
From the Mediterranean to the Indian Ocean: Medieval History in Geographic Perspective

Author(s): Andre Wink

Source: *Comparative Studies in Society and History*, Vol. 44, No. 3 (Jul., 2002), pp. 416-445

Published by: Cambridge University Press

Stable URL: <http://www.jstor.org/stable/3879375>

Accessed: 03/06/2009 16:32

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=cup>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.



Cambridge University Press is collaborating with JSTOR to digitize, preserve and extend access to *Comparative Studies in Society and History*.

From the Mediterranean to the Indian Ocean: Medieval History in Geographic Perspective

ANDRÉ WINK

University of Wisconsin, Madison

It is widely acknowledged that Orientalist notions of political economy were marred by geographic determinism. From Marx to Wittfogel, generic concepts such as the “Asiatic mode of production,” the “hydraulic state” or “Oriental despotism” involved simplistic observations relating to climate and, particularly, the presence of large rivers and alluvial plains which were invoked to explain essential and persistent differences with the West.¹ Considering its overwhelmingly important role in this earlier literature, it is remarkable that the historical geography of the rivers and riverplains of the Indian Ocean has not yet been explored in any depth. It is perhaps to avoid being stung by charges of determinism that historians of India and the Indian Ocean area in recent decades have, if anything, downplayed the importance of geography. And, as W. A. McDougall has recently argued, it appears as if current thinking in general has become “suspicious of a subject [geography] that emphasizes distinctions among regions, invites unflattering comparisons and hierarchy among nations and cultures, and has been used in the past as an intellectual tool of empire.”² By and large, what K. N. Chaudhuri observed in 1978 still holds true: “There can be few aspects of Indian studies more neglected than that of historical geography.”³ The aim of this essay is to re-introduce a geographic dimension in the history of the Indian Ocean area—one that is not overly deterministic and helps to account not only for continuities but also for changes in social and economic organization over an extended period of time.

RIVERS, PLAINS AND DELTAS

From the point of view of geography—taking our cue from the older literature—the Indian Ocean does provide a sharp contrast to the more familiar

Acknowledgements: Research for this essay was done at the Netherlands Institute for Advanced Study, Wassenaar 1997–1998. The author would like to thank all individuals—too numerous to list—who commented on earlier drafts of this article.

0010-4175/02/416–445 \$9.50 © 2002 Society for Comparative Study of Society and History

world of the Mediterranean. The ancient civilizations of the Mediterranean did not follow the course of big rivers, with the exception of Egypt, which followed the Nile. The Greeks and Romans knew mostly short rivers, along the Tyrrhenian coast up to the Arno, and along the Adriatic.⁴ A typical Mediterranean river is relatively short, suffers from great seasonal variability in its water flow, and is navigable only near its mouth. The one major river in Italy, the Po, whose basin includes the widest and most fertile plain in the Mediterranean, is difficult to navigate because of sandbanks.⁵ The Rhône, rising in the central Alps, is the only major river which has its origin in non-Mediterranean Europe and flows directly into the sea.⁶ Generally speaking, the ancient Mediterranean was vitalized by constant movement along shores and sea-lanes, but not along rivers. It was a milieu of relatively easy sea-borne communications (as described in the early Greek *periploi*) which coexisted with an unusually fragmented topography of the sea's coastlands, peninsulas, and islands.⁷

What is striking in the lands of the Indian Ocean—this too is generally agreed upon—is the great variety and abundance of river landscapes along an immense coastline, running from the Zambezi in East Africa to the Euphrates and the Tigris, to the Indus and its tributaries, the Ganges and the Yamuna, the Brahmaputra, the rivers of the Indian peninsula, and, beyond, to the Irrawaddy, Chao Phraya, Mekong, the Solo, and the Brantas and other rivers in its eastern parts. Even more striking is that many of these rivers are of extraordinary magnitude and reach deeply inland. In sharp contrast to the Mediterranean, most of the civilizations that arose in the Indian Ocean area from protohistoric and ancient times onwards were typically alluvial river-plain and delta civilizations. The Indus or Harappa civilization (fl. 3000–1500 B.C.) exemplifies how in protohistoric times the first urban centers in India, as in Mesopotamia and Egypt, arose on the banks of very large rivers, while the various agricultural and pastoral societies that developed in many parts of the subcontinent in post-Harappa times were also essentially based on rivers.

From these early beginnings onwards, rivers remained of the utmost importance in India and throughout the Indian Ocean for agricultural development and irrigation. The seed-yield ratios of these river basins were far higher than those of medieval European soils, allowing for much higher population densities, and providing an environment which was utterly unlike that of the marginal Mediterranean lands.⁸ Rivers were also important because many of them served as communication links and trade routes, and hence to bridge the distance between inland population centers and seaports. Even where rivers were not navigable, as in the Indian peninsula, traffic often followed the course of rivers. Due to the general absence of deep-water harbors in the Indian Ocean, most seaports were located at or near the mouths of rivers or in deltas which provided shelter against the tide and bad weather.⁹

THE 'LOST' CIVILIZATIONS OF THE INDIAN OCEAN:
ENVIRONMENTAL CHANGE, GEOGRAPHY, AND HISTORY

Archaeologists have produced new data on fragments of the Indian Ocean world which survived from very early times. Most significantly perhaps, their efforts have sharpened our awareness of environmental change associated with river instability, soil erosion, earthquakes, and delta formation, and this, in its turn, has led to the realization that India is a land of 'lost' cities and 'lost' rivers, of the violent obliteration of entire civilizations by natural disaster.¹⁰ Much more than anywhere in the temperate zone, geomorphological change appears to have been pervasive in the vast alluvial river lands and deltas all around the Indian Ocean.

For this reason, the historical study of the Indian Ocean is, to a very considerable degree, the study of changing landscapes, and here not only archaeology but also hydrology and geology are indispensable auxiliary sciences. Geomorphological change is in evidence wherever we follow the Indian Ocean coastline, and numerous difficulties are encountered in attempts to merely trace the names of places, of towns, and river estuaries in the amphibious world of the seaboard as well as in the alluvial plains inland. Hence it is not merely the medieval legendary sources that present difficulties for the historian, but even the more recent and prosaic accounts of sea voyages by Portuguese, English, or Dutch merchants.

This can be illustrated when we attempt, for instance, to reconstruct the itinerary of the first Dutch ship in the Persian Gulf (an inner sea of the Indian Ocean) in 1645, from the published journal of its captain, Cornelis Roobacker.¹¹ The Dutch ship can be followed quite easily, until it approaches the Shatt al-'Arab, in southern Iraq, from which point the route becomes unrecognizable. It becomes abundantly clear that this enormous delta has changed tremendously since the seventeenth century. For one thing, since Roobacker's journey the Bahmishir river, which gave access to Basra, has become almost entirely unnavigable. For another, the coastline has moved up no less than ten miles. Areas that Roobacker described as deep sea have become sandbanks, while his sandbanks have become land. And we can extrapolate that transformations on the same order have in fact been going on for millennia. Over the last three millennia alluvial deposition has added more than a hundred miles of land in the area.¹² In even earlier times, the Persian Gulf extended all across what later became Mesopotamia ('the land between the rivers'), and now consists entirely of alluvial river deposits.

The silting-up of the deep-water channels of rivers and the retreat of the sea was one form of environmental change affecting the historical development of Indian Ocean civilizations throughout history. Of even more pervasive impact was the general instability of rivers everywhere, particularly because the changes resulting from river shifts were often abrupt. River instability and hy-

drological disorder, of course, are not phenomena unique to the Indian Ocean area, but the enormous digressions that occur here on a regular basis have no equivalent in the Mediterranean,¹³ or even in the Netherlands (where, in any case, the rivers have been tamed by dikes). It is well known that the hydrographic map of the alluvial plains of North India has changed dramatically. There is not a river in the Indo-Gangetic plains that in historical times has not changed its course a hundred times over, not infrequently with catastrophic consequences. This makes it hard or impossible to identify the sites of numerous places.¹⁴

The causes of such river instability are multiple and show considerable regional variation.¹⁵ Surface erosion is particularly intense in areas of soft alluvium which have alternating wet and dry seasons, areas affected by monsoon rains. Here, alterations in the courses of rivers are the consequence of vast amounts of silt being deposited in their beds and raising them to the level of the surrounding flat countryside. Erosion and the resulting very heavy silt load of rivers in the wet season also gave them a great capacity for rapidly building up deltas, sedimenting the estuaries, and thus blocking harbors. Every large delta of the Indian Ocean shows frequent migration of distributaries, and old channels in various stages of abandonment are found at every river mouth. In Indonesia volcanoes add to the problem, when unconsolidated ash is washed into the rivers and spread out over the estuaries. As a result, the Solo river in Java carries about sixty times as much sediment as the Rhine, although it is 60 percent shorter.¹⁶ The Solo and Tjimanoeck deltas of Java extend outward, into shallow seas, at a rate of 300 feet annually. But even without volcanoes, such rivers as the Mekong and Irrawaddy annually add to their deltas at a rate of 180 feet or more.

North India is well known for its seismic instability, associated with mountain building. This sometimes results in violent earthquakes, of a type that is already reported by Strabo.¹⁷ The alluvial sheet between the Indus and the Ganges river systems is not level and is still subject to earth movements. The Himalayas, and the Siwaliks in front of them, continue to rise and are, at the same time, notorious for violent storms and heavy rainfall. Earthquakes have produced landslides, and extremely severe floods in the spring and monsoon seasons were the result of rivers being blocked by debris swept down from the hills and forming lake reservoirs which ultimately burst. At present, the existence of five million people is threatened by precisely such a situation in the Moergab river in the Pamir mountains. Natural disasters of perhaps comparable magnitude have been recorded, and one terrible flood, connected with disturbances in the mountains in the north, is known to have devastated the Panjab in the early fourteenth century, changing abruptly its entire hydrographic network.¹⁸ In other areas of India, climatic changes probably contributed to changes in the river courses or the extinction of rivers. The Thar desert shows traces of a hydrographic network only recently covered by sand, indicating that the region was formerly less arid.

The instability of rivers, and the resulting changes in plains, coastlines and

deltas, could not fail to have the most profound consequences for human settlement and economic activity, the more so since such environmental change was always inevitable. Navigation had to adapt itself continuously,¹⁹ as did irrigation.²⁰ And archaeological evidence shows numerous remnants of abandoned cities, towns, forts, and villages wherever rivers changed their courses. There is virtually no district on the alluvial plains that does not have mounds that mark places of historical importance. Every deserted river bed meant the disruption of human settlement on some scale. Inevitably, India became a graveyard of cities.

