

The role of migrant networks in linking local labour markets: the case of Asian Indian migration to New York and London

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***Abstract** Social networks have long been identified as crucial to migration flows and the economic behaviour of immigrants. Much of the literature on international migration and economic sociology specifically focuses on the role of interpersonal ties in influencing migration and economic action, such as finding employment. Using the case of Gujarati Indian migration to New York and London, the life histories of these immigrants illustrate that specific configurations of network ties result in different migration flows and occupational outcomes. These configurations include organizational, composite, and interpersonal ties that link local labour markets transnationally and channel immigrants to particular destinations and into particular occupations. The findings clarify the role and meaning of networks as they affect different types of migration and the occupational outcomes of migrants. The prominence of these network mechanisms also challenges the role of human capital in producing distinct outcomes for immigrants.*

For the time being German nationals can stop shouting ‘Kinder statt Inder’ (children not Indians) to protest against the German government’s present effort at recruiting foreign high-tech labour. Between August and December 2000, only 946 Indians (7 per cent of all applicants) of an anticipated 20,000 Indians and Eastern Europeans positively responded to the German government’s offer of employment in high-tech jobs for the next five years.¹ Why aren’t Indians racing towards this great opportunity? The scheme has been criticized for being too bureaucratic, salaries too low compared with those in the USA, visa terms too short, and restrictions on bringing family too difficult (Harding 2000). Although these are all credible reasons, they mask the underlying mechanism that explains how recruited professionals end up migrating to, and working in, other countries. On the one hand, there is a global labour market for certain types of labour such as computer scientists and software engineers. Often, states think they know where that labour should come from – information technology specialists from India, nurses from the Philippines, or teachers from Europe. On the other hand, flows of these professionals and other kinds of workers, such as entrepreneurs or unskilled labourers, reveal very specific patterns that make the international circulation of labour a very local process that links labour markets. Contrary to most explanations, which suggest an efficient market mechanism for how workers are matched with jobs, labour markets are embedded in networks of

social relations (and vice versa) that often do the business of matching. Specific networks of interpersonal and organizational ties channel immigrants into particular occupations at particular destinations, and link local labour markets in the process. High-tech workers, such as the Indians referred to above, rely on organizational ties to migrate and secure employment. The narrow and trans-local character of this occupational channelling further illuminates how social networks facilitate and constrain the movement and economic incorporation of immigrants. This article demonstrates how local labour markets become linked transnationally through specific network mechanisms that are roughly distinguished by different configurations of social ties. In doing so, it clarifies the role and meaning of networks as they affect different types of migration and the occupational outcomes of immigrants. The prominence of these network mechanisms also challenges the role of human capital in producing distinct migration flows and occupational outcomes.

Methodology

Using life histories of Gujarati Indian immigrants, this article examines how labour market linkages occur at the individual and network levels and what the resulting occupational outcomes are for those immigrants. It draws on interviews with 56 Indians who have migrated to New York or London and 24 interviews with leaders and members of Indian voluntary associations. The sample specifically focuses on Indians whose origins lie in the western state of Gujarat, since high proportions of the Indian populations in New York and London are Gujarati. Four common Gujarati surnames were used to create a random sample recruited from public telephone directories in both cities. A short-string snowball sample was then obtained from the random sample to provide primary data on the social networks of the initial random sample. The initial sample corresponded to the top residential areas for Indians according to the New York Consolidated Metropolitan Statistical Area (CMSA) of the 1990 US Census and the Greater London area of the 1991 British Census.

Interviews took place in 1998 and 1999 during the author's fieldwork in both cities. They addressed experiences of natal family life, education, migration, work, marriage, and associational, cultural, and economic activities. The life history interviews of the respondents' networks showed how new networks formed and how individuals and their economic behaviour became embedded in these networks. Comparing migrant networks in two different sites also aided in the untangling of network effects from the effect of each city's socio-economic context.

Linking local labour markets

Labour markets have generally appeared and flourished under industrial capitalism (Tilly and Tilly 1998). In labour markets, recruitment and supply employment networks provide information that links workers with jobs. Employment networks, therefore, reduce hiring costs, but also limit the 'market efficiency' of matching workers with jobs. Since these networks provide restricted types of information, resources, and outlets for such matching, specific categories of workers are often reproduced to fit particular jobs. Notwithstanding some control over differences in human capital, these categories might be based on gender, race, ethnicity, community of origin, or religion. Labour markets, thus, become highly segmented and highly localized.

This localization and segmentation of labour markets, however, does not always require geographical proximity of workers to jobs, as is often the measure of a local labour market. Sassen (1995: 90) instructively proposes a return to the original concept of a local labour market, which centres on employers, and then extends the concept by examining the 'workplace-household nexus' in immigrant labour. Her conceptualization holds well for the way that local labour markets become linked. As employment networks connect workers with jobs in one local labour market, two or more local labour markets can become linked through transnational recruitment and supply networks that aim to fulfil labour demand. Local labour markets are further conditioned by historical, political, and economic relations between the geographical regions encompassing those markets. Where labour markets are linked transnationally, some international migration is bound to occur. An examination of recruitment and supply networks that connect potential migrants with jobs shows how local labour markets become linked and how immigrants are actually embedded within them (and vice versa). This examination also reveals how recruitment and supply networks operate through different configurations of social ties in migrant networks.

