



The refinery rises out of the desert like a distant metropolis. Employing upwards of 200,000 people and consisting of a complex of facilities that rivals London proper in size, it is in some sense its own metropolis. The Reliance Industries refinery, 20 miles outside the city of Jamnagar in northwestern India, will be the world's largest refinery when it is completed later this summer. Its skyline dominates the arid plains, stretching from one end of the horizon to the other. Designed and built from the ground up in two major construction phases over the last decade, it may well usher in a new era of scale, efficiency, and integration in refining if not the oil industry as a whole. In a passenger van driving towards the refinery crowded with workers I, somewhat in awe at seeing that expanse of metal and concrete for the first time, said to no one in particular, "It is the biggest in the world." "Ah," the man next to me replied, "It is the greatest."

Jamnagar (pronounced "jahm - na-gar"), a port city of half a million, is located along an inlet of the Arabian Sea just over 500 miles south of the Persian Gulf. Crude oil from the Middle East destined for India, China, Singapore, Japan, and the western United States – the paramount geographies of current and anticipated fuel consumption – travel in established shipping lanes just off the coast from Jamnagar, a geo-economic fact not lost on Reliance Industries when they decided to construct the first global refinery here in 1995.¹ Elsewhere, renovations have steadily increased the output of a handful of key refineries, enabling a growing class of refineries to orient their production past local demand to more profitable destinations around the globe. These expansions remain, however, prohibitively costly and ultimately constrained by the initial scope of the refinery. The Reliance Industries refinery in Jamnagar is the first refinery in the world designed and constructed for a planetary market. Among the world's largest refineries, only Reliance Industries intentionally set out to build a refinery of such scale. The others arrived on that list only after recognizing the strategic value of existing local facilities and then relentlessly retrofitting those facilities to such a scale. Such renovations are hampered not only by the finite foundations of the original structure but also by the existing set of regulations that, often encouraged by the refineries, expedited place of such infrastructure in the local economy but have since become something of an exoskeleton that the refineries are forced to awkwardly grow within. The Reliance Industries refinery in Jamnagar is coming online optimized to an exceptional global reach. Reliance, reflecting on its experience in Jamnagar, has been upfront about what it sees as the emerging logic that will guide future

¹ "Global oil flows to the extent of 26 million barrels per day in just two regions: the Straits of Hormuz in the Persian Gulf and the Straits of Malacca in South East Asia. You would thus see that demand and supply issues have a lot to do with concentration." Reliance Industries Limited, Maker Chambers IV, Nariman Point, Mumbai, pg 2.

oil installations in a global market: build “new sites of large geographic formats near ports.”² While Reliance has been well served by such reasoning, it is clear that only a handful of energy firms have the financial means and technical ability, not to mention governmental blessing, to build world-class facilities of this scale from the ground up. Those few that do are now hard at work catching up to the new standard Reliance has set. None of them, it should be added, are in Europe or North America.

Refineries are strange machines. While built in accordance with somewhat universal engineering schemes, they are carefully calibrated to process a particular variety of crude oil (largely determined by its place of origin) and produce fuels that meet the specifications of a single consumer market (however large or small that consumer market may be). That is to say, geography is manifest in their design. Once built, there is a structural inertia that encourages them to continue abiding by such geographies despite what changing political moods might demand. Most refineries in the United States are anatomically attuned to the light, sweet oil from Venezuela, Saudi Arabia and Nigeria. And there is no feasible way to adjust them to process crude oil from more palpable regimes. When it comes to oil, we are stuck with them. This type of oil, when world reserves were plentiful and demand low, was the easiest crude oil to transform into fuel as considerably less had to be done to it. Thus refineries built in the last 50 years or so – the lion’s share of them in North America, Europe, and in major world cities – were built to process this light, sweet oil for local markets. As these refineries have been renovated and expanded to meet rising demand, light, sweet crude oil has become a fraught global commodity that everyone seems to be clamoring for.

South Asia has recently entered this oil geography. As late as 1990, both India and China produced as much fuel as they consumed. Since then, consumption has soared while domestic production has remained flat. China is now the third largest net importer of crude oil (behind the United States and Japan) and India has risen to fifth place. Flush with capital, the Chinese state oil companies have sought to leverage China’s position as a major importer by orchestrating heavy investments in the economic and social infrastructure of oil regions other private energy firms had declared unstable and were clamoring to exit. From Ecuador to Indonesia, from Nigeria to Venezuela, the Chinese state oil firms are often the first to invest in the wake of various nationalization schemes. Africa has become a primary destination of Chinese investments. Indeed, Angola has recently beaten Saudi Arabia to become China’s largest source of crude oil imports. China, through such a strategy, has secured an ample supply of the coveted light, sweet crude oil from geopolitical hot spots and has begun building an energy infrastructure of refineries that reflects such geographies.

India, without the focused dexterity of state-sponsored capitalism, has gone in as many different directions as there are private firms. Stepping into the global fray from an provincial energy infrastructure designed for India’s own reserves of light, sweet oils, most Indian energy companies have pursued access to politically stable oil reserves of similar types of crude oil in the Middle East and Africa. Without the cavalier capital of China and entering at a time when many of these reserves have been contracted decades in advance, these firms have paid dearly for marginal access. Reliance, sensing opportunity in what was being overlooked, invested in the opposite direction. Heavy, sour crude oils represent one of the few surpluses on the supply side of hydrocarbons for the time being. Historically overlooked as the unusable dregs of the oil industry, ample reservoirs of such crude were often ignored and left in the ground, much of it in Saudi Arabia.³ Reliance Industries has built one of the few refineries in the world calibrated to process this surplus crude oil from Saudi Arabia into the ultralow polluting fuels that are in spectacular demand in the global cities along the Pacific Rim and it has built such a facility on an unprecedented scale that gives it the flexibility to supply each one of those urban markets.⁴ Such a strategy has

² Mukesh Ambani, “Is there Energy in the global petrochemical industry?,” keynote address, NPRA International Petrochemical Conference, San Antonio, Texas, March 26, 2006.

³ Indeed, it was not even considered a proper hydrocarbon until recently. As Daniel Yergin recently testified, current conditions have led energy companies to “non-traditional liquids” as the category of hydrocarbon expands to incorporate oil sands, convertible natural gas, and reserves astonishingly deep under the ocean floor. “This represents a widening definition of oil,” Yergin told the US Congress in 2006. Daniel Yergin, “Statement,” Committee on Energy and Commerce, U.S. House of Representatives, May 4, 2006.

⁴ That somewhat forgotten American contrary-economist Thorsten Veblen provided several key insights that formed the foundation of my approach to Reliance Industries in an article entitled “On the Penalty of Taking the Lead.” Or, what we might more precisely call

resulted in Reliance securing a refinery profit margin of \$10-\$14 a barrel in a portion of the industry where the norm runs closer to \$1-\$2 a barrel.⁵

Reliance Industries refers to its Jamnagar refinery as the “Jamnagar Super Site.”⁶ Indeed, it is far more than just a refinery. Within the 70,000 acre complex, Reliance has also built the world’s largest petrochemical facility (which actually consists of a multitude of distinct production streams, the two plastic streams each holding the accolade of largest in the world), India’s largest maritime port (a thoroughly private structure which dwarfs the aging municipal port), India’s largest mango plantation (in accordance with a recent Indian law that stipulates all new refineries must be encircled in “a greenbelt”), and a megalopolis sized power plant and desalination plant (which are partially powered by the heat released from the refining process and are capable of not only providing power and water to the refinery but also, in emergencies, to the city of Jamnagar and surrounding villages). Reliance also provides feedstock to a state owned fertilizer plant adjacent to its complex. In addition, if construction at the refinery is completed on schedule later this summer – all indications suggest it will – it will add yet another global trophy to its already crowded case: the fastest construction of a major refinery. The Jamnagar Super Site, when it swings into full operation this autumn, will not only receive acclaim for its daunting size, it also will be the most automated and integrated refinery in the world.

