

Flexible Citizens and the Internet: The Global Politics of Local High-Tech Development in India¹

PAULA CHAKRAVARTTY

University of California, San Diego

The fact that *apna* [our own] Azim Premji who lives in Bangalore is richer than the Queen of England or Gururaj Deshpande (having created a new start-up, barely a year old) has acquired wealth faster than the Sultan of Brunei in the past year are indications that Indians are a lot smarter, a lot more hard working and a damned sight more ingenious than most. Give us one more generation of free Indians and you will see how the pattern of wealth changes globally. What is doubly satisfying is the fact that most Indians who have succeeded overseas are ready to share their ideas, their wealth with people back home...We are no longer losers. We are no longer a sick nation, teetering on the edge of bankruptcy and shackling its people to a cantankerous, obsolete socialist ideology. We are a free nation today, trying to redesign our future and our lives. (Editorial by Pritish Nandy. See www.rediff.com/news/2000/feb23)²

I am particularly happy to note that this conference is focussing on non-resident Indians [NRIs] as potential investors and entrepreneurs. NRIs are doing very well in their respective fields. By dint of their hard work and intelligence, they have made their mark in highly developed and competitive countries despite the handicap of being outsiders...I strongly believe that NRIs can, if they set their mind to it, contribute greatly to changing the face of India...I hope and trust that this meeting marks the beginning of what should really be an annual event in our calendar, when we get together with our extended family. The Indian economy is growing and its fundamentals are sound. There is a spirit of entrepreneurship and competitiveness among Indians. I call upon all of you to come and contribute to this scenario of change, challenge and opportunities, which is taking place. *Jai Hind* [Long Live India]. (Prime Minister Vajpayee's address to the 'Global Indian Entrepreneurs Conference,' November 11, 1998.³ See www.indianembassy.org/inews/December98/11.html)

According to industry estimates, three new Indian websites appear on the Net each day, and as of April of 2000, there were 23,000 India-specific websites and more than 100,000 domain names registered by Indians.⁴ One of the dominant discourses of 'India on the web' revolves around the rejuvenation of a technologically led market society. As the vitriolic editorial and the nationalist speech

by the current Prime Minister make apparent, the celebration of entrepreneurial prowess marks a rupture with the nation's socialist past while preserving a primordial link to an essential Indian identity. This article considers the role played by the diasporic Non-Resident Indian (NRI) in shaping the discourse of modernization of home away from home through the new translocal medium of the Internet.

India, like most other developing nations, has undergone a dramatic decade of economic liberalization in the 1990s based on new commercial and technological ties with multilateral institutions and transnational corporations. The fervor of dotcom-mania may seem incongruous with the fact that the domestic Internet economy consists of approximately 100,000 personal computers and 1.5 million Internet users in a country that recently celebrated the birth of its billionth new citizen. Unsurprisingly, over 40% of Indian Internet users' household income is between Rs 10,000 and Rs 25,000 per month, or in the top tenth percentile of the nation's households.⁵ Despite the tiny fraction of the population who might have direct access to the Internet, the promise of an entrepreneurial information revolution is raging in Indian urban public culture, both within and outside the confines of the nation-state. Beyond the obvious issue of information disparity and unequal access in a low-income nation like India, this article focuses on the more complex question about the resonance, the populist appeal and the necessary limits of an anti-state, high-tech nationalist identity that is very much a product of global economic integration and the convergence of new communications technologies (Morley and Robbins, 1995). One must question what happens when the effective but delicate metaphor of a transnational Indian family is extended by these transnational cyber-elites to real places which are, at best, painfully fractured hinterlands in the global information economy. In other words, this article examines virtual global discourses of a specific mode of high-tech development as it applies to local experiments in constructing real Third World technopoles.

Education for and employment in the transnational information technology (IT) sector most graphically symbolizes a new relationship between the state, science and the market in India. As the fastest growing and most prominent industry in India's new economy, the export of software and the development of e-commerce promises to erase structural barriers between India and the First World. Since the mid-1980s, the Indian state has rapidly expanded its technological infrastructure, and promoted the nation's vast pool of highly trained, low-wage labor alongside the unmet market potential of its growing middle classes, in order to attract foreign investment. Domestic and transnational firms have responded with unprecedented levels of investment, while the state has formalized networks of labor and capital between regional high-tech growth areas like Bangalore, Chennai, and Hyderabad with their global counterparts in Hong Kong, Tokyo, New Jersey and Silicon Valley. The new economy is based on new configurations of public and private, national and transnational, and science and industry. Central to these new logics is the institutional and symbolic role played by the new heroes of Indian digital capitalism: the technologically savvy and entrepreneurial NRI living in Australia, East Asia, Western Europe, Canada and, most importantly, the United States.

Aihwa Ong argues that 'New strategies of flexible accumulation have promoted a flexible attitude toward citizenship.' Challenging the 'hegemonic link between whiteness and capitalism,' Ong argues that Asian flexible citizenship refers to 'flexible practices, strategies, and disciplines associated with transnational capitalism' that create new 'modes of subject making and new kinds of valorized subjectivity' (1999, pp. 17–19). Ong is one among several scholars who write about the new heroes of Asian capitalism, as the valorized subjects of transnational national identity (Pinches, 1999). While Ong provides an insightful analysis of new transnational narratives of Asian modernity that celebrate the ascendance of the East, her analysis is less concerned with historical contexts of, and conflict over, the terms of this new Asian capitalism at 'home.' I extend Ong's concept of flexible citizen by arguing that the new valorization of the cyber-heroes of Indian capitalism is rooted in an old cultural legacy of the failure of the Indian nation-state in relation to science and the market. It is precisely this perceived failure of the old Nehruvian state-led model of capitalism (often misrepresented today as socialism) that is used to legitimate export-led high-tech development. Thus, if we are to understand the new global information economy in Manuel Castells' terms, where the 'space of flows' is replacing the old 'space of places,' then the new network society that connects high-tech India to the global information economy is based on a 'space of flows' dominated by NRI managerial elites associated with the information technology (IT) industry (1996).