The significance of organizational and interpersonal ties in migrant networks

Distinguishing between the types of social ties in the pre-migration networks of immigrants is important for understanding how people migrate, to which destination, and with what expectations and prospects for economic opportunities. Much of the literature on international migration and in economic sociology has shown that both immigrants and non-immigrants rely heavily on interpersonal ties to migrate and find employment (Boyd 1989; Granovetter 1974; Grieco 1987; Gurak and Caces 1992; Massey et al. 1987, 1999; Portes and Bach 1985; Powell and Smith-Doerr 1994; Tilly and Tilly 1998; Tilly 1998; Waldinger 1996). Interpersonal ties are typically defined in terms of labels, such as friend, relative, or neighbour (see Krackhardt 1992). These labels and measures can be ambiguous. For instance, a workplace friend might be a quite different kind of tie from a childhood friend, and thus provide different kinds of information or resources. Distinguishing ties based on the channel through which they are related, that is the way two people meet, or the organizational context of a relationship, helps to correct for some of these ambiguities. This distinction also clarifies why some ties are strong and generate trust, while others are weak and generate new information (Granovetter 1973). The channels through which people relate to each other, at least initially, organize social ties in terms of mutual relations or interests, for example, a mother and daughter, a foreman and workers, or a faculty of a university department. These ties can be crudely distinguished as interpersonal ties and organizational ties.

Interpersonal ties, which are commonly cited in the network and migration literatures, include relationships to kin, friends, and community.² In contrast, organizational ties, which are typically weak in Granovetter's sense, exist when individuals are embedded in organizations or institutions. Interpersonal ties of friendship and family do exist within organizations (see Heimer 1992). However, organizational ties need to be distinguished because they refer to the mediating structure of the organization, where colleagues, co-workers, supervisors, and even friends, family, and acquaintances relate to each other. Examples of such organizations are firms,

schools or universities, businesses, cultural institutes, and government or state agencies. Ties to people in these organizations encourage migration in various ways. Organizations actively recruit both their own members and outsiders to work abroad. Individuals pursue known opportunities overseas. Formal aids to labour recruitment, such as interviewing for overseas jobs or taking professional certification exams in immigrant sending countries, are also common. In some cases, such as family businesses, interpersonal and organizational relations overlap. For example, the president of a family firm might have his sons and nephews each manage separate branches of the firm. Such distinctions have significant and differential consequences for migration flows and occupational outcomes. These distinctions also give meaning to networks. They allow us to look at what kinds of relationships make up social ties and what kinds of transactions pass through those ties. Thus, networks are comprised of both social ties or relations and transactions within those ties. Ties and transactions are the elements that give networks meaning. Thus, the term network is a useful metaphor for understanding how *configurations* of ties – not only their content or transactions – affect the transmission of information and resources, which leads to specific kinds of migration and occupational outcomes.

Types of migration streams

Roughly four ideal types of migration streams (defined below) can be distinguished according to their different configurations of ties: solitaries, chains, recruits, and trusties. These types of flows are not mutually exclusive. For example, as network ties change, flows of recruits and trusties can become chains. Some chains can also become trusties. The different configurations of ties present in these types of migration flows also affect the selectivity of migrants, the risk associated with channelling migrants into specific occupations, the ways of monitoring economic activity, and the preservation of occupational status.

Solitaries have no prior ties. This leads to little or no migration. Accounts of individuals migrating without the help of interpersonal or organizational ties in the home or host countries are rare. Although solitaries are pioneers, not all pioneers are solitaries. Pioneers often have weak ties to organizations such as universities or governmental institutions, and thus resemble recruits. For instance, students, who are often thought to migrate without any ties, commonly report using organizations such as the United States Agency for International Development and other American governmental representatives, such as the United States Educational Foundation in India, to obtain information and aid on migrating and applying to American universities. Even refugees are directed to particular destinations by governmental and non-governmental organizations. Thus, the migration of solitaries is rare.

Chains have interpersonal ties. This leads to the most common form of migration, chain migration. Chains are formed through interpersonal ties that control the process of selection according to personal relations and social obligations to kin and community, not according to the formal requirements of organizations. Since chains lack organizational ties to channel them into occupations consistent with their prior occupational status, their employment opportunities are less stable than for recruits or trusties. As a result, chains often face the prospect of downgraded occupational status upon arrival in the host society, even when they have high educational qualifications.

Some chains, however, have interpersonal ties that can channel them into occupations as owners or workers in industries dominated by their co-ethnics. In such cases, those ties reduce the risk associated with small business ventures by monitoring the economic behaviour of the immigrants they recruit. When interpersonal ties in such ethnic economies are lacking, chains often use formal means, such as advertisement and employment agencies, to become employed in the dominant labour market. Occupational channelling and the ability to monitor the economic activities of immigrants are less likely for workers outside ethnic economies.