Reliance has taken integration to a new level at the Jamnagar Super Site. From gasoline refined to California’s demanding specifications to plastic resin destined to the bottling plants of Coca-Cola and Pepsi to synthetic fabrics for use in Reliance’s various clothing and furniture lines to an array of acrylic paints to the base ingredients of detergents to a variety of substances for use in the emerging field of biotechnology, Reliance Industries, within a single complex, will produce every major byproduct of crude oil with unparalleled efficiency on an unprecedented scale. While many North American and European oil forms have relentlessly pursued the next big discovery as the site to solidify their dominance, pouring the lions share of their investments and expertise into the exploration and development of the worlds oil frontiers, Reliance has looked the other way, reimagining and reinventing the downstream as an ever expanding market of products derived from crude oil. History, of course, has something to due with this – Reliance, through what it refers to as “capturing value addition through vertical backwards integration,” first entered the hydrocarbon marketplace as a manufacturer of synthetic fabrics and from there progressively worked its way back up the production line to crude oil.⁷

In this, Reliance has made the all Wall Street buzz about finding synergy in mergers and acquisition look quite puny in comparison to the scope of its own internal integration. It is as if ExxonMobil not only managed the entire production stream of hydrocarbons, but also owned and operated J.C. Penny, Benjamin Moore Paints, Pfizer, Safeway Groceries, and was opening up a new retail chain it was calling Wal-Mart (in reality they are named Reliance Mart). As the late Dhirubhai Ambani, who founded Reliance in 1966 as a specialized spice-

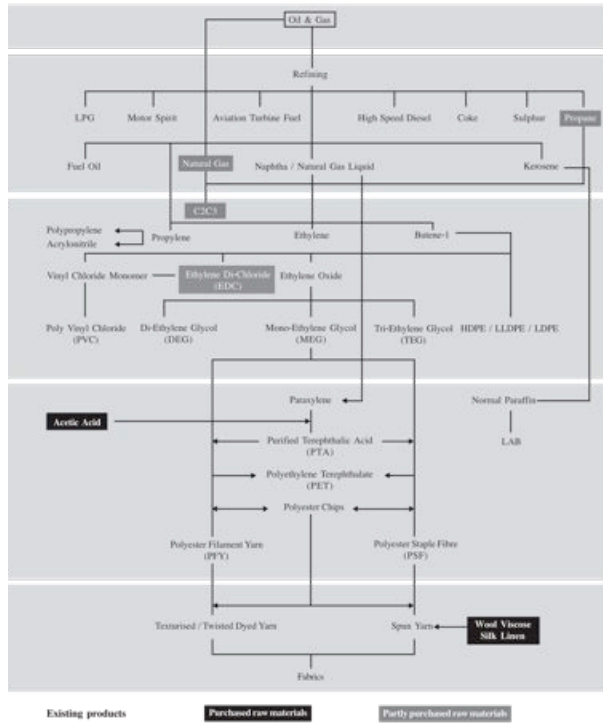
the advantage of the disadvantaged. Those, Veblen argues, who take the lead in various industries sink their capital into investments perfectly calibrated to the scale and trajectory of the market at that moment. For Veblen, this is as much about stocks and bonds as it is about the size of factories and width of roads. The central problem Veblen dwells on is that eventually the market changes and those that have taken the lead find all their investment tied up in outdated means of circulation (In Marx, this is the underdeveloped distinction between fixed capital and fluid capital). Those latecomers are able to synchronize their investments to the new moment and by doing so outperform the now vanquished leaders of yesterday. (While it might be tempting to make this argument for India and China – indeed, Veblen in making this argument is thinking about the nation of Germany – I am interested in using it to think about Reliance Industries without reducing them to either lucky ambition or prophetic genius). If there is any validity in Veblen’s model it rests first on deciphering what about the market is new. Although I only hint at it here, my sense is that it is global cities that provide the critical new – cities so big they no longer have the space, let alone desire, to house refineries that could supply their growing fuel needs. Cities, crucially, have become net importers of refined products. Reliance is, at a general level, the largest exporter of refined fuel and other petroleum products to such urban markets.

⁵ Keith Bradsher, “A Former Gas Station Attendant’s Big Bet on a Refinery Has Paid Off,” *New York Times*, February 18, 2005.

⁶ Mukesh Ambani, “Chairman’s Statement,” Reliance Industries Annual General Meeting, Mumbai, October 12, 2007.

⁷ Dhirubhai Ambani, “Chairman’s Statement,” Extraordinary General Meeting, Mumbai, October 16, 1997.

Product Flow Chart



trading company and orchestrated its growth into a textile conglomerate and eventually India's largest private corporation, said of the Jamnagar Super Site in 1999, "Commissioning of the refinery marks the completion of Reliance's presence across the entire vertical integration chain – from oil & gas to textiles. The Reliance group's sole major feedstock will be crude oil."⁸ Since then Reliance has acquired drilling rights to several major proven oil reserves in India and the Middle East. "Jamnagar," executives at Reliance Industries have said repeatedly, "is our new centre of growth."⁹ It is a growth that, within a single site, has accomplished a complete integration of hydrocarbon products and has perfected a bullishly planetary outlook.

The Jamnagar Super Site is immense. On three consecutive days I tried to drive around its outer perimeter. Not once did I make it more than halfway around. Such size raises questions of where one might stand to describe it adequately. What vantage point might best provide insights into its workings? Who should one speak to? Where, exactly, does one begin? Most accounts of the Jamnagar Super Site that have appeared in newspapers and trade journals remain firmly within the set of facts and figures provided by the company. It is the largest refinery in the world, and so on and so forth. By way of explaining they make almost predictable turns towards the Ambani families remarkable foresight and unbridled ambition. Allusively skirting around the edges is the unbelievable but by now well-known economic boom in India and China over the last decade. What remains missing in most of these accounts is an actual description of the everyday life in and around the complex. The Jamnagar Super Site is not just something that can be counted and numerically revered. It also is something that not only is lived in profound and profane ways but also purports to transform the largest industry in the world. Questions of when increases in quantity become something qualitatively new are missing, as well as the more familiar queries of how such a place came about, what impact it has had on surrounding communities, who works there, and how it is lived from day to day remain tellingly absent. If the Jamnagar Super Site is a model of what the emerging global market entails for sites of production, as Reliance not only claims but is also actively working to bring about, than these are far more than academic inquiries. They are the substance of an emerging world economy.

There are, in reality, two distinct Jamnagar Super Site's. One, designed and built by Reliance Industries to process crude oil from Saudi Arabia for the metropolitan fuel markets along the Pacific Rim, is a decidedly global venture. Reliance firmly

⁸ D. Ambani, "Chairman's Statement," Reliance Industries Annual General Meeting, Mumbai, June 24, 1999.

⁹ D. Ambani, "Chairman's Statement," Reliance Industries Annual General Meeting, Mumbai, June 26, 1998.

believes such a venture will herald the return of India to a dominant position in the global economy. The other one, lived by a splintered multitude of people employed in the construction and daily operation of the refinery and petrochemical facilities, is an emerging place in its own right. This place, formed in the promise of decent wages, has begun to take the form of a corporate city-state as Reliance Industries begins to provide the most basic of services to adjacent populations as the government is slowly relieved of its obligation to those citizens. While the two are inseparable, they resist appearing under the same optic. This inquiry tracks the former through what company officials and documents say about the Jamnagar Super Site and then moves into the latter through descriptions of how the refinery has altered the city of Jamnagar and descriptions of how various classes of employees live in and around the refinery. It is unfortunate and ultimately a limit imposed by my own mind that the two sites require, in a sense, two separate inquiries.

With the blessing of the national, state, and municipal governments, Reliance was able to secure a tax holiday for the construction of the refinery and the first decade of its operations in 1995, along with the designation of Special Economic Zone (SEZ) that deregulates the movements of commodities and labor within the refinery and petrochemical complex.¹⁰ Mukesh Ambani, the eldest son of Dhirubhai Ambani and present chairman of Reliance Industries, reflecting in 2003 on how such legislation expedited Reliance's success in Jamnagar, asked, "whether the whole of India cannot be declared as a free trade zone for specific products and services."¹¹ While Reliance has a progressive global view of its customer base, it has a decidedly national outlook on production. In Reliance parlance, these SEZ's represent not only the legislative foundation for its global ambitions but also "the new engines of growth for the New India."¹² While Reliance believes it sees an emerging global marketplace for petroleum products in its Jamnagar Super Site, it also believes it can see the future of India.

This "New India" that Reliance Industries imagines is one vitalized in the deep reverberations of a history denied and by the present swell of demographic inevitability. "The tide is turning," Mukesh Ambani said recently, "The center of gravity of economic growth is shifting to the east."¹³ In 2006 Ambani spoke to a crowd of Texan oilmen: "The center of economic growth and development is shifting to Asia," he said. "The new crucibles of innovation are being located in Asia."¹⁴ For Ambani, history underlay's this shift. This is not India's debut on the global economic stage – "Let us not forget that India was a leading economic power in the eighteenth century," Ambani said in 2003. "India accounted for 23% of world GDP."¹⁵ Although referring somewhat elliptically to that two-century gap we know as the British Empire, this account of a history deferred remains popular with across India. The last decade has not been an economic boom. It is a revival. "Historically, India and China were major economic powers at the turn of the eighteenth century. They contributed to almost half of the global output," Ambani said more recently. "Today, the development cycle is coming around a full circle. Economies of China and India are growing rapidly – at close to double-digit rates. By the year 2050, these two nations will account for half of global output."¹⁶ "Today," Ambani has said with more than a bit of nationalist undertone, "we have the opportunity to regain for India her past glory in global trade."¹⁷ In such accounting, European and US interventions only delayed the ascent of South Asia and ultimately stunted the consolidation of the global market. Such a feat, like all artificial adjustments of the

¹⁰ An updated form of the Export Processing Zones (EPZ) that have flourished across the developing world, SEZ's streamline the process by which the exemption of duties and tariffs on goods imported and exports as well as a ten-year elimination or reduction of income and property taxes is granted. Whereas formerly several national, state, and municipal agencies had to sign off on potential EPZ's, the SEZ's place all relevant officials in a single meeting that has the authority to immediately approve or reject an applicant.¹⁰ In addition, SEZ's provide increased government aid for developing essential infrastructure in and around the designated zone.

¹¹ Mukesh Ambani, "A new world of vibrant trade for India," speech, Aurangabad, India, Dec. 14, 2003.

¹² Reliance Industries Annual Report, 2007, pg 202.