Larger changes, particularly if they were abrupt, could bring disaster to a great city, or the elimination of its water supply, or the loss of strategic or commercial advantages.²¹ Former capital cities and major commercial centers such as Cambay, Kanauj, Ayudhya, Debal, Mansura, Cranganore, Kayal, and Gaur are among the famous casualties on this list.²² A river might also cause the abandonment of a town or city without actually destroying it. A common phenomenon in the floodplains and deltas of the Indian Ocean was that of deserted river branches becoming stagnant and choked with vegetation, and hence infested with malaria, leading to their final abandonment. In the thirteenth century, the beginnings of the declines of Angkor, the great Khmer capital of Cambodia, of Shrivijaya, the capital of Indonesia's first maritime empire, and of Anuradhapura and Polonnaruva, the northern Buddhist capitals of Sri Lanka, were all associated with problems of water management in the wake of military invasion, deforestation, climatic shifts, and the spread of malaria in expanding riverine swamps or stagnant backwaters.²³ In the Ganges delta, the number of cities and even capitals buried in the marshes is simply uncountable. And in Sind, according to Richard Burton, "Deserts spring up, cities, ports and towns fall in the space of time which it takes the Indus to shift its bed for a few miles, or a native prince to remove his capital. Except in a few cases, it is vain to speculate on the topography of the country fifty years ago."²⁴

Indian Ocean civilizations have thus provided fertile ground for the imagination. For example, people with a romantic interest in ruins have long preferred to believe that almost nothing was known about the Khmer monuments. In *Pèlerin d'Angkor*, Pierre Loti wrote: "Here there once were palaces, in which lived those prodigiously luxurious kings, of whom we know nothing, who have passed into oblivion without leaving so much as a name engraved either in stone or in memory."²⁵ The Khmer, according to the French writer, having suddenly appeared from abroad and settled on the banks of the Mekong, disappeared just as mysteriously.

THE HISTORICAL UNITY OF THE INDIAN OCEAN: COASTLINES AND THE CONNECTIONS OF LAND AND SEA

If pervasive environmental change is in evidence back to the furthest reaches of the archaeological record, there are also remarkably stable patterns in the general geography of the Indian Ocean. In particular, the connections of land

and sea, and the degree of importance and accessibility of the hinterlands, although extremely variable in the different geographic subregions, have changed little over time. Here again, rivers and other geographical features were essential. They set the conditions for the unification of the Indian Ocean world in medieval times. This unification was hardly complete, and is perhaps better characterized as a form of regional interrelatedness, one which was often tenuous and open-ended. Its importance can be demonstrated most easily by following the ocean's coastline from west to east.

Africa has always been difficult to penetrate from the Indian Ocean due to the general lack of navigable rivers on the east coast. *Swahili* (Ar. 'coastal') culture was sea-borne and did not spread far into the interior, and this has contributed to the perception that the coast was separated from the interior.²⁶ In the late sixteenth century the Portuguese still had very little idea about the geography of the African interior. Even so, connections existed. Agricultural colonization had proceeded from the coast inwards. The growth of dense populations in the moist and warm regions of the coast, in the Zambezi valley, the lakes area, and in the perennially watered valleys around the great mountains, had been made possible by the introduction of food plants like banana, rice, coconut, the coco-yam, and the Asian yam by Indonesia's 'people of the sea' in the early centuries A.D.²⁷ There was, in fact, a considerable difference between the southern and northern Swahili coasts in terms of the access they provided to the interior of Africa.²⁸ The southern rivers, like the Zambezi and Limpopo (among other, smaller ones), were navigable for a few hundred miles inland. Conditions on the great Zimbabwe plateau, where much gold was produced, were healthier than in the northern wilderness, and this allowed for the rise of large internal political formations, like the Mutapa state, with which the ports interacted.²⁹ Swahili Muslims sometimes did penetrate the south, and they made converts far up the Zambezi valley and onto the Zimbabwe plateau.³⁰ Gold was brought to the Zambezi river ports of Sena and Tete by Shona speakers, or to inland bazaars at Teve, and was there exchanged for goods brought by Muslim (and later Portuguese) traders.³¹ Generally, however, the key elements in the human geography of the Swahili coast have not been rivers, but rather the many bays, inlets, and sounds protected by coral reef, as well as islands and projecting headlands.³² Coastal lowlands, and shallow arms of river deltas which had been previously silted up, were often drowned by the sea, forming shallow straits between islands and between islands and mainland. It is these features that facilitated coastal traffic and gave rise to settlements and settlement clusters, and they intensified the maritime orientation of the coast.

Land-locked Ethiopia has, throughout history, been crucially dependent on the northern *Mareb Mellash* or Eritrea for access to the sea.³³ Overseas interests and the tendency to look towards the contemporary culture of the Hellenized eastern Mediterranean had already shaped some of the institutions of the Aksumite state (c. first to early seventh century), turning it into a 'Black Byzan-

tium.' Ethiopia became Constantinople's trading partner in the Indian Ocean, and was often confused in the sources with India itself.³⁴ Even nowadays access to the sea is an issue over which Ethiopia and Eritrea go to war, and the autobiography of the late emperor Haile Selassie contains a great deal of material relating to this recurrent problem. Over the long term, Ethiopia's history is suspended between a tendency to retreat into its mountain fastnesses, and a need for contact with the outside world through access to the Eritrean sea. The 725 miles of Eritrean coast provided numerous safe anchorages which made an important nexus of commerce for millennia. By the fifteenth century, the ports of Zeila and Berbera were the most important outlets of Ethiopian trade in the Red Sea.³⁵ Ankobar, with Aliu Amba, was at the end of a trade route leading to Zeila, at the very edge of the Ethiopian plateau and nearly 10,000 feet above sea level. About thirty miles to the east was the great mercantile center of Gendevu, where the bales of Indian spices were taken off the camels, which could not climb to the heights.

Further to the north and east on this route along the Indian Ocean's shoreline, the quadrilateral landmass of the *Jazirat al-'Arab* or 'Island of the Arabs'—by which term was meant the Arabian peninsula—was mostly inhabited by scattered nomadic populations who used camels and also horses.³⁶ In some parts of the *Rub'al-Khālī* or 'Empty Quarter' rain may not fall for ten years on end. The southern part of the peninsula, comprising the Yemen and parts of the Hadramaut, was however deeply affected by the monsoon, and in this sense can be said to belong to the world of the Indian Ocean. The Yemen, and Hadramaut and Oman, contain numerous cities, as do a few other places in the Hijaz and the coastal plain of Tihama. But generally the coasts of the Arabian peninsula have no major indentions anywhere. The paucity of shelters for ships here is unparalleled in the Indian Ocean. The one good natural harbor along the southern coast is Aden.

The only serious alternative to the Red Sea, therefore, was the spice route which ran through the Persian Gulf and then followed the great rivers of Mesopotamia, to split at Mosul either in the direction of Aleppo to reach the Mediterranean, or going northward to Trebizond on the Black Sea. Important caravan routes at one time also branched off towards Palmyra, one of the greatest commercial sites of late antiquity, deriving most of its wealth from the India trade. The rivers of Mesopotamia, too, despite their tendency to change their beds, provided the homeland of some of the earliest, if not the earliest literate civilizations in the world. Along the Indian Ocean routes they maintained early links with the Indus Valley civilization, which was also urban and literate, and similarly founded on river irrigation, already a thousand miles inland. Between Mesopotamia and the Indus plains, the Persian plateau lacked great rivers. Here, agriculture was dependent on a system of underground water channels known as *qanāts* and remained precarious, while traffic depended on caravan routes rather than waterways.

The Indus itself is a great trans-Himalayan river, and with its eighteen hundred miles one of the longest in the world, navigable in one way or another up to the foothills.³⁷ Its annual flow is twice that of the Nile and three times that of the Tigris and Euphrates combined. Its drainage basin includes the region of the Panjab or 'five-river' land, where it is joined by the Jhelum, Chenab, Ravi, Sutlej, and Beas; but it also passes for hundreds of miles through the rainless country of Sind without tributaries, steadily losing water in a Nilotic landscape. The most pronounced environmental phenomenon throughout its recorded history has been the westering of the Indus and all of the Panjab tributaries.³⁸ A great part of the delta south of Thatta has been formed relatively recently, after the mid-fourteenth century. But inland navigation has adjusted and was never interrupted.

The Panjab was connected to the Doab or 'two-river' land of the Ganges and its tributary the Yamuna by land routes, but the land routes are short by comparison with the river routes. Physiographically, the Gangetic plain resembles the Lombardy plain and Mesopotamia, but it dwarfs them.³⁹ On a rough estimate, the Ganges and its tributaries nowadays affect the lives of more than five hundred million people. Between its source in the Himalayas and the Bay of Bengal it has a length of more than fifteen hundred miles and flows through one of the most fertile areas of the world, draining about a quarter of the South Asian subcontinent. The Gangetic plain has been the heartland of successive Indian civilizations, from the period of the early Buddhist kingdoms in the centuries B.C. to that of the imperial Mughals in the early modern era. In the delta, the area now constituting Bangla Desh and a wedge of eastern India, the Ganges is joined by another major trans-Himalayan river, the Brahmaputra. The vast cascade of water coming down from these two rivers has never had a permanent path to the ocean. Rather, its numerous shifting channels have incessantly created and destroyed islands on which, over the centuries, millions of Bengalis have attempted to live.⁴⁰ Navigation was of paramount significance in the Gangetic plains generally, but in the delta there often were virtually no other routes of communication. While the delta, with its shifting islands became an exceptionally fertile rural area in the medieval period, it continued to be plagued by recurrent catastrophes, including river floods which could inundate up to half of the country, and sometimes invasions by the sea. Even in very recent times, the Brahmaputra is known to have claimed forever ten square miles of land in a single night. Between the twelfth and the sixteenth century the entire Bengal river system underwent profound modifications, including a gradual shift eastwards which brought an intensification of wet-rice cultivation and the expansion of a society of Muslim peasants in its wake.⁴¹ More land is now under padi in the Gangetic plain than in the whole of China. The coast itself has again advanced considerably since the sixteenth century, and the archaeological remains of all the ports mentioned in early Portuguese accounts are today much farther from the open sea than they were then. The flight of the river east-

wards left many lost rivers in the moribund delta while at the same time vast new areas were made inhabitable.