Recruits have organizational ties. This leads to the migration of professionals. Flows of students and recruited low-skill labour also roughly fall into this category. However, professionals depend more heavily on organizational ties than do most other migrants. Organizational ties play a critical role in controlling the process of selectivity for recruits, especially for recruited professionals. Formal constraints on the opportunities of immigrants to become embedded in professional organizational networks open the doors only to those who can satisfy specific requirements, such as educational degrees, certification, or licensing. External monitoring of network members is enacted primarily through organizations. This kind of monitoring lessens the risk involved in recruitment via organizational ties and preserves the occupational status of recruited professionals. Students often follow a similar path as recruited professionals by using organizational ties to faculty and classmates in their universities to seek employment. Flows of recruited low-skill labour, which initially resemble recruited professionals, quickly begin to resemble chains since human capital requirements for their recruitment are low. In other words, their recruitment networks, which are initially mediated through organizations, quickly become supply networks that are mediated solely through interpersonal ties. This is possible in occupations that do not require external monitoring by organizations (namely non-professions).

Trusties have composite (interpersonal overlapping with organizational) ties, as in dense, multiplex networks (see Portes 1995). This leads to entrepreneurial migration. The lack of external mechanisms for monitoring and enforcement make economic activities within networks of trustees riskier. In cases such as the high-stakes, transnational, diamond trade, the selectivity of migrants and the monitoring of their behaviour occur within dense networks of composite ties. Kin and community double as suppliers and buyers in the trade in order to ensure the enforcement and monitoring of business activities. The selectivity of migrants and their occupational position in transnational trades are also regulated by composite ties that control the recruitment of labour through social obligations between network members. For trustees, then, maintaining occupational status in the host country depends less on human capital requirements than on composite ties that dominate the network's economic activity.

To illustrate the differences in the networks and occupational outcomes of recruits, trustees, and chains, six typical profiles of immigrants (individuals or married couples) and their social networks are presented in the pages that follow.³ The narratives of solitaires are not presented because the sample did not include any Gujarati immigrants without some type of social ties; however, theoretically solitaires might exist. The narrative profiles intend to show, first, the historical, political, and economic linkages connecting local labour markets in origin and destination countries pertaining to each network, secondly, the structure of those social networks, which facilitates migration within that larger context, and thirdly, the ways in which those

individual immigrants and their networks are channelled into particular jobs or occupations as a result of the linkages and structure.⁴ Despite differences in the socio-economic context of New York and London, the structure of Gujarati migrant networks was similar for each category of migration streams across sites. Networks of recruits in New York, for example, resemble their counterparts in London, but not other trustees or chains in New York.

Recruits: professionals in New York and East Africa

Health professionals in New York

The first significant Indian migrant stream to the US since the turn of the twentieth century occurred in the 1960s. This pioneer flow was composed largely of professional workers. Several historical circumstances facilitated the migration of health professionals in particular: the 1965 liberalization of US immigration laws, which abolished national origins quotas; the national labour shortage of doctors in the US, which resulted in the recruitment of foreign professional labour from India and other countries; and an examination process for foreign medical graduates that could take place in India or the USA in order to obtain a labour visa or green card before actually migrating (see Bowers and Rosenheim 1971). The development of medical education in post-independence India (after 1947) also created an enormous surplus of doctors (Mejia et al. 1980). For many potential immigrants, however, these conditions were probably not sufficient encouragement to migrate. Organizational ties to educational institutions, professional organizations, and employers were crucial for recruited professionals to retain their professional status after migration to the host society. The following narratives of Kishor and Jamnadevi show how US immigration policy and organizational ties facilitated their migration and linked professional labour in India with corresponding demand in the USA.

Kishor, the son of a respected cloth merchant, was a practising medical doctor in Gujarat. Kishor's father wanted Kishor and his siblings to become doctors, rather than continue in their father's business. In the 1970s, shortly after graduating from medical school in Gujarat, Kishor visited his brother, Mahesh, a practising medical doctor in the USA. Life in the USA made a positive impression on Kishor. Thus, during a subsequent six-month visit, he lived and worked for his brother while taking classes in preparation for the Educational Council for Foreign Medical Graduates (ECFMG) exam. The exam would qualify him to practise as a physician in the USA. During his studies, Kishor made contact with a friend from their medical college in Gujarat, who was working as a physician at a New York hospital. Kishor's friend informed him of an opening at that hospital and arranged for him to work there. Upon passing the exam, Kishor applied for a green card, and returned to India for four months pending its approval. In 1975, he re-entered the USA to begin a job as a house physician. Kishor entered the country just one year before the enactment of the Health Professions Educational Assistance Act, which declared an end to the national shortage of physicians and surgeons. The Act eliminated the automatic labour certification granted to foreign medical graduates and prevented the over-allocation of these visas to certain countries, such as the Philippines and India (Lobo and Salvo 1998). Kishor's doctor-friend, doctor-brother and a receptive immigration policy, therefore, helped Kishor migrate directly to New York to practise medicine.⁵

Organizational ties alone would probably have sufficed to encourage Kishor's migration and employment, such as the recent pioneer migration of Indian IT workers to Germany. Fortunately, both interpersonal and organizational ties assisted Kishor in meeting the requirements for entry as a professional doctor, and providing him with more personal needs such as housing and companionship, a combination of ties that signal a mature migrant stream of professionals with well-developed supply networks. In the case of Jamnadevi, Kishor's wife, both kinds of ties also helped her to complete her education and to establish her own dental practice in New York – her first job in the USA.