¹³ Mukesh Ambani, "Bridging Gaps in Globalization," inaugural address, Annual Meeting, Indian Merchants Chamber, April 24, 2007.

¹⁴ Mukesh Ambani, "Is there Energy in the global petrochemical industry?," keynote address, NPRA International Petrochemical Conference, San Antonio, Texas, March 26, 2006.

¹⁵ Mukesh Ambani, "A new world of vibrant trade for India," speech, Aurangabad, India, December 14, 2003.

¹⁶ Mukesh Ambani, "Is there Energy in the global petrochemical industry?," keynote address, NPRA International Petrochemical Conference, San Antonio, Texas, March 26, 2006.

¹⁷ Mukesh Ambani, "A new world of vibrant trade for India," speech, Aurangabad, India, December 14, 2003.



marketplace, remains as impressive as it is unsustainable. The world market, having recognized the last two centuries as an imperial distraction, is slowly shifting back to its true economic center of gravity in South Asia.

Beyond history, Mukesh Ambani has joined the prevalent refrain that celebrates the demographic advantage of India (and much of South Asia) over the United States and Europe. “India today is one of the youngest countries in the world,” Ambani said in 2007. “More than half of all Indians are under the age of 25 years. Two-thirds of India’s current population is under the age of 35. It is thus endowed with enormous reservoir of energy and youthful dynamism. It can leverage the power of Indian mind and enterprise to scale unprecedented peaks of economic growth.”¹⁸ In nearly all of its Annual Reports to shareholders over the last decade, Reliance Industries has reported the average age within the company – a number typically falling somewhere in the mid 30’s – as a crucial asset that most analysts overlook. Youth, for Reliance Industries, provides a strategic advantage to both the company and India as young minds are more adept at mastering the technological forms of knowledge that increasingly have come to play crucial roles as both motor and mediator of an emerging global marketplace.

Financial Highlights

Turnover	Rs. 139,269 crore (\$ 34,713 million)
PBDIT	Rs. 24,201 crore (\$ 6,032 million)
Cash Profit	Rs. 25,205 crore (\$ 6,282 million)
Net Profit	Rs. 19,458 crore (\$ 4,850 million)
Net Profit (excl. exceptional income)	Rs. 15,261 crore (\$ 3,804 million)
Net Profit 5 years CAGR	30%
Total Assets	Rs. 149,792 crore (\$ 37,336 million)

Significant contribution to India's economic growth

- Revenues equivalent to about 3% of India's GDP
- 13.4% of India's total exports
- 4.9% of the Government of India's indirect tax revenues
- 6.6% of the total market capitalisation in India
- Weightage of 16.5% in the BSE Sensex
- Weightage of 12.5% in the Nifty Index

Growing importance across the globe

- Largest producer of Polyester fibre and yarn
- 4th largest producer of Paraxylene (PX) and Purified Terephthalic Acid (PTA)
- 6th largest producer of Mono Ethylene Glycol (MEG)
- 7th largest producer of Polypropylene (PP)

Featured above is the Board of Directors of Reliance Industries Limited.
 Standing from left to right: Dr. Raghunath Anant Mashelkar, Prof. Dipak C. Jain, Shri Nikhil R. Meswani, Dr. Dharam Vir Kapur, Shri Rammiklal H. Ambani, Shri Mansingh L. Bhakta, Shri Mukesh D. Ambani, Shri Yogendra P. Trivedi, Shri S. Venkitaramanan, Shri Mahesh P. Modi, Shri Hiral R. Meswani, Shri Hardev Singh Kohli and Prof. Ashok Misra.

“In the Old World, comparative advantage was defined by materials, capital and labour. In this New World, competitive advantage is driven by capital and knowledge,” Ambani said in 2002.¹⁹ One of the most capitalized firms in India if not the world, Reliance Industries has been focusing on the latter half of that equation. Frequently citing the fact that there will be “an 80% fall in the output of petroleum engineers in the USA,” Ambani has initiated wide investments in technical education across India.²⁰ In its attempt to transform India’s demographic advantage into Reliance’s technological advantage, Reliance has even built its own university for graduate and doctoral work in what it sees as the future of the petrochemical industry: biotechnology.²¹ The Reliance School of Life Sciences (RSLs) in Mumbai, with an express focus on “domains of life sciences and related technologies,” was built to provide the forms of

¹⁸ Mukesh Ambani, “Bridging Gaps in Globalization,” inaugural address, Annual Meeting, Indian Merchants Chamber, April 24, 2007.

¹⁹ Mukesh Ambani, “The Chemical Industry in the New World,” keynote address, Seventh Asia Pacific Chemical Industry Meeting, Singapore, February 18, 2002.

²⁰ Mukesh Ambani, “Is there Energy in the global petrochemical industry?,” keynote address, NPRA International Petrochemical Conference, San Antonio, Texas, March 26, 2006.

²¹ Mukesh Ambani, arguing, “Oil and gas will continue to be the backbone of the global energy system,” has pointed out three strategic directions the oil and petrochemical industry should pursue to ensure its future profitability: environmentalism, integration, and information technology. Oil companies, he said, should seek to shift the focus of environmentalists from advocating alternatives to hydrocarbons to promoting efficiencies within hydrocarbons. Innovative integration, he said, should capture more and more of the downstream products and byproducts of crude oil with special attention paid to the emerging field of biotechnology. Lastly, information technology can provide the necessary processing capabilities for firms who are increasingly overwhelmed by the data emerging from their global reach. Mukesh Ambani, “Contours of the Petro Industry,” speech, January 12, 2001.



expertise that Reliance would need to integrate its petrochemical capacities with the emerging field of biotechnology.²² This year it inaugurated a program in Biopharmaceutical Manufacturing. It has already announced plans to build a second campus adjacent to the Jamnagar Super Site. “India is also emerging as a research hub of the world,” Ambani said recently, echoing an outlook that Reliance Industries is committed to facilitating.²³

For Reliance, India’s global place in history and in demographics is leading to an inevitable resurgence and eventual ascension in the world economy. Reliance Industries has primed the Jamnagar Super Site to remain solvent and flexible from the beginning to the end of this transition – while the United States, Japan, and Singapore are its biggest customers now, it already is prepared to shift its output to the rising economies of both India and China once those destination become as profitable as the former. The Jamnagar Super Site is, in many ways, the harbinger of this New India that Reliance both believes is inevitable and is tirelessly working to bring about. In the plush waiting room at the Main Gate of the Jamnagar Super Site, a video played a short loop from the perspective of a plane soaring towards the refinery from far out at sea while a distinguished voice said in measured tone, “This is not just another petrochemical complex. This is not just another refinery. Not just another plant. It is an inspiring temple of a resurgent India.”

When Reliance Industries first began looking for a site to build a global refinery, the northwestern state of Gujarat was attractive because of its hostile stance towards unions and the fact that large swathes of land were available near the deepwater port of Jamnagar. What really sealed the deal, however, was the Gujarat state governments willingness to enforce SEZ’s at the state level. When the national government first announced the SEZ’s (and when they were revised in 2005 and 2006 to favor export oriented industries), many state governments were reluctant to enact it. According to Reliance Industries, the Gujarat State Government has a uniquely “pragmatic approach towards business and were among the first few States to legislate their respective SEZ Acts in line with the national policy.”²⁴ This approach is, in no small part, due to Reliance’s politicking and pointed investments within Gujarat. Since then, the state of Gujarat has undergone a resurgence that is unmatched in contemporary India. Reliance, which has singlehandedly created over 200,000 jobs within Gujarat and made it the



²² Mukesh Ambani, Annual Report 2007, pg. 42.

²³ Mukesh Ambani, “A new world of vibrant trade for India,” speech, Aurangabad, India, December 14, 2003.

²⁴ Reliance Industries Annual Report, 2007, pg 37.

largest site of capital investment in all of India, has paid careful attention to this transformation, ensuring that credit goes where credit is due. “Gujarat is now a revenue-surplus state from being a revenue deficit state five years ago. Gujarat has about 5% of India’s population and 6% of the geographical area,” Mukesh Ambani said recently. “Gujarat is now India’s most industrialized state with 20% of India’s manufacturing output, 21% of its exports and 30% of stock market capitalization.”²⁵



Jamnagar’s claim to fame prior to the arrival of Reliance Industries was an entry in the Guinness Book of World Records for longest continual chant – since 1964 night and day shifts of monks take turns repeating a short mantra, ad infinitum. While most guidebooks mentioned this distinction as a prime reason to visit Jamnagar, no one I spoke to in Jamnagar knew much about it. Everyone had something to say about Reliance Industries.