The enormous triangle of land which the Indian peninsula projects into the ocean has given it a privileged position in maritime life. But rivers of the peninsula, while important in many places for agriculture and generally as sources of water, are rarely navigable, severely limiting inland river traffic.⁴² The rivers Chambal, Narmada, and Tapti provided Malwa with an extensive agricultural basis, and in the Deccan and the south such rivers as the Godavari, Krishna, and Kaveri have also been exploited by large-scale agricultural communities from early times. Combining influences of land and sea, and using river estuaries, the situation in the peninsula favored an exceptionally large coastal trade. Such coastal trade, in terms of total tonnage and numbers of boats involved, has probably always been more important than long-distance navigation.⁴³ In the past the small vessels used in this trade needed only the most rudimentary shelter, and they could be pulled onto the beach. To accommodate such traffic there was an almost infinite number of minuscule anchoring points and maritime establishments on India's peninsular coasts, either on the seaboard itself or in small bays and inlets, at the mouths of rivers and in lagunas. The great historical ports, like Calicut in Malabar, or Cambay and Surat in Gujarat, receiving the traffic from distant parts of the Indian Ocean, were invariably at the mouths of rivers. But since these rivers were not navigable for any long distance inland, trade in these ports was dependent on caravan traffic through the arid and semi-arid parts of the subcontinent, especially on India's west coast, in Gujarat and the Deccan.

The eastern parts of the Indian Ocean, from the Bay of Bengal to the Java Sea and the South China Sea, can again be characterized as an environment of rivers, alluvial plains, deltas, and sea-arms with a decisive influence on the patterns of settlement and the formation of states generally. However, the plains of the Irrawaddy, Chao Phraya, and the Mekong, and the entire Malay-Indonesian archipelago, until recently were a region of remarkably low population density, not exceeding ten million in 1800 even if we include their hilly terrain and highlands.⁴⁴ Malaya had about a quarter of a million people; Java perhaps four million, and Burma (Myanmar) less than two million.⁴⁵ In the medieval period these figures must have been considerably lower still, and would have represented no more than a fraction—perhaps between 5 and 20 percent of the South Asian population figures. Typically, all land masses from which the rivers have emptied out on the Sunda Platform are fringed with huge, flat marshlands, and every delta in this area shows evidence of frequent migrations of rivers and river bed sedimentation in the lower reaches, with shifting patterns of irrigation and low population figures until as late as the turn of the nineteenth century. The Tonle Sap alluvial plain and lake in Cambodia are the result of Mekong sedimentation in more distant times. Here a shallow arm of the sea was turned into a plain and swamp as the lower Mekong built up

mudflats. Curiously, the Tonle Sap lake still contains fish that are adaptations of marine species.⁴⁶

Settlement and the formation of states on the mainland followed the major north-south river corridors which facilitated agricultural expansion and gave access to the Indian Ocean.⁴⁷ States were consolidated in the basins of the Irrawaddy in Burma, the Chao Phraya in Thailand, the Tonle Sap in Cambodia, and the Song-koi in north and central Vietnam. In the western and central mainland, the invaders who developed these states came from the arid and inhospitable north, from areas which suffered from unreliable rainfall, not from the sea or the as yet undeveloped southern deltas. Thus the Burmans, who entered the central Irrawaddy plain by the ninth century, brought along agricultural conceptions of a dry rather than a wet environment.⁴⁸ By the fourteenth century the first state embracing the Irrawaddy basin and the adjacent Shan plateau emerged, and by the fifteenth century we witness the rise to dominance of the Mon coastal ports in Pegu, Bassein, Syriam, and Martaban.⁴⁹

Similarly, the ancestors of the Thai began to disperse in the centuries after 1000 A.D., moving from their barren northern homelands into areas as far west as Assam and as far south as modern Thailand.⁵⁰ The great Thai achievement was the settlement of the Chao Phraya valley and delta. Superseding Angkor in Cambodia, two major Thai states established themselves in the thirteenth and fourteenth centuries: Sukhothai and Chiangmai. With sea-borne commerce with China and Indonesia expanding, by the fifteenth century power shifted to trade-based cities. Hence the new capital of Ayudhya emerged at exactly the point in the river at which ocean-going ships give way to river traffic.⁵¹ In Cambodia, from the fifteenth century onwards, Pnom Penh was similarly located at a point which could still be reached by ocean-going ships, at the junction of the Tonle Sap and Mekong.

The Indonesian archipelago, with a length of over two thousand miles, is the only large-scale equatorial environment which is easily accessible through stretches of sea.⁵² It also has sheltered lagoons behind the coasts, and rivers that serve as trade arteries running through forests and swamps. People from India, China, Arabia, Iran, and later Europe, have used these waterways for centuries. The islands, however, all followed to a large extent their own historical trajectories, depending in part on the accessibility of their interiors. Here Java was the most densely inhabited island and the cultural and political focus of much of the archipelago. Here political power was centered around the productive riverine and volcanic zones, or in the amphibious coastal fringes at the mouths of navigable rivers, the most important of which were the Solo and the Brantas, both penetrating deeply into the interior. Malacca, the most significant medieval port in the eastern Indian Ocean, was situated on an estuary on the west coast of the Malay peninsula and had all the characteristics of an entrepôt, virtually lacking a hinterland of its own. It was eventually rendered inaccessible by silting. 'Outer islands' like Irian Jaya or Kalimantan were covered by dense

forests, and here too coastal people were often relatively isolated from the interior, resembling parts of the east coast of Africa. Even Sumatra (the name of which derives from Sanskrit *Samudra*, 'ocean') combined a cosmopolitan, coastal civilization with ties to India, China, and Arabia, with an inland culture that was invariably described as 'savage' and as the domain of 'naked cannibals' by early Muslim and European authors alike.⁵³ In Sumatra too, river states, at Palembang, Jambi, Indragiri, and Siak, centered on transshipment points of ocean-going and river craft.⁵⁴ The least populated zone of Sumatra, occupying about half of the island, has been a coastal marsh produced by prolonged sedimentation of tropical rivers flowing eastward from the Barisan mountains into the shallow sea of the Strait of Malacca. Such sedimentation was aided by volcanic eruption in inner Sumatra in medieval times, as well as by forest cutting, heavy rainfall, and tectonic movement. The eastern flatlands are even now frequently inundated by tides. Very rapid changes in the coastline probably caused the decline of large kingdoms in eastern Sumatra in the first millennium. Sumatran folklore, in any case, is full of legends of coastal change.

MEDIEVAL CITIES

A major new study of Mediterranean history by Peregrine Horden and Nicholas Purcell, *The Corrupting Sea*, concludes that "the Mediterranean has probably been the most durably and densely urbanized region in world history."⁵⁵ Cities like Athens, Rome, Alexandria, Antioch, Constantinople, Marseille, Cordoba, Barcelona, Pisa, Florence, Venice, and a long list of others have been prominent centers of power and civilization, determining the fortunes of Mediterranean people over many centuries and indeed, in some cases, millennia.⁵⁶ Correspondingly, there is a long tradition of Mediterranean historiography that has privileged towns and cities. This tradition runs from H. Pirenne's *Medieval Cities*⁵⁷ to M. Rostovtzeff's *The Social and Economic History of the Roman Empire*⁵⁸ and *The Social and Economic History of the Hellenistic World*,⁵⁹ to S. D. Goitein's *A Mediterranean Society*,⁶⁰ to F. Braudel's *The Mediterranean and the Mediterranean World in the Age of Philip II*.⁶¹ It is a tradition that tallies with the much broader current of social and economic thought—represented by, among others, Adam Smith, Karl Marx, and Max Weber—which has elevated towns and cities generally into a highly distinctive and supremely significant category.⁶² In Braudel's words, cities were "electric transformers," "watersheds of human history," and the conviction has been widely shared that they have been the "driving force in not only the industrial, but also the preindustrial world economy."⁶³ In all cases, cities have been considered significant as a historical category precisely because they are set apart from the countryside.⁶⁴ In the context of the historiography of the medieval Mediterranean and medieval Europe, the role of cities has, inevitably, been linked to the historiography of capitalism, industrialization, and modernity, as also to the debates about the uniqueness of the European development. Debates about the distinc-

tiveness of Mediterranean and European cities revolved around the extent to which such cities were 'islands in a feudal sea' and 'autonomous communities.' In America, urban studies took Chicago as the paragon city, and here rural-urban polarity was emphasized to an extreme degree;⁶⁵ the city was seen as an enclave on the frontier, staking out extensive commercial claims over huge hinterlands in the drive to the West.⁶⁶

But cracks have appeared in the very definition of the city as an historical category.⁶⁷ Attempts to define urban centers by size or on the basis of crude demographic criteria (e.g., ten thousand people or more) are no longer convincing.⁶⁸ Nor, it seems, can any particular political, legal, social, or architectural criteria be deployed to establish unambiguously what makes an urban settlement not merely quantitatively but qualitatively different from other types of settlement.⁶⁹ The preceding observations on the instability of rivers, changing coastlines, and the pervasiveness of environmental change in the Indian Ocean area have already made it apparent that cities were much less durable here than in the Mediterranean, and that traditions of urbanism were less continuous.⁷⁰ A starting point for the renewed study of Indian urbanism must be a clear understanding that cities and towns, like all settlements, are physically vulnerable to hydrological instability and other geophysical factors. Recognition of this basic fact will help steer us clear of at least some of the faulty decline theories that have plagued Indian history for so long. It may also help us to explain the more or less constant re-alignments of urban patterns observable throughout the Indian Ocean over time. The instability of urban centers has meant innumerable urban sites but hardly any of the great cities like those in the Mediterranean, which go back to an ancient past. Indian urbanism was labile, and followed a paradigm already established in pre-historic Harappa and Mohenjodaro, the first urban civilization of the Indus and the 'lost' Saraswati river.

Exceptions to this paradigm did occur, but they were not common. One that comes to mind is the sacred city of Varanasi, with its magnificent river-front display of temples and stone steps.⁷¹ Here we do have a city with ancient origins, a vestige of Hindu urbanism that by the seventeenth century could still be described as "a large and very well-built town, the majority of the houses being of brick and cut stone, and more lofty than those of other towns of India . . ." ⁷² But the continued existence from ancient times of Varanasi reflects an exceptional situation: it stands on a riverbank which is made of beds of *kankar* or hard clay.⁷³ *Kankar* is an impure limestone, the nearest approach to rock, found in nodules in the older alluvium of the Indo-Gangetic plains, an area normally made of much softer material. *Kankar* is relatively resistant to erosion and this accounts for the longevity of Varanasi (and also of Patna and Mathura).