Jamnadevi and Kishor had an arranged marriage while she was still finishing dental school in India. In order to join Kishor in the USA, she applied for a green card under the immigration statute's allotment for professionals. Kishor also applied to sponsor her immigration. Both approvals arrived simultaneously and Jamnadevi was officially admitted under the family preferences provision. That year, Jamnadevi entered dental school in New York to complete her training. By 1979, she finished dental school, passed her board examinations, and began her own practice. The owner of Kishor's practice helped her to set up her own office. He offered Jamnadevi the opportunity to establish her practice near their office consisting of three paediatricians. The two medical practices strategically banked on the idea that by having neighbouring paediatric and dental offices, they could share clients needing both of these health services. Jamnadevi's ties to medical professionals, such as her husband's professional partners, and organizations, such as the Indian Dental Association of New York, provided important information and resources for her employment. Her status as a qualifying dentist and her professional degree from a prominent university in New York also aided the creation of those organizational ties.

Jamnadevi and Kishor were not part of the pioneer stream of health professionals to the USA in the 1960s. However, they were able to take advantage of linked labour markets between India and the USA. They arrived at a time when supply networks of Indian immigrant health professionals were already in place to recruit them and ease their transition. An open immigration policy and demand for their labour contributed to the functioning of those networks, which consisted mostly of organizational ties from their educational institutions and their workplaces. Similarly, the recent migration of Indian IT workers to Germany represents an early stage of migration of recruited professionals where supply networks are still few and under-developed. However, in time, this flow is likely to mature into a stream of professionals, who will be recruited by Indian colleague-friends, and not only German institutions.

Anavils in East Africa

Administrators, clerks, and educators are the traditional occupations of the Anavils, a low-status caste within the high-status Brahmin caste. Four members of the Anavil friendship network I interviewed in London were teachers. As part of an educated middle class, many Anavils were unsurprisingly employed in educational, administrative, and professional positions in the East African protectorates of the British Empire. Teachers were in demand in East Africa during the first half of the twentieth century as a result of the British development of a formal educational system for European settlers, the African population, and a growing Asian population. Gregory

(1993) reports that Asians far outnumbered Europeans and Africans as teachers in the East African protectorates of Uganda, Tanzania, and Kenya. He states that '[a]lthough the proportion of Asians to Europeans in the overall population was approximately three to one, the teacher ratio was five to one' (228). Gregory found that Goans, Gujaratis, Punjabis, and Mahratis were among the most numerous Indian regional communities represented by the teachers, especially those who were educated and expatriates. The Anavils, therefore, probably constituted a high proportion of those Gujarati teachers since most of them were expatriates with a college degree. India's proximity to Africa and its British-influenced educational system also made it favourable to teacher recruitment. Representatives from the Ugandan, Kenyan, and Tanzanian High Commissions regularly recruited teachers during visits to India. They circulated advertisements, held interviews, and visited colleges and universities to recruit students. Colonial links and formal recruitment mechanisms, therefore, shaped the way in which the Anavil network I interviewed in London first migrated to East Africa. Here is the story of Kanti and Uma.

Kanti and Uma had an arranged marriage in India. Kanti received his B.Sc. in 1950 from Bombay University and found work as a teacher. Uma taught primary school in Gujarat after she matriculated. Kanti informed me that, at that time, there were many advertisements circulating in local Indian newspapers for available work in East Africa. Gregory (1993) also confirms this account. Kanti and Uma answered an advertisement for teachers that was placed by the Indian committee members of a Ugandan private school serving mostly Asian children. (Students were ethnically segregated into European, Asian, and African schools throughout the British colonial period.) Since Kanti had a B.Sc. with second-class honours, he was hired to be the headmaster of a small staff of 12 teachers; Uma was hired to teach the primary grades. In addition to their desire to have new experiences, the opportunity was attractive to them because teaching contracts in East Africa paid higher salaries than in India, and provided free first-class travel and six months leave every four years. Thus, in 1953, they left together for a small town outside Kampala to begin their new jobs.

The Anavils, on the whole, are recruits. Their prior experience as teachers in India allowed them to take advantage of organizational ties within local labour markets produced by colonial relations linking India and East Africa. Demand for teachers and formal recruitment mechanisms carried out by governing officials influenced the formation of transnational networks between India and East Africa and aided their migration and employment opportunities. Despite the different historical contexts of these two cases, organizational ties to professional and educational colleagues and to government and institutional representatives led to a similar process. These recruits were channelled into occupations that were consistent with their Indian education and training before leaving India.

