is fortunate enough to have such bridgeheads of people on the world's most attractive consumer markets, and is able to involve these bridgeheads in exports and product development, the cluster may leapfrog like Bollywood.

In conclusion, the Bollywood case suggests that globalization can facilitate rather than inhibit cultural clusters in emerging economies. Globalization may help to channel talent and capital enhancing such clusters' external economies, and it may facilitate development of new cultural products that can compete with Western styled products. However, before we make any general claim that globalization obliterates late-mover disadvantages for cultural clusters in emerging economies, it is worth considering some sobering policy implications of the Bollywood case. This particular cultural cluster was only able to take advantage of globalization because of India's generally wide open borders to global flows of products, labor, and capital, and because Indian policies during the last decade changed in order to facilitate huge investments into Bollywood. A sideward glance at Hollywood underscores this policy lesson. Even if this has been largely overlooked, facilitating policies were also crucial to the export growth of this prolific cultural cluster. Since the Second World War, the joint effort of the US State Department, the Department of Commerce, and various US embassies to boost strategic trade helped Hollywood to build its internal and external economies (Segrave, 1997; Busch, 1999; Ulff-Møller, 2001; Scott, 2005). The crucial importance of a facilitating policy framework is an important lesson for the many cultural clusters in emerging economies that are currently on the verge of taking advantage of globalization.

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