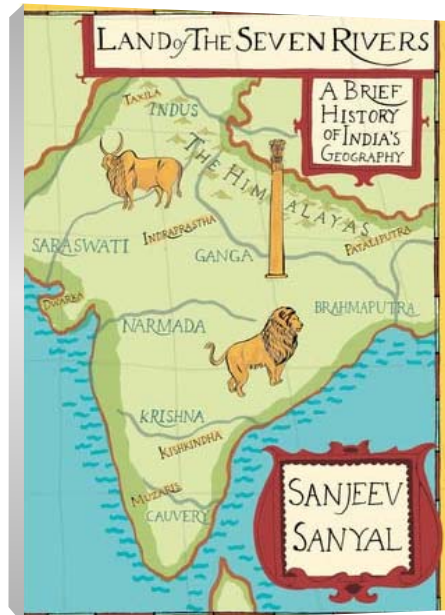




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## ABOUT THE BOOK

This book provides a geographical perspective of Indian history and its evolution so far, it argues. How geography has shaped our policies and still affects our life. It explores India and looks at how the country's history was shaped by, among other things, its rivers, mountains and cities. Traversing remote mountain passes, visiting ancient archaeological sites, crossing rivers in shaky boats and immersing himself in old records and manuscripts, author considers questions about Indian history that we rarely ask: Why do Indians call their country Bharat? How did the British build the railways across the subcontinent? What was it like to sail on an Indian Ocean merchant ship in the fifth century AD? Etc.

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# INTRODUCTION

As we make our way through the second decade of the twenty-first century, India is undergoing an extraordinary transformation. After centuries of relative decline, the Indian economy is reasserting itself. The result is an urban construction boom that defies imagination. Almost overnight, whole new cities are being built.

Mobile telephones and satellite television, combined with rising literacy and affluence, have changed the dynamics and aspirations of rural and small-town India. The children of farmers are moving to the cities in the millions. By all accounts, India is likely to become an urban-majority country within a generation and its cities need to prepare for the influx of hundreds of millions of people.

The economic rise of India is to be welcomed in a country that has long been plagued by poverty but change is not without its price. Natural habitats are being drastically altered and often ravaged by activities like mining, sometimes legal but often illegal. I am told that there are now barely 1706 tigers left in the wild. Dams and canals are altering the fortunes of sacred rivers even as factories and cities empty their untreated waste into them.

We live in a time of rapid change. However, it is important to remember that India is an ancient land. In the long course of its history, it has witnessed many twists and turns. Cities have risen and then disappeared. There have been 'golden' periods of economic and cultural achievement as well as periods of defeat and humiliation. Over the centuries, many groups have come to India as traders, invaders and refugees, even as Indians have settled in foreign lands. The country has endured dramatic changes in climate and natural habitat. In short, India has been through all this many times before.

Much has been written about Indian history but almost all of it is concerned with sequences of political events—the rise and fall of empires and dynasties, battles, official proclamations and so on. However, history is not just politics—it is the result of the complex interactions between a large number of factors. Geography is one of the most important of these factors. Moreover, this relationship works both ways—just as geography affects history, history too affects geography.

This book is an attempt to write a brief and eclectic history of India's geography. It is about the changes in India's natural and human landscape, about ancient trade routes and cultural linkages, the rise and fall of cities, about dead rivers and the legends that keep them alive.

# 1. OF GENETICS AND TECTONICS

## ■ Geographical Evolution

- ▶ The Indian subcontinent was not always located where it is today but was once attached to Africa and Madagascar. This is a relatively recent discovery. Till the early 20th century, it was assumed that most geological features were due to vertical rather than horizontal movements in the earth's crust. The positions of the continents were considered to be essentially fixed. This was first challenged by the hypothesis of continental drift, proposed by Alfred Wegener in 1912.
- ▶ It appears that most of the earth's land mass was joined together a billion years ago in a supercontinent called Rodinia. It was probably located south of the equator but there is still a great deal of debate about its exact shape and size, and where India's land mass fit into it. This supercontinent broke up around 750 million years ago and the various continents began to drift apart. There is one remaining relic from the Pre-Cambrian period that is still very visible—the Aravalli range. It is the oldest surviving geological feature anywhere in the world.
- ▶ A map of Pangea would show the Indian craton wedged between Africa, Madagascar, Antarctica and Australia. It was on Pangea that the dinosaurs appeared 230 million years ago. However, the earth remained restless and Pangea began to break up around 175 million years ago during the Jurassic era. It first split into a northern continent called Laurasia (consisting of North America, Europe and Asia) and a southern continent called Gondwana (Africa, South America, Antarctica, Australia and India). Note that the name Gondwana is itself derived from the Gond tribe of central India.
- ▶ We now see a sequence of rifts that separate India from its neighbours. First, India and Madagascar separated from Africa around 158 million years ago and then, 130 million years ago, they separated from Antarctica. Around 90 million years ago India separated from Madagascar and drifted steadily northwards.
- ▶ As the Indian craton drifted northwards towards Asia, it passed over the Reunion 'hotspot', which caused an outburst of volcanic activity. Most of these eruptions happened in the Western Ghats near Mumbai and created the Deccan Traps.
- ▶ India kept up its relentless northward journey and, 55–60 million years ago, it collided with the Eurasian plate. This collision pushed up the Himalayas and the Tibetan plateau. What are now tall mountains were once under the sea, which is why marine fossils are quite common high up in the mountains. The process is not over—the Indian plate is still pushing into Asia. As a result the Himalayas are still rising by around 5 mm every year (although erosion reduces the actual increase in height). The resulting tectonic pressures make the Himalayas seismically unstable and prone to frequent and powerful earthquakes.
- ▶ With the Indian plate wedged into Asia along the Himalayas, the stage was set for the formation of the youngest of India's geological features—the Gangetic plains. They started out as a marshy depression running between the Himalayas and an older mountain range called the Vindhya. Silt brought down by the Ganga and its tributaries slowly began to fill up this hollow to create a fertile alluvial plain.

## ■ Populating India

- ▶ The entry of large mammals into India was due to its geographical re-attachment to Eurasia and the shifting climatic zones that allowed or forced these animals to migrate into India. Take for instance a genetic study of the frozen remains of a Siberian mammoth that died 33,000 years ago.

The scientists of the Max Planck Institute in Leipzig found that the Asian elephant is more closely related to the mammoth than to the African elephant. It appears that the genetic lines of the Asian and the African elephant separated six million years ago whereas the Asian elephants and the mammoths diverged only 440,000 years ago.