Trusties: transnational entrepreneurs create new markets for labour and consumption

Oswals in East Africa and London

The majority of young, Halari Oswal, Jain men sailed in small Arab dhows to East Africa, and specifically to Kenya, around the turn of the twentieth century. At that

time, most Halari Oswals were struggling economically as small farmers in their 52 villages surrounding the western Gujarat city of Jamnagar. A severe famine in the region, which lasted from 1899 to 1901, resulted in the Halari's decline in status relative to the urban trading group of Jamnagari Oswals (Banks 1994). The resulting class division, in addition to the hardships created by the famine, contributed to the migration of many Halari Oswals to East Africa, but not of Jamnagari Oswals. At the time, many regions of Gujarat were already experiencing substantial out-migration to East Africa, as the word spread that good opportunities for trade and commerce existed there. By 1972, half of the almost 15,000 Oswals in East Africa had settled in Nairobi; the other half settled elsewhere in Kenya (Banks 1994; Gregory 1993). In Kenya, Oswals were primarily small shopkeepers dealing in textiles and household goods since their Jain practices conflicted with the handling of meat, fish, and liquor.⁶

The migration of Oswals to East Africa began as a turn-of-the-century free migration that eventually became a chain migration and settlement. Pioneer, male migrants returned to India to recruit family and community members to work for them and to marry and bring their wives to East Africa. Indian and British organizations played a very limited role in that chain migration flow and in the Oswals' economic development as small shopkeepers and traders. Kin and community networks in India were initially sustained throughout their settlement in East Africa and provided labour for their shopkeeping niche. These networks would serve them later, when many members of their community migrated to London and re-established themselves in small shops and trade, thus resembling trusties rather than chains. The following profile of Mahendra, an elder in the Oswal community, shows how he became a transnational entrepreneur in East Africa and in London, linking local labour markets for commercial trade in India, East Africa, and Britain.

Mahendra was born in Kenya, the eldest of 12 siblings. He received a seat to study dentistry in Edinburgh, but he was too poor to pursue an education abroad. Instead, Mahendra had been keeping accounts for a businessman (who would soon become his uncle-in-law) in exchange for living with his family. That uncle asked Mahendra to become a partner in his confectionary business. Later, they began a food manufacturing company that made curries and other Indian foods for export and local sale. Thus, Mahendra soon acquired the necessary experience and ties to suppliers and buyers in order to operate a transnational business. Until at least the mid-1900s, Indians were trading throughout East Africa, in particular, Uganda, where agriculture and industry were well developed. Therefore, Mahendra migrated to Uganda in order to start an independent business with the help of his brother. Colonial links to Britain, particularly London, also opened opportunities for trade. Among other pioneers of the ethnic foods industry in the 1960s, Mahendra and his brother bought a shop in London to sell curries made in their factories in Uganda. They also imported indigenous Indian and African vegetables and flowers grown in East Africa. While Mahendra stayed in Uganda, his brother and a partner ran the London end of the business. In addition to difficulties with food spoilage and developing a new market in London, the shop failed because of mismanagement and conflict between Mahendra's brother and his partner. In 1972, when Idi Amin expelled the Asians from Uganda, Mahendra and his family immigrated to London as refugees. Even though Amin's government seized all of their property, technology, and capital, Mahendra and his four brothers were able to start new businesses together in London. They not

only had pre-existing ties to suppliers and buyers in India and Europe, but they also had experience in the London retail market. They imported silk saris from India, Japan, and Paris. They had 12 sari shops at one point, but Mahendra eventually sold them because of family conflict.

In Kenya, Uganda, and Britain, Mahendra owned several transnational businesses. Each migration and transnational business was facilitated by his interpersonal ties to his younger brothers, who had to oblige him with labour. His brothers and other Oswals also served as organizational ties of suppliers and buyers in the various industries represented by their businesses. Such dense networks of composite organizational and interpersonal ties were crucial to run their risky and lucrative transnational businesses. As the eldest, and the holder of the family's wealth, Mahendra had the power to intensely monitor the behaviour of his network of brothers and business partners. This dense transnational business network also directed Mahendra and his brothers' migration to Uganda and London.

Jain diamond traders in New York

New York is one of the major diamond markets in the world, including Antwerp, Hong Kong, Bangkok, and Tel Aviv. Ninety per cent of uncut diamonds and 50 per cent of all polished stones sold in the world are traded in Antwerp alone (duBois 1997; Westwood 2000). India's \$4.5 billion industry is the stone-cutting centre for 80 per cent of the diamonds sold around the world (Karp 1999). Uncut diamonds are traded in Antwerp and sent to Bombay and other cities, where they are carried by 'anagadias' (the Gujarati word for a person who carries valuables and therefore is trustworthy) to stone-cutting and polishing centres such as Surat and Ahmedabad in Gujarat. Then, they are exported for sale to major diamond markets such as New York. India's advantage in the market for stone-cutting and polishing is, in part, the availability of cheap, skilled labour that 'can put 56 facets on a stone the size of a grain of salt' (McDonald 1996: 4). Other advantages include the tight-knit networks of Jain diamond traders whose origins lie in the town of Palanpur, the original home of the diamond industry in Gujarat.⁷ The following profile of Lakshmi and Narendra, who are part of this close community of diamond traders, show how migration is encouraged through transnational trade, channelling entrepreneurs directly into emerging industries and markets dominated by their community.