Geophysical factors probably explain other important aspects of historical Indian cities, such as why cities were often paid little attention, and why they were mostly casually built from perishable materials. We find residential parts

made of mud and bamboo or wood, with stone or brick used exclusively for fortress walls, temples, mosques, palaces, and mansions for nobles and rich merchants. Medieval accounts present most Indian cities as hugely extended villages. The settled riverplains of the Indian Ocean must have provided an overwhelmingly rural spectacle, even where settlements were large. Agrotowns and 'semi-rural cities' (Weber's *Ackerbürgerstädte*) existed in the Mediterranean too,⁷⁴ and an 'agricultural' sector was present within Mediterranean settlements of every type and size: large open spaces of uncultivated or agricultural land and orchards could be found in even the largest and most crowded of Mediterranean cities, including Rome, Milan, and Cairo.⁷⁵ Here too, extensive suburbs and extra-mural sprawl often made the transition from city to countryside a gradual one.⁷⁶ But in the lands of the Indian Ocean 'agrarian cities' and 'rurban' settlements of all sizes were the general rule throughout the medieval period.⁷⁷

The Khmer city of Angkor, for instance, was at the core of a group of buildings which left ruins over an area of approximately twenty by fourteen miles, constituting the most important Indianized site of Cambodia.⁷⁸ Angkor was the residence of a king with an administration and an army, and it was a commercial and even a spiritual center; but it was more an agrarian than an urban agglomeration, consisting of a grandiose but precarious collection of hydraulic works and canals which facilitated the cultivation of ricelands inside the 'city,' as well as for miles around.⁷⁹ It was the focal point of an agricultural economy in which the use of money appears to have been minimized, and in its sacred geography it accommodated a hierarchical society in which the Buddhist and Hindu clergy occupied a privileged position—hence the site is strewn with the remnants of temples as well.⁸⁰ In the same broad region, sites contemporary with Angkor, such as Pagan, Sukhothai, and Majapahit, while less studied, appear to show similar patterns, as do places like Amarapura, Mandalay, Kartasura, Surakarta, and Yogyakarta, well after the fifteenth century.⁸¹ Mercantile centers that arose in the Malay-Indonesian archipelago from the thirteenth and particularly the fifteenth century, like Malacca, were usually sited at river mouths and consisted essentially of unwalled aggregates of villages, the houses of which might be rebuilt in a few days if necessary.⁸² These centers could be quite large even by European or Chinese standards, and their residents were cosmopolitan in culture and familiar with the use of money, but to visitors from outside they often did not look like cities at all. Even these commercial centers had the appearance of agrarian settlements. Visitors from Europe and China were struck by their greenness, the rural pattern of city life, and the virtual non-existence of a boundary between city and countryside.⁸³ Manpower and fruit-trees were the main assets of such cities.⁸⁴

In the Indian subcontinent very similar observations have been made almost everywhere until recent times. It should be emphasized that the vast majority of the now 'lost' cities of India have not yet been the object of much study. But

the evidence is overwhelming that most Indian cities, especially those of the northern riverplains, were sprawling agrarian agglomerations which were both amorphous and ephemeral. This is how Babur (1483–1530), the founder of the Mughal empire, described what he found in Hindustan:

The cities and provinces of Hindustan are all unpleasant. All cities, all locales are alike. The gardens have no walls, and most places are flat as boards. . . . In Hindustan the destruction and building of villages and hamlets, even of cities, can be accomplished in an instant. Such large cities in which people have lived for years, if they are going to be abandoned, can be left in a day, even half a day, so that no sign or trace remains. . . . There is no limit to the people. . . . There is no making of houses or raising of walls. They simply make huts from the plentiful straw and innumerable trees, and instantly a village or city is born.⁸⁵

Francois Bernier, in the mid-seventeenth century, writes that Delhi, “the capital of Hindoustan,” was “not destitute of handsome buildings” but consisted very largely of “thatched cottages” and, he adds, “it is because of these wretched mud and thatch houses that I always represent to myself Delhi as a collection of many villages, or as a military encampment with a few more conveniences than are usually found in such places.”⁸⁶ Only slightly later, Jean-Baptiste Tavernier wrote of Delhi as “a large town” but broken down since the court had moved to Shahjahanabad, and he observed that even the remaining nobles now lived in tents: “There are narrow streets and houses of bamboo as in all India, and only three or four nobles of the court reside at Delhi, in large enclosures, in which they have their tents pitched.”⁸⁷

The same writer made compelling observations about other Indian cities. He describes how the governor of Dhaka [Dacca] also used to live in tents: “Dacca . . . is a large town . . . Its length exceeds two coss; and from the last brick bridge, which I have mentioned above, up to Dacca, there is a succession of houses . . . These houses are, properly speaking, only miserable huts made of bamboo, and mud which is spread over them. Those of Dacca are scarcely better built, and that which is the residence of the Governor is an enclosure of high walls, in the middle of which is a poor house merely built of wood. He ordinarily resides under tents, which he pitches in a large court in this enclosure.”⁸⁸ Burhanpur, a provincial capital in the northern Deccan, was “a large, much ruined town, the houses of which are for the most part thatched.”⁸⁹ Sironj was “a large town, of which the majority of the inhabitants are Banian merchants and artisans, who have dwelt there from father to son, which is the reason why it contains some houses of stone and brick.”⁹⁰ Patna was “one of the largest towns in India, and is situated on the margin of the Ganges, on its western side, and is not less than two coss in length. The houses are not better than those in the majority of the other towns of India, and they are nearly all roofed with thatch or bamboo.”⁹¹ Masulipatam “is a straggling town (village), the houses in which are built of wood, and stand detached from one another.”⁹² Of the famous trading port of Surat, Tavernier says that “the walls of the city are built of earth, and

the houses of private persons are like barns, being constructed of nothing but reeds, covered with cow dung mixed with clay, to fill the interstices, and to prevent those outside from seeing between the reeds what goes on inside. In the whole of Surat there are only nine or ten well-built houses, and the Shahbandar or chief of the merchants, owns two or three of them."⁹³

Tavernier describes Agra as "the largest town in India" and a beautiful city; but even so, the same city had, in the estimate of Bernier "the appearance of a country town, especially when viewed from an eminence."⁹⁴ Building styles in Agra were clearly mixed. We learn that "the palaces and gardens take up the greatest part of it . . . [but] the ordinary houses are low, and those of the commoner sort of people are but straw, containing but few people apiece."⁹⁵ There were over eight hundred baths in Agra, and many mosques, caravanserais, and other tombs.⁹⁶ Nonetheless, Bernier elaborates: "The prospect it presents is rural, varied, and agreeable; for the grandees having made it a point to plant trees in their gardens and courts for the sake of shade, the mansions of Omrahs, Rajas, and others are all interspersed with luxuriant and green foliage, in the midst of which the lofty stone houses of Banyanes or Gentile merchants have the appearance of old castles buried in forests."⁹⁷ Spacious houses, as in Agra, that were exposed on all sides to the wind, were attractive, although they had to be concealed by high walls in order to prevent the women from being seen.⁹⁸ The thatched cottages of the ordinary people may have been well-suited to the hot climate, and they could be easily built and rebuilt, but their presence made Indian cities subject to frequent conflagrations.⁹⁹

The instability of Indian cities was enhanced by volatile demographic factors: sharp seasonal fluctuations of the number of their inhabitants, the general mobility of large numbers of people, the long tradition of internal migration caused by famines, epidemics and droughts, as well as the general volatility of Indian political life.¹⁰⁰ It was hard to tell how many people lived in Surat, says Thevenot, because of the seasons; there were many all year round, but in the monsoon time, from January to April (when ships could come and go) there were so many that lodgings could hardly be obtained and all the suburbs were full.¹⁰¹ Highly peripatetic political elites were instrumental in creating new towns and cities. If there were about 250 urban or 'rurban' localities in the sixteenth- and seventeenth-century Mughal empire, many of these centers were founded on the initiative of local political rulers, either in Mughal times or in the not-so-distant past.¹⁰² Some of the major cities were virtually new creations of the Mughal emperors themselves. Thus Agra was "no more but a Bourg which had a little Castle of Earth" before it mushroomed under Akbar (1556–1605).¹⁰³ Lahore was not old, "for before King Humayun [1530–1540; 1555–1556], it was at best a bourg: that king made a city of it, built a castle, and kept his court there, and it increased so in short time, that with the suburbs it made three leagues in length."¹⁰⁴ Even the largest capitals had trouble surviving the frequent relocations of the imperial court. When the fourteenth-century Mo-

roccan traveler Ibn Battuta first saw Delhi, he described it as “the imperial residence of Delhi, capital of the country of India (*qa’ida bilad al-hind*), a very illustrious city, large, combining beauty and power. It is surrounded by a wall which does not have its equal in the universe. It is the greatest of the cities of India (*mudun al-hind*) and even of all the cities of the Islamic East.”¹⁰⁵ Shortly afterwards he observed that Delhi was “entirely abandoned . . . without fire, smoke, or torch . . . immense city that it is . . . it was empty, abandoned and its population completely scattered.”¹⁰⁶ Battuta’s account is perhaps exaggerated, but it does illustrate the devastating consequences of Muhammad bin Tughluq’s decision to relocate his capital in the Deccan, in Daulatabad. Centuries later, the temporary departure of the imperial Mughal court would still have a comparable effect on the city of Delhi. Thevenot reported in 1666 that Delhi “appears to be a desert when the king is absent.”¹⁰⁷

Still in the eighteenth century, French accounts of India emphasize the general lack of monumentality of Indian cities.¹⁰⁸ Louis de Féderbe de Modave, in 1776, observes that “in the cities of India . . . the majority of the houses are merely of earth.”¹⁰⁹ The architectural splendor of the Mughals and other Muslim dynasties, which consisted largely of forts, palaces, mosques, gardens, and mausoleums, offers a stark contrast to the residential mud architecture which served ordinary people. Monumental Muslim architecture, like its Hindu counterparts, however, served dynastic, imperial, and even religious ambitions, but it is not conceptually linked to the city as such. Rare as it is, it could be fitted into any landscape, whether rural or urban.

Dutch and British servants of the East India Companies sometimes blamed the carelessness, inefficiency, and indolence of Indian officials for the neglect of cities. Thus Francisco Pelsaert regarded the port city of Surat, while immensely wealthy and important and the gateway to Mecca, as an underdeveloped city, threatened by fires and by the sedimentation of its harbor which its corrupt officials chose to ignore.¹¹⁰ Surat hardly had any permanent infrastructure, not even a marketplace. It had unpaved streets and there were no substantial public buildings within the precincts of the city.¹¹¹ Even in the seventeenth century it had only the flimsiest defense works, with earthen walls. There was a fortress, but it was a poor one, and no-one thought that a determined invader would be unable to take it.¹¹² In the estimate of Richard Burton, most cities in the area were similarly furnished. Thus Hyderabad, in Sind, “like most native capitals in this part of Asia, consists of a huge mass of huts and houses, bazaars, and mosques, with a fort or citadel of formidable appearance, but of no real value.”¹¹³ All provincial capitals, in fact, lacked an urban regime that could have guaranteed their survival in a time of crisis.

It can be concluded, then, that the city had little or no autonomy in the historical Indian Ocean region. And however one may wish to evaluate the Mediterranean and European city and its historical role, the Indian city as such was certainly not the privileged locus of sustained and cumulative social change.