- ▶ Many Indian animals came into the subcontinent from the east. The tiger is one such example. There is some disagreement about the exact origins of the big cat. Some scholars claim a Siberian origin while others prefer to locate it in South China. Two-million-year-old remains of the tiger's ancestors have been found in Siberia, China, Sumatra and Java. However, the animal is a relative newcomer to India. The genetic data as well as fossil finds suggest that the Bengal tiger came to inhabit India fairly recently, perhaps no more than 12,000 years ago.
- ▶ Meanwhile, where were the humans? There is now general consensus that, anatomically, modern humans evolved in Africa around 200,000 years ago. This fits both genetic data as well as archaeological remains. Genetic studies show that the San tribe of the Kalahari (also called the 'Bushmen') are probably the oldest surviving population of humans. Members of this tribe show the greatest genetic variation of any racial group and are therefore likely to be direct descendants of the earliest modern human population.
- ▶ Climate and environment had a very significant impact on the expansion of modern humans. Our planet goes through natural cycles of cooling and heating. When early humans made their way out of Africa, the earth was much cooler and much of the world's water was locked in giant ice-sheets. As a result, sea-levels were as much as 100 metres lower than today and coastlines and climate zones would have been very different. Thus, the early band of humans migrating from Africa to southern Arabia would have had to make a relatively short crossing across the Red Sea. Furthermore, they would have found an Arabian coastline that was much wetter and more hospitable.
- ▶ It appears that modern humans next made their way along the coast to what is now the Persian Gulf. The average depth of the Persian Gulf is merely 36 metres. With sea-levels 100 metres below current levels, this area would have been a well-watered plain—a veritable Garden of Eden. The groups of early humans would have found this a very attractive location and probably enjoyed a significant population increase. Expansion into Central Asia and Europe would have been difficult at this stage because of the Ice Age. However, they would have spread out along the Makran coast into the Indian subcontinent. Note again, that the Indian coastline would have been different from what we see today and, in many places, the shore would have been 25–100 km out from current contours.
- ▶ At some stage, branches of the Persian Gulf people pushed their way farther into the Indian subcontinent. The landscape being traversed by these early migrations had supported other hominid populations. One branch eventually reached Australia around 40,000 years ago and became the ancestors of the aboriginals. Genetic studies confirm that the Australian aboriginals do have a genetic link with aboriginal tribes in South East Asia. However, for a long time researchers could find no direct genetic link between present-day Indians and native Australians. Some scholars even argued that this group may have avoided India altogether and used a route through Central Asia. A study published in 2009 by the Anthropological Survey of India finally found genetic traces to link some Indian tribes with native Australians.

## ■ Who are the Indians?

- ▶ Till the early twentieth century, it was believed that India was inhabited by aboriginal stone-age tribes till around 1500 BC when Indo-Europeans called 'Aryans' invaded the subcontinent from Central Asia with horses and iron weapons. Indian civilization was seen as a direct result of this invasion.
- ▶ India is home to a bewildering array of castes, tribes and language groups. Some of these groups came to India in historical times—Jews, Parsis, Ahoms, Turks to name a few. However, there are also many populations that have lived in the country for a very long time.

- ▶ Further complicating the picture is the fact that there has been a great deal of internal migration over thousands of years. So, where a group is found today may be very different from where it originated. Over the centuries most groups have mingled and yet a few have retained their unique identity to this day.
- ▶ The first thing that should be clear from the outset is that there are no ‘pure’ races. With the possible exception of some tiny isolated groups, the vast majority of Indian tribes, castes and communities are a mixture of many genetic streams. This merely confirms what we can all see—that Indians come in all shapes, sizes and shades—and these can vary quite a lot even within the same family.
- ▶ A study led by David Reich of Harvard Medical School, published in Nature in 2009, suggests that the bulk of the Indian population can be explained by the mixture of two ancestral groups—the Ancestral South Indian (ASI) and the Ancestral North Indian (ANI). The ASIs are the older group and are not related to Europeans, East Asians or any group outside the subcontinent. The ANIs are a somewhat more recent group and are related to Europeans.
- ▶ After thousands of years of mixing, Indians are most closely related to each other and it is pointless splitting hair over who is more Aryan and who is more Dravidian.

### ■ Castes or Tribes?

- ▶ There is one further insight that genetics hints at—the dynamics of India’s caste system. India is not unique in having developed a caste system. Through history we have seen different versions of the caste system in Japan, Iran, and even in Classical Europe.
- ▶ What is remarkable about Indian castes is their persistence over thousands of years despite changes in technology, political conditions, and even religion. The system has even survived centuries of strong criticism and opposition from within the Hindu tradition.
- ▶ It was once thought that the caste system had something to do with the Aryan influx and the imposition of a rigid racial hierarchy. However, as geneticist Sanghamitra Sahoo and her team have shown: ‘The Y-chromosomal data consistently suggest a largely South Asian origin for Indian caste communities’. Genetic studies suggest that Indian castes are profoundly influenced by ‘founder events’. Roughly speaking, this means that castes are created by an ‘event’ when a group separates out and turns itself into an endogamous ‘tribe’.
- ▶ Over time this process leads to a heterogeneous milieu of groups and sub-groups, sometimes combining and sometimes splitting off. The result is that, despite centuries of mixing, we do not have a unified population but a complex network of clans. This is a good description of the messy ‘Jati’-based social system that exists to this day.

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## 2. PEOPLE OF THE LOST RIVER

### ■ Summary

- ▶ As we move from prehistory to history, we are immediately confronted by a problem of plenty. The early history of India has two parallel sources, but there is a great deal of disagreement about how they fit together. On one hand there is the archaeological evidence of the sophisticated cities of the Harappan Civilization (also called Indus Valley or Indus–Saraswati civilization). On the other hand, there is the literature of the Vedic tradition. Their geographies and timelines roughly overlap but archaeologists and historians have long had difficulty reconciling them. Indeed, this has remained a hot topic of discussion among scholars and often deteriorates into a political debate.

### ■ The Harappan Civilization

- ▶ Till the early twentieth century, it was believed that Indian civilization began with the ‘Aryan Invasions’ that were supposed to have taken place around 1500 BC. These European-like Aryans were supposed to have come from Central Asia and to have conquered the subcontinent and then ‘civilized’ the native population. The date of 1500 BC was mostly arbitrary. It ignored the fact that both ancient texts and folk traditions have always maintained a much older timeline, but these were considered mythical and dismissed.
- ▶ In the 1920s, Rakhal Das Banerji and Sir John Marshall of the Archaeological Survey decided to revisit the site. Another team led by Daya Ram Sahni began to excavate another site called Harappa in Punjab (both these sites are now in Pakistan). They soon realized that mounds of bricks scattered along the Indus Valley were the remnants of a much older civilization, a contemporary of the Sumerians, the Minoans and the ancient Egyptians. It was named the Indus Valley or Harappan civilization.
- ▶ The reason that the Harappan sites were ignored for so long is that they lack grand structures like the Pyramids of Giza that stare out at a visitor. There are large buildings that have been given names like ‘granary’, ‘assembly hall’, ‘citadel’ and ‘college’ but these designations are essentially arbitrary. We do not know what these buildings were really used for and, in most cases, we have little more than foundations and lower walls. There is nothing that is obviously a great palace or a temple. One of the few major buildings that we can definitely identify is the ‘Great Bath’ in Mohenjodaro but even in this case we do not know if the structure was used for religious rituals (as in later Hindu temples), a bathing pool for the royal family or some completely different purpose. Yet, the Harappan sites are remarkable for their attention to urban design and active municipal management. At its height, the Harappan civilization was very consciously urban.