What we find in this analysis of the new discourse of development espoused by Indian flexible citizens is that this new space of flows does not fundamentally challenge the construction of self-identity but, rather, uses the same rules whereby 'old dreams are foisted on new technology' (Robbins cited in Kitchen, 1998, p. 82). Within the translocal virtual Indian community, the role of the NRI seems to exist in a historical vacuum. In a sense, this study attempts to unpack the neo-colonial legacy of the old dreams of national identity associated with science that provides the historical context of the NRI's role in today's national development discourse.

My empirical findings are based on discussions of high-tech development at 'home' in urban India as carried out in five popular (commercial) translocal websites that target NRI audiences mainly in the United States (see Table 1). Although the focus is on these five websites over a period of two years, the study also examines other relevant commercial and non-commercial websites that target these same NRI audiences. My analysis of 'home' begins by examining ongoing cyber-discussions about a specific place: Hyderabad or Cyberabad, the *new* Silicon Valley and so-called 'knowledge hub' of India in the southeast state of Andhra Pradesh. The politically inventive tactics of the state's colorful Chief Minister, Chandrababu Naidu, have captured the imagination of NRIs concerned with efficient and rapid development in India. The next section of the article provides a history of the Indian flexible citizen. However, in order to comprehend what makes the specific goals of high-tech development in Hyderabad so appealing to the translocal Indian public, I will first offer an examination of the institutional and symbolic role of the NRI, in order to argue that the current discourse of development is incomprehensible

Table 1. Indian-content websites

Website	Content	Intended audience	Recurring advertisers
www.expressindia.com Indian Express Group of Newspapers and Periodicals, Chennai, India	Online news service based on well-known Indian national newspaper	Non-Resident Indians	Cricknetnext.com Chaitime.com Worldquest (phone cards) Intel ICICI Bank Motorola Western Union ICICI Bank Gillette Parker Pen Alibaba.com Amazon.com Amul.com Namaste.com Other Indiaworld Services H1Bjobs.com
www.rediff.com Independent, minority investors: Draper, Intel Corp and Warburg Pincus, Mumbai, India	Online network targeting India and Indians worldwide with 'Indian-focused' content. News, chat, homepages, e-mail, e-commerce	Non-Resident Indians Claims to be most popular website for NRI information technology professionals	
www.indialine.com Indiaworld Network Mumbai, India Owned by Satyam Infoway (Satyam Infoway acquired Indiaworld for \$115m) www.samachar.com Indiaworld Network Mumbai, India Owned by Satyam Infoway (Satyam Infoway acquired Indiaworld for \$115m) www.siliconindia.com BPA International, Newark, California	Information on the Internet and e-commerce related to India and Indian firms Personalized Indian newspaper service An information technology and e-commerce Web-based magazine focusing on Indians overseas and India	Non-Resident Indians and Indian information technology professionals Non-Resident Indians For Indiaworld.com as a whole, out of 13 million page views in 1999, 90% from 'outside India' Non-Resident Indian information technology professionals	Citibank H1Bjobs.com Phone Card Services Other Indiaworld Services Indiaplaza.com Totalcricket.com Ebolla.com Itsquare.com Dakhana.com Countryoven.com

Source: Compiled by author from online materials, June 16, 2000.

without reference to the postcolonial legacy of the failed Indian state. In the concluding section, I will return to broader Web-based discussions of high-tech development on 'India on the web,' arguing that this online discourse attempts to rewrite the local cultural and economic space of home away from home, erasing the difficult realities associated with inequality and redistribution of socio-economic resources.

The Virtual Politics of Creating Cyberabad

There have been very few studies of Indian Web culture that are not purely descriptive (Mitra, 1997). This study draws from the work of Ravi Sundaram who has written several critical articles on Indian 'techno-culture (1997, 1998)'. Sundaram argues that 'India on the web' is '... dominated by expatriate Indians sympathetic to Hindu nationalism'; 'For the NRI, the virtual space of India finally replaces the actual pressure of the Return. The Journey is now a sanitised one — no longer fraught with tension — the shock and complaints of peripheral poverty, the perplexities of cultural self-questioning' (1997). In fact, 'India on the web' is filled with news and editorials that are sympathetic to the Hindu right-wing agenda of nuclear self-reliance and global market integration. While I looked specifically at political and business news, the most popular links and sites are dedicated to entertainment news: from the massive Bollywood film industry and sports (including cricket and soccer) to sites that provide e-commerce goods and services ranging from arranged marriage boards, cheap phone cards to call India and specific Indian commodities of food, fashion, music and videos. The demographic profile of these mostly commercial websites structure the parameters of content based on rather narrow gendered, class (and caste) composition. For example, one survey conducted this year showed that 39% of visitors to one of these websites are information technology (IT) professionals, 64% of whom are between 25 and 40 years of age, and that 86% visit India at least once a year.⁶ Another survey found that over 90% of regular Indian Internet users are male, reinforcing Ong's observation that flexible citizenship is based on 'mobile masculinity and localized femininity' in a gendered global information economy (1999, p. 22). Whether or not these in-house studies are accurate, it is clear that the published as well as interactive content on these sites forge new connections between the politics of India as a place and the identity of Indians as a translocal national public.