Lakshmi and Narendra were pioneers of the American market for Indian diamonds. In India, they had a love marriage combining similar class backgrounds, but different religions. Narendra is Hindu, whereas Lakshmi comes from a Jain diamond family. Narendra left his natal family's business as a result of interpersonal conflict, and was adopted and trained in the diamond trade by Lakshmi's uncle. Lakshmi had been working in her family's business in Bombay since she was eighteen. In the early 1970s, her uncle sent them to New York to expand the family business. They immigrated under US visa allocations for investors with sponsorship from the family firm's headquarters in Antwerp. They were also among the first Jain families to establish diamond businesses in New York. They forged new ties with other Jain pioneers in the American diamond market and with American buyers. Members of their community of diamond traders provided them with a directory of all of the jewellers in the USA, which included names, locations and ratings. Based on

those merchant's ratings, Lakshmi and Narendra spent their first two years in the USA by travelling throughout the country to meet potential customers. Their composite ties to other traders in New York and Antwerp and to exporters in India helped the firm to grow and allowed them to build more factories in India in order to expand into jewellery manufacturing and sale. They had a series of partnerships, always with Jain diamond families, until they could make their business independent.

The USA is viewed as a very large market for selling diamonds, accounting for over two-thirds of cut and polished diamonds exported from India (India Diamond and Colorstone Association, see www.idca.net). Lakshmi's and Narendra's financial success is further evidence of the large market demand for their goods and of their ability to dominate the trade through dense networks of composite interpersonal and organizational ties. Kin, community, business, and trust are carefully interwoven in this social network of trusties, preserving and enhancing their high occupational status in the New York diamond trade.

Chains: 'business in their blood' or the limits of interpersonal ties?

Gujaratis often say they have 'business in their blood' when they explain why they own or are employed in various retail and wholesale trades. That belief persists as a collective myth owing to the centuries of successful merchant and trading castes from Gujarat (see Tripathi 1984). On the contrary, this research shows that some Gujarati immigrants are entrepreneurial, not because they have business in their blood, but rather interpersonal ties that channel their entry into business niches controlled by others in their network. Conversely, other Gujarati chains have interpersonal ties that aid their entry into the dominant labour market, albeit in lower occupational positions than they held prior to migrating.

Organizational ties typically play a very limited role in channelling chains to particular destinations and into occupations. Without such ties, these immigrants have instead used interpersonal ties to move to Britain and the USA. Although US immigration policy since 1965 has substantially increased the number of high-skill visas, the majority of immigrants still enter the country on family visas. In Britain since the 1960s, most Indian immigrants came from East Africa with British passports in hand and family to help them settle. Once they arrive in the host country, chains also use interpersonal ties to seek employment. However, interpersonal ties limit their employment opportunities because kin and community can rarely provide new and better information and resources. Since reliance on interpersonal ties produces few new possibilities, chains must resort to public advertisement and employment agencies. Whether chains rely on interpersonal ties or on formal means to become employed, their occupational status is typically downgraded to entry-level positions at the time of their arrival in the host society. Their lack of organizational ties significantly affects their ability to achieve parity with their home-country status. Nevertheless, some chains can compensate for lowered status if they are part of interpersonal networks that dominate occupational niches. This is a significant factor in channelling some chains into niches while excluding others. The following narratives of chains in the Patidar and Swadhyaya communities show how interpersonal ties limited their employment opportunities to small business or entry-level positions in the dominant labour market.

London's Patidars

The Patidar community has origins in the Charotar region of central Gujarat. The Patidars are a peasant, landowning caste, who have been economically and socially influential throughout Gujarat since the early twentieth century (Gregory 1993; Patel 1999).⁸ Their immigration to East Africa began around the mid-nineteenth century, when many Patidar men migrated to work for British infrastructural projects and administration, such as the railways and civil service. Many also engaged in commerce as small shopkeepers. In Uganda in 1950, Patels (the most common surname of the Patidar caste) numbered 41 per cent of Hindus who held trading licences (Gregory 1993). Although some second- and third-generation East African Patidars rose into the professional occupations, the community retained a significant shopkeeping niche until the 1960s. Around that time, the Africanization policies of Tanzania and Kenya and the expulsion of Asians from Uganda prompted or forced most Patidars to migrate to London or back to India. In London, their tight-knit community based on interpersonal ties helped them re-establish themselves in local retail trade. Consider the case of Raj and Parvati, who run a small shop in East London.