### ■ The Merchants of Meluhha

- ▶ The people of the civilization were actively engaged in domestic and international trade. For land transport, the Harappans used bullock-carts that are almost exactly the same as those that can still be seen in rural India. Cart ruts from Harappa show that even the axle-gauge was almost exactly the same as that of carts used in today’s Sindh. The streets of Mohenjodaro, Harappa and Dholavira would have been full of these bullock-carts ferrying goods and merchants. Thousands of years later, French traveller Tavernier would speak of how seventeenth-century Indian highways were clogged by bullock-cart caravans that could have as many as 10,000–12,000 oxen. He goes on to describe how, when two such caravans met on a narrow road, there would be a traffic jam and it could take two or three days for them to pass.
- ▶ The numerous rivers of the region would have been useful waterways for ferrying goods and people. A dry dock has been discovered at Lothal in Gujarat where vessels would have docked. Little more than foundations and drains have survived of the urban settlement and the visitor may



need help from the friendly staff of the archaeology museum (across the car park) to make sense of it. However, the dock—the world's earliest known—is an impressive structure. It was connected by a canal to the estuary of the Sabarmati river and a lock-gate system was used to regulate water flow during tides. Next to the dock are the remains of warehouses.

- ▶ There is strong evidence that the Harappans traded actively with the Persian Gulf. The merchant ships likely hugged the Makran coast, perhaps with a pit stop at Sutkagen-dor and then sailed on to the ports of the Persian Gulf. Mesopotamian tablets mention a land called Meluhha that exported bead jewellery, copper, wood, peacocks, monkeys and ivory. These sound like goods that Indians would have exported. It is likely that they exported cotton textiles since the Harappans were the world pioneers in the spinning and weaving of cotton. To this day, the Indian subcontinent remains a major exporter of cotton textiles and garments. Strangely, we have no idea what the Harappans imported.

## ■ What Happened to India's First Cities?

- ▶ It was once believed that Aryan invasions from Central Asia had caused the collapse of the Indus Valley Civilization. However, there is no sign that Harappan cities were laid waste by invaders. The evidence strongly points to the wrath of nature. A number of studies show that the area which is today the Thar desert was once far wetter and that the climate gradually became drier. However, the exact trajectory of this change is somewhat disputed.
- ▶ Around 2200 BC, we find that the monsoons had become distinctly weaker and there were prolonged droughts. In fact, this is a widespread phenomenon that also affected Egypt and Turkey. By itself, this would have caused an agricultural crisis for a heavily populated region. However, the Harappans were hit by an even bigger problem—the drying up of the river system on which the civilization was based.
- ▶ A simple map of Harappan sites would be enough to illustrate that the largest concentration of settlements is not centred around the Indus but around the dry riverbed of the Ghaggar. It is now little more than a dry riverbed that contains water only after heavy rains (it saw an exceptional flow after the heavy monsoons of 2010). However, surveys and satellite photographs confirm that it was once a great river that rose in the Himalayas, entered the plains in Haryana, flowed through the Thar– Cholistan desert of Rajasthan and eastern Sindh (running roughly parallel to the Indus) and then reached the sea in the Rann of Kutchh in Gujarat. Indeed, the strange marshy landscape of the Rann of Kutchh is partly due to the fact that it was once the estuary of a great river. Although much of this course is now dry desert and often hidden under sand, satellite photographs show that there is still a substantial amount of underground water along the old channels. This has been confirmed by drilling wells that have given fresh water at shallow depths even in the middle of the Thar desert!
- ▶ Moreover, satellite images show that both the Sutlej and the Yamuna once flowed into the Ghaggar, which would have made the Ghaggar a mighty river. However, at some point the Ghaggar appears to have lost its main sources of glacial melt from the Himalayas even as the Sutlej and the Yamuna, its largest tributaries, abandoned it for the Indus and the Ganga respectively. Tectonic shifts appear to have played a role in this. As a result, we find that the river no longer flowed to the sea. The Ghaggar may have struggled on with the help of rain-fed seasonal tributaries but even these failed as the climate changed.
- ▶ What does the drying of the Ghaggar tell us about the fate of the Harappans? Their carefully managed cities began to disintegrate and they began to migrate. One can imagine long lines of bullock-carts, heavily laden with personal belongings, leaving their old villages and cities in search of a more secure future.

## ■ The Rig Veda

- ▶ The Rig Veda speaks repeatedly of a great river called the Saraswati. It is described as the greatest of rivers. The Saraswati is called the mother of all rivers and 'great among the great, the most impetuous of rivers'. It is even called the 'inspirer of hymns' suggesting that the Rig Veda was composed on its banks.

- ▶ The problem is that there is no living river in modern India that fits the description. This has led some historians to argue that the Saraswati is a figment of poetic imagination. Others have tried to identify it with the Helmand river in Afghanistan. However, the Rig Veda itself describes the geographical location of the river. In the Nadistuti Sukta (Hymn to the Rivers), the major rivers are enumerated from east to west starting with the Ganga.
- ▶ The hymn clearly places the Saraswati between the Yamuna and the Sutlej. There is no room for doubt. There is only one river that could fit this description—the Ghaggar. Its river bed may be dry today but satellite and ground surveys unequivocally tell us that it was once a mighty river. It is very difficult to escape the conclusion that the Rig Vedic people and the Harappans were dealing with the same river.

## ■ Land of the Seven Rivers

- ▶ At the core of the Rig Vedic landscape was an area called Sapta-Sindhu (Land of the Seven Rivers). This is clearly the heartland of the Rig Veda, but the problem is that the text does not clearly specify the seven rivers. It is almost as if it was too obvious to be worthy of explanation. The hymns repeatedly describe the Saraswati as being ‘of seven-sisters’, so the sacred river was certainly one of the rivers, but the others are uncertain.
- ▶ The conventional view is that the seven rivers include the Saraswati, the five rivers of Punjab and the Indus. This would mean that the Sapta-Sindhu region included Haryana, all of Punjab (including Pakistani Punjab) and even parts of adjoining provinces. This is a very large area. What was so special about these seven rivers? In my view the importance of the Land of the Seven Rivers probably derives from it being the home of the Bharatas, a tribe that would give Indians the name by which they call themselves.

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# 3. THE AGE OF LIONS

## ■ Summary

- ▶ The Gangetic plain was the birthplace of the next cycle of urbanization. From 1300 to 400 BC, the area was made up of a network of small kingdoms and republics. Many of them were centred around towns. For the first time, we see an awareness of the whole subcontinent as a geographical and civilizational unit. It is also a time that we witness the growing cultural importance of the Asiatic lion—an animal that would come to occupy a central role in Indian symbolism. One of the most important cultural contributions of the period was the composition of the two great epics Ramayana and Mahabharata. They tell us a lot about how the geographical conception of India evolved in the Iron Age.