It is hard to find an Indian-content website that does not celebrate the '*Desi* [Indian] Dot-Com' mania by focusing on how well South Asians are doing in the IT sector both 'here' and 'at home.' These websites boast that some 160 of Fortune 500 companies outsource software requirements to India, and highlight the fact that Silicon-Valley-based NRI executives are increasingly turning to India to help fledgling Indian start-ups.⁷ In these websites we see corporate biographies or hagiographies of successful Indian IT entrepreneurs, recited repeatedly in hundreds if not thousands of online articles about India's rosy high-tech future. These new transnational heroes include Vinod Dham, CEO of Silicon Spice and former group leader of the team that designed the Pentium chip for Intel, Saheer Bhatia, founder of Hotmail.com who sold his company to

Microsoft in 1997 for \$400m, N.R. Murthy, co-founder of Infosys Technologies based in Bangalore which was the first Indian software firm to list on NASDAQ commanding a market capitalization of \$15bn. While not all of these cyber-heroes are Non-Resident Indians, they are all flexible citizens with links to both India and the central nodes of the information economy in the Pacific Rim, North America and Europe. The victorious discourse of a confident India consistently erases national boundaries and instead focuses on national origin. For example, when Mumbai-based Rajesh Jain sold *indiaworld.com* to Satyam Infoway for \$116m in 1999, 'the business press on both sides' apparently claimed that the Indian cyber-capitalist hero had 'wiped out the difference between Santa Cruz, Mumbai and San Jose, California.'⁸ This erasure is significant in that it highlights the financial and technological connection between high-tech nodes of the global information economy thereby making redundant the old geographic divisions between the First and Third Worlds.

Confidence in India's ability to transcend its Third World past also helps explain the steady support for the right-wing Bharatya Janata Party's (BJP), evident in most of the commercial websites that I examined. However, almost more prominent in terms of consistent praise is the unwavering support for the technocratic populism espoused by the self-proclaimed 'CEO of Andhra Pradesh,' Chief Minister Chandrababu Naidu. In 1998, the popular *www.samachar.com* conducted a poll for the title of 'Person of the Year.' Coming in first and beating out BJP Prime Minister Vajpayee (responsible for India's nuclear profile), was the Chief Minister of the southeastern state of Andhra Pradesh. Naidu came to power with his regional centrist Telegu Desam Party in 1995, and has since made a concerted vocal and *translocal* effort — evident from his numerous websites and sophisticated public relations campaign — to turn the relatively underdeveloped state of Andhra Pradesh into the 'knowledge hub' of India. He has formulated a media-savvy 'SMART plan of governance' (Simple, Moral, Accountable, Responsive and Transparent) based on statewide public intranet facilities, and talks about his citizens as 'shareholders.'⁹ Naidu asserts that access to communications technologies at the rural level (in district-level headquarters) will 'empower' people both to hold the government accountable and stimulate entrepreneurial activity.

Although these plans highlight the contribution of new technologies in terms of rural development, much of the actual emphasis is on literally transforming the capitol city of Hyderabad into 'Cyberabad' within a rapid timeframe. The harried construction of dozens of new 'flyovers,' modern housing complexes, a new international airport and other construction projects that meet international standards, are changing the urban landscape of a relatively unknown national city into a global city, almost overnight. Hyderabad is thus one of dozens of urban locations in Asia that are competing to create a Silicon Valley model of technopole (Castells and Hall, 1994). It is Chief Minister Naidu's plan that Hyderabad directly compete with Bangalore, which is the original Silicon Valley of India, for foreign investment, expansion of communications and physical infrastructure, education and employment. In the plethora of articles about the Chief Minister and his plans for Cyberabad on these sites, Naidu boldly repeats that Hyderabad will replace Bombay as the

business center of India and become known as a 'knowledge state.' Taking advantage of the national Software Technology Park scheme, the administration inaugurated the much-publicized 'Hi-Tec City' in November of 1999 complete with attractive fiscal incentives which lured the brightest stars including Microsoft's R&D division, Oracle, and IBM along with 192 other software companies. Industry analysts speculate that the competition for the pool of talented and skilled software engineers' between Bangalore and Hyderabad may lead to a further 'tax-cut war' which is good for the national IT industry.¹⁰ Naidu has also encouraged private investment in computer and business education, and the administration boasts results of \$67.5m in software exports in 1998, up from a meager \$1m in 1992. In addition to computer software, Hyderabad is also home to a 400 hectare film and TV studio, Ramoji Film City, which according to its own online publicity 'has surpassed the size and facilities offered at the Universal Studios of Hollywood.'¹¹ Interestingly, the large film studio is a popular destination for NRI tourists in Hyderabad, with facilities to purchase tickets for tours of Ramoji City using American credit cards for payment from the United States.

Hyderabad's rapid rise and, more importantly, strategic profile, in the global information economy has garnered steady praise in the 'Indian Web community.' In the Samachar poll, Naidu's cyber-supporters gushed praise on the 'CEO of Andhra Pradesh' who was deemed the 'first Indian leader to give infotech its due.'¹² Naidu replied with the following message:

I am overwhelmed by the response of your readers to vote me as the Person of the Year for 1998! The vote perhaps represents an urge on the part of a large number of Indians that their political leaders should focus on development of the nation and should steer clear of petty politics. For much too long politicians in this country have wasted their energies on inane trivia rather than focusing on matters of substance ... We are a talented people with many examples of individual and collective genius, and yet others have overtaken us in most fields ... The new Millennium promises to usher in the age of information. We will have to prepare ourselves for the Information Age if we are not to be permanently reduced to the status of laggards ... I am confident that we can achieve a position of leadership and excellence in the future, provided we change our collective mind-set to one of 'We can' as opposed to 'We cannot!' Success comes only to those who believe in themselves, and who strike hard to transform their aspirations and dreams into reality.¹³