The medieval chronicles of India preserved a record of events that have occurred in particular cities, but there are no surviving civic records of any nature in any of them. In India, as in all other parts of the Indian Ocean area, we encounter 'labile rurbanism' from the earliest times, a form of city life that was relatively undifferentiated from the agrarian order and precarious in nature. In some places, like in Ethiopia, we even encounter a medieval civilization that was entirely without urbanism of any kind, with elite positions rurally dispersed; the Ethiopians of the state which succeeded Aksum did not have cities or houses at all since they lived in tents and in cottages.¹¹⁴

Cities definitely increased in size and number under Islam in the medieval period, but their character remained the same. By Akbar's time we are presented with long lists of cities and *qasbas* in northern India. The Indo-Islamic cities were the sites of political and military power, apart from being commercial centers.¹¹⁵ Islamic cities and towns proliferated, and sometimes mushroomed, but even though they were the nodal points of conquest and political power, and of commercial life as well, they were essentially not recognized as legal entities in any way, and the inhabitants of cities and towns enjoyed no special privileges.¹¹⁶ In India, Islamic cities always continued to include large numbers of non-Muslims.¹¹⁷ Beyond the construction of mosques and other Islamic buildings in predominantly Hindu cities the ruling elite made no political distinction in the government of city and country.¹¹⁸

FRONTIER AND SETTLED SOCIETY

To find the sources of social change in medieval society is far from easy, particularly because social change and innovation in the medieval context were generally regarded as illegitimate. Rather than being valued as a positive force, it was routinely dismissed as disturbing. The intellectual apparatus for evaluating change by understanding its possibilities and uses was lacking; change meant lawlessness and the only terms in which it could be conceptualized were those of heresy, immorality, sedition and treason.¹¹⁹ Change could only occur surreptitiously, in the margins of the political system and to the extent that the political authorities overlooked or failed to check it.¹²⁰

In a geographic perspective, we associate the sources of social change, above all, with the habitats of the frontier of settled society. The major sources of change affecting the settled agrarian societies of the riverplains and delta lands surrounding the Indian Ocean, therefore, can be found not in urban institutions but in the desert and arid zone, and in the maritime world of the Indian Ocean itself. Medieval Indian history is not the story of how urban life gradually subverted the feudal order, but the story of how the rich production areas of the agricultural riverplains were affected by the movements of nomadic and seafaring people. It is about how people from the desert and the sea increased their hold over settled society, and how they did this by inserting themselves in the interstitial areas of the settled society, or at river outlets and on the littoral.

The resulting medieval synthesis was a fusion of two types of society. One was the society of the frontier, of mobile wealth, of nomadism, of raiding and long distance trade (both overland and maritime), and of precious metals—the essence of mobile wealth. The other was the settled society of the riverplains, characterized by intensive agriculture, high population density, relative immobility, and a failing production of precious metals. The nomadic and maritime worlds were alike in that both fostered movement and change. They generated the forces of rationalization, and of commercialization and monetization. Because of their potential for resource mobilization, both were fields of economic growth. But both were intractably resistant to the medieval principles of political control at work in settled society.

DESERT AND STEPPE

Geographers have long identified a broad swath of territory stretching from Morocco and the Sahara, across Suez, to Saudi Arabia, the Levant and Iran, and on to the steppes and deserts north of China, as the world's largest continuous arid zone.¹²¹ This arid zone includes numerous semi-arid areas where agriculture was practiced, and mountainous zones as well. Large parts of the arid zone, however, have traditionally been areas where pastoral nomadism has predominated, in a variety of forms. These were often areas which could not sustain permanent and intensive agriculture because of poor soils and a lack of irrigation facilities, but did produce good grasslands fit for grazing livestock, camels, or horses.

The transition from the arid zone to the wet lowlands of the rivers of the Indian subcontinent, the fertile Panjab, with its capital at Lahore, is a gradual one. But the change of scenery is dramatic, as anyone who has traveled from Herat, Kandahar, and Kabul to Peshawar and then to Lahore, or alternatively from Zاهدان and Quetta to Lahore, will readily affirm. The Afghan border regions, about a thousand miles long and one hundred miles wide, from Baluchistan to the North-West Frontier Province and the Hindu Kush and Karakorum mountains (which embrace Kashmir) is a deathly landscape of crags and winding canyons which has never been fitted into any settled order. The valleys around Kabul in the southern foothills of the Hindu Kush are agriculturally the most productive region of Afghanistan, while north of the Hindu Kush mountains begin the high, shaved wastes and moonscapes of Central Asia, stretching for thousands of miles up to Siberia.

The arid zone, in fact, extends deeply into the Indian subcontinent.¹²² Geographically, the subcontinent straddles the divide between the arid zone and the humid, equatorial parts of the Indian Ocean where intensive agriculture and dense forests prevailed. The arid and semi-arid extensions into the subcontinent are all areas with something less than three feet of rainfall per year. From the alkaline wastelands of Sind, Rajasthan, and the Thar desert, the arid zone extends into an eastern and a southern direction.¹²³ Eastwards it runs up to the

southern banks of the Ganges near Varanasi; southwards, across the Aravalli mountains into Malwa, then to the lee side of the Western Ghats down to the Deccan plateau, and further into the southeastern direction of Rayalseema and Kurnool and Cudappah, and towards the southwest, the Mysore plateau.¹²⁴

The Indian subcontinent was thus closely linked to the nomadic world of the arid zone as well as the mountainous tribal belt of Afghanistan. This situation ensured that the subcontinent was exposed to the great nomadic movements and tribal migrations which characterize especially the medieval period. Here too, India parts ways with the Mediterranean and with Europe, the latter areas being largely exempt from such movements after the tenth century.¹²⁵ The Indianized mainland of Southeast Asia was, like the subcontinent, exposed to tribal invasions from the north, but to a much lesser degree. The Burman and Thai peoples came from the arid north, and there have been Mongol incursions in the area as well. But the so-called 'dry zone' of Burma is exceptional in Southeast Asia, and with 3.5 feet of rain per year it is still more humid than any part of the arid zone in South Asia. The extensions of the arid zone into the Indian subcontinent—the biggest single landmass in the Indian Ocean—provided historically important corridors for traffic and movement. Like the navigable rivers, they connected the agrarian core areas with each other and with areas beyond, and, running up to the littoral, to the sea-lanes as well. These inner frontier zones were like the maritime frontier in that they were characterized by mobility and openness. Caravans and armies moving from north to south would always follow the nutritious marches and supply lines of the arid zone.¹²⁶ Some of the most important ports of the Indian Ocean were dependent not on river traffic but on caravan traffic through the arid zone; this was particularly so with ports close to Suez—without which the commerce between the Mediterranean and the Indian Ocean would have collapsed. Likewise with ports of the northern Levant and the Persian Gulf like Siraf, Kish, and Hormuz, and also the Indian ports of Cambay and Surat, in Gujarat.¹²⁷ In the Indian subcontinent the arid or semi-arid inner frontier zones were on the interface of agrarian expansion and pastoral nomadism, and hence they were often also the zones of maximum tension and violent conflict, and it was in these interstitial areas that the Islamic conquest states gained their first footholds.

If this fusion occurred in the medieval period, in the later part of the first millennium and the first half of the second millennium A.D., it is because in these centuries the arid zone everywhere gained significantly in importance as a conduit of people and animals, and therefore in political importance. The reasons for this medieval upsurge in power of the arid zone are complex, and to some extent will probably always remain the subject of speculation. But it is likely that these reasons had to do with demographic as well as military factors.¹²⁸ Pastoral-nomadic societies probably had a higher demographic growth rate—due to healthier living conditions and the dispersal of their populations—than the densely packed peasant societies in the humid riverplains. Hence the

paradox is that the poor lands of the arid zone, with their small populations (perhaps a few million in Iran and Central Asia each), were more prone to overpopulation than the agricultural plains of India, which could easily accommodate a hundred million people or more in medieval times. Demographic pressure in the nomadic societies of the arid zone may have provided the drive behind the conquest and migration movements of the medieval period, as they probably had, to a lesser extent, in ancient times. A second factor was that the nomads had access to an unlimited supply of better horses than could ever be obtained in the humid conditions of India. Mounted archery, in combination with changes in military organization, technology, and tactics related to superior mobility, gave medieval nomadic peoples a decisive military advantage over the sedentary ones.

Within the medieval Indian subcontinent, too, the arid zone territories became a major corridor of migration and movement of people.¹²⁹ The Muslim conquests and migrations in these centuries brought the arid zone to the center of developments. At the same time, previously marginal groups living on the frontier of settled society within the subcontinent rose to power. People from the pastoral backwoods emerged under such dynasties as the Yadavas, Hoysalas and Kakatiyas, and under the Vijayanagara kings of the peninsula. From the Turkish- and Afghan-held territories of the north to the deep south, new military, commercial and political networks of unprecedented intensity were brought into play along the frontier of settled society. The new capitals of the first half of the second millennium, including Delhi, Devagiri, Warangal, Dvarasamudram, and then Bijapur, Golkonda, and Vijayanagara, were all located on the fringes of the arid or semi-arid zone, and functioned as major centers for the recruitment of man- and animal-power.¹³⁰ Situated on the interface of the settled world and the world of the marches, the eccentric new capitals could mediate between sedentary investment and the mobilization of the resources of military entrepreneurs, merchants, and pastoralists. These medieval cities were the product of the fusion of the nomadic frontier with settled society; they were 'connectors' rather than 'electric transformers.' They belonged to new, more powerful, horse-riding warrior elites which emerged on the arid peripheries of the old agrarian societies.

In this way, then, geography shaped the contours of medieval government. The rationalization of the fiscal structures of settled society and the expansion of populations came to depend on the measures with which the Islamic rulers, successively, bore down on peasant society. Over time, the mobilization of agrarian resources was vastly enhanced, and trade increased, giving a higher profile to commercial and financial groups.

THE OCEAN AND ITS ISLANDS

Plato could conceive of the sea as "a teacher of vice," and a medieval vision of the Mediterranean by Opicino de Canistris labels it *causa peccati*, "the cause

of sin,” depicting its Levantine end as a devil’s head.¹³¹ In India, too, the sea and the seaboard were places of extraordinary license, and the literary remains of all agrarian civilizations around the Indian Ocean are replete with denunciations of the people who made the sea their domain, just as they abound with denunciations of pastoral nomads.

The seaboard, like the desert, was a place of heresy and sedition. In the *Pra-bodhacandrodaya*, the Jain religion is described as *tāmasika*, the outcome of darkness; and according to the same Sanskrit work, Jainism, together with other ‘heretical’ sects, had secretly retired to countries which were ‘rich in vulgar people,’ by which were meant the arid realm of Rajasthan and Malwa, and more particularly the ‘places on the seashore’ of southeast Gujarat and Saurashtra.¹³² Yajñavalkya emphasizes both the profitability and uncertainty of maritime trade, but the implicit attitude towards the sea among Hindu legal scholars is generally one of fear and distaste.¹³³ Deeply entrenched maritime taboos and *thalassophobia* are in evidence among the caste Hindus of Malabar.¹³⁴ The latter abhorred the meat-eating, liquor-drinking and promiscuous inhabitants of the seaboard, who occupied a place at the very bottom of the caste hierarchy—if they were not downright outcasts—and who were quick to convert to the *mleccha* (‘impure’) religion of Islam.