## ■ The Geography of the Epics

- ▶ The Ramayana is a journey from the Gangetic plains to the southern tip of India and on to Sri Lanka. It could be argued that the epic pre-dates geographical knowledge about South India and that the place-names were retro-fitted in later times to flow with the story. However, having visited some of the sites, I think this is unlikely. Take for instance Kishkindha, the kingdom of the monkeys. The site is across the river from the medieval ruins of Vijayanagar at Hampi. The terrain consists of strange rock-outcrops, caves with Neolithic paintings, and bands of monkeys scampering over the boulders. It is such an evocative landscape that it is likely that Valmiki either visited it or had heard detailed descriptions of it from merchants plying the Dakshina Path or Southern Road. The same can be said of the bridge from Rameswaram to Lanka. There exists a 30-km-long chain of shoals and sand-banks that links India to the northern tip of Sri Lanka.
- ▶ Many of the places mentioned in the Mahabharata are located around Delhi. For instance, Gurgaon, now a modern boom-town, was a village that belonged to Dronacharya, the teacher who trained the cousins in martial arts. The name Gurgaon literally means the 'Village of the Teacher'. The Pandav capital of Indraprastha is said to be located under the Purana Qila in Delhi. Similarly, the site of Hastinapur is identified with a site near modern Meerut. The battlefield of Kurukshetra is nearby, in the state of Haryana.

## ■ Enter the Lion

- ▶ India is the only country in the world where both lions and tigers co-exist. Tigers evolved in East Asia and probably entered the subcontinent around 12,000 years ago. Soon, they had spread across the subcontinent. They are commonly represented in Harappan art and seals. In sharp contrast, the Harappans appear to be ignorant of the lion! None of the main Harappan sites have thrown up any representation of the lion. This is very odd given the obvious appeal of the animal and its importance in later Indian culture. The tiger hunts by stealth in dense jungle and, therefore, is more of an object of fear. In contrast, the lion with its shaggy mane, its harem of lionesses, and its confident visibility is easily converted into a symbol of power.
- ▶ Before 2000 BC, north-west India was much wetter than it is today with higher rainfall and the Saraswati river flowing. The lion is an animal that hunts in open grasslands and could not penetrate the tiger-infested jungles that existed in the region. However, the balance shifted as the climate became drier and the Saraswati dwindled. There would have been a savannah phase when lions from Iran could have made their way through Balochistan and then into tiger territory, which would explain why the earliest artifact depicting a lion in the subcontinent, a golden goblet, was found in Balochistan. As Harappan urban centers were abandoned and populations migrated to the Gangetic plains, the lions would have taken over the wilderness. Over time they would penetrate as far east as Bihar and northwestern Orissa, co-existing in many places with tigers. Eastern and southern India, nevertheless, remained the exclusive domain of the tiger.

## ■ The Empire of the Lion

- ▶ Although Alexander's invasion did not make much of a dent in the Indian heartland, it did trigger a chain of events that led to the founding of India's first great empire, that of the Mauryas. The empire was created by two extraordinary characters: Chanakya (also called Kautilya) and his pupil Chandragupta Maurya. When Alexander entered into an alliance with the king of Taxila, the Brahmins of the city opposed this.
- ▶ When Alexander died, there was a power vacuum in northwest India. Chanakya and his protégé used the opportunity to put together a band of rebels. However, their initial efforts at unseating the Nanda king of Magadh appear to have failed. There is a legend that tells of how Chandragupta had to flee into the forests to escape the Nanda king. Overcome with fatigue he collapsed and fell into a deep slumber. However, a lion appeared and licked him clean. Then it stood guard till the future king awoke. When Chandragupta realized what had happened, he saw it as a good omen and renewed his efforts to unseat the Nandas.
- ▶ After several years of effort, Chanakya managed to cobble together a large army, possibly with the help of the hill tribes of Himachal. He and Chandragupta slowly took control of the north-west of the country. Then they steadily encroached into the Gangetic plains. Around 321 BC, they defeated the Nanda king of Magadh and emerged as the paramount power in the subcontinent. Astonishingly, Chanakya did not take the throne for himself but crowned his pupil. Then they spent over a decade establishing control over central India.

## ■ Of Imperial Pillars and Edicts

- ▶ Ashoka is the first Indian monarch who has left us artifacts that indisputably belong to his reign. To be absolutely accurate, the name Ashoka does not appear on any major edict inscription. The edicts were issued by a king who called himself 'Beloved of the Gods', Piyadassi. However, there is strong circumstantial evidence that link Piyadassi to Buddhist legends about a great king called Ashoka. The link was discovered from dynastic lists in the Puranas, Hindu religious texts, that describe a king called Ashoka as Chandragupta's grandson. Best known of Ashokan artifacts are a series of edicts engraved on rocks and on stone pillars scattered across the empire.

## ■ Of Cities and Highways

- ▶ By the time the Mauryan empire was established, the second cycle of India's urbanization had been underway for a millennium. Taxila in the north-west was not just a vibrant city but an important intellectual hub. In the east, Tamralipti was established as a major port; it is likely that Emperor Ashoka sent his son Mahindra on a mission to Sri Lanka from there. The site is located across the river from Kolkata and is not far from the port of Haldia. 'Tamralipta' means 'full of copper' and may have originally been linked to export of copper goods.
- ▶ The imperial capital of Pataliputra, of course, was the most important city in the empire. Megasthenes, the Macedonian ambassador to Chandragupta, tells us that Pataliputra was surrounded by massive wooden palisades with 64 gates and 570 watch-towers. The city was shaped like a parallelogram 14.5 km in length and 2.5 km in breadth. Megasthenes tells us that he had seen all the great cities of the east, including Susa and Ecbatana, but that Pataliputra was the greatest city in the world.

## ■ What was it like to live in a Mauryan city?

- ▶ Kautilya's Arthashastra has a long list of municipal laws that give us a good insight into the civic concerns of the times. There were traffic rules stating that bullock-carts were not allowed to move without a driver. A child could only drive a cart if accompanied by an adult. The Arthashastra also contains instructions for waste-disposal, building codes, the maintenance of public spaces like parks and rules against encroachment into a neighbour's property. It specifies fines for urinating or defecating near a water reservoir, a temple and a royal palace.

# 4. THE AGE OF MERCHANTS

## ■ Summary:

- ▶ There were relatively peaceful periods when trade and culture flourished. Taxila remained a centre of learning and new urban centres appeared, especially under Kushan rule. Buddhist ideas made their way into Central Asia and then eventually to China. Nonetheless, it is fair to say that the North West was unsettled for several centuries after the decline of the Mauryas. The heart of Indian civilization had already shifted from the Sapta-Sindhu region to the Gangetic plains during the Iron Age. Now, the action shifted to the coasts due to a boom in maritime trade. We see this all along the coast from Gujarat in the west to Kerala in the southwestern tip and then all along the eastern seaboard up to Tamralipti in Bengal.