Steering 'clear of petty politics' is Naidu's self-constructed trademark as a politician who is 'beyond politics,' or beyond corruption, speaking to the legacy of the failed bureaucratic state. Naidu is a popular figure among NRIs from Andhra Pradesh, who make up a large proportion of the recent immigrant skilled software workers in the United States here on the controversial H1B visa. But beyond the Telugu-speaking diaspora, Naidu and his 'revolutionary' zeal for high-tech development has vocal support from the larger Indian flexible citizen votebank. Inspired by the similar rationale as those who claim that these entrepreneurial cyber-heroes prove that India is no longer a

'nation of losers' by the measurements of the global marketplace, an editorial from www.indialine.com declares 'We need more evangelists like Chandrababu Naidu' to develop 'India's brand name.' Deploying the metaphor of the democracy of the marketplace, the editorial argues that Naidu has been successful at 'capturing an appreciable amount of mindshare thanks to the evocative images of creating a "Cyberabad" in Hyderabad.'¹⁴

Adding to Naidu's global political legitimacy among NRIs is the approval the Chief Minister has received from both heads of state (Bill Clinton) and heads of corporate empires (Bill Gates). Perhaps most significantly, Chandrababu Naidu's efforts have made Andhra Pradesh 'credit worthy' according to the World Bank, which makes a point of repeatedly recognizing and commending his efforts. Pictures of James Wolfanson (President of the World Bank), Bill Gates and Bill Clinton shaking the Chief Minister's hand, surrounded by flickering computer screens in a modern office setting speaks volumes on Naidu's commercial website (www.nchandrabaunaidu.com). The 'man behind the dream' of transforming an old Mughal city into a techno-utopia of the future clearly matches the World Bank prescription for development.¹⁵ As one World Bank official clarifies in an interview with www.indialine.com, Naidu has the '... understanding and political will to increase the diffusion of information and communication technologies like the Internet.'¹⁶

Despite these translocal channels of support, the Naidu government came close to losing the state elections in 1998 and has had to cut back on its plans for Internet and intranet infrastructure expenditure, caving into what is described on the websites as 'populist pressures' from trade unions and the left. While the race to build the city of Cyberabad moves ahead, not all of the citizens of the city or the state feel empowered by Naidu's 'information revolution.' The pace of construction has taxed civic amenities, especially politically volatile issues closer to the hearts of average citizens like the non-high-tech issue of clean drinking water. The needs of basic health and education, land use by the vast majority of low-income citizens and the need to create and sustain low-skilled jobs exposes the structural biases of Naidu's seemingly 'apolitical' modernization agenda. One of Chandrababu Naidu's top IT officials admits that in fact Web usage in Hyderabad is very low, with little over 9000 Internet connections as of 1999. However, he argues that the increasing 'digitisation of Telegu content' and the proliferation of 'cyber-kiosks' hold the key to popularizing the spread of the Internet beyond the 'affluent sections of society.'¹⁷ Papering over the fundamental problem of selling a vision of export-led high-tech development has not prevented accusations that the CEO of Andhra Pradesh's high-tech agenda will only increase social stratification of the 'infotech upper castes' (*Computers Today*, November 30, 1998). Politically uncomfortable redistributive questions like these, based on caste, class and regional disparity, are a constant in Indian political culture.

Naidu has been able to evade many of these concerns since his re-election to serve a second term in 1998, when he returned full steam ahead to his mission to launch Cyberabad. Naidu continues to garner global attention including a visit from Bill Clinton, who actually bypassed Bangalore for Hyderabad on his official state visit to India in March 2000. Clinton's speech in

Hyderabad was entitled 'India and United States of America: World Leaders in Science and Technology.'¹⁸ In the Web-based discussions of Cyberabad's future, we are told that:

Cyberabad has successfully made the Net a *janata* [people's] phenomenon. It is a city with a huge number of émigrés to the US, so people in every locality are busy emailing their relatives. Others are checking out their prospects at the US Immigration and Naturalisation Service website. (See www.webpage.com/hindu/daily/990103/13/1303692.html)

This re-imagining of urban India mediated through virtual India is not simply a case of techno-utopian dreams with little connection to reality. The city of Hyderabad, like all of the metros and large cities of India, are changing rapidly. In reality, these changes are drastically uneven, with new unprecedented levels of disparity and exclusion. In effect, there are sections of these cities connected to the global information economy in profoundly new ways. The connections are not solely through intranets and dedicated satellite links between corporate headquarters and their software outsourcing posts in the 'information hinterland.' The promise of a new trajectory of modernization based on high-tech jobs and rapid socio-economic mobility, as well as the proliferation of the hype around the 'information revolution' has changed the urban cultural landscape.

The urgent conversation between the NRI public abroad and reformers like Naidu at 'home' reflects a distinctly anti-state, pro-nation critique of India's political system that is difficult to understand without some sense of historical context. The role of the flexible NRI citizen and their history in relation to state-led development reveals how the symbolic power of Naidu's anti-political cyber-populism provides a very tangible solution to India's development problems.