Descriptions of Jamnagar before Reliance Industries arrived in 1997 converged on one point. The general refrain was that it was a place for retirees, a place with the comforts of a decent sized city but without the frantic competition and hectic pace of a major city. “Jamnagar was a place for those who had retired.” “We used to say Jamnagar is for retired people.” “Jamnagar was a backwater, a place for retired people.” “It was quiet and peaceful, popular with retirees.” “Many retired people came to live here.” “Jamnagar was for retired people.” Nearly everyone I spoke with – from company employees to government officials to nearby villagers to residents of the city – said Jamnagar was a seldom visited, rarely noticed city before Reliance. There was a similar agreement in how people described what Jamnagar has become since Reliance – a major urban area. Reliance has transformed Jamnagar into a sprawling city where money is easy to come by (especially if you owned property prior to the coming of Reliance) but also one beset with rising crime and encroaching fears of the massive waves of young male migrant workers who, coming from poorer states across India, have provided the most basic of services during the construction boom at the refinery. A deep suspicion of the migrants permeated among the residents of Jamnagar and employees of Reliance Industries, even as many directly profited from their rents and labor. Repeatedly, I heard of the conspicuous correlations between the growing number of migrant workers amassed in camps just outside the municipality and the rising rates of alcoholism, gambling, and prostitution within the city. Or, as one retired teacher phrased it, “the moral denigration of the migrants” was destroying the decency of the city. Everyone, however, was in complete agreement that the building of the refinery has reinvented the



²⁵ Mukesh Ambani, “Resurgent Gujarat,” speech, January 12, 2007. Ahmadabad, India.



city of Jamnagar. A long time resident who now works as a security guard for Reliance told me, “You will find Jamnagar on the map now because this refinery only.” “The refinery,” one government official said, “has brought Jamnagar to light.”

Part of Jamnagar, however, remains resistant to this transformation. As the megaphone calls from the minaret each morning, families from the countryside to the south of Jamnagar enter the old town pushing bicycle-wheel carts of fresh produce. Khaki colored melons with a heavenly scent, glossy eggplants stacked into careful pyramids, mangoes sliced or juiced, freshly brewed chai tea, bright spices piled high in steel bowls, and wooden stands where betel nut is cut, mixed, and rolled into perfect bite sized packets – blankets and wares fill the narrow streets of the old town as the day begins. Archaic gates and a mass of adjoined buildings, all inwardly facing, mark off the walled quarter of Jamnagar. This former center feels a world apart. The meandering streets are quiet and unhurried, lined with small shops and shopkeepers who stop to watch you pass. Wooden balconies, once carefully carved but now sagging and worn with weather, seem to pull the buildings towards one another while cows lounge across the concrete streets in the absence of autorickshaws. In the old town, families walked in quiet conversation and gathered in groups around tea stalls, remarkable only in that this was the only place I saw families together.



There is no birds-eye sensibility to the layout of the old town – it was not a grid that designed this portion of the city but minor histories squeezed together in one place. The streets refrain from straight lines – they turn until you swear you are in a spiraling maze, they split into an infuriating multitude, narrow into nothing, end abruptly. The streets have no discernable names. Destinations in the old town eschew exact addresses, consisting instead of cardinal directions, approximate paces, and orientations to known landmarks. Individual residences are identifiable by the wooden beams sometimes visible through a patchwork of faded paint and masonry, by the sectioning of shattered glass and sloppy concrete recently placed atop the outside wall, and by peeling iron gates and oiled padlocks that secure gurgling courtyards. Within this section of Jamnagar the larger fate of becoming an oil town has not yet been conceded. However, the aging residents who live within this walled section have begun to accessorize their properties with security details in response to the influx of migrants brought to Jamnagar by the promise of honest work and decent wages.



The rest of Jamnagar is exploding north towards the refinery as fast as buildings can be built and roads can be laid, spilling out in a scattered jumble of multileveled strip malls and gated condominium complexes that extend nearly entire 20 miles from the edge of city to the main gate of the refinery. It is a “transition town,” one hotel owner told me, “neither here nor there.” Property values, several residents tell me, have risen to rival those of Mumbai in the last few years. Jamnagar is becoming an oil town. A new center has cropped up where the thruway from the refinery splinters into side streets as it runs into a round park. ATMs abound and construction is quick at work raising the heights of every adjacent building. Traffic fills the roads from morning until night. Oil towns bear an uncanny resemblance to border towns – everything is somewhere short of being finished and most folks are from elsewhere and hoping to return there soon. Except here, unlike border towns, it is overwhelmingly male and most everyone has a decent wage (and everyone else is scrambling to get a cut of those wages). Families and biographies have been put on hold and no one intends to linger much past that eventual big payday. In the meantime, every imaginable luxury item is on sale in this rising center of Jamnagar – stainless steel appliances, the latest iPhone from Apple, imported Italian marble tiles, enormous flat-screen TVs, designer jeans and t-shirts, luxury European sports cars and an hour or two with the body of a woman can all be had for a price. It’s the equivalent of a city with the population and reputation of Boise but with the consumer market of Manhattan. Downtown Jamnagar is a sprawling, hectic marketplace of men flush with wages and other men hawking every conceivable object those wages might desire. As the global refinery and petrochemical complex comes online, the city of Jamnagar is being pulled into the global marketplace as well. It too is being retrofitted.



The Hotel President is probably the nicest hotel in downtown Jamnagar, a designation that means it has AC, flush toilets and a reasonable restaurant.²⁶ I ask the concierge if many visitors come to Jamnagar. “Yes,” he replies quickly, “many visitors come to Jamnagar.” When I ask whether most visitors came for pleasure or business, he replied “Reliance.” The hotel is full of oilmen – dark suits, sunglasses, briefcases, and the occasional pair of cowboy boots. They exit the hotel en masse each morning between 8am and 9am to the line of private cars that have been waiting outside the hotel since dawn and return in staggered waves throughout the evening. Each time I left the hotel, the small crowd of drivers who had gathered in the shade would turn, each taking a step towards me with the same question. “Reliance?” “Reliance?” “Reliance?” Other hotel

²⁶ The nicest hotels in the city, however, are owned and operated by Reliance Industries. Built on the outskirts of town, they house distinguished guests and senior employees visiting from Mumbai.

employees told me nearly everyone that has stayed in the Hotel President in the last few years has come on official business with Reliance Industries. “Tourists are very rare,” one said. Some oilmen stay a few days for a brief meeting, while others are housed at the hotel for months at a time. Next to the main desk is a faded poster listing the sites to see in and around Jamnagar. “Jamnagar is an ideal gateway to the precious jewels the gulf has to offer: Unspoilt white and golden beaches; Temples, ancient to the new; Hills with temples on top.”

Several specialized fabric stores can be found in the new center of Jamnagar. This region of Gujarat is known for something called “Bandhani” textiles. Elaborate tie-dye is an apt description. Women stitch a thousand pin-sized knots in various shapes and designs across a folded cotton sheet, which is then dyed. When the sheet is dried and pulled out it reveals an abundance of tiny white dots that form intricate patterns across the fabric. They can be quite impressive. Bandhani has become the authentic trinket one purchases when visiting Jamnagar – it is the cultural niche of this region. At the Kamangari Store I ask the owner where most of his business came from. “Reliance,” he said, adding, “Because of Reliance business is very good.” Sitting on luxurious pillows on the floor, adolescents stretch out various designs in front of you in quick successive waves until you implore them to stop. Being on the constrained budget of grad student grant but needing to bring something back for a small multitude of family members, I asked for a discount when I purchased three Bandharis. After turning down my offer, the owner said, by way of explaining, “You are a person of no importance.” Somewhat taken aback, I asked what he meant – I did not have oil money, just tourist money, which apparently is not the same thing.

Men begin gathering in small groups at dawn next to the Indian Oil gas station downtown. They are a mass of muted flannels and canvas pants worn at the knees. Each neck carries a bright white plastic ID with a blue “R.” Every ten minutes or so a Toofan Classic SUV (it looks like the strange offspring of a Toyota Land Cruiser and a Dodge passenger van) pulls up and 10-15 workers pile in. As they depart, new groups of men have already begun to gather. This perpetual arrival and departure goes on all day at locations all across Jamnagar. Getting to and from the refinery is never a problem. At the cost of roughly one dollar each way, this thirty-minute ride in the Toofan Classic to the Main Gate is the cheapest means of transportation to the refinery for those who live in the city. Somehow they wedge me into a bench seat in the front with four other grown men. I straddle the clutch – the driver, whose upper torso is actually half out the window, steers by reaching over me and shifts between my legs. Those squeezed into the back spill over into the front. One of them, somewhat awkwardly protruding from the back comes to rest atop the front seat, his face next to mine. He turns and smiles at me for the length of the ride. I ask him how many people work at the refinery. He continues smiling while a voice wistfully replies from somewhere behind me: “So many...”

During the ride to the refinery I asked the one man not wearing work clothes if he too worked at the refinery. “No,” he said with potent disdain, “I am not a worker. I am a contractor.” This was my first foray into the splintering mess of class identities that circulates in and around the refinery. It took me a week to fully untangle the various categories of work and their fraught and unequal relations to one another. There are three major classes of labor at the refinery. On top of the hierarchy are the 20,000 or so employees, an exclusive group that consists of top Reliance administrators and a smattering of key representatives from the international contractors like Bechtel who are providing technical assistance during the construction. Most of the employees live with their families in a gated community referred to as “The Township” that was built by Reliance across the highway from the refinery. It is an oasis of spectacular fountains and deep green lawns that could rival any golf course community in the United States. Just beneath employees are the contractors, a wide-ranging demographic of nearly 100,000 men that includes university trained engineers and drivers from nearby villages. The engineers live in gated condominium complexes that are scattered across the landscape surrounding the Jamnagar Super Site. Most of the other contractors live in simple apartments in Jamnagar or in the villages around the refinery. Lastly are the workers, that mass of 100,000 laboring bodies who provide the most basic services at the refinery and petrochemical facilities. Nearly all of them are from the three or four states that remain outside the resurgent Indian economy of the last decade. About half of these men are here on a 9 month contract, living in a handful of company run camps that each houses between 6,000 to 8,000 workers in



concrete barracks surrounded by a twenty-foot barbed wire fence. The remainder either rent small, sparse rooms from villagers who have quickly transitioned from farmers into landlords – their untilled fields now filled with a growing mass of squat, windowless apartment buildings – or they live in makeshift camps of blue tarps and tin roofing alongside the outer wall of the refinery, working from day to day. Each morning the employees, contractors, and workers all meet as they make their way to the refinery.