The medieval centuries that witnessed the rise of pastoral-nomadic power also saw the rise of coastal centers and maritime people—rapidly Islamizing—throughout the Indian Ocean: ports of the Swahili coast of Africa, Hormuz in the Persian Gulf, Cambay, Calicut, Malacca, Ayudhya, Pnom Penh, the coastal city-states of northeast Sumatra, of the Javanese *pasisir* (Gresik, Tuban, Demak, Jakarta, Banten)—all of these, and many others as well, rose to prominence in the first half of the second millennium A.D. Throughout the Indian Ocean this was the beginning of a new age of commerce, a decisive shift of power toward trade-based coastal centers, and an increase in urbanization on the maritime frontier.¹³⁵

These latter cities were close to the sea and, even though they sometimes turned their backs on their own hinterlands, they were open in physical and economic terms, while pluralistic in political terms. They were thus characterized by a high degree of unregulated and even lawless competition. The acceptance of Islam by many of the maritime centers was a continuous process lasting from the medieval period to the present. Islam became the connecting link between the Red Sea and the Persian Gulf and the west coast of India, down to Malabar and Sri Lanka, and hence to the Malay-Indonesian archipelago. The exact significance of the Chinese-Muslim network in the early centuries is not known, but there appears to have been a slow reinforcement of overseas Chinese communities, whose position, especially in the eastern parts of the Indian Ocean, was becoming crucial. Trade with China was much more important than that with the Mediterranean. In the estimate of Marco Polo, “for one shipload of

pepper that goes to Alexandria or elsewhere, destined for Christendom, there come a hundred such, aye and more, to this haven of Zayton [Ch'uan-chou]."¹³⁶ Especially after 1277, when the Mongol emperor Kublai Khan established his power over the coastal provinces of southeastern and southern China, the drain of China's metallic currency towards the Indian Ocean appears to have accelerated.¹³⁷ From the thirteenth century, too, the presence of Chinese mercantile communities is attested in Cambodia, and around 1350 they took part in the founding of the new Thai capital of Ayudhya. Ma Huan in his *Overall Survey of the Ocean's Shores* shows them to have been numerous in the *pasisir* of Java by the beginning of the fifteenth century, and quite committed to Islam.¹³⁸ The Chinese were still present on the Malabar coast in the fifteenth century, but here they would soon disappear, as they did from all parts of the Indian Ocean to the west of Malacca. In the early fifteenth century, the Ming government was still adopting an aggressive overseas policy, and it looked for a while as if China would emerge as the supreme power in the 'Western Ocean.' A series of seven naval expeditions was undertaken, the first in 1405, under the admiralship of the Chinese-Muslim eunuch Chwang Ho, which reached Indonesia, Malacca, Sri Lanka, Calicut, Hormuz, Aden, and Malindi, among other places. But a stream of failures, withdrawals and recessions followed. Overseas expeditions were suspended, and the Chinese ceased to be a major power in the Indian Ocean altogether. Chinese Muslims, however, figured in the spread of Islam in the eastern archipelago, especially in the Sulu area.

People who have been widely referred to as "sea nomads"—Moken, Orang Laut and Sama-Bajau—groups whose mode of adaptation appears to have been unique to the Malay-Indonesian archipelago, were instrumental in the formation of numerous states and statelets, linking together the emerging courts, subsidiary chiefs, and a developing peasantry.¹³⁹ Throughout the area, the sea nomads emerged, together with a variety of related coastal and strand peoples, from a common cultural matrix. Like pastoral nomads and other mobile groups, the sea nomads who propped up the earliest historical states in these eastern extensions of the Indian Ocean seem to have been regarded as semi-pariahs. Even so, like the seafaring people in the Sulu archipelago, the Orang Laut who were concentrated along the southern approaches of the Strait of Malacca were at a major crossroads of maritime commerce. They were active in the primary arena of Malay political history and played centrally important roles in the naval power and communicative links upon which the hegemony of successive Malay states was based, in a zone of otherwise sparse population.

There can hardly be a better illustration of this fact than the account of the role of the Orang Laut—or Orang Selat or "Celates," "People of the Strait," as the Portuguese called them—in the founding by Paramcura of the fourteenth-century entrepôt of Malacca. In Tomé Pires' version: "There lived in Malacca . . . the Celates, who are corsairs in small light craft . . . they are men who go

out pillaging in their boats and fish, and are sometimes on land and sometimes at sea, of whom there are a large number in our time . . . when Paramcura fled from Palembang they followed his company . . . Paramcura's son endeavored with his father to populate Malacca as much as he could . . . People began to come . . . , men such as Celates robbers and also fishermen, in such numbers that three years after his coming Malacca was a place with two thousand inhabitants, and Siam was sending rice there."¹⁴⁰ Malacca rose to such importance that by the early sixteenth century Pires held out that "Whoever is lord of Malacca has his hand on the throat of Venice."¹⁴¹

No clear distinction is made in this and countless similar accounts between 'corsairs,' 'robbers,' 'pirates,' and 'people of the sea' or 'orang laut' generally. Likewise, Joseph Conrad, in *An Outcast of the Islands*, could still describe "a true Orang Laut" as someone "living by rapine and plunder of coasts and ships in his prosperous days; earning his living by honest and irksome toil when the days of adversity were upon him."¹⁴² Such an Orang Laut was Babalatchi, "who hated the white men who interfered with the manly pursuits of throat-cutting, kidnapping, slave-dealing, and fire-raising, that were the only possible occupation for a true man of the sea."¹⁴³ The maritime frontier has continued to be the domain of outlaws until fairly recent times, and in some respects it still is. In the medieval Indian Ocean, pirates were specifically associated with the rough, indented coasts of East Africa, the Persian Gulf, Baluchistan, Cutch and Kathiawar, the Konkan and Malabar, but above all with island archipelagoes, as in many parts of Indonesia. We know that in the western Indian Ocean piracy was already widespread in Roman times, but that it increased in the first half of the second millennium. Arabic sources amply testify to the dangers of pirate fleets, called *bīra*, which swept the Indian seas from Zanzibar to Socotra.¹⁴⁴ According to Marco Polo, Indian pirates brought their plunder to Socotra—on the southern side of the Gulf of Aden—for disposal, and here a market was held where these commodities were brought back into the main currents of Indian Ocean commerce.¹⁴⁵ Similar islands with black markets could be found in most parts of the Indian Ocean where trade was conducted. The *insularity* of islands made them a geographical zone of transition between the settled world and the maritime frontier. In Marco Polo's estimate there were 12,700 islands in the Sea of India; and some of these he describes as "the Flower of the Indies."¹⁴⁶ Taken together, they probably belong more in the frontier than in the settled category, although that would vary with their individual size. In their religious life, the islands and island archipelagoes, while open to influences from the mainland, often retained unorthodox and heretical orientations. For instance, Socotra in the fifteenth century was inhabited by a heretical Christian community, a branch of the Ethiopian church which was eventually obliterated by Islam; but witchcraft and sorcery have long been associated with Socotra in popular belief, and these beliefs survived.¹⁴⁷ Similarly, the Orang Laut of the Riau archipelago have been known as practitioners of black magic, and the greatest fear

of outsiders coming to the islands was that the Orang Laut would bewitch them and induct them into a marriage and a life at sea.¹⁴⁸

Attempts were sometimes made to clean up the islands and rid them of pirates. But piracy remained successful as long as its practitioners had secure bases for their operations and places where they could sell their loot.¹⁴⁹ The history of trade in the Indian Ocean is to a considerable degree the history of trading combined with raiding and freebooting—in this it was like the Mediterranean.¹⁵⁰ Even if the people of the sea were known as ‘robbers,’ raiding and freebooting often appear to have been essential in the militarization of coastal kingdoms. Such activities generally contributed to the commercialization of the Indian Ocean seaboard, to new forms of urbanization, and hence to higher, more complex, and more monetized forms of social and economic organization.

CONCLUSION AND SUMMARY

Geography provides only a blueprint for history and does not, as an earlier Orientalist paradigm proposed, determine it. This essay has been an attempt to show some of the ways in which this blueprint has been important in the history of the Indian Ocean area, and how it made the area different from the Mediterranean and Europe. Thus, the first three sections of the essay focused on the role of rivers, riverplains, and deltas. Rivers are perhaps the most striking feature of the entire geographic region on account of their extraordinary lengths. Alluvial riverplains and deltas provided the agricultural settings for the major Indian Ocean civilizations from early times. Reaching deeply inland, rivers locked land and sea into a highly differentiated but coherent political economy of exchange. A second important feature of rivers in the Indian Ocean area was to be found not in the hydraulic demands they made on the state but in their hydrological instability. Environmental change associated with river instability, soil erosion in alluvial plains, earthquakes, and delta formation, was pervasive. The Indian Ocean was, for this reason, an area of environmentally disrupted human settlement, of ‘lost’ rivers, ‘lost’ civilizations, and ‘lost’ cities. No hydraulic effort on the part of the state could ever change this basic geographic factor. Environmental change was largely beyond the control of man.

Against this backdrop, the fourth section of the essay proposed that Indian Ocean cities were characteristically fragile, lacking in continuity, and relatively undifferentiated from an overwhelmingly agrarian context. ‘Labile rurbanism’ is another fact of historical geography that set the Indian Ocean apart from the Mediterranean and Europe. The city as such was not a transmutative *deus ex machina*, nor the privileged locus of a precocious economic rationality. Instead, as the final three sections argue, some of the major sources of change were to be found not in medieval cities but on the frontier of the settled society of the riverplains: in the deserts and steppes of the arid zone stretching from North Africa to Central Asia and into the Indian subcontinent, and in the maritime world of the Indian Ocean itself.