Flexible Citizens and their Postcolonial Past: Science and the State versus Science and the Market

In the Indian context, the flexible citizen has a distinctly postcolonial past — a past in which colonized elites turned to the notion of indigenous scientific capacity on the behalf of the 'masses' as well as in contest with the West. Today's Indian cyber-elites extend this symbolic violence but overturn the previous correlation between the state and science and replace it with a seemingly 'radical' new turn to science and the market. In his recent study of 'science's cultural authority' in India's colonial and postcolonial history, Prakash argues:

... while accepting the Orientalist image of India as spiritual, the nationalists claimed that science was not alien or marginal to the nation's culture and history. India, the argument went, was the original home of science, though unlike the West, it had never separated science from religious life and the philosophy of daily living ... With the vital sign of modernity — science — lodged in the 'inner' fiber of the nation, India could be modern without being Western. (Prakash, 1999, p. 231)

The results, of course, were contradictory, with the urban, uppercaste Indian middle class deploying a nationalist discourse of science to rationalize a skewed modernization agenda. Following independence, the 1950s and 1960s were marked by massive public sector investment in large dam projects, steel mills and other 'temples of the future,' while concerns about national security rationalized disproportionate expenditure on high-tech research and development in capital-intensive areas like aerospace, nuclear power, and the electronics industry. Correspondingly, the state created a highly skewed educational system where public resources subsidized tertiary education at the expense of the spread of literacy and elementary education.¹⁹ Although the 1970s are often characterized as India's socialist era, populist politics promising the 'removal of poverty' went hand in hand with significant increases in expenditure on scientific research. Expenditure on scientific research was rationalized as part of India's growing security concerns in the region, as well as a related concern about technological self-reliance. In this period, public funding for scientific research institutions like the Indian Institute of Technology (IIT) — modeled after MIT — grew, resulting in the training of thousands of highly qualified engineers and scientists. These state-sponsored strategies created a vast pool of high-tech labor that would become the first generation of flexible citizens, leaving India for the West to find more lucrative employment possibilities.

As the Nehruvian era of state-led development drew to a close, the arrogance of the modernizing state and its presence in everyday life faced a new set of challenges. The inaccessibility and inscrutability of the state became a central concern of political activists. What is important to keep in mind when we examine the populist appeal of the anti-state discourse since the 1980s is that it was the manner rather than the policies of the interventionist state that became the target of social movements in the 1970s and 1980s (Kaviraj, 1991). Although the vast majority of poor Indian citizens were the real victims of the state's failed development strategy, the Nehruvian state's empty promises of redistribution were used by reform advocates to emphasize the liberatory possibilities of a market society.

By the mid-1980s, a growing consensus emerged at the level of policy makers, business elites and high-level bureaucrats over the failure of politics to deliver the nation from economic stagnation. These pro-market reformers appealed to these public resentments against the state's colonial culture of secrecy and arrogance to promote a new direction in economic policy. Sections of the political and business elite, beginning in the Rajiv Gandhi era, were able to co-opt liberal and left criticisms of state-led development to promote the idea of efficient and, more importantly, accountable, market governance (Kothari, 1995, p. 157). Central to this new anti-state development agenda was the catalytic possibilities of new communications and information technologies.

Having cultivated significant R&D potential in the electronics and software sectors, the Rajiv Gandhi administration's public priority became expanding and modernizing the nation's communications industries; including the television and telecommunications infrastructure, the consumer electronics industry, and the new information technology (IT) industry. Influenced by the success of the Asian Tigers, the Indian state redefined its relationship to capital

by deregulating imports, formalizing networks with domestic and transnational capital, and established the 'Software Technology Parks of India' (STPI) to attract offshore software production. In 1986, transnational firms like Texas Instruments (TI) and Hewlett Packard (HP) entered the Indian market in much-publicized, multi-million dollar operations in Bangalore, officially inaugurating the first and most well-known experiments in an Indian Silicon Valley.²⁰

Throughout this period of the 1980s, new networks were being cultivated between the Indian state, domestic and transnational corporations and NRIs living in the West, especially the United States. Since the 1950s, emigration from India to the West has been of skilled populations destined for the United Kingdom, United States and Canada, with fewer going to Western Europe and Australia. For a majority of these high-skilled immigrants, especially those who came to the West after the 1970s, emigration from India was not understood as a permanent departure for another nation-state.²¹ Links to India through family, travel, remittances and investments bound NRIs to their 'homeland,' while many features of 'home' changed because of these new economic and cultural networks. The growing demands for Western quality consumer goods and services among the urban Indian middle class in the 1980s is generally seen as one of the greatest impacts of these new NRI networks (Pendakur, 1990). At the larger level of development strategy, the 1980s also brought to the stage a prominent NRI businessman and 'computer missionary,' Sam Pitroda, who served in Prime Minister Rajiv Gandhi's administration. Pitroda, a Chicago resident and telecom engineer, evoked an early version of transnational nationalism and technological populism that Chandrababu Naidu would embrace a decade later. Pitroda represented a new connection between scientist and entrepreneur that very much marked a break from an older model of nationalist scientific research that had characterized the Nehruvian model of development. As Pitroda himself argued, India's ability to develop technologically in the field of electronics was 'an exercise in national self-assurance.' As Pitroda himself states:

Part of our mission was to inspire a whole generation of young talent and thumb our noses at the naysayers, the political reactionaries, and the vested interests whose prosperity rested entirely on imports ... I cheered people on, knowing as I did that young Indians did well in the United States ... I was almost brutal in my determination to root out hierarchy and bureaucracy ... I opened our doors to the media, which responded with excitement, optimism, and the kind of hero worship that we hoped would attract more young people to technology careers. (Pitroda, 1993, p. 73)

Interestingly, many of the aforementioned websites bear evocative kickers like 'In a land where money is worshipped unabashedly, the geeks from the Indian Institute of Technology are now calling the shots even financially'²² or 'Products of India's "Millionaire University" are the country's hottest export since spices,'²³ thus allowing Pitroda's mission to bring an American management

ethos to Indian industry to come full circle. As one of Pitroda's former employees in C-Dot — his experiment in national self-reliance — now argues:

The belief that anything an Indian touches in the tech world is destined for gold is taking on an awesome sheen in Silicon Valley. Not a week passes in the US without the story of another Indian making it big. Says Srihar Mukund, formerly of C-Dot in India and now a chip architect at Lightspeed Semiconductors, 'There was a notion once that you had to have a white guy in the team to succeed. These days companies like to have an Indian on the team to be successful. Being Indian has a premium value now.' (See www.expressindia.com/ie/daily/20000520/svsaga1.html)

It is precisely this connection between the success of American NRIs and the untapped potential of the broader Indian public at 'home' that became the point of departure for a 'radically' new development discourse in the 1990s. While new flexible strategies of accumulation allowed for new modes of valorized subjectivity — the NRI high-tech cyber capitalist and the liberated Indian consumer — the symbolic power of this new 'confident India' in the global marketplace was effective as a critique of the 'failed' Indian state. Indian techno-populism has a clearly nationalist agenda based on overturning four decades of 'Brahminized socialism' when 'businessmen' with relatively limited clout had to approach the 'dispensers of permits and licenses essentially as supplicants' (Bardhan, 1984, p. 58). As in other parts of the developing world where the heavy hand and inscrutable power of the state had become the object of public political resentment, Indian policy makers and new transnational elites co-opted the critiques of social movements to promote an indigenized version of the American ideal of the 'democratic market place' coupled with 'Indian' values of community (Pinches, 1999). What began in 1984, accelerated in 1991 when a severe fiscal crisis led to a more extensive liberalization of the Indian economy. It is in this historical context that the new discourse of Indian capitalism embodied by the flexible NRI citizen tries to make a complete break from its so-called 'socialist' past.²⁴

Having outlined the particular historical context that helps explain the role of the NRI citizen and their relationship to market-led high-tech development at 'home,' we return to the ongoing discussions in the websites targeting the flexible Indian citizen. In the concluding section, I examine how the new medium of web-based communication has allowed the NRI flexible citizen to rewrite the local and espouse an alternative 'Indian' modernity: one that showcases select sectors of urban India in the global information economy while erasing the difficult realities associated with inequality and redistribution of socio-economic resources.

The Global Politics and Local Realities of Flexible Citizenship on the Internet: Cyberabad and Beyond

As previously illustrated in the last section, the anti-Nehruvian political turn of the 1980s positioned the entrepreneurial scientist against his bureaucratic

counterpart. However, as critics have noted with irony, the same elites who once took advantage of Indian 'socialism' or the bureaucratic 'permit raj GENSTRING95' often through corrupt practices justified by nationalism, are now the main beneficiaries of global market reforms (Patnaik, 1998; Chatterjee, 1998). What is new today is the naturalization of the transnational Indian family. No longer are there the 1970s dated concern about 'brain drain,' but rather the adamant claim that successful NRIs are a financial and technological resource as well as a symbolic inspiration. It is thus no surprise that the NRI 'community' returns the compliment as it were, legitimating politicians who are most comfortable with the discourse of high-tech development like Chandrababu Naidu's anti-political message, or the right-wing BJP's pro-nation anti-state platform.

As media theorist Armand Mattelart insightfully points out, what we are confronted with is the appeal to 'modern tradition' to sell the idea of the market model *as* national interest. The new discourse of development thus aligns national interest with the 'disposable income and cosmopolitan tastes' of the new urban Indian middle classes as well as their NRI counterparts, in a constant attempt to 'diminish the gaps between signs and dreams and between products and markets' (Mattelart, 1994, pp. 230–232). In this view, segments of the population in countries like India simply cease to exist as part of what is viable as national interest — 'being too poor to constitute markets and too culturally backward to serve as a work force in a productive system founded on information' (Mattelart, 1994, p. 231).

This takes us back to the persistent celebration of entrepreneurial success by Indians in the IT industry on the NRI pitched websites. In addition to celebrating entrepreneurial success, the websites commonly solicit 'expert' opinion from academics, politicians and entrepreneurs who offer prescriptive advice in regards to development back 'home.' These interviews, editorials and chat sessions tend to focus on the failures of the interventionist state and the need for faster and more extensive liberalization of policy and expansion of export-oriented infrastructure. For example, addressing how India might better operationalize its attempts at reproducing the success of Silicon Valley, Berkeley Professor of Urban Planning Annalee Saxenian argues that 'the boundaries between academia, research and industry need to be more open,' citing India's biggest obstacles as infrastructure and bureaucracy.²⁵ According to the CEO of Hotmail.com, Sabeer Bhatia, India needs less 'messy' politics and a more friendly environment towards business. He argues that 'Hotmail could just as easily have been based in India, but the conditions turned out to be more favourable in Sunnyvale, California.' Bhatia like most other vocal flexible citizens, complains about bureaucratic red tape, advocating the rights of the blighted Indian consumer and the need to support 'entrepreneurial spirit.'²⁶

Similar to Southeast and East Asian entrepreneurial culture that Ong examines, Indian entrepreneurial triumphalism uses 'orientalist codes to (re) frame overseas Chinese as enlightened cosmopolitans who possess both economic capital and humanistic values' (1999, p. 131). New corporate networks between India and the West promote a cyber-capitalist rereading of Hindu values, locating the success of high-tech Indian entrepreneurs in essential

characteristics associated with ethno-religious identity. For example, Indian competence in the Internet economy is associated with the 'web of inter-relations' that tie together Indian families across national borders. The more common argument is that 'Indians have a long history of excelling in abstract thinking useful in writing computer code.' This line of reasoning is almost always followed by the assertion that 'The concept of zero was developed by Indians ... and therefore Indians are naturals for software development.'²⁷ Indian entrepreneurial triumphalism is explained through the Hindu work ethic based on industriousness, discipline and frugality. In contrast to Western capitalist culture, this Indianized version appeals to a distinctly flexible notion of family and community. As one successful NRI entrepreneur notes, Indians have been successful in the information age because 'Indian parents ... stress science or technological careers.'²⁸ This is an argument that emphasizes essential qualities associated with Indian family values, speaking directly to American racial politics of the 'model minority' as distinct from the minorities that fail. However, this line of argument also addresses the thorny issue of meritocracy back 'home' where illiteracy remains at 52%, a result of the skewed education system discussed earlier.