Raj was born in Kampala, Uganda to a father born in Gujarat and a mother born in Kampala. His father had a bachelors degree in commerce and was a certified accountant on a coffee plantation in Kampala. However, the 1972 Asian expulsion suddenly transported Raj's family to a refugee resettlement camp in Britain.⁹ Like all Ugandan refugees, they were only allowed to bring £150 per person into Britain; and unlike the wealthy businessmen of Uganda, they had no overseas bank accounts to buffer their loss. Raj's family stayed in the camp for a week until a cousin offered them housing. Raj's parents found their first jobs in factories doing assembly work. Raj's father was unable to transfer his educational qualifications to London's dominant labour market. Therefore, he attained the same occupational status as Raj's mother, who had only matriculated. Raj's father also kept the account books of local Indian shopkeepers to gain extra income informally. After more than a decade of working on assembly lines, Raj's parents bought a shop in the confectionary/tobacco/newsstand (CTN) industry, which is dominated by Patidars across London (Lyon and West 1995). Relatives living in the USA and bank loans helped them buy the shop. Prior experience keeping the accounts for other CTN shopkeepers made the transition into a small business easy. Raj's father died shortly after Raj finished his A levels (high school qualifications) and while his sister was still unmarried. Raj then inherited the shop, which he presently runs with the help of his mother and his wife, Parvati. Parvati has a bachelor's degree in social studies. She completed her degree in the same year that she was introduced to Raj, while he was in Gujarat for his father's funeral. They were married in four days, after which time Parvati migrated to London where she began work in the family shop. Raj's overwhelming obligations as the new head of the family included providing his sister with all the obligatory expenses of a Patidar wedding.

For Raj and Parvati, then, interpersonal ties channelled their opportunities for small business. While inheriting the family shop was economically advantageous, their economic opportunities were severely limited by family obligations and limited wealth.

Dadaji's pilgrims in New York

The Swadhyayees are a fairly heterogeneous lot in terms of their caste association and class composition in the USA. That diversity is in keeping with the religious philosophy of Swadhyaya (self-study), which binds them together as a network of friends, who participate in this socio-religious movement.¹⁰ The eight Swadhyaya members, who I interviewed, were born and raised in Gujarat in relatively urban, middle-class families. Their Indian educational qualifications range from associates degrees to post-graduate masters' and medical degrees. Equally important, they each had at least one close family member living in the USA before they migrated. Five of the eight Swadhyayees I interviewed arrived in the USA on family visas – as chain migrants with family already residing there. However, without organizational ties, finding employment that would honour these qualifications proved difficult. Ashok and Hansaveni provide a typical example of the limits of interpersonal ties.

Ashok and Hansaveni are from educated, middle-class families in the Anavil community. Ashok has a bachelor's degree in commerce, but found economic prospects in Gujarat unsatisfactory. In the late 1970s, he immigrated to the USA on a family visa sponsored by his sister. Ashok's sister was sponsored by her husband, who entered the USA from Britain by taking advantage of immigration preferences for health professionals. Ashok was introduced to Hansaveni by his brother-in-law and they had an arranged marriage in Gujarat. In their first years in New York, the couple relied on Ashok's sister and brother-in-law to house them and to adjust to life in the US. Ashok's sister also provided Ashok with his first job; she asked her supervisor to hire Ashok at the nursing home where she was employed. Even though Hansaveni has a bachelor of science degree from Gujarat, she took her first job as a clerk at a large New York bank. Ashok arranged for her employment after he began working there. Ashok and Hansaveni became employed in a string of similar entry-level positions. After more than a decade, they obtained jobs that were consistent with their educational background and experience.

Interpersonal ties helped Ashok and Hansaveni to become employed even though that resulted in a significant drop in their initial occupational status. Age and familial obligations further limited their economic activities, such as pursuing American educational qualifications in order to obtain professional status. Thus, interpersonal ties facilitated and constrained Raj's and Parvati's employment in small business and Ashok's and Hansaveni's employment in the dominant labour market.

Comparing networks and drawing conclusions

Among recruits, built-in certification mechanisms that are part of educational institutions, government agencies or firms in their organizational networks reduce the risk associated with sponsoring migration and employment. Even when immigrants recruit their colleague-friends to work overseas, those recruits must fulfil the requirements of organizations in order to migrate and become employed. Therefore, the organizational ties of professionals generally provide a wider and better range of opportunities than interpersonal ties, given that the requirements of the organization can be satisfied.

In contrast, trusties are characterized by composite interpersonal and organizational ties. In these typically dense, multiplex networks, kin and friends are also

business colleagues, who all belong to the same community of origin, speak the same language, and practise the same religion. The high risk of malfeasance in long-distance or transnational trade is buffered by composite ties used to sponsor network members for employment and then to monitor their behaviour. Labour recruitment and monitoring primarily depend on personal relations and social obligations that are used to enforce trust between network ties.

The networks of chains are similar to those of trusties only when interpersonal ties monitor their economic activities and sponsor their employment in ethnic economies. However, chains tend to be part of networks that are either entrepreneurial or whose members are employed in the dominant labour market. Interpersonal ties to entrepreneurs in niche industries in the host society aid newcomers to become employed and/or establish themselves in similar businesses in their ethnic economy. In contrast, workers with interpersonal ties in the host society's dominant labour market have more uncertain employment prospects because their networks tend not to dominate particular industries. The economic behaviour of these chains is often not bound by social obligations to interpersonal ties. Thus, chains either become employed in occupations where their networks are dominant, such as in ethnic economies, or they must pursue opportunities through formal means. Therefore, entrepreneurship is not in the blood of Gujaratis, but rather in their networks.