## ■ The World of the Periplus

- ▶ We know a significant amount about trade routes because an unknown Greek writer has left us a detailed manual called the Periplus Maris Erythraei. According to the Periplus, the port of Berenike was a key hub in the trading network. It was located on the Red Sea coast of Egypt and had been established by the Ptolemies, the Greek dynasty that was founded in Egypt by one of Alexander's generals. Archaeological excavations in the nineties have confirmed its location.
- ▶ The Periplus tells us that ships sailing from Berenike to India went down the Red Sea to Yemen and then, dodging pirates, to the island of Socotra. The island had a mixed population of Arab, Greek and Indian traders. Even the island's name is derived from Sanskrit—Dwipa Sukhadara (Island of Bliss). This may explain why many Yemenis carry genes of Indian extract. From here, there were two major routes to India. The first made its way north to Oman and then across the Arabian Sea to Gujarat. Ships were advised to make this journey in July to take advantage of the monsoon wind.
- ▶ There were many ports in Gujarat but Barygaza (modern Bharuch) appears to have been the most important. The port-town is at the estuary of the Narmada river. Treacherous shoals and currents made it difficult for ships to sail up the river. Therefore, the local king had appointed fishermen to act as pilots and to tow merchant ships to Barygaza port which was several miles upriver. The author of the Periplus almost certainly visited the area because he describes in great detail the impact of a ferocious bore tide in the estuary. Imports into Barygaza are listed by the Periplus and include: gold, silver, brass, copper, lead, perfumes and 'various sashes half a yard wide'. Italian and Arabian wine was also imported in large quantities. The Indian love of imported alcohol is clearly not new.
- ▶ The second route to India was a more southerly one that went across from Socotra to the Kerala coast. The most important port in this area was Muzaris (or Muchheri Pattanam) that is mentioned frequently in both Graeco-Roman and Indian texts. A variety of goods were traded in Muzaris but the most important item of export by far was pepper, a spice that is native to the southern tip of India. It must have been exported in very large quantities because it was commonly available as far as Roman Britain.
- ▶ For a long time historians had debated the exact location of this great port of antiquity. Excavations between 2004 and 2009 have identified it with a village called Pattanam, 30 km north of Kochi. Archaeologists have dug up a large number of Roman coins, amphorae and other artifacts in the area. It would remain a major port till it was destroyed by a big flood on the Periyar river in 1341 AD. The main trading hub then shifted to Kochi, but the Muzaris area retained enough strategic importance for both the Portuguese and the Dutch to maintain a fort there.

## ■ Sailing on Stitched Ships

- ▶ As we have seen, the boom in maritime trade made India both an economic and a cultural superpower. According to Angus Maddison, the country accounted for 33 percent of world GDP in the first century AD. India's share was three times that of western Europe and was much larger than that of the Roman empire as a whole (21 per cent). China's share of 26 percent of world GDP was significantly smaller than India's. He also estimates India's population at 75 million (compared to today's 1.2 billion).
- ▶ What did the merchant fleets plying the Indian Ocean look like in this era? There were a wide variety of vessels, ranging from small boats for river and coastal use to large ships with double masts for long sea voyages. There were also regional variations. As shown in the panels of Borobodur, the Indonesians preferred a design with outriggers.
- ▶ However, they all seem to have shared a peculiar design trait: they were not held together by nails; they were stitched together with rope! Throughout the ages, travellers from outside the Indian Ocean world have repeatedly commented on this odd design preference. The technique persisted into modern times—locally built vessels were being stitched together well into the twentieth century. A survey of the Orissa coast by Eric Kentley in the 1980s found that boats called 'padua' were still being made by sewing together planks with coir ropes.

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# 5. FROM SINDBAD TO ZHENG HE

## ■ Summary

- ▶ At about the same time that Emperor Harsha was consolidating his empire and Xuan Zang was setting off on his long pilgrimage, a former merchant called Muhammad had set in motion a chain of events that would dramatically change the political and religious landscape of Arabia and eventually of the world. By the time Prophet Muhammad died in 632 AD, he already controlled much of the Arabian peninsula. However, within a century, his followers created an empire that stretched from the Iberian peninsula to Central Asia. In the eighth century, the Arabs established a toehold in Sindh by defeating Raja Dahir.
- ▶ The Muslim conquest of Sindh, however, did not seem to have impacted the Indian heartland. Arab attempts at further expansion appear to have been fended off by the Rashtrakuta and the Gurjara-Pratihara kingdoms (the latter gave their name to the state of Gujarat). Arab chroniclers specifically wrote about the excellent quality of Indian cavalry. Indeed, the emerging Rajput military class appears to have made counter-raids of its own and much of Afghanistan continued to be ruled by the Hindu Shahis well into the tenth century. Thus, for the first several centuries of Islam, India's interaction with Islam was defined not by conquest but by trade.

## ■ The Age of Sindbad

- ▶ Arabs had been actively involved in trade with India from pre-Islamic times. In the early seventh century, the ports along the western coast were regularly visited by Byzantines, Persians, Yemenis, Omanis, and even Ethiopians. There were merchants from the Mecca region too; Muhammad would have personally known several merchants who had visited India. The Cheraman Juma mosque in Kerala claims to have been established in 629 AD. If true, this would not just make it India's oldest mosque but also the second oldest in the world!
- ▶ With the creation of the Islamic empire, with its headquarters in Baghdad, the Arabs came to control a vast trading network. Arab merchants sailed the Mediterranean, criss-crossed the Sahara in camel caravans, traded for Chinese silks in the bazaars of Central Asia and made their way down the East African coast in search of slaves. This was the age of Sindbad the Sailor. Even if the tales of the One Thousand and One Nights are fictional, they retain the colourful spirit of the times.
- ▶ The Iraqi port of Basra became the most important trading hub of the empire because of its proximity to the capital. Indian goods and merchants so dominated the trade that the Arabs spoke of Basra as 'belonging to al-Hind'. The merchandise included perfumes, spices, ginger, textiles and medicinal substances. After the Arab conquest of Sindh, large numbers of slaves were also brought in from the province. Interestingly, the most important Indian export of the period was the steel sword. The country was famous at that time for the quality of its metallurgy, and the swords used by the early Muslim armies were often of Indian origin. This remained true even at the time of the Christian Crusades and the famous 'Damascus Sword' was either imported directly from India or was made using Indian techniques.

## ■ The Turkic Invasions

- ▶ In the late tenth century, waves of Turkic invasions began to erode the Hindu-Buddhist kingdoms of Afghanistan. In 963 AD, the Turks captured the strategically important town of Ghazni. From there they steadily ate away at the Hindu Shahi kingdom of Kabul and pushed them into Punjab. The



Shahis doggedly fought back for decades but, on 27 November 1001, they were routed by Mahmud of Ghazni in a battle near Peshawar. The Shahi king Jayapala was so distraught that he abdicated in favour of his son and committed suicide by climbing on to his own funeral pyre. The Shahis would continue to fight the Turks, but they were now a spent force.