Staying clear of caste and class, the new development discourse although based on the Hindu patriarchal family, does go so far as to recognize the contribution of Indian women high-tech entrepreneurs. Although the websites tend to address female visitors as 'wives' of software workers, occasionally they feature stories like 'Indian women, for long homemakers, childbearers, trophy wives, and occasional wage earners in the US, are suddenly blossoming in a field that was hitherto thought to be a male preserve.' This article on www.expressindia.com goes on to name Indian female cyber-heroes like Cisco's vice president Jayashree Ullal, Digitallink Chairwoman Vinita Gupta, and Yahoo! Content editor Srinija Srinivasan. The bulk of the text is about Srinivasan from Yahoo as a potential 'female Indian Bill Gates' or a 29-year-old '*desi* billionaire.' Staying within the model of Indian family values, the article claims that Srinivasan and others like her prove that Indian women can 'prosper' combining 'home life with professional success.' Indian women, the article tells us, are 'chucking ... history, philosophy, literature and plain old home-making to go the tech route in droves' the article concludes happily.²⁹

Although the connection to 'home' may appear tenuous given that these are mere opinions and observations floating in virtual space for NRIs to consume at their whim, the implications for policy are very real. In addition to attracting capital, technology and management expertise from the NRI community abroad, the Indian state as well as domestic capital has intensified efforts to formalize networks with these 'loyal' citizens without citizenship. Most recently, the BJP national government established an 'NRI Advisory Committee on IT' that will 'draw up a comprehensive action plan to identify new opportunities for India in infotech and related areas.' Identified as the most pressing issue is the need to raise venture capital and promote IT education and 'knowledge based enterprises.'³⁰

Given that some 70% of Indians live in rural areas outside the city, the translocal nationalist dreams of India becoming an 'Information Superpower'

by 2020 has had to account for the awkward question of rural development. In Web discussions about rural development, the 'solution' is again technocratic: combining scientific innovation and market expansion. The rural poor must be empowered as high-tech consumers, free to participate in the technologically driven new market society. A typical analysis by journalists and notable commentators³¹ writing for these sites is the following analysis of the 'rural problem' in relation to India's high-tech development strategy. This particular article, written by the President of the main lobbying body of the Indian software industry, takes us to village India where, as in this case, we are told about an 'illiterate woman' and her 'awestruck face hidden behind a colourful veil' as she is exposed to the wonders of modern communications technologies:

Chameli Devi blushed with amazement in the small public telephone office in Jaunpur when she saw and heard a message from her husband, Ram Singh, who had recorded it earlier from a similar booth in Mumbai, 1,240 km away. Just a few months ago, the couple inaugurated the world's first commercial video-email that will eventually enable millions of poor, illiterate people to communicate cheaply. For Rs 15 the facility transmits a three-minute message with video images and the voice of the users to email accounts just like text messages.

In the same article, Dewang Mehta, President of NASSCOM, concludes with the following vivid statement about the impact of IT in village India:

This is just but one example of how IT will transform the lives of Indians in the next few years. It is evident that we will not only witness a high growth rate in Indian software exports, but also see information technology directly affecting the lives of common people in the country. It is my firm belief that Mahatama Gandhi's dream of removing every tear from an Indian face will be actually fulfilled by the innumerable education, employment and economic opportunities provided by the software-driven IT industry in India. (See <http://www.itspace.com/ITspaceAlpha/ITpolicy/dewang.asp>)

Commercial communications technology thus not only erases the divide between the First and Third Worlds and between urban and rural India, but also overcomes the state's failures in terms of social infrastructure. For the 'blushing' Chameli Devi, poverty and illiteracy are alleviated through the wonders of video e-mail. It is these reassuring stories of Indian modernity that binds the transnational family together. The flexible citizen has a heart, after all. The transnational nationalist cyber-hero helps to liberate their less flexible counterparts from the grip of the postcolonial state.

Notes

1. A first draft of this paper was presented at the Birmingham Conference on Cultural Studies, in Birmingham, UK, June 2000. I thank Chris Chekuri and Gianpaolo Baiocchi for their comments and suggestions. The revisions have

benefited from very helpful comments by the anonymous reader of this special issue.