As shown above, organizational, composite, and interpersonal ties in migrant networks lead to significantly different migration and occupational outcomes. The three cases of recruits, trusties, and chains illustrate that these ties play distinct roles in channelling migrants into occupations in their host societies. Local labour markets become linked not only through historical circumstances, such as colonial relations or labour shortages, but also through the actual ties created out of those circumstances. Thus, Germany's recent effort at recruiting Indian IT workers can be understood as a situation where supply networks of Indian immigrants working in the German IT sector are still few and underdeveloped. Until those networks are established, and as long as they have to compete with the long-established American ones, German recruitment efforts will likely result in a slow trickle of those workers.

The significance of organizational and interpersonal ties in creating different migration and occupational outcomes also challenges the importance of human capital. Many chains are of professional or highly-educated people. However, they cannot replicate their status upon arrival in the host country without the aid of organizational ties to channel them into equivalent positions. Recruits, on the other hand, have organizational ties that preserve their occupational status. Trusties and chains depend on personal relations and social obligations to recruit labour (or be recruited) and to monitor the economic behaviour of those workers (or be monitored by them). Therefore, the economic activities of these three types of migrant networks operate under different kinds of constraints that alter the role of human capital in producing migration flows and occupational outcomes.

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Notes

1. Although Indians are a fairly low proportion of all applicants, they have been granted greencards at a high rate. To date, they have received 20 per cent of greencards given to foreign workers; Russia, Ukraine and the Baltic States followed close behind (personal communication with the Central Placement Office of the Federal Employment Service, Press Office, Bonn, Germany (Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit (ZAV), Pressestelle).
2. The term 'community', when used with reference to Indians or Indian immigrants, specifically refers to shared region of origin, language, religion, sub-caste and class status within a particular group.
3. Pseudonyms have been used in all of the narrative profiles to protect the confidentiality of the participants.
4. The analysis is limited to an examination of the structure of network ties until the time of one's first job. Although an immigrant's first job in the host economy represents an important entry point for evaluating future occupational outcomes, employment opportunities can and do change, sometimes dramatically, and with little regard to obvious human capital constraints. Space limitations prevent me from dealing with the question of how social networks and occupations change over time.
5. Kishor is among the approximately 26,000 practising medical doctors of Indian origin in the USA today, or 5 per cent of all medical doctors in the USA (author's calculation from Tilly and Tilly (1998) and the American Association of Physicians of Indian Origin (AAPI)). Like him, the majority of these doctors are first-generation immigrants since most of their second-generation children have barely come of age. Nevertheless, AAPI reports that although Asian Indians are less than 1 per cent of the US population, they also include over 3000 or about 10 per cent of the student body in the country's medical schools. AAPI is the umbrella organization for about 100 professional physician associations and chapters formed by Indians in the USA. Many of these are broken down by region and reflect linguistic differences. For instance, the Baroda Medical College Alumni Association of North America represents about 1500 alumni from Gujarat. Medical graduates from the Indian states of Kerala and Tamil Nadu also have their own associations. These associations are the most recent conduits of information for becoming a medical doctor in the USA. Their transnational activities, such as AAPI's 13 clinics in India and 30 annual medical educational conferences there, update doctors in India on the latest medical and technological developments, thus linking Indian immigrant doctors in the USA with potential immigrant doctors in India.
6. Oswals practise the Jain religion, which dates from the fifth century BCE. Jainism does not accept the authority of the Vedas as in Hinduism. Instead, its worldview is grounded in logic and experience and five different kinds of knowledge that are attained through strict ascetic practices (Radhakrishnan and Moore 1957). Most of these practices, which require the shedding of all material wealth, are so difficult to maintain that many Jains do not follow the religion faithfully. Eating habits are the only area in which some Jains are able to adhere: eating only plant life, and among plants, eating only those with the fewest senses (this excludes root vegetables), thereby killing less.

7. See Koskoff (1981) for a fuller description of the global diamond trade. Also see Westwood (2000) for a depiction of the role of Jains and other Indians in the trade.
8. Many Patidars were originally from the lower Kanbi caste. They represent one of the most notable examples of upward caste mobility through emigration and return migration. Their cumulative success in commerce in East Africa eventually elevated their entire caste community in India. See Chandra (1997) for a detailed discussion of this process and Pocock (1972) for a more general discussion of the Kanbi and Patidar in India.
9. Although Raj and his family were refugees from Uganda, in many ways they resemble chains. The refugee status of many Ugandan Indians was short-lived because so many of their kin and co-ethnics throughout East Africa had already settled in Britain and were able and willing to help them. Nonetheless, the most durable effect on the refugees' economic adjustment to life in Britain was the confiscation of their livelihood and assets.
10. See Srivastava (1998) for a revealing collection of essays about this socio-religious movement.

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