- ▶ Over the next quarter-century, Mahmud would make seventeen raids into India, many of them directed at wealthy temple towns such as Mathura and Nagarkot. His most infamous raid was against the temple of Somnath, Gujarat, in 1026 AD. It is said that this single attack left over fifty thousand of its defenders dead and yielded twenty million dirhams worth of gold, silver and gems. Although the Somnath temple would be destroyed and rebuilt many times, it is the raid of Mahmud Ghazni that is still remembered most vividly.
- ▶ The Turkish raids were no doubt inspired partly by religious zeal and partly by the lure of plunder. However, it is often forgotten that one of their most important motivations was the capture of slaves. Over the next few centuries, hundreds of thousands of Indian slaves—particularly from West Punjab and Sindh—would be marched into Afghanistan and then sold in the bazaars of Central Asia and the Middle East. Unused to the extreme cold of the Afghan mountains, they died in such large number that the range would come to be known as the Hindukush meaning ‘Killer of Hindus’.
- ▶ The Turks occupied Delhi and then embarked on a series of conquests that radically changed the political, social and urban geography of India. By 1194, Varanasi and Kannauj were captured and sacked. The latter, then the largest city in northern India, would never really recover. Within a few years, the university of Nalanda was destroyed by Bakhtiyar Khilji, its library was torched and most of its scholars put to death.

## ■ The Voyages of Admiral Zheng He

- ▶ While northern India was suffering from waves of invasion from Central Asia, the world of Indian Ocean trade continued to flourish. Both Marco Polo and Ibn Batuta were witness to this. However, under the surface, the role of Indians in the network began to change from the end of the twelfth century. Indian merchants had once been explorers and risk-takers who criss-crossed the oceans in their stitched ships. They could be found in large numbers in ports from the Persian Gulf to China. Buddhist and Brahmin scholars sailed in large numbers to South-East Asia where they were in great demand. Suddenly, a little over a century after the Chola naval raids on Srivijaya, they almost all disappeared. What happened? The proximate cause for this change was the enforcement of caste rules prohibiting the crossing of the seas. However, the caste rules were merely a reflection of a wider malaise. There appears to have been a shift in India’s cultural and civilizational attitude towards innovation and risk-taking. Given this cultural shift, Indian merchants became increasingly shore-based, while shipping passed mostly into the hands of Arabs.
- ▶ Zheng He was an unlikely admiral for the Chinese fleet. He was a Muslim eunuch from land-locked Yunnan who had been brought as a boy prisoner to the Ming court and castrated. Yet, he led seven major naval expeditions between 1405 and 1433 that visited South-East Asia, India, Sri Lanka, Arabia and East Africa. The ‘treasure fleets’ were of an astonishing scale, with over hundred ships and tens of thousands of men. Chinese naval technology at this stage was centuries ahead of the rest of the world.
- ▶ It is even possible that the Chinese wanted to diminish the outside risk of an Indian revival reexerting its influence on the region. The Chinese of this period were very conscious of themselves as a civilizational nation and wanted to establish themselves as the civilizational top dog. In any event, the Chinese strategy set in motion the steady Islamization of South East Asia.
- ▶ The Chinese domination of the seas, however, came to an abrupt end. The mandarins decided that the voyages were not worth the expense. The treasure fleets were allowed to rot and their records suppressed. Like India, China turned inward and slipped into centuries of decline. Technological superiority could not save China from the closing of the mind. For a while, it seemed that the Indian Ocean would revert to the Arabs but that was not to be. In December 1497, a small Portuguese fleet rounded the Cape of Good Hope and sailed boldly into the Indian Ocean.

# 6. THE MAPPING OF INDIA

## ■ Summary

- ▶ Maps were a very important military weapon (and remain so today). One can almost trace the ascendancy of a particular European power by the relative quality of its maps. The Marathas were the only Indian power who developed some cartographic ability. Although their maps are not as rigorous as their European counterparts, they were complemented by an intuitive knowledge of the terrain. Meanwhile, the French and British cartographers replaced the Dutch at the cutting-edge of mapping.

## ■ French Contribution:

- ▶ At first, it was the French who held the advantage, both on the ground as well as in the quality of their maps. By the early 18th century, they had a well-established network of enclaves on the Indian coast. The most important were Pondicherry, just south of Madras and the ancient submerged port of Mahabalipuram. There were smaller outposts like Mahé on the Kerala coast, Yanam on the Andhra coast and Chandannagar on the Hooghly channel of the Ganga, just north of the English settlement at Calcutta. Mirroring the strategic advantage of the French, their maps of India are also superior to those of their rivals. Arguably the best of the French cartographers was D’Anville. He never visited India but appears to have collected the best available information from his Paris home. Cartographic historian Susan Gole has called him the first scientific map-maker. Unlike his predecessors, he strictly focused on geographical accuracy and refrained from eye-catching embellishments.

## ■ British Contribution:

- ▶ The British, meanwhile, were only marginally behind. The first half of the eighteenth century saw a series of British mapmakers—Herman Moll, John Thornton and Thomas Jefferys. Their records show that they keenly kept abreast of the latest French maps. There are also detailed local maps of specific ports and military installations. One of the most interesting is an English map of Maratha admiral Kanoji Angre’s sea fort. From its fortified base at Vijaydurg, the Maratha navy harassed European shipping up and down the Konkan coast for several decades. Angre also defeated the Abyssinian pirates, the Sidis, but was unable to evict them from their base at Murud-Janjira.

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# 7. TRIGONOMETRY AND STEAM

## ■ Summary:

- ▶ The Portuguese first arrived in Bengal in 1530. They set up trading posts at Chittagong in the east and Satgaon in the west. Over time, the river near Satgaon silted up and the river port of Hooghly became the main trading hub. The port was on the Bhagirathi distributary of the Ganga—although we now usually call it the Hooghly after the old port town. By the seventeenth century, other Europeans had also set up trading posts along the river—the French at Chandannagar, the Danes at Srirampur and the Dutch at Chinsurah. The English East India Company initially had its local headquarters at Hooghly.

## ■ The Building of Calcutta

- ▶ On 24 August 1690, Job Charnock landed at a village called Sutanuti on the east bank of the river. He had already visited the spot during the retreat two years earlier and had obviously liked it. So he decided to build the new English trading post here. It would grow into the city of Calcutta, now renamed Kolkata. This was not an uninhabited landscape. There were three villages in the area—Sutanuti, Gobindapore and Kalikata. The city's name is derived from that of the last village.
- ▶ Job Charnock probably chose this site from a standpoint of defensibility. The river ran along the west of the site while there were marshy salt lakes to the east. To the south there were dense, tiger-infested jungles, while to the north there was a creek that ran from the river to the salt lakes and was navigable by large boats. Many of these features are still discernible. The creek has long since silted up but is remembered in place-names like Creek Row and Creek Lane. The eastward suburban extensions of the 1970s, officially called Bidhannagar, are commonly called Salt Lake, recalling the marshlands. A few of the lakes still exist as the East Kolkata Wetlands that provide the city with a unique natural sewage recycling system that is now protected under the Ramsar Convention.
- ▶ Most of the early British settlement was built around a preexisting water tank called Lal Dighi that had been excavated by the Bengali merchant Lal Mohan Sett. The name Lal Dighi literally means Red Pond; there is a story that it gets its name from the colours used by the locals during the festival of Dol (or Holi). The waterbody still exists and stands in the middle of the business district. Soon, the British had built a number of substantial buildings around Lal Dighi, including a fort that they named Fort William. It stood on the site now occupied by the General Post Office and should not be confused with the later Fort William that we see today.
- ▶ Calcutta continued to grow. A map from 1757 shows that the British had built a fortified trench called the Maratha Ditch all around Calcutta to defend it from attacks by Indian rulers.