Reliance Industries built the four-lane highway that leads from Jamnagar to the refinery on top of what was previously a dusty single lane road to nowhere. Streetlights arching over the road bear the corporate logo, as do the flowering planters that divide the highway. “This road is the only good thing Reliance has provided. Before it was impossible to drive on this road,” Xavier told me as we waited in traffic a few days later. I had hired him to take me to the villages that dot the countryside around the refinery. An august man with deep-set dark eyes and an aquiline nose, he has a face that resembled those marbled busts of ancient despots and the demeanor of a fox outside a chicken pen. He proudly tells me that he can trace his Portuguese lineage back to the colonial outpost of Goa while trying to figure out what kind of story I wanted to hear. “Since Reliance rebuilt this road 5,000 people have died on it,” he says matter-of-factly. When Reliance arrived in Jamnagar they needed to transport massive amounts of construction materials along this route quickly. “Overnight everyone who could sit behind the wheel became a driver, no qualifications required.” Thirteen-year-olds, he tells me, were driving loads of steel and petrol. Although neither the number of deaths nor the minimum age of drivers could be confirmed, I witnessed two horrendous accidents along the road in as many days and saw more than a few suspiciously young drivers behind the wheel of transport vehicles.

Just outside the city limits, the transportation of workers and construction material melds into a giant traffic jam. Darting around the caravan of flatbed trucks and the occasional camel weighted down with steel and bags of concrete, a dizzying array of bicycles, scooters, autorickshaws, SUV passenger vans, company buses and AC hired cars transport the human components of the world’s largest refinery. A constant bickering of horns and a veritable fog of exhaust fill the air. Hundreds upon hundreds of tanker trucks, dump trucks, and flatbed trucks line the surrounding fields, the landowners having realized there is more profit in parking than farming. Trucks loaded down with pipeline wait in these fields, bare feet extruding from an open door. They sleep away a wait that often lasts days. Between the makeshift parking lots and construction sites that are quickly turning this stretch of

highway into one giant strip mall, the arid plains reach the road. It is an endlessly flat expanse of gravelly reddish soil interrupted by ubiquitous power lines and wide rocky riverbeds that cross the terrain, waiting for the annual deluge that is the monsoon. Alongside the road the sage green shrubs that dot the countryside appear almost iridescent, their thin, weeping leaves coated in the light grey dust of concrete. Near the refinery, plastic bags and emptied soda bottles have blown against the shrubs and formed an ad hoc fence of plastic detritus three to four feet tall. In the distance, pointy Jain temples dot the landscape, bright red flags fluttering atop them like loosened scarves in the breeze.



Xavier tells me we need to fill the car with diesel before heading to the villages. After passing a Reliance gas station closed with a chain pulled across its entrance and stopping at several other gas stations only to find they are out of diesel I begin to worry. Within sight of a refinery that can process 1.2 million barrels of crude oil a day, everyone seems to be out of gas. Xavier tells me this is the case everywhere. The Government of India (along with most of the governments in South Asia) subsidizes the price of fuel for its citizens, much to the chagrin of the current US Administration, which has placed significant blame for the spike in oil prices on the artificially inflated consumption that national fuel subsidies encourage in an already tight global market. While such subsidies were sustainable when oil was trading at \$80 a barrel, they are quickly bankrupting the government at \$150 a barrel. It being an election year, no politician wants to be associated with eliminating the subsidies. When the government cut the subsidies back by a few cents a liter the next week protests shutdown the railway between Mumbai and Delhi. The state owned oil companies, which were losing roughly twenty-five cents on every liter of gasoline and diesel they sold, stopped resupplying their respective gas stations once they caught wind of the coming adjustment. They would sit on their stocks until they could lose a more manageable sum. Gas stations across India began running out of gas because of this unannounced but widely known decision.



As a private company, Reliance Industries, even with its own national chain of gas stations, is not required to sell its products at the subsidized rates. Indeed, the gas station outside the refinery would have been selling a liter of gasoline at twice the subsidized rate if it had not been closed. It was closed because no one – not even a desperate driver – is willing to pay twice the subsidized rate. Three-quarters of the Reliance gas station I saw in India were both brand new and closed. This is something of a fortuitous situation for Reliance. Having just built a national distribution network of gas stations and storage facilities all across India, Reliance claims to be a national

energy company in both in manufacturing and in sales. The Jamnagar Super Site, accounting for 25% of India's refining capacity, has earmarked roughly 40% of its daily output (some 452,000 barrels of oil) for the domestic market. Despite such intentions, however, nearly all of it ends up being exported with the tacit approval of the national government. Unable to move any of its unsubsidized fuel products domestically, Reliance is able to pressure the Indian government to deregulate fuel prices while simultaneously making a hefty sum exporting everything to the more lucrative urban markets in California, Japan, Singapore, and Hong Kong. If demand continues to rise if and when India deregulates fuel prices, Reliance shows every sign of shifting from being an energy company with a global outlook to one with a national priority. Globalization, to Reliance Industries, seems to mean the ability to sell products, in a quantity that defies any one locality, anywhere in the world, including its own backyard. Today Reliance is resolutely global because that geographic scale of flexibility is where the money is. Tomorrow it could just as easily focus its sales on a national or South Asian scale, provided the greater returns are there. While many firms are scrambling to expand local production facilities to the demands of a global market, few companies are poised to make the opposite move should the demand move in that direction.

Xavier and I eventually found a gas station with diesel just above the subsidized rate. A long line of vehicles stretched out onto the highway waiting to refuel. Trucks, cars, motorcycles, tractors, autorickshaws, even people with buckets, all waited to fill up before this station ran out as well.

As the highway approaches the refinery it narrows into a mile long corridor that runs straight through the Jamnagar Super Site, lined on both sides with twenty-foot stone walls and behind them a towering configuration of metal and concrete. A handful of titled gates break up the length of these two stone walls: Fertilizer Gate, Main Gate, Township Gate, Fertilizer Township. Crossing a series of railroad tracks, the beginning of this corridor is announced by a four-storey billboard of the Reliance corporate logo. This sign overshadows the unmarked metal gate where the mass of laboring bodies enter the refinery and petrochemical complex. Laboring minds enter further down, at the elaborately arched Main Gate. Here, just to the left of the soaring blue R, thousands of men with white IDs hanging around their necks join a constant flow that narrows into a series of single-file lines before passing under the watchful eye of armed guards, much like cars passing through the toll plaza on the Triborough Bridge during rush hour. Occasionally a worker is taken abruptly from the line and patted down by the guards. Behind the Reliance sign a line of bicycles runs several hundred feet along the outer wall. On the other side of the gate a makeshift market of wooden huts peddle used yellow hardhats to the mass of workers and general contractors who stream by on their way in. On their way out the market switches its emphasis from equipment to illicit, selling cigarettes and nearly everything else that is forbidden within the walls of the refinery as fast as they can stock them.

When I first arrived at the refinery in that crowded Toofan Classic, I was told that if I wanted official permission to visit the refinery I would have to check in with the security office at the Township Gate. Possibly ill-advised, I had previously decided it would be more interesting to track how people lived around the refinery than to schedule a formal tour of the premises. Instead I arranged to follow various employees and workers to and from the refinery and to see how they lived outside of their working day. In addition I planned to spend several days visiting the villages around the perimeter of the Super Site. My priority would be on the everyday life of the world's largest refinery. As the workers exited the Toofan Classic at the unmarked gate, many strongly advising me against taking pictures of the refinery, I decided it would be interesting to try to access the innards of the Super Site through official channels. So I paid the driver an extra dollar to take me the half-mile down to the corridor to the Township Gate.

The visitor's room at the Township Gate feels more like an interrogation room. A windowless room at the center of a house-sized guard booth, it is painted institutional white and brightly lit. Uncomfortable metal chairs line the walls: two other men wait with me, each sitting alone and looking like someone in a holding cell waiting for a family member to come bail them out. Slumped over, their elbows on their knees, hands covering their face while holding up their downward gaze. The AC hums on one wall while a squeaky fan spins above. The

Township Gate itself is a well-manicured affair – flowering gardens surround the granite guardhouse. In a small parking lot just outside the gate, white vans with “SHUTTLE” stenciled in red wait in a perfect row. A steady traffic of new Japanese coupes brings carloads of teenagers in and out of the gated community all afternoon. The guards wave them through with a smile. The teenagers, boisterous and clamoring on their cell-phones with tinted windows up and air conditioning on, hardly seem to notice. When not attending the private schools that Reliance provides, they spend their days driving to the recently opened shopping complex – owned and operated by Reliance – and the movie theater between Jamnagar and the refinery – owned and operated by Reliance. While everyone refers to this community as “The Township,” its more formal name adorns a billboard that looms over the exterior wall nearby: “Jamnagar Reliance Greens – Your oasis in the desert.” Past the gate you can watch the street wind through lush lawns, tended by imperceptible caretakers who use electrical mowers that operate in strange silence, towards a series of luxury apartment buildings. Painted in soft earth tones and each with a balcony fit to watch the sunset over some elegant sea, they are grouped around fountains that spill water into the sky. At the edge of the Township a private hospital for employees and their families is under construction. A sign on an adjacent building reads “Occupational Health and Family Care.”



When I arrived at the Township Gate there was considerable confusion about what exactly to do with me. Uncertain glances and furtive phone calls led to a guard politely asking me to wait in the visitor’s room until his superior arrived. The security personnel at the Super Site appear closer to a private military squadron than the security guards I am familiar with. Well-disciplined, clean-shaven, perfectly postured and remarkably fit, they all wore crisp, grey uniforms with small insignias that distinguished rank. Indeed, Reliance hired many of them from the military with offers of a doubled salary for the same work but in defense of private enterprise. From mundane tasks like issuing traffic violations to errant drivers and patting down workers for contraband before they can enter secure sites to more martial tasks like patrolling the perimeter of the refinery and dispatching the municipal police and national soldiers that are now based at the refinery, Reliance enforces its own law and order at the Jamnagar Super Site.



Praveen Janghu is the head of security at the Township Gate. He leads me from the visitor’s room to a corner office with a cluttered desk and windows overlooking beautiful gardens. A large photo of Mukesh Ambani hangs framed on one wall next to tacked-up blueprints of the Township. In his thirties, he has a chiseled face and sharp eyes. The glimmer of a grin



constantly lurks around the corners of his mouth. “What is the purpose of your visit here?” he asks, beginning what will become an unending refrain from company officials. After jotting down a few details, Janghu calls the head of PR, speaks to him in hushed tones with back turned to me, and hands the phone to me. “What is the purpose of your visit here Mr. Bond?,” the voice on the other end says in a proper and crisp colonial English. I tell him I am writing an article on the world’s largest refinery. After an exchange of formalities he tells me he is sorry but I will not be able to tour the refinery. If I would like to arrange a visit I will have to go through the “proper channels,” a Kafkaesque exercise that involves getting a letter from the US Embassy in Delhi explaining who I am and what I am doing in India, taking this letter to the Indian Government to get a series of officials to sign off on the US Embassy’s assessment of me, and then taking this growing bundle of forms to Reliance’s headquarters in Mumbai where they will be reviewed by the proper offices and, after a short interview, a decision will be made. When I ask if there is any other way to visit the refinery, the voice on the other line says with utmost civility: “I’m sorry but that will not be possible. Goodbye Mr. Bond.”

Hanging up the phone for me, Praveen Janghu asks an underling to bring us tea while he leans back in his chair and smiles. “So what would you like to know?” We talk for some time about the refinery – he is well versed in the facts and figures of what is happening here. 70,000 acre complex, 20,000 employees and their families live in the Township, over 200,000 laborers work for Reliance in and around the refinery, construction began in 1996, fuel products are almost exclusively for export, and there are 110 varieties of Mangoes grown in the greenbelt that surrounds the refinery. This list was repeated to me so often over the next several days that I began to suspect employment with Reliance was contingent on one’s ability to memorize it. Looking out his window at the Township’s exclusive residencies, I remarked how extensive Reliance’s presence was in the lives of its employees – providing not only a great salary but also luxury housing, excellent schools, private healthcare, groceries, furniture, entertainment, and law and order. Which is to say providing everything employees and their families might want. “We are a city,” Janghu replied. “We have everything.” A young engineer, hoping to work his way up within Reliance, told me a few days later, “It would be like heaven to someday live in the Township.” The privatization of aspiration.

Just down the corridor from the Township is the recently opened Reliance Mart. A mix between IKEA and Wal-Mart, it is a prototype of what Reliance believes will be the future of retail in India. Reliance Mart is dressed in what has become

the signature style of grand budget shopping – a warehouse looking building brightly painted on the outside and unadorned within. Grey stones form an ornate circle around a fountain in the plaza that leads to the store’s protruding glass foray. It is surrounded on two sides by desert. The third side abuts the fertilizer factory. A small army of gardeners kept the flowering specimens that framed the plaza thoroughly watered and kept the lawns between sections of the parking lot neatly trimmed. Inside the store, everything seemed to be on sale: from plastic flowers to Sony TV’s, from Puma sneakers to Axe Body Deodorant, from Kinder Bueno Chocolate to Maxyavar Ethnic Wear; from Reliance brand bath towels to mangoes grown by Reliance on the grounds of the refinery. A large sign advertised loans from Reliance Finance: “We’re here to help you.” The store was full of middle-aged women, most of whom seemed to be wives of Reliance employees. They gathered in conversation in the center of the store, where children ran amuck in a padded playground. Although they carried a global array of products, the Reliance brand was ubiquitous. For nearly every name brand item, there was a cheaper Reliance model, most made of the plastics and synthetic fabrics most likely fabricated across the way. Somewhat in awe, I said to a fellow customer, “Reliance has everything.” “Yes,” he replied, “but security is very tight.” I asked an employee where the typical customer came from. “The Township mainly,” he replied. Behind the Reliance Mart an auto repair shop has just opened, Reliance Auto.



Riding with a group engineers on their way home from work, I ask them about Reliance but they are more interested in Barack Obama. Barely a year out of university, they tell me they have not spoken proper English since they graduated. Nobody here speaks in an educated manner they complain. “Who do you think will become president?” they ask. Followed quickly by, “Who do you think should be president?” They have been following the democratic primaries and, while each thinks Obama should win, all are convinced Hillary will somehow triumph. “Why are you interested in the refinery,” they ask after I insist on the topic. “It will be the world’s largest,” I responded. The engineers nodded but looked somewhat bored by that fact. They understood, but such an accolade, in itself, is not worthy of much more than noting on the way to some weightier topic of conversation. “But why are you interested in the world’s largest refinery?” one pushed. I tell them that it seems this refinery is coming online at a particular moment in the global economy. That it is perfected for this moment in both scale of production and flexibility in distribution. “Ah,” comes the uniform reply, and they all talk enthusiastically about the arrival of the global market for the remainder of the car ride. And India’s prime position to thrive in such conditions.





Reliance, often double or tripling the expected salary of technical expertise, has hired a veritable army of engineers. Attracting the best and the brightest right out of university, Reliance has expedited the construction of its Jamnagar Super Site, collapsing the last major portion of its construction into an unbelievable 36 months of non-stop, round the clock work. The engineers I rode with were part of the Pipe Fabrication Team, a specialized field office of 150 engineers and their staffs. Reliance, as with the majority of labor that was hired for the construction boom, is not providing them anything outside a remarkable salary. They are, after all, only contractors. This situation has led to an array of apartment complexes built for the engineers around the refinery, like an archipelago of suburban condominiums scattered across an otherwise barren wasteland. No one knows what will happen when this last wave of construction is complete later this summer, when over half of the laborers that have moved here over the last decade will no longer be needed by Reliance Industries. The engineers know their work is temporary. This, however, is not so much a bleak fate as it is a source of hope. The engineers also know that the Jamnagar Super Site is unprecedented and that being associated with such a project might very well open up work around the world as others try to catch up with the new standard Reliance has set. They are ambitious members of an emerging cadre of global refining expertise. One engineer already had lined up work as a consultant in Saudi Arabia, another had an interview with ExxonMobil for a position overseeing the renovation of one of its facilities. [they too are seeking global flexibility]

The Kaveri Labor Camp has a sign above its entrance: “Welcome.” A fifteen-foot wire fence topped with coils of barbed wire encircles the camp, which consists of a grid of concrete dormitories lined up in ten rows, each row four buildings deep. The gravel paths between the barracks are the only open space in the camp. Three dented metal slides, one tilting precariously to the left, sit along the fence near the gate. A water tower lords over the skyline. As I walked into the camp a small squadron of police with rifles and riot gear boarded a bus. While I never saw the police working in the city of Jamnagar, the nine Reliance labor camps were surrounded by the hectic activities of the Jamnagar Police Department. They patrolled the perimeters of the camps with rifles slung over their shoulders, inspected the dormitories while the workers were away, and provided a variety of other security services that Reliance Industries required. The nine labor camps that Reliance has built on land rented from nearby villages provide housing for approximately 60,000 unskilled workers. These contracted workers provide the basic maintenance and manpower at the Super Site. Working twelve hours a day, six

days a week for nine month (followed by a month of unpaid leave to visit their families), once construction is complete they will comprise the permanent bulk of labor at the Super Site. Most of them are young men from a handful of poorer states in India. They make up a significant portion of that larger demographic more popularly referred to as “migrants.” Two Reliance guards escorted me through the gate and directly into the security office at the front of the camp. It is a building just like all the others, but packed with offices instead of beds. Just inside a large dry erase board keeps track of the camps present demographics, reading “POPULATION: 7136; WORKING: 7030; Female: 23; Children: 17.” As I jot it down the head of security Kavamir Singh tells me, his hand ominously on his bamboo club, in no uncertain terms, “Please sir, no writing.” Inside his office, blueprints of the camp are nailed to wall – they show bathrooms and showers clumped together on the far end of the camp. A framed picture of Mukesh Ambani hangs on one wall, adorned with a freshly cut string of marigolds. A prominent poster reads, “Safety and Health of personnel and protection of environment overrides all production targets” in English, a language spoken by administrators, engineers, and security guards, but unknown to the thousands of workers who live in these camps. All of the corporate signage I saw was in English with little to no translations into the languages spoken by the majority of workers.

Karml Gah, the administrator of the Kaveri Labor Camp, welcomes me with a fresh cup of tea. “What is the purpose of your visit here?” After explaining myself, he tells me that without formal permission I will not be given access to the labor camp. “After taking permission, you may go ahead,” he says, directing me to the Main Gate. No one can answer my question as to whether the fence is to keep workers in or others out. As we leave Paz, the translator I hired to speak with the workers is visibly unnerved. He would prefer if I not pursue the topic of workers camps any further. “Reliance is very strong here,” he says. “They will talk to the police and at midnight the police will pick me up and take me away. No one will know where I have gone.” The questions I have been asking do not bother him he tells me, it is the fact that I want to ask such question inside the labor camp that is terrifying.

The Main Gate is a surprisingly large entrance with a football field-sized metal arch overhead. It can handle six lanes of traffic, but only two are open when we arrive. Gujarat State Police and national soldiers man the gate under the watchful eye of Reliance security personnel. The entrance to the guard booth at the Main Gate leads to a small patio with fifteen or so cushioned seats facing an enormous flat-screened TV and windows and a door of mirrored glass on the far side. Inside that door a small waiting room awaits visitors, its walls covered with company posters and framed certificates awarded to Reliance Industries. Many posters consist of quotes reputedly from the mouth of Mukesh Ambani: “Give a man a fish and you feed him for a day; Teach a man to fish and you feed him for a lifetime,” reads one. Another, above a photo of Ambani and his wife, says, “A Guest is Gods messenger, Say the Indian Scriptures.” Shikha Sighn, the only female I met working for Reliance, greeted me and led me to a desk: “What is the purpose of your visit here?” She interrupted my reply, exclaiming, “Ah, you want to write a story on the condition of the lower classes!” “No,” I reply emphatically, “it is not the lower classes I am interested in but the lives of everyone associated with Reliance. All classes. From the top to the bottom.” She gets on the phone and explains to someone, “He is doing a study of the industrial zone, all populations, form top to bottom.” As we chat waiting for her superiors to call back with a decision, she tells me, “Actually foreigners are not allowed in the workers camps. That is why it is taking so long.”

Walking to her superior’s office in an adjacent building, she tells me she’s worked for Reliance for two years now and finds it quite agreeable. Mostly because they pay so well. Ajay Kumar, a former military man now stationed as the head of Reliance security at the Main Gate, looks me up and down as Shikha Sighn explains my interest in “the populations of the industrial zone.” “This is a very interesting project,” Kumar says, telling me he will call his boss and do his best to arrange permission. Sighn adds, “Actually it’s up to you now, how you convince Mr. Gtvashi. If you can convince him you will be allowed.” After the briefest of conversations Kumar hangs up the phone and turns to me, “I am sorry but you will not be allowed.” They seem disappointed. Sighn says, “Officially we cannot allow you, but informally you can go to the entrance of the labor camp and talk to workers returning from their shifts.” “They will start returning in an hour,” Kumar adds. “This is a very

important study you are doing.” They both tell me that little is actually known about those living and working for the refinery. As I leave, Kumar says, rummaging through his desk, “Wait, I will give you a medal.” He hands me a Reliance Traffic Safety Award, a keychain trinket.

Back at the Kaveri Labor Camp, Reliance guards walk back and forth across the entrance in slow measured steps as workers begin returning on foot. Each guard carries a bamboo rod, worn smooth with handling. A water truck, sloshing desalinated seawater from the refinery on the gravel, drives in with the camps daily allotment of drinking water. Kavamir Singh comes out to meet me, shouting “No!” and pointing away from the camp. As I try to explain that I am allowed to talk to workers as long as I remain outside the camp, he shoves me and begins to raise his bamboo club. My smirch at his pointless rage turns quickly into fear of the strength of his right arm and I retreat to a small vegetable market an hundred feet or so from the entrance to the camp. Four or so families have the same assortment of vegetables spread out in piles on blue tarps. “We sell vegetables to the workers,” one family explains. The workers, housed in concrete rooms, buy everything they might need from this simple market. The labor camp was built 11 years ago. Before Reliance came to Jamnagar, most of the families working in the market were village farmers on rented land. Soaring property rates since Reliance have brought them here. One family ran a makeshift tea stall. With my translator Paz, I asked them who lived in the camp. “Workers,” they replied, referring to the 7,000 plus men that walk by here twice day. Talking about the nine months they spend here in the camps, I asked what these young men do for leisure. Paz interrupted me: “You cannot ask this question.” “Why not?” “There is no prostitution here,” came the quick reply.” “I did not ask about prostitution, I asked about what the men do in their free time.” “You cannot ask a question like that,” reiterated Paz, “It goes against religion.” “Is there prostitution here?” “No.”

Four young men appeared in the distance on the road in a staggered line. Dark skinned and exhausted, each glistened as they walked under the late afternoon sun. Carrying neither lunch boxes nor water bottles, they had only the clothes on their backs – ragged jeans, shirts worn to transparency and yellow hard hats. As they passed the market I stepped out and asked each if I could buy them a cup of tea. Each entered the camp without pause, silently moving towards the shade of their barracks in dull, steady steps. They might have been 18. A painter, one of the workers who agreed to talk to me, said, “Its okay work, good pay.” Working 10-12 hours a day, six days a week painting and repainting the storage facilities near the port, he makes roughly \$250 a month. Reliance provides free housing in these camps, he tells me, which consists of “a space on the floor.” These dormitories, he says, are divided into 20x20 foot rooms that each house ten men. Some rooms have a kerosene stove, purchased by one of the workers. Each room has a hole in one corner that serves as the lavatory and a single faucet. Reliance, he adds, also provides free medical care provided the injuries are work related.

Very little farming is now done in the villages to the south of Jamnagar. While agriculture was the dominant vocation here only a decade ago, today everyone works for Reliance in some capacity. Those village that owned the land where Reliance built become fabulously wealthy overnight. Those villages that owned land near the refinery have, like the families selling vegetables outside the labor camp, been slowly forced from the land by rising property rates and into jobs either formally or informally providing services for Reliance. Those villages that sold their land to Reliance are now subsidized by Reliance’s office of community development, which has built schools and temples along with providing them with drinking water and medical service. The other villages receive nothing.

The village of Medhpur is on the far side of the corridor that slices through the Jamnagar along the exterior wall of the refinery. Some of the dirt streets end abruptly in a concrete wall separating the village from a series of towering metal structures. The entire area smells like an auto mechanic’s shop. The village president was sleeping when Xavier and I arrived at 10am. He stood, quickly wrapped himself in a sheet torn from his bed, and shook my hand somewhat gingerly. Ten minutes later he returned in a rumpled grey polyester disco suit dotted with cigarette burns. A large gold watch hung loosely on his wrist. Keshubba Kanchba was an unshaven middle-aged man with slightly concave cheeks and a flashy smile. Xavier leaned in to tell me this is “a warrior community,” gesturing to the dagger holstered in the back of Kanchba’s pants. When Reliance



Industries decided to build its Super Site here, the dry land was worth roughly \$175 an acre, the land along the riverbeds \$300 an acre. Reliance paid \$1,000 an acre for the dry land, \$1,500 an acre for green land. Overnight they made millionaires out of a handful of villagers who had humbly farmed these lands for generations.

A plethora of small metal plaques are affixed to the corner of buildings that Reliance has provided for the village. They rebuilt the village school (expanding it from a crumbling, windowless one-room affair for 20 students into a modern, seven room building with an enclosed courtyard that educates 300 students), renovated the village temple, constructed an enormous water tower (which they fill whenever it gets low), and built stables for the village 60 cows (every three months Reliance officials renegotiate the cost of maintaining these cows with village leaders – the current rate is \$15 month). Each week a Reliance medical van run by a doctor and several nurses visits Medhpur, providing care and professional advice on whatever ails the legal residents there. Before Reliance came, several villagers tell me, the school was falling apart and doctors refused to visit this part of the country. “Reliance provides better services than the government ever did,” Kanchba tells me. “The government is guided by its own rules. The company doesn’t follow rules.” He provides the example of water – when a cyclone swept through the area in 1998 the government took three days to provide safe drinking water to the village. Reliance brought drinking water thirty minutes after the village contacted them. “Through the greatness of Reliance, help will come,” Kanchba tells me confidently. I ask a group of school children from the village what they hope to be when they grow up. “A Doctor.” “Lawyer.” “A Reliance Employee.”



Sarjaysingh, a nineteen year old villager, tells me that all the young men in the village have contract work with Reliance. Most are drivers, he says. He works as a boat examiner at the port. “It’s only paperwork,” he tells me. The water table has dropped considerably since Reliance arrived, his family says, all of the wells in the village are now dry. Sarjaysingh adds, “The drinking water is now owned by Reliance.” Every few days, a tanker truck from Reliance brings desalinated drinking water to the village. Before Reliance came to Jamnagar this family had been farmers for as many generations as they can remember. I ask Sarjaysingh what he wants to be when he is older. “Maybe a doctor or a lawyer,” he says, “or a Reliance employee.”



Leading me through the dusty, stone village, Kanchba takes me into a new house on the outskirts of the village. Air conditioners are on in every room with ceiling fans helping circulate the refreshing cool. A set of brand-new stainless steel



pots hangs above the recently renovated kitchen. A satellite on the roof brings cable TV into every room – all of the televisions were left on, the sound muted. Up a tiled staircase, we end up on an elaborate balcony overlooking the refinery. Several men from the village join us. I ask them if they ever imagined they would be living like this. Unanimously: “No.” “A Hindu priest used to forecast that we would someday develop into a prosperous village, but nobody believed him,” Kanchba says. The owner of the house, Mahipatisnh Parmar, adds, “We thought maybe in 100 years. But it happened overnight.” Another man, Smjadeja introduces himself, informing me that he is a stockbroker. “Why is the US economy in recession,” he asks, a question followed by inquires into which publically traded companies I think might play a part in the eventual recovery. “Before Reliance came,” he tells me, “this was a backwards area. We have become more advanced with Reliance. Before we all rode bicycles everywhere. Now everyone can own a vehicle.” “Before Reliance,” Kanchba adds, “The young were fighting, drinking, and doing nothing to pass their time. Now 80% of the boys own their own vehicle.” From bicycles to SUV’s, this is progress. Parmar hands me a business card – several limousines and luxury SUV’s parked in a semi-circle in front of the refinery with his name and phone number underneath. People with their own vehicles, he tells me, can make as much as \$2,5000 a month driving for Reliance. He was a simple farmer ten years ago. Today he owns 8 vehicles and the biggest house in the village. He is also a landlord.

The village of Medhpur, with an official population of 1,000, houses an additional 8,000 migrant workers in small apartments that line their backyards and most of their remaining fields. One resident referred to this influx simply as “new income.” These migrants, living in 10x10 foot apartments built from concrete blocks, tin roofing, and plywood doors, live 5-6 to an apartment. Typically they are work in alternating twelve-hour shifts, ensuring no more than 3 men are in the apartment at any one time. Most of the villager’s residences had at least six apartments along their outer wall, several had over twenty. These migrants often work at the refinery on a day-to-day basis. The lowest rung on the employment ladder at Reliance, their wages are all Reliance provides them with. I asked a group of them what they did at the refinery. Presently they were unloading scrap metal. Did they like that sort of work? “Yes, very much.” When I asked why, the all replied, “The wages are very good.” The villagers have ensured that the migrants are kept from voting in local elections and participating in the daily life of the village. “They are a class among themselves,” one villager tells me, explaining that everyone is happier when they live separate lives. In addition, the migrants are forbidden from attending the village



school and seeking healthcare from the Reliance medical van. I asked Kanchba if there are ever any conflict between villagers and the migrants. “No, no, no,” he replied, “Sometimes the migrants have conflicts but they are only quarrels among themselves.” Reliance estimates that some 50,000 migrant workers live in the villages around the refinery. In the last year, several villages have witnessed small protests as unrest among the migrant communities surfaced. The offending migrant workers were quickly fired and shipped home.

The pervasive scent of petrochemicals fills the village of Padana. Abutting the wall with the refinery, every building has been converted into housing for migrants. Five minutes after arriving I have a splitting headache. A metal tower looms out from just over the wall, emitting a long cloud of white steam that hovers over the village. Two 18 year-olds are sitting on the concrete blocks in front of their apartment, staring at building across the dirt path. An older man stands in the doorway, gingerly leaning away from his right foot with is bare and an ungodly shade of orange, the pant leg rolled up to avoid all unnecessary contact. In the next apartment, a young man lays on atop a thin cardboard sheet in the middle of the concrete, eyes restlessly open in the 100 degree plus heat of midday. A single-burner kerosene stove sits in one corner, a towel and spare shirt hang on nails pounded into the wall. They all shift slightly to follow my approach. Curious, but unmoved. They are from the states of Bihar, Punjab, and Uttar Pradesh. Over the last few months, each had come here separately in search of employment. I asked if Reliance had recruited them. “No, we came without the promise of a job but we knew there was plenty of work here,” the older man said. “Many of our relatives had come before,” another explained. “It was well know that there were many options for work here,” the last added. They answered every question in the collective “we.” They tell me that working 12 hour shifts 6-7 days a week does not bother them as “the salary is very good.” Although they work day-to-day at the Jamnagar Super Site, they all believe employment with Reliance will last well into the foreseeable future. Each hopes to soon have saved enough to return to their families.

Outside of the villages, a number of older migrant workers live with their families in makeshift camps along the uninhabited portions of the outer wall of the Jamnagar Super Site. Hand cut tree branches covered with tattered blue tarps and tin sheets provide the most basic of shelter. About a mile down a dirt road traversed by many feet but few cars, a half circle of such huts faces away from the stone wall of the Township. The tops of lush green trees are visible between the barbed wire strands. As I stepped out of the car, girls in brightly colored saris ran into the group of huts, peaking at me from tears in the



tarps. Eventually a woman emerged – short, young, and assured, she walked over to me as the children scrambled to stay just behind her steady strides. Her husband is a worker at the refinery, she tells me. Approximately 100 people live in this camp. “We were farmers before,” she says. “Now my husband makes good wages.” I ask if the children go the school. “No,” she says, “there is no school.” Once a week a medical van from Reliance stops in the village to administer polio shots to recently arrived children, she tells me. “Nothing else comes from Reliance.” In an emergency, I ask, who does this community turn to for help. Nearby villages she say. “Do they help you?” I ask. “Sometimes.”

There is no water tower in this camp, nor well or nearby stream. There are no flocks of animals nor gardens. There is a flat gravelly expanse of nothing where no one seems to mind their presence and there is the possibility of a decent wage nearby. While the men work, the women endlessly carry water and food from afar. While one looks after the children, the rest forage for supplies. Forever walking in small groups or four or five down the main corridor, carrying empty containers loosely in leisurely conversations on the way to the nearest market, carrying full containers in steady march on their way back. The women, in these camps, are the basic infrastructure. It is they that provide the basic services for the lowest class of workers.

Back on the balcony in the Medhpur Village, someone brings out a tray with a plastic bottle full of clear liquid and four small glasses. They pour me a drink first. Hand it to me gingerly. Everyone stops and turns toward me in attentive silence. As if awaiting a punch line. “It’s water,” someone says in a way that reveals it is clearly not water. I look closer at the glass – white flakes are suspended in the liquid. I take a whiff; it smells like cleaning solvents stored under a musty kitchen sink. Moonshine. “No thank you,” I tell them. They all roar with laughter, knowing that I now know. And then take to insisting. Soon the others are downing the other glasses, each gulp followed by a pressuring stare and smile. I take a sip. It burns like blindness. Clenching my throat, I force my body not to expel whatever homemade poison I’ve just swallowed. Trying to change the focus, I ask about pollution from the refinery. “Changes have come all over the world. It is hotter here now, but the temperature is going up everywhere,” Kanchba says, looking to me to confirm this fact. “The climate is changing everywhere,” he continues. “It is not due to Reliance.”

By the time I’ve finished half of my glass the bottle is nearing empty as the others are nearing inebriation. The pour the remainder into my glass as two men in formal slacks and button-ups come in, one sitting down next to without a word.



He watches the villagers, pays me no attention. I introduce myself. They are from Reliance. “What is the purpose of your visit here?” Bharatsingh Bhatti asks. Bhatti is a Community Development Officer in Reliance’s Economic Development Office, an office that oversees Reliance’s aid to the select villages around the Jamnagar Super Site. As we talk, he runs through the usual facts and figures pertaining to the world’s largest refinery. He has something of a cubicle personality. “It seems like Reliance is replacing the government in providing basic services to these villages,” I say. “Yes, Bhatti replies,” We are faster and more efficient than the government at providing services.” He adds, “60%-70% of the rural population is now dependant on Reliance.” He politely refuses the moonshine that is being forced on me. After an hour, he leaves somewhat abruptly, telling me that he would arrange an official tour of the refinery the next day. Such an offer amounted to me wasting half of a day in a security office the next day before being outright denied the promised tour.



After the bottle of moonshine is finished, a bottle of Aristocrat Whiskey appears. It is surprisingly bad and once again I find myself in the predicament of a full glass. As I labor through my small glass, the bottle is passed around until it is dry. The village president is in fine form, stumbling from one grandiose pronouncement to another. He is increasingly belligerent. Kanchba pulls out the dagger that had been holstered in his pants, waving it around for emphasis. He tells us how much he loves Reliance Industries and, pointing the sharpened steel in my direction, how much he respects me. Xavier, visibly terrified, leans over to me: “This is a very delicate situation Mr. David.” Soon Kanchba is drunk beyond comprehension. He falls to the floor in the next room. We leave quickly, shaking hands and thanking the others for their hospitality as the village president snores on the concrete floor in the adjoining room. As the car pulls out of the village Xavier turns around to face me: “I cannot do this work for you anymore.”



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