2. This quote is from an editorial about the controversial film *Fire*, which portrayed a same-sex romance set in contemporary urban India. Pritish Nandy, who is a noted right-wing media personality, contrasts the nation's transnational entrepreneurial renaissance with filmmaker Deepa Mehta's 'sick, prejudiced pornography to the world.' Nandy condemns Mehta on nationalist principles, comparing her representation of Indian culture to that of Katherine Mayo (an Orientalist anthropologist of poverty) in that they both 'make India wince in public.' See P. Nandy (February 23, 2000) www.rediff.com/news/2000/feb23/nandy.html
3. This is from a speech by Prime Minister Vajpayee (November 11, 1998) that was posted on the Indian embassy's webpage in January of 2000. For more, see <http://www.indianembassy.org/inews/December98/11.html>
4. See Lundstrom (September 27, 1999).
5. *Ibid.*
6. This was survey information provided in the 'about us' link at the www.rediff.com website on February 3, 2000. Rediff.com has recently separated channels of operation to include [usrediff.com](http://www.usrediff.com), and services in Gujarati, Hindi and Tamil, along with its main Indian-based rediff site. For more, see <http://www.rediff.com/adref/vprofile.html>
7. See, for example, Staff Writer (June 24, 2000) <http://www.rediff.com/us/2000/jun/24us1.htm>
8. See Lundstrom, op. cit.
9. See Staff Writer (February 8, 2000) www.rediff.com/news/2000/feb/08/naidu.html
10. See Special Report on 'India Property Market Survey' (January 11, 2000) <http://www.rediff.com/money/2000/jan/11resrep.htm>
11. Hyderabad-based media baron Ramoji Rao, who owns *Eenadu* (This Land), a widely circulated Telegu newspaper, as well as other English print and electronic media, owns Ramoji City. Ramoji is Chandrababu Naidu's 'mentor,' and his plans to make Hyderabad an important film and TV content as well as traditional software content center has recently grabbed much attention in the Indian Web discussions. Not only have there been several articles about Hollywood 'coming to India' (for example, Roger Corman, infamous B-film director is shooting an 'epic' at Ramoji City), but it has also become a popular tourist site for NRI visitors. See Travel-India.com's special on Hyderabad and Ramoji City: http://www.travel-india.com/news/1999/destination_honeymoon.htm
12. See quote by Naidu when he was voted as 'Person of the Year' at the 1998 samachar.com poll. This particular quotation, along with others that acknowledge Mr. Naidu's global popularity, are listed at: <http://www.ourcm.com/awards.htm>.
13. Coming in a close second was BJP Prime Minister Atal Behari Vajpayee for 'taking the initiative vis-à-vis the nuclear bomb,' but also for being 'an honest and clean person' leading India. For statistics on other candidates see <http://202.162.226.5/survey/YN/SAMAPERSON98.html>

14. See Editorial (November 20, 1997) <http://www.indialine.com/net.editorial/editorial30.html>
15. See Patralekha Chatterjee (Spring 1999).
16. See interview with Tara Vishwanath (World Bank Consultant) (December 17, 1998) <http://www.indialine.com/net.views/interview48.html>
17. See Interview with Professor AnnaLee Saxenian (October 13, 1998) <http://www.indialine.com/net.views/interview43.html>
18. See news release from the cyberabad.com website (March 22, 2000) at: <http://www.cyberabad.com/info/news/archive3.html#cyberawelcmclinton22mar2k>
19. The neglect of primary compulsory education is contrasted with the highly organized pressure groups in Indian society who have historically made tertiary education a priority for public policy by Drèze and Sen:

The sections of the population that are most affected by the absence of literacy are typically much worse off than the groups that benefit from higher education. In terms of consequences, the bias in educational priorities has tended to reinforce existing inequalities, and has been least kind to the most deprived. (See Drèze and Sen, 1997, pp. 90–91)

20. For more, see Chakravartty (1999, Chapter 5).
21. Economic historians have separated the postcolonial history of emigration from India into two phases. Mostly people with professional expertise and technical skills characterized a first period following independence in the 1950s until the mid-1970s. Most of these skilled populations were destined for the United Kingdom, United States and Canada, with fewer going to Western Europe and Australia. A second phase of emigration, beginning in the mid-1970s, saw a significant expansion in the flow of lower-skilled laborers on temporary contracts to the Gulf oil economies of the Middle East. This sudden change in the profile of emigrants in the mid-1970s is evident if we compare the fact that in 1975, 57% of emigrants were from the professional or technical category, versus 88% in the previous period from 1971 to 1975. While these numbers are significant in gauging the changing overall profile of emigrants from India in this period, emigration for the United States remained concentrated in the highly skilled 'professional expertise or technical qualifications' category. Deepak Nayyar, who has written a thorough enumerative account of Indian emigration, found that out of the total number of professional highly-skilled immigrants admitted to the United States from all countries, India made up 19.5% in the period between 1971 and 1980, and 13.4% between 1981 and 1990. These numbers are conspicuously disproportionate because India's share in total immigration is much lower, at 3.8% and 3.6% for each respective period. See Nayyar (1994).
22. See Mukul Pandya (August 1998).
23. See Chidanand Rajghatta (December 7, 1999).
24. Marxist analysts have argued that the Indian state has historically been unable to deliver on its normative commitment to socialism because it has been captured by competing interests within the dominant classes. The

state has used public revenues as patronage for the three heterogeneous dominant classes of rich farmers, industrial bourgeoisie, and the professional classes (Bardhan, 1984; Vanaik, 1990). From 1947 to 1975, variations of Nehruvian socialism as a national political project thus had minimal economic impact if one compares indicators such as land redistribution, the state of basic education and welfare and unemployment in India with China or other East Asian nations (Patnaik, 1998).

25. See Interview with Professor AnnaLee Saxenian: <http://www.indialine.com/net.views/interview43/html>
26. See Sabeer Bhatia (April 2, 1998): <http://indialine.com/net.views/interview34.html>
27. See Frauenheim (September 20, 1999).
28. *Ibid.*
29. See Chidanand Rajghatta (November 13, 1999).
30. The Advisory Committee was announced during the recent visit by Information Technology Minister Pramod Mahajan in May of 2000 to San Francisco, where he met with various Indian IT entrepreneurs as well as the TiE (the Indus Entrepreneur network). See <http://www.econoictimes.com/nri/news57.html>
31. It is beyond the scope of this article to examine in further detail the social location of the journalists and commentators who write for these Indian-content websites. Interestingly, this is also an area that the Indian IT industrialists feel India has a comparative advantage — along with data-processing and customer service — especially in terms of English-language online content. This is an interesting issue, which requires further research.

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