## ■ The Great Indian Arc of the Meridian

- ▶ As the British became more entrenched in India, they quickly discovered the need for good maps of the country's interior to help with administration, revenue collection and military movements. Till the mid-seventeenth century, European mapping had been concentrated on the coastline but now the interiors had to be systematically charted too. The key survey tool was the perambulator—essentially a large wheel set up to allow the measurement of distance. East India Company troops would often take a perambulator along on marches and an estimate of distance would be worked out by adjusting for the twists and turns of the road. While this was hardly accurate, it provided readings that were a vast improvement on earlier estimates.

- ▶ With the conquest of Bengal, the British decided to carry out a more scientific survey of their new possessions. In 1765, Robert Clive assigned James Rennell, a young naval officer, the task of making a general survey of Bengal. Rennell took a detachment of sepoys and criss-crossed the countryside for seven years fixing latitudes, plotting productive lands and marking rivers and villages. It was hard and dangerous work. At thirty-five, Rennell returned to England and produced the famous Bengal Atlas. He was hailed as ‘the Father of Indian Geography’.
- ▶ Although it was the best that has been done thus far, Rennell’s work had covered only a small part of the subcontinent. As British conquests expanded, the need for further surveys was felt. The task fell to acerbic genius William Lambton, who had had a long but unremarkable career in India till he was made the Superintendent of the Great Trigonometrical Survey of India.
- ▶ Lambton began by establishing a baseline at sea-level in 1802. He did this just south of Chennai’s famous Marina beach. From a flagpole on the beach, he ascertained the horizontal distance to the grandstand of Madras racecourse. Once he had established this base-line, Lambton set in motion a sequence of triangulation that would crisscross India for the next sixty years, consuming not just his life but that of his successor George Everest. In 1802, the East India Company had expected the work to have finished in five years! It is a testimony to the prestige and usefulness of this project that it was not stopped for six decades, despite the time and resources it would ultimately consume.

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# 8. THE CONTOURS OF MODERN INDIA

## ■ Summary:

- ▶ After centuries of foreign domination, India finally became independent on 15 August 1947. Unfortunately it was not a time of unmitigated celebration. The subcontinent was partitioned at birth into Muslim-dominated Pakistan and Hindu-majority India, which predictably was a very bloody affair. The matter did not end there. Over a third of the country was ruled by local princes who were less than enthusiastic about losing their kingdoms. There were even enclaves still ruled by the French and the Portuguese, leftovers from the age of colonial conquest. Add to this the fact that the long border with China (initially Tibet) was disputed. Thus, the borders of modern India were not established in August 1947, but evolved to their current shape only in the mid-1970s, when Sikkim was incorporated into the Union. The continued disputes with China and Pakistan mean that the contours are still not set in stone.

## ■ The Partition

- ▶ The frictions over dividing government property were minor compared to the real business of dividing territory, particularly the two large provinces of Punjab and Bengal. This job fell to a London barrister, Sir Cyril Radcliffe. He was considered one of the most brilliant lawyers of his time but had had nothing to do with India. His unfamiliarity with India was considered a major advantage as it was felt that this was the only way to ensure impartiality.
- ▶ Given the paucity of time, he had no opportunity to visit the lands that he had to divide. Instead, he had to trace out a boundary line on a Royal Engineers map with merely population statistics and maps for company. The Hindu and Muslim enclaves were haphazardly mixed up. The city of Lahore was split exactly between the Muslim and the Hindu-Sikh populations. Similarly, Amritsar was a holy city for the Sikhs, but was surrounded by Muslimmajority areas. There were other factors to be considered as well.
- ▶ The maps that would decide the fate of millions was delivered to the Viceroy on 13 August, but they were not made public for seventy-two hours. Thus, when India became independent on 15 August, many Indians along the borderlands did not know in which country their homes would fall. The maps were made public a day later and the bloodbath began. Meanwhile, a disenchanted Radcliffe returned to his London chambers. He returned the 2000 pounds that he had received for his services.

## ■ Duels with the Dragon

- ▶ The Sino-Indian border can be divided into two sectors. In the east, it is defined by the McMohan Line which had been agreed upon between the Tibetans and the British as per the Simla Agreement of 1914. It was named after Sir Arthur Henry McMohan who was the chief negotiator for the British side. It generally followed the crest of the Himalayan range eastwards from Tawang near the Bhutan tri-border and defined the northern boundary of the North East Frontier Agency (what we now know as the state of Arunachal Pradesh). An early version of the Line had also been endorsed by a Chinese representative, but the final detailed version was signed only by Tibet and British India.

- ▶ In the middle Himalayas, India and China were separated by three kingdoms—Nepal, Bhutan and Sikkim (the last was then an Indian protectorate). The border resumed in the western Himalayas and ran along what are now the states of Uttarakhand and Himachal Pradesh and finally ran into Ladakh. Here, India had inherited the territorial claims of the former kingdom of Jammu and Kashmir. However, there was uncertainty about a large but uninhabited territory that is now Chinese-controlled Aksai Chin. Nineteenth-century British surveyors had demarcated the border on two separate occasions, using two different natural contours. The first demarcation is called the Johnson Line, drawn in 1865 between Kashmir and Turkestan (this was during the Dungun revolt, when the Chinese were not in control of the area). This line used the Kunlun mountains as the natural boundary which left Aksai Chin within Kashmir.
- ▶ After independence, India's focus remained on Kashmir's western border, leaving the eastern boundary essentially unmarked and unpatrolled. Sino-India relations in the early 1950s were marked by great shows of friendship by Premiers Nehru and Chou En-Lai. It was the age of 'Hindi-Chini Bhai-Bhai' (meaning Indians and Chinese are brothers). It appears that Nehru was led to believe that the Chinese accepted the McMohan Line in the east and that any disagreements over the western border could be ironed out by friendly negotiations. Thus, it came as a shock when it was found in 1957 that, over the previous year, the Chinese had quietly built a highway between Tibet and Xinjiang that went right through Aksai Chin. The Indian government did not even know about such a major project being constructed on territory that it claimed!
- ▶ Matters really heated up from there. An official Chinese magazine published a map in 1958 that showed large parts of Ladakh and the North East Frontier Agency (NEFA) as part of Chinese territory. Nehru wrote angry letters to Chou En-Lai. The Chinese responded that Aksai Chin had always been Chinese territory and that the McMohan Line was not valid as it had been concluded between British imperialists and the Tibet Region of China (implying that a mere province had no business negotiating the national boundary). In the middle of all the letter-writing, in March 1959, the Dalai Lama fled to India via Tawang and was granted asylum.
- ▶ By the time the Dalai Lama arrived in India, there were regular skirmishes between Indian and Chinese border patrols. Alarm bells were going off everywhere. General Thimayya, the army chief, repeatedly requested an equipment upgrade and the redeployment of troops to the China border.
- ▶ When the Chinese launched a full-fledged attack on the night of 19 October, the Indian troops were outgunned, outnumbered and leaderless. The Chinese had attacked Ladakh too, but there the Indian army had fallen back to defensible positions and held their ground. In NEFA, however, they were overrun and the Chinese took control of Tawang on 25 October. Here, they halted their advance to construct supply roads. The Indians should have used the time to build up a more defensible position at Bomdila where it would have been easier to resupply from Assam. When the Chinese restarted their advance on 14 November, they simply went around Sela and cut off the Indian troops from behind. There was a massacre and Bomdila fell soon after. When this news arrived in Assam, there was panic. The town of Tezpur was abandoned and even the inmates of the local mental asylum were let loose.
- ▶ Then, as suddenly as they had come, the Chinese declared a unilateral ceasefire and withdrew roughly to their pre-war position. We still do not know for sure why they came in and why they left. The most likely reason is that winter was fast approaching and supply lines through the Himalayas would have been difficult to sustain. In the end, nature proved a better defender of the Indian Republic than its politicians.

## ■ The Urban Frontier

- ▶ City folk tend to have a view that rural migrants get squeezed out of rural areas by the atrocities of feudal landlords who pitilessly exploit the poor villagers. This is an image that derives from old Hindi films and is completely inaccurate on the ground. In fact, there are few large landholdings left in rural India. The real issue is that property rights are unclear because of a shoddy legal system, incomplete records, disregard for common rights and arbitrary land acquisition (often by the State



using eminent domain powers). Indian farming is hopelessly inefficient and uneconomical. The children of farmers want to opt out. Who are we to stop them? Rural India needs reforms and investment, not subsidies. Meanwhile, urban India needs to prepare for large-scale migration: large cities will grow larger, small towns will grow big and brand new cities will be built.

- ▶ Most people tend to be overwhelmed by the poor living conditions that prevail in Indian slums. The usual reaction is to treat this as a housing problem. Over the decades, we have seen many well meaning slum redevelopment projects that have attempted to resettle slum-dwellers into purpose built housing blocks (often on the outskirts of the city). Yet, almost all these efforts have failed. The problem is that these schemes view slums as a static housing problem whereas slums are really evolving ecosystems that include informal jobs inside the slum, information about jobs outside the slum, social networks, security and so on. Thus, slums play an important role as ‘routers’ in the urbanization process. They absorb poor migrants from the rural hinterland and naturalize them into the urban landscape. In doing so, they provide the urban economy with the armies of blue-collar workers—maids, drivers, factory-workers—who are essential to the functioning of any vibrant city.

### ■ Urban Villages, Slums and the New Middle Class

- ▶ The expansion of cities happens by engulfing the surrounding countryside. In some cases the old villages are swept away. However, in most parts of India, the old villages often survive despite being engulfed by the expanding urban sprawl. Scattered across modern Indian cities, there remain enclaves where the contours of the old villages can be clearly discerned decades after the surrounding farmlands were converted into offices, roads, houses and shops.
- ▶ A few years pass and construction work in that particular area begins to wind down. The construction workers drift away to other sites. New migrants move in—security guards, maids, drivers and other people who work in the newly built urban space. The shops selling construction material and hardware are steadily replaced by shops selling mobile phones, street-food, car-parts and so on. For the first time we see private and, occasionally public, investment in amenities such as common toilets. As the migrants become more permanent, they bring their families in from their ancestral villages. This leads to an interesting supply-side response—the ‘English Medium’ school! In my experience, language is seen by the poor as the single most important tool for social climbing.

### ■ Diaspora—Being Indian in the Twenty-First Century

- ▶ Indians had again begun to travel and migrate abroad during the colonial era. The fortunes of these various diasporas changed with the withdrawal of British rule. In some places like Singapore and Mauritius, the Indian community would thrive. However, in many places, they faced severe persecution. In 1962, the Indian community in Burma was expelled by the dictator Ne Win and its properties were expropriated. A similar fate befell the Gujarati community in Uganda under Idi Amin in 1972. Some of these groups returned to India but others sailed farther afield. The Ugandan Gujaratis, for instance, moved to Britain in large numbers and would become a successful business community.
- ▶ Indians tend to be inordinately proud of the personal achievements of people of Indian origin even if they have had no direct link to the subcontinent. An Indian-origin governor of an American state, a Nobel Prize winner or a CEO of a multinational company can make headlines in Indian newspapers. In other words, both sides share a very palpable sense of shared identity. This is not unique to Indians since the Jewish and Chinese diasporas also share similar sentiments. The point is that India’s civilizational nationhood includes people who are neither citizens nor live on the subcontinent. In recent years, the Indian Republic has tried to deal with this reality by creating, perhaps clumsily, different shades of citizenship in the form of Overseas Citizen of India and Person of Indian Origin. Such has been the journey of the ‘global Indian’: from the docks of Lothal to the boardrooms of London, New York and Singapore.



## ■ Gondwana to Gurgaon

- ▶ The journey from Gondwana to Gurgaon has been a long one. In this book, I have hopefully given the reader a sense of the twists and turns, the abrupt shifts as well as the surprising continuities. It is remarkable how the artifacts of this long history sit juxtaposed and piled up next to each other. The brand new city of Gurgaon, for instance, is being constructed right next to the Aravalli ridges, the oldest discernible geological feature on this planet. If you look north from one of Gurgaon's tall office blocks, you will see the Qutub Minar, built by a Turkish slave-general to commemorate the conquest of Delhi. Just below the medieval tower, globalized Indians enjoy Thai and Italian food at the expensive restaurants of Mehrauli, an urban village that is steadily gentrifying. Metro trains slither nearby on their elevated tracks.
- ▶ The history of India's geography and civilization reminds us of the insignificance of each generation in the vastness of time. The greatest of India's monarchs and thinkers too felt it. So they left behind their stories and thoughts in ballads, folk-tales, epics and inscriptions. Even if these memories are not always literally true, what matters is that they carry on the essence of India's civilization. On the island of Mauritius, descendants of Indian immigrants have transferred their memories of the river Ganga to a lake, Ganga Talao, that they now hold as sacred. A very long time ago, their distant ancestors would have similarly transferred the memory of the Saraswati to the Ganga. Geography is not just about the physical terrain, but also about the meaning that we attribute to it. Thus, the Saraswati flows, invisibly, at Allahabad.

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