NOTES

1. See R. Inden, "Orientalist Constructions of India," *Modern Asian Studies* 20,3 (1986):422–23.
2. W. A. McDougall, "You Can't Argue with Geography," essay excerpted from a paper commissioned by the Thomas B. Fordham Foundation as part of the History-Geography Project for publication in the *Middle States Yearbook 2001*. On the neglect of geography, see also E. W. Fox, *History in Geographic Perspective: The Other France* (New York 1971); E. G. Genovese and L. Hochberg, eds., *Geographic Perspectives in History: Essays in Honor of Edward Whiting Fox* (Oxford, and Cambridge, Mass. 1989).
3. K. N. Chaudhuri, "Some Reflections on the Town and the Country in Mughal India," *Modern Asian Studies* 12,1 (1978):77. In two later works, *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750* (Cambridge 1985) and *Asia before Europe: Economy and Civilisation of the Indian Ocean from the Rise of Islam to 1750* (Cambridge 1990), Chaudhuri made some attempts to remedy this situation, but they are faint.
4. See M. Grant and R. Kitzinger, eds., *Civilization of the Ancient Mediterranean: Greece and Rome, Volume I* (New York 1988), pp. 104–6; P. Squatriti, *Water and Society in Early Medieval Italy, A.D. 400–1000* (Cambridge 1998).
5. Grant and Kitzinger, op. cit., pp. 104–5.
6. Ibid., p. 104.
7. See Horden and N. Purcell, *The Corrupting Sea: A Study of Mediterranean History* (Oxford, and Cambridge, Mass. 2000), pp. 5, 30.
8. On the inferior fertility of European soils, see E. L. Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia* (Cambridge 1987), p. 8; on the marginality of the Mediterranean environment, see Horden and Purcell, op. cit., p. 178 ff.
9. See Chaudhuri, *Trade and Civilisation*, pp. 161–62.
10. See for instance V. N. Misra, "Human Adaptations to the Changing Landscape of the Indian Arid Zone During the Quaternary Period," in J. M. Kenoyer, ed., *Old Problems and New Perspectives in the Archaeology of South Asia* (Madison 1989), pp. 3–20.
11. See A. Hotz, "Cornelis Cornelisz Roobacker's Scheepsjournaal Gamron Basra (1645); De Eerste Reis der Nederlanders door de Perzische Golf; Uitgegeven, met Inleiding en Noten," *Tijdschrift van het Koninklijk Aardrijkskundig Genootschap*, Tweede Serie, Deel 24 (1907):289–405.
12. Ibid., p. 342.
13. For environmental mutability in the Mediterranean, see Horden and Purcell, op. cit., esp. p. 61; Squatriti, op. cit., pp. 71–72.
14. See especially H. G. Raverty, *The Mihran of Sind and its Tributaries* (1892) (Lahore 1979 repr.); W. H. Arden Wood, "Rivers and Man in the Indus-Ganges Alluvial Plain," *The Scottish Geographical Magazine* 55 (1924):1–16.
15. See Arden Wood, op. cit., p. 8; J. Deloche, *La Circulation en Inde, Avant la Révolution des Transports, Tome II, La Voie d'Eau* (Paris 1980), p. 11; E.H.G. Dobby, *Southeast Asia* (London 1950), pp. 48–50, 55–56, 383; D. N. Wadia, *Geology of India* (London 1953), pp. 54, 388–89.
16. Dobby, op. cit., pp. 49–50, 55–56, 383.
17. Strabo, *Geography* (Cambridge, Mass. 1949), 15.1.19; Raverty, op. cit., p. 324; Arden Wood, op. cit., p. 2.
18. Arden Wood, op. cit., p. 15.
19. See Deloche, op. cit., p. 14.

20. See M. S. Mate, *A History of Water Management and Hydraulic Technology in India (1500 B.C. to 1800 A.D.)* (Delhi 1998), p. 77; Raverty, op. cit., p. 123.
21. Arden Wood, op. cit., p. 3.
22. See A. Wink, *Al-Hind: The Making of the Indo-Islamic World, Volume I: Early Medieval India and the Expansion of Islam, 7th–11th Centuries* (Leiden 1990), pp. 181, 183–85; Raverty, op. cit., pp. 9, 165; M. Longworth Dames, ed., *The Book of Duarte Barbosa: An Account of the Countries Bordering on the Indian Ocean and their Inhabitants, Written by Duarte Barbosa and Completed about the Year 1518 A.D.*, 2 Volumes (New Delhi 1989), II, pp. 88–89 note 3, 122, 140 note 1, 171–72, & passim; *The Suma Oriental of Tomé Pires: An Account of the East, from the Red Sea to Japan, Written in Malacca and India in 1512–1515, 2 Volumes* (New Delhi 1990), II, p. 271 note 1; H. Yule and H. Cordier, eds., *The Travels of Marco Polo, 2 Volumes* (New York 1992), II, pp. 371–74; V. Ball and W. Crooke, eds. and trans., *Travels in India by Jean-Baptiste Tavernier* (orig. French ed. 1676), 2 vols. (New Delhi 1977), I, p. 56.
23. See A. Wink, *The Making of the Indo-Islamic World, Volume II: The Slave Kings and the Islamic Conquest, 11th–13th Centuries* (Leiden 1997), pp. 164–65, 287, 374.
24. R. F. Burton, *Sindh and the Races that Inhabit the Valley of the Indus* (1851) (Karachi 1973), pp. 3–4.
25. Quoted in G. Coedès, *Angkor* (Singapore 1986), p. 10.
26. See D. Nurse and T. Spear, *The Swahili: Reconstructing the History and Language of an African Society, 800–1500* (Philadelphia 1985).
27. See R. K. Kent, “The Possibilities of Indonesian Colonies in Africa with Special Reference to Madagascar,” *Mouvements de Populations dans L’Océan Indien* (Paris 1979), pp. 93–105; R. A. Oliver and J. D. Fage, *A Short History of Africa* (New York 1988), p. 80; R. Blench, “The Ethnographic Evidence for Long-distance Contacts Between Oceania and East Africa,” in J. Reade, ed., *The Indian Ocean in Antiquity* (London 1996), pp. 417–38; R. Oliver, “The Problem of the Bantu Expansion,” in J. D. Fage and R. A. Oliver, eds., *Papers in African Prehistory* (Cambridge 1970), pp. 141–56.
28. M. N. Pearson, *Port Cities and Intruders: the Swahili Coast, India and Portugal in the Early Modern Era* (Baltimore and London 1998), esp. pp. 20, 68–69, 83–85, 93–94.
29. *Ibid.*, pp. 69, 85.
30. *Ibid.*, p. 20.
31. *Ibid.*, p. 94.
32. See A.H.J. Prins, *Sailing from Lamu: A Study of Maritime Culture in East Africa* (Assen 1965), p. 17.
33. F. A. Dombrowski, *Ethiopia’s Access to the Sea* (Leiden 1985); R. Pankhurst, *An Introduction to the Economic History of Ethiopia from Early Times to 1800* (London 1961); R. Pankhurst, “The History of Ethiopia’s Relations with India Prior to the Nineteenth Century,” in *IV Congresso Internazionale di Studi Etiopici* 1 (1974):205–311; S.C.H. Munro-Hay, “The Foreign Trade of the Aksumite Port of Adulis,” *Azania* 17 (1982):107–25; S.C.H. Munro-Hay, “Aksumite Overseas Interests,” in Reade, op. cit., pp. 403–16.
34. Munro-Hay, “Aksumite Overseas Interests,” p. 403; for the medieval identification of Ethiopia and India, see Wink, *Al-Hind*, I, p. 47 ff.
35. See O.G.S. Crawford, ed., *Ethiopian Itineraries, Circa 1400–1524* (Cambridge 1958).
36. See *The Encyclopaedia of Islam, Volume I* (Leiden 1986), pp. 533–47, s.v. *Djazīrat al-‘Arab*.
37. See O.H.K. Spate and A.T.A. Learmonth, *India and Pakistan: A General and Regional Geography* (London 1967), *passim*; D. Ross, *The Land of the Five Rivers and*

Sindh (London, 1883); H. T. Lambrick, *Sind: A General Introduction* (Hyderabad 1964); Deloche, op. cit., pp. 15–18.

38. Raverty, op. cit.; R. D. Oldham, "On Probable Changes in the Geography of the Panjab and Its Rivers: A Historico-Geographical Survey," *Journal of the Asiatic Society of Bengal* 55,2 (1886):322–43.

39. E.H.G. Dobby, *Monsoon Asia* (London 1967), p. 230.

40. See W. A. Inglis, "Some of the Problems Set Us by the Rivers of Bengal," *Journal and Proceedings of the Asiatic Society of Bengal, New Series* 5 (1909):393–405; N. D. Bhattacharya, "Changing Courses of the Padma and Human Settlements," *National Geographic Journal of India* 24,1&2 (1978):62–76; D. Schwartz, *Delta: The Perils, Profits and Politics of Water in South and Southeast Asia* (London 1997); G. Bouchon and L. F. Thomaz, *Voyage dans les deltas du Gange et de l'Irraouaddy. Relation Portugaise Anonyme (1521)* (Paris, 1988), p. 170.

41. See R. M. Eaton, *The Rise of Islam and the Bengal Frontier, 1204–1760* (Berkeley, Los Angeles, and London 1993).

42. See Deloche, op. cit., pp. 15, 32–40.

43. *Ibid.*, pp. 40–42.

44. Dobby, *Southeast Asia*, p. 385.

45. *Ibid.*

46. See Dobby, *Southeast Asia*, pp. 50, 55, 301, 303.

47. V. Lieberman, "Local Integration and Eurasian Analogies: Structuring Southeast Asian History, c. 1350—c. 1830," *Modern Asian Studies* 27,3 (1993):482.

48. Dobby, *Southeast Asia*, pp. 167–68; Wink, *Al-Hind*, I, pp. 346–51.

49. See A. Reid, *Southeast Asia in the Age of Commerce, 1450–1680, Volume II: Expansion and Crisis* (New Haven and London 1993), pp. 54–55, 62–63.

50. See Wink, *Al-Hind*, II, pp. 377–79.

51. Reid, op. cit., p. 54.

52. See Dobby, *Southeast Asia*, pp. 196–97; *Monsoon Asia*, p. 199.

53. See Wink, *Al-Hind*, I, pp. 351–55; II, pp. 285–93.

54. See Reid, op. cit., p. 54; Dobby, *Southeast Asia*, p. 201.

55. Op. cit., p. 90.

56. *Ibid.*

57. H. Pirenne, *Medieval Cities: Their Origins and the Revival of Trade* (Princeton 1925).

58. First pub. 1926; 2d. revised ed. 2 vols. (Oxford 1957).

59. M. Rostovtzeff, *The Social and Economic History of the Hellenistic World*, 3 vols. (Oxford 1941).

60. S. D. Goitein, *A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza*, 5 Vols. (Berkeley, Los Angeles, and London 1967–1988).

61. First ed. 1949; 2 vols., (London and New York 1972–1973).

62. Horden and Purcell, op. cit., p. 91.

63. F. Braudel, *Civilization and Capitalism 15th–18th Century, Volume One: The Structures of Everyday Life, The Limits of the Possible* (New York 1985), p. 479; Horden and Purcell, op. cit., p. 91.

64. See J. Friedmann, "Cities in Social Transformation," *Comparative Studies in Society and History* 4 (1961–1962):88; L. Mumford, *The City in History, Its Origins, Its Transformations, and Its Prospects* (New York 1961); S. Thrupp, "The Creativity of Cities: A Review Article," *Comparative Studies in Society and History* 4 (1961–1962): 53–64.

65. F. Benet, "Sociology Uncertain: The Ideology of the Rural-urban Continuum," *Comparative Studies in Society and History* 6 (1963–1964):3, 17–18.

66. For a recent example of this reinterpretation of the American frontier thesis, see W. Cronon, *Nature's Metropolis: Chicago and the Great West* (New York 1991).
67. See Horden and Purcell, *op. cit.*, pp. 91–94.
68. *Ibid.*, p. 93.
69. *Ibid.*, pp. 93–96.
70. On this issue, see also D. Lombard, “Pour une histoire des villes du Sud-Est asiatique,” *Annales* 25,4 (1970):849.
71. On this city, see also Chaudhuri, *Asia before Europe*, p. 350; and *idem*, “Reflections,” p. 94.
72. Ball and Crooke, *op. cit.*, pp. 96–97.
73. Arden Wood, *op. cit.*, pp. 1–2.
74. See M. Weber, *The City* (New York and London 1958), p. 70; Horden and Purcell, *op. cit.*, p. 110.
75. Horden and Purcell, *op. cit.*, p. 110.
76. *Ibid.*
77. The term “rurban” was introduced by Charles J. Galpin in 1922, and applied to Rajput lineage centers in North India by Richard Fox to underscore the spuriousness of the distinction between “urban” and “rural” in this context (see R. G. Fox, “Rurban Settlements and Rajput ‘Clans’ in Northern India,” in R. G. Fox, ed., *Urban India: Society, Space and Image* (Durham 1970), pp. 167–85). Fox uses the term “rurban” to indicate “small urban-like centers associated with kin bodies (“clans”) of locally dominant castes in parts of northern India” (p. 171). The same term can be used for even the largest of India’s medieval cities.
78. See Lombard, *op. cit.*, pp. 850–51.
79. *Ibid.*
80. *Ibid.*, p. 851.
81. *Ibid.*
82. *Ibid.*, pp. 851–54; A. Reid, “The Structure of Cities in Southeast Asia, Fifteenth to Seventeenth Centuries,” *Journal of Southeast Asian Studies* 11,2 (Sept. 1980): 235–50; Reid, *Age of Commerce, II*, pp. 87–90.
83. Reid, “Structure of Cities,” pp. 240–41.
84. *Ibid.*, p. 241.
85. W. M. Thackston, trans., *The Baburnama: Memoirs of Babur, Prince and Emperor* (New York 1996), p. 334.
86. F. Bernier, *Travels in the Mogul Empire, A.D. 1656–1668* (Sec. revised ed. by V. A. Smith, Delhi 1989), pp. 248, 246.
87. Ball and Crooke, *op. cit.*, p. 78.
88. *Ibid.*, p. 105.
89. *Ibid.*, p. 42.
90. *Ibid.*, p. 46.
91. *Ibid.*, p. 100.
92. *Ibid.*, p. 141.
93. *Ibid.*, p. 6.
94. Ball and Crooke, *op. cit.*, p. 86; Bernier, *op. cit.*, p. 285.
95. Sen, *op. cit.*, p. 49.
96. *Ibid.* pp. 46–48.
97. Bernier, *op. cit.* p. 285.
98. See Bernier, *op. cit.*, p. 246; Ball and Crooke, *op. cit.* p. 86.
99. See Bernier, *op. cit.* p. 246.
100. See Chaudhuri, “Reflections,” p. 92.
101. Sen, *op. cit.*, p. 21.
102. See Chaudhuri, “Reflections,” pp. 83, 88.

103. Sen, op. cit., p. 46.
104. Sen, op. cit., p. 85.
105. C. Defrémery and B. R. Sanguinetti, ed. and trans., *Voyages d'Ibn Batoutah*, 4 vols., (Paris, 1873–1878), III, pp. 145–46.
106. *Ibid.*, pp. 315–16.
107. Sen, op. cit., p. 60; and cf. Ball and Crooke, op. cit., p. 78; other imperial capitals like Lahore and Agra were similarly affected by the departure of the court (cf. Bernier, op. cit., p. 384; Sen, op. cit., pp. 49, 85).
108. G. Deleury, *Les Indes Florissantes: Anthologie des Voyageurs Français (1750–1820)* (Paris 1991), p. 473.
109. “. . . dand les villes des Indes . . . la plupart des maisons ne sont que de terre” (*ibid.*, p. 135).
110. See J. C. Heesterman, “Littoral et Intérieur de L’Inde,” in L. Blussé, H. L. Wesling and G. D. Winus, eds., *History and Underdevelopment: Essays on Underdevelopment and European Expansion in Asia and Africa* (Leiden 1980), pp. 87–92.
111. Sen, op. cit., p. 23.
112. Heesterman, op. cit., p. 89; Ball and Crooke, op. cit., p. 6.
113. Burton, *Sindh*, p. 6.
114. F. C. Gamst, “Peasantries and Elites without Urbanism: The Civilization of Ethiopia,” *Comparative Studies in Society and History* 12 (1970):373–92.
115. See Chaudhuri, “Reflections,” p. 83; R. S. Humphreys, *Islamic History: A Framework for Inquiry* (Princeton 1991), pp. 228–54.
116. Chaudhuri, op. cit., pp. 83–84; Humphreys, op. cit., p. 231.
117. Chaudhuri, “Reflections,” p. 84.
118. *Ibid.*, pp. 84–94.
119. For a brief analysis of this problem in medieval Europe, see N. Rosenberg and L. E. Birdzell, Jr., *How the West Grew Rich: The Economic Transformation of the Industrial World* (New York 1986), p. 96; for the Islamic Middle East, cf. M. Chamberlain, *Knowledge and Social Practice in Medieval Damascus, 1190–1350* (Cambridge 1994).
120. Rosenberg and Birdzell, op. cit., p. 96.
121. See M.G.S. Hodgson, *The Venture of Islam*, 3 vols. (Chicago 1974), II, p. 71; X. de Planhol, *Le monde Islamique: Essai de géographie religieuse* (Paris 1957).
122. J.J.L. Gommans, “The Silent Frontier of South Asia, c. A.D. 1100–1800,” *Journal of World History* 9,1 (1998):1–23; idem, “The Eurasian Frontier after the First Millennium A.D.: Reflections along the Fringe of Time and Space,” *The Medieval History Journal* 1,1 (1998):125–43.
123. See Gommans, “Silent Frontier,” p. 6.
124. *Ibid.*
125. As P. Crone puts it, “Europe lacked ecological niches for nomadic pastoralists and hunter-gatherers, except in the extreme north . . . [and] was well protected against external barbarians” (*Pre-Industrial Societies* (Oxford, and Cambridge, Mass. 1989), p. 150).
126. Gommans, “Silent Frontier,” p. 7 ff.
127. See also Chaudhuri, *Trade and Civilisation*, pp. 167, 169.
128. See A. Wink, “India and the Turko-Mongol Frontier,” in A. M. Khazanov and A. Wink, eds., *Nomads in the Sedentary World* (London, 2001), pp. 211–33.
129. See Wink, *Al-Hind, II*; Gommans, “Silent Frontier” and “The Eurasian Frontier.”
130. Gommans, “Silent Frontier,” p. 15.
131. Plato, as reported in Strabo’s *Geography* (Cambridge, Mass. 1949), 7.3.8 (Hor-

den and Purcell, op. cit., titlepage); for the medieval representation by Opicino de Canistris, *ibid.*, frontispiece.

132. S. K. Nambiar, ed. and trans., *Prabodhacandrodaya* (Delhi 1971), p. 45.

133. See A. L. Basham, "Notes on Seafaring in Ancient India," *Arts and Letters: The Journal of the Royal India and Pakistan Society* 23 (1949):62, 69.

134. See Wink, *Al-Hind*, I, pp. 72–73.

135. As memorably depicted in an historical novel by Pramoedya Toer, *De stroom uit het noorden* (Original title *Arus Balik* (1979); Dutch trans. by H. Maier, Breda (1995)). For an historical analysis of the late-medieval and early modern transformation of "the lands below the winds" see A. Reid, *Southeast Asia in the Age of Commerce, 1450–1680*, 2 vols. (London and New Haven 1988–1993).

136. Yule and Cordier, op. cit., II, p. 235.

137. W. W. Rockhill, "Notes on the Relations and Trade of China with the Eastern Archipelago and the Coast of the Indian Ocean during the Fourteenth Century, Part I," *T'oung Pao* 15 (1914):418–66.

138. J.V.G. Mills, trans. and ed., *Ma Huan, Ying-Yai Sheng-Lan: The Overall Survey of the Ocean's Shores* (Cambridge 1970), esp. p. 86 ff.

139. C. Sather, "Sea and Shore People: Ethnicity and Ethnic Interaction in Southeastern Sabah," *Contributions to Southeast Asian Ethnography* 3 (Dec. 1984):3–27; D. W. Hogan, "Men of the Sea: Coastal Tribes of South Thailand's West Coast," *Journal of the Siam Society* 60,1 (Jan. 1972):205–35; Ch. Pelras, "Notes sur Quelques Populations Aquatiques de L' Archipel Nusantaraien," *Archipel* (1972):133–68; N. M. Saleeby, *The History of Sulu* (Manila 1908); T. M. Kiefer, "The Tausig Polity and the Sultanate of Sulu: A Segmentary State in the Southern Philippines," *Sulu Studies* 1 (1972):19–64; C. Sather, "Sea Nomads and Rainforest Hunter-Gatherers: Foraging Adaptations in the Indo-Malaysian Archipelago," in P. Bellwood, J. J. Fox and D. Tryon, eds., *The Austronesians: Historical and Comparative Perspectives* (Canberra 1995), pp. 229–68; D. E. Sopher, *The Sea Nomads: A Study Based on the Literature of the Maritime Boat People of Southeast Asia* (Singapore 1965).

140. Pires, *Suma Oriental*, II, pp. 232–38.

141. *Ibid.*, II, p. 287.

142. First pub. 1896. This quotation is from the 1975 Penguin Modern Classics edition, p. 50.

143. *Ibid.*

144. See E. C. Sachau, trans. and ed., *Alberuni's India: An Account of the Religion, Philosophy, Literature, Geography, Chronology, Astronomy, Customs, Laws and Astrology of India about A.D. 1030*, (New Delhi 1983), I, p. 208.

145. Yule and Cordier, op. cit., II, p. 407.

146. *Ibid.*, pp. 423–24.

147. *Ibid.*, pp. 406–10.

148. *Bijdragen KITLV* 153,4 (1997).

149. Cf. Rozenberg and Birdzell, op. cit., p. 92.

150. For the Mediterranean, *ibid.*, p